



January 27, 2017

FILED

JAY IGNACIO, P.E.
President

2017 JAN 27 P 4: 14

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: Hawai'i Electric Light Energy Cost Adjustment Factor for February 2017

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") energy cost adjustment factor for February 2017 is -2.956 cents per kilowatt-hour ("kWh"), a decrease of 0.114 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$162.87, a decrease of \$0.40 compared to the rates effective January 1, 2017. The decrease in the typical residential bill is due to the decrease in the energy cost adjustment factor (-\$0.57) and the increase in the Purchased Power Adjustment Clause rate (+\$0.17).

Hawai'i Electric Light's fuel composite cost of generation decreased 3.98 cents per million BTU to 1,052.11 cents per million BTU. There was no distributed generation forecast for February. The composite cost of purchased energy increased 0.427 cents per kWh to 11.474 cents per kWh.

The attached sheets set forth the energy cost adjustment in cents per kWh for each rate schedule that is applicable for pro rata use beginning February 1, 2017.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST ADJUSTMENT FACTOR

	<u>EFFECTIVE DATES</u>		
	<u>1/01/17</u>	<u>2/01/17</u>	<u>Change</u>
<u>Composite Cost</u>			
Generation, ¢/mmbtu	1,056.09	1,052.11	(3.98)
Dispersed Generation Energy, ¢/kWh	12.065	0.000	(12.065)
Purchased Energy, ¢/kWh	11.047	11.474	0.427
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment - ¢/kWh	(2.842)	(2.956)	(0.114)
<u>Others - "G,J,P,F"</u>			
Energy Cost Adjustment - ¢/kWh	(2.842)	(2.956)	(0.114)
Residential Customer with:			
500 KWH Consumption - \$/Bill	\$163.27	\$162.87	(\$0.40)
600 KWH Consumption - \$/Bill	\$195.58	\$195.09	(\$0.49)

HAWAII ELECTRIC LIGHT COMPANY, INC.
ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - February 1, 2017 (Page 1 of 2)

<u>Line</u>		
1	Effective Date	February 1, 2017
2	Supercedes Factors of	January 1, 2017

