

December 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 January 2021

Maui Electric Company, Limited's ("Maui Electric" or "Company") January 2021 Energy Cost Recovery factor for our Maui Division is 14.967 cents per kilowatt-hour ("kWh"), an increase of 0.044 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$156.21, an increase of \$0.28 compared to rates effective December 1, 2020. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$0.23) and increase in the Green Infrastructure Fee (+\$0.06), partially offset by a decline in the Purchase Power Adjustment (-\$0.01).

The Company's Maui Division fuel composite cost of generation, central station and other increased 28.490 cents per million BTU to 981.48 cents per million BTU. The composite cost of DG energy is 0.00 cents per kWh. The composite cost of purchased energy increased 1.523 cents per kWh to 19.944 cents per kWh.

The Energy Cost Recovery factor for our Lāna'i Division for January 2021 is 19.498 cents per kWh, an increase of 1.624 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$147.44, an increase of \$6.55 compared to rates effective December 1, 2020. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$6.49) and increase in the Green Infrastructure Fee (+\$0.06).

The Company's Lāna'i Division fuel composite cost of generation, central station and other increased 134.36 cents per million BTU to 1,677.61 cents per million BTU. The composite cost 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 January 2021 is 14.116 cents per kWh, an increase of 0.779 cents per kWh from last month. A residential customer consuming 400 kWh of electricity will be paying \$133.06, an increase of \$3.17 compared to rates effective December 1, 2020. The increase in the typical residential bill is due to the increase in the Energy Cost Recovery factor (+\$3.11) and increase in the Green Infrastructure Fee (+\$0.06).

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The Company's Moloka'i Division fuel composite cost of generation, central station and other increased 78.07 cents per million BTU to 1,156.70 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 January 1, 2021.

Sincerely,

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

Attachments

cc: Division of Consumer Advocacy

# MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION

# **ENERGY COST RECOVERY FACTOR**

	EFFECTIVE DATES		
	<u>12-01-20</u>	<u>01-01-21</u>	<u>Change</u>
COMPOSITE COSTS  Generation, Central Station & Other, ¢/mbtu DG Energy, ¢/kWh Purchased Energy, ¢/kWh	1,078.63 0.00 22.48	1,156.70 0.00 21.80	78.07 0.00 (0.68)
Residential Schedule "R"			
Energy Cost Recovery, ¢/kWh	13.337	14.116	0.779
Others - "G,P,F"			
Energy Cost Recovery, ¢/kWh	13.337	14.116	0.779
Residential Customer with			
400 KWH Consumption, \$/Bill 500 KWH Consumption, \$/Bill	129.89 160.86	133.06 164.81	3.17 3.95

