

April 28, 2020

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 Recovery Factor for May 2020

Maui Electric Company, Limited's ("Maui Electric" or "Company") May 2020 Energy Cost Recovery factor for our Maui Division is 16.260 cents per kilowatt-hour ("kWh"), a decrease of 1.243 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$166.06, a decrease of \$6.56 compared to rates effective April 1, 2020. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery Factor (-\$6.22) and decrease in the residential DSM Adjustment (-\$0.65), partially offset by the termination of the Solar Saver Adjustment (+\$0.30) and the increase in the Purchase Power Adjustment (+\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other decreased 179.34 cents per million BTU to 1,122.52 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy decreased 0.390 cents per kWh to 19.204 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for May 2020 is 18.958 cents per kWh, a decrease of 0.836 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$148.04, a decrease of \$3.11 compared to rates effective April 1, 2020. The decrease in the typical residential bill is due to the decrease of the Energy Cost Recovery Factor (-\$3.35), partially offset by the termination of the Solar Saver Adjustment (+\$0.24).

The Company's Lāna'i Division fuel composite cost of generation, central station and other decreased 84.55 cents per million BTU to 1,598.71 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 Recovery factor for our Moloka'i Division for May 2020 is 18.231 cents per kWh, a decrease of 1.324 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$151.00, a decrease of \$6.34 compared to rates effective April 1, 2020. The decrease in the typical residential bill is due to the decrease of the

The Honorable Chair and Members of the Hawai'i Public Utilities Commission April 28, 2020 Page 2

Energy Cost Recovery Factor (-\$5.30), and decrease in the Purchase Power Adjustment (-\$1.28), partially offset by the termination of the Solar Saver Adjustment (+\$0.24).

The Company's Moloka'i Division fuel composite cost of generation, central station and other decreased 70.19 cents per million BTU to 1,487.98 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy is 22.46 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, 2020.

Sincerely,

/s/ Sharon M. Suzuki Sharon M. Suzuki President Maui County and Hawai'i Island Utilities

Attachments

cc: Division of Consumer Advocacy

# **ENERGY COST RECOVERY FACTOR**

	EFFECTIVE DATES		
	<u>04-01-20</u>	<u>05-01-20</u>	<u>Change</u>
COMPOSITE COSTS Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	1,683.26 0.00 30.00	1,598.71 0.00 30.00	(84.55) 0.00 0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	19.794	18.958	(0.836)
Others - "G,P,F"			
Energy Cost Recovery, ¢/kWh	19.794	18.958	(0.836)
Residential Customer with			
400 KWH Consumption, \$/Bill	151.15	148.04	(3.11)
500 KWH Consumption, \$/Bill	187.31	183.43	(3.88)

Supersedes Sheet Effective: April 1, 2020

### **ENERGY COST RECOVERY (ECR) FILING**

ENERGY COST RECOVERY (ECR) FILING - May 1, 2020 (page 1 of 2)

