2015-07-29 MECO ECAC - August 2015.pdf

State of Hawaii

Public Utilities Commission

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Form:	Hawaii PUC eFile Non-Docketed
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SHARON M. SUZUKI
President

July 29, 2015

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 August 2015

Maui Electric Company, Limited's ("Maui Electric" or "Company") August 2015 energy cost adjustment factor for our Maui Division is -4.415 cents per kilowatt-hour ("kWh"), a decrease of 0.079 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying $164.11, a decrease of $0.33 compared to rates effective July 1, 2015. The decrease in the typical residential bill is due to the decrease in the energy cost adjustment factor (-$0.40) and the increase in the Purchased Power Adjustment Clause rate (+$0.07).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 31.64 cents per million BTU to 1,412.85 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.269 cents per kWh to 18.745 cents per kWh.

The energy cost adjustment factor for our Lāna‘i Division for August 2015 is -8.457 cents per kWh, a decrease of 1.143 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying $153.70, a decrease of $4.57 compared to rates effective July 1, 2015.

The Company's Lāna‘i Division fuel composite cost of generation, central station and other decreased 103.49 cents per million BTU to 1,910.25 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 August 2015 is -5.864 cents per kWh, an increase of 0.321 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying $149.83, an increase of $1.28 compared to rates effective July 1, 2015.

The Company's Moloka‘i Division fuel composite cost of generation, central station and other increased 19.25 cents per million BTU to 1,664.57 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 August 1, 2015.

Sincerely,

/s/ Sharon M. Suzuki

Sharon M. Suzuki
President

Attachments

cc: Division of Consumer Advocacy

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION

ENERGY COST ADJUSTMENT FACTOR

	EFFECTIVE DATES 07/01/2015	08/01/2015	
COMPOSITE COSTS			
Generation, Central Station & Other, ¢/mbtu	1,444.49	1,412.85	(31.64)
DG Energy, ¢/kWh	0.00	0.00	0.000
Purchased Energy, ¢/kWh	19.014	18.745	(0.269)
Residential Schedule "R"			
Energy Cost Adjustment, ¢/kWh	(4.336)	(4.415)	(0.079)
Others - "G,H,P,F"			
Energy Cost Adjustment, ¢/kWh	(4.336)	(4.415)	(0.079)
Residential Customer with			
500 KWH Consumption, $/Bill	164.44	164.11	(0.33)
600 KWH Consumption, $/Bill	196.93	196.54	(0.39)

Supersedes Sheet Effective: July 1, 2015

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

ENERGY COST ADJUSTMENT (ECA) FILING - August 1, 2015 (page 1 of 2)

Line		
1	Effective Date	August 1, 2015
2	Supercedes Factors of	July 1, 2015

GENERATION COMPONENT

CENTRAL STATION

FUEL PRICES, ¢/mmbtu

3	Industrial	845.53
4	Diesel	1,615.41
5	Other	

BTU MIX, %

6	Industrial	26.31%
7	Diesel	73.69%
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))	1,412.85
10	% Input to System kWh Mix	62.10%

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	18.31	0.002770
12	Diesel	0.010026	81.69	0.008190
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)]	0.010960
15	WEIGHTED COMPOSITE CENTRAL STATION + OTHER GENERATION COST, ¢/kWh (lines (9 x 10 x 14))	9.61608
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))	(7.65301)
21	Revenue Tax Req Multiplier	1.0975
22	CENTRAL STATION + OTHER GENERATION FACTOR, ¢/kWh (line (20 x 21))	(8.39918)

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)	(8.39918)
34	DG (line 32)	-
35	TOTAL GENERATION FACTOR, ¢/kWh (lines 33 + 34)	(8.39918)

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

ENERGY COST ADJUSTMENT (ECA) FILING - August 1, 2015 (page 2 of 2)