Supersedes Sheet Effective: December 1, 2020

# MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - January 1, 2021 (page 1 of 2)

Line 1 Effective Date January 1, 2021 2 Supercedes Factors December 1, 2020

## **GENERATION COMPONENT**

	CENTRAL STATION		
	FUEL PRICES, ¢/mmbtu		
3	Industrial	0.00	
-	Diesel	1,156.70	
	Other	0.00	
3	Other	0.00	
	BTU MIX, %		DG ENERGY COMPONENT
6	Industrial	0.00	23 COMPOSITE COST OF DG
7	Diesel	100.00	ENERGY, ¢/kWh 0.000
8	Other	0.00	24 % Input to System kWh Mix 0.00
		100.00	
			25 WEIGHTED COMPOSITE DG ENERGY COST,
9	COMPOSITE COST OF GENERATION,		¢/kWh (Lines 23 x 24) 0.00000
	CENTRAL STATION + OTHER ¢/mmbtu	1,156.70	
	(Lines (3 x 6) + (4 x 7) + (5 x 8))		
10	% Input to System kWh Mix	99.99	26 BASE DG ENERGY COMP COST 0.000
			27 Base % Input to System kWh Mix 0.00
	EFFICIENCY FACTOR, mmbtu/kWh		28 WEIGHTED BASE DG ENERGY COST,
	(A) (B) (C)	(D)	¢/kWh (Line 26 x 27) 0.00000
	Percent of		
	Eff Factor Centrl Stn +	Weighted	29 Cost Less Base (Line 25 - 28) 0.00000
	Fuel Type mmbtu/kwh Other	Eff Factor	30 Loss Factor 1.098
11	Industrial 0.000000 0.00	0.000000	31 Revenue Tax Req Multiplier 1.0975
12	Diesel 0.011127 100.00	0.011127	32 DG FACTOR,
13	Other 0.011127 0.00	0.000000	¢/kWh (Line 29 x 30 x 31) 0.00000
	(Lines 11, 12, 13): Col(B) x Col(C) = Col(D)		
14	Weighted Efficiency Factor, mmbtu/kWh		
	[lines 11(D) + 12(D) + 13(D)]	0.011127	
15	WEIGHTED COMPOSITE CENTRAL STATION	+	
	OTHER GENERATION COST, ¢/kWh		
	(lines (9 x 10 x 14))	12.86876	
16	BASE CENTRAL STATION + OTHER		
16	GENERATION COST, ¢/mmbtu	0.00	
47		0.00	
	Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh	0.00	
	WEIGHTED BASE CENTRAL STATION + OTH		
19	GENERATION COST ¢/kWh	EN	
	(lines (16 x 17 x 18))	0.00000	
	(11103 (10 x 17 x 10))	0.00000	SUMMARY OF
20	COST LESS BASE (line(15 - 19))	12.86876	TOTAL GENERATION FACTOR, ¢/kWh
	Revenue Tax Reg Multiplier	1.0975	33 CNTRL STN + OTHER (line 22) 14.12346
	CENTRAL STATION + OTHER GENERATION		34 DG (line 32) 0.00000
	FACTOR, ¢/kWh (line (20 x 21))	14.12346	35 TOTAL GENERATION FACTOR,
	, , , , , , , , , , , , , , , , , ,		¢/kWh (lines 33 + 34) 14.12346
			. , ,

# MAUI ELECTRIC COMPANY, LTD. MOLOKAI DIVISION ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - January 1, 2021 (page 2 of 2)

1 Effective Date January 1, 2021 2 Supercedes Factors December 1, 2020

Line	PURCHASED ENERGY COMPONENT	
37	PURCHASED ENERGY PRICE, ¢/kWh - Fossil PURCHASED ENERGY PRICE, ¢/kWh - Renewab Unused CBRE FIT	ole 0.000 22.500 21.800
40	Sch Q	0.000
42	PURCHASED ENERGY KWH MIX, % - Fossil PURCHASED ENERGY KWH MIX, % - Renewable Unused CBRE FIT	0.00% 0.00% 100.00%
45	Sch Q	0.00%
45B 45C	Fossil Purch. Energy % Renewable Purch. Energy % Comp. Cost, Fossil Purch. Energy, ¢/kWh Comp. Cost, Renewable Purch. Energy,¢/kWh	0.00% 100.00% N/A 21.800
47	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh (Lines (36 x 41) + (37 x 42) + (38 x 43) + (39 x 44) % Input to System kWh Mix WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (lines (46 x 47))	0.01
50	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh Base % Input to Sys kWh Mix WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (lines (49 x 50))	0.000 0.00 0.00000
53 54	COST LESS BASE (lines (48 - 51)) Loss Factor Revenue Tax Req Multiplier PURCHASED ENERGY FACTOR, ¢/kWh (lines (52 x 53 x 54))	0.00312 1.098 1.0975 0.00376