GENERATION COMPONENT

<u>CENTRAL STATION WITH WIND/HYDRO COMPONENT</u>						
FUEL PRICES, ¢/mmbtu						
3						
4	Hill Industrial		841.86			
5	Puna Industrial		853.55			
6	Keahole Diesel		1,314.74			
6a	Keahole ULSD		1,287.56			
7	Waimea ULSD Diesel		1,282.77			
8	Hilo Diesel		1,286.74			
8a	Hilo (Kanoelehua) ULSD Diesel ¹		1,256.77			
9	Puna Diesel		1,291.55			
10	Wind		0.00			
11	Hydro		0.00			
BTU MIX, %						
12						
13	Hill Industrial		48.520			
14	Puna Industrial		6.485			
15	Keahole Diesel		44.333			
15a	Keahole ULSD		0.003			
16	Waimea ULSD Diesel		0.002			
17	Hilo Diesel		0.000			
17a	Hilo (Kanoelehua) ULSD Diesel ¹		0.001			
18	Puna Diesel		0.414			
19	Wind		0.000			
20	Hydro		0.242			
			100.000			
21	COMPOSITE COST OF GENERATION, CENTRAL STATION + WIND/HYDRO ¢/mmb		1,052.11			
22	% Input to System kWh Mix		48.372			
EFFICIENCY FACTOR, mmbtu/kWh						
	(A)	(B)	(C)	(D)		
			Percent of			
			Centrl Stn +	Weighted		
	<u>Fuel Type</u>	<u>Eff Factor</u>	<u>Wind/Hydro</u>	<u>Eff Factor</u>		
		<u>mmbtu/kwh</u>				
23	Industrial	0.015148	43.976	0.006661		
24	Diesel	0.010424	53.356	0.005562		
25	Other	0.012621	2.668	0.000337		
	(Lines 23, 24, 25): Col(B) x Col(C) = Col(D)					
26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]			0.0125600		
27	WEIGHTED COMPOSITE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/kWh (Lines (21 x 22 x 26))				6.39212	
28	BASE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/mmbtu				1,224.44	
29	Base % Input to Sys kWh Mix				46.06	
30	Efficiency Factor, mmbtu/kwh				0.012621	
31	WEIGHTED BASE CENTRAL STATION + WIND/HYDRO GENERATION COST ¢/kWh (Lines (28 x 29 x 30))				7.11795	
32	COST LESS BASE (Line 27 - 31)				(0.72583)	
33	Revenue Tax Req Multiplier				1.0975	
34	CENTRAL STATION + WIND/HYDRO GENERATION FACTOR, ¢/kWh (Line (32 x 33))				(0.79660)	
				<u>DG ENERGY COMPONENT</u>		
				35	COMPOSITE COST OF DG ENERGY, ¢/kWh ²	0.000
				36	% Input to System kWh Mix ²	0.000
				37	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 35 x 36)	0.00000
				38	BASE DG ENERGY COMPOSITE COS	15.702
				39	Base % Input to System kWh Mix	0.06
				40	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 38 x 39)	0.00942
				41	Cost Less Base (Line 37 - 40)	(0.00942)
				42	Loss Factor	1.067
				43	Revenue Tax Req Multiplier	1.0975
				44	DG FACTOR, ¢/kWh (Line 41 x 42 x 43)	(0.01103)
				SUMMARY OF		
				TOTAL GENERATION FACTOR, ¢/kWh		
				45	Cntrl Stn+Wind/Hydro (line 34)	(0.79660)
				46	DG (line 44)	(0.01103)
				47	TOTAL GENERATION FACTOR, ¢/kWh (lines 45 + 46)	(0.80763)

¹ Hilo ULSD same location as Kanoelehua ULSD

² There is no forecast for February 2017 based on the production simulation files received on November 28, 2016 from R. Wang.

HAWAII ELECTRIC LIGHT COMPANY, INC.
ENERGY COST ADJUSTMENT (ECA) FILING

ENERGY COST ADJUSTMENT (ECA) FILING - February 1, 2017 (Page 2 of 2)

Line	<u>PURCHASED ENERGY COMPONENT</u>		
	PURCHASED ENERGY PRICE, ¢/kWh		
48	HEP		12.823
49	PGV	On Peak	10.733
50	PGV	Off Peak	10.852
51	PGV - Add'l 5 MW	On Peak	12.670
52	PGV - Add'l 5 MW	Off Peak	12.670
53	PGV - Add'l 8 MW	On Peak	6.440
54	PGV - Add'l 8 MW	Off Peak	6.440
55	Wailuku Hydro	On Peak	10.733
56	Wailuku Hydro	Off Peak	10.852
57	Hawi Renewable Dev.	On Peak	10.733
58	Hawi Renewable Dev.	Off Peak	10.852
59	Tawhiri (Pakini Nui)	On Peak	14.400
60	Tawhiri (Pakini Nui)	Off Peak	12.730
61			
62	Small Hydro (>100 KW)	On Peak	10.733
63	Small Hydro (>100 KW)	Off Peak	10.852
64	Sch Q Hydro (<100 KW)		10.460
65	FIT		23.800
	PURCHASED ENERGY KWH MIX, %		
66	HEP		17.679
67	PGV	On Peak	23.379
68	PGV	Off Peak	14.328
69	PGV - Addt'l	On Peak	4.676
70	PGV - Addt'l	Off Peak	3.340
71	PGV - Add'l 8 MW	On Peak	2.800
72	PGV - Add'l 8 MW	Off Peak	5.959
73	Wailuku Hydro	On Peak	4.052
74	Wailuku Hydro	Off Peak	2.754
75	Hawi Renewable Dev.	On Peak	1.637
76	Hawi Renewable Dev.	Off Peak	1.037
77	Tawhiri (Pakini Nui)	On Peak	10.006
78	Tawhiri (Pakini Nui)	Off Peak	7.788
79			
80	Small Hydro (>100 KW)	On Peak	0.000
81	Small Hydro (>100 KW)	Off Peak	0.000
82	Sch Q Hydro (<100 KW)		0.193
83	FIT		0.372
			100.000
84	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		11.474
85	% Input to System kWh Mix		51.628
86	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (Lines (84 x 85))		5.92380
87	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh		13.354
88	Base % Input to Sys kWh Mix		53.88
89	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (Lines (87 x 88))		7.19514
90	COST LESS BASE (Lines (86 - 89))		(1.27134)
91	Loss Factor		1.067
92	Revenue Tax R		1.0975
93	PURCHASED ENERGY FACTOR, ¢/kWh (Lines (90 x 91 x 92))		(1.48878)