Line
1 Effective Date
2 Supercedes Factors of May 1, 2020 April 1, 2020

## **GENERATION COMPONENT**

	CENTRAL STATION			
	FUEL PRICES, ¢/mmbtu			
_	Industrial	0.00		
	Diesel - Miki Basin	1,598.71		
	Diesel - Manele Bay	2,005.04		
6	Other	0.00		
	DTILMIV 0/		DO ENERGY COMPONENT	
_	BTU MIX, % Industrial	0.000/	DG ENERGY COMPONENT	
	Diesel - Miki Basin	0.00% 100.00%	25 COMPOSITE COST OF DG ENERGY, ¢/kWh	0.000
	Diesel - Manele Bay	0.00%	ENERGY, ¢/kvvii	0.000
	Other	0.00%	26 % Input to System kWh Mix	0.00%
10	- Other	100.00%	20 % input to System KWII with	0.00%
		100.0078	27 WEIGHTED COMPOSITE DG ENERGY	
11	COMPOSITE COST OF GENERATION,		COST, ¢/kWh (Lines 25 x 26)	0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	1,598.71	COOT, WINTER (Elliou 20 X 20)	0.00000
	(Lines $(3 \times 7) + (4 \times 8) + (5 \times 9) + (6 \times 10)$ )	1,000.71		
12	% Input to System kWh Mix	93.15%	28 BASE DG ENERGY COMP COST	0.000
	70 mput to Gyotom term mix	00070	29 Base % Input to System kWh Mix	0.00%
	EFFICIENCY FACTOR, mmbtu/kWh		30 WEIGHTED BASE DG ENERGY COST,	0.007.0
	(A) (B) (C)	(D)	¢/kWh (Line 28 x 29)	0.00000
	Percent of	` ,	,	
	Eff Factor Centrl Stn +	Weighted	31 Cost Less Base (Line 27 - 30)	0.00000
	Fuel Type mmbtu/kwh Other	Eff Factor	32 Loss Factor	1.0500
13	Industrial 0.000000 0.00	0.000000	33 Revenue Tax Req Multiplier	1.0975
14	Diesel 0.010872 100.00	0.010872	34 DG FACTOR,	
15	Other 0.010872 0.00	0.000000	¢/kWh (Line 31 x 32 x 33)	0.00000
	(Lines 13, 14, 15): Col(B) x Col(C) = Col(D)			
16	Weighted Efficiency Factor, mmbtu/kWh			
	[lines 13(D) + 14(D) + 15(D)]	0.010872		
17	WEIGHTED COMPOSITE CENTRAL STATION	+		
	OTHER GEN COST, ¢/kWh	40 40050		
	(lines (11 x 12 x 16))	16.19056		
10	BASE CENTRAL STATION + OTHER GENERA	TION		
18	COST. c/mmbtu	TION		
10	Base % Input to Sys kWh Mix	0.00%		
	Efficiency Factor, mmbtu/kwh	0.00%		
	WEIGHTED BASE CENTRAL STATION +	0.010072		
	OTHER GENERATION COST ¢/kWh			
	(lines (18 x 19 x 20))	_		
	(11100 (10 × 10 × 20))		SUMMARY OF	
22	COST LESS BASE (line(17 - 21))	16.19056	TOTAL GENERATION FACTOR, ¢/kWh	
	Revenue Tax Req Multiplier	1.0975	35 CNTRL STN + OTHER (line 24)	17.76914
	CENTRAL STATION + OTHER GENERATION		36 DG (line 34)	-
]	FACTOR, ¢/kWh (line (22 x 23))	17.76914	37 TOTAL GENERATION FACTOR,	
	, \ - \ - \ - \ - \ \ - \ \ - \ \ - \ \ \ - \ \ \ - \ \ \ \ - \ \ \ \ \ - \		¢/kWh (lines 35 + 36)	17.76914

### **ENERGY COST RECOVERY (ECR) FILING**

ENERGY COST RECOVERY (ECR) FILING - May 1, 2020 (page 2 of 2)

Line 1 Effective Date May 1, 2020 2 Supercedes Factors of April 1, 2020

	BURGULAGED ENERGY COMPON	-N-
<u>Line</u>	PURCHASED ENERGY COMPON	<u>ENI</u>
	PURCHASED ENERGY PRICE, ¢/kWh - FOSSI PURCHASED ENERGY PRICE, ¢/kWh - RENE	
38 39	LANAI SOLAR RESEARCH - On Peak - Off Peak	30.000 30.000
40	Sch Q	0.000
41 42	PURCHASED ENERGY KWH MIX, %, FOSSIL PURCHASED ENERGY KWH MIX, %, RENEW. LANAI SOLAR RESEARCH - On Peak - Off Peak	ABLE 100.00% 0.00%
43A 43B 43C	Sch Q Total Fossil % Total Renewable % Comp. cost of purch. energy, fossil ¢/kWh Comp. cost of purch. energy, renewable ¢/kWh	0.00% 0.00% 100.00% N/A 30.00
45	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (38 x 41) + (39 x 42) + (40 x 43)) % Input to System kWh Mix WEIGHTED COMP. PURCH. ENERGY COST, ¢/kWh (lines (44 x 45))	30.000 6.85% 2.05500
48	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (47 x 48))	0.000 0.00 0.00000
51 52	COST LESS BASE(lines (46 - 49)) Loss Factor Revenue Tax Req Multiplier PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	2.05500 1.050 1.0975 2.36813

