



December 27, 2017

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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 January 2018

Hawaiian Electric Company Inc.'s ("Hawaiian Electric" or "Company") January 2018 energy cost adjustment factor is -1.145 cents per kilowatt-hour ("kWh"), an increase of 0.484 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$144.26, an increase of \$2.44 compared to rates effective December 1, 2017. The increase in the typical residential bill is due to an increase in the Energy Cost Adjustment factor (+\$2.42), an increase in the Green Infrastructure Fee (+0.16) and a decrease in the Purchased Power Adjustment Clause rate (-\$0.14).

The Company's fuel composite cost of generation increased 19.30 cents per million BTU to 1,178.18 cents per million BTU. The Company's Distributed Generation ("DG") energy component decreased 0.005 cents per kWh to 0.009 cents per kWh. The composite cost of purchased energy decreased 0.123 cents per kWh to 8.564 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 January 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>12/01/17</u>	<u>01/01/18</u>	
Composite Cost Of Generation, ¢/mmbtu	1,158.88	1,178.18	19.30
DG Energy Component, ¢/kWh	0.014	0.009	(0.005)
Composite Cost Of Purchased Energy, ¢/kWh	8.687	8.564	(0.123)
 <u>Residential, Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	(1.629)	(1.145)	0.484
 <u>Others, Schedules "G,J,DS,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	(1.629)	(1.145)	0.484
 <u>Residential Customer with:</u>			
500 kWh Consumption, \$/bill	141.82	144.26	2.44
600 kWh Consumption, \$/bill	168.96	171.84	2.88

Supersedes Sheet Effective:           December 1, 2017

Hawaiian Electric Company, Inc.  
ENERGY COST ADJUSTMENT FILING

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

<u>Line</u>		
1	<b>Effective Date</b>	- January 1, 2018
2	<b>Supersedes Factor</b>	- December 1, 2017

**GENERATION COMPONENT**

<b>CENTRAL STATION</b>					
FUEL PRICES, ¢/MBTU					
3	Honolulu		1,150.49		
4	Kahe		1,150.81		
5	Waiau-Steam		1,150.49		
6	Waiau-Diesel		1,513.85		
7	CIP-Diesel		N/A		
8	CIP-Biodiesel		2,729.27		
9	Other		0		
BTU MIX, %					
10	Honolulu		0.00		
11	Kahe		69.36		
12	Waiau-Steam		27.43		
13	Waiau-Diesel		1.91		
14	CIP-Diesel		N/A		
15	CIP-Biodiesel		1.30		
16	Other		0.00		
17	COMPOSITE COST OF GENERATION, CNTRL STN + OTHER ¢/mmbtu		1,178.18		
18	% Input to system kWh Mix		54.11		
EFFICIENCY FACTOR, mmbtu/kWh					
	(A)	(B)	(C)	(D)	
		Eff Factor	Percent of	Weighted	
	Fuel Type	mmbtu/kWh	Centrl Stn + Other	Eff Factor	
19	LSFO	<b>0.011079</b>	98.28	0.010888	
20	Diesel	<b>0.019721</b>	0.83	0.000164	
21	Biodiesel	<b>0.020169</b>	0.89	0.000180	
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))]			0.011232	
24	WGTD. COMPOSITE CNTRL STN + OTHER GEN COST, ¢/kWh (lines 17 x 18 x 23)			7.16055	
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)			(1.53135)	
30	Revenue Tax Req Multiplier			1.0975	
31	CNTRL STN + OTHER GENERATION FACTOR, ¢/KWH (Line 29 x 30)			(1.68066)	
					<b>DG ENERGY COMPONENT</b>
				32	COMPOSITE COST OF DG ENERGY, ¢/kWh
				33	% Input to System kWh Mix
				34	WTD COMP DG ENRGY COST, ¢/kWh (Lines 32 x 33)
				35	BASE DG ENERGY COMP COST
				36	Base % Input to System kWh Mix
				37	WTD BASE DG ENERGY COST, ¢/kWh (Line 35 x 36)
				38	Cost Less Base (Line 34 - 37)
				39	Loss Factor
				40	Revenue Tax Req Multiplier
				41	DG FACTOR, ¢/kWh (Line 38 x 39 x 40)
					<b>SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh</b>
				42	CNTRL STN + OTHER (line 31)
				43	DG (line 41)
				44	TOTAL GENERATION FACTOR, ¢/KWH (lines 42 + 43)

