



October 26, 2021

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: Hawaiian Electric Energy Cost Recovery Factor for November 2021

Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or "Company") November 2021 Energy Cost Recovery Factor is 15.767 cents per kilowatt-hour ("kWh"), an increase of 1.440 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$166.60, an increase of \$3.28 compared to rates effective October 1, 2021. The increase in the residential typical bill is due to an increase in the Energy Cost Recovery Factor (+\$7.20), which is partially offset by a decrease in the Purchase Power Adjustment Clause rate (-\$2.59), a decrease in the DSM Adjustment (-\$1.29), and a decrease in the Demand Response Adjustment Clause rate (-\$0.04).

The Company's fuel composite cost of major energy increased 43.86 cents per million BTU to 1,471.21 cents per million BTU. The Company's composite cost of minor energy increased 3.139 cents per kWh to 17.707 cents per kWh. The composite cost of purchased energy increased 0.891 cents per kWh to 11.164 cents per kWh.

The attached sheets set forth the energy cost recovery factor in cents per kWh for each rate schedule that is applicable for *pro rata* use beginning November 1, 2021.

Very truly yours,

/s/ Dean K. Matsuura

Dean K. Matsuura  
Director, Regulatory Rate Proceedings

Attachments  
cc: Division of Consumer Advocacy

**Hawaiian Electric Company, Inc.**  
**ENERGY COST RECOVERY FACTOR**

	<u>Effective Dates</u>		<u>Change</u>
	<u>10/01/21</u>	<u>11/01/21</u>	
Composite Cost Of Major Energy, ¢/mmbtu	1,427.35	1,471.21	43.86
Composite Cost Of Minor Energy, ¢/kwh	14.569	17.707	3.139
Composite Cost Of Purchased Energy, ¢/kWh	10.273	11.164	0.891
 <u>Residential, Schedule "R"</u>			
Energy Cost Recovery, ¢/kWh	14.327	15.767	1.440
 <u>Others, Schedules "G,J,DS,P,F"</u>			
Energy Cost Recovery, ¢/kWh	14.327	15.767	1.440
 <u>Residential Customer with:</u>			
500 kWh Consumption, \$/bill	163.32	166.60	3.28
600 kWh Consumption, \$/bill	194.25	198.20	3.95

Supersedes Sheet Effective:

October 1, 2021

Hawaiian Electric Company, Inc.  
ENERGY COST RECOVERY FILING

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

Line		
1	Effective Date	- November 1, 2021
2	Supercedes Factor	- October 1, 2021

GENERATION COMPONENT

MAJOR ENERGY COMPONENT				MINOR ENERGY COMPONENT			
				Gen Cost	Percent of	Weighted Gen	
				\$/KWH	Minor Energy	Cost \$/KWH	
FUEL PRICES, \$/mmbtu				Fuel Type			
3	Honolulu	0.00		32a Airport DG	26.30	3.03%	0.7956
4	Kahe	1,471.21		32b CIP-Biodiesel	0.00	0.00%	0.0000
5	Waiau-Steam	1,471.21		32c CT-1 (CIP) ULSD	29.16	16.65%	4.8546
6	(Future Use)	0.00		32d SGS - Biodiesel	23.51	24.49%	5.7569
7	(Future Use)	0.00		32e SGS - ULSD	18.20	0.09%	0.0167
8	(Future Use)	0.00		32f Waiau-Diesel	38.01	16.53%	6.2835
9	Other	0		32g West Loch PV	0.00	39.22%	0.0000
				32h COMPOSITE COST OF MINOR ENERGY, \$/kWh			17.707
10	Honolulu	0.00		33 % Input to System kWh Mix			1.52
11	Kahe	69.69					
12	Waiau-Steam	30.31		34 WTD COMP MINOR ENERGY COST, \$/kWh (Lines 32h x 33)			0.26915
13	(Future Use)	0.00		35 2017 TY Loss Factor			1.0490
14	(Future Use)	0.00		36 WTD COMP MINOR ENERGY COST, \$/kWh (Line 34 x 35)			0.28234
15	(Future Use)	0.00					
16	Other	0.00		37 BASE MINOR ENERGY COMP COST			0.0000
		100.00		38 Base % Input to System kWh Mix			0.0000
17	COMPOSITE COST OF GENERATION, MAJOR ENERGY \$/mmbtu	1,471.21		39 WTD BASE MINOR ENERGY COST, \$/kWh (Line 37 x 38)			0.00000
18	% Input to system kWh Mix	44.82		40 2017 TY Loss Factor			1.0490
EFFICIENCY FACTOR, mmbtu/kWh				41 WTD COMP MINOR ENERGY COST, \$/kWh (Line 39 x 40)			0.00000
(A)	(B)	(C)	(D)	42 Cost Less Base (Line 36 - 41)			0.282338
Fuel Type	Eff Factor mmbtu/kWh	Percent of Centri Stn + Other	Weighted Eff Factor	43 Revenue Tax Adjustment (1 / (1-0.08885))			1.097514
19	LSFO	0.011142	100.00	44 MINOR ENERGY FACTOR, \$/kWh (Line 42 x 43)			0.30987
20	(Future Use)	0.000000	0.00				
21	(Future Use)	0.000000	0.00				
22	Other	0.011142	0.00				
(Lines 19 through 22): Col(B) x Col(C) = Col(D)							
23	Weighted Efficiency Factor, mmbtu/kWh [lines 19(D) + 20(D) + 21(D) + 22(D)]		0.011142				
24	WEIGHTED MAJOR ENERGY COST, \$/kWh Sales (lines 17 x 18 x 23)		7.34699				
25	BASE MAJOR ENERGY COST, \$/mmbtu		0.00				
26	Base % Input to System kWh Mix		0.0000				
27	Efficiency Factor, Mbtu/kWh		0.000000				
28	WEIGHTED BASE MAJOR ENERGY COST \$/KWH Sales (lines 25 x 26 x 27)		0.00000				
29	Cost Less Base (Line 24 - 28)		7.34699				
30	Revenue Tax Adjustment (1 / (1-0.08885))		1.097514				
31	MAJOR ENERGY GENERATION FACTOR, \$/KWH (Line 29 x 30)		8.06343				