cuiatio	n of Monthly Fossil Fuel Cost Risk Sharing Component	
	Baseline Diesel	
54	Diesel \$, baseline month	\$616,46
55	Diesel mmbtu, baseline	30,21
56	Baseline Diesel, c/mmbtu	2,040.2
	Month Diesel	
57	Diesel mmbtu, budget	28,75
58	Diesel Cost, ¢/mmbtu	1,598.7
59	Diesel ECRC Fossil Cost	\$459,7
60	Diesel Base ECRC Recovery Target	\$586,7
61	Diesel differential	-\$126,9
62	Total Fossil	-\$126,9
63	2% of above	-\$2,5
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	-\$2,1
65	Maximum Annual Cap (bi-directional)	\$31,5
66	Number of Days in year from implementation	36
67	Fossil Risk % Proration (based on 366 day year)	100.00
68	Maximum Annual Cap (bi-directional) prorated	\$31,5
69	Applicable Monthly Fossil Fuel Cost Risk Sharing	-\$2,5
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$4,6
71	Fossil Cost Risk Sharing before taxes	-\$2,5
72	Revenue Tax Adjustment	1.09751
73	Fossil Cost Risk Sharing w/revenue tax	-\$2,7
74	Forecasted Month MWh Sales	2,18
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.127

#### Line SYSTEM COMPOSITE CALCULATIONS 76 GENERATION AND PURCHASED ENERGY 20.13727 FACTOR, ¢/kWh (lines (37 + 53))77 Adjustment, ¢/kWh 78 Fossil Fuel Cost Risk Sharing Component 0.000 0.128 79 ECR Reconciliation Adjustment (1.307)80 ECR FACTOR, ¢/kWh (lines (76 + 77 + 78 + 79)) 18.958

### Maui Electric Company, Ltd. Lanai Division

## MONTH END FUEL OIL ESTIMATE

<u>Miki Basin - ULSD</u>	Barrels	MBTU	\$
4/17/2020	4,355.14	24,955.01	446,173.67
Estimated Use	1,690.02	9,683.81	163,003.78
Estimated Received	1,714.29	9,822.88	130,541.64
Estimated Additional	454.79	2,605.92	29,130.28
Estimated End	4,834.20	27,700.00	442,841.81

Next Month's Combined Miki Expense (\$/bbl) = \$ 91.6060 /bbl

Manele CHP	Barrels	MBTU	\$	
4/17/2020	160.67	920.64	19,525.57	
Estimated Use	(0.02)	(0.11)	(2.25)	
Estimated Received	-	-	-	
Estimated Additional	23.78	136.25	1,665.55	
Estimated End	184.47	1,057.00	21,193.38	

Next Month's Manele Expense (\$/bbl) = \$ 114.8890 /bbl

### **FUEL OIL INVENTORY PRICE USED FOR FILING**

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel - Miki Basin	\$ 91.6060	5.73 BTU/BBL	1,598.71
Diesel - Manele Bay	\$ 114.8890	5.73 BTU/BBL	2,005.04

# **Contract Prices effective April 1, 2020**

TYPE OF OIL BURNED	\$/BBL	¢/MBTU
MIKI BASIN - ULTRA LOW	SULFUR DIESEL	(DYED)
Tax *	1.6020	27.95
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
MIZI DACINI III TDA LOW	CIII EUD DIECEI	
MIKI BASIN - ULTRA LOW		
Tax	15.0492	262.64
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
MANELE BAY - ULTRA LO	W SULFUR DIES	EL
Tax *	15.0492	<u></u> 262.64
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
- 9 -		

