



August 31, 2018

FILED

2018 AUG 31 P 2:41

PUBLIC UTILITIES
COMMISSION

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

Dear Commissioners:

Subject: Hawaiian Electric Energy Cost Adjustment Factor for September 2018

Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or "Company") September 2018 energy cost adjustment factor is 4.201 cents per kilowatt-hour ("kWh"), an increase of 3.399 cents per kWh from last month. Base Energy Cost factors are reset to the 2017 rate case approved levels effective September 1, 2018 in Docket No. 2016-0328.

The Company's fuel composite cost of major energy is 1,428.07 cents per million BTU. The Company's composite cost of minor energy is -3.185 cents per kWh. The composite cost of purchased energy decreased 0.149 cents per kWh to 10.000 cents per kWh.

A residential customer consuming 500 kWh of electricity will be paying \$169.09, an increase of \$10.30 compared to rates effective August 1, 2018. The increase in the residential typical bill is comprised of the increase in the energy cost adjustment factor (+\$17.00), and an increase in the Purchase Power Adjustment Clause (+\$1.84), partially offset by the termination of the 2017 Interim Rate Increase (-\$7.03), and a decrease of (-\$1.51) due to the implementation of the 2017 Final Rates effective September 1, 2018.

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 September 1, 2018.

Very truly yours,

Dean K. Matsuura
Manager, Regulatory Rate Proceedings

Attachments

cc: Division of Consumer Advocacy

Hawaiian Electric Company, Inc.
ENERGY COST ADJUSTMENT FACTOR

	<u>Effective Dates</u>		<u>Change</u>
	<u>08/01/18</u>	<u>09/01/18</u>	
Composite Cost Of Generation, ¢/mmbtu	1,408.15	-	
Composite Cost Of Major Energy, ¢/mmbtu	-	1,428.07	
DG Energy Component, ¢/kWh	0.106	-	
Composite Cost Of Minor Energy, ¢/kwh	-	(3.185)	
Composite Cost Of Purchased Energy, ¢/kWh	10.149	10.000	(0.149)
 <u>Residential, Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	0.802	4.201	3.399
 <u>Others, Schedules "G,J,DS,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	0.802	4.201	3.399
 <u>Residential Customer with:</u>			
500 kWh Consumption, \$/bill	158.79	169.09	10.30
600 kWh Consumption, \$/bill	189.22	201.16	11.94

Supersedes Sheet Effective: August 1, 2018

Hawaiian Electric Company, Inc.
ENERGY COST ADJUSTMENT FILING

ENERGY COST ADJUSTMENT (ECA) FILING - September 1, 2018 (page 1 of 2)