Hawaiian Electric Company, Inc.  
ENERGY COST ADJUSTMENT FILING

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

Line

1	Effective Date	- January 1, 2018
2	Supercedes Factor	- December 1, 2017

Line	PURCHASED ENERGY COMPONENT		
	PURCHASED ENERGY PRICE - ¢/KWH		
45	PAR Hawaii	- On Peak	12.206
46	(f.k.a HIE/Tesoro)	- Off Peak	11.841
47	HRRV	- On Peak	17.19
48		- Off Peak	16.70
49	HRRV	- On Peak (excess)	10.95
50		- Off Peak (excess)	6.57
51	IES Downstream	- On Peak	12.206
52		- Off Peak	11.841
53	Kalaeloa		10.833
54	AES-HI		3.254
55	Kawailoa		22.064
56	Kahuku Wind		20.704
57	Waianaë Solar PV		14.500
58	As Available I		22.058
59	FIT		19.211
	PURCHASED ENERGY KWH MIX, %		
60	PAR Hawaii	- On Peak	0.27
61	(f.k.a HIE/Tesoro)	- Off Peak	0.19
62	HRRV	- On Peak	9.07
63		- Off Peak	2.97
64	HRRV	- On Peak (excess)	0.00
65		- Off Peak (excess)	2.73
66	IES Downstream	- On Peak	0.02
67	(f.k.a Chevron)	- Off Peak	0.01
68	Kalaeloa		26.51
69	AES-HI		49.03
70	Kawailoa		3.53
71	Kahuku Wind		1.08
72	Waianaë Solar PV		2.10
73	As Available I		0.64
74	FIT		1.85
			100.00
75	COMPOSITE COST OF PURCHASED ENERGY, ¢/KWH		8.564
76	% Input to System kWh Mix		45.86
77	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 75 x 76)		3.92745
78	BASE PURCH ENERGY COMP COST		8.328
79	Base % Input to System kWh Mix		42.41
80	WEIGHTED COMP. PURCH. ENERGY COST, ¢/KWH (lines 78 x 79)		3.53190
81	Cost Less Base (Line 77 - 80)		0.39555
82	Loss Factor		1.053
83	Revenue Tax Req Multiplier		1.0975
84	PURCHASED ENERGY FACTOR, ¢/KWH (lines 81 x 82 x 83)		0.45712

Line

SYSTEM COMPOSITE

85	GEN AND PURCHASED ENERGY FACTOR, ¢/kWh (lines 44 + 84)	(1.21297)
86	Kahuku Wind D-VAR Adjustment, ¢/kWh	0.000
87	ECA Reconciliation Adjustment	0.068
88	ECA FACTOR, ¢/kWh (lines 85 + 86 + 87)	(1.145)

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

	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiiau</u>
Average Low Sulfur Fuel Oil, ¢/Mbtu	1,150.49	1,150.49	1,150.49
Kahe Fuel Additive, ¢/Mbtu	-	0.32	-
Honolulu Trucking Cost, ¢/Mbtu	-	-	-
<hr/> <hr/>			
Low Sulfur Fuel Oil Prices Used For Filing, ¢/Mbtu	1,150.49	1,150.81	1,150.49

	<u>Waiiau</u>	<u>CIP</u>
Average Diesel / Biodiesel Oil, ¢/Mbtu	1,513.85	2,729.27
Thruput Charges, ¢/Mbtu	-	-
<hr/> <hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	1,513.85	2,729.27

	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiiau</u>
Average Low Sulfur Fuel Oil, \$/bbl	72.18	72.18	72.18
Kahe Fuel Additive, \$/bbl	-	0.02	-
Honolulu Trucking Cost, \$/bbl	-	-	-
<hr/> <hr/>			
Low Sulfur Fuel Oil Prices Used For Filing, \$/bbl	72.18	72.20	72.18

	<u>Waiiau</u>	<u>CIP</u>
Average Diesel / Biodiesel Oil, \$/bbl	86.65	144.67
Thruput Charges, ¢/Mbtu	-	-
<hr/> <hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	86.65	144.67