Line		
1	Effective Date	August 1, 2015
2	Supercedes Factors of	July 1, 2015

Line	**PURCHASED ENERGY COMPONENT**		
	PURCHASED ENERGY PRICE, ¢/kWh		
36	HC&S - Regular	- On Peak	13.866
37		- Off Peak	12.216
38	HC&S - Unscheduled	- On Peak	13.866
39		- Off Peak	12.216
40	Kaheawa Wind I	- On Peak	13.368
41		- Off Peak	12.569
42	Kaheawa Wind II		24.199
43	Sempra Wind		20.914
44	Hydro & Other	- On Peak	13.866
45		- Off Peak	12.216
46	FIT		22.010
	PURCHASED ENERGY KWH MIX, %		
47	HC&S - Regular	- On Peak	0.00%
48		- Off Peak	0.00%
49	HC&S - Unscheduled	- On Peak	0.00%
50		- Off Peak	0.00%
51	Kaheawa Wind I	- On Peak	21.51%
52		- Off Peak	18.15%
53	Kaheawa Wind II	- On Peak	28.68%
54	Sempra Wind	- On Peak	27.27%
55	Hydro & Other	- On Peak	0.14%
56		- Off Peak	0.10%
57	FIT		4.15%
			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)		18.745
59	% Input to System kWh Mix		37.90%
60	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (58 x 59))		7.10436
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))		3.63387
65	Loss Factor		1.063
66	Revenue Tax Req Multiplier		1.0975
67	PURCHASED ENERGY FACTOR, ¢/kWh (lines (64 x 65 x 66))		4.23943

Line	SYSTEM COMPOSITE CALCULATIONS	
68	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (lines (35 + 67))	(4.15975)
69	ADJUSTMENT, ¢/kWH	
70	ECA Reconciliation Adjustment	(0.255)
71	ECA FACTOR, ¢/kWh (lines (68 + 69 + 70))	(4.415)

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION

Fuel Oil Inventory Prices for August 2015

TYPE OF OIL BURNED	PRICES $/BBL	CONVERSION FACTORS		PRICES ¢/MBTU
INDUSTRIAL	53.2682	6.30	MBTU/BBL	845.53
DIESEL/ULSD	94.6628	5.86	MBTU/BBL	1,615.41

Maui Electric Company, Ltd.
Maui Division

Month End Fuel Oil Estimate

Kahului	Barrels	MBTU	($)
7/21/2015	54,072.553	339,594.14	2,906,592.51
Estimated Use	5,697.490	30,329.64	329,742.38
Estimated Received	0.000	0.00	0.00
Estimated Additional	0.000	0.00	0.00
Estimated End	48,375.063	309,264.50	2,576,850.13

Next month's expense ($/bbl) = $ 53.2682

Maalaea	Barrels	MBTU	($)
7/21/2015	101,665.069	595,282.72	9,771,450.88
Estimated Use	35,010.855	205,000.17	3,378,375.94
Estimated Received	300.000	1,756.60	28,149.57
Estimated Additional	12,883.990	75,500.16	1,136,481.30
Estimated End	79,838.204	467,539.31	7,557,705.81

Next month's expense ($/bbl) = $ 94.6628

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION

Contract Prices effective July 1, 2015

TYPE OF OIL BURNED	$/BBL	¢/MBTU
INDUSTRIAL		
Tax *	3.4674	55.04
Ocean Transportation	1.9920	31.62
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.2400	3.81
DIESEL		
Tax *	5.5940	95.46
Ocean Transportation	1.9920	33.99
Land Transportation	0.9913	16.92
Storage	2.0625	35.20
Wharfage	0.2400	4.10

* 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.
MAUI DIVISION

PURCHASED POWER PRICE CALCULATIONS

HC&S PRICE DETERMINATION:	Avoided Cost *
Firm Power - On Peak, ¢/kWh	13.866
- Off Peak, ¢/kWh	12.216
Emergency - On Peak, ¢/kWh	13.866
- Off Peak, ¢/kWh	12.216

* Avoided cost for August 2015

KAHEAWA WIND POWER ENERGY RATE:	
Kaheawa Wind - On Peak, ¢/kWh	13.368
- Off Peak, ¢/kWh	12.569

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 2015:	
On-peak, ¢/kwh	9.668
Off-peak, ¢/kwh	8.527

Flat Payment Rate Per Docket No. 2011-0192 D&O 30331:	
On-peak, ¢/kwh	22.000
Off-peak, ¢/kwh	22.000

On-Peak Rate = 9.668 ¢/kwh x 0.7 + 22.000 ¢/kwh x 0.3 = 13.368 ¢/kwh
Off-Peak Rate = 8.527 ¢/kwh x 0.7 + 22.000 ¢/kwh x 0.3 = 12.569 ¢/kwh

MAUI ELECTRIC COMPANY, LTD.
Maui Division
ECA Reconciliation Adjustment
August 2015