Line		
1	Effective Date	- September 1, 2018
2	Supercedes Factor	- August 1, 2018

GENERATION COMPONENT

MAJOR ENERGY COMPONENT					MINOR ENERGY COMPONENT					
FUEL PRICES, ¢/mmbtu					Gen Cost Percent of Weighted Gen					
					<u>Fuel Type</u>	<u>¢/KWH</u>	<u>Minor Energy</u>	<u>Cost ¢/KWH</u>		
3	Honolulu	0.00			32a Airport DG	32.74	1.70%	0.5578		
4	Kahe	1,428.15			32b CIP-Biodiesel	0	0.00%	0.0000		
5	Waiau-Steam	1,427.83			32c CIP-Diesel	36.78	3.05%	1.1228		
6	(Future Use)	0.00			32d SGS - Biodiesel	-96.93	33.42%	-32.3905		
7	(Future Use)	0.00			32e SGS - ULSD	21.61	2.42%	0.5220		
8	(Future Use)	0.00			32f Waiau-Diesel	45.45	59.41%	27.0024		
9	Other	0			32g COMPOSITE COST OF MINOR ENERGY, ¢/kWh				(3.185)	
BTU MIX, %					33 % Input to System kWh Mix					0.69
10	Honolulu	0.00			34 WTD COMP MINOR ENERGY COST, ¢/kWh (Lines 32d x 33)					-0.02198
11	Kahe	73.82			35 2017 TY Loss Factor					1.0490
12	Waiau-Steam	26.18			36 WTD COMP MINOR ENERGY COST, ¢/kWh (Line 34 x 35)					(0.02306)
13	(Future Use)	0.00			37 BASE MINOR ENERGY COMP COST					35.2185
14	(Future Use)	0.00			38 Base % Input to System kWh Mix					0.5117
15	(Future Use)	0.00			39 WTD BASE MINOR ENERGY COST, ¢/kWh (Line 37 x 38)					0.18021
16	Other	100.00			40 2017 TY Loss Factor					1.0490
17	COMPOSITE COST OF GENERATION, MAJOR ENERGY ¢/mmbtu	1,428.07			41 WTD COMP MINOR ENERGY COST, ¢/kWh (Line 39 x 40)					0.18904
18	% Input to system kWh Mix	47.92			42 Cost Less Base (Line 36 - 41)					(0.212097)
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)					(0.23278)
		Eff Factor	Percent of	Weighted						
	<u>Fuel Type</u>	<u>mmbtu/kwh</u>	<u>Centrl Stn +</u>	<u>Eff Factor</u>						
			<u>Other</u>							
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			0.011165						
[lines 19(D) + 20(D) + 21(D) + 22(D)]										
24	WEIGHTED MAJOR ENERGY COST, ¢/kWh Sales (lines 17 x 18 x 23)			7.64056						
25	BASE MAJOR ENERGY COST, ¢/mmbtu			909.59						
26	Base % Input to System kWh Mix			45.4505						
27	Efficiency Factor, Mbtu/kWh			0.011165						
28	WEIGHTED BASE MAJOR ENERGY COST ¢/KWH Sales (lines 25 x 26 x 27)			4.61576						
29	Cost Less Base (Line 24 - 28)			3.02480						
30	Revenue Tax Adjustment (1 / (1-0.08885))			1.097514						
31	MAJOR ENERGY GENERATION FACTOR, ¢/KWH (Line 29 x 30)			3.31976						

SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh	
45 MAJOR ENERGY (line 31)	3.31976
46 MINOR ENERGY (line 44)	(0.23278)
47 TOTAL GENERATION FACTOR, ¢/KWH (lines 45 + 46)	3.08698

Hawaiian Electric Company, Inc.
ENERGY COST ADJUSTMENT FILING

ENERGY COST ADJUSTMENT (ECA) FILING - September 1, 2018 (page 2 of 2)

Line

- 1 **Effective Date** - September 1, 2018
- 2 **Supersedes Factor** - August 1, 2018

