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2017 OCT 27 P 3:51

PUBLIC UTILITIES
COMMISSION

SHARON M. SUZUKI
President

October 27, 2017

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 November 2017

Maui Electric Company, Limited's ("Maui Electric" or "Company") November 2017 Energy Cost Adjustment factor for our Maui Division is -5.305 cents per kilowatt-hour ("kWh"), an increase of 2.086 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying $158.18, an increase of $10.54 compared to rates effective October 1, 2017. The increase in the typical residential bill is due to the increase in the Energy Cost Adjustment factor (+$10.43) and the increase in the Purchased Power Adjustment Clause rate (+$0.11).

The Company's Maui Division fuel composite cost of generation, central station and other increased 208.68 cents per million BTU to 1,423.82 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.579 cents per kWh to 17.471 cents per kWh.

The Energy Cost Adjustment factor for our Lāna'i Division for November 2017 is -8.264 cents per kWh, an increase of 1.795 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying $153.90, an increase of $7.18 compared to rates effective October 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 218.45 cents per million BTU to 1,963.38 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 November 2017 is -4.912 cents per kWh, an increase of 4.181 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying $153.07, an increase of $16.72 compared to rates effective October 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 347.32 cents per million BTU to 1,745.94 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 November 1, 2017.

Sincerely,

Sharon M. Suzuki
President

Attachments

cc: Division of Consumer Advocacy

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION

ENERGY COST ADJUSTMENT FACTOR

	EFFECTIVE DATES 10/01/2017	11/01/2017	Change
COMPOSITE COSTS			
Generation, Central Station & Other, ¢/mbtu	1,215.14	1,423.82	208.68
DG Energy, ¢/kWh	0.00	0.00	0.000
Purchased Energy, ¢/kWh	18.050	17.471	(0.579)
Residential Schedule "R"			
Energy Cost Adjustment, ¢/kWh	(7.391)	(5.305)	2.086
Others - "G,H,P,F"			
Energy Cost Adjustment, ¢/kWh	(7.391)	(5.305)	2.086
Residential Customer with			
500 KWH Consumption, $/Bill	147.64	158.18	10.54
600 KWH Consumption, $/Bill	176.80	189.46	12.66

Supersedes Sheet Effective: October 1, 2017

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

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

Line		
1	Effective Date	November 1, 2017
2	Supercedes Factors of	October 1, 2017

GENERATION COMPONENT

CENTRAL STATION

FUEL PRICES, ¢/mmbtu

3	Industrial	871.43
4	Diesel	1,637.36
5	Other	

BTU MIX, %

6	Industrial	27.88%
7	Diesel	72.12%
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))	1,423.82
10	% Input to System kWh Mix	72.75%

EFFICIENCY FACTOR, mmbtu/kWh

	(A) Fuel Type	(B) Eff Factor mmbtu/kwh	(C) Percent of Centrl Stn + Other	(D) Weighted Eff Factor
11	Industrial	0.015126	19.65	0.002972
12	Diesel	0.010026	80.35	0.008056
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)]	0.011028
15	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))	11.42312
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))	(5.84597)
21	Revenue Tax Req Multiplier	1.0975
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))	(6.41595)

DG ENERGY COMPONENT

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)	(6.41595)
34	DG (line 32)	-
35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	(6.41595)