<sup>\*</sup> Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST tax, Environmental Response Tax, Customs Duty Fee, Fed Oil Spill Recovery Fee, Federal Oil Spill Liability Tax, 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. Lanai Division ECR Reconciliation Adjustment

# May 2020

1.	Amount to be refunded	(\$78,000)	
2.	Monthly amount (1 / 3 X Line 1)	(\$26,000)	
3.	Revenue Tax Divisor	0.91115	
4.	Total (Line 2 / Line 3)	(\$28,535)	
5.	Estimated Sales (May 2020)	2,183	mwh
6.	Adjustment (Line 4 ÷ Line 5)	-1.307	¢/kwh

# MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION 2020 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY (Thousand \$)

	(11100	ισαιτα ψή			
<u>Line</u>		Without Deadband 1st Quarter <u>YTD Total</u>	collection by company*	Basis for Recon With Deadband 1st Quarter YTD Total	collection by company*
	ACTUAL COSTS:				
1	Generation	\$1,751.7		\$1,751.7	
2	Distributed Generation	\$0.0		\$0.0	
3	Purch Power	\$29.9		\$29.9	
3	i diciri owci	Ψ20.0		Ψ23.3	
4	TOTAL	\$1,781.6		\$1,781.6	
	FUEL FILING COST				
5	Generation	\$1,788.8		\$1,780.6	
6	Distributed Generation	\$0.0		\$0.0	
7	Purch Power	\$29.9		\$29.9	
8	TOTAL	\$1,818.7		\$1,810.5	
	BASE FUEL COST				
9	Generation	\$0.0		\$0.0	
10	Distributed Generation	\$0.0		\$0.0	
11	Purch Power	\$0.0		\$0.0	
12	TOTAL	\$0.0		\$0.0	
13	FUEL-BASE COST (Line 8-12)	\$1,818.7		\$1,810.5	
14	ACTUAL FOA LESS TAX	\$1,840.5		\$1,840.5	
15	FOA reconciliation adj for prior year	-\$48.1		-\$48.1	
15	FOA reconciliation adjitor prior year	<del>-</del> -\$40.1		- <b>Φ40.</b> I	
16	ADJUSTED FOA LESS TAX	\$1,888.6		\$1,888.6	
17	FOA-(FUEL-BASE) (Line 16-13)	\$69.9	Over	\$78.1	Over
	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	
20	Outer	Ψ0.0		Ψ0.0	
21	1st QUARTER FOA RECONCILIATION (Lines 17+18+19+20)	\$69.9	Over	\$78.1	Over
	Fossil Fuel Cost Risk Sharing Adjustment	-\$0.2		-\$0.2	
	Quarterly FOA RECONCILIATION w/Fossil Risk Adjustment	\$69.7		\$78.0	
22	2019 QUARTERLY FOA Reconciliation Recognized in FOA Rate	es		\$0.0	
23	FOA Reconciliation to be Refunded May 2020 to July 2020 (Line	e 22- 21B)		-\$78.0	Refunded

<sup>\*</sup> Over means an over-collection by the company. Under means an under-collection by the company.

# MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION DEADBAND CALCULATION

Determination of Efficiency Factor to use for Cost-Recovery Purposes Period: January 1, 2020 through March 31, 2020

	Notes <u>Y</u>	<u>TD</u>
<u>Diesel</u>		
Diesel Efficiency Factor, BTU/kWh	f	10,872
Diesel Deadband Definition, +/- BTU/kWh	d	50
Diesel Portion of Recorded Sales, MWh	а	8,060
Diesel Consumption (Recorded), MMBTU	b	85,840
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	10,650
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	10,822
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	10,922
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c. e. or a	10.822

# GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND 2020

	2020	
	Without	With
	Deadband	Deadband
		AS FILED
	Jan 1 - Mar 31	Jan 1 - Mar 31
Diesel Portion of Recorded Sales, MWH	8,060	8,060
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.010872	0.010822
Mmbtu adjusted for Sales Efficiency Factor	87,632	87,228
\$/mmbtu	<u>\$20.4126</u>	<u>\$20.4126</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$1,788.8	\$1,780.6
TOTAL GENERATION FUEL FILING COST, \$000s	\$1,788.8	\$1,780.6
TOTAL GENERATION BASE FUEL COST , \$000s	\$0.0	\$0.0
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$1,788.8	\$1,780.6
TOTAL GENERATION BASE FUEL COST, \$000s YTD	\$0.0	\$0.0

## Fossil Fuel Cost Risk Sharing Mechanism, March 2020, Lanai

Jan-20, Baseline YTD Subject to Fossil Risk

	Diesel Fossil Fuel Cost Risk Sharing		
AA	MMBtu	30,215	85,840
BB	\$ cost, actuals	616,461	1,751,743
CC = BB / AA (Baseline Column)	Jan 2020 baseline \$/mmbtu	20.4028093	20.4028093
DD	Diesel Gen kWh		8,445,986
EE	Total kWh, Gen, Purch Pwr, DG		8,698,140
FF	Sales kWh		8,300,246
$GG = (DD / EE) \times FF$	Diesel kWh-sales		8,059,627
НН	Target Heat Rate		10,872
II1	Upper limit w/deadband		10,922
II2	Lower limit w/deadband		10,822
II3	Calculated Heat Rate (YTD subject to fossil risk, before deadband)		10,650
II	Recovery Heat Rate (YTD subject to fossil risk, after deadband)		10,822
JJ = BB/AA (YTD Column)	Actual Cost \$/MMbtu		20.4071462
$KK = CC \times HH \times GG / 1,000,000$	Base Cost Recovery w/Target Heat Rate		\$1,787,781
$LL = II \times JJ \times GG / 1,000,000$	Fuel Filing Cost Recovery		\$1,779,937
$MM = 2\% \times (LL-KK)$	Diesel Cost Risk Sharing		-\$157
NN	Annual Cap (non-prorated)		\$31,500
00	# Days		366
PP	Annual Cap (pro-rated)		\$31,500
QQ = MM, up to cap	Total Fossil Fuel Cost Risk Sharing Adjustment, subject to ±\$31500 cap		-\$157

# MAUI ELECTRIC COMPANY, LTD. LANAI DIVISION 2020 Cumulative Reconciliation Balance

	(1)		(2)	(3)	(4)	(5)	(6)
			FOA Rec	FOA Rec			Month-end
	YTD FOA	_	Adjust	Less	Try to	Actual	Cumulative
<u>Month</u>	Reconciliation	<u>Qtr</u>	<u>Variance</u>	<u>Variance</u>	<u>Collect</u>	<u>Collect</u>	<u>Balance</u>
December '18					(11,867)	(11,797)	11,475
January '19					(11,867)	(11,150)	325
February	8,600	(4)	(386)	8,986	(2,867)	(2,721)	6,590
March					(2,867)	(2,728)	3,862
April					(2,867)	(2,599)	1,263
May	91,900	(1)	1,002	90,898	(30,633)	(28,551)	63,610
June					(30,633)	(30,812)	32,798
July					(30,633)	(30,931)	1,867
August	(13,000)	(2)	2,171	(15,171)	4,333	4,372	(8,932)
September					4,333	4,343	(4,589)
October					4,333	4,291	(298)
November	(23,800)	(3)	(249)	(23,551)	7,933	8,219	(15,630)
December '19					7,933	8,627	(7,003)
January '20					7,933	8,106	1,103
February	83,900	(4)	938	82,962	(27,967)	(28,222)	55,843
March					(27,967)	(27,038)	28,805
April					(27,967)		
May	78,000	(1)	847	77,153	(26,000)		
NOTES:							
Col(1):	Quarterly FOA	rec	onciliation a	mounts. (Refe	er to Attachme	nt 13)	

