



FILED

November 25, 2015

2015 NOV 25 P 3: 55

The Honorable Chair and Members  
of the Hawai'i 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 December 2015

Hawaiian Electric Company Inc.'s ("Hawaiian Electric" or "Company") December 2015 energy cost adjustment factor is -3.353 cents per kilowatt-hour ("kWh"), a decrease of 0.174 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$131.47, a decrease of \$0.89 compared to rates effective November 1, 2015. The decrease in the typical residential bill is due to the decrease in the energy cost adjustment factor (-\$0.87) and the decrease in the Purchased Power Adjustment Clause rate (-\$0.02).

The Company's fuel composite cost of generation increased 20.27 cents per million BTU to 851.96 cents per million BTU. The Company's Distributed Generation ("DG") energy component increased 0.001 cents per kWh to 0.003 cents per kWh. The composite cost of purchased energy decreased 0.443 cents per kWh to 7.359 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 prorata use beginning December 1, 2015.

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>11/1/15</u>	<u>12/01/15</u>	
Composite Cost Of Generation, ¢/mmbtu	831.69	851.96	20.27
DG Energy Component, ¢/kWh	0.002	0.003	0.001
Composite Cost Of Purchased Energy, ¢/kWh	7.802	7.359	(0.443)
 <u>Residential, Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	(3.179)	(3.353)	(0.174)
 <u>Others, Schedules "G,J,DS,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(3.179)	(3.353)	(0.174)
 <u>Residential Customer with:</u>			
600 kWh Consumption, \$/bill	157.57	156.51	(1.06)
500 kWh Consumption, \$/bill	132.36	131.47	(0.89)

Supersedes Sheet Effective:            November 1, 2015

Hawaiian Electric Company, Inc.  
ENERGY COST ADJUSTMENT FILING

ENERGY COST ADJUSTMENT (ECA) FILING - December 1, 2015 (page 1 of 2)

Line  
1 **Effective Date** - December 1, 2015  
2 **Supersedes Factor** - November 1, 2015

**GENERATION COMPONENT**

<b>CENTRAL STATION</b>							
FUEL PRICES, ¢/MBTU							
3	Honolulu			852.61			
4	Kahe			819.60			
5	Waiau-Steam			819.28			
6	Waiau-Diesel			1,303.66			
7	CIP-Diesel			N/A			
8	CIP-Biodiesel			3,166.15			
9	Other			0			
BTU MIX, %							
10	Honolulu			0.00			
11	Kahe			65.87			
12	Waiau-Steam			31.54			
13	Waiau-Diesel			1.52			
14	CIP-Diesel			N/A			
15	CIP-Biodiesel			1.07			
16	Other			0.00			
				100.00			
17	COMPOSITE COST OF GENERATION, CNTRL STN + OTHER ¢/mmbtu			851.96			
18	% Input to system kWh Mix			45.68			
EFFICIENCY FACTOR, mmbtu/kWh							
	(A)	(B)	(C)	(D)			
		Eff Factor	Percent of	Weighted			
	Fuel Type	mmbtu/kwh	Centrl Stn +	Eff Factor			
			Other				
19	LSFO	<b>0.011079</b>	98.78	0.010944			
20	Diesel	<b>0.019721</b>	0.75	0.000148			
21	Biodiesel	<b>0.020169</b>	0.47	0.000095			
22	Other	<b>0.011143</b>	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))]			0.011187			
24	WGTD. COMPOSITE CNTRL STN + OTHER GEN COST, ¢/kWh (lines 17 x 18 x 23)			4.35370			
25	BASE CNTRL STN + OTHER GEN. COST, ¢/Mbtu			1,354.58			
26	Base % Input to System kWh Mix			57.59			
27	Efficiency Factor, Mbtu/kWh			0.011142			
28	WEIGHTED BASE CNTRL STN + OTHER GEN COST ¢/KWH (lines 25 x 26 x 27)			8.69190			
29	Cost Less Base (Line 24 - 28)			(4.33820)			
30	Revenue Tax Req Multiplier			1.0975			
31	CNTRL STN + OTHER GENERATION FACTOR, ¢/KWH (Line 29 x 30)			(4.76117)			
					<b>DG ENERGY COMPONENT</b>		
					32	COMPOSITE COST OF DG ENERGY, ¢/kWh	7.600
					33	% Input to System kWh Mix	0.04
					34	WTD COMP DG ENRGY COST, ¢/kWh (Lines 32 x 33)	0.00304
					35	BASE DG ENERGY COMP COST	0.000
					36	Base % Input to System kWh Mix	0.00
					37	WTD BASE DG ENERGY COST, ¢/kWh (Line 35 x 36)	0.00000
					38	Cost Less Base (Line 34 - 37)	0.00304
					39	Loss Factor	1.053
					40	Revenue Tax Req Multiplier	1.0975
					41	DG FACTOR, ¢/kWh (Line 38 x 39 x 40)	0.00351
					<b>SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh</b>		
					42	CNTRL STN + OTHER (line 31)	(4.76117)
					43	DG (line 41)	0.00351
					44	TOTAL GENERATION FACTOR, ¢/KWH (lines 42 + 43)	(4.75766)