Distributed Generation Fuel Prices Used for Filing, ¢/kWh 30.490

**FOAC January 2018**

<b><u>LSFO</u></b>	<b><u>BARRELS</u></b>	<b><u>MBTU</u></b>	<b><u>AMOUNT</u></b>	<b><u>AVE \$/MBTU</u></b>
Per FOAC run	747,592	4,690,285.80	53,961,483.47	11.504946
Additional	-	-	-	-
Forecast Amt	747,592	4,690,285.80	53,961,483.47	11.504946
	-	6.20	-	ADD'L BBL
	4,690,286	747,592	6.2739	MBTU / BBL
	53,961,483	747,592	72.18	DOLLARS / BBL
<b><u>WAIU DIESEL</u></b>	25,184	144,145.79	2,182,149.87	15.138492
	2,182,150	25,184	86.65	DOLLARS / BBL
<b><u>CIP BIODIESEL</u></b>	33,694	178,604.76	4,874,604.50	27.292691
	4,874,605	33,694	144.67	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

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

**Hawaiian Electric Company, Inc.**  
**CONTRACT PRICES EFFECTIVE 12-1-17**

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
<b>LOW SULFUR FUEL OIL</b>		
Tax *	4.7135	76.03
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 *	5.7973	98.94
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

<u>Line No.</u>		
L1	Estimated Distributed Generation Fuel Cost (\$/mbtu)	\$27.15
L2	Estimated Distributed Generation Fuel Transport Cost (\$/mbtu)	\$0.00
L3 = L1+ L2	Estimated Total Fuel and Transportation Cost (\$/mbtu)	\$27.15
L4	Estimated Mbtu Generation for month (January 2018)	1,518
L5 = L3 x L4	Estimated Distributed Generation Total Fuel Cost (\$)	\$41,215
L6	Estimated Distributed Generation kWh Produced (January 2018)	135,193
L7 = (L5 ÷ L6) x 100	Distributed Generation Fuel Prices Used for Filing, (¢/kWh)	<b>30.4900</b>



**Hawaiian Electric Company, Inc.**  
**ECA RECONCILIATION ADJUSTMENT**  
**January 2018**

1.	Amount to be collected	\$	988,400
2.	Monthly Amount (Line 1 x 1/3)	\$	329,467
3.	Revenue Tax Divisor		0.91115
4.	Total (Line 2 / Line 3)	\$	361,594
5.	Estimated MWh Sales (January 2018)		535,500
6.	ECA Reconciliation Adjustment, ¢/kWh (Line 4 ÷ Line 5)		<u><u>0.068</u></u>

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**2017 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
December 16					(145,070)	(146,542)	159,869
January'17					(145,070)	(136,541)	23,328
February	(4,392,100)	(4)	14,792	(4,406,892)	1,464,033	1,375,221	(3,008,344)
March					1,464,033	1,470,145	(1,538,199)
April					1,464,033	1,458,185	(80,014)
May	(955,000)	(1)	(74,171)	(880,829)	318,333	312,457	(648,385)
June					318,333	329,519	(318,866)
July					318,333	331,277	12,411
August	(4,553,893)	(2)	(539)	(4,553,354)	1,517,964	1,583,875	(2,957,069)
September					1,517,964	1,579,137	(1,377,932)
October					1,517,964	1,520,202	142,270
November	(988,400)	(3)	140,027	(1,128,427)	329,467	323,129	(663,027)
December					329,467		
January '18					329,467		

**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</u> <u>CENTS / KWH</u>		<u>RESIDENTIAL BILL (\$)</u>	
	<u>RESIDENTIAL &amp;</u> <u>COMMERCIAL</u>		<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2013	5.885		168.27	200.91
February 1, 2013	7.674		180.93	216.11
March 1, 2013	8.113		183.12	218.75
April 1, 2013	5.602		170.09	203.11
May 1, 2013	5.631		167.15	199.59
June 1, 2013	5.502		171.23	204.47
July 1, 2013	5.422		171.06	204.27
August 1, 2013	5.844		175.95	210.14
September 1, 2013	4.640		170.05	203.06
October 1, 2013	5.521		174.43	208.32
November 1, 2013	5.406		174.29	208.15
December 1, 2013	5.087		172.67	206.20
January 1, 2014	5.946		176.84	211.22
February 1, 2014	7.338		181.96	217.36
March 1, 2014	5.978		176.41	210.70
April 1, 2014	6.057		177.55	212.05
May 1, 2014	5.541		176.07	210.28
June 1, 2014	5.685		180.90	216.08
July 1, 2014	5.721		181.86	217.24
August 1, 2014	5.901		182.65	218.17
September 1, 2014	5.988		183.30	218.96
October 1, 2014	5.155		179.10	213.91
November 1, 2014	3.694		170.67	203.79
December 1, 2014	2.659		165.48	197.32
January 1, 2015	1.065		157.06	187.22
February 1, 2015	-0.755		148.91	177.45
March 1, 2015	-1.863		142.92	170.25
April 1, 2015	-1.151		140.96	167.91
May 1, 2015	-1.931		140.48	167.34
June 8, 2015	-1.624		144.54	172.20
July 1, 2015	-0.997		146.21	174.20
August 1, 2015	-1.673		142.51	169.75
September 1, 2015	-1.343		144.33	171.94
October 1, 2015	-2.793		136.95	163.07
November 1, 2015	-3.179		132.36	157.57
December 1, 2015	-3.353		131.47	156.51
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