SUMMARY OF TOTAL GENERATION FACTOR, \$/kWh	
45 MAJOR ENERGY (line 31)	8.06343
46 MINOR ENERGY (line 44)	- 0.30987
47 TOTAL GENERATION FACTOR, \$/KWH (lines 45 + 46)	- 8.37330

Hawaiian Electric Company, Inc.  
ENERGY COST RECOVERY FILING

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

Line	Effective Date	- November 1, 2021
2	Supercedes Factor	- October 1, 2021

Line	PURCHASED ENERGY COMPONENT		Calculation of Monthly Fossil Fuel Cost Risk Sharing Component	
	PURCHASED ENERGY PRICE - FOSSIL - ¢/KWH			
48	PAR Hawaii	- On Peak	10.200	<b>Baseline LSFO</b>
49	PAR Hawaii	- Off Peak	14.091	101 LSFO \$, baseline month
50	IES Downstream		0.000	102 LSFO mmbtu, baseline
51	Kalaeloa		15.340	103 Baseline LSFO, ¢/mmbtu
52	AES-HI		3.515	
53				<b>Baseline Diesel</b>
	PURCHASED ENERGY PRICE - RENEWABLE - ¢/KWH			104 Diesel \$, baseline month
54	HRRV	- On Peak	18.14	105 Diesel mmbtu, baseline
55		- Off Peak	17.62	106 Baseline Diesel, ¢/mmbtu
56	HRRV	- On Peak (excess)	11.55	
57		- Off Peak (excess)	6.93	<b>Month LSFO</b>
58	Kawaiiloa Wind		23.07	107 LSFO mmbtu, budget
59	Kahuku Wind		21.64	108 LSFO Cost, ¢/mmbtu
60	Waianae Solar PV		14.50	109 LSFO ECRC Fossil Cost
61	As Available I		23.12	110 LSFO Base ECRC Recovery Target
62	FIT		23.75	111 LSFO differential
63	CBRE PV		15.00	
64	Kawaiiloa PV		12.73	<b>Month Diesel</b>
65	Lanikuhana PV		13.05	112 Diesel mmbtu, budget
66	Waipio PV		12.18	113 Diesel Cost, ¢/mmbtu
67	Na Pua Makani Wind		13.93	114 Diesel ECRC Fossil Cost
	PURCHASED ENERGY KWH MIX - FOSSIL - %			115 Diesel Base ECRC Recovery Target
68	PAR Hawaii	- On Peak	0.23	116 Diesel differential
69	PAR Hawaii	- Off Peak	0.17	117 Total Fossil
70	IES Downstream		0.03	118 2% of above
71	Kalaeloa		29.39	118A Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year
72	AES-HI		39.92	118B Maximum Annual Cap (bi-directional)
73				118C Applicable Monthly Fossil Fuel Cost Risk Sharing
73a	Subtotal Fossil %		69.74	118D Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month
	PURCHASED ENERGY KWH MIX - RENEWABLE - %			119 Fossil Cost Risk Sharing before taxes
74	HRRV	- On Peak	6.16	120 Revenue Tax Adjustment
75		- Off Peak	2.60	121 Fossil Cost Risk Sharing w/revenue tax
76	HRRV	- On Peak (excess)	0.00	122 Forecasted Month MWh Sales
77		- Off Peak (excess)	1.67	123 Fossil Fuel Cost Risk Sharing Component, ¢/kWh
78	Kawaiiloa Wind		4.46	
79	Kahuku Wind		2.54	<b>Derivation of Non-Adjustable Component:</b>
80	Waianae Solar PV		1.48	80A Fuel Handling Exp, \$000
81	As Available I		0.49	Final Settlement, HECO-603, p1
82	FIT		1.74	80B Revenue Tax Adjustment
83	CBRE PV		0.03	80C Non-Adj Revenues, \$000
84	Kawaiiloa PV		2.45	80D 2017 TY Sales, MWh
85	Lanikuhana PV		0.73	HECO-301, p1
86	Waipio PV		2.29	80E Non-Adj Revenues, ¢/kWh
87	Na Pua Makani Wind		3.62	
87a	Subtotal Renewable %		30.26	
87b	Total Purchased Energy %		100.00	
87c	Composite Cost of Purchased Energy, Fossil		8.54	
87d	Composite Cost of Purchased Energy, Renewable		17.20	
88	COMPOSITE COST OF PURCHASED ENERGY, ¢/KWH		11.164	<b>Line SYSTEM COMPOSITE</b>
89	% Input to System kWh Mix		53.66	124 GEN AND PURCHASED ENERGY FACTOR, ¢/kWh (lines 47 + 100)
90	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 88 x 89)		5.99060	125 (Future Use) Adjustment, ¢/kWh
91	2017 TY Loss Factor		1.0490	126 ECR Reconciliation Adjustment
92	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 90 x 91)		6.28414	127 Non-Adjustable Component (line 80E)
93	BASE PURCHASED ENERGY COMPOSITE COST, ¢/KWH		0.000	128 Fossil Fuel Cost Risk Sharing Component (line 123)
94	Base % Input to System kWh Mix		0.0000	
95	WEIGHTED BASE PURCHASED ENERGY COST, ¢/KWH SALES (lines 93 x 94)		0.00000	129 Monthly Energy Cost Recovery Factor (lines 124 + 125 + 126 + 127 + 128)
96	2017 TY Loss Factor		1.049	
97	WTD CMP PURCH ENRGY COST, ¢/KWH sales (lines 95 x 96)		0.00000	
98	Cost Less Base (Line 92 - 97)		6.28414	
99	Revenue Tax Adjustment (1 / (1-0.08885))		1.097514	
100	PURCHASED ENERGY FACTOR, ¢/KWH (lines 98 x 99)		6.89693	