Hawaiian Electric Company, Inc.  
ENERGY COST ADJUSTMENT FILING

ENERGY COST ADJUSTMENT (ECA) FILING - December 1, 2015 (page 2 of 2)

<u>Line</u>		
1	<b>Effective Date</b>	- December 1, 2015
2	<b>Supercedes Factor</b>	- November 1, 2015

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>		
PURCHASED ENERGY PRICE - ¢/KWH			
45	THC	- On Peak	8.655
46		- Off Peak	8.340
47	HRRV	- On Peak	16.43
48		- Off Peak	15.96
49	HRRV	- On Peak (excess)	10.47
50		- Off Peak (excess)	6.28
51	Chevron	- On Peak	8.655
52		- Off Peak	8.340
53	Kalaeloa		7.676
54	AES-HI		3.119
55	Kawailoa		21.100
56	Kahuku Wind		18.990
57	As Available I		21.075
58	FIT		18.985
PURCHASED ENERGY KWH MIX, %			
59	THC	- On Peak	0.18
60		- Off Peak	0.13
61	HRRV	- On Peak	6.57
62		- Off Peak	2.34
63	HRRV	- On Peak (excess)	0.00
64		- Off Peak (excess)	1.36
65	Chevron	- On Peak	0.00
66		- Off Peak	0.00
67	Kalaeloa		42.13
68	AES-HI		40.93
69	Kawailoa		3.23
70	Kahuku Wind		2.06
71	As Available I		0.40
72	FIT		0.67
			100.00
73	COMPOSITE COST OF PURCHASED ENERGY, ¢/KWH		7.359
74	% Input to System kWh Mix		54.28
75	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 73 x 74)		3.99447
76	BASE PURCH ENERGY COMP COST		8.328
77	Base % Input to System kWh Mix		42.41
78	WEIGHTED COMP. PURCH. ENERGY COST, ¢/KWH (lines 76 x 77)		3.53190
79	Cost Less Base (Line 75 - 78)		0.46257
80	Loss Factor		1.053
81	Revenue Tax Req Multiplier		1.0975
82	PURCHASED ENERGY FACTOR, ¢/KWH (lines 79 x 80 x 81)		0.53458

<u>Line</u>	<u>SYSTEM COMPOSITE</u>	
83	GEN AND PURCHASED ENERGY FACTOR, ¢/kWh (lines 44 + 82)	(4.22308)
84	Adjustment, ¢/kWh	0.000
85	ECA Reconciliation Adjustment	0.870
86	ECA FACTOR, ¢/kWh (lines 83 + 84 + 85)	(3.353)