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

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

Line		
1	Effective Date	November 1, 2017
2	Supercedes Factors of	October 1, 2017

PURCHASED ENERGY COMPONENT

Line			
	PURCHASED ENERGY PRICE, ¢/kWh		
36			
37			
38			
39			
40	Kaheawa Wind I	- On Peak	13.572
41		- Off Peak	12.749
42	Kaheawa Wind II		19.245
43	Sempra Wind		21.546
44	Hydro & Other	- On Peak	15.047
45		- Off Peak	14.154
46	FIT		20.397
	PURCHASED ENERGY KWH MIX, %		
47			
48			
49			
50			
51	Kaheawa Wind I	- On Peak	22.82%
52		- Off Peak	17.22%
53	Kaheawa Wind II	- On Peak	30.10%
54	Sempra Wind	- On Peak	27.31%
55	Hydro & Other	- On Peak	0.19%
56		- Off Peak	0.14%
57	FIT		2.22%
			100.00%
58	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (36 x 49) + (37 x 50) + (38 x 51) + (39 x 52) + (40 x 53) + (41 x 54) + (42 x 55) + (43 x 54) + (44 x 55) + (45 x 56) + (46 x 57)		17.471
59	% Input to System kWh Mix		27.25%
60	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (58 x 59))		4.76085
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))		1.29036
65	Loss Factor		1.063
66	Revenue Tax Req Multiplier		1.0975
67	PURCHASED ENERGY FACTOR, ¢/kWh (lines (64 x 65 x 66))		1.50539

SYSTEM COMPOSITE CALCULATIONS

Line		
68	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 67))	(4.91056)
69	ADJUSTMENT, ¢/kWH	
70	ECA Reconciliation Adjustment	(0.394)
71	ECA FACTOR, ¢/kWh (lines (68 + 69 + 70))	(5.305)

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION

Fuel Oil Inventory Prices for November 2017

TYPE OF OIL BURNED	PRICES $/BBL	CONVERSION FACTORS		PRICES ¢/MBTU
INDUSTRIAL	54.8998	6.30	MBTU/BBL	871.43
DIESEL/ULSD	95.8817	5.86	MBTU/BBL	1,637.36

Maui Electric Company, Ltd.
Maui Division

Month End Fuel Oil Estimate

Kahului	Barrels	MBTU	($)
10/20/2017	30,440.14	191,184.84	1,628,838.80
Estimated Use	11,164.21	70,227.39	556,379.28
Estimated Received	6,000.00	37,800.00	331,538.87
Estimated Additional	6,661.52	41,967.55	349,360.09
Estimated End	31,937.45	200,725.00	1,753,358.48

Next month's expense ($/bbl) = $ 54.8998

Maalaea	Barrels	MBTU	($)
10/20/2017	94,656.01	554,294.20	8,785,922.98
Estimated Use	30,954.60	181,266.44	2,464,460.14
Estimated Received	6,500.00	38,063.22	588,187.02
Estimated Additional	21,270.56	124,645.51	1,860,833.67
Estimated End	91,471.96	535,736.49	8,770,483.53

Next month's expense ($/bbl) = $ 95.8817

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION

Contract Prices effective October 1, 2017

TYPE OF OIL BURNED	$/BBL	¢/MBTU
INDUSTRIAL		
Tax *	3.3535	53.23
Ocean Transportation	1.6828	26.11
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.3400	4.60
DIESEL		
Tax *	5.4052	92.24
Ocean Transportation	1.6828	28.07
Land Transportation	0.8817	15.05
Storage	3.0781	52.53
Wharfage	0.3400	4.95

* 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	13.572
- Off Peak, ¢/kWh	12.749

Kaheawa Wind Energy Rate Calculations:

Percent of Energy Payment Rate:

Fixed energy payment rate	70%
Flat payment rate	30%
	100%

Fixed Energy Payment Rate (Table D-1) for 2017:

On-peak,	9.960
Off-peak, ¢/kwh	8.784

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

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

On-Peak Rate = 9.960 x 0.7 + 22.000 x 0.3 = 13.572
Off-Peak Rate = 8.784 ¢/kwh x 0.7 + 22.000 ¢/kwh x 0.3 = 12.7488 ¢/kwh

MAUI ELECTRIC COMPANY, LTD.
Maui Division
ECA Reconciliation Adjustment
November 2017

1. Amount to be Refunded	($969,500)	
2. Monthly amount (1 / 3 X Line 1)	($323,167)	
3. Revenue Tax Divisor	0.91115	
4. Total (Line 2 / Line 3)	($354,680)	
5. Estimated Sales (November 2017)	90,006	mwh
6. Adjustment (Line 4 ÷ Line 5)	(0.394)	¢/kwh

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

Line		W/O Deadband 3rd Quarter YTD Total	collection by company*	Basis for Recon With Deadband 3rd Quarter YTD Total	collection by company*
	ACTUAL COSTS:				
1	Generation	$75,289.0		$75,289.0	
2	Distributed Generation	$18.2		$18.2	
3	Purch Power	$36,284.4		$36,284.4	
4	TOTAL	$111,591.6		$111,591.6	
	FUEL FILING COST				
5	Generation	$75,352.2		$74,945.8	
6	Distributed Generation	$0.0		$0.0	
7	Purch Power	$36,284.4		$36,284.4	
8	TOTAL	$111,636.6		$111,230.2	
	BASE FUEL COST				
9	Generation	$125,093.2		$125,093.2	
10	Distributed Generation	$17.5		$17.5	
11	Purch Power	$37,961.6		$37,961.6	
12	TOTAL	$163,072.2		$163,072.2	
13	FUEL-BASE COST (Line 8-12)	-$51,435.6		-$51,842.1	
14	ACTUAL FOA LESS TAX	-$51,720.9		-$51,720.9	
15	FOA reconciliation adj for prior year	-$1,408.1		-$1,408.1	
16	ADJUSTED FOA LESS TAX	-$50,312.8		-$50,312.8	
17	FOA-(FUEL-BASE) (Line 16-13)	$1,122.8	Over	$1,529.3	Over
	ADJUSTMENTS				
18	Current year FOA accrual reversal	$1,334.4		$1,334.4	
19	Other prior year FOA	$0.0		$0.0	
20	Other	$0.0		$0.0	
21	3rd QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	$2,457.2	Over	$2,863.7	Over
22	2nd QUARTERLY YTD 2017 FOA Reconciliation Recognized in FOA Rates			$1,894.2	Over
23	FOA Reconciliation to be Refunded November 2017 to January 2018 (Line 22- 21)			-$969.5	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, 2017 through September 30, 2017

	Notes	Jan 1 - Sep 30
Industrial Fuel Oil		
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	108,930
Industrial Fuel Oil Consumption (Recorded), MMBTU	b	1,703,497
Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	15,638
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**
Diesel		
Diesel Efficiency Factor (TY2012), BTU/kWh	f	10,026
Diesel Deadband Definition, +/- BTU/kWh	d	**100**
Diesel Portion of Recorded Sales, MWh	a	487,940
Diesel Consumption (Recorded), MMBTU	b	4,854,015
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	9,948
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	**9,948**

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

	Without Deadband	**With Deadband - AS FILED**
	Jan 1 - Sep 30	Jan 1 - Sep 30
INDUSTRIAL		
Industrial Portion of Recorded Sales , MWH	108,930	108,930
Industrial Sales Efficiency Factor (mmbtu/kwh)	0.015126	0.015226
Mmbtu adjusted for Sales Efficiency Factor	1,647,674	1,658,567
$/mmbtu	$7.5820	$7.5820
TOTAL Industrial $000s TO BE RECOVERED	$12,492.7	$12,575.3
DIESEL FUEL FILING COST		
Diesel Portion of Recorded Sales, MWH	487,940	487,940
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010026	0.009948
Mmbtu adjusted for Sales Efficiency Factor	4,892,091	4,854,032
$/mmbtu	$12.8492	$12.8492
TOTAL DIESEL $000s TO BE RECOVERED	$62,859.6	$62,370.5
TOTAL GENERATION FUEL FILING COST, $000s	$75,352.2	$74,945.8
TOTAL GENERATION BASE FUEL COST , $000s YTD	$125,093.2	$125,093.2
TOTAL GENERATION FUEL FILING COST, $000s YTD	$75,352.2	$74,945.8
TOTAL GENERATION BASE FUEL COST, $000s YTD	$125,093.2	$125,093.2

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2017 Cumulative Reconciliation Balance

Month	(1) YTD FOA Reconciliation	Qtr	(2) FOA Rec Adjust Variance	(3) FOA Rec Less Variance	(4) Try to Collect	(5) Actual Collect	(6) Month-end Cumulative Balance
December '16					(340,033)	(338,730)	359,058
January '17					(340,033)	(313,303)	45,755
February	1,068,200	(4)	19,017	1,049,183	(356,067)	(333,496)	761,442
March					(356,067)	(353,056)	408,386
April					(356,067)	(362,325)	46,061
May	214,700	(1)	52,312	162,388	(71,567)	(71,347)	137,102
June					(71,567)	(72,876)	64,226
July					(71,567)	(74,042)	(9,816)
August	1,679,500	(2)	(7,347)	1,686,847	(559,833)	(569,839)	1,107,192
September					(559,833)	(567,239)	539,953
October					(559,833)		
November	969,500	(3)	(19,887)	989,387	(323,167)		

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		
		10/01/17	11/01/17	10/01/17	11/01/17	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	0.0000	0.0000	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	-0.0275	-0.0058	-0.14	-0.03	0.11
Energy Cost Adjustment	¢/kWh	-7.391	-5.305	-36.95	-26.52	10.43
Green Infrastructure Fee	$	1.18	1.18	1.18	1.18	0.00
Avg Residential Bill at 500 kwh				147.64	158.18	

147.64	Increase (Decrease -)	10.54
176.8	% Change	7.14%

		Rate		Charge ($) at 600 Kwh		
		10/01/17	11/01/17	10/01/17	11/01/17	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	0.0000	0.0000	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	-0.0275	-0.0058	-0.17	-0.03	0.14
Energy Cost Adjustment	¢/kWh	-7.391	-5.305	-44.35	-31.83	12.52
Green Infrastructure Fee	$	1.18	1.18	1.18	1.18	0.00
Avg Residential Bill at 600 kwh				176.80	189.46	

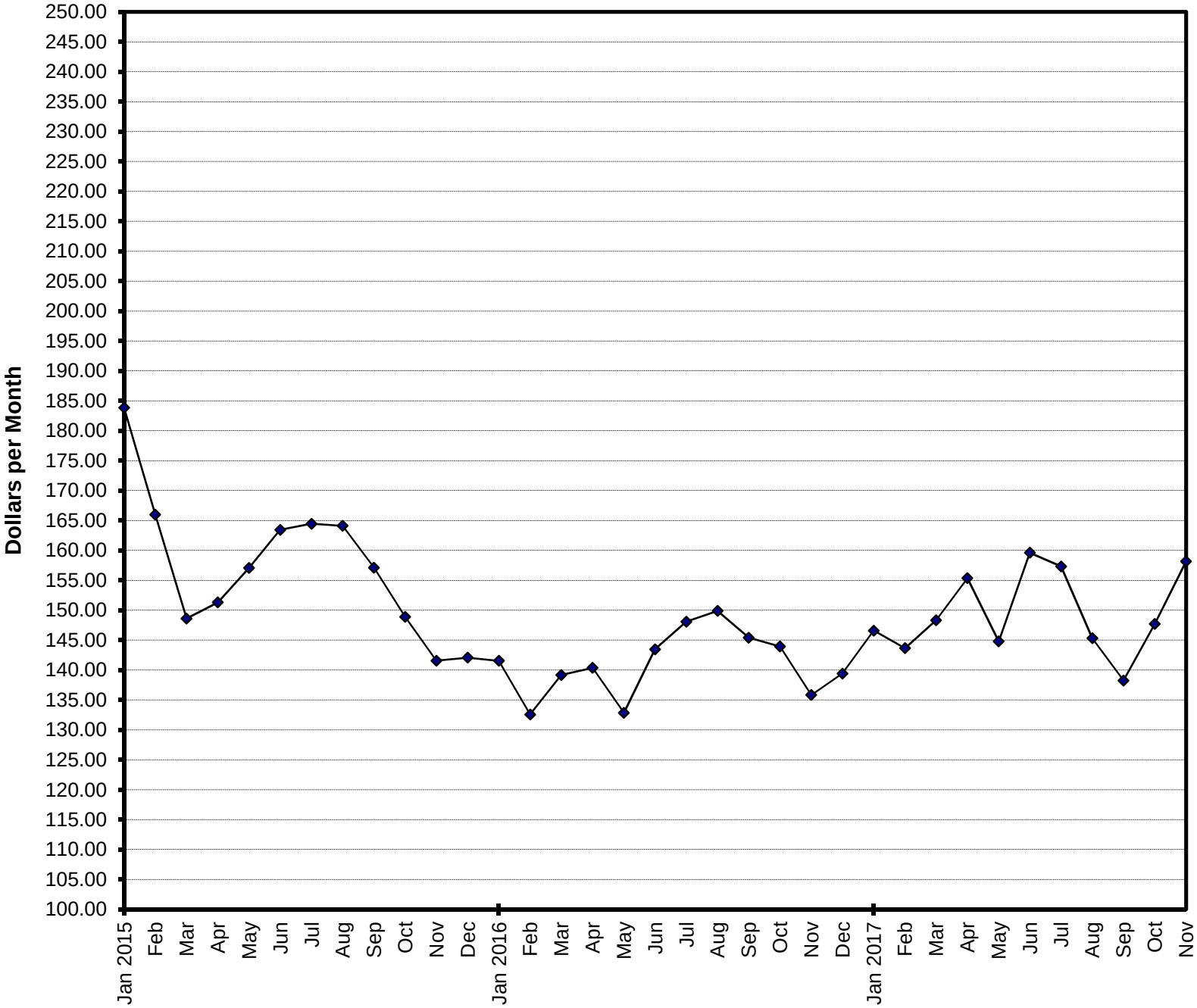
	Increase (Decrease -)	12.66
	% Change	7.16%

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

EFFECTIVE DATE	FUEL FACTOR CENTS / KWH RESIDENTIAL & COMMERCIAL	RESIDENTIAL BILL ($) @ 500 KWH	@ 600 KWH
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

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)**		
01/01/15 - 01/31/15	PURCHASED POWER ADJUSTMENT	0.1117	CENTS/KWH
02/01/15 - 02/28/15	PURCHASED POWER ADJUSTMENT	0.0875	CENTS/KWH
03/01/15 - 03/31/15	PURCHASED POWER ADJUSTMENT	0.1036	CENTS/KWH
04/01/15 - 04/30/15	PURCHASED POWER ADJUSTMENT	0.0963	CENTS/KWH
04/01/15 - 04/30/15	SOLARSAVER ADJUSTMENT	-0.2744	CENTS/KWH
05/01/15 - 05/31/15	PURCHASED POWER ADJUSTMENT	0.1444	CENTS/KWH
05/01/15 - 03/31/16	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/01/15 - 06/30/15	PURCHASED POWER ADJUSTMENT	0.1453	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 - 07/31/15	PURCHASED POWER ADJUSTMENT	0.1482	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
08/01/15 - 08/31/15	PURCHASED POWER ADJUSTMENT	0.1613	CENTS/KWH
08/17/15 - 02/29/16	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0103	CENTS/KWH
09/01/15 - 09/30/15	PURCHASED POWER ADJUSTMENT	0.1573	CENTS/KWH
10/01/15 - 10/31/15	PURCHASED POWER ADJUSTMENT	0.1612	CENTS/KWH
11/01/15 - 11/30/15	PURCHASED POWER ADJUSTMENT	-0.1207	CENTS/KWH
12/01/15 - 12/31/15	PURCHASED POWER ADJUSTMENT	-0.1139	CENTS/KWH
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	**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**
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	**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
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	**PURCHASED POWER ADJUSTMENT**	**-0.0058**	**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.

Maui Electric Company, Ltd. - Maui Division
Residential Bill at 500 kWh/Month Consumption