1. Amount to be Refunded	($635,000)	
2. Monthly amount (1 / 3 X Line 1)	($211,667)	
3. Revenue Tax Divisor	0.91115	
4. Total (Line 2 / Line 3)	($232,308)	
5. Estimated Sales (August 2015)	91,222	mwh
6. Adjustment (Line 4 ÷ Line 5)	(0.255)	¢/kwh

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2015 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand $)

Line		W/O Deadband 2nd Quarter YTD Total	collectn by company*	Basis for Recon With Deadband 2nd Quarter YTD Total	collectn by company*
	ACTUAL COSTS:				
1	Generation	$55,474.2		$55,474.2	
2	Distributed Generation	$35.9		$35.9	
3	Purch Power	$27,330.1		$27,330.1	
4	TOTAL	$82,840.2		$82,840.2	
	FUEL FILING COST (1)				
5	Generation	$56,606.3		$56,173.0	
6	Distributed Generation	$0.0		$0.0	
7	Purch Power	$27,330.1		$27,330.1	
8	TOTAL	$83,936.4		$83,503.1	
	BASE FUEL COST				
9	Generation	$75,359.1		$75,359.1	
10	Distributed Generation	$25.4		$25.4	
11	Purch Power	$31,477.8		$31,477.8	
12	TOTAL	$106,862.3		$106,862.3	
13	FUEL-BASE COST (Line 8-12)	-$22,925.9		-$23,359.2	
14	ACTUAL FOA LESS TAX	-$23,824.4		-$23,824.4	
15	FOA reconciliation adj for prior year	-$1,308.6		-$1,308.6	
16	ADJUSTED FOA LESS TAX	-$22,515.8		-$22,515.8	
17	FOA-(FUEL-BASE) (Line 16-13)	$410.1	Over	$843.4	Over
	ADJUSTMENTS				
18	Current year FOA accrual reversal	$416.6		$416.6	
19	Other prior year FOA	$0.0		$0.0	
20	Other	$0.0		$0.0	
21	2nd QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	$826.7	Over	$1,260.0	Over
22	1st QUARTERLY YTD 2015 YTD FOA Reconciliation Recognized in FOA Rates			$625.0	Over
23	FOA Reconciliation to be Refunded August 2015 to October 2015 (Line 22- 21)			-$635.0	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, 2015 through June 30, 2015

	Notes	Jan 1 - Jun 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	54,216
Industrial Fuel Oil Consumption (Recorded), MMBTU	b	844,333
Industrial Fuel Oil Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	15,573
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 (TY2009), BTU/kWh	f	10,026
Diesel Deadband Definition, +/- BTU/kWh	d	**100**
Diesel Portion of Recorded Sales, MWh	a	305,353
Diesel Consumption (Recorded), MMBTU	b	2,980,815
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	9,762
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	**9,926**

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND
2015

	Without Deadband	With Deadband - AS FILED
	Jan 1 - Jun 30	Jan 1 - Jun 30
INDUSTRIAL		
Industrial Portion of Recorded Sales , MWH	54,216	54,216
Industrial Sales Efficiency Factor (mmbtu/kwh)	0.015126	0.015226
Mmbtu adjusted for Sales Efficiency Factor	820,078	825,500
$/mmbtu	$9.6528	$9.6528
TOTAL Industrial $000s TO BE RECOVERED	$7,916.1	$7,968.4
DIESEL FUEL FILING COST		
Diesel Portion of Recorded Sales, MWH	305,353	305,353
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010026	0.009926
Mmbtu adjusted for Sales Efficiency Factor	3,061,464	3,030,929
$/mmbtu	$15.9042	$15.9042
TOTAL DIESEL $000s TO BE RECOVERED	$48,690.2	$48,204.6
TOTAL GENERATION FUEL FILING COST, $000s	$56,606.3	$56,173.0
TOTAL GENERATION BASE FUEL COST , $000s YTD	$75,359.1	$75,359.1
TOTAL GENERATION FUEL FILING COST, $000s YTD	$56,606.3	$56,173.0
TOTAL GENERATION BASE FUEL COST, $000s YTD	$75,359.1	$75,359.1

MAUI ELECTRIC COMPANY, LTD.
MAUI DIVISION
2015 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 '14					202,500	208,355	(201,840)
January '15					202,500	198,116	(3,724)
February	1,511,200	(4)	655	1,510,545	(503,733)	(523,409)	983,412
March					(503,733)	(506,321)	477,091
April					(503,733)	(531,689)	(54,598)
May	625,000	(1)	(26,648)	651,648	(208,333)	(207,610)	389,440
June					(208,333)	(218,425)	171,015
July					(208,333)		
August	635,000	(2)	(37,325)	672,325	(211,667)		

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		
		07/01/15	08/01/15	07/01/15	08/01/15	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	1.5987	1.5987	7.99	7.99	0.00
PBF Surcharge	¢/kWh	0.4749	0.4749	2.37	2.37	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	0.1482	0.1613	0.74	0.81	0.07
Energy Cost Adjustment	¢/kWh	-4.336	-4.415	-21.68	-22.08	-0.40
Green Infrastructure Fee	$	1.42	1.42	1.42	1.42	0.00
Avg Residential Bill at 500 kwh				164.44	164.11	
				Increase (Decrease -)		-0.33
				% Change		-0.20%

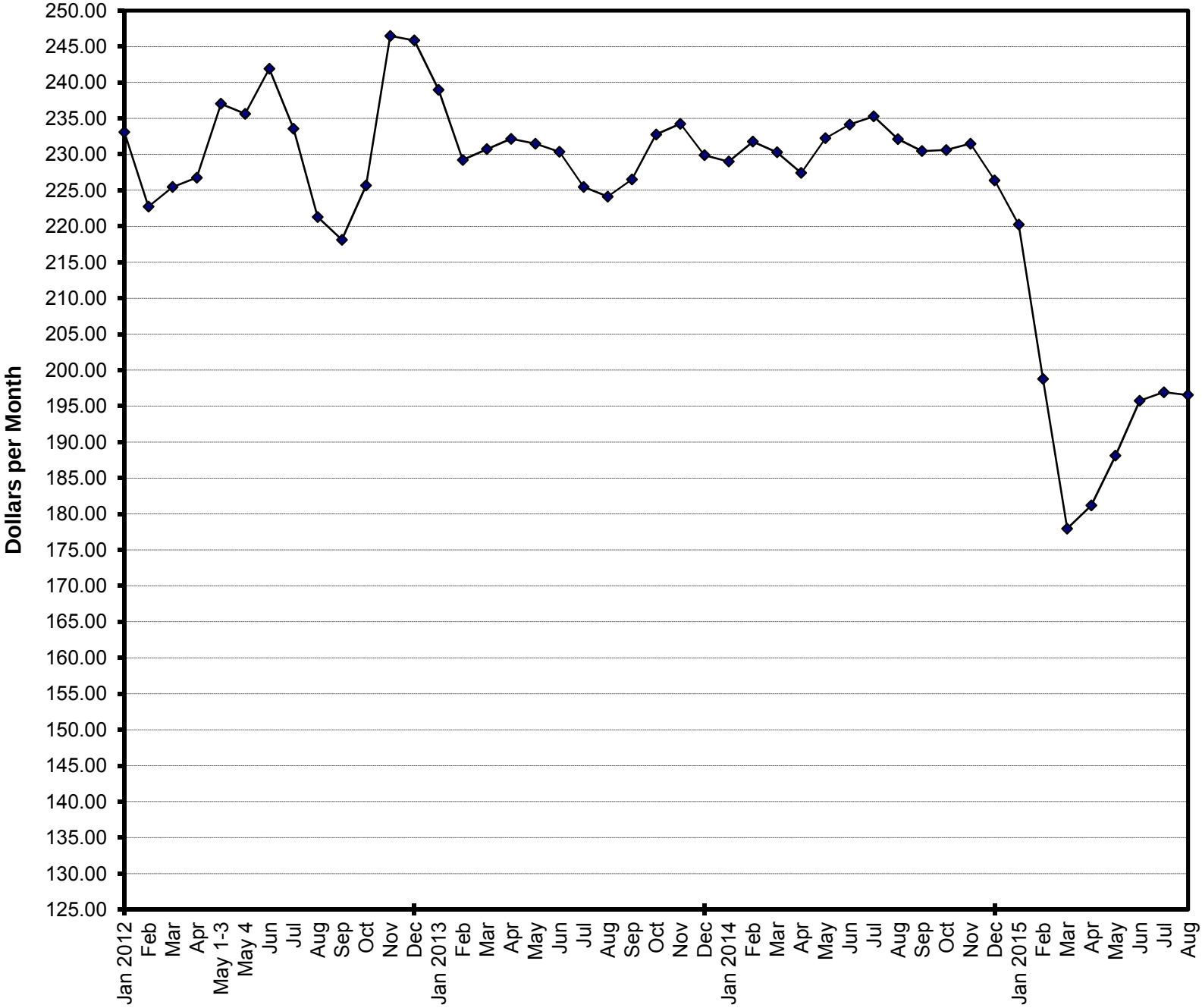
		Rate		Charge ($) at 600 Kwh		
		07/01/15	08/01/15	07/01/15	08/01/15	Difference
Base Rates	effective date:	08/01/13	08/01/13			
Base Fuel/Energy Charge	¢/kWh	23.0016	23.0016	138.01	138.01	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	9.3393	9.3393	32.69	32.69	0.00
Next 850 kWhr 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	1.5987	1.5987	9.59	9.59	0.00
PBF Surcharge	¢/kWh	0.4749	0.4749	2.85	2.85	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Purchased Power Adjustment	¢/kWh	0.1482	0.1613	0.89	0.97	0.08
Energy Cost Adjustment	¢/kWh	-4.336	-4.415	-26.02	-26.49	-0.47
Green Infrastructure Fee	$	1.42	1.42	1.42	1.42	0.00
Avg Residential Bill at 600 kwh				196.93	196.54	
				Increase (Decrease -)		-0.39
				% Change		-0.20%