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>		
	PURCHASED ENERGY PRICE - ¢/KWH		
48	PAR Hawaii	- On Peak	14.916
49	PAR Hawaii	- Off Peak	14.526
50	HRRV	- On Peak	17.19
51		- Off Peak	16.70
52	HRRV	- On Peak (excess)	10.95
53		- Off Peak (excess)	6.57
54	IES Downstream	- On Peak	14.916
55	IES Downstream	- Off Peak	14.526
56	Kalaeloa		12.938
57	AES-HI		3.286
58	Kawailoa		22.064
59	Kahuku Wind		20.704
60	Waianae Solar PV		14.500
61	As Available I		22.061
62	FIT		19.247
	PURCHASED ENERGY KWH MIX, %		
63	PAR Hawaii	- On Peak	0.23
64	PAR Hawaii	- Off Peak	0.16
65	HRRV	- On Peak	7.12
66		- Off Peak	2.48
67	HRRV	- On Peak (excess)	0.00
68		- Off Peak (excess)	2.28
69	IES Downstream	- On Peak	0.01
70	IES Downstream	- Off Peak	0.01
71	Kalaeloa		36.85
72	AES-HI		40.45
73	Kawailoa		3.61
74	Kahuku Wind		2.40
75	Waianae Solar PV		2.16
76	As Available I		0.62
77	FIT		1.62
			100.00
78	COMPOSITE COST OF PURCHASED ENERGY, ¢/KWH		10.000
79	% Input to System kWh Mix		51.39
80	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 78 x 79)		5.13900
81	2017 TY Loss Factor		1.0490
82	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 80 x 81)		5.39081
83	BASE PURCHASED ENERGY COMPOSITE COST, ¢/KWH		7.762
84	Base % Input to System kWh Mix		54.0378
85	WEIGHTED BASE PURCHASED ENERGY COST, ¢/KWH SALES (lines 83 x 84)		4.19441
86	2017 TY Loss Factor		1.049
87	WTD CMP PURCH ENRGY COST, ¢/KWH sales (lines 85 x 86)		4.39994
88	Cost Less Base (Line 82 - 87)		0.99087
89	Revenue Tax Adjustment (1 / (1-0.08885))		1.097514
90	PURCHASED ENERGY FACTOR, ¢/KWH (lines 88 x 89)		1.08750
	<u>Line SYSTEM COMPOSITE</u>		
	91 GEN AND PURCHASED ENERGY FACTOR, ¢/kWh (lines 47 + 90)		4.17448
	92 (Future Use) Adjustment, ¢/kWh		0.000
	93 ECA Reconciliation Adjustment		0.027
	94 ECA FACTOR, ¢/kWh (lines 91 + 92 + 93)		4.201

Hawaiian Electric Company, Inc.
FUEL OIL INVENTORY PRICES FOR 09-01-18

	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiiau</u>
Average Low Sulfur Fuel Oil, ¢/Mbtu	1,427.83	1,427.83	1,427.83
Kahe Fuel Additive, ¢/Mbtu	-	0.32	-
Honolulu Trucking Cost, ¢/Mbtu	-	-	-
	<hr/>		
Low Sulfur Fuel Oil Prices Used For Filing, ¢/Mbtu	1,427.83	1,428.15	1,427.83
	<hr/>		
	<u>Waiiau</u>	<u>CIP Biodiesel</u>	<u>CIP Diesel</u>
Average Diesel / Biodiesel Oil, ¢/Mbtu	1,718.06	2,963.91	2075.16
Thruput Charges, ¢/Mbtu	-	-	0
	<hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	1,718.06	2,963.91	2,075.16
	<hr/>		
	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiiau</u>
Average Low Sulfur Fuel Oil, \$/bbl	89.95	89.95	89.95
Kahe Fuel Additive, \$/bbl	-	0.02	-
Honolulu Trucking Cost, \$/bbl	-	-	-
	<hr/>		
Low Sulfur Fuel Oil Prices Used For Filing, \$/bbl	89.95	89.97	89.95
	<hr/>		
	<u>Waiiau</u>	<u>CIP Biodiesel</u>	<u>CIP Diesel</u>
Average Diesel / Biodiesel Oil, \$/bbl	98.23	154.65	118.46
Thruput Charges, ¢/Mbtu	-	-	-
	<hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	98.23	154.65	118.46
	<hr/>		
Distributed Generation Fuel Prices Used for Filing, ¢/kWh			-84.720

FOAC September 2018

<u>LSFO</u>	<u>BARRELS</u>	<u>MBTU</u>	<u>AMOUNT</u>	<u>AVE \$/MBTU</u>
Per FOAC run	675,302	4,254,254.28	60,743,511.32	14.278298
Additional	-	-	-	-
Forecast Amt	675,302	4,254,254.28	60,743,511.32	14.278298
	-	6.20	-	ADD'L BBL
	4,254,254	675,302	6.2998	MBTU / BBL
	60,743,511	675,302	89.95	DOLLARS / BBL
<u>WAIKU DIESEL</u>	23,569	134,756.92	2,315,199.97	17.180565
	2,315,200	23,569	98.23	DOLLARS / BBL
<u>CIP BIODIESEL</u>	3,569	18,623.84	551,992.94	29.639051
	551,993	3,569	154.65	DOLLARS / BBL
<u>CIP DIESEL</u>	9,136	52,152.72	1,082,250.04	20.751556
	1,082,250	9,136	118.46	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 8-1-18