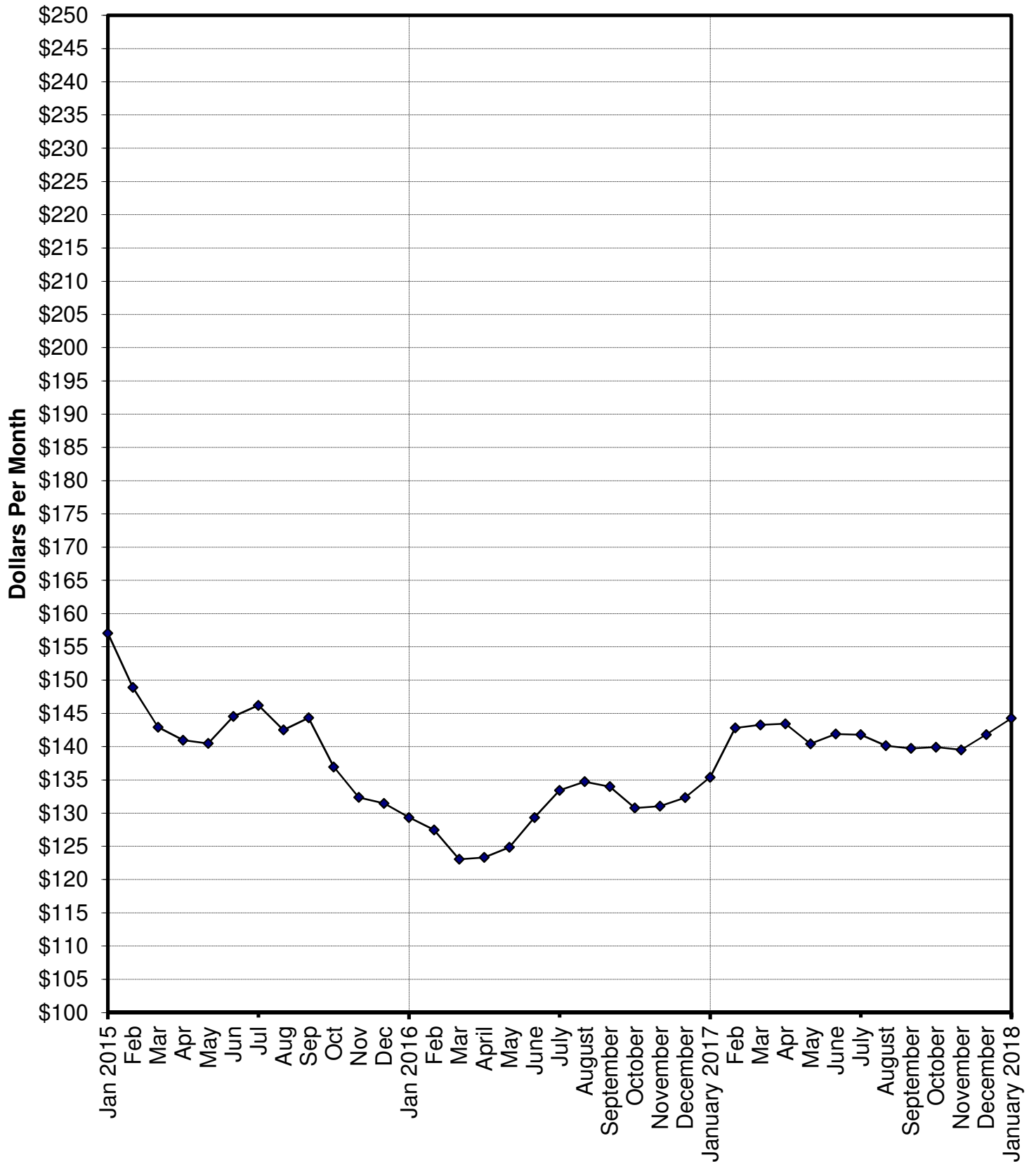
**Hawaiian Electric Company, Inc.**  
**RESIDENTIAL SURCHARGE DATA**

