#### MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

#### **ENERGY COST ADJUSTMENT FACTOR**

	EFFECTIVE DATES		Chango
	<u>02-01-15</u>	<u>03-01-15</u>	<u>Change</u>
COMPOSITE COSTS Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	1,953.20 0.00 27.00	1,826.78 0.00 27.00	(126.42) 0.00 0.00
Residential Schedule "R"			
Energy Cost Adjustment, ¢/kWh	(7.361)	(8.793)	(1.432)
Others - "G,P,F"			
Energy Cost Adjustment, ¢/kWh	(7.361)	(8.793)	(1.432)
Residential Customer with			
400 KWH Consumption, \$/Bill	159.20	153.47	(5.73)
500 KWH Consumption, \$/Bill	198.09	190.93	(7.16)

Supersedes Sheet Effective: February 1, 2015

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

#### **ENERGY COST ADJUSTMENT (ECA) FILING**

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

Line
1 Effective Date March 1, 2015 February 1, 2015 2 Supercedes Factors of

#### **GENERATION COMPONENT**

	CENTRAL STATION			
	FUEL PRICES, ¢/mmbtu			
3	Industrial	0.00		
4	Diesel - Miki Basin	1,855.02		
5	Diesel - Manele Bay	1,681.44		
6	Other	0.00		
	DTILLMIN OF		DO ENEDOV COMPONENT	1
7	BTU MIX, % Industrial	0.00%	<u>DG ENERGY COMPONENT</u> 25 COMPOSITE COST OF DG	
	Diesel - Miki Basin			0.000
		83.73%	ENERGY, ¢/kWh	0.000
	Diesel - Manele Bay	16.27%	OC O/ Institute Constant IAMIs Miss	0.000/
10	Other	0.00%	26 % Input to System kWh Mix	0.00%
		100.00%	27 WEIGHTED COMPOSITE DG ENERGY	
11	COMPOSITE COST OF GENERATION,		COST, ¢/kWh (Lines 25 x 26)	0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	1,826.78	COST, ¢/kvvii (Lines 25 x 26)	0.00000
	(Lines $(3 \times 7) + (4 \times 8) + (5 \times 9) + (6 \times 10)$			
12	% Input to System kWh Mix	) 91.63%	28 BASE DG ENERGY COMP COST	0.000
12	76 Input to System KWII Wilk	91.03/0	29 Base % Input to System kWh Mix	0.000
	EFFICIENCY FACTOR, mmbtu/kWh		30 WEIGHTED BASE DG ENERGY COST.	0.0076
	(A) (B) (C)	(D)	¢/kWh (Line 28 x 29)	0.00000
	Percent of	(D)	¢/kvvii (Lilie 20 x 29)	0.00000
	Eff Factor Centrl Stn +	Weighted	31 Cost Less Base (Line 27 - 30)	0.00000
	Fuel Type mmbtu/kwh Other	Eff Factor	32 Loss Factor	1.0510
13	Industrial 0.000000 0.00	0.000000	33 Revenue Tax Reg Multiplier	1.0975
14	Diesel 0.011151 100.00	0.011151	34 DG FACTOR,	
15	Other 0.011151 0.00	0.000000	¢/kWh (Line 31 x 32 x 33)	0.00000
	(Lines 13, 14, 15): Col(B) x Col(C) = Col	(D)	,	<u> </u>
16	Weighted Efficiency Factor, mmbtu/kWh	· /		
	[lines 13(D) + 14(D) + 15(D)]	0.011151		
17	WEIGHTED COMPOSITE CENTRAL STA	TION +		
	OTHER GEN COST, ¢/kWh	40.005.40		
	(lines (11 x 12 x 16))	18.66542		
18	BASE CENTRAL STATION + OTHER GET	NERATION		
10	COST, ¢/mmbtu	2,647.15		
19	Base % Input to Sys kWh Mix	89.65%		
	Efficiency Factor, mmbtu/kwh	0.011151		
	WEIGHTED BASE CENTRAL STATION +	0.01.101		
	OTHER GENERATION COST ¢/kWh			
	(lines (18 x 19 x 20))	26.46322		
	, , , , , , , , , , , , , , , , , , , ,		SUMMARY OF	
22	COST LESS BASE (line(17 - 21))	(7.79780)	TOTAL GENERATION FACTOR, ¢/kWh	
23	Revenue Tax Req Multiplier	1.0975	35 CNTRL STN + OTHER (line 24)	(8.55809)
24	CENTRAL STATION + OTHER GENERAT	ION	36 DG (line 34)	- ′
	FACTOR, ¢/kWh (line (22 x 23))	-8.55809	37 TOTAL GENERATION FACTOR,	
	, //		¢/kWh (lines 35 + 36)	(8.55809)

### MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

#### **ENERGY COST ADJUSTMENT (ECA) FILING**

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

<u>Line</u>

Effective Date March 1, 2015
 Supercedes Factors of February 1, 2015

Line	PURCHASED ENERGY COMPOR	<u>NENT</u>
	PURCHASED ENERGY PRICE, ¢/kWh	
	LANAI SOLAR RESEARCH - On Peak	27.000
39	- Off Peak	27.000
40	Sch Q	0.000
	PURCHASED ENERGY KWH MIX, %	
41	•	100.00%
42	- Off Peak	0.00%
43	Sch Q	0.00%
	33 4	0.0070
44	COMPOSITE COST OF PURCHASED	
	ENERGY, ¢/kWh	27.000
	(Lines (38 x 41) + (39 x 42) + (40 x 43))	
	% Input to System kWh Mix	8.37%
46	WEIGHTED GOIM IT ORGIN ERERGT	
	COST, ¢/kWh (lines (44 x 45))	2.25990
47	BASE PURCHASED ENERGY	
	COMPOSITE COST, ¢/kWh	27.000
48	Base % Input to Sys kWh Mix	10.35
49	WEIGHTED BASE PURCHASED ENERGY	
	COST, ¢/kWh (lines (47 x 48))	2.79450
50	COST LESS BASE(lines (46 - 49))	(0.53460)
51	Loss Factor	1.051
52	Revenue Tax Req Multiplier	1.0975
53	PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	(0.61665)

#### <u>Line</u> <u>SYSTEM COMPOSITE CALCULATIONS</u>

54 GENERATION AND PURCHASED ENERGY
FACTOR, ¢/kWh
(lines (37 + 53))
55 Adjustment, ¢/kWh
56 ECA Reconciliation Adjustment
57 ECA FACTOR, ¢/kWh
(lines (54 + 55 + 56))
58 GENERATION AND PURCHASED ENERGY
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(9.17474)
(1000)

#### Maui Electric Company, Ltd. Lanai Division

#### MONTH END FUEL OIL ESTIMATE

Miki Basin - ULSD	Barrels	MBTU	\$
2/19/2015	2,840.79	16,277.73	329,080.94
Estimated Use	801.27	4,591.28	92,097.35
Estimated Received	1,000.00	5,730.00	91,257.60
Estimated Additional	343.38	1,967.58	31,336.05
Estimated End	3,382.90	19,384.00	359,577.25

Next Month's Combined Miki Expense (\$/bbl) = \$ 106.2927 /bbl

Manele CHP	Barrels	MBTU	\$
Estimated Use	130.40	747.19	13,539.01
Estimated Use	273.05	1,564.58	26,426.95
Estimated Received	226.19	1,296.07	21,755.41
Estimated Additional	573.70	3,287.32	54,456.76
Estimated End	657.24	3,766.00	63,324.23

Next Month's Manele Expense (\$/bbl) = \$ 96.3468 /bbl

MBTU Forecast

March 2015 Miki Basin 19,384 Manele CHP 3,766

#### FUEL OIL INVENTORY PRICE USED FOR FILING

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel - Miki Basin	\$ 106.2927	5.73 BTU/BBL	1,855.02
Diesel - Manele Bay	\$ 96.3468	5.73 BTU/BBL	1,681.44

### MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION

#### **Contract Prices effective February 1, 2015**

TYPE OF OIL BURNED	\$/BBL	¢/MBTU
MIKI BASIN - ULTRA LOV	W SULFUR DIESI	EL (DYED)
Tax *	1.9320	33.72
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
MIKI BASIN - ULTRA LO		
Tax *	1.9320	33.72
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
MANELE DAV III TDA I	OW SIII EUD DIE	:CEI
MANELE BAY - ULTRA L		
ιαχ	5.7014	99.50
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