**Hawaiian Electric Company, Inc.**  
**FUEL OIL INVENTORY PRICES FOR 11-01-15**

	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiiau</u>
Average Low Sulfur Fuel Oil, ¢/Mbtu	819.28	819.28	819.28
Kahe Fuel Additive, ¢/Mbtu	-	0.32	-
Honolulu Trucking Cost, ¢/Mbtu	33.33	-	-
	<hr/> <hr/>		
Low Sulfur Fuel Oil Prices Used For Filing, ¢/Mbtu	852.61	819.60	819.28
	<hr/> <hr/>		
	<u>Waiiau</u>	<u>CIP</u>	
Average Diesel / Biodiesel Oil, ¢/Mbtu	1,303.66	3,166.15	
Thruput Charges, ¢/Mbtu	-	-	
	<hr/> <hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	1,303.66	3,166.15	
	<hr/> <hr/>		
	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiiau</u>
Average Low Sulfur Fuel Oil, \$/bbl	51.62	51.62	51.62
Kahe Fuel Additive, \$/bbl	-	0.02	-
Honolulu Trucking Cost, \$/bbl	-	-	-
	<hr/> <hr/>		
Low Sulfur Fuel Oil Prices Used For Filing, \$/bbl	51.62	51.64	51.62
	<hr/> <hr/>		
	<u>Waiiau</u>	<u>CIP</u>	
Average Diesel / Biodiesel Oil, \$/bbl	75.15	167.05	
Thruput Charges, ¢/Mbtu	-	-	
	<hr/> <hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	75.15	167.05	
	<hr/> <hr/>		
Distributed Generation Fuel Prices Used for Filing, ¢/kWh			7.600

**FOAC December 2015**

<b><u>LSFO</u></b>	<b>BARRELS</b>	<b>MBTU</b>	<b>AMOUNT</b>	<b>AVE \$/MBTU</b>
Per FOAC run	797,167	5,022,742.91	41,150,278.70	8.192790
Additional	-	-	-	-
Forecast Amt	797,167	5,022,742.91	41,150,278.70	8.192790
	-	6.20	-	ADD'L BBL
	5,022,743	797,167	6.3007	MBTU / BBL
	41,150,279	797,167	51.62	DOLLARS / BBL
<b><u>WAI AU DIESEL</u></b>	21,110	121,691.95	1,586,447.79	13.036588
	1,586,448	21,110	75.15	DOLLARS / BBL
<b><u>CIP BIODIESEL</u></b>	46,365	244,631.40	7,745,399.25	31.661509
	7,745,399	46,365	167.05	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	-	0.15	0.05	0.333333
Additional	-	-	-	-
Forecast Amt	-	0.15	0.05	0.333333
\$ / BBL =	0.05	-	-	DOLLARS / BBL

\* Annualized amount per HECO T-4 in Docket No. 2010-0080

**Hawaiian Electric Company, Inc.**

**CONTRACT PRICES EFFECTIVE 11-1-15**

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
<b>LOW SULFUR FUEL OIL</b>		
Tax *	3.6100	58.24
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 *	5.4268	92.61
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 *	0.0000	0.00
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)	\$7.34
L2	Estimated Distributed Generation Fuel Transport Cost (\$/mbtu)	\$0.00
L3 = L1+ L2	Estimated Total Fuel and Transportation Cost (\$/mbtu)	\$7.34
L4	Estimated Mbtu Generation for month (December 2015)	2,300
L5 = L3 x L4	Estimated Distributed Generation Total Fuel Cost (\$)	\$16,874
L6	Estimated Distributed Generation kWh Produced (December 2015)	222,000
L7 = (L5 ÷ L6) x 100	Distributed Generation Fuel Prices Used for Filing, (¢/kWh)	<b>7.6000</b>



**Hawaiian Electric Company, Inc.**  
**ECA RECONCILIATION ADJUSTMENT**  
**December 2015**

1.	Amount to be collected	\$	13,548,200
2.	Monthly Amount (Line 1 x 1/3)	\$	4,516,067
3.	Revenue Tax Divisor		0.91115
4.	Total (Line 2 / Line 3)	\$	4,956,447
5.	Estimated MWh Sales (December 2015)		569,800
6.	ECA Reconciliation Adjustment, ¢/kWh (Line 4 ÷ Line 5)		<u><u>0.870</u></u>

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**2015 Cumulative Reconciliation Balance**

