



September 26, 2018

FILED

2018 SEP 26 P 3:43

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

PUBLIC UTILITIES  
COMMISSION

Dear Commissioners:

Subject: Hawaiian Electric Energy Cost Adjustment Factor for October 2018

Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or "Company") October 2018 energy cost adjustment factor is 4.008 cents per kilowatt-hour ("kWh"), a decrease of 0.193 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$168.13, a decrease of \$0.96 compared to rates effective September 1, 2018. The decrease in the residential typical bill is comprised of the increase in the Purchase Power Adjustment Clause (+\$0.01), offset by the decrease in the energy cost adjustment factor (-\$0.97).

The Company's fuel composite cost of major energy decreased 22.96 cents per million BTU to 1,405.11 cents per million BTU. The Company's composite cost of minor energy increased 17.550 cents per kWh to 14.364 cents per kWh. The composite cost of purchased energy decreased 0.227 cents per kWh to 9.773 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 October 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>09/01/18</u>	<u>10/01/18</u>	
Composite Cost Of Major Energy, ¢/mmbtu	1,428.07	1,405.11	(22.96)
Composite Cost Of Minor Energy, ¢/kwh	(3.185)	14.364	17.550
Composite Cost Of Purchased Energy, ¢/kWh	10.000	9.773	(0.227)
 <u>Residential, Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	4.201	4.008	(0.193)
 <u>Others, Schedules "G,J,DS,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	4.201	4.008	(0.193)
 <u>Residential Customer with:</u>			
500 kWh Consumption, \$/bill	169.09	168.13	(0.96)
600 kWh Consumption, \$/bill	201.16	200.01	(1.15)

Supersedes Sheet Effective:                      September 1, 2018

Hawaiian Electric Company, Inc.  
ENERGY COST ADJUSTMENT FILING

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

Line		
1	<b>Effective Date</b>	- October 1, 2018
2	<b>Supercedes Factor</b>	- September 1, 2018

**GENERATION COMPONENT**

<b>MAJOR ENERGY COMPONENT</b>					<b>MINOR ENERGY COMPONENT</b>					
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	33.09	1.00%	0.3293		
4	Kahe	1,405.20			32b CIP-Biodiesel	0	0.00%	0.0000		
5	Waiau-Steam	1,404.88			32c CIP-Diesel	35.77	1.30%	0.4663		
6	(Future Use)	0.00			32d SGS - Biodiesel	-32.62	39.36%	-12.8391		
7	(Future Use)	0.00			32e SGS - ULSD	21.73	2.23%	0.4847		
8	(Future Use)	0.00			32f Waiau-Diesel	46.2	56.11%	25.9233		
9	Other	0			32g COMPOSITE COST OF MINOR ENERGY, ¢/kWh				14.364	
BTU MIX, %					33 % Input to System kWh Mix					0.93
10	Honolulu	0.00			34 WTD COMP MINOR ENERGY COST, ¢/kWh (Lines 32d x 33)					0.13330
11	Kahe	72.74			35 2017 TY Loss Factor					1.0490
12	Waiau-Steam	27.26			36 WTD COMP MINOR ENERGY COST, '¢/kWh (Line 34 x 35)					0.13983
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	1,405.11			41 WTD COMP MINOR ENERGY COST, '¢/kWh (Line 39 x 40)					0.18904
18	% Input to system kWh Mix	46.67			42 Cost Less Base (Line 36 - 41)					(0.049209)
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)					(0.05401)
		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)			7.32114						
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)			2.70538						
30	Revenue Tax Adjustment (1 / (1-0.08885))			1.097514						
31	MAJOR ENERGY GENERATION FACTOR, ¢/KWH (Line 29 x 30)			2.96919						

SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh	
45 MAJOR ENERGY (line 31)	2.96919
46 MINOR ENERGY (line 44)	(0.05401)
47 TOTAL GENERATION FACTOR, ¢/KWH (lines 45 + 46)	2.91518

**Hawaiian Electric Company, Inc.**  
**ENERGY COST ADJUSTMENT FILING**

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

Line

1	<b>Effective Date</b>	- October 1, 2018
2	<b>Supersedes Factor</b>	- September 1, 2018