<sup>\*</sup> 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. Lanai Division ECA Reconciliation Adjustment

#### **March 2015**

Amount to be Collected	\$23,000
2. Monthly amount (1/3 X Line 1)	\$7,667
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	\$8,415
5. Estimated Sales (March 2015)	2,200 mwh
6. Adjustment (Line 4 ÷ Line 5)	0.382 ¢/kwh

## MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION 2015 Cumulative Reconciliation Balance

<u>Month</u>	(1) YTD FOA Reconciliation Qtr	(2) FOA Rec Adjust <u>Variance</u>	(3) FOA Rec Less <u>Variance</u>	(4) Try to Collect	(5) Actual Collect	(6) Month-end Cumulative <u>Balance</u>
December '14 January '15 February March	(23,000) (4)	(1,149)	(21,851)	(2,500) (2,500) 7,667 7,667	(2,753) (2,402)	1,349
NOTES:						
Col(1):	Quarterly FOA rec A positive number		•		•	r-collection.
Col(2):	FOA reconciliation starting with the fo sales used to deriv (Col(5) - Col(4))	adjustment urth prior me	variance accu onth; the differ	imulated durir ence betweer	ng the last the the estimate	ree months, ed recorded
Col(3):	FOA reconciliation difference minus the	•		•	YTD FOA red	onciliation
Col(4): Col(5): Col(6):	Amount that the Foundative Actual collected ar Cumulative balance	OA reconcili nount. (reco	ation adjustme rded sales * \$	ent is trying to /kwh adjustme	ent/1.09751)	,

## Maui Electric Company, Ltd. Lanai Division Calculations of the Average Residential Customer Bill

Base Fuel/Energy Charge
Non-fuel Fuel Energy Charge
First 250 kWhr per month
Next 500 kWhr per month
Customer Charge
Total Base Charges
IRP Refund
IRP Refund  Revenue Balancing Rate Adjustment PBF Adjustment SolarSaver Adjustment

Rate				
	02-01-15	03-01-15		
effective date:	08/01/13	08/01/13		
¢/kWh	32.2668	32.2668		
¢/kWh	9.1240	9.1240		
¢/kWh	11.6240	11.6240		
\$	8.50	8.50		
% on base	0.0000	0.0000		
¢/kWh	1.6239	1.6239		
¢/kWh	0.7583	0.7583		
¢/kWh	0.0000	0.0000		
¢/kWh	-7.361	-8.793		
\$	1.29	1.29		

Charge (\$) at 400 Kwh				
02-01-15	03-01-15	Difference		
129.07	129.07	0.00		
22.81	22.81	0.00		
17.44	17.44	0.00		
8.50	8.50	0.00		
177.82	177.82	0.00		
0.00	0.00	0.00		
6.50	6.50	0.00		
3.03	3.03	0.00		
0.00	0.00	0.00		
-29.44 1.29	-35.17 1.29	-5.73 0.00		
159.20	153.47			

Increase (Decrease -) % Change

-5.73 -3.60%

Base Fuel/Energy Charge
Non-fuel Fuel Energy Charge
First 250 kWhr per month
Next 500 kWhr per month
Customer Charge
Total Base Charges

Avg Residential Bill at 400 kwh

**IRP Refund** 

Revenue Balancing Rate Adjustment PBF Adjustment SolarSaver Adjustment

**Energy Cost Adjustment Green Infrastructure Fee** 

Avg Residential Bill at 500 kwh

Rate				
	02-01-15	03-01-15		
effective date:	08/01/13	08/01/13		
¢/kWh	32.2668	32.2668		
¢/kWh	9.1240	9.1240		
¢/kWh	11.6240	11.6240		
\$	8.50	8.50		
% on base	0.0000	0.0000		
¢/kWh	1.6239	1.6239		
¢/kWh	0.7583	0.7583		
¢/kWh	0.0000	0.0000		
¢/kWh	-7.361	-8.793		
\$	1.290	1.290		

Charge (\$) at 500 Kwh					
02-01-15	03-01-15	Difference			
161.33	161.33	0.00			
22.81	22.81	0.00			
29.06	29.06	0.00			
8.50	8.50	0.00			
221.70	221.70	0.00			
0.00	0.00	0.00			
8.12	8.12	0.00			
3.79	3.79	0.00			
0.00	0.00	0.00			
-36.81 1.29	-43.97 1.29	-7.16 0.00			
198.09	190.93				