<u>Line</u>	Calculation of Monthly Fossil Fuel Cost Risk Sharing Compone	<u>ent</u>
	Baseline Diesel	
56	Diesel \$, baseline month	\$298,406
57	Diesel mmbtu, baseline	25,798
58	Baseline Diesel, c/mmbtu	1,156.70
	Month Diesel	
59	Diesel mmbtu, budget	25,798
60	Diesel Cost, ¢/mmbtu	1,156.70
61	Diesel ECRC Fossil Cost	\$298,406
62	Diesel Base ECRC Recovery Target	\$298,406
63	Diesel differential	\$0
64	Total Fossil	\$0
65	2% of above	\$0
66	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$0
67	Maximum Annual Cap (bi-directional)	\$31,500
68	Number of Days in year from implementation	365
69	Fossil Risk % Proration (based on 365 day year)	100.00%
70	Maximum Annual Cap (bi-directional) prorated	\$31,500
71	Applicable Monthly Fossil Fuel Cost Risk Sharing	\$0
72	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	\$0
73	Fossil Cost Risk Sharing before taxes	\$0
74	Revenue Tax Adjustment	1.097514
75	Fossil Cost Risk Sharing w/revenue tax	\$0
76	Forecasted Month MWh Sales	2,292
77	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.0000

<u>Line</u>	SYSTEM COMPOSITE CALCULATIONS	
78	GENERATION AND PURCHASED ENERGY	
	FACTOR, ¢/kWh	14.12722
	(lines (35 + 55))	
79	Adjustment, ¢/kWh	0.000
80	Fossil Fuel Cost Risk Sharing Component	0.000
81	ECR Reconciliation Adjustment	(0.011)
82	ECR FACTOR, ¢/kWh	14.116
	(lines (78 + 79 + 80 + 81))	

# Maui Electric Company, Ltd. Molokai Division

## MONTH END FUEL OIL ESTIMATE

	Barrels	MBTU	\$
12/17/2020	6,002.50	34,394.33	384,225.16
Estimated Use	2,300.94	13,184.39	142,210.52
Estimated Received	-	-	-
Estimated Additional	800.71	4,588.06	56,390.47
Estimated End	4,502.27	25,798.00	298,405.11

Next Months Expense = \$ 66.2788 /bbl

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

Type of Oil Burned	<u>Price</u>	Conversion Factor	Prices ¢/MBTU
Diesel	\$ 66.2788	5.73 BTU/BBL	1156.70

# MAUI ELECTRIC COMPANY, LTD. Molokai Division ECR Reconciliation Adjustment

# January 2021

Amount to be refunded	(\$700)
2. Monthly amount (1/3 x Line 1)	(\$233)
3. Revenue Tax Divisor	0.91115
4. Total (Line 2 / Line 3)	(\$256)
5. Estimated Sales (January 2021)	2,292 mwh
6. Adjustment (Line 4 ÷ Line 5)	-0.011 ¢/kwh

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

<u>Month</u>	(1) YTD FOA Reconciliation	<u>Qtr</u>	(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 '19 January '20					(9,667) (9,667)	(10,289) (10,240)	7,910 (2,330)
February	(31,000)	(4)	(1,752)	(29,248)	10,333	9,207	(22,371)
March	(01,000)	( . /	(1,102)	(20,210)	10,333	10,125	(12,246)
April					10,333	9,676	(2,570)
May	(400)	(1)	(1,907)	1,507	133	156	(907)
June	,	, ,	,		133	132	(775)
July					133	140	(635)
August	23,000	(2)	(635)	23,635	(7,667)	(7,490)	15,510
September					(7,667)	(7,964)	7,546
October					(7,667)	(7,901)	(355)
November	700	(3)	(113)	813	(233)	(238)	220
December					(233)		
January '21					(233)		

NOTES:

Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 20)

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. Molokai 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 Cost Recovery Provision SolarSaver Adjustment Refund of 2018 Interim Purchased Power Adjustment Energy Cost Recovery Green Infrastructure Fee

