



January 29, 2019

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PUBLIC UTILITIES
COMMISSION

The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
Kekuaanaoa Building, First Floor
465 South King Street
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Hawaiian Electric Energy Cost Recovery Factor for February 2019

Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or "Company") February 2019 Energy Cost Recovery Factor is 12.044 cents per kilowatt-hour ("kWh"), a decrease of 2.051 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$147.31, a decrease of \$14.05 compared to rates effective January 1, 2019. The decrease in the residential typical bill is due to a decrease in the Purchase Power Adjustment Clause rate (-\$3.69), a decrease in the Energy Cost Recovery Factor (-\$10.26), and a decrease in the DSM Adjustment (-\$0.10).

The Company's fuel composite cost of major energy decreased 327.89 cents per million BTU to 1,008.23 cents per million BTU. The Company's composite cost of minor energy decreased 7.079 cents per kWh to 18.161 cents per kWh. The composite cost of purchased energy decreased 0.183 cents per kWh to 8.784 cents per kWh.

The attached sheets set forth the energy cost adjustment factor in cents per kWh for each rate schedule that is applicable for *pro rata* use beginning February 1, 2019.

Hawaiian Electric's Energy Cost Recovery Clause ("ECRC") tariff states:

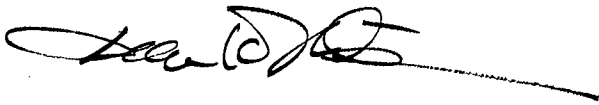
2. The target sales heat rate for LSFO may be reestablished each calendar year, beginning at January 1, 2019. If the prior year's actual sales heat rate is greater than or equal to the established target sales heat rate in place at the end of the prior calendar year, the target sales heat rate for LSFO remains unchanged. If the prior year's actual sales heat rate is less than the established target sales heat rate in place at the end of the prior calendar year, the target sales heat rate in place at the end of the prior calendar year shall be reduced by one-half of the difference between the prior year's actual sales heat rate and the established target sales heat rate in place at the end of the prior calendar year.¹

¹ See Hawaiian Electric's ECRC tariff, Revised Sheet No. 63B.

The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
January 29, 2019
Page 2

Hawaiian Electric's 2018 actual LSFO sales heat rate of 0.011244 million Btu per kWh is greater than the 2017 test year established target sales heat rate of 0.011165 million Btu per kWh. Therefore, the target sales heat rate for LSFO remains unchanged for 2019.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Dean K. Matsuura', with a long horizontal line extending to the right.

Dean K. Matsuura
Director, Regulatory Rate Proceedings

Enclosures

cc: Division of Consumer Advocacy

Hawaiian Electric Company, Inc.
ENERGY COST RECOVERY FACTOR

	<u>Effective Dates</u>		<u>Change</u>
	<u>01/01/19</u>	<u>02/01/19</u>	
Composite Cost Of Major Energy, ¢/mmbtu	1,336.12	1,008.23	(327.89)
Composite Cost Of Minor Energy, ¢/kwh	25.240	18.161	(7.079)
Composite Cost Of Purchased Energy, ¢/kWh	8.967	8.784	(0.183)
 <u>Residential, Schedule "R"</u>			
Energy Cost Recovery, ¢/kWh	14.095	12.044	(2.051)
 <u>Others, Schedules "G,J,DS,P,F"</u>			
Energy Cost Recovery, ¢/kWh	14.095	12.044	(2.051)
 <u>Residential Customer with:</u>			
500 kWh Consumption, \$/bill	161.36	147.31	(14.05)
600 kWh Consumption, \$/bill	191.85	175.01	(16.84)

Supersedes Sheet Effective:

January 1, 2019

Hawaiian Electric Company, Inc.
ENERGY COST RECOVERY FILING

ENERGY COST RECOVERY (ECR) FILING - February 1, 2019 (page 1 of 2)

Line		
1	Effective Date	- February 1, 2019
2	Supersedes Factor	- January 1, 2019

GENERATION COMPONENT

<u>MAJOR ENERGY COMPONENT</u>				<u>MINOR ENERGY COMPONENT</u>				
FUEL PRICES, ¢/mmbtu				Fuel Type	Gen Cost ¢/KWH	Percent of Minor Energy	Weighted Gen Cost ¢/KWH	
3	Honolulu		0.00	32a Airport DG	33.53	0.59%	0.1968	
4	Kahe		1,008.32	32b CIP-Biodiesel	0.00	0.00%	0.0000	
5	Waiau-Steam		1,008.00	32c CIP-Diesel	173.98	0.90%	1.5596	
6	(Future Use)		0.00	32d SGS - Biodiesel	32.13	37.01%	11.8927	
7	(Future Use)		0.00	32e SGS - ULSD	18.90	2.51%	0.4737	
8	(Future Use)		0.00	32f Waiau-Diesel	36.67	11.01%	4.0380	
9	Other		0	32g West Loch PV	0.00	47.98%	0.0000	
	BTU MIX, %			32h COMPOSITE COST OF MINOR ENERGY, ¢/kWh			18.161	
10	Honolulu		0.00	33 % Input to System kWh Mix			1.19	
11	Kahe		70.85	34 WTD COMP MINOR ENERGY COST, ¢/kWh (Lines 32f x 33)			0.21611	
12	Waiau-Steam		29.15	35 2017 TY Loss Factor			1.0490	
13	(Future Use)		0.00	36 WTD COMP MINOR ENERGY COST, ¢/kWh (Line 34 x 35)			0.22670	
14	(Future Use)		0.00	37 BASE MINOR ENERGY COMP COST			0.0000	
15	(Future Use)		0.00	38 Base % Input to System kWh Mix			0.0000	
16	Other		0.00	39 WTD BASE MINOR ENERGY COST, ¢/kWh (Line 37 x 38)			0.00000	
			100.00	40 2017 TY Loss Factor			1.0490	
17	COMPOSITE COST OF GENERATION, MAJOR ENERGY ¢/mmbtu		1,008.23	41 WTD COMP MINOR ENERGY COST, ¢/kWh (Line 39 x 40)			0.00000	
18	% Input to system kWh Mix		45.93	42 Cost Less Base (Line 36 - 41)			0.226699	
	EFFICIENCY FACTOR, mmbtu/kWh			43 Revenue Tax Adjustment (1 / (1-0.08885))			1.097514	
	(A)	(B)	(C)	(D)	44 MINOR ENERGY FACTOR, ¢/kWh (Line 42 x 43)			0.24881
			Percent of Centrl Stn + Other	Weighted Eff Factor				
19	LSFO	0.011165	100.00	0.011165				
20	(Future Use)	0.000000	0.00	0.000000				
21	(Future Use)	0.000000	0.00	0.000000				
22	Other	0.011165	0.00	0.000000				
	(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)]			0.011165				
24	WEIGHTED MAJOR ENERGY COST, ¢/kWh Sales (lines 17 x 18 x 23)			5.17029				
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)			5.17029				
30	Revenue Tax Adjustment (1 / (1-0.08885))			1.097514				
31	MAJOR ENERGY GENERATION FACTOR, ¢/KWH (Line 29 x 30)			5.67447				

SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh	
45 MAJOR ENERGY (line 31)	5.67447
46 MINOR ENERGY (line 44)	- 0.24881
47 TOTAL GENERATION FACTOR, ¢/KWH (lines 45 + 46)	- 5.92328

Hawaiian Electric Company, Inc.
ENERGY COST RECOVERY FILING

ENERGY COST RECOVERY (ECR) FILING - February 1, 2019 (page 2 of 2)

Line

1	Effective Date	- February 1, 2019
2	Supersedes Factor	- January 1, 2019

Line	PURCHASED ENERGY COMPONENT		
	PURCHASED ENERGY PRICE - FOSSIL - ¢/KWH		
48	PAR Hawaii	- On Peak	10.463
49	PAR Hawaii	- Off Peak	11.096
50	IES Downstream	- On Peak	10.463
51	IES Downstream	- Off Peak	11.096
52	Kalaeloa		10.819
53	AES-HI		3.319
	PURCHASED ENERGY PRICE - RENEWABLE - ¢/KWH		
54	HRRV	- On Peak	17.63
55		- Off Peak	17.13
56	HRRV	- On Peak (excess)	11.23
57		- Off Peak (excess)	6.74
58	Kawaiiloa		22.395
59	Kahuku Wind		21.013
60	Waianae Solar PV		14.500
61	As Available I		22.399
62	FIT		19.254
63	CBRE PV		15.000
64	(Future IPP)		0.000
65	(Future IPP)		0.000
66	(Future IPP)		0.000
67	(Future IPP)		0.000
	PURCHASED ENERGY KWH MIX - FOSSIL - %		
68	PAR Hawaii	- On Peak	0.26
69	PAR Hawaii	- Off Peak	0.18
70	IES Downstream	- On Peak	0.02
71	IES Downstream	- Off Peak	0.01
72	Kalaeloa		37.32
73	AES-HI		43.80
73a	Subtotal Fossil %		81.59
	PURCHASED ENERGY KWH MIX - RENEWABLE - %		
74	HRRV	- On Peak	6.21
75		- Off Peak	2.79
76	HRRV	- On Peak (excess)	0.00
77		- Off Peak (excess)	1.42
78	Kawaiiloa		2.60
79	Kahuku Wind		1.65
80	Waianae Solar PV		1.74
81	As Available I		0.52
82	FIT		1.26
83	CBRE PV		0.22
84	(Future IPP)		0.00
85	(Future IPP)		0.00
86	(Future IPP)		0.00
87	(Future IPP)		0.00
87a	Subtotal Renewable %		18.41
87b	Total Purchased Energy %		100.00
87c	Composite Cost of Purchased Energy, Fossil		6.79
87d	Composite Cost of Purchased Energy, Renewable		17.61
88	COMPOSITE COST OF PURCHASED ENERGY, ¢/KWH		8.784
89	% Input to System kWh Mix		52.88
90	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 88 x 89)		4.64498
91	2017 TY Loss Factor		1.0490
92	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 90 x 91)		4.87258
93	BASE PURCHASED ENERGY COMPOSITE COST, ¢/KWH		0.000
94	Base % Input to System kWh Mix		0.0000
95	WEIGHTED BASE PURCHASED ENERGY COST, ¢/KWH SALES (lines 93 x 94)		0.00000
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)		4.87258
99	Revenue Tax Adjustment (1 / (1-0.08885))		1.097514
100	PURCHASED ENERGY FACTOR, ¢/KWH (lines 98 x 99)		5.34773

Calculation of Monthly Fossil Fuel Cost Risk Sharing Component		
Baseline LSFO		
101	LSFO \$, baseline month	\$40,843,012
102	LSFO mmbtu, baseline	3,056,838
103	Baseline LSFO, ¢/mmbtu	1336.12
Baseline Diesel		
104	Diesel \$, baseline month	\$1,125,662
105	Diesel mmbtu, baseline	66,898
106	Baseline Diesel, ¢/mmbtu	1,682.66
Month LSFO		
107	LSFO mmbtu, budget	2,547,487
108	LSFO Cost, ¢/mmbtu	1,008.23
109	LSFO ECRC Fossil Cost	\$25,684,443
110	LSFO Base ECRC Recovery Target	\$34,037,476
111	LSFO differential	-\$8,353,033
Month Diesel		
112	Diesel mmbtu, budget	22,512
113	Diesel Cost, ¢/mmbtu	1,654.35
114	Diesel ECRC Fossil Cost	\$372,429
115	Diesel Base ECRC Recovery Target	\$378,801
116	Diesel differential	-\$6,372
117	Total Fossil	-\$8,359,405
118	2% of above	-\$167,188
118A	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$0
118B	Maximum Annual Cap (bi-directional)	\$2,500,000
118C	Applicable Monthly Fossil Fuel Cost Risk Sharing	-\$167,188
118D	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$167,188
119	Fossil Cost Risk Sharing before taxes	-\$167,188
120	Revenue Tax Adjustment	1.097514
121	Fossil Cost Risk Sharing w/revenue tax	-\$183,491
122	Forecasted Month MWh Sales	492,900
123	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.0372

Derivation of Non-Adjustable Component:

80A	Fuel Handling Exp, \$000	\$7,604.5
	Final Settlement, HECO-603, p1	
80B	Revenue Tax Adjustment	1.097514
80C	Non-Adj Revenues, \$000	\$8,346.0
80D	2017 TY Sales, MWh	6,660,200
	HECO-301, p1	
80E	Non-Adj Revenues, ¢/kWh	0.12531

Line SYSTEM COMPOSITE

124	GEN AND PURCHASED ENERGY FACTOR, ¢/kWh (lines 47 + 100)	11.2710
125	(Future Use) Adjustment, ¢/kWh	0.0000
126	ECR Reconciliation Adjustment	0.6100
127	Non-Adjustable Component (line 80E)	0.1253
128	Fossil Fuel Cost Risk Sharing Component (line 123)	0.0372
129	Monthly Energy Cost Recovery Factor (lines 124 + 125 + 126 + 127 + 128)	12.044

Hawaiian Electric Company, Inc.
FUEL OIL INVENTORY PRICES FOR 01-01-19

	Honolulu	Kahe	Waiau
Average Low Sulfur Fuel Oil, ¢/Mbtu	1,008.00	1,008.00	1,008.00
Kahe Fuel Additive, ¢/Mbtu	-	0.32	-
Honolulu Trucking Cost, ¢/Mbtu	-	-	-
Low Sulfur Fuel Oil Prices Used For Filing, ¢/Mbtu	1,008.00	1,008.32	1,008.00

	Waiau	CIP Biodiesel	CIP Diesel
Average Diesel / Biodiesel Oil, ¢/Mbtu	1,737.17	2,813.13	1,406.75
Thruput Charges, ¢/Mbtu	-	-	0
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	1,737.17	2,813.13	1,406.75

	SGS ULSD	SGS Biodiesel
Average Diesel / Biodiesel Oil, ¢/Mbtu	2,000.71	3,459.46
Thruput Charges, ¢/Mbtu	-	-
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	2,000.71	3,459.46

	Honolulu	Kahe	Waiau
Average Low Sulfur Fuel Oil, \$/bbl	62.69	62.69	62.69
Kahe Fuel Additive, \$/bbl	-	0.02	-
Honolulu Trucking Cost, \$/bbl	-	-	-
Low Sulfur Fuel Oil Prices Used For Filing, \$/bbl	62.69	62.71	62.69

	Waiau	CIP Biodiesel	CIP Diesel
Average Diesel / Biodiesel Oil, \$/bbl	99.63	146.85	80.59
Thruput Charges, ¢/Mbtu	-	-	-
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	99.63	146.85	80.59

	SGS ULSD	SGS Biodiesel
Average Diesel / Biodiesel Oil, \$/bbl	115.96	182.66
Thruput Charges, ¢/Mbtu	-	-
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	115.96	182.66

Distributed Generation Fuel Prices Used for Filing, ¢/kWh			33.530
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FOAC February 2019

<u>LSFO</u>	BARRELS	MBTU	AMOUNT	AVE \$/MBTU
Per FOAC run	577,244	3,589,822.07	36,185,558.20	10.080042
Additional	-	-	-	-
Forecast Amt	577,244	3,589,822.07	36,185,558.20	10.080042
	-	6.20	-	ADD'L BBL
	3,589,822	577,244	6.2189	MBTU / BBL
	36,185,558	577,244	62.69	DOLLARS / BBL
<u>WAIU DIESEL</u>	34,419	197,406.43	3,429,294.31	17.371746
	3,429,294	34,419	99.63	DOLLARS / BBL
<u>CIP BIODIESEL</u>	3,759	19,622.00	551,992.94	28.131326
	551,993	3,759	146.85	DOLLARS / BBL
<u>CIP DIESEL</u>	53,103	304,230.03	4,279,768.96	14.067543
	4,279,769	53,103	80.59	DOLLARS / BBL
<u>SGS ULSD</u>	426	2,469	49,399.63	20.00714025
	49,399.63	426	115.96	DOLLARS / BBL
<u>SGS BIODIESEL</u>	12,278	64,827.22	2,242,671.85	34.59460354
	2,242,672	12,278	182.66	DOLLARS / BBL
KAHE FUEL ADDITIVE *				
Additional	-	-	-	0.003194
Forecast Amt	-	-	-	0.003194
\$ / BBL =		-	0.02	DOLLARS / BBL
HONOLULU TRUCKING COST				
Per FOAC run	-	-	-	-
Additional	-	-	-	-
Forecast Amt	-	-	-	-
\$ / BBL =	-	-	-	DOLLARS / BBL

Hawaiian Electric Company, Inc.

CONTRACT PRICES EFFECTIVE 1-1-19

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
LOW SULFUR FUEL OIL		
Tax *	4.5808	73.89
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
DIESEL		
Tax *	5.5727	95.11
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
ULTRA LOW SULFUR DIESEL		
Tax *	5.9834	104.41
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
BIODIESEL		
Tax *	7.4412	141.79
Ocean Transportation	0.0000	0.00
Land 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, Federal Oil Spill Recovery Fee, and Environmental Response, Energy and FS 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.

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)	\$	29.86	\$	34.59	\$	20.01 Estimated Distributed Generation Fuel Cost (\$/MBTU)
(B)		404		21,088		1452 Estimated MBTU Consumption
(B1)		77		4,018		253 Estimated fuel consumption barrels
(C) = (A) x (B)		\$12,071		\$729,526		\$29,059 Estimated Distributed Generation Fuel Cost (\$)
(D)		36,000		2,270,702		153,756 Estimated Distributed Generation kWh
(E) = ((C) ÷ (D)) x 100		<u>33.530</u>		<u>32.130</u>		<u>18.900</u> ¢/kWh

Hawaiian Electric Company, Inc.
ECA RECONCILIATION ADJUSTMENT
February 2019

1.	Amount to be collected	\$	8,214,600
2.	Monthly Amount (Line 1 x 1/3)	\$	2,738,200
3.	Revenue Tax Divisor		0.91115
4.	Total (Line 2 / Line 3)	\$	3,005,213
5.	Estimated MWh Sales (February 2019)		492,900
6.	ECA Reconciliation Adjustment, ¢/kWh (Line 4 ÷ Line 5)		<u><u>0.610</u></u>

Hawaiian Electric Company, Inc.
FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
December 2018
(Thousand \$)

<u>Line</u>	<u>Description</u>	Info Only		Basis for Recon	
		W/O DeadBand December 2018 Cumulative <u>YTD Total</u>	collectn by <u>company*</u>	W/ DeadBand December 2018 Cumulative <u>YTD Total</u>	collectn by <u>company*</u>
ACTUAL COSTS:					
1	Generation / Major Fuels	\$502,997.3		\$502,997.3	
2	Distributed Generation / Minor Fuels	\$16,617.6		\$16,617.6	
3	Purch Power	\$331,082.0		\$331,082.0	
4	TOTAL	\$850,696.9		\$850,696.9	
FUEL FILING COST					
5	Generation / Major Fuels	\$499,360.0		\$503,026.3	
6	Distributed Generation / Minor Fuels	\$16,617.6		\$16,617.6	
7	Purch Power	\$331,082.0		\$331,082.0	
8	TOTAL	\$847,059.6		\$850,725.9	
BASE FUEL COST					
9	Generation / Major Fuels	\$371,770.9		\$371,770.9	
10	Distributed Generation / Minor Fuels	\$7,285.8		\$7,285.8	
11	Purch Power	\$358,300.9		\$358,300.9	
12	TOTAL	\$737,357.6		\$737,357.6	
13	FUEL-BASE COST (Line 8-12)	\$109,702.0		\$113,368.3	
14	ACTUAL FOA LESS TAX	\$108,476.0		\$108,476.0	
15	Less: FOA reconciliation adj for prior year	\$6,969.7		\$6,969.7	
16	ADJUSTED FOA LESS TAX	\$101,506.3		\$101,506.3	
17	FOA-(FUEL-BASE) (Line 16-13)	-\$8,195.7	under	-\$11,862.0	under
ADJUSTMENTS:					
18	Current year FOA accrual reversal	-\$10,217.0		-\$10,217.0	
19	SGS test fuel removal	\$2,420.1		\$2,420.1	
20	Other	\$77.1		\$77.1	
21	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	-\$15,915.5	under	-\$19,581.8	under
22	3rd Quarter Reconciliation YTD			-\$11,367.2	
23	Amount to be collected			-\$8,214.6	

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

Hawaiian Electric Company, Inc.
DEADBAND CALCULATION
2018

FOR PERIOD: JANUARY 1, 2018 TO APRIL 12, 2018

	Notes	YTD
Industrial		
Heat Rate Days		1,130,058
Industrial Efficiency Factor (per D&O), BTU/kWh*	f	11,079
Industrial Deadband Definition, +/- BTU/kWh	d	50
Industrial Portion of Recorded Sales, kWh	a	874,645,679
Industrial Consumption (Recorded), MMBTU	b	9,794,533
Industrial Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	11,198
Lower limit of Industrial Deadband, BTU/kWh	e = f-d	11,029
Higher limit of Industrial Deadband, BTU/kWh	g = f+d	11,129
Industrial Efficiency Factor for cost-recovery, BTU/kWh	h = c, e or g	11,129
Recorded BTU/kWh vs. Deadband		Worse
Diesel		
Diesel Efficiency Factor (per D&O), BTU/kWh*	f	19,721
Diesel Deadband Definition, +/- BTU/kWh	d	50
Diesel Portion of Recorded Sales, MWh	a	6,463,149
Diesel Consumption (Recorded), MMBTU	b	188,720
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	29,199
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	19,671
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	19,771
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e or g	19,771
Recorded BTU/kWh vs. Deadband		Worse
Biodiesel		
Biodiesel Efficiency Factor (per D&O), BTU/kWh*	f	20,169
Biodiesel Deadband Definition, +/- BTU/kWh	d	50
Biodiesel Portion of Recorded Sales, MWh	a	16,727,814
Biodiesel Consumption (Recorded), MMBTU	b	274,835
Biodiesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	16,430
Lower limit of Biodiesel Deadband, BTU/kWh	e = f-d	20,119
Higher limit of Biodiesel Deadband, BTU/kWh	g = f+d	20,219
Biodiesel Efficiency Factor for cost-recovery, BTU/kWh	h = c, e or g	20,119
Recorded BTU/kWh vs. Deadband		Better
Hydro		
Hydro Efficiency Factor (per D&O), BTU/kWh*	f	0
Hydro Deadband Definition, +/- BTU/kWh	d	50
Hydro Portion of Recorded Sales, MWh	a	0
Hydro Consumption (Recorded), MMBTU	b	0
Hydro Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	0
Lower limit of Hydro Deadband, BTU/kWh	e = f-d	-50
Higher limit of Hydro Deadband, BTU/kWh	g = f+d	50
Hydro Efficiency Factor for cost-recovery, BTU/kWh	h = c, e or g	0
Recorded BTU/kWh vs. Deadband		Neutral
Other		
Other Efficiency Factor (per D&O), BTU/kWh*	f	11,143
Other Deadband Definition, +/- BTU/kWh	d	50
Other Portion of Recorded Sales, MWh	a	0
Other Consumption (Recorded), MMBTU	b	0
Other Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	0
Lower limit of Other Deadband, BTU/kWh	e = f-d	11,093
Higher limit of Other Deadband, BTU/kWh	g = f+d	11,193
Other Efficiency Factor for cost-recovery, BTU/kWh	h = c, e or g	11,093
Recorded BTU/kWh vs. Deadband		Better

* YTD Efficiency Factor (per D&O) is actual YTD & projected to the end of the year weighted by calendar days in the year.

Hawaiian Electric Company, Inc.
DEADBAND CALCULATION
2018

FOR PERIOD: APRIL 13, 2018 TO DECEMBER 31, 2018

	Notes	YTD
Industrial		
Industrial Efficiency Factor (per D&O), BTU/kWh*	f	11,165
Industrial Deadband Definition, +/- BTU/kWh	d	125
Industrial Portion of Recorded Sales, kWh	a	2,389,476,371
Industrial Consumption (Recorded), MMBTU	b	26,905,915
Industrial Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	11,260
Lower limit of Industrial Deadband, BTU/kWh	e = f-d	11,040
Higher limit of Industrial Deadband, BTU/kWh	g = f+d	11,290
Industrial Efficiency Factor for cost-recovery, BTU/kWh h = c, e or g		11,260
Recorded BTU/kWh vs. Deadband		Neutral

Diesel		
Diesel Efficiency Factor (per D&O), BTU/kWh*	f	0
Diesel Deadband Definition, +/- BTU/kWh	d	50,000
Diesel Portion of Recorded Sales, MWh	a	0
Diesel Consumption (Recorded), MMBTU	b	0
Diesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	0
Lower limit of Diesel Deadband, BTU/kWh	e = f-d	-50,000
Higher limit of Diesel Deadband, BTU/kWh	g = f+d	50,000
Diesel Efficiency Factor for cost-recovery, BTU/kWh h = c, e or g		0
Recorded BTU/kWh vs. Deadband		Neutral

Biodiesel		
Heat Rate Days		0
Biodiesel Efficiency Factor (per D&O), BTU/kWh*	f	0
Biodiesel Deadband Definition, +/- BTU/kWh	d	50,000
Biodiesel Portion of Recorded Sales, MWh	a	0
Biodiesel Consumption (Recorded), MMBTU	b	0
Biodiesel Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	0
Lower limit of Biodiesel Deadband, BTU/kWh	e = f-d	-50,000
Higher limit of Biodiesel Deadband, BTU/kWh	g = f+d	50,000
Biodiesel Efficiency Factor for cost-recovery, BTU/kWh h = c, e or g		0
Recorded BTU/kWh vs. Deadband		Neutral

Hydro		
Hydro Efficiency Factor (per D&O), BTU/kWh*	f	0
Hydro Deadband Definition, +/- BTU/kWh	d	0
Hydro Portion of Recorded Sales, MWh	a	0
Hydro Consumption (Recorded), MMBTU	b	0
Hydro Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	0
Lower limit of Hydro Deadband, BTU/kWh	e = f-d	0
Higher limit of Hydro Deadband, BTU/kWh	g = f+d	0
Hydro Efficiency Factor for cost-recovery, BTU/kWh h = c, e or g		0
Recorded BTU/kWh vs. Deadband		Neutral

Other		
Other Efficiency Factor (per D&O), BTU/kWh*	f	0
Other Deadband Definition, +/- BTU/kWh	d	0
Other Portion of Recorded Sales, MWh	a	0
Other Consumption (Recorded), MMBTU	b	0
Other Efficiency Factor (Recorded), BTU/kWh	c = (b/a)*1000	0
Lower limit of Other Deadband, BTU/kWh	e = f-d	0
Higher limit of Other Deadband, BTU/kWh	g = f+d	0
Other Efficiency Factor for cost-recovery, BTU/kWh h = c, e or g		0
Recorded BTU/kWh vs. Deadband		Neutral

* YTD Efficiency Factor (per D&O) is actual YTD & projected to the end of the year weighted by calendar days in the year.

HAWAIIAN ELECTRIC COMPANY, INC.
GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST, WITHOUT and WITH DEADBAND
December 2018 Year-to-Date

	Without Deadband	With Deadband AS FILED	Without Deadband	With Deadband AS FILED
<u>INDUSTRIAL FUEL FILING COST</u>	<u>Jan 1-Apr 12</u>	<u>Jan 1-Apr 12</u>	<u>Apr 13 - Dec 31</u>	<u>Apr 13 - Dec 31</u>
LSFO Portion of Recorded Sales , MWH	874,645,679	874,645,679	2,389,476,371	2,389,476,371
LSFO Sales Efficiency Factor (mmbtu/kwh)	0.011079	0.011129	0.011165	0.01126
Mmbtu adjusted for Sales Efficiency Factor	9,690,199,480	9,733,931,764	26,678,503,680	26,905,503,935
\$/mmbtu	<u>\$12.0361</u>	<u>\$12.0361</u>	<u>\$13.9139</u>	<u>\$13.9139</u>
TOTAL LSFO \$ TO BE RECOVERED	\$116,632,271	\$117,158,637	\$371,202,885	\$374,361,351
<u>DIESEL FUEL FILING COST (Effective April 13, 2018, Diesel Fuels has been reclassified to Minor Fuels.)</u>				
Diesel Portion of Recorded Sales, MWH	6,463,149	6,463,149	-	-
Diesel Sales Efficiency Factor (mmbtu/kwh)	0.019721	0.019771	-	-
Mmbtu adjusted for Sales Efficiency Factor	127,459,761	127,782,919	-	-
\$/mmbtu	<u>\$15.6339</u>	<u>\$15.6339</u>	-	-
TOTAL DIESEL \$ TO BE RECOVERED	\$1,992,692	\$1,997,745	-	-
<u>BIODIESEL FUEL FILING COST (Effective April 13, 2018, Biodiesel Fuels have been reclassified to Minor Fuels.)</u>				
Biodiesel Portion of Recorded Sales , MWH	16,727,814	16,727,814	-	-
Biodiesel Sales Efficiency Factor (mmbtu/kwh)	0.020169	0.020119	-	-
Mmbtu adjusted for Sales Efficiency Factor	337,383,281	336,546,890	-	-
\$/mmbtu	<u>\$28.2533</u>	<u>\$28.2533</u>	-	-
TOTAL BIODIESEL \$ TO BE RECOVERED	\$9,532,177	\$9,508,546	-	-
<u>TOTAL GENERATION FUEL FILING COST</u>				
Generation Portion of Recorded Sales , MWH				
Sales Efficiency Factor (mmbtu/kwh)				
Mmbtu adjusted for Sales Efficiency Factor				
\$/mmbtu				
TOTAL GENERATION FUEL FILING COST \$	\$128,157,140	\$128,664,928	\$371,202,885	\$374,361,351
<u>GENERATION BASE FUEL COST</u>				
TOTAL GENERATION BASE FUEL COST	\$110,985,472	\$110,985,472	\$260,785,439	\$260,785,439
TOTAL GENERATION FUEL FILING COST \$ YTD	\$128,157,140	\$128,664,928	\$371,202,885	\$374,361,351
TOTAL GENERATION BASE FUEL COST YTD	\$110,985,472	\$110,985,472	\$260,785,439	\$260,785,439

HAWAIIAN ELECTRIC COMPANY, INC.
2018 Cumulative Reconciliation Balance

	(1)		(2)	(3)	(4)	(5)	(6)
	YTD FOA		FOA Rec	FOA Rec	Try to	Actual	Month-end
<u>Month</u>	<u>Reconciliator</u>	<u>Qtr</u>	<u>Variance</u>	<u>Variance</u>	<u>Collect</u>	<u>Collect</u>	<u>Cumulative</u>
							<u>Balance</u>
November '18	(3,451,000)	(3)	46,479	(3,497,479)	1,150,333	1,163,303	(2,284,162)
December					1,150,333	1,102,163	(1,181,999)
January '19					1,150,333		
February	(8,214,600)	(4)	(31,672)	(8,182,928)	2,738,200		

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 CENTS / KWH <u>RESIDENTIAL & COMMERCIAL</u>	RESIDENTIAL BILL (\$)	
		<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2017	-2.091	135.39	161.22
February 1, 2017	-1.863	142.81	170.13
March 1, 2017	-1.730	143.26	170.66
April 1, 2017	-1.608	143.43	170.86
May 1, 2017	-2.347	140.42	167.26
June 1, 2017	-2.215	141.89	169.01
July 1, 2017	-2.003	141.79	168.91
August 1, 2017	-2.180	140.14	166.92
September 1, 2017	-2.288	139.74	166.45
October 1, 2017	-2.216	139.91	166.65
November 1, 2017	-2.109	139.52	166.18
December 1, 2017	-1.629	141.82	168.96
January 1, 2018	-1.145	144.26	171.84
February 1, 2018	-0.261	150.24	179.01
March 1, 2018	-0.389	152.06	181.14
April 1, 2018	-0.483	152.06	181.14
May 1, 2018	0.923	149.05	177.53
June 1, 2018	1.529	154.86	184.50
July 1, 2018	1.204	158.27	188.61
August 1, 2018	0.802	158.79	189.22
September 1, 2018	4.201	169.09	201.16
October 1, 2018	4.008	168.13	200.01
November 1, 2018	5.151	167.62	199.40
December 1, 2018	5.553	169.64	201.82
January 1, 2019	14.095	161.36	191.85
February 1, 2019	12.044	147.31	175.01

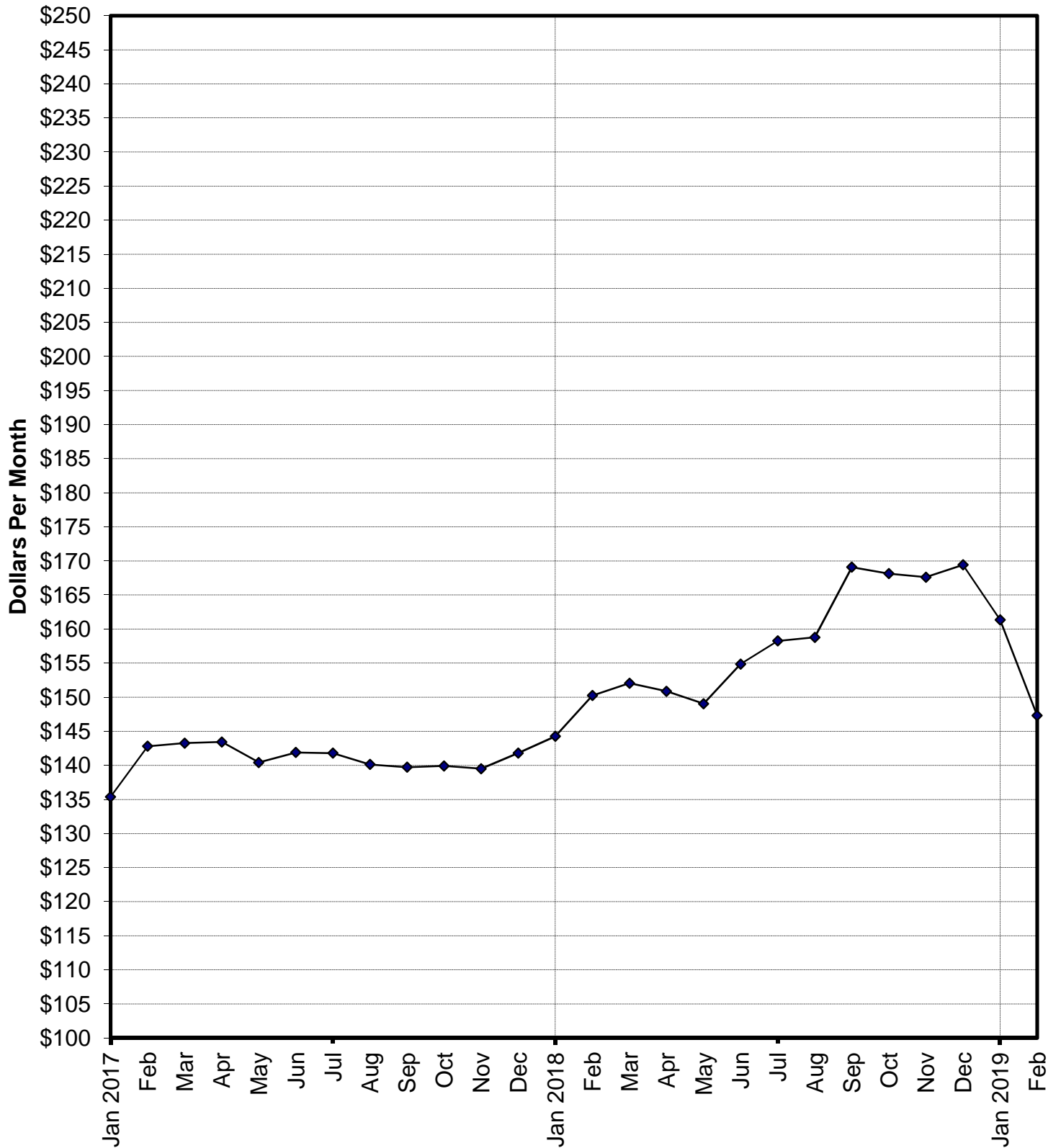
Hawaiian Electric Company, Inc.
RESIDENTIAL SURCHARGE DATA

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
09/01/12 - 8/31/2018	FINAL RATE INCREASE (TY2011) 3.39% EFFECTIVE 09/01/12, DOCKET NO. 2010-0080	
2/1/2013	REFUND OF 2011 INTERIM RATE INCREASE	0.00 PERCENT ON BASE
01/1/2016 - 01/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	2.8642 CENTS/KWH
12/17/2015 - 02/29/2016	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0204 CENTS/KWH
01/01/2016 - 06/30/2016	GREEN INFRASTRUCTURE FEE	1.3000 DOLLARS/MONTH
02/1/2016 - 02/29/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.3809 CENTS/KWH
03/1/2016 - 03/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.3578 CENTS/KWH
3/1/2016 - 05/14/2016	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0204 CENTS/KWH
04/1/2016 - 04/30/2016	SOLAR SAVER ADJUSTMENT	-0.1223 CENTS/KWH
04/1/2016 - 04/30/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.3834 CENTS/KWH
4/1/2016 - 3/31/2017	RESIDENTIAL DSM ADJUSTMENT	0.0811 CENTS/KWH
5/1/2016 - 3/31/2017	SOLAR SAVER ADJUSTMENT	0.00 CENTS/KWH
05/1/2016 - 05/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.6989 CENTS/KWH
5/15/2016	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0000 CENTS/KWH
06/1/2016 - 06/30/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.7373 CENTS/KWH
6/1/2016 - 5/31/2017	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	2.1098 CENTS/KWH
07/1/2016 - 07/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.6808 CENTS/KWH
7/1/2016 - 12/31/2016	GREEN INFRASTRUCTURE FEE	1.1300 DOLLARS/MONTH
7/1/2016 - 6/30/2017	RESID. PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
08/1/2016 - 08/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.2621 CENTS/KWH
09/1/2016 - 09/30/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.2827 CENTS/KWH
10/1/2016 - 10/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.2576 CENTS/KWH
11/1/2016 - 11/30/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.1959 CENTS/KWH
12/1/2016 - 12/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.1815 CENTS/KWH
01/1/2017 - 01/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	2.2812 CENTS/KWH
1/01/2017 - 06/30/2017	GREEN INFRASTRUCTURE FEE	1.2700 DOLLARS/MONTH
02/1/2017 - 02/28/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5384 CENTS/KWH
03/1/2017 - 03/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.4937 CENTS/KWH
04/1/2017 - 04/30/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5276 CENTS/KWH
4/1/2017 - 02/15/2018	RESIDENTIAL DSM ADJUSTMENT	0.0774 CENTS/KWH
4/1/2017 - 4/30/2017	SOLAR SAVER ADJUSTMENT	-0.1187 CENTS/KWH
5/1/2017-3/31/2018	SOLAR SAVER ADJUSTMENT	0.0000 CENTS/KWH
05/1/2017 - 05/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5484 CENTS/KWH
06/1/2017 - 06/30/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5894 CENTS/KWH
6/1/2017 - 2/15/2018	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	2.2291 CENTS/KWH
7/1/2017 - 12/31/2017	GREEN INFRASTRUCTURE FEE	1.1800 DOLLARS/MONTH
7/1/2017 - 7/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5388 CENTS/KWH
7/1/2017 - 6/30/2018	RESID. PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
8/1/2017 - 8/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.3840 CENTS/KWH
9/1/2017 - 9/30/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.4128 CENTS/KWH
10/1/2017 - 10/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.3748 CENTS/KWH
11/1/2017 - 11/30/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.1890 CENTS/KWH
12/1/2017 - 12/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.1709 CENTS/KWH
1/1/2018 -1/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.1422 CENTS/KWH
1/1/2018 - 6/30/2018	GREEN INFRASTRUCTURE FEE	1.3400 DOLLARS/MONTH
2/1/2018 - 2/28/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4536 CENTS/KWH
2/16/2018 -04/12/2018	INTERIM RATE INCREASE 2017 TEST YEAR	8.8700 PERCENT ON BASE
2/16/2018 - 5/31/2018	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.7116 CENTS/KWH
2/16/2018 - 3/31/2018	RESIDENTIAL DSM ADJUSTMENT	0.0000 CENTS/KWH
3/1/2018 -3/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4266 CENTS/KWH
4/1/2018 - 4/30/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4413 CENTS/KWH
4/1/2018 - 4/30/2018	SOLAR SAVER ADJUSTMENT	-0.1063 CENTS/KWH
4/1/2018 - 7/31/2018	RESIDENTIAL DSM ADJUSTMENT	-0.0513 CENTS/KWH
4/13/2018 -8/31/2018	INTERIM RATE INCREASE 2017 TEST YEAR	5.8900 PERCENT ON BASE
5/1/2018	SOLAR SAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2018 - 5/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	2.2718 CENTS/KWH
6/1/2018 - 6/30/2018	PURCHASED POWER ADJUSTMENT CLAUSE	2.5042 CENTS/KWH
6/1/2018	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.0350 CENTS/KWH
7/1/2018 - 12/31/2018	GREEN INFRASTRUCTURE FEE	1.2100 DOLLARS/MONTH
7/1/2018	RESID. PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
7/1/2018 - 7/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4959 CENTS/KWH
8/1/2018 - 8/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.9557 CENTS/KWH
8/1/2018 - 10/31/2018	RESIDENTIAL DSM ADJUSTMENT	-0.0064 CENTS/KWH
9/1/2018 - 9/30/2018	PURCHASED POWER ADJUSTMENT CLAUSE	4.3234 CENTS/KWH
9/1/2018	INTERIM RATE INCREASE 2017 TEST YEAR	0.0000 PERCENT ON BASE
9/1/2018	FINAL RATE INCREASE (TY2017) -0.039% EFFECTIVE 09/01/18, DOCKET NO. 2016-0328	
10/1/2018 - 10/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	4.3252 CENTS/KWH
11/1/2018 - 11/1/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.0539 CENTS/KWH
11/1/2018 - 1/31/2019	RESIDENTIAL DSM ADJUSTMENT	0.0203 CENTS/KWH
12/1/2018 - 12/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.0553 CENTS/KWH
1/1/2019 - 1/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	3.0574 CENTS/KWH
1/1/2019	GREEN INFRASTRUCTURE FEE	1.35 DOLLARS/MONTH
2/1/2019	RESIDENTIAL DSM ADJUSTMENT	0.0000 CENTS/KWH
2/1/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.3209 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.