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	3.4676 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
4/1/2015 - 03/31/2016	RESIDENTIAL DSM ADJUSTMENT	0.0348 CENTS/KWH
05/1/2015 - 05/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.9760 CENTS/KWH
5/1/2015 - 03/31/2016	SOLAR SAVER ADJUSTMENT	0.00 CENTS/KWH
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
6/8/2015 - 5/31/2016	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	2.1078 CENTS/KWH
07/1/2015 - 07/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.4648 CENTS/KWH
7/1/2015 - 6/30/2016	RESID. PBF SURCHARGE ADJUSTMENT	0.4749 CENTS/KWH
7/1/2015 - 12/31/2015	GREEN INFRASTRUCTURE FEE	1.4200 DOLLARS/MONTH
08/1/2015 - 08/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	3.4002 CENTS/KWH
8/17/2015 - 12/16/2015	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0304 CENTS/KWH
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
12/1/2015 - 12/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.8628 CENTS/KWH
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	RESID. PBF SURCHARGE ADJUSTMENT	0.5885 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
<b>4/1/2017</b>	<b>RESIDENTIAL DSM ADJUSTMENT</b>	<b>-0.0774 CENTS/KWH</b>
4/1/2017 - 4/30/2017	SOLAR SAVER ADJUSTMENT	-0.1187 CENTS/KWH
<b>5/1/2017</b>	<b>SOLAR SAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>
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
<b>6/1/2017</b>	<b>REVENUE BALANCING ACCOUNT RATE ADJUSTMENT</b>	<b>2.2291 CENTS/KWH</b>
7/1/2017 - 12/31/2017	GREEN INFRASTRUCTURE FEE	1.1800 DOLLARS/MONTH
7/1/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5388 CENTS/KWH
<b>7/1/2017</b>	<b>RESID. PBF SURCHARGE ADJUSTMENT</b>	<b>0.4244 CENTS/KWH</b>
8/1/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.3840 CENTS/KWH
9/1/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.4128 CENTS/KWH
10/1/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.3748 CENTS/KWH
11/1/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.1890 CENTS/KWH
12/1/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.1709 CENTS/KWH
<b>1/1/2018</b>	<b>PURCHASED POWER ADJUSTMENT CLAUSE</b>	<b>3.1422 CENTS/KWH</b>
<b>1/1/2018</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.3400 DOLLARS/MONTH</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			
	12/1/2017	1/1/2018	12/1/2017	1/1/2018	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	3.1709	3.1422	15.85	15.71	-0.14
<b>RBA Rate Adjustment</b>	¢/kWh	2.2291	2.2291	11.15	11.15	0.00
<b>DSM Adjustment</b>	¢/kWh	0.0774	0.0774	0.39	0.39	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	0.4244	0.4244	2.12	2.12	0.00
<b>Renewable Energy Infrastructure Cost 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	-1.629	-1.145	-8.15	-5.73	2.42
<b>Green Infrastructure Fee</b>	\$	1.18	1.34	1.18	1.34	0.16
<b>Avg Residential Bill at 500 kWh</b>				141.82	144.26	

Increase / (Decrease -) 2.44  
% Change 1.72%

	Rate		Charge (\$) at 600 kWh			
	12/1/2017	1/1/2018	12/1/2017	1/1/2018	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	3.1709	3.1422	19.03	18.85	-0.18
<b>RBA Rate Adjustment</b>	¢/kWh	2.2291	2.2291	13.37	13.37	0.00
<b>DSM Adjustment</b>	¢/kWh	0.0774	0.0774	0.46	0.46	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	0.4244	0.4244	2.55	2.55	0.00
<b>Renewable Energy Infrastructure Cost 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	-1.629	-1.145	-9.77	-6.87	2.90
<b>Green Infrastructure Fee</b>	\$	1.18	1.34	1.18	1.34	0.16
<b>Avg Residential Bill at 600 kWh</b>				168.96	171.84	

Increase / (Decrease -) 2.88  
% Change 1.70%