**Hawaiian Electric Company, Inc.**  
**FUEL OIL INVENTORY PRICES FOR November 1, 2021**

	Honolulu	Kahe	Waiau
Average Low Sulfur Fuel Oil, ¢/Mbtu	1,469.91	1,469.91	1,469.91
Fuel Additive, ¢/Mbtu	-	1.30	1.30
Honolulu Trucking Cost, ¢/Mbtu	-	-	-
Low Sulfur Fuel Oil Prices Used For Filing, ¢/Mbtu	1,469.91	1,471.21	1,471.21
	Waiau	CIP Biodiesel	CIP Diesel
Average Diesel / Biodiesel Oil, ¢/Mbtu	1,563.34	-	1,636.13
Thruput Charges, ¢/Mbtu	-	-	0
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	1,563.34	-	1,636.13
	SGS ULSD	SGS Biodiesel	
Average Diesel / Biodiesel Oil, ¢/Mbtu	2,000.71	2,654.82	
Thruput Charges, ¢/Mbtu	-	-	
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	2,000.71	2,654.82	
	Honolulu	Kahe	Waiau
Average Low Sulfur Fuel Oil, \$/bbl	91.42	91.42	91.42
Fuel Additive, \$/bbl	-	0.08	0.08
Honolulu Trucking Cost, \$/bbl	-	-	-
Low Sulfur Fuel Oil Prices Used For Filing, \$/bbl	91.42	91.50	91.50
	Waiau	CIP Biodiesel	CIP Diesel
Average Diesel / Biodiesel Oil, \$/bbl	89.69	-	92.40
Thruput Charges, ¢/Mbtu	-	-	-
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	89.69	-	92.40
	SGS ULSD	SGS Biodiesel	
Average Diesel / Biodiesel Oil, \$/bbl	115.96	139.96	
Thruput Charges, ¢/Mbtu	-	-	
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	115.96	139.96	
Distributed Generation Fuel Prices Used for Filing, ¢/kWh			26.300

FOAC November 1, 2021

<b>LSFO</b>	<b>BARRELS</b>	<b>MBTU</b>	<b>AMOUNT</b>	<b>AVE \$/MBTU</b>
Per FOAC run	728,986	4,533,686	66,641,108	14.699102
Additional	-	-	-	-
Forecast Amt	728,986	4,533,686	66,641,108	14.699102
	-	6.20	-	ADD'L BBL
	4,533,686	728,986	6.2192	MBTU / BBL
	66,641,108	728,986	91.42	DOLLARS / BBL
<b><u>WAI AU DIESEL</u></b>	23,650	135,685	2,121,218	15.633375
	2,121,218	23,650	89.69	DOLLARS / BBL
<b><u>CIP BIODIESEL</u></b>	-	-	-	-
	-	-	-	DOLLARS / BBL
<b><u>CIP DIESEL</u></b>	44,570	251,712	4,118,343	16.361305
	4,118,343	44,570	92.40	DOLLARS / BBL
<b><u>SGS ULSD</u></b>	426	2,469	49,400	20.007140
	49,399.63	426	115.96	DOLLARS / BBL
<b><u>SGS BIODIESEL</u></b>	6,481	34,168	907,088	26.54823706
	907,088	6,481	139.96	DOLLARS / BBL
<b>FUEL ADDITIVE</b>				0.013019
Additional				
Forecast Amt	-	-	-	0.013019
\$ / BBL =	-	-	0.08	DOLLARS / BBL
<b>HONOLULU TRUCKING COST</b>				
Per FOAC run	-	-	-	-
Additional				
Forecast Amt	-	-	-	-
\$ / BBL =	-	-	-	DOLLARS / BBL

HAWAIIAN ELECTRIC COMPANY, INC.

DETERMINATION OF DISTRIBUTED GENERATION EXPENSE

<u>Line No.</u>		<u>Airport DG Biodiesel</u>		<u>Schofield Biodiesel</u>		<u>Schofield ULSD</u>	
(A)	\$	25.77	\$	26.55	\$	20.01	Estimated Distributed Generation Fuel Cost (\$/MBTU)
(B)		2561		17,979		69	Estimated MBTU Consumption
(B1)		488		3,426		12	Estimated fuel consumption barrels
(C) = (A) x (B)		\$65,987		\$477,312		\$1,385	Estimated Distributed Generation Fuel Cost (\$)
(D)		250,866		2,030,544		7,609	Estimated Distributed Generation kWh
(E) = ((C) ÷ (D)) x 100		<u>26.300</u>		<u>23.510</u>		<u>18.200</u>	¢/kWh

**Hawaiian Electric Company, Inc.**  
**ECA RECONCILIATION ADJUSTMENT**  
**November 2021**

1.	Amount to be collected	\$	6,273,400
2.	Monthly Amount (Line 1 x 1/3)	\$	2,091,133
3.	Revenue Tax Divisor		0.91115
4.	Total (Line 2 / Line 3)	\$	2,295,048
5.	Estimated MWh Sales (November 2021)		523,773
6.	ECA Reconciliation Adjustment, ¢/kWh (Line 4 ÷ Line 5)		<u><u>0.438</u></u>



**Hawaiian Electric Company, Inc.**  
**FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY**  
**September, 2021**  
**(Thousand \$)**

<u>Line</u>	<u>Description</u>	<u>Info Only</u>		<u>Basis for Recon</u>	
		<u>W/O DeadBand</u> <u>September, 2021</u> <u>Cumulative</u> <u>YTD Total</u>	<u>collectn</u> <u>by</u> <u>company*</u>	<u>W/ DeadBand</u> <u>September, 2021</u> <u>Cumulative</u> <u>YTD Total</u>	<u>collectn</u> <u>by</u> <u>company*</u>
<b>ACTUAL COSTS:</b>					
1	Generation / Major Fuels	\$290,600.6		\$290,600.6	
2	Distributed Generation / Minor Fuels	\$11,746.9		\$11,746.9	
3	Purch Power	\$249,524.8		\$249,524.8	
4	<b>TOTAL</b>	<b>\$551,872.3</b>		<b>\$551,872.3</b>	
<b>FUEL FILING COST</b>					
5	Generation / Major Fuels	\$284,734.0		\$290,483.9	
6	Distributed Generation / Minor Fuels	\$11,746.9		\$11,746.9	
7	Purch Power	\$249,524.8		\$249,524.8	
8	<b>TOTAL</b>	<b>\$546,005.7</b>		<b>\$551,755.6</b>	
<b>BASE FUEL COST</b>					
9	Generation / Major Fuels	\$0.0		\$0.0	
10	Distributed Generation / Minor Fuels	\$0.0		\$0.0	
11	Purch Power	\$0.0		\$0.0	
12	<b>TOTAL</b>	<b>\$0.0</b>		<b>\$0.0</b>	
13	FUEL-BASE COST (Line 8-12)	\$546,005.7		\$551,755.6	
14	ACTUAL FOA LESS TAX	\$552,278.5		\$552,278.5	
15	Less: FOA reconciliation adj for prior year	\$2,160.6		\$2,160.6	
15A	Less: Non-Adjustable Component Revenues Less Tax	\$5,226.5		\$5,226.5	
16	<b>ADJUSTED FOA LESS TAX</b>	<b>\$544,891.4</b>		<b>\$544,891.4</b>	
17	FOA-(FUEL-BASE) (Line 16-13)	-\$1,114.3	under	-\$6,864.2	under
<b>ADJUSTMENTS:</b>					
18	Current year FOA accrual reversal	-\$3,590.2		-\$3,590.2	
19	Other prior year FOA	\$0.0		\$0.0	
20	Other	\$0.0		\$0.0	
21	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	-\$4,704.5	under	-\$10,454.4	under
21A	YTD Fossil Fuel Cost Risk Sharing Adjustment	\$1,663.7		\$1,663.7	
21B	QUARTERLY FOA RECON w/Fossil Risk Adj (Line 21+Line 21A)	-\$3,040.8		-\$8,790.6	
22	2nd Quarter Reconciliation YTD			-\$2,517.2	under
23	Amount to be collected			-\$6,273.4	under

\* Over means an over-collection by the company.  
Under means an under-collection by the company.

**Hawaiian Electric Company, Inc.****DEADBAND CALCULATION****2021**

FOR PERIOD: JANUARY 1, 2021 TO SEPTEMBER, 2021

	Notes	YTD
<b><u>Low Sulfur Fuel Oil (LSFO)</u></b>		
LSFO Efficiency Factor, BTU/kWh*	f	11,142
LSFO Deadband Definition, +/- BTU/kWh	d	225
LSFO Portion of Recorded Sales, kWh	a	2,137,221,568
LSFO Consumption (Recorded), MMBTU	b	24,295,917
LSFO Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	11,368
Lower limit of LSFO Deadband, BTU/kWh	e = f-d	10,917
Higher limit of LSFO Deadband, BTU/kWh	g = f+d	11,367
LSFO Efficiency Factor for cost-recovery, BTU/kWh	h = c, e or g	11,367
Recorded BTU/kWh vs. Deadband		Worse

\* YTD Efficiency Factor is actual YTD & projected to the end of the year weighted by calendar days in the year

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**FUEL FILING COST AND BASE FUEL COST, MAJOR FUELS, WITHOUT and WITH DEADBAND**  
**September, 2021 Year-to-Date**

	<b>Without Deadband</b>	<b>With Deadband AS FILED</b>
<u>FUEL FILING COST, MAJOR FUELS</u>	<u>Jan 1-Sep 30</u>	<u>Jan 1-Sep 30</u>
LSFO Portion of Recorded Sales , MWH	2,137,221,568	2,137,221,568
LSFO Sales Efficiency Factor (mmbtu/kwh)	0.011142	0.011367
Mmbtu adjusted for Sales Efficiency Factor	23,812,922,711	24,293,797,563
\$/mmbtu	<u>\$11.9571</u>	<u>\$11.9571</u>
TOTAL LSFO \$ TO BE RECOVERED	\$284,734,041	\$290,483,921
TOTAL MAJOR FUEL FILING COST \$	\$284,734,041	\$290,483,921
<u>BASE FUEL COST, MAJOR FUELS</u>		
TOTAL BASE FUEL COST	\$0	\$0
TOTAL FUEL FILING COST, MAJOR FUELS \$ YTD	\$284,734,041	\$290,483,921
TOTAL BASE FUEL COST, MAJOR FUELS YTD	\$0	\$0

Hawaiian Electric Company, Inc.  
 Fuel Oil Adjustment Reconciliation

ATTACHMENT 4  
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**Fossil Fuel Cost Risk Sharing Mechanism and Non-Adjustable Component, September, 2021**

		Jan-21, Baseline	YTD
<b>LSFO Fossil Fuel Cost Risk Sharing</b>			
A	MMBtu	2,936,857 mmbtu	24,295,917 mmbtu
B	\$ cost, actuals	\$26,119,028	\$290,600,607
C = B / A (Jan Column)	Jan 2021 baseline \$/MMBtu	8.893530	8.893530
D	LSFO Gen kWh		2,234,002,086
E	Total kWh, Gen, Purch Pwr, DG		4,785,149,512
F	Sales kWh		4,577,563,530
G = (D / E) x F	LSFO kWh-sales		2,137,088,183
H	Target Heat Rate		11,142
I	Recovery heat rate		11,367
J = B/A (YTD Column)	Actual Cost \$/MMBtu		11.960883
K = C x H x G / 1,000,000	Base Cost Recovery w/Target Heat Rate		\$211,767,735
L = I x J x G / 1,000,000	Fuel Filing Cost Recovery		\$290,557,128
M = 2% x (L-K)	<b>LSFO Cost Risk Sharing</b>		<b>\$1,575,788</b>
<b>Diesel Fossil Fuel Cost Risk Sharing (w/o target heat rate)</b>			
AA	MMBtu	205,718 mmbtu	1,391,101 mmbtu
BB	Fuel Filing Cost Recovery (no heat rate)	\$1,959,475	\$17,648,231
CC = BB/AA (Jan Column)	Jan 2021 baseline \$/MMBtu	9.525053	9.525053
DD = AA x CC	Base Cost Recovery		\$13,250,312
EE = (BB - DD) x 2%	<b>Diesel Cost Risk Sharing</b>		<b>\$87,958</b>
FF = M + EE, up to ±\$2.5MM	<b>Total Fossil Fuel Cost Risk Sharing Adjustment, subject to ±\$2.5MM cap</b>		<b>\$1,663,746</b>
<b>Non-Adjustable Component</b>			
AAA = F	YTD kWh		4,577,563,530
BBB	Non-Adjustable Component, c/kWh		0.12531
CCC = AAA x BBB	Non-Adjustable Component Revenues w/tax		\$5,736,145
DDD = CCC / (1/(1-.08885))	Non-Adjustable Component Revenues less tax		<b>\$5,226,488</b>

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**2021 Cumulative Reconciliation Balance**

<u>Month</u>	(1) <u>YTD FOA Reconciliation</u>	<u>Qtr</u>	(2) <u>FOA Rec Variance</u>	(3) <u>FOA Rec Less Variance</u>	(4) <u>Try to Collect</u>	(5) <u>Actual Collect</u>	(6) <u>Month-end Cumulative Balance</u>
November '19	(6,720,985)	(3)	294,091	(7,015,076)	2,240,328	2,353,575	(4,284,761)
December					2,240,328	2,361,239	(1,923,522)
January '20					2,240,328	2,306,195	382,673
February	(13,170,400)	(4)	316,801	(13,487,201)	4,390,133	4,094,101	(9,010,426)
March					4,390,133	4,306,396	(4,704,030)
April					4,390,133	3,741,603	(962,427)
May	(8,014,600)	(1)	(313,903)	(7,700,697)	2,671,533	2,938,807	(5,724,317)
June					2,671,533	3,210,640	(2,513,677)
July					2,671,533	3,023,078	509,401
August	1,191,000	(2)	157,850	1,033,150	(397,000)	(425,414)	1,117,137
September					(397,000)	(420,594)	696,543
October					(397,000)	(434,377)	262,166
November	(3,466,900)	(3)	299,537	(3,766,437)	1,155,633	1,229,016	(2,275,255)
December					1,155,633	1,216,131	(1,059,124)
January 21					1,155,633	1,133,735	74,611
February	(1,005,100)	(4)	96,503	(1,101,603)	335,033	303,760	(723,232)
March					335,033	337,351	(385,881)
April					335,033	321,756	(64,125)
May	(5,736,000)	(1)	(50,854)	(5,685,146)	1,912,000	1,943,306	(3,805,965)
June					1,912,000	1,887,196	(1,918,769)
July					1,912,000	1,943,799	25,030
August	3,218,800	(2)	(6,775)	3,225,575	(1,072,933)	(1,069,958)	2,180,647
September					(1,072,933)	(1,036,068)	1,144,579
October					(1,072,933)		
November	(6,273,400)	(3)	71,640	(6,345,040)	2,091,133		