COI(1).	Quarterly FOA reconciliation amounts. (Refer to Attachment 13)
	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. Lanai Division Calculations of the Average Residential Customer Bill

Base Rates
Base Fuel/Energy Charge
Non-fuel Energy Charge
First 250 kWhr per month
Next 500 kWhr per month
Customer Charge
Total Base Charges
•
IRP Refund
Revenue Balancing Rate Adjustment
PBF Surcharge
Renewable Energy Infrastructure Cos
Recovery Provision
SolarSaver Adjustment
Refund of 2018 Interim

PBF Surcharge
Renewable Energy Infrastructure Cost
Recovery Provision
SolarSaver Adjustment
Refund of 2018 Interim
Energy Cost Recovery
Green Infrastructure Fee

Avg Residential Bill at 400 kwh

Rate				
	04-01-20	05-01-20		
effective date:	09/01/19	09/01/19		
¢/kWh	0.0000	0.0000		
¢/kWh	12.3123	12.3123		
¢/kWh	14.8123	14.8123		
\$	11.50	11.50		
% on base	0.0000	0.0000		
¢/kWh	0.8716	0.8716		
¢/kWh	0.7437	0.7437		
¢/kWh	0.0000	0.0000		
¢/kWh	-0.0592	0.0000		
% on Base	-0.0592	0.000		
¢/kWh	19.794	18.958		
\$	1.25	1.25		

Charge (\$) at 400 Kwh			
04-01-20	05-01-20 Difference		
0.00	0.00	0.00	
30.78	30.78	0.00	
22.22	22.22	0.00	
11.50	11.50	0.00	
64.50	64.50	0.00	
0.00	0.00	0.00	
3.49	3.49	0.00	
2.97	2.97	0.00	
0.00	0.00	0.00	
-0.24	0.00	0.24	
0.00	0.00	0.00	
79.18	75.83	-3.35	
1.25	1.25	0.00	
151.15	148.04		

Increase (Decrease -) % Change

-3.11 -2.06%

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

### **IRP Refund**

**Revenue Balancing Rate Adjustment PBF Surcharge** Renewable Energy Infrastructure Cost **Recovery Provision SolarSaver Adjustment** Refund of 2018 Interim **Energy Cost Recovery Green Infrastructure Fee** 

Avg Residential Bill at 500 kwh

Rate				
	04-01-20	05-01-20		
effective date:	09/01/19	09/01/19		
¢/kWh	0.0000	0.0000		
¢/kWh	12.3123	12.3123		
¢/kWh	14.8123	14.8123		
\$	11.50	11.50		
% on base	0.0000	0.0000		
¢/kWh	0.8716	0.8716		
¢/kWh	0.7437	0.7437		
¢/kWh	0.0000	0.0000		
¢/kWh	-0.0592	0.0000		
% on Base	0.00	0.00		
¢/kWh	19.794	18.958		
\$	1.25	1.25		

Charge (\$) at 500 Kwh				
04-01-20	05-01-20	Difference		
0.00	0.00	0.00		
30.78	30.78	0.00		
37.03	37.03	0.00		
11.50	11.50	0.00		
79.31	79.31	0.00		
0.00	0.00	0.00		
4.36	4.36	0.00		
3.72	3.72	0.00		
0	0	0.00		
0.00	0.00	0.00		
-0.30	0.00	0.30		
0.00	0.00	0.00		
98.97	94.79	-4.18		
1.25	1.25	0.00		
1.25	1.23	0.00		
187.31	102 42			
187.31	183.43			

Increase (Decrease -) % Change

-3.88
-2.07%

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

FUEL FACTOR CENTS / KWH

	CENTS / KWH	_	
	RESIDENTIAL &		IAL BILL (\$)
EFFECTIVE DATE	<u>COMMERCIAL</u>	<u>@ 400 KWH</u>	<u>@ 500 KWH</u>
January 1, 2018	-8.358	153.69	191.20
February 1, 2018	-8.395	153.54	191.01
March 1, 2018	-7.868	155.65	193.65
April 1, 2018	-9.141	150.05	186.64
May 1, 2018	-7.716	156.26	194.41
June 1, 2018	-6.144	163.86	203.92
July 1, 2018	-5.753	165.46	205.95
August 1, 2018	-7.005	160.45	199.69
September 1, 2018	-6.735	166.53	207.25
October 1, 2018	-6.372	167.98	209.07
November 1, 2018	-6.037	169.32	210.74
December 1, 2018	-5.396	171.89	213.95
January 1, 2019	-6.950	165.81	206.32
February 1, 2019	-8.789	158.45	197.12
March 1, 2019	-6.041	169.45	210.86
April 1, 2019	-6.801	166.07	206.63
May 1, 2019	-7.864	162.15	201.75
June 1, 2019	4.196	172.73	214.30
July 1, 2019	3.088	171.26	212.48
August 1, 2019	3.232	171.84	213.20
September 1, 2019	24.278	168.18	208.62
October 1, 2019	24.957	170.90	212.02
November 1, 2019	26.088	175.42	217.67
December 1, 2019	26.449	176.87	219.48
	0= 000	4=0.00	0.1= 10
January 1, 2020	25.369	173.69	215.49
February 1, 2020	24.109	168.65	209.19
March 1, 2020	23.379	165.73	205.54
April 1, 2020	19.794	151.15	187.31
May 1, 2020	18.958	148.04	183.43

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE	
06/01/11 08/17/17	IRP RECOVERY REFUND RENEWABLE ENERGY INFRASTRUCTURE COST		PERCENT ON BASE CENTS/KWH
01/01/18 - 06/30/18 04/01/18 - 04/30/18 05/01/18 - 03/31/19	RECOVERY PROVISION  GREEN INFRASTRUCTURE FEE  SOLARSAVER ADJUSTMENT  SOLARSAVER ADJUSTMENT	1.3400	DOLLARS/MONTH CENTS/KWH CENTS/KWH
06/01/18 - 08/22/18 07/01/18 - 06/30/19 07/01/18 - 12/31/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT RESID. PBF SURCHARGE ADJUSTMENT GREEN INFRASTRUCTURE FEE	1.8954 0.4658	CENTS/KWH CENTS/KWH DOLLARS/MONTH
08/23/18 - 05/31/19 08/23/18 - 05/31/19 01/01/19 - 06/30/19	INTERIM RATE INCREASE 2018 TEST YEAR REVENUE BALANCING ACCOUNT RATE ADJUSTMENT GREEN INFRASTRUCTURE FEE	0.3183	PERCENT ON BASE CENTS/KWH DOLLARS/MONTH
04/01/19 - 04/30/19 05/01/19 - 03/31/20 <b>06/01/19</b>	SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (3.74%)	0.0000 <b>2018 TEST Y</b>	
06/01/19 - 06/30/19 <b>06/01/19</b> 07/01/19 - 12/31/19 07/01/19 - 12/31/19	REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR REVENUE BALANCING ACCOUNT RATE ADJUSTMENT RESID. PBF SURCHARGE ADJUSTMENT GREEN INFRASTRUCTURE FEE	<b>0.8716</b> 0.4775 1.17	CENTS/KWH CENTS/KWH DOLLARS/MONTH
<b>01/01/20</b> <b>01/01/20</b> 04/01/20-4/30/20 <b>05/01/20</b>	RESID. PBF SURCHARGE ADJUSTMENT GREEN INFRASTRUCTURE FEE SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT	<b>1.25</b> -0.0592	CENTS/KWH DOLLARS/MONTH CENTS/KWH 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.