Line	SYSTEM COMPOSITE	
94	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93))	(2.29641)
95	Not Used	0.000
96	Not Used	0.000
97	ECA Reconciliation Adjustment	(0.660)
98	ECA FACTOR, ¢/kWh (Lines (94 + 95+ 96 + 97))	(2.956)

Hawaii Electric Light Company, Inc.
FUEL OIL INVENTORY PRICES FOR February 1, 2017

INDUSTRIAL FUEL COSTS:

	<u>HILO</u>	<u>PUNA</u>
Average Industrial Fuel Cost - \$/BBL	53.0375	53.0375
Land Transportation Cost - \$/BBL	--	0.7360
Industrial Costs For Filing - \$/BBL	53.0375	53.7735
Conversion Factors - mmbtu/BBL	6.30	6.30
Industrial Costs For Filing - ¢/mmbtu	841.86	853.55

DIESEL FUEL COSTS:

	<u>KEAHOLE</u>	<u>PUNA CT-3</u>	<u>HILO</u>
Average Diesel Fuel Cost - \$/BBL	74.5392	74.5392	74.5392
Land Transportation Cost - \$/BBL	2.5044	1.1454	0.8637
Diesel Costs For Filing - \$/BBL	77.0436	75.6846	75.4029
Conversion Factors - mmbtu/BBL	5.86	5.86	5.86
Diesel Costs For Filing - ¢/mmbtu	1,314.74	1,291.55	1,286.74

ULSD FUEL COSTS:

	<u>KEAHOLE</u>	<u>WAIMEA</u>	<u>HILO</u>	<u>DISPERSED GENERATION</u>
Average ULSD Fuel Cost - \$/BBL	71.1508	71.1508	71.1508	71.1508
Land Transportation Cost - \$/BBL	2.6265	2.3519	0.8622	-
ULSD Costs For Filing - \$/BBL	73.7773	73.5027	72.0129	71.1508
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,287.56	1,282.77	1,256.77	1,241.72

Dispersed Generation, cents per kWh

	<u>COMPOSITE COST OF DISP. GEN.</u>
BBIs Fuel:	2.2136
\$/BBI Inv Cost:	71.1508
Fuel \$ (Prod Sim Consumption x Unit Cost)	157.50
Net kWh (from Prod Sim)	0
cents/kWh:	0.000

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

	SHIPMAN INDUSTRIAL		HILL INDUSTRIAL		COST PER BARREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 12/31/2016	0	0.00	38,032	1,961,573.10			
Less: Est'd Inventory Addn			(3,797)	(205,213.44)			
Purchases: Estimate	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Actual	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfers out: Estimate	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Actual	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfers in: Estimate	0	0.00	(28,101)	(1,444,379.98)			
Actual	0	0.00	27,202	1,371,993.98			
Consumed: Estimate	0	0.00	33,094	1,684,153.66			
Actual	0	0.00	(32,862)	(1,696,666.61)			
Balance Per G/L 12/31/2016	0	0.00	33,568	1,671,460.71			
Purchases	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer out	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer in	0	0.00	28,116	1,565,697.24			
Consumed	0	0.00	(34,526)	(1,798,752.81)	106.5901	0.0000	106.5901
Balance @ 01/31/2017	0	0.00	27,158	1,438,405.14			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	6,261	340,763.55			
Fuel Balance @ 01/31/2017	0	0.00	33,419	1,779,168.68			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxx	(1,779,168.68)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxx	1,772,479.80			
Total @ 9/30/2013 Avg Price	0	0.00	33,419	1,772,479.80			