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, 2012	8.030	195.03	233.08
February 1, 2012	6.306	186.40	222.73
March 1, 2012	6.761	188.68	225.46
April 1, 2012	7.218	189.76	226.76
May 1, 2012	8.690	198.32	237.03
May 4, 2012	11.832	196.46	235.63
June 1, 2012	11.776	201.69	241.90
July 1, 2012	10.387	194.75	233.56
August 1, 2012	8.356	184.52	221.30
September 1, 2012	7.827	181.88	218.12
October 1, 2012	9.087	188.18	225.68
November 1, 2012	12.583	205.50	246.47
December 1, 2012	12.480	204.98	245.85
January 1, 2013	11.223	199.25	238.96
February 1, 2013	9.649	191.15	229.23
March 1, 2013	9.897	192.39	230.72
April 1, 2013	10.342	193.58	232.16
May 1, 2013	9.969	193.04	231.49
June 1, 2013	8.972	192.09	230.35
July 1, 2013	8.113	188.03	225.48
August 1, 2013	0.827	186.89	224.13
September 1, 2013	1.230	188.88	226.53
October 1, 2013	2.268	194.08	232.77
November 1, 2013	2.624	195.32	234.25
December 1, 2013	1.889	191.68	229.88
January 1, 2014	1.733	190.94	229.00
February 1, 2014	2.238	193.25	231.77
March 1, 2014	1.978	192.02	230.29
April 1, 2014	1.754	189.62	227.42
May 1, 2014	2.175	193.66	232.25
June 1, 2014	1.675	195.24	234.15
July 1, 2014	1.679	196.18	235.28
August 1, 2014	1.134	193.54	232.12
September 1, 2014	0.855	192.16	230.46
October 1, 2014	0.880	192.27	230.60
November 1, 2014	1.135	193.01	231.48
December 1, 2014	0.325	188.98	226.39
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