Increase (Decrease -) % Change

-7.16 -3.61%

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

FUEL FACTOR CENTS / KWH

	CENTS / KWH		
	<b>RESIDENTIAL &amp;</b>	RESIDENT	IAL BILL (\$)
<b>EFFECTIVE DATE</b>	COMMERCIAL		@ 500 KWH
		<u> </u>	<u> </u>
January 1, 2012	9.260	182.11	226.46
February 1, 2012	9.134	181.61	225.83
March 1, 2012	9.355	182.49	226.94
April 1, 2012	10.438	185.86	231.15
May 1, 2012	11.637	191.62	238.35
May 4, 2012	12.284	190.23	237.21
June 1, 2012	11.897	194.24	242.21
July 1, 2012	11.230	191.57	238.87
August 1, 2012	8.352	180.06	224.48
September 1, 2012	9.038	182.80	227.91
October 1, 2012	10.621	189.13	235.83
November 1, 2012	12.828	197.96	246.86
December 1, 2012	12.174	195.35	243.59
			_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
January 1, 2013	10.379	188.60	235.17
-	8.902	182.69	227.78
February 1, 2013			
March 1, 2013	12.189	195.84	244.22
April 1, 2013	12.132	194.79	242.90
May 1, 2013	10.815	190.34	237.35
June 1, 2013	10.222	191.20	238.42
July 1, 2013	9.996	190.47	237.52
August 1, 2013	0.662	187.02	233.21
September 1, 2013	1.722	191.26	238.51
October 1, 2013	1.784	191.51	238.82
November 1, 2013	2.188	193.12	240.84
December 1, 2013	1.934	192.11	239.57
December 1, 2013	1.334	192.11	239.31
January 1, 2014	0.693	187.14	233.37
February 1, 2014	1.420		
•		190.05	237.00
March 1, 2014	1.370	189.85	236.75
April 1, 2014	1.854	190.81	237.94
May 1, 2014	-1.036	180.23	224.72
June 1, 2014	0.013	187.69	234.05
July 1, 2014	0.208	189.21	235.94
August 1, 2014	-0.179	187.66	234.00
September 1, 2014	-0.244	187.40	233.68
October 1, 2014	-3.591	174.02	216.94
November 1, 2014	-1.766	181.32	226.07
December 1, 2014	-3.365	175.18	218.07
,		-	-
January 1, 2015	-4.698	169.85	211.41
•			
February 1, 2015	-7.361	159.20	198.09
March 1, 2015	-8.793	153.47	190.93

#### MAUI ELECTRIC COMPANY, LTD. -- Lanai 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 (2	007 TEST YE	EAR)
01/12/11 - 05/03/12	INTERIM RATE INCREASE 2010 TEST YEAR	2.68	PERCENT ON BASE
02/01/11 - 02/28/11	IRP RECOVERY REFUND	-4.332	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	-0.356	PERCENT ON BASE
06/01/11	INTERIM RATE INCREASE (3.03%), DOCKET NO. 2000-0387 (2 INTERIM RATE INCREASE 2010 TEST YEAR IRP RECOVERY REFUND SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT IRP RECOVERY REFUND IRP RECOVERY REFUND RESID. PBF SURCHARGE ADJUSTMENT SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT	0.000	PERCENT ON BASE
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 - 07/31/13	FINAL RATE INCREASE (1.51%), DOCKET NO. 2009-0163 (2		
6/1/2012 - 07/31/13	INTERIM RATE INCREASE 2012 TEST YEAR	_	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	-0.2053	CENTS/KWH
05/01/13 - 03/31/14	SOLARSAVER ADJUSTMENT		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 (2	2012 TEST Y	EAR)
04/01/14 - 04/30/14	SOLARSAVER ADJUSTMENT	-0.2453	CENTS/KWH
05/01/14	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/01/14	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	RESID. PBF SURCHARGE ADJUSTMENT	0.7583	CENTS/KWH
12/01/14	GREEN INFRASTRUCTURE FEE	1.29	DOLLARS/MONTH

<sup>~</sup> Surcharges currently in effect are in bold.
 Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.