Weighted Avg Cost/BBL by Location #DIV/0! 53.2376

Weighted Avg Cost/BBL @ Avg Cost #DIV/0! 53.0375

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

PUNA INDUSTRIAL

	BBL	COST	LAND TRANSP	COST PER BARREL		TOTAL
				EXCLUDE LT	LT	
Balance at 12/31/2016	6,583	321,420.65	4,468.64			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Actual	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers out: Estimate	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Actual	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate	(1,451)	(60,284.48)	(1,735.02)			
Actual	1,148	44,570.41	996.05			
Consumed: Estimate	1,708	86,920.12	905.24			
Actual	(1,733)	(89,474.87)	(987.50)			
Balance Per G/L 12/31/2016	6,255	303,151.83	3,647.41			
Purchases	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer in	1,758	100,411	2,102.11			
Consumed	(2,592)	(135,039.31)	(1,759.45)	52.0985	0.6788	52.7773
Balance @ 01/31/2017	5,421	268,523.98	3,990.07			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	5,421	268,523.98	3,990.07		0.7360	
Reverse Fuel Balance	xxxxxxxxxxxx	(268,523.98)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	287,516.02	xxxxxxxxxxxx			
Total @ 02/01/2017 Avg Price	5,421	287,516.02	3,990.07			

Weighted Avg Cost/BBL by Location

49.5340

0.7360

Weighted Avg Cost/BBL @ Avg Cost

53.0375

0.7360

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

KEAHOLE CT

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER EXCLUD LT	BARREL LT	TOTAL
Balance at 12/31/2016	47,113.2	1,978,756.0	3,563,168.8	132,069.1			
Less: Est'd Inventory Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate	0.0	0.0	0.0	0.0			
Actual	0.0	0.0	0.0	0.0			
Transfers out: Estimate		xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Actual		xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfers in: Estimate	(36,438.0)	(1,530,397.0)	(2,765,279.2)	(97,391.6)			
Actual	36,565.5	1,535,753.0	2,769,855.8	95,978.72			
Consumed: Estimate	43,205.5	1,814,631.0	3,266,335.8	139,553.77			
Actual	(43,122.4)	(1,811,141.0)	(3,217,776.8)	(144,195.7)	74.6196		
Balance Per G/L 12/31/2016	47,323.9	1,987,602	3,616,304.38	126,014.34	74.6161		
Purchases	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer in	39,098.4	1,642,133.0	2,879,841.3	104,502.2	73.6562		
Consumed	(47,127.0)	(1,979,334.0)	(3,585,525.8)	(132,106.41)	76.0822	2.8032	78.8854
Balance @ 01/31/2017	39,295.3	1,650,401	2,910,619.79	98,410.15	74.0705		
Inventory From Offsite/Transfers	0.0	0.0	0.0	0.00			
Est'd Inventory Addition	0.0	0	0.0	0.00			
Fuel Balance @ Avg Price	39,295.3	1,650,401	2,910,619.79	98,410.15	74.0705		
Reverse Fuel Balance	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	(2,910,619.8)	xxxxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	2,929,037.2	xxxxxxxxxxxxxx			
Total @ 02/01/2017 Avg Price	39,295.3	1,650,401	2,929,037.20	98,410.15	74.5392		