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		
	1/1/2019	2/1/2019	1/1/2019	2/1/2019	Difference
Base Rates	effective date:	01/01/19	01/01/19		
Base Fuel/Energy Charge	¢/kWh	-	-	0.00	0.00
Non-fuel Fuel Energy Charge					
First 350 kWhr per month	¢/kWh	10.6812	10.6812	37.38	37.38
Next 850 kWhr per month	¢/kWh	11.8347	11.8347	17.75	17.75
Customer Charge	\$	11.50	11.50	11.50	11.50
Total Base Charges				66.63	66.63
Purchase Power Adjustment	¢/kWh	3.0574	2.3209	15.29	11.60
RBA Rate Adjustment	¢/kWh	1.0350	1.0350	5.18	5.18
DSM Adjustment	¢/kWh	0.0203	0.0000	0.10	0.00
Interim Rate Increase (TY 2017)	% on base	0.000%	0.000%	0.00	0.00
Refund of 2011 Interim	% on base	0.000%	0.000%	0.00	0.00
PBF Surcharge	¢/kWh	0.4658	0.4658	2.33	2.33
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	-	-	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00
Energy Cost Recovery	¢/kWh	14.095	12.044	70.48	60.22
Green Infrastructure Fee	\$	1.35	1.35	1.35	1.35
Avg Residential Bill at 500 kWh				169.64	147.31

Increase / (Decrease -)	-14.05
% Change	-8.28%

	Rate		Charge (\$) at 600 kWh		
	1/1/2019	2/1/2019	1/1/2019	2/1/2019	Difference
Base Rates	effective date:	09/01/18	01/01/19		
Base Fuel/Energy Charge	¢/kWh	-	-	0.00	0.00
Non-fuel Fuel Energy Charge					
First 350 kWhr per month	¢/kWh	10.6812	10.6812	37.38	37.38
Next 850 kWhr per month	¢/kWh	11.8347	11.8347	29.59	29.59
Customer Charge	\$	11.50	11.50	11.50	11.50
Total Base Charges				78.47	78.47
Purchase Power Adjustment	¢/kWh	3.0574	2.3209	18.34	13.93
RBA Rate Adjustment	¢/kWh	1.0350	1.0350	6.21	6.21
DSM Adjustment	¢/kWh	0.0203	0.0000	0.12	0.00
Interim Rate Increase (TY 2017)	% on base	0.000%	0.000%	0.00	0.00
Refund of 2011 Interim	% on base	0.000%	0.000%	0.00	0.00
PBF Surcharge	¢/kWh	0.4658	0.4658	2.79	2.79
Renewable Energy Infrastructure Cost Recovery Provision	¢/kWh	-	-	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00
Energy Cost Recovery	¢/kWh	14.095	12.044	84.57	72.26
Green Infrastructure Fee	\$	1.35	1.35	1.35	1.35
Avg Residential Bill at 600 kWh				191.85	175.01

Increase / (Decrease -)	-16.84
% Change	-8.78%