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
LOW SULFUR FUEL OIL		
Tax *	5.4196	87.42
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
DIESEL		
Tax *	6.2759	107.11
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 *	6.6866	116.69
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
BIODIESEL		
Tax *	7.8766	150.09
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

Line No.					
L1		Estimated Distributed Generation Fuel Cost (\$/mbtu)	\$		(85.34)
L2		Estimated Distributed Generation Fuel Transport Cost (\$/mbtu)			\$0.00
L3 = L1 + L2		Estimated Total Fuel and Transportation Cost (\$/mbtu)	\$		(85.34)
L4	Sum of (B)	Estimated Mbtu Generation for month (September 2018)			25,137
L5 = L3 x L4	Sum of (C)	Estimated Distributed Generation Total Fuel Cost (\$)			(\$2,145,154)
L6	Sum of (D)	Estimated Distributed Generation kWh Produced (September 2018)			2,532,199
L7 = (L5 ÷ L6) x 100		Distributed Generation Fuel Prices Used for Filing, (¢/kWh)			(84.7200)
		Airport DG Biodiesel		Schofield Biodiesel	
(A)	\$	29.16	\$	(98.79)	\$
(B)		1141		22,379	1618
(B1)		217		4,264	282
(C) = (A) x (B)		\$33,270		(\$2,210,793)	\$32,368
(D)		101,600		2,280,808	149,791
(E) = ((C) ÷ (D)) x 100		32.750		(96.930)	21.610

Fuel Prices for Avoided Cost Filing, Page 2 of 9 (¢/kWh)

Hawaiian Electric Company, Inc.
ECA RECONCILIATION ADJUSTMENT
September 2018

1.	Amount to be collected	\$	417,100
2.	Monthly Amount (Line 1 x 1/3)	\$	139,033
3.	Revenue Tax Divisor		0.91115
4.	Total (Line 2 / Line 3)	\$	152,591
5.	Estimated MWh Sales (SEPTEMBER 2018)		572,500
6.	ECA Reconciliation Adjustment, ¢/kWh (Line 4 ÷ Line 5)		<u><u>0.027</u></u>

HAWAIIAN ELECTRIC COMPANY, INC.
2018 Cumulative Reconciliation Balance

	(1)		(2)	(3)	(4)	(5)	(6)
Month	YTD FOA Reconciliation	Qtr	FOA Rec Adjust Variance	FOA Rec Less Variance	Try to Collect	Actual Collect	Month-end Cumulative Balance
November '17	(988,400)	(3)	140,027	(1,128,427)	329,467	323,129	(663,027)
December					329,467	305,191	(357,836)
January '18					329,467	320,330	(37,506)
February	(6,640,300)	(4)	(28,376)	(6,611,924)	2,213,433	2,088,724	(4,560,707)
March					2,213,433	2,155,118	(2,405,589)
April					2,213,433	2,229,374	(176,215)
May	(7,499,100)	(1)	(192,161)	(7,306,939)	2,499,700	2,387,495	(5,095,658)
June					2,499,700	2,571,358	(2,524,300)
July					2,499,700	2,540,846	16,546
August	(417,100)	(2)			139,033		
September					139,033		

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.
FUEL OIL ADJUSTMENT FACTOR DATA

<u>EFFECTIVE DATE</u>	FUEL FACTOR CENTS / KWH <u>RESIDENTIAL & COMMERCIAL</u>	RESIDENTIAL BILL (\$)	
		<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2016	-3.748	129.34	153.97
February 1, 2016	-4.637	127.47	151.74
March 1, 2016	-5.498	123.06	146.43
April 1, 2016	-5.393	123.34	146.76
May 1, 2016	-5.527	124.85	148.58
June 1, 2016	-4.651	129.34	153.95
July 1, 2016	-3.854	133.43	158.90
August 1, 2016	-3.176	134.73	160.45
September 1, 2016	-3.345	133.98	159.57
October 1, 2016	-3.964	130.77	155.71
November 1, 2016	-3.848	131.04	156.03
December 1, 2016	-3.578	132.32	157.56
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