MAUI ELECTRIC COMPANY, LTD. -- Maui 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 (3.65%), DOCKET NO. 2006-0387 (2007 TEST YEAR)		
01/12/11 - 05/03/12	INTERIM RATE INCREASE 2010 TEST YEAR	2.44	PERCENT ON BASE
01/12/11 - 01/31/11	FIRM CAP SURCHARGE	0.081	PERCENT ON BASE
02/01/11 - 04/30/11	FIRM CAP SURCHARGE	0.0515	PERCENT ON BASE
02/01/11 - 02/28/11	IRP RECOVERY REFUND	-3.630	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	-0.339	PERCENT ON BASE
05/01/11 - 07/31/11	FIRM CAP SURCHARGE	-0.0180	PERCENT ON BASE
06/01/11	**IRP RECOVERY REFUND**	**0.000**	**PERCENT ON BASE**
08/01/11 - 10/31/11	FIRM CAP SURCHARGE	-0.0056	PERCENT ON BASE
11/01/11 - 01/31/12	FIRM CAP SURCHARGE	0.0047	PERCENT ON BASE
01/01/12 - 12/31/12	RESID. PBF SURCHARGE ADJUSTMENT	0.6766	CENTS/KWH
02/01/12 - 05/03/12	FIRM CAP SURCHARGE	0.0000	PERCENT ON BASE
04/01/12 - 04/30/12	SOLARSAVER ADJUSTMENT	-0.2392	CENTS/KWH
05/01/12 - 03/31/13	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
05/4/2012 - 07/31/13	FINAL RATE INCREASE (1.51%), DOCKET NO. 2009-0163 (2010 TEST YEAR)		
05/04/12 - 07/31/12	PURCHASED POWER ADJUSTMENT	0.1889	CENTS/KWH
06/1/2012 - 07/31/13	INTERIM RATE INCREASE 2012 TEST YEAR	4.14	PERCENT ON BASE
08/01/12 - 10/31/12	PURCHASED POWER ADJUSTMENT	0.1747	CENTS/KWH
11/1/2012 - 01/31/13	PURCHASED POWER ADJUSTMENT	0.1427	CENTS/KWH
01/01/13 - 06/30/13	RESID. PBF SURCHARGE ADJUSTMENT	0.7850	CENTS/KWH
02/01/13 - 04/30/13	PURCHASED POWER ADJUSTMENT	0.1530	CENTS/KWH
04/01/13 - 04/30/13	SOLARSAVER ADJUSTMENT	-0.2053	CENTS/KWH
05/01/13 - 03/31/14	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
05/01/13 - 07/31/13	PURCHASED POWER ADJUSTMENT	0.1530	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
08/01/13	**FINAL RATE INCREASE (1.25%), DOCKET NO. 2011-0092 (2012 TEST YEAR)**		
08/01/13 - 08/31/13	PURCHASED POWER ADJUSTMENT	0.1892	CENTS/KWH
09/01/13 - 09/30/13	PURCHASED POWER ADJUSTMENT	0.1865	CENTS/KWH
10/01/13 - 10/31/13	PURCHASED POWER ADJUSTMENT	0.1877	CENTS/KWH
11/01/13 - 11/30/13	PURCHASED POWER ADJUSTMENT	0.0808	CENTS/KWH
12/01/13 - 12/31/13	PURCHASED POWER ADJUSTMENT	0.0861	CENTS/KWH
01/01/14 - 01/31/14	PURCHASED POWER ADJUSTMENT	0.0943	CENTS/KWH
02/01/14 - 02/28/14	PURCHASED POWER ADJUSTMENT	0.0514	CENTS/KWH
03/01/14 - 03/31/14	PURCHASED POWER ADJUSTMENT	0.0650	CENTS/KWH
04/01/14 - 04/30/14	PURCHASED POWER ADJUSTMENT	0.0560	CENTS/KWH
04/01/14 - 04/30/14	SOLARSAVER ADJUSTMENT	-0.2453	CENTS/KWH
05/01/14 - 03/31/15	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
05/01/14 - 06/30/14	PURCHASED POWER ADJUSTMENT	0.1957	CENTS/KWH
06/01/14 - 05/31/15	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.6239	CENTS/KWH
07/01/14 - 07/31/14	PURCHASED POWER ADJUSTMENT	0.1960	CENTS/KWH
07/01/14 - 11/30/14	RESID. PBF SURCHARGE ADJUSTMENT	1.0157	CENTS/KWH
08/01/14 - 08/31/14	PURCHASED POWER ADJUSTMENT	0.2145	CENTS/KWH
09/01/14 - 09/30/14	PURCHASED POWER ADJUSTMENT	0.2159	CENTS/KWH
10/01/14 - 10/31/14	PURCHASED POWER ADJUSTMENT	0.2149	CENTS/KWH
11/01/14 - 11/30/14	PURCHASED POWER ADJUSTMENT	0.1066	CENTS/KWH
12/01/14 - 12/31/14	PURCHASED POWER ADJUSTMENT	0.1108	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
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	**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	**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	**RESID. PBF SURCHARGE ADJUSTMENT**	**0.4749**	**CENTS/KWH**
07/01/15	**GREEN INFRASTRUCTURE FEE**	**1.42**	**DOLLARS/MONTH**
08/01/15	**PURCHASED POWER ADJUSTMENT**	**0.1613**	**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 600 kWh/Month Consumption