Avg Residential Bill at 400 kwh

Rate				
	12-01-20	01-01-21		
effective date:	09/01/19	09/01/19		
¢/kWh	0.0000	0.0000		
¢/kWh	14.0459	14.0459		
¢/kWh	16.6959	16.6959		
\$	11.50	11.50		
0/	0.000	0.000		
% on base	0.000	0.000		
¢/kWh	0.3383	0.3383		
¢/kWh	0.5882	0.5882		
¢/kWh	0.0000	0.0000		
¢/kWh	0.0000	0.0000		
% on base	0.00	0.00		
¢/kWh	0.0000	0.0000		
¢/kWh	13.337	14.116		
\$	1.19	1.25		

Charge (\$) at 400 Kwh						
12-01-20						
	<u> </u>	2				
0.00	0.00	0.00				
35.11	35.11	0.00				
25.04	25.04	0.00				
11.50	11.50	0.00				
71.65	71.65	0.00				
0.00	0.00	0.00				
4.05	4.05	0.00				
1.35	1.35	0.00				
2.35	2.35	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
0.00	0.00	0.00				
53.35	56.46	3.11				
1.19	1.25	0.06				
11.10	1.20	0.00				
129.89	133.06					

Increase (Decrease -) % Change

3.17 2.44%

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 Purchased Power Adjustment Energy Cost Recovery Green Infrastructure Fee

Avg Residential Bill at 500 kwh

Rate			
	12-01-20	01-01-21	
effective date:	09/01/19	09/01/19	
¢/kWh	0.0000	0.0000	
¢/kWh	14.0459	14.0459	
¢/kWh	16.6959	16.6959	
\$	11.50	11.50	
% on base	0.000	0.000	
¢/kWh	0.3383	0.3383	
¢/kWh	0.5882	0.5882	
¢/kWh	0.0000	0.0000	
¢/kWh	0.0000	0.0000	
	0.000		
% on base		0.00	
¢/kWh	0.0000	0.0000	
¢/kWh	13.337	14.116	
\$	1.19	1.25	

Charg	Charge (\$) at 500 Kwh			
12-01-20	Difference			
0.00	0.00	0.00		
35.11	35.11	0.00		
41.74	41.74	0.00		
11.50	11.50	0.00		
88.35	88.35	0.00		
	0.00	0.00		
0.00	0.00	0.00		
1.69	1.69	0.00		
2.94	2.94	0.00		
2.94	2.94	0.00		
0.00	0.00	0.00		
0.00	0.00	0.00		
0.00	0.00	0.00		
0.00	0.00	0.00		
66.69	70.58	3.89		
1.19	1.25	0.06		
160.86	164.81			

Increase (Decrease -) % Change

2.46%	3.95
	2.46%

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

# FUEL FACTOR CENTS / KWH

	CENTS / KWH		
		RESIDENT	IAL BILL (\$)
EFFECTIVE DATE	<u>COMMERCIAL</u>	<u>@ 400 KWH</u>	<u>@ 500 KWH</u>
January 1, 2019	-3.771	163.91	204.03
February 1, 2019	-7.208	150.16	186.85
March 1, 2019	-4.872	159.50	198.53
April 1, 2019	-5.034	158.51	197.29
May 1, 2019	-3.503	164.98	205.37
June 1, 2019	5.096	166.63	206.77
July 1, 2019	3.171	161.65	200.57
August 1, 2019	2.259	155.00	192.25
September 1, 2019	19.349	152.49	189.11
October 1, 2019	19.071	151.51	187.89
November 1, 2019	20.907	162.13	201.16
December 1, 2019	18.365	151.94	188.43
January 1, 2020	18.533	153.75	190.67
February 1, 2020	21.165	164.02	203.51
March 1, 2020	21.967	167.23	207.52
April 1, 2020	19.555	157.34	195.16
May 1, 2020	18.231	151.00	187.24
June 1, 2020	12.810	127.13	157.40
July 1, 2020	10.471	118.42	146.53
August 1, 2020	12.013	125.55	155.44
September 1, 2020	14.463	135.41	167.76
October 1, 2020	10.877	121.03	149.78
November 1, 2020	14.096	132.92	164.65
December 1, 2020	13.337	129.89	160.86
January 1, 2021	14.116	133.06	164.81