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>		
	PURCHASED ENERGY PRICE - ¢/KWH		
48	PAR Hawaii	- On Peak	14.780
49	PAR Hawaii	- Off Peak	14.416
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	14.780
55	IES Downstream	- Off Peak	14.416
56	Kalaeloa		13.083
57	AES-HI		3.286
58	Kawailoa		22.064
59	Kahuku Wind		20.704
60	Waianae Solar PV		14.500
61	As Available I		22.056
62	FIT		19.229
	PURCHASED ENERGY KWH MIX, %		
63	PAR Hawaii	- On Peak	0.22
64	PAR Hawaii	- Off Peak	0.16
65	HRRV	- On Peak	6.67
66		- Off Peak	2.39
67	HRRV	- On Peak (excess)	0.00
68		- Off Peak (excess)	2.02
69	IES Downstream	- On Peak	0.01
70	IES Downstream	- Off Peak	0.01
71	Kalaeloa		38.34
72	AES-HI		41.74
73	Kawailoa		2.68
74	Kahuku Wind		1.72
75	Waianae Solar PV		1.93
76	As Available I		0.56
77	FIT		1.55
			100.00
78	COMPOSITE COST OF PURCHASED ENERGY, ¢/KWH		9.773
79	% Input to System kWh Mix		52.40
80	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 78 x 79)		5.12105
81	2017 TY Loss Factor		1.0490
82	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 80 x 81)		5.37198
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)		0.97205
89	Revenue Tax Adjustment (1 / (1-0.08885))		1.097514
90	PURCHASED ENERGY FACTOR, ¢/KWH (lines 88 x 89)		1.06683
	<u>Line SYSTEM COMPOSITE</u>		
	91 GEN AND PURCHASED ENERGY FACTOR, ¢/kWh (lines 47 + 90)		3.98201
	92 (Future Use) Adjustment, ¢/kWh		0.000
	93 ECA Reconciliation Adjustment		0.026
	94 ECA FACTOR, ¢/kWh (lines 91 + 92 + 93)		4.008

**Hawaiian Electric Company, Inc.**  
**FUEL OIL INVENTORY PRICES FOR 10-01-18**

	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiiau</u>
Average Low Sulfur Fuel Oil, ¢/Mbtu	1,404.88	1,404.88	1,404.88
Kahe Fuel Additive, ¢/Mbtu	-	0.32	-
Honolulu Trucking Cost, ¢/Mbtu	-	-	-
	<hr/>		
Low Sulfur Fuel Oil Prices Used For Filing, ¢/Mbtu	1,404.88	1,405.20	1,404.88
	<hr/>		
	<u>Waiiau</u>	<u>CIP Biodiesel</u>	<u>CIP Diesel</u>
Average Diesel / Biodiesel Oil, ¢/Mbtu	1,690.79	2,878.64	2044.26
Thruput Charges, ¢/Mbtu	-	-	0
	<hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	1,690.79	2,878.64	2,044.26
	<hr/>		
	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiiau</u>
Average Low Sulfur Fuel Oil, \$/bbl	88.46	88.46	88.46
Kahe Fuel Additive, \$/bbl	-	0.02	-
Honolulu Trucking Cost, \$/bbl	-	-	-
	<hr/>		
Low Sulfur Fuel Oil Prices Used For Filing, \$/bbl	88.46	88.48	88.46
	<hr/>		
	<u>Waiiau</u>	<u>CIP Biodiesel</u>	<u>CIP Diesel</u>
Average Diesel / Biodiesel Oil, \$/bbl	96.80	150.24	116.75
Thruput Charges, ¢/Mbtu	-	-	-
	<hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	96.80	150.24	116.75
	<hr/>		
Distributed Generation Fuel Prices Used for Filing, ¢/kWh			-28.680

FOAC October 2018

<u>LSFO</u>	<u>BARRELS</u>	<u>MBTU</u>	<u>AMOUNT</u>	<u>AVE \$/MBTU</u>
Per FOAC run	625,181	3,936,479.96	55,302,666.85	14.048761
Additional	-	-	-	-
Forecast Amt	625,181	3,936,479.96	55,302,666.85	14.048761
	-	6.20	-	ADD'L BBL
	3,936,480	625,181	6.2965	MBTU / BBL
	55,302,667	625,181	88.46	DOLLARS / BBL
<u>WAIKU DIESEL</u>	29,141	166,843.37	2,820,971.94	16.907906
	2,820,972	29,141	96.80	DOLLARS / BBL
<u>CIP BIODIESEL</u>	3,674	19,175.46	551,992.94	28.786429
	551,993	3,674	150.24	DOLLARS / BBL
<u>CIP DIESEL</u>	9,296	53,092.24	1,085,344.45	20.442620
	1,085,344	9,296	116.75	DOLLARS / BBL
<b>KAHE FUEL ADDITIVE *</b>				
Additional	-	-	-	0.003194
Forecast Amt	-	-	-	0.003194
\$ / BBL =		-	0.02	DOLLARS / BBL
<b>HONOLULU TRUCKING COST</b>				
Per FOAC run	-	-	-	-
Additional	-	-	-	-
Forecast Amt	-	-	-	-
\$ / BBL =	-	-	-	DOLLARS / BBL

