

August 27, 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 September 2020

Maui Electric Company, Limited's ("Maui Electric" or "Company") September 2020 Energy Cost Recovery factor for our Maui Division is 13.659 cents per kilowatt-hour ("kWh"), a decrease of 0.121 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$149.08, a decrease of \$0.62 compared to rates effective August 1, 2020. The decrease in the typical residential bill is due to the decrease in the Energy Cost Recovery factor (-\$0.61) and decrease in the Purchase Power Adjustment (-\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other increased 37.910 cents per million BTU to 991.33 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 0.803 cents per kWh to 20.082 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for September 2020 is 18.135 cents per kWh, an increase of 0.380 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$141.93, an increase of \$1.52 compared to rates effective August 1, 2020. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor.

The Company's Lāna'i Division fuel composite cost of generation, central station and other increased 20.07 cents per million BTU to 1,510.99 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 September 2020 is 14.463 cents per kWh, an increase of 2.450 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$135.41, an increase of \$9.86 compared to rates effective August 1, 2020. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$9.80) and increase in the Purchase Power Adjustment (+\$0.06).

The Honorable Chair and Members of the Hawai'i Public Utilities Commission August 27, 2020 Page 2

The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 203.93 cents per million BTU to 1,199.03 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 0.02 cents per kWh to 22.48 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 September 1, 2020.

Sincerely,

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

Attachments

cc: Division of Consumer Advocacy

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		
	<u>08-01-20</u>	<u>09-01-20</u>	<u>Change</u>
<u>COMPOSITE COSTS</u> Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh	1,490.92 0.00	1,510.99 0.00	20.07 0.00
Purchased Energy, ¢/kWh	30.00	30.00	0.00
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	17.755	18.135	0.380
<u>Others - "G,P,F"</u> Energy Cost Recovery, ¢/kWh	17.755	18.135	0.380
Residential Customer with			
400 KWH Consumption, \$/Bill	140.41	141.93	1.52
500 KWH Consumption, \$/Bill	173.91	175.81	1.90

Supersedes Sheet Effective:

August 1, 2020

ENERGY COST RECOVERY (ECR) FILING

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

September 1, 2020 August 1, 2020

1 Effective Date 2 Supercedes Factors of

GENERATION COMPONENT

r		CENTRA	L STATION			
	FUEL PRICES	S, ¢/mmbtu				
3	Industrial			0.00		
4	Diesel - Miki E	Basin		1,510.99		
5	Diesel - Mane	le Bay		1,877.94		
6	Other	-		0.00		
	BTU MIX, %				DG ENERGY COMPONENT	
7	Industrial			0.00%	25 COMPOSITE COST OF DG	
8	Diesel - Miki E	Basin		100.00%	ENERGY, ¢/kWh	0.000
9	Diesel - Mane	le Bay		0.00%		
10	Other			0.00%	26 % Input to System kWh Mix	0.00%
				100.00%		
					27 WEIGHTED COMPOSITE DG ENERGY	
11	COMPOSITE	COST OF GEN	IERATION,		COST, ¢/kWh (Lines 25 x 26)	0.00000
	CENTRAL S	TATION + OTH	IER ¢/mmbtu	1,510.99		
	(Lines (3 x 7)) + (4 x 8) + (5 x	(9) + (6 x 10))			
12	% Input to Sys	stem kWh Mix		94.89%	28 BASE DG ENERGY COMP COST	0.000
					29 Base % Input to System kWh Mix	0.00%
	EFFICIENCY	FACTOR, mmb	otu/kWh		30 WEIGHTED BASE DG ENERGY COST,	
	(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, 1	4, 15): Col(B) x	Col(C) = Col(D)			
16	Weighted Effic	ciency Factor, n	nmbtu/kWh			
	[lines 13(D) +	+ 14(D) + 15(D)]	0.010872		
17			ENTRAL STATION	+		
		l COST, ¢/kWh				
	(lines (11 x 1	2 x 16))		15.58804		
18			OTHER GENERA	ATION		
	COST, ¢/mn			-		
		to Sys kWh Mix		0.00%		
		tor, mmbtu/kwh		0.010872		
21		BASE CENTRA				
		IERATION COS	ST ¢/kWh			
	(lines (18 x	19 x 20))		-		
					SUMMARY OF	
		BASE (line(17 -	21))	15.58804	TOTAL GENERATION FACTOR, ¢/kWh	
	Revenue Tax			1.0975	35 CNTRL STN + OTHER (line 24)	17.10787
24			R GENERATION		36 DG (line 34)	-
	FACTOR, ¢/I	kWh (line (22 x	: 23))	17.10787	37 TOTAL GENERATION FACTOR,	
					¢/kWh (lines 35 + 36)	17.10787

ENERGY COST RECOVERY (ECR) FILING

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

Line		
1	Effective Date	September 1, 2020

2	Supercedes Factors of	August 1, 2020
~		7 lagabt 1, 2020

Line	PURCHASED ENERGY COMPON	IENT
	PURCHASED ENERGY PRICE, ¢/kWh - FOSS 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	
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	30.000 5.11%
	COST, ¢/kWh (lines (44 x 45))	1.53300
48	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY	0.000 0.00
51 52	COST, ¢/kWh (lines (47 x 48)) COST LESS BASE(lines (46 - 49)) Loss Factor Revenue Tax Req Multiplier PURCHASED ENERGY FACTOR, ¢/kWh (lines (50 x 51 x 52))	0.00000 1.53300 1.050 1.0975 1.76659