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE RATE		RATE
06/01/11 08/17/17	IRP RECOVERY REFUND RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION		PERCENT ON BASE CENTS/KWH
07/01/17 - 06/30/18	RESID. PBF SURCHARGE ADJUSTMENT	0 4244	CENTS/KWH
01/01/18 - 06/30/18	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
04/01/18 - 04/30/18	SOLARSAVER ADJUSTMENT	_	CENTS/KWH
05/01/18 - 03/31/19	SOLARSAVER ADJUSTMENT		CENTS/KWH
06/01/18 - 08/22/18	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
07/01/18 - 06/30/19	RESID. PBF SURCHARGE ADJUSTMENT		CENTS/KWH
07/01/18 - 12/31/18	GREEN INFRASTRUCTURE FEE	1.21	DOLLARS/MONTH
08/23/18 - 05/31/19	INTERIM RATE INCREASE 2018 TEST YEAR	6.68	PERCENT ON BASE
08/23/18 - 05/31/19	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT		CENTS/KWH
01/01/19 / 06/30/19	GREEN INFRASTRUCTURE FEE	1.35	DOLLARS/MONTH
04/01/19 - 04/30/19	SOLARSAVER ADJUSTMENT		CENTS/KWH
5/1/2019 - 03/31/20	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/01/19	FINAL RATE INCREASE (3.74%), DOCKET NO. 2017-0150 (2.11)	2018 TEST YEAR	?)
06/01/19 - 06/30/19	REFUND OF INTERIM RATE INCREASE 2018 TEST YEAR		PERCENT ON BASE
06/01/19 - 05/31/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.8716	CENTS/KWH
07/01/19 - 12/31/19	RESID. PBF SURCHARGE ADJUSTMENT	0.4775	CENTS/KWH
07/01/19 - 12/31/19	GREEN INFRASTRUCTURE FEE	1.17	DOLLARS/MONTH
08/01/19 - 08/31/19	PURCHASED POWER ADJUSTMENT	-0.7518	CENTS/KWH
09/01/19 - 09/30/19	PURCHASED POWER ADJUSTMENT	-0.7820	CENTS/KWH
10/01/19 - 10/31/19	PURCHASED POWER ADJUSTMENT	-0.7475	CENTS/KWH
11/01/19 - 11/30/19	PURCHASED POWER ADJUSTMENT	0.0692	CENTS/KWH
12/01/19 - 12/31/19	PURCHASED POWER ADJUSTMENT	0.0655	CENTS/KWH
01/01/20 - 01/31/20	PURCHASED POWER ADJUSTMENT	0.0648	CENTS/KWH
01/01/20 - 06/30/20	RESID. PBF SURCHARGE ADJUSTMENT	0.7437	CENTS/KWH
01/01/20 - 06/30/20	GREEN INFRASTRUCTURE FEE	1.25	DOLLARS/MONTH
02/01/20 - 04/30/20	PURCHASED POWER ADJUSTMENT	0.00	CENTS/KWH
04/01/20 - 04/30/20	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/20 - 05/31/20	PURCHASED POWER ADJUSTMENT	-0.3200	CENTS/KWH
05/01/20	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/01/20 - 06/30/20	PURCHASED POWER ADJUSTMENT	-0.3325	CENTS/KWH
06/01/20	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.3383	CENTS/KWH
07/01/20 - 07/31/20	PURCHASED POWER ADJUSTMENT	0.0000	CENTS/KWH
07/01/20	RESID. PBF SURCHARGE ADJUSTMENT	0.5882	CENTS/KWH
07/01/20 - 12/31/20	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
08/01/20 - 08/31/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
09/01/20 - 09/30/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
10/01/20 -10/31/20	PURCHASED POWER ADJUSTMENT	0.2449	CENTS/KWH
11/01/20	PURCHASED POWER ADJUSTMENT		CENTS/KWH
01/01/21	GREEN INFRASTRUCTURE FEE	1.25	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.