



FILED

April 26, 2018

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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 May 2018

Maui Electric Company, Limited's ("Maui Electric" or "Company") May 2018 Energy Cost Adjustment factor for our Maui Division is -4.510 cents per kilowatt-hour ("kWh"), an increase of 0.404 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$162.34, an increase of \$2.66 compared to rates effective April 1, 2018. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor (+\$2.02) and termination of the April 2018 credit for the SolarSaver adjustment (+\$0.64).

The Company's Maui Division fuel composite cost of generation, central station and other increased 125.61 cents per million BTU to 1,423.66 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.566 cents per kWh to 18.549 cents per kWh.

The Energy Cost Adjustment factor for our Lāna'i Division for May 2018 is -7.716 cents per kWh, an increase of 1.425 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$156.26, an increase of \$6.21 compared to rates effective April 1, 2018. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor (+\$5.70) and termination of the April 2018 credit for the SolarSaver adjustment (+\$0.51).

The Company's Lāna'i Division fuel composite cost of generation, central station and other increased 137.58 cents per million BTU to 2,012.66 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 30.00 cents per kWh.

The Energy Cost Adjustment factor for our Moloka'i Division for May 2018 is -5.031 cents per kWh, an increase of 0.944 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$152.76, an increase of \$4.29 compared to rates effective April 1, 2018. The increase in the typical residential bill is due to the

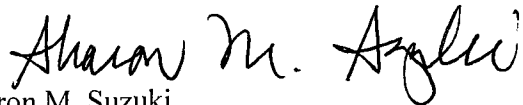
The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
April 26, 2018
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increase in the Energy Cost Adjustment factor (+\$3.78) and termination of the April 2018 credit for the SolarSaver adjustment (+\$0.51).

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 67.95 cents per million BTU to 1,740.15 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, 2018.

Sincerely,



Sharon M. Suzuki
President

Attachments

cc: Division of Consumer Advocacy

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

ENERGY COST ADJUSTMENT FACTOR

	EFFECTIVE DATES		<u>Change</u>
	<u>04/01/2018</u>	<u>05/01/2018</u>	
<u>COMPOSITE COSTS</u>			
Generation, Central Station & Other, ¢/mbtu	1,298.05	1,423.66	125.61
DG Energy, ¢/kWh	0.00	0.00	0.000
Purchased Energy, ¢/kWh	19.115	18.549	(0.566)
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	(4.914)	(4.510)	0.404
<u>Others - "G,H,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(4.914)	(4.510)	0.404
<u>Residential Customer with</u>			
500 KWH Consumption, \$/Bill	159.68	162.34	2.66
600 KWH Consumption, \$/Bill	191.23	194.42	3.19

Supersedes Sheet Effective:

April 1, 2018

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

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

<u>Line</u>		
1	Effective Date	May 1, 2018
2	Supercedes Factors of	April 1, 2018

GENERATION COMPONENT

<u>CENTRAL STATION</u>							
FUEL PRICES, ¢/mmbtu							
3	Industrial			912.00			
4	Diesel			1,637.66			
5	Other						
BTU MIX, %							
6	Industrial			29.49%			
7	Diesel			70.51%			
8	Other			0.00%			
				100.00%			
9	COMPOSITE COST OF GENERATION, CENTRAL STATION + OTHER ¢/mmbtu (Lines (3 x 6) + (4 x 7) + (5 x 8))			1,423.66			
10	% Input to System kWh Mix			67.57%			
EFFICIENCY FACTOR, mmbtu/kWh							
	(A)	(B)	(C)	(D)			
			Percent of				
			Centrl Stn +				
			Other				
	<u>Fuel Type</u>	<u>Eff Factor</u>	<u>Centrl Stn +</u>	<u>Weighted</u>			
		<u>mmbtu/kwh</u>	<u>Other</u>	<u>Eff Factor</u>			
11	Industrial	0.015126	18.61	0.002815			
12	Diesel	0.010026	81.39	0.008160			
13	Other	0.010951	0.00	-			
	(Lines 11, 12, 13): Col(B) x Col(C) = Col(D)						
14	Weighted Efficiency Factor, mmbtu/kWh [(lines 11(D) + 12(D) + 13(D))]			0.010975			
15	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))			10.55759			
16	BASE CENTRAL STATION + OTHER GENERATION COST, ¢/mmbtu			2,019.39			
17	Base % Input to Sys kWh Mix			78.09			
18	Efficiency Factor, mmbtu/kwh			0.010951			
19	WEIGHTED BASE CENTRAL STATION + OTHER GENERATION COST ¢/kWh (lines (16 x 17 x 18))			17.26909			
20	COST LESS BASE (line(15 - 19))			(6.71150)			
21	Revenue Tax Req Multiplier			1.0975			
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))			(7.36587)			
					<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)	-
					26	BASE DG ENERGY COMP COST	0.000
					27	Base % Input to System kWh Mix	0.01
					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	1.063
					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)	(7.36587)
					34	DG (line 32)	-
					35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	(7.36587)