<u>Month</u>	<u>(1)</u> YTD FOA Reconciliation	<u>Qtr</u>	<u>(2)</u> FOA Rec Adjust 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
December '14					1,544,441	1,608,085	(1,335,668)
January '15					1,544,441	1,409,471	73,803
February	(7,727,500)	(4)	208,767	(7,936,267)	2,575,833	2,444,436	(5,418,028)
March					2,575,833	2,384,363	(3,033,665)
April					2,575,833	2,515,163	(518,502)
May	(3,773,048)	(1)	(457,838)	(3,315,210)	1,257,683	1,168,222	(2,665,490)
June					1,257,683	1,211,890	(1,453,600)
July					1,257,683	1,294,671	(158,929)
August	(4,973,852)	(2)	(195,924)	(4,777,928)	1,657,951	1,756,932	(3,179,926)
September					1,657,951	1,761,129	(1,418,797)
October					1,657,951	1,610,966	192,169
November	(13,548,200)	(3)	239,148	(13,787,348)	4,516,067		
December					4,516,067		

**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>	<u>FUEL FACTOR CENTS / KWH RESIDENTIAL &amp; COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$)</u>		
		<u>@ 500 KWH</u>	<u>@ 600 KWH</u>	<u>@ 700 KWH</u>
January 1, 2012	11.428	-	204.17	237.32
February 1, 2012	10.924	-	200.11	232.57
March 1, 2012	11.530	-	203.74	236.81
April 1, 2012	11.600	-	203.79	236.87
May 1, 2012	13.122	-	215.69	250.76
June 1, 2012	13.274	-	218.60	254.16
July 1, 2012	12.917	-	216.85	252.11
August 1, 2012	12.332	-	215.65	250.71
September 1, 2012	7.083	-	209.82	243.96
October 1, 2012	7.023	-	210.37	244.60
November 1, 2012	5.828	-	200.18	232.71
December 1, 2012	5.029	-	195.38	227.11
January 1, 2013	5.885	-	200.91	233.57
February 1, 2013	7.674	-	216.11	251.31
March 1, 2013	8.113	-	218.75	254.38
April 1, 2013	5.602	-	203.11	236.15
May 1, 2013	5.631	-	199.59	232.03
June 1, 2013	5.502	-	204.47	237.72
July 1, 2013	5.422	-	204.27	237.48
August 1, 2013	5.844	-	210.14	244.33
September 1, 2013	4.640	-	203.06	236.08
October 1, 2013	5.521	-	208.32	242.21
November 1, 2013	5.406	-	208.15	242.01
December 1, 2013	5.087	-	206.20	239.74
January 1, 2014	5.946	-	211.22	245.58
February 1, 2014	7.338	-	217.36	252.75
March 1, 2014	5.978	-	210.70	244.99
April 1, 2014	6.057	-	212.05	246.58
May 1, 2014	5.541	-	210.28	244.50
June 1, 2014	5.685	-	216.08	251.28
July 1, 2014	5.721	-	217.24	252.62
August 1, 2014	5.901	-	218.17	253.73
September 1, 2014	5.988	-	218.96	254.65
October 1, 2014	5.155	-	213.91	248.76
November 1, 2014	3.694	-	203.79	236.96
December 1, 2014	2.659	-	197.32	229.18
January 1, 2015	1.065	-	187.22	217.40
February 1, 2015	-0.755	-	177.45	205.99
March 1, 2015	-1.863	-	170.25	197.60
April 1, 2015	-1.151	140.96	167.91	194.86
May 1, 2015	-1.931	140.48	167.34	0.00
June 8, 2015	-1.624	144.54	172.20	0.00
July 1, 2015	-0.997	146.21	174.20	0.00
August 1, 2015	-1.673	142.51	169.75	0.00
September 1, 2015	-1.343	144.33	171.94	0.00
October 1, 2015	-2.793	136.95	163.07	0.00
November 1, 2015	-3.179	132.36	157.57	0.00
December 1, 2015	-3.353	131.47	156.51	-