**Hawaiian Electric Company, Inc.**

**CONTRACT PRICES EFFECTIVE 9-1-18**

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
<b>LOW SULFUR FUEL OIL</b>		
Tax *	5.3743	86.69
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
<b>DIESEL</b>		
Tax *	6.3673	108.67
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
<b>ULTRA LOW SULFUR DIESEL</b>		
Tax *	6.7780	118.28
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
<b>BIODIESEL</b>		
Tax *	7.8964	150.46
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)	\$		(29.06)
L2		Estimated Distributed Generation Fuel Transport Cost (\$/mbtu)			\$0.00
L3 = L1+ L2		Estimated Total Fuel and Transportation Cost (\$/mbtu)	\$		(29.06)
L4	Sum of (B)	Estimated Mbtu Generation for month (October 2018)			37,679
L5 = L3 x L4	Sum of (C)	Estimated Distributed Generation Total Fuel Cost (\$)			(\$1,094,925)
L6	Sum of (D)	Estimated Distributed Generation kWh Produced (October 201			3,817,282
L7 = (L5 ÷ L6) x 100		Distributed Generation Fuel Prices Used for Filing, (¢/kWh)			<b>(28.6800)</b>
		<b>Airport DG Biodiesel</b>		<b>Schofield Biodiesel</b>	
(A)	\$	29.47	\$	(33.32)	\$
(B)		880		34,825	1974
(B1)		168		6,636	344
(C) = (A) x (B)		\$25,946		(\$1,160,357)	\$39,485
(D)		78,400		3,557,189	181,692
(E) = ((C) ÷ (D)) x 100		<b>33.090</b>		<b>(32.620)</b>	<b>21.730</b>

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



**Hawaiian Electric Company, Inc.**  
**ECA RECONCILIATION ADJUSTMENT**  
**October 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 (OCTOBER 2018)		581,300
6.	ECA Reconciliation Adjustment, ¢/kWh (Line 4 ÷ Line 5)		<u><u>0.026</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)		(417,100)	139,033	142,637	(257,917)
September					139,033		
October					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 &amp; COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$)</u> <u>@ 500 KWH @ 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
October 1, 2018	4.008	168.13 200.01

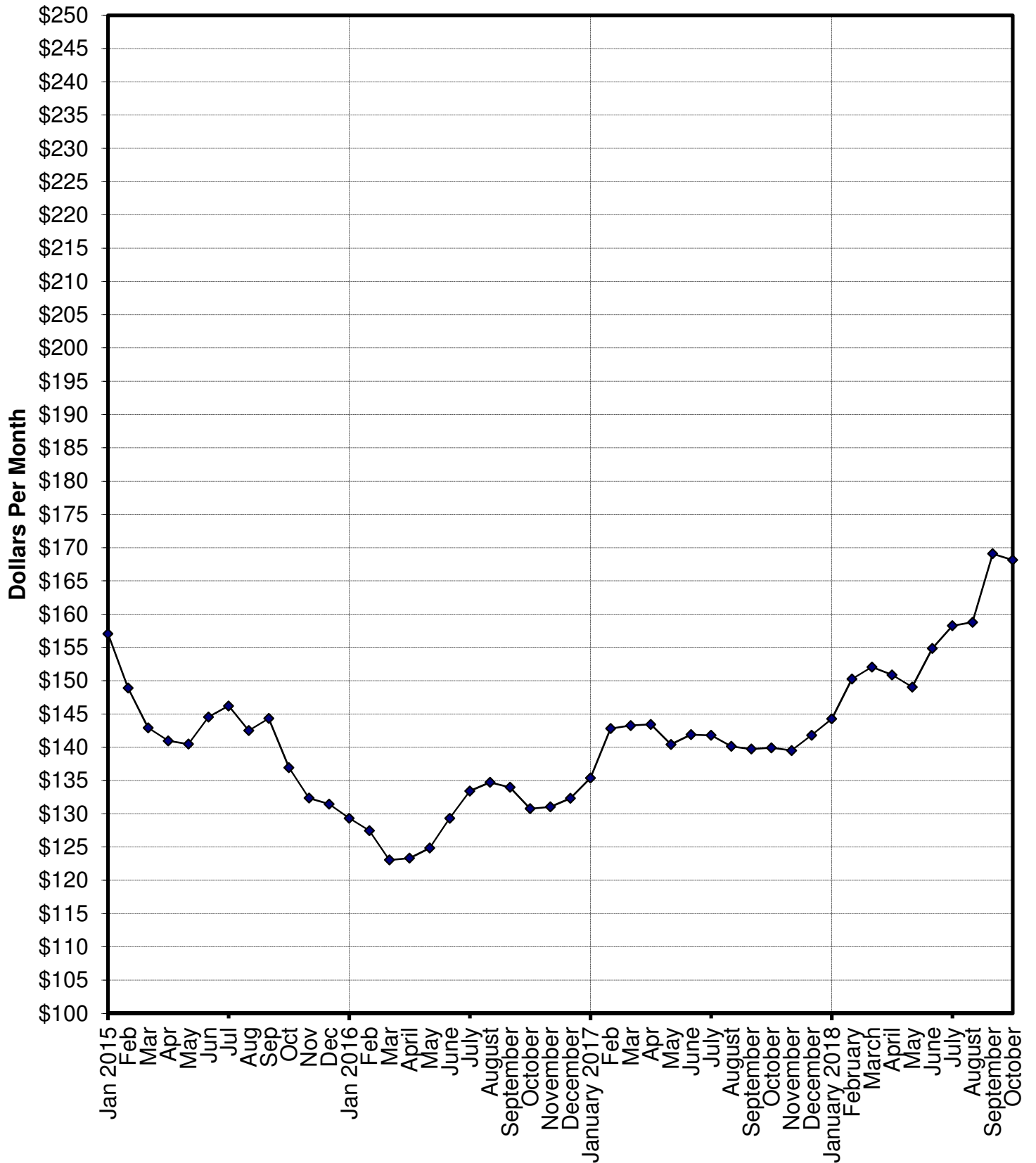
**Hawaiian Electric Company, Inc.**  
**RESIDENTIAL SURCHARGE DATA**

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
<b>5/15/2016</b>	<b>RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION</b>	<b>0.0000 CENTS/KWH</b>
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
<b>5/1/2018</b>	<b>SOLAR SAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>
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
<b>6/1/2018</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>1.0350 CENTS/KWH</b>
<b>7/1/2018</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.2100 DOLLARS/MONTH</b>
<b>7/1/2018</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.4658 CENTS/KWH</b>
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
<b>8/1/2018</b>	<b>RESIDENTIAL DSM ADJUSTMENT</b>	<b>-0.0064 CENTS/KWH</b>
9/1/2018	PURCHASED POWER ADJUSTMENT CLAUSE	4.3234 CENTS/KWH
<b>9/1/2018</b>	<b>INTERIM RATE INCREASE 2017 TEST YEAR</b>	<b>0.0000 PERCENT ON BASE</b>
<b>9/1/2018</b>	<b>FINAL RATE INCREASE (TY2017) -0.039% EFFECTIVE 09/01/18, DOCKET NO. 2016-0328</b>	
<b>10/1/2018</b>	<b>PURCHASED POWER ADJUSTMENT CLAUSE</b>	<b>4.3252 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			
	9/1/2018	10/1/2018	9/1/2018	10/1/2018	Difference	
<b>Base Rates</b>	effective date:	09/01/18	09/01/18			
Base Fuel/Energy Charge	¢/kWh	10.2278	10.2278	51.14	51.14	0.00
Non-fuel Fuel Energy Charge						
First 350 kWh per month	¢/kWh	10.6812	10.6812	37.38	37.38	0.00
Next 850 kWh 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>				117.77	117.77	0.00
<b>Purchase Power Adjustment</b>	¢/kWh	4.3234	4.3252	21.62	21.63	0.01
<b>RBA Rate Adjustment</b>	¢/kWh	1.0350	1.0350	5.18	5.18	0.00
<b>DSM Adjustment</b>	¢/kWh	-0.0064	-0.0064	-0.03	-0.03	0.00
<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	0.4658	0.4658	2.33	2.33	0.00
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	-	-	0.00	0.00	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	4.201	4.008	21.01	20.04	-0.97
<b>Green Infrastructure Fee</b>	\$	1.21	1.21	1.21	1.21	0.00
<b>Avg Residential Bill at 500 kWh</b>				169.09	168.13	

Increase / (Decrease -) -0.96  
 % Change -0.57%

	Rate		Charge (\$) at 600 kWh			
	9/1/2018	10/1/2018	9/1/2018	10/1/2018	Difference	
<b>Base Rates</b>	effective date:	09/01/18	09/01/18			
Base Fuel/Energy Charge	¢/kWh	10.2278	10.2278	61.37	61.37	0.00
Non-fuel Fuel Energy Charge						
First 350 kWh per month	¢/kWh	10.6812	10.6812	37.38	37.38	0.00
Next 850 kWh 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>				139.84	139.84	0.00
<b>Purchase Power Adjustment</b>	¢/kWh	4.3234	4.3252	25.94	25.95	0.01
<b>RBA Rate Adjustment</b>	¢/kWh	1.0350	1.0350	6.21	6.21	0.00
<b>DSM Adjustment</b>	¢/kWh	-0.0064	-0.0064	-0.04	-0.04	0.00
<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	0.4658	0.4658	2.79	2.79	0.00
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	-	-	0.00	0.00	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	4.201	4.008	25.21	24.05	-1.16
<b>Green Infrastructure Fee</b>	\$	1.21	1.21	1.21	1.21	0.00
<b>Avg Residential Bill at 600 kWh</b>				201.16	200.01	

Increase / (Decrease -) -1.15  
 % Change -0.57%