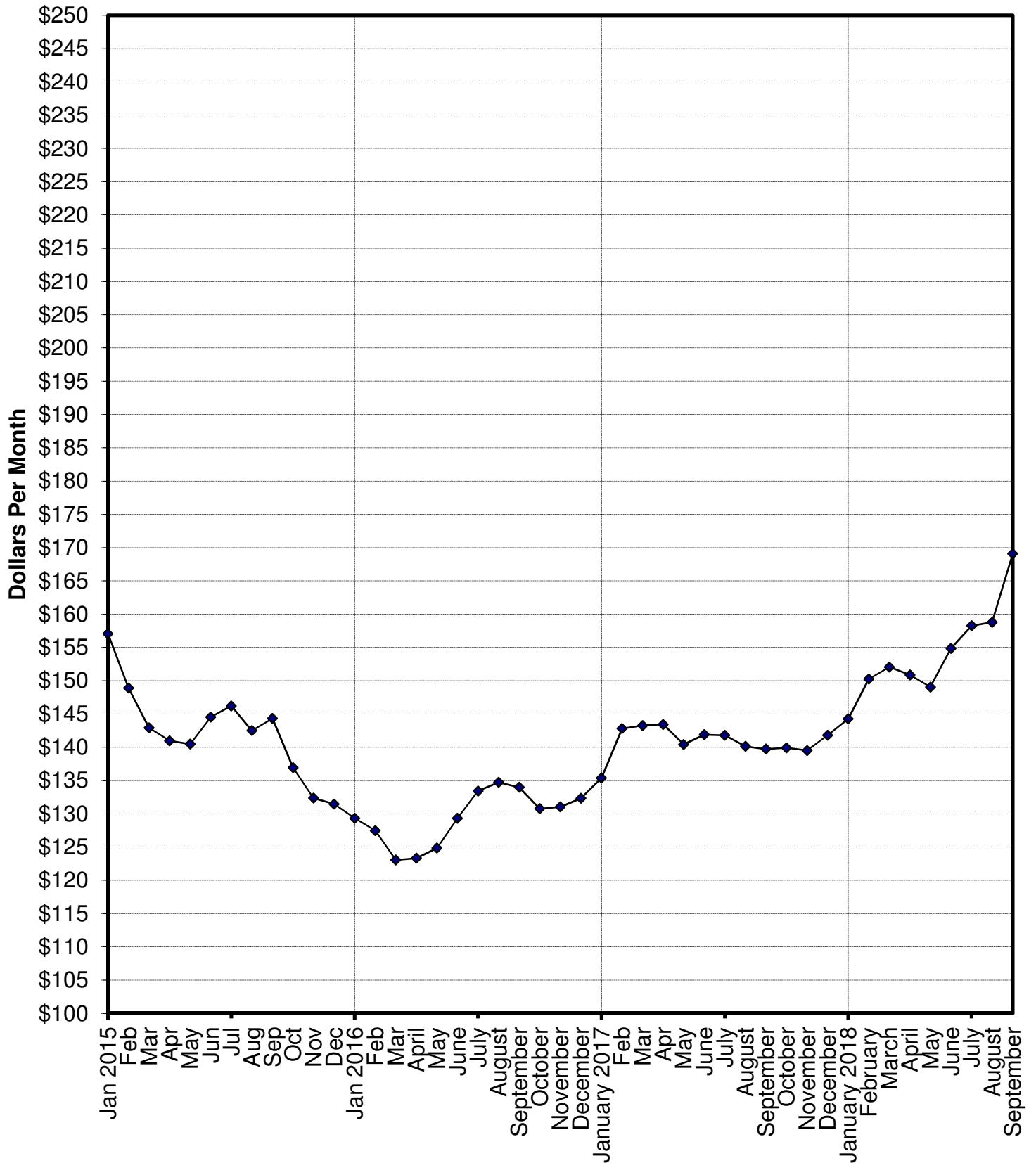
Hawaiian Electric Company, Inc.
RESIDENTIAL SURCHARGE DATA