Calculatio	n of Monthly Fossil Fuel Cost Risk Sharing Component	
	Baseline Diesel	
	Baseline Diesel	
54	Diesel \$, baseline month	\$616,461
55	Diesel mmbtu, baseline	30,215
56	Baseline Diesel, c/mmbtu	2,040.28
	Month Diesel	
57	Diesel mmbtu, budget	31,221
58	Diesel Cost, ¢/mmbtu	1,510.99
59	Diesel ECRC Fossil Cost	\$471,739
60	Diesel Base ECRC Recovery Target	\$636,987
61	Diesel differential	-\$165,247
62	Total Fossil	-\$165,247
63	2% of above	-\$3,305
64	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	-\$16,702
65	Maximum Annual Cap (bi-directional)	\$31,500
66	Number of Days in year from implementation	366
67	Fossil Risk % Proration (based on 366 day year)	100.00%
68	Maximum Annual Cap (bi-directional) prorated	\$31,500
69	Applicable Monthly Fossil Fuel Cost Risk Sharing	-\$3,305
70	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$20,007
71	Fossil Cost Risk Sharing before taxes	-\$3,305
72	Revenue Tax Adjustment	1.097514
73	Fossil Cost Risk Sharing w/revenue tax	-\$3,627
74	Forecasted Month MWh Sales	2,996
75	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.1211

Line SYSTEM COMPOSITE CALCULATIONS

76 GENERATION AND PURCHASED ENERGY	
FACTOR, ¢/kWh	18.87446
(lines (37 + 53))	
77 Adjustment, ¢/kWh	0.000
78 Fossil Fuel Cost Risk Sharing Component	0.121
79 ECR Reconciliation Adjustment	(0.860)
80 ECR FACTOR, ¢/kWh	18.135
(lines (76 + 77 + 78 + 79))	
(lines (76 + 77 + 78 + 79))	

Maui Electric Company, Ltd. Lanai Division

MONTH END FUEL OIL ESTIMATE

<u> Miki Basin - ULSD</u>	Barrels		MBTU	\$
8/19/2020	4,885.62		27,994.60	423,529.39
Estimated Use	1,930.50		11,061.77	164,922.07
Estimated Received	1,309.52		7,503.55	112,588.47
Estimated Additional	886.84		5,081.62	74,816.69
Estimated End	5,151.48		29,518.00	446,012.48
Next Month's Combined Miki Exp	ense (\$/bbl)	=	\$ 86.5795 /bbl	
Manele CHP	Barrels		MBTU	\$
8/19/2020	160.67		920.64	19,525.61
Estimated Use	(0.02)		(0.11)	(2.29)
Estimated Received	-		-	-
Estimated Additional	136.34		781.25	12,434.77
Estimated End	297.03		1,702.00	31,962.68
Next Month's Manele Expense (\$	/bbl)	=	\$ 107.6062 /bbl	

FUEL OIL INVENTORY PRICE USED FOR FILING

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel - Miki Basin		5.73 BTU/BBL	1,510.99
Diesel - Manele Bay		5.73 BTU/BBL	1,877.94

Contract Prices effective August 1, 2020

TYPE OF OIL BURNED	\$/BBL	¢/MBTU		
MIKI BASIN - ULTRA LOW S	ULFUR DIESEL	<u>. (DYED)</u>		
Tax *	4.9765	86.84		
Ocean Transportation	0.0000	0.00		
Storage	0.0000	0.00		
Wharfage	0.0000	0.00		
MIKI BASIN - ULTRA LOW SULFUR DIESEL				

Tax *	15.3181	267.33
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

MANELE BAY - ULTRA LOW SULFUR DIESEL

Tax *	15.3181	267.33
Ocean Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

 * 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

September 2020

1. Amount to be refunded	(\$70,400)
2. Monthly amount (1 / 3 X Line 1)	(\$23,467)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$25,755)
5. Estimated Sales (September 2020)	2,996 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.860 ¢/kwh

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

<u>Month</u>	(1) YTD FOA <u>Reconciliation</u>	<u>Qtr</u>	(2) FOA Rec Adjust <u>Variance</u>	(3) FOA Rec Less <u>Variance</u>	(4) Try to <u>Collect</u>	(5) Actual <u>Collect</u>	(6) Month-end Cumulative <u>Balance</u>
December '18					(11 967)	(11 707)	11 475
January '19					(11,867) (11,867)	(11,797) (11,150)	11,475 325
February	8,600	(4)	(386)	8,986	(11,867)	(11,130) (2,721)	6,590
March	0,000	(-)	(000)	0,000	(2,867)	(2,721)	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)	(21,694)	7,111
May	78,000	(1)	847	77,153	(26,000)	(28,250)	56,014
June					(26,000)	(27,227)	28,787
July		(-)			(26,000)	(29,208)	(421)
August	70,400	(2)	2,796	67,604	(23,467)		
September					(23,467)		