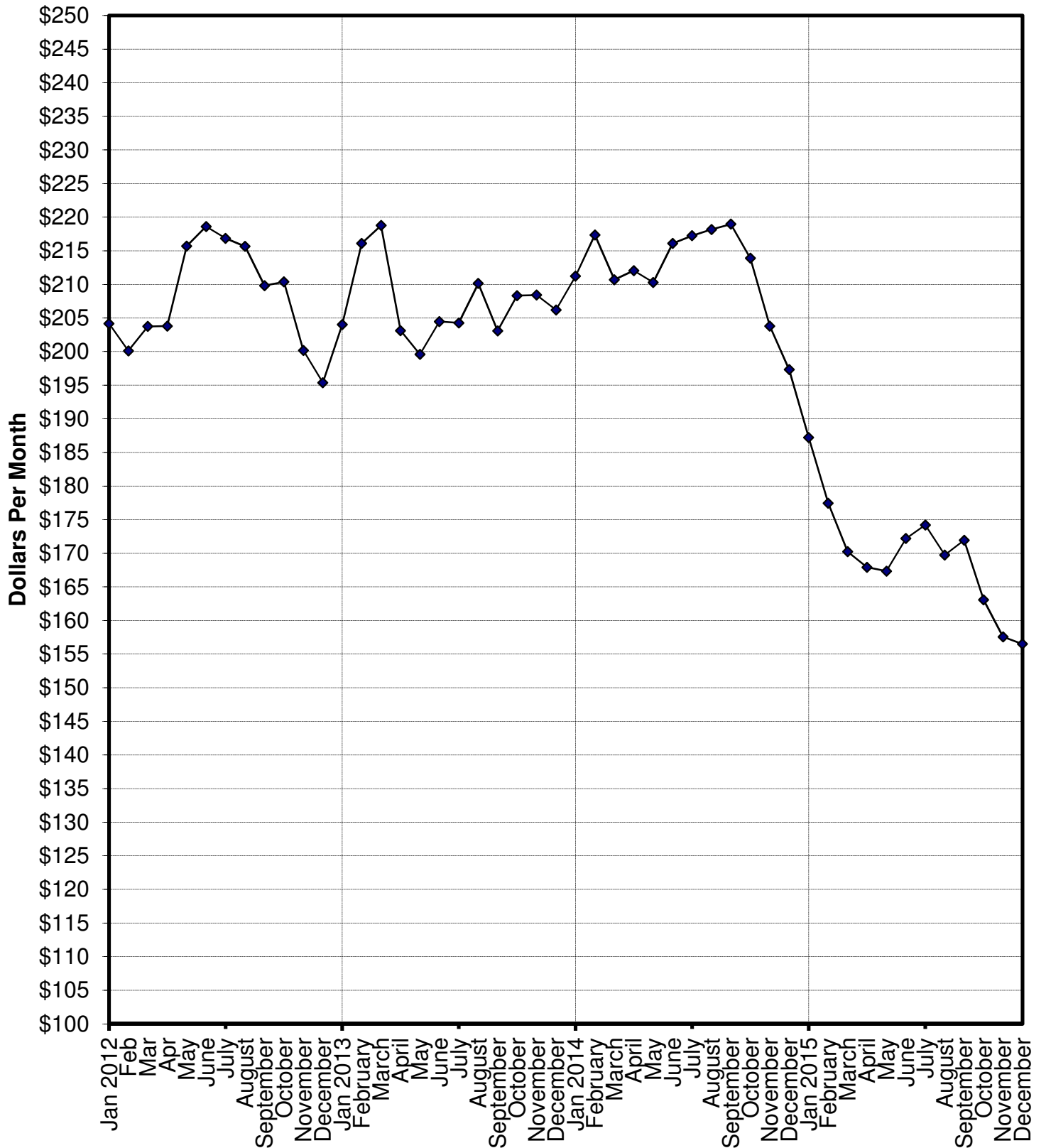
**Hawaiian Electric Company, Inc.**  
**RESIDENTIAL SURCHARGE DATA**

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
<b>09/01/12</b>	<b>FINAL RATE INCREASE (TY2011) 3.39% EFFECTIVE 09/01/12, DOCKET NO. 2010-0080</b>	
9/1/2012 - 09/30/2012	REFUND OF 2011 INTERIM RATE INCREASE	-0.64 PERCENT ON BASE
10/1/2012 - 12/31/2012	REFUND OF 2011 INTERIM RATE INCREASE	0.00 PERCENT ON BASE
11/1/2012 - 01/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	2.6960 CENTS/KWH
1/1/2013 - 01/31/2013	REFUND OF 2011 INTERIM RATE INCREASE	-0.18 PERCENT ON BASE
1/1/2013 - 6/30/2013	RESID. PBF SURCHARGE ADJUSTMENT	0.7850 CENTS/KWH
<b>2/1/2013</b>	<b>REFUND OF 2011 INTERIM RATE INCREASE</b>	<b>0.00 PERCENT ON BASE</b>
2/1/2013 - 4/30/2013	PURCHASED POWER ADJUSTMENT CLAUSE	3.3989 CENTS/KWH
4/1/2013 - 4/30/2013	SOLARSAVER ADJUSTMENT	-0.1196 CENTS/KWH
4/1/2013 - 3/31/2014	RESIDENTIAL DSM ADJUSTMENT	0.1067 CENTS/KWH
5/1/2013 - 3/31/2014	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2013 - 7/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	2.6617 CENTS/KWH
5/15/2013 - 2/28/2014	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0211 CENTS/KWH
6/1/2013 - 5/31/2014	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.3119 CENTS/KWH
7/1/2013 - 6/30/2014	RESID. PBF SURCHARGE ADJUSTMENT	0.8312 CENTS/KWH
8/1/2013 - 8/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	3.2174 CENTS/KWH
9/1/2013 - 9/30/2013	PURCHASED POWER ADJUSTMENT CLAUSE	3.2422 CENTS/KWH
10/1/2013 - 10/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	3.2377 CENTS/KWH
11/1/2013 - 11/30/2013	PURCHASED POWER ADJUSTMENT CLAUSE	3.3246 CENTS/KWH
12/1/2013 - 12/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	3.3179 CENTS/KWH
1/1/2014 - 1/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.2943 CENTS/KWH
2/1/2014 - 2/28/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.9263 CENTS/KWH
3/1/2014 - 3/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.1754 CENTS/KWH
3/1/2014 - 7/6/2014	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0226 CENTS/KWH
4/1/2014 - 4/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.4058 CENTS/KWH
4/1/2014 - 3/31/2015	RESIDENTIAL DSM ADJUSTMENT	0.1423 CENTS/KWH
4/1/2014 - 4/30/2014	SOLARSAVER ADJUSTMENT	-0.1177 CENTS/KWH
5/1/2014 - 5/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.4058 CENTS/KWH
5/1/2014 - 3/31/2015	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2014 - 6/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.5152 CENTS/KWH
6/1/2014 - 5/31/2015	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	2.1269 CENTS/KWH
7/1/2014 - 7/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.4876 CENTS/KWH
7/1/2014 - 11/30/2014	RESID. PBF SURCHARGE ADJUSTMENT	1.0157 CENTS/KWH
7/7/2014 - 02/28/2015	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0223 CENTS/KWH
8/1/2014 - 8/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.4655 CENTS/KWH
9/1/2014 - 9/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.5100 CENTS/KWH
10/1/2014 - 10/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.5018 CENTS/KWH
11/1/2014 - 11/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.2773 CENTS/KWH
12/1/2014 - 12/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	3.2747 CENTS/KWH
12/1/2014 - 06/30/2015	GREEN INFRASTRUCTURE FEE	1.2900 DOLLARS/MONTH
12/1/2014 - 6/30/2015	RESID. PBF SURCHARGE ADJUSTMENT	0.7583 CENTS/KWH
01/1/2015 - 01/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.1849 CENTS/KWH
02/1/2015 - 02/28/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.3760 CENTS/KWH
03/1/2015 - 03/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.2873 CENTS/KWH
3/1/2015 - 08/16/2015	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0204 CENTS/KWH
04/1/2015 - 04/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.4105 CENTS/KWH
4/1/2015 - 4/30/2015	SOLARSAVER ADJUSTMENT	-0.1178 CENTS/KWH
<b>4/1/2015</b>	<b>RESIDENTIAL DSM ADJUSTMENT</b>	<b>0.0348 CENTS/KWH</b>
05/1/2015 - 05/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.9760 CENTS/KWH
<b>5/1/2015</b>	<b>SOLAR SAVER ADJUSTMENT</b>	<b>0.00 CENTS/KWH</b>
06/1/2015 - 06/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.4972 CENTS/KWH
06/1/2015 - 06/7/2015	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.00 CENTS/KWH
<b>6/8/2015</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>2.1078 CENTS/KWH</b>
07/1/2015 - 07/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.4646 CENTS/KWH
<b>7/1/2015</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.4749 CENTS/KWH</b>
<b>7/1/2015</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.4200 DOLLARS/MONTH</b>
08/1/2015 - 08/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.4002 CENTS/KWH
<b>8/17/2015</b>	<b>RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION</b>	<b>0.0304 CENTS/KWH</b>
09/1/2015 - 09/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.4246 CENTS/KWH
10/1/2015 - 10/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.3971 CENTS/KWH
11/1/2015 - 11/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.8651 CENTS/KWH
<b>12/1/2015 - 12/31/2015</b>	<b>PURCHASED POWER ADJUSTMENT CLAUSE</b>	<b>2.8628 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 600 KWH/Month Consumption



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

	Rate		Charge (\$) at 500 kWh			
	11/1/2015	12/1/2015	11/1/2015	12/1/2015	Difference	
<b>Base Rates</b>	effective date:	09/01/12	09/01/12			
Base Fuel/Energy Charge	¢/kWh	13.6062	13.6062	68.03	68.03	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	8.1034	8.1034	28.36	28.36	0.00
Next 850 kWhr per month	¢/kWh	9.2569	9.2569	13.89	13.89	0.00
Customer Charge	\$	9.00	9.00	9.00	9.00	0.00
<b>Total Base Charges</b>				119.28	119.28	0.00
<b>Purchase Power Adjustment</b>	¢/kWh	2.8651	2.8628	14.33	14.31	-0.02
<b>RBA Rate Adjustment</b>	¢/kWh	2.1078	2.1078	10.54	10.54	0.00
<b>DSM Adjustment</b>	¢/kWh	0.0348	0.0348	0.17	0.17	0.00
<b>Interim Rate Increase (TY 2011)</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	0.4749	0.4749	2.37	2.37	0.00
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	0.0304	0.0304	0.15	0.15	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	-3.179	-3.353	-15.90	-16.77	-0.87
<b>Green Infrastructure Fee</b>	\$	1.42	1.42	1.42	1.42	0.00
<b>Avg Residential Bill at 500 kWh</b>				132.36	131.47	

Increase / (Decrease -)	-0.89
% Change	-0.67%

	Rate		Charge (\$) at 600 kWh			
	11/1/2015	12/1/2015	11/1/2015	12/1/2015	Difference	
<b>Base Rates</b>	effective date:	09/01/12	09/01/12			
Base Fuel/Energy Charge	¢/kWh	13.6062	13.6062	81.64	81.64	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	8.1034	8.1034	28.36	28.36	0.00
Next 850 kWhr per month	¢/kWh	9.2569	9.2569	23.14	23.14	0.00
Customer Charge	\$	9.00	9.00	9.00	9.00	0.00
<b>Total Base Charges</b>				142.14	142.14	0.00
<b>Purchase Power Adjustment</b>	¢/kWh	2.8651	2.8628	17.19	17.18	-0.01
<b>RBA Rate Adjustment</b>	¢/kWh	2.1078	2.1078	12.65	12.65	0.00
<b>DSM Adjustment</b>	¢/kWh	0.0348	0.0348	0.21	0.21	0.00
<b>Interim Rate Increase (TY 2011)</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	0.4749	0.4749	2.85	2.85	0.00
<b>Renewable Energy Infrastructure Cost</b>						
<b>Recovery Provision</b>	¢/kWh	0.0304	0.0304	0.18	0.18	0.00
<b>SolarSaver Adjustment</b>	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
<b>Energy Cost Adjustment</b>	¢/kWh	-3.179	-3.353	-19.07	-20.12	-1.05
<b>Green Infrastructure Fee</b>	\$	1.42	1.42	1.42	1.42	0.00
<b>Avg Residential Bill at 600 kWh</b>				157.57	156.51	

Increase / (Decrease -)	-1.06
% Change	-0.67%