**NOTES:**

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 4)  
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))

**Hawaiian Electric Company, Inc.**  
**ENERGY COST RECOVERY FACTOR DATA**

<u>EFFECTIVE DATE</u>	ENERGY COST FACTOR		RESIDENTIAL BILL (\$)	
	<u>RESIDENTIAL &amp; COMMERCIAL</u>	<u>CENTS / KWH</u>	<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2019	14.095		161.36	191.85
February 1, 2019	12.044		147.31	175.01
March 1, 2019	13.449		154.51	183.63
April 1, 2019	14.338		158.42	188.34
May 1, 2019	14.721		163.56	194.50
June 1, 2019	15.199		163.47	194.39
July 1, 2019	14.545		160.95	191.42
August 1, 2019	14.297		160.45	190.82
September 1, 2019	13.240		155.11	184.42
October 1, 2019	12.951		153.64	182.65
November 1, 2019	12.778		150.18	178.51
December 1, 2019	12.409		148.41	176.37
January 1, 2020	13.629		155.97	185.42
February 1, 2020	14.648		161.90	192.54
March 1, 2020	14.349		160.64	191.02
April 1, 2020	13.071		153.83	182.86
May 1, 2020	11.735		148.21	176.12
June 1, 2020	10.875		142.16	168.84
July 1, 2020	10.128		137.84	163.68
August 1, 2020	9.274		133.06	157.94
September 1, 2020	10.220		137.57	163.36
October 1, 2020	10.589		139.36	165.49
November 1, 2020	10.850		138.03	163.91
December 1, 2020	10.624		136.57	162.15
January 1, 2021	11.355		140.57	166.94
February 1, 2021	11.812		145.00	172.25
March 1, 2021	12.304		147.49	175.24
April 1, 2021	11.919		145.53	172.89
May 1, 2021	13.135		152.07	180.74
June 1, 2021	13.711		157.85	187.70
July 1, 2021	15.014		164.69	195.91
August 1, 2021	14.076		162.12	192.82
September 1, 2021	14.227		162.82	193.65
October 1, 2021	14.327		163.32	194.25
November 1, 2021	15.767		166.60	198.20

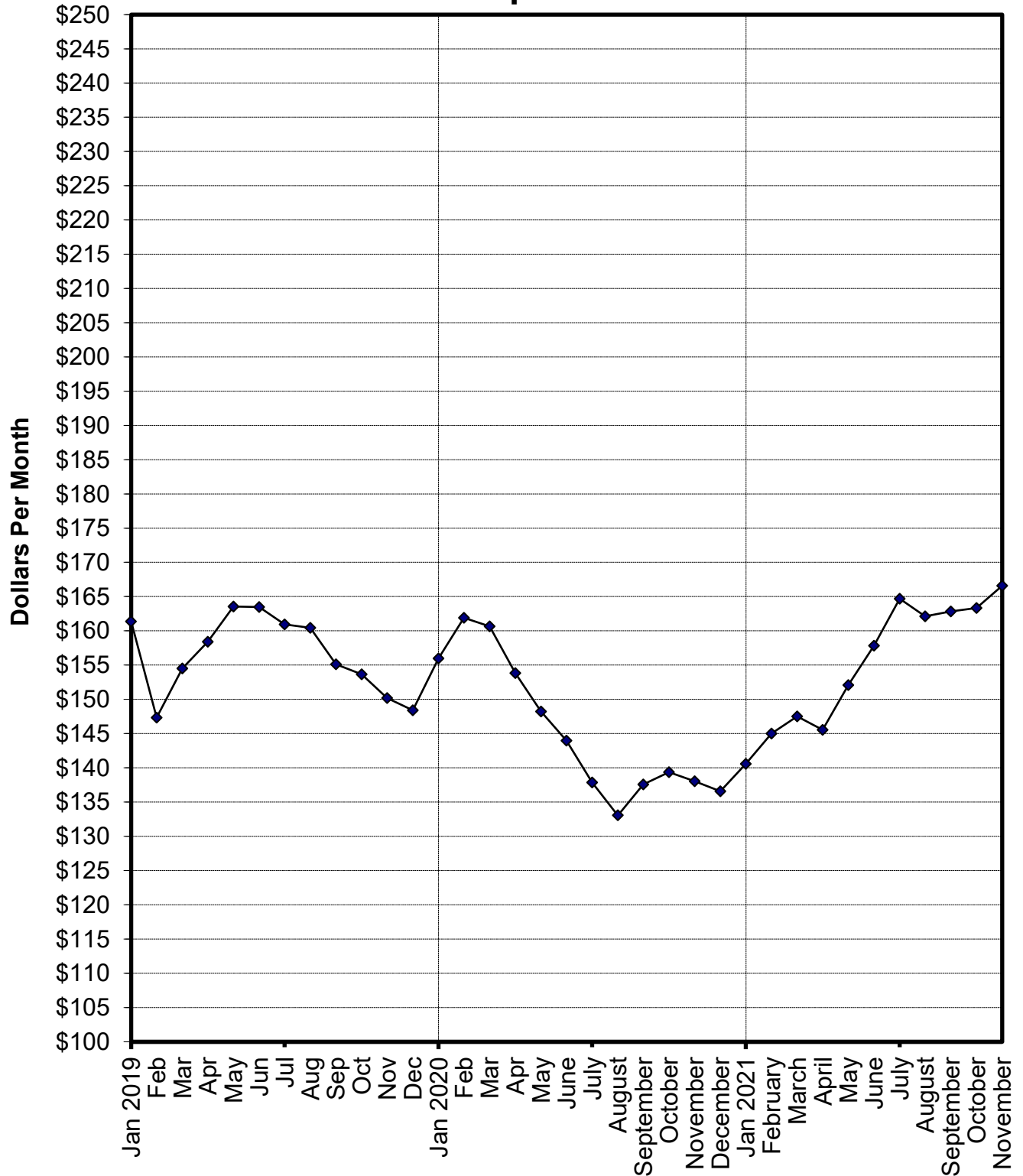
**Hawaiian Electric Company, Inc.**  
**RESIDENTIAL SURCHARGE DATA**

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
<b>9/1/2018</b>	<b>FINAL RATE INCREASE (TY2017) -0.039% EFFECTIVE 09/01/18, DOCKET NO. 2016-0328</b>	
5/1/2019 - 3/31/2020	SOLAR SAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2019 - 7/31/2019	RESIDENTIAL DSM ADJUSTMENT	0.0133 CENTS/KWH
6/1/2019 - 6/30/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.4806 CENTS/KWH
6/1/2019-5/31/2020	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.9376 CENTS/KWH
7/1/2019 - 7/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.6543 CENTS/KWH
7/1/2019 - 12/31/2019	GREEN INFRASTRUCTURE FEE	1.17 DOLLARS/MONTH
7/1/2019 - 12/31/2019	RESID. PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
8/1/2019 - 8/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.8165 CENTS/KWH
8/1/2019 - 1/31/2020	RESIDENTIAL DSM ADJUSTMENT	0.0000 CENTS/KWH
9/1/2019 - 9/30/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.8061 CENTS/KWH
10/1/2019-10/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.8008 CENTS/KWH
11/1/2019 - 11/30/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.2849 CENTS/KWH
11/1/2019 - 1/31/2020	RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)	0.0000 CENTS/KWH
12/1/2019 - 12/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.2980 CENTS/KWH
1/1/2020 - 1/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	0.0000 CENTS/KWH
1/1/2020-6/30/2020	RESID. PBF SURCHARGE ADJUSTMENT	0.7437 CENTS/KWH
1/1/2020-6/30/2020	GREEN INFRASTRUCTURE FEE	1.25 DOLLARS/MONTH
2/1/2020-4/30/2020	RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)	-0.0116 CENTS/KWH
2/1/2020-4/30/2020	RESIDENTIAL DSM ADJUSTMENT	0.0651 CENTS/KWH
2/1/2020 - 2/29/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.4197 CENTS/KWH
3/1/2020 - 3/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.4281 CENTS/KWH
3/1/2020-7/31/2020	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0158 CENTS/KWH
4/1/2020 - 4/30/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.4087 CENTS/KWH
4/1/2020 - 4/30/2020	SOLAR SAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2020-3/31/2021	SOLAR SAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2020-5/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.6029 CENTS/KWH
5/1/2020-7/31/2020	RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)	0.0096 CENTS/KWH
5/1/2020-7/31/2020	RESIDENTIAL DSM ADJUSTMENT	-0.0011 CENTS/KWH
6/1/2020-6/30/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.6114 CENTS/KWH
6/1/2020-5/31/2021	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.5773 CENTS/KWH
7/1/2020-7/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.2269 CENTS/KWH
7/1/2020-12/31/2020	GREEN INFRASTRUCTURE FEE	1.19 DOLLARS/MONTH
7/1/2020-6/30/2021	RESID. PBF SURCHARGE ADJUSTMENT	0.5882 CENTS/KWH
8/1/2020-8/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.5796 CENTS/KWH
8/1/2020-10/31/2020	RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)	-0.0006 CENTS/KWH
8/1/2020-10/31/2020	RESIDENTIAL DSM ADJUSTMENT	0.0008 CENTS/KWH
8/1/2020-7/31/2021	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0282 CENTS/KWH
9/1/2020-9/30/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.5362 CENTS/KWH
10/1/2020-10/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.5237 CENTS/KWH
11/1/2020-11/30/2020	PURCHASED POWER ADJUSTMENT CLAUSE	2.0219 CENTS/KWH
11/1/2020-1/31/2021	RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)	-0.0099 CENTS/KWH
11/1/2020-1/31/2021	RESIDENTIAL DSM ADJUSTMENT	-0.0137 CENTS/KWH
12/1/2020-12/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.9552 CENTS/KWH
1/1/2021-1/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.0114 CENTS/KWH
1/1/2021-6/30/2021	GREEN INFRASTRUCTURE FEE	1.25 DOLLARS/MONTH
2/1/2021-2/28/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.2974 CENTS/KWH
2/1/2021-4/30/2021	RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)	-0.0044 CENTS/KWH
2/1/2021-4/30/2021	RESIDENTIAL DSM ADJUSTMENT	0.1242 CENTS/KWH
3/1/2021-3/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.3031 CENTS/KWH
4/1/2021-4/30/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.3216 CENTS/KWH
4/1/2021-4/30/2021	SOLAR SAVER ADJUSTMENT	-0.0254 CENTS/KWH
5/1/2021-5/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.5310 CENTS/KWH
<b>5/1/2021</b>	<b>SOLAR SAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>
5/1/2021-7/31/2021	RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)	-0.0008 CENTS/KWH
5/1/2021-7/31/2021	RESIDENTIAL DSM ADJUSTMENT	-0.0233 CENTS/KWH
6/1/2021-6/30/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.5442 CENTS/KWH
<b>6/1/2021</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>1.1469 CENTS/KWH</b>
7/1/2021-7/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.5615 CENTS/KWH
<b>7/1/2021</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.19 DOLLARS/MONTH</b>
<b>7/1/2021</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.6478 CENTS/KWH</b>
8/1/2021-8/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.7556 CENTS/KWH
8/1/2021-10/31/2021	RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)	-0.0020 CENTS/KWH
8/1/2021-10/31/2021	RESIDENTIAL DSM ADJUSTMENT	0.2201 CENTS/KWH
<b>8/1/2021</b>	<b>RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION</b>	<b>0.0158 CENTS/KWH</b>
9/1/2021-9/30/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.7433 CENTS/KWH
10/1/2021-10/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.7430 CENTS/KWH
<b>11/1/2021</b>	<b>RESIDENTIAL DEMAND RESPONSE ADJUSTMENT CLAUSE (DRAC)</b>	<b>-0.0094 CENTS/KWH</b>
<b>11/1/2021</b>	<b>RESIDENTIAL DSM ADJUSTMENT</b>	<b>-0.0370 CENTS/KWH</b>
<b>11/1/2021</b>	<b>PURCHASED POWER ADJUSTMENT CLAUSE</b>	<b>2.2269 CENTS/KWH</b>

~ Surcharges currently in effect are in bold.

~ Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount and minimum charge.

## Hawaiian Electric Company, Inc. Residential Bill at 500 KWH/Month Consumption





**Hawaiian Electric Company, Inc.**  
**CALCULATIONS OF THE AVERAGE RESIDENTIAL CUSTOMER BILL**

	Rate		Charge (\$) at 500 kWh			
	10/1/2021	11/1/2021	10/1/2021	11/1/2021	Difference	
<b>Base Rates</b>	effective date:	01/01/19	01/01/19			
Base Fuel/Energy Charge	¢/kWh	-	-	0.00	0.00	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	10.6812	10.6812	37.38	37.38	0.00
Next 850 kWhr per month	¢/kWh	11.8347	11.8347	17.75	17.75	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
<b>Total Base Charges</b>			66.63	66.63	0.00	
<b>Purchase Power Adjustment</b>	¢/kWh	2.7430	2.2269	13.72	11.13	-2.59
<b>RBA Rate Adjustment</b>	¢/kWh	1.1469	1.1469	5.73	5.73	0.00
<b>DSM Adjustment</b>	¢/kWh	0.2201	-0.0370	1.10	-0.19	-1.29
<b>Demand Response Adjustment Clause</b>	¢/kWh	-0.0020	-0.0094	-0.01	-0.05	-0.04
<b>Interim Rate Increase (TY 2017)</b>	% on base	0.000%	0.000%	0.00	0.00	0.00
<b>Refund of 2011 Interim</b>	% on base	0.000%	0.000%	0.00	0.00	0.00
<b>PBF Surcharge</b>	¢/kWh	0.6478	0.6478	3.24	3.24	0.00
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	0.0158	0.0158	0.08	0.08	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Recovery</b>	¢/kWh	14.327	15.767	71.64	78.84	7.20
<b>Green Infrastructure Fee</b>	\$	1.19	1.19	1.19	1.19	0.00
<b>Avg Residential Bill at 500 kWh</b>			163.32	166.60		

Increase / (Decrease -)	3.28
% Change	2.01%

	Rate		Charge (\$) at 600 kWh			
	10/1/2021	11/1/2021	10/1/2021	11/1/2021	Difference	
<b>Base Rates</b>	effective date:	01/01/19	01/01/19			
Base Fuel/Energy Charge	¢/kWh	-	-	0.00	0.00	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	10.6812	10.6812	37.38	37.38	0.00
Next 850 kWhr per month	¢/kWh	11.8347	11.8347	29.59	29.59	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
<b>Total Base Charges</b>			78.47	78.47	0.00	
<b>Purchase Power Adjustment</b>	¢/kWh	2.7430	2.2269	16.46	13.36	-3.10
<b>RBA Rate Adjustment</b>	¢/kWh	1.1469	1.1469	6.88	6.88	0.00
<b>DSM Adjustment</b>	¢/kWh	0.2201	-0.0370	1.32	-0.22	-1.54
<b>Demand Response Adjustment Clause</b>	¢/kWh	-0.0020	-0.0094	-0.01	-0.06	-0.05
<b>Interim Rate Increase (TY 2017)</b>	% on base	0.000%	0.000%	0.00	0.00	0.00
<b>Refund of 2011 Interim</b>	% on base	0.000%	0.000%	0.00	0.00	0.00
<b>PBF Surcharge</b>	¢/kWh	0.6478	0.6478	3.89	3.89	0.00
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	0.0158	0.0158	0.09	0.09	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Recovery</b>	¢/kWh	14.327	15.767	85.96	94.60	8.64
<b>Green Infrastructure Fee</b>	\$	1.19	1.19	1.19	1.19	0.00
<b>Avg Residential Bill at 600 kWh</b>			194.25	198.20		

Increase / (Decrease -)	3.95
% Change	2.03%

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**From:** puc@hawaii.gov  
**Sent:** Tuesday, October 26, 2021 1:50 PM  
**To:** Oya, Tyler  
**Subject:** Hawaii PUC eFiling Confirmation of Filing

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