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 -04/12/018	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	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	RESIDENTIAL DSM ADJUSTMENT	-0.0064 CENTS/KWH
9/1/2018	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	

~ 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			
	8/1/2018	9/1/2018	8/1/2018	9/1/2018	Difference	
Base Rates	effective date:	09/01/12	09/01/18			
Base Fuel/Energy Charge	¢/kWh	13.6062	10.2278	68.03	51.14	-16.89
Non-fuel Fuel Energy Charge						
First 350 kWh per month	¢/kWh	8.1034	10.6812	28.36	37.38	9.02
Next 850 kWh per month	¢/kWh	9.2569	11.8347	13.89	17.75	3.86
Customer Charge	\$	9.00	11.50	9.00	11.50	2.50
Total Base Charges				119.28	117.77	-1.51
Purchase Power Adjustment	¢/kWh	3.9557	4.3234	19.78	21.62	1.84
RBA Rate Adjustment	¢/kWh	1.0350	1.0350	5.18	5.18	0.00
DSM Adjustment	¢/kWh	-0.0064	-0.0064	-0.03	-0.03	0.00
Interim Rate Increase (TY 2017)	% on base	5.890%	0.000%	7.03	0.00	-7.03
Refund of 2011 Interim	% on base	0.000%	0.000%	0.00	0.00	0.00
PBF Surcharge	¢/kWh	0.4658	0.4658	2.33	2.33	0.00
Renewable Energy Infrastructure Cost						
Recovery Provision	¢/kWh	-	-	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Energy Cost Adjustment	¢/kWh	0.802	4.201	4.01	21.01	17.00
Green Infrastructure Fee	\$	1.21	1.21	1.21	1.21	0.00
Avg Residential Bill at 500 kWh				158.79	169.09	

Increase / (Decrease -)	10.30
% Change	6.49%

	Rate		Charge (\$) at 600 kWh			
	8/1/2018	9/1/2018	8/1/2018	9/1/2018	Difference	
Base Rates	effective date:	09/01/12	09/01/18			
Base Fuel/Energy Charge	¢/kWh	13.6062	10.2278	81.64	61.37	-20.27
Non-fuel Fuel Energy Charge						
First 350 kWh per month	¢/kWh	8.1034	10.6812	28.36	37.38	9.02
Next 850 kWh per month	¢/kWh	9.2569	11.8347	23.14	29.59	6.45
Customer Charge	\$	9.00	11.50	9.00	11.50	2.50
Total Base Charges				142.14	139.84	-2.30
Purchase Power Adjustment	¢/kWh	3.9557	4.3234	23.73	25.94	2.21
RBA Rate Adjustment	¢/kWh	1.0350	1.0350	6.21	6.21	0.00
DSM Adjustment	¢/kWh	-0.0064	-0.0064	-0.04	-0.04	0.00
Interim Rate Increase (TY 2017)	% on base	5.890%	0.000%	8.37	0.00	-8.37
Refund of 2011 Interim	% on base	0.000%	0.000%	0.00	0.00	0.00
PBF Surcharge	¢/kWh	0.4658	0.4658	2.79	2.79	0.00
Renewable Energy Infrastructure Cost						
Recovery Provision	¢/kWh	-	-	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Energy Cost Adjustment	¢/kWh	0.802	4.201	4.81	25.21	20.40
Green Infrastructure Fee	\$	1.21	1.21	1.21	1.21	0.00
Avg Residential Bill at 600 kWh				189.22	201.16	

Increase / (Decrease -)	11.94
% Change	6.31%