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

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

<u>Line</u>		
1	Effective Date	May 1, 2018
2	Supercedes Factors of	April 1, 2018

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>	
	PURCHASED ENERGY PRICE, ¢/kWh	
36	Kaheawa Wind I	13.676
37	- On Peak	
	- Off Peak	12.841
38	Kaheawa Wind II	25.304
39	Sempre Wind	21.869
40	Hydro & Other	15.257
41	- On Peak	
	- Off Peak	14.407
42	South Maui RR	11.060
43	Ku'ia Solar	11.060
44		
45		
46	FIT	21.458
	PURCHASED ENERGY KWH MIX, %	
47	Kaheawa Wind I	23.53%
48	- On Peak	
	- Off Peak	18.67%
49	Kaheawa Wind II	22.11%
50	Sempre Wind	27.66%
51	Hydro & Other	0.22%
52	- On Peak	
	- Off Peak	0.14%
53	South Maui RR	1.99%
54	Ku'ia Solar	1.95%
55		
56		
57	FIT	3.73%
		<u>100.00%</u>
58	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh	18.549
	(Lines (36 x 47) + (37 x 48) + (38 x 49) + (39 x 50) + (40 x 51) + (41 x 52) + (42 x 53) + (43 x 54) + (46 x 57))	
59	% Input to System kWh Mix	32.43%
60	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (58 x 59))	6.01544
61	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh	15.847
62	Base % Input to Sys kWh Mix	21.90
63	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (61 x 62))	3.47049
64	COST LESS BASE (lines (60 - 63))	2.54495
65	Loss Factor	1.063
66	Revenue Tax Req Multiplier	1.0975
67	PURCHASED ENERGY FACTOR, ¢/kWh (lines (64 x 65 x 66))	2.96905

<u>Line</u>	<u>SYSTEM COMPOSITE CALCULATIONS</u>	
68	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 67))	(4.39682)
69	ADJUSTMENT, ¢/kWh	
70	ECA Reconciliation Adjustment	(0.113)
71	ECA FACTOR, ¢/kWh (lines (68 + 69 + 70))	(4.510)

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

Fuel Oil Inventory Prices for May 2018

<u>TYPE OF OIL BURNED</u>	<u>PRICES \$/BBL</u>	<u>CONVERSION FACTORS</u>		<u>PRICES ¢/MBTU</u>
INDUSTRIAL	57.4559	6.30	MBTU/BBL	912.00
DIESEL/ULSD	95.8972	5.86	MBTU/BBL	1,637.66

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

Month End Fuel Oil Estimate

<u>Kahului</u>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
4/19/2018	52,742.84	332,279.89	3,020,455.68
Estimated Use	10,855.77	68,391.35	613,794.84
Estimated Received	0.00	0.00	0.00
Estimated Additional	0.00	0.00	0.00
Estimated End	<u>41,887.07</u>	<u>263,888.54</u>	<u>2,406,660.84</u>

Next month's expense (\$/bbl) = \$ 57.4559

<u>Maalaea</u>	<u>Barrels</u>	<u>MBTU</u>	<u>(\$)</u>
4/19/2018	68,971.89	403,880.84	6,602,513.68
Estimated Use	24,845.27	145,487.22	2,143,309.36
Estimated Received	52,000.00	304,498.03	4,759,064.98
Estimated Additional	0.00	0.00	0.00
Estimated End	<u>96,126.62</u>	<u>562,891.65</u>	<u>9,218,269.30</u>

Next month's expense (\$/bbl) = \$ 95.8972

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

Contract Prices effective April 1, 2018

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
INDUSTRIAL		
Tax *	3.6590	58.08
Ocean Transportation	1.6542	26.26
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.3400	5.40
DIESEL		
Tax *	5.4923	93.73
Ocean Transportation	1.6542	28.23
Land Transportation	0.9255	15.79
Storage	1.0104	17.24
Wharfage	0.3400	5.80

* Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST tax, Environmental Response Tax, Customs Duty Fee, and Fed Oil Spill Recovery Fee

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.
MAUI DIVISION**

PURCHASED POWER PRICE CALCULATIONS

KAHEAWA WIND POWER ENERGY RATE:

Kaheawa Wind - On Peak, ¢/kWh	13.676
- Off Peak, ¢/kWh	12.841

Kaheawa Wind Energy Rate Calculations:

Percent of Energy Payment Rate:

Fixed energy payment rate	70%
Flat payment rate	<u>30%</u>
	<u>100%</u>

Fixed Energy Payment Rate (Table D-1) for 2018:

On-peak,	10.109
Off-peak, ¢/kwh	8.916

Flat Payment Rate Per Docket No. 2011-0192 D&O 30331:

On-peak, ¢/kwh	22.000
Off-peak, ¢/kwh	22.000

On-Peak Rate = $10.1090 \times 0.7 + 22.000 \times 0.3 = 13.676$

Off-Peak Rate = $8.916 \text{ ¢/kwh} \times 0.7 + 22.000 \text{ ¢/kwh} \times 0.3 = 12.841 \text{ ¢/kwh}$

MAUI ELECTRIC COMPANY, LTD.
Maui Division
ECA Reconciliation Adjustment
May 2018

1. Amount to be Refunded	(\$250,155)
2. Monthly amount (1 / 3 X Line 1)	(\$83,385)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$91,516)
5. Estimated Sales (May 2018)	81,229 mwh
6. Adjustment (Line 4 ÷ Line 5)	(0.113) ¢/kwh

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2018 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand \$)

<u>Line</u>	<u>W/O 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	\$31,132.6	\$31,132.6	
2	Distributed Generation	\$1.1	\$1.1	
3	Purch Power	<u>\$8,635.7</u>	<u>\$8,635.7</u>	
4	TOTAL	\$39,769.4	\$39,769.4	
FUEL FILING COST				
5	Generation	\$31,282.3	\$31,083.7	
6	Distributed Generation	\$0.0	\$0.0	
7	Purch Power	<u>\$8,635.7</u>	<u>\$8,635.7</u>	
8	TOTAL	\$39,918.0	\$39,719.4	
BASE FUEL COST				
9	Generation	\$42,277.2	\$42,277.2	
10	Distributed Generation	\$1.0	\$1.0	
11	Purch Power	<u>\$8,789.1</u>	<u>\$8,789.1</u>	
12	TOTAL	\$51,067.3	\$51,067.3	
13	FUEL-BASE COST (Line 8-12)	-\$11,149.3	-\$11,348.0	
14	ACTUAL FOA LESS TAX	-\$12,084.3	-\$12,084.3	
15	FOA reconciliation adj for prior year	<u>-\$986.5</u>	<u>-\$986.5</u>	
16	ADJUSTED FOA LESS TAX	-\$11,097.8	-\$11,097.8	
17	FOA-(FUEL-BASE) (Line 16-13)	\$51.5 Over	\$250.2 Over	
ADJUSTMENTS				
18	Current year FOA accrual reversal	\$0.0	\$0.0	
19	Other prior year FOA	\$0.0	\$0.0	
20	Other	<u>\$0.0</u>	<u>\$0.0</u>	
21	1st QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	\$51.5 Over	\$250.2 Over	
22	2017 FOA Reconciliation Recognized in FOA Rates		<u>\$0.0</u>	
23	FOA Reconciliation to be Refunded May 2018 to July 2018 (Line 22- 21)		<u><u>-\$250.2</u></u> To Be Refunded	

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

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

Determination of Efficiency Factor to use for Cost-Recovery Purposes

Period: January 1, 2018 through March 31, 2018

	<u>Notes</u>	<u>Jan 1 - Mar 31</u>
<u>Industrial Fuel Oil</u>		
Industrial Fuel Oil Efficiency Factor (TY2012), BTU/kWh	f	15,126
Industrial Fuel Oil Deadband Definition, +/- BTU/kWh	d	100
Industrial Fuel Oil Portion of Recorded Sales, MWh	a	38,744
Industrial Fuel Oil Consumption (Recorded), MMBTU	b	593,760
Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	15,325
Lower limit of Industrial Fuel Oil Deadband, BTU/kWh	e = f-d	15,026
Higher limit of Industrial Fuel Oil Deadband, BTU/kWh	g = f+d	15,226
Industrial Fuel Oil Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	15,226
<u>Diesel</u>		
Diesel Efficiency Factor (TY2012), BTU/kWh	f	10,026
Diesel Deadband Definition, +/- BTU/kWh	d	100
Diesel Portion of Recorded Sales, MWh	a	162,978
Diesel Consumption (Recorded), MMBTU	b	1,618,994
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	9,934
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	9,926
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	10,126
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e, or g	9,934

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND
2018

	<u>Without Deadband</u> <u>Jan 1 - Mar 31</u>	<u>With Deadband - AS FILED</u> <u>Jan 1 - Mar 31</u>
<u>INDUSTRIAL</u>		
Industrial Portion of Recorded Sales , MWH	38,744	38,744
Industrial Sales Efficiency Factor (mmbtu/kwh)	0.015126	0.015226
Mmbtu adjusted for Sales Efficiency Factor	586,034	589,909
\$/mmbtu	<u>\$9,5561</u>	<u>\$9,5561</u>
TOTAL Industrial \$000s TO BE RECOVERED	\$5,600.2	\$5,637.2
<u>DIESEL FUEL FILING COST</u>		
Diesel Portion of Recorded Sales, MWH	162,978	162,978
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010026	0.009934
Mmbtu adjusted for Sales Efficiency Factor	1,634,021	1,619,027
\$/mmbtu	<u>\$15,7171</u>	<u>\$15,7171</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$25,682.1	\$25,446.5
TOTAL GENERATION FUEL FILING COST, \$000s	\$31,282.3	\$31,083.7
TOTAL GENERATION BASE FUEL COST , \$000s YTD	\$42,277.2	\$42,277.2
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$31,282.3	\$31,083.7
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$42,277.2	\$42,277.2

**MAUI ELECTRIC COMPANY, LTD.
MAUI 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					(323,167)	(288,628)	393,068
January '18					(323,167)	(330,544)	62,524
February	994,600	(4)	69,895	924,705	(331,533)	(332,923)	654,306
March					(331,533)	(333,329)	320,977
April					(331,533)		
May	250,155	(1)	(10,563)	260,718	(83,385)		

NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 5)
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.
Maui Division
Calculations of the Average Residential Customer Bill**

	Rate		Charge (\$) at 500 Kwh			
	04/01/18	05/01/18	04/01/18	05/01/18	Difference	
Base Rates	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	23.0016	23.0016	115.01	115.01	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	9.3393	9.3393	32.69	32.69	0.00
Next 850 kWhr per month	¢/kWh	11.5993	11.5993	17.40	17.40	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
Total Base Charges				173.60	173.60	0.00
RBA Rate Adjustment	¢/kWh	1.5654	1.5654	7.83	7.83	0.00
PBF Surcharge	¢/kWh	0.4244	0.4244	2.12	2.12	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	-0.1278	0.0000	-0.64	0.00	0.64
Purchased Power Adjustment	¢/kWh	0.0003	0.0004	0.00	0.00	0.00
Energy Cost Adjustment	¢/kWh	-4.914	-4.510	-24.57	-22.55	2.02
Green Infrastructure Fee	\$	1.34	1.34	1.34	1.34	0.00
Avg Residential Bill at 500 kwh				159.68	162.34	

Increase (Decrease -)	2.66
% Change	1.67%

	Rate		Charge (\$) at 600 Kwh			
	04/01/18	05/01/18	04/01/18	05/01/18	Difference	
Base Rates	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	23.0016	23.0016	138.01	138.01	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	9.3393	9.3393	32.69	32.69	0.00
Next 850 kWhr per month	¢/kWh	11.5993	11.5993	29.00	29.00	0.00
Customer Charge	\$	8.50	8.50	8.50	8.50	0.00
Total Base Charges				208.20	208.20	0.00
RBA Rate Adjustment	¢/kWh	1.5654	1.5654	9.39	9.39	0.00
PBF Surcharge	¢/kWh	0.4244	0.4244	2.55	2.55	0.00
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	-0.1278	0.0000	-0.77	0.00	0.77
Purchased Power Adjustment	¢/kWh	0.0003	0.0004	0.00	0.00	0.00
Energy Cost Adjustment	¢/kWh	-4.914	-4.510	-29.48	-27.06	2.42
Green Infrastructure Fee	\$	1.34	1.34	1.34	1.34	0.00
Avg Residential Bill at 600 kwh				191.23	194.42	

Increase (Decrease -)	3.19
% Change	1.67%

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

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR CENTS / KWH</u>		
	<u>RESIDENTIAL & COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$) @ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2015	-0.702	183.85	220.24
February 1, 2015	-4.255	165.96	198.78
March 1, 2015	-7.740	148.62	177.96
April 1, 2015	-6.921	151.30	181.18
May 1, 2015	-6.092	157.06	188.10
June 8, 2015	-4.794	163.43	195.74
July 1, 2015	-4.336	164.44	196.93
August 1, 2015	-4.415	164.11	196.54
September 1, 2015	-5.820	157.12	188.14
October 1, 2015	-7.471	148.88	178.26
November 1, 2015	-8.651	141.57	169.49
December 1, 2015	-8.557	142.07	170.10
January 1, 2016	-8.649	141.54	169.48
February 1, 2016	-10.511	132.58	158.73
March 1, 2016	-9.196	139.17	166.62
April 1, 2016	-8.768	140.37	168.08
May 1, 2016	-10.483	132.89	159.10
June 1, 2016	-8.170	143.47	171.79
July 1, 2016	-7.334	148.08	177.36
August 1, 2016	-6.973	149.89	179.52
September 1, 2016	-7.866	145.42	174.16
October 1, 2016	-8.162	143.94	172.39
November 1, 2016	-9.782	135.84	162.67
December 1, 2016	-9.069	139.41	166.95
January 1, 2017	-7.659	146.59	175.55
February 1, 2017	-8.247	143.65	172.02
March 1, 2017	-7.314	148.32	177.61
April 1, 2017	-5.770	155.35	186.05
May 1, 2017	-7.998	144.79	173.38
June 1, 2017	-5.191	159.61	191.16
July 1, 2017	-5.635	157.32	188.42
August 1, 2017	-7.867	145.30	174.01
September 1, 2017	-9.278	138.19	165.47
October 1, 2017	-7.391	147.64	176.80
November 1, 2017	-5.305	158.18	189.46
December 1, 2017	-7.839	145.51	174.26
January 1, 2018	-6.115	154.28	184.75
February 1, 2018	-5.747	156.16	187.00
March 1, 2018	-4.402	162.88	195.07
April 1, 2018	-4.914	159.68	191.23
May 1, 2018	-4.510	162.34	194.42

**MAUI ELECTRIC COMPANY, LTD. -- Maui 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)	
01/01/16 - 01/31/16	PURCHASED POWER ADJUSTMENT	-0.1055 CENTS/KWH
01/01/16 - 06/30/16	GREEN INFRASTRUCTURE FEE	1.30 DOLLARS/MONTH
02/01/16 - 02/29/16	PURCHASED POWER ADJUSTMENT	-0.0338 CENTS/KWH
03/01/16 - 03/31/16	PURCHASED POWER ADJUSTMENT	-0.0325 CENTS/KWH
03/01/16 - 02/28/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0099 CENTS/KWH
04/01/16 - 04/30/16	PURCHASED POWER ADJUSTMENT	-0.0355 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
05/01/16 - 05/31/16	PURCHASED POWER ADJUSTMENT	0.0000 CENTS/KWH
06/01/16 - 06/30/16	PURCHASED POWER ADJUSTMENT	-0.0081 CENTS/KWH
06/01/16 - 05/31/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.4082 CENTS/KWH
07/01/16 - 04/30/17	PURCHASED POWER ADJUSTMENT	0.0000 CENTS/KWH
07/01/16 - 12/31/16	GREEN INFRASTRUCTURE FEE	1.13 DOLLARS/MONTH
07/01/16 - 06/30/17	RESID. PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
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 - 3/31/18	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/17 - 05/31/17	PURCHASED POWER ADJUSTMENT	-0.0224 CENTS/KWH
06/01/17 - 06/30/17	PURCHASED POWER ADJUSTMENT	-0.0218 CENTS/KWH
06/01/17	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.5654 CENTS/KWH
07/01/17 - 12/31/17	GREEN INFRASTRUCTURE FEE	1.18 DOLLARS/MONTH
07/01/17 - 07/31/17	PURCHASED POWER ADJUSTMENT	-0.0202 CENTS/KWH
07/01/17	RESID. PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
08/01/17 - 08/31/17	PURCHASED POWER ADJUSTMENT	-0.0286 CENTS/KWH
08/17/17	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0000 CENTS/KWH
09/01/17 - 09/30/17	PURCHASED POWER ADJUSTMENT	-0.0307 CENTS/KWH
10/01/17 - 10/31/17	PURCHASED POWER ADJUSTMENT	-0.0275 CENTS/KWH
11/01/17 - 11/30/17	PURCHASED POWER ADJUSTMENT	-0.0058 CENTS/KWH
12/01/17 - 12/31/17	PURCHASED POWER ADJUSTMENT	-0.0054 CENTS/KWH
01/01/18 - 01/31/18	PURCHASED POWER ADJUSTMENT	-0.0060 CENTS/KWH
01/01/18	GREEN INFRASTRUCTURE FEE	1.34 DOLLARS/MONTH
02/01/18 - 04/30/18	PURCHASED POWER ADJUSTMENT	0.0003 CENTS/KWH
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT	-0.1278 CENTS/KWH
05/01/18	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/18	PURCHASED POWER ADJUSTMENT	0.0004 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.