NOTES:

Col(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

	Rate			Charge (\$) at 400 Kwh		
		08-01-20	09-01-20	08-01-20	09-01-20	Difference
Base Rates	effective date:	09/01/19	09/01/19			
Base Fuel/Energy Charge	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Non-fuel Energy Charge						
First 250 kWhr per month	¢/kWh	12.3123	12.3123	30.78	30.78	0.00
Next 500 kWhr per month	¢/kWh	14.8123	14.8123	22.22	22.22	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
Total Base Charges				64.50	64.50	0.00
IRP Refund	% on base	0.0000	0.0000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	0.3383	0.3383	1.35	1.35	0.00
PBF Surcharge	¢/kWh	0.5882	0.5882	2.35	2.35	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
Refund of 2018 Interim	% on Base	0.00	0.00	0.00	0.00	0.00
Energy Cost Recovery	¢/kWh	17.755	18.135	71.02	72.54	1.52
Green Infrastructure Fee	\$	1.19	1.19	1.19	1.19	0.00

Avg Residential Bill at 400 kwh

Increase (Decrease -) % Change

140.41

141.93

	1.52
1.0)8%

	Rate			Charg	00 Kwh	
		08-01-20	09-01-20	08-01-20	09-01-20	Difference
Base Rates	effective date:	09/01/19	09/01/19			
Base Fuel/Energy Charge	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Non-fuel Energy Charge						
First 250 kWhr per month	¢/kWh	12.3123	12.3123	30.78	30.78	0.00
Next 500 kWhr per month	¢/kWh	14.8123	14.8123	37.03	37.03	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
Total Base Charges				79.31	79.31	0.00
IRP Refund	% on base	0.0000	0.0000	0.00	0.00	0.00
Revenue Balancing Rate Adjustment	¢/kWh	0.3383	0.3383	1.69	1.69	0.00
PBF Surcharge	¢/kWh	0.5882	0.5882	2.94	2.94	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
Refund of 2018 Interim	% on Base	0.00	0.00	0.00	0.00	0.00
Energy Cost Recovery	¢/kWh	17.755	18.135	88.78	90.68	1.90
Green Infrastructure Fee	\$	1.19	1.19	1.19	1.19	0.00
	•					

Avg Residential Bill at 500 kwh

Increase (Decrease -) % Change

173.91

175.81

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

	FUEL FACTOR CENTS / KWH		
	RESIDENTIAL &	RESIDENT	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
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
June 1, 2020	15.429	131.79	163.12
July 1, 2020	16.335	134.73	166.81
August 1, 2020	17.755	140.41	173.91
September 1, 2020	18.135	141.93	175.81

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 RECOVERY PROVISION	0.0000	PERCENT ON BASE CENTS/KWH
01/01/18 - 06/30/18 04/01/18 - 04/30/18 05/01/18 - 03/31/19 06/01/18 - 08/22/18 07/01/18 - 06/30/19 07/01/18 - 12/31/18 08/23/18 - 05/31/19 08/23/18 - 05/31/19 01/01/19 - 06/30/19	GREEN INFRASTRUCTURE FEE SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT REVENUE BALANCING ACCOUNT RATE ADJUSTMENT RESID. PBF SURCHARGE ADJUSTMENT GREEN INFRASTRUCTURE FEE INTERIM RATE INCREASE 2018 TEST YEAR REVENUE BALANCING ACCOUNT RATE ADJUSTMENT GREEN INFRASTRUCTURE FEE	0.0000 1.8954 0.4658 1.21 6.36 0.3183	DOLLARS/MONTH CENTS/KWH CENTS/KWH CENTS/KWH DOLLARS/MONTH PERCENT ON BASE CENTS/KWH DOLLARS/MONTH
04/01/19 - 04/30/19 05/01/19 - 03/31/20 06/01/19 06/01/19 - 06/30/19	SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2 REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR	0.0000 2018 TEST Y	
06/01/19 - 05/31/20 07/01/19 - 12/31/19 07/01/19 - 12/31/19 01/01/20 - 06/30/20 01/01/20 - 06/30/20 04/01/20 - 04/30/20 05/01/20 06/01/20 07/01/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT RESID. PBF SURCHARGE ADJUSTMENT GREEN INFRASTRUCTURE FEE RESID. PBF SURCHARGE ADJUSTMENT GREEN INFRASTRUCTURE FEE SOLARSAVER ADJUSTMENT SOLARSAVER ADJUSTMENT REVENUE BALANCING ACCOUNT RATE ADJUSTMENT RESID. PBF SURCHARGE ADJUSTMENT	0.8716 0.4775 1.17 0.7437 1.2500 -0.06 0.0000 0.3383 0.5882	CENTS/KWH CENTS/KWH DOLLARS/MONTH CENTS/KWH CENTS/KWH CENTS/KWH CENTS/KWH CENTS/KWH
07/01/20	GREEN INFRASTRUCTURE FEE	1.19	DOLLARS/MONTH

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