Weighted Avg Cost/BBL by Location

74.0705

2.5044

Weighted Avg Cost/BBL @ Avg Cost

74.5392

2.5044

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

PUNA CT-3

HS Diesel	BBL	GALLONS	COST EXCLUD LT	LAND TRANSP	COST PER EXCL LT	BARREL LT	TOTAL
Balance at 12/31/2016	4,152.4	174,401.0	314,685.4	5,663.3			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate		xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers out: Estimate		xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate	(768.5)	(32,277.0)	(59,477.2)	(801.0)			
Actual	879.0	36,918.0	88,785.2	1,180.2			
Consumed: Estimate	235.0	9,869.0	17,764.2	338.4			
Actual	(213.7)	(8,977.0)	(15,949.1)	(214.6)			
Balance Per G/L 12/31/2016	4,284.1	179,934	345,808.54	6,166.24			
Purchases		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer out		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer in	2,520.9	105,878.0	183,147.5	2,627.5	72.6515		
Consumed	(4,572.9)	(192,062)	(347,916.65)	(6,236.98)	76.0822	1.3639	77.4461
Balance @ 01/31/2017	2,232.1	93,750	181,039.41	2,556.79	81.1057		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 01/31/2017	2,232.1	93,750	181,039.41	2,556.79	81.1057		
Reverse Fuel Balance		xxxxxxxxxxxx	(181,039.41)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price		xxxxxxxxxxxx	166,382.13	xxxxxxxxxxxx			
Total @ 02/01/2017 Avg Price	2,232.1	93,750	166,382.13	2,556.79	74.5392		

Weighted Avg Cost/BBL by Location 81.1057 1.1454

Weighted Avg Cost/BBL @ Avg Cost 74.5392 1.1454

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

TOTAL HILO HS-DIESEL

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER EXCL LT	BARREL LT	TOTAL
Balance at 12/31/2016	1434.8	60,260	108,427	1,235			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Actual		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfers out: Estimate		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Actual		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfers in: Estimate	2.7	114.0	0.0	2.5			
Actual	-2.7	-114.0	0.0	0.0			
Consumed: Estimate	10.0	422.0	759.6	8.6			
Actual	-8.5	-356.0	-632.5	-5.5			
Balance Per G/L 12/31/2016	1436.3	60,326	108,554.32	1,240.55	75.5774		
Purchases		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer out		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer in	0.0	0.0	0.0	0.0	0.0000		
Consumed	-10.9	-458.0	-829.7	-9.4	76.0822	0.8607	76.9429
Balance @ 01/31/2017	1,425.4	59,868	107,724.66	1,231.16	75.5735		
Inven From Offsite/Transfers	0.0	0.0	0.0	0.0			
Est'd Inventory Addition	0.0	0.0	0.0	0.0			
Fuel Balance @ Avg Price	1,425.4	59,868	107,724.66	1,231.16	75.5735		
Reverse Fuel Balance		XXXXXXXXXXXX	XXXXXXXXXXXX -107,724.66	XXXXXXXXXXXX			
Fuel Balance @ Avg Price		XXXXXXXXXXXX	XXXXXXXXXXXX 106,250.30	XXXXXXXXXXXX			
Total @ 02/01/2017 Avg Price	1,425.4	59,868	106,250.30	1,231.16	74.5392		

Weighted Avg Cost/BBL by Location

75.5735 0.8637

Weighted Avg Cost/BBL @ Avg Cost

74.5392 0.8637

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

KEAHOLE DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	LT	TOTAL
Balance at 12/31/2016	1,937.0	81,353	138,736.95	6,177.22			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(189.1)	(7,943)	(13,916.93)	(505.48)			
Actua	189.1	7,943	14,217.97	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx			
Actua		xxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate		1,416	0.00	90.11			
Actua		68	0.00	505.48			
Consumed: Estimate	240.9	10,117	16,895.39	778.05			
Actua	(274.6)	(11,532)	(19,134.58)	(1,883.21)	69.6889		
Balance Per G/L 12/31/2016	1,938.6	81,422	136,798.80	5,162.17	70.5651		
Purchases	181.9	7,638	13,672.02	486.07	0.0000		
Estimated Purchases	0.0	0	0.00	0.00			
Transfer in	1.3	54	0.00	3.44	0.00		
Consumed	(140.1)	(5,884)	(9,959.75)	(446.78)	71.0927	3.1891	74.2818
Balance @ 01/31/2017	1,981.7	83,230	140,511.07	5,204.90	70.9055		
Inventory From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ Avg Price	1,981.7	83,230	140,511.07	5,204.90	70.9055		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(140,511.07)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	140,997.16	xxxxxxxxxxxx			
Total @ 02/01/2017 Avg Price	1,981.7	83,230	140,997.16	5,204.90	71.1508		

Weighted Avg Cost/BBL by Location

70.9055 2.6265

Weighted Avg Cost/BBL @ Avg Cost

71.1508 2.6265

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

WAIMEA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL	LT	TOTAL
Balance at 12/31/2016	1,399.0	58,757.0	99,441.7	3,303.29			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(7,939)	(13,909.92)	(420.90)			
Actual		7,939.0	14,210.8	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate	11.0	460	0.00	0.00			
Actual	(4.1)	(171)	0.00	420.90			
Consumed: Estimate	265.4	11,146	18,613.82	626.30			
Actual	(233.9)	(9,825)	(16,302.23)	(518.05)			
Balance Per G/L 12/31/2016	1,437.3	60,367	102,054.22	3,411.54	71.0036		
ULSD Purchases	0.0	0	0.00	0.00	#DIV/0!		
Estimated Purchases	190.0	7,980	14,284.20	423.07			
Transfer in	xxxxxxxxxxxx	96	0.00	0.00	#DIV/0!		
Consumed	(215.8)	(9,064)	(15,342.48)	(509.57)	71.0927	2.3612	73.4539
Balance @ 01/31/2017	1,413.8	59,379	100,995.94	3,325.04	71.4365		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ Avg Price	1,413.8	59,379	100,995.94	3,325.04	71.4365		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(100,995.94)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	100,591.98	xxxxxxxxxxxx			
Total @ 02/01/2017 Avg Price	1,413.8	59,379	100,591.98	3,325.04	71.1508		

Weighted Avg Cost/BBL by Location

71.4365 2.3519

Weighted Avg Cost/BBL @ Avg Cost

71.1508 2.3519

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

KANOELEHUA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP		
Balance at 12/31/2016	1,388.7	58,324.0	97,749.4	1,191.1		
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	0.0	0	0.00	0.00		
Actual	0.0	0	0.00	0.00		
Transfers out: Estimate			x	x	x	
Actual			x	x	x	
Transfers in: Estimate		267	0.00	5.85		
Actual		(420)	0.00	0.00		
Consumed: Estimate	21.1	885	1,477.95	21.97		
Actual	(38.0)	(1,598)	(2,651.50)	(36.01)		
Balance Per G/L 12/31/2016	1,368.0	57,458	96,575.82	1,182.93		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	(6)	(266)	0.00	(5.83)		
Consumed	(52.0)	(2,182)	(3,693.44)	(47.89)	71.0927	0.8577
Balance @ 01/31/2017	1,309.8	55,010	92,882.38	1,129.22		
Inventory From Offsite/Transfers	0.0	0	0.00	0.00		
Est'd Inventory Addition	0.0	0	0.00	0.00		
Fuel Balance @ Avg Price	1,309.8	55,010	92,882.38	1,129.22		
Reverse Fuel Balance	x	x	(92,882.38)	x		
Fuel Balance @ Avg Price	x	x	93,190.60	x		
Total @ 02/01/2017 Avg Price	1,309.8	55,010	93,190.60	1,129.22		
Weighted Avg Cost/BBL by Location			70.9155	0.8622		
Weighted Avg Cost/BBL @ Avg Cost			71.1508	0.8622		

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2017

DISPERSED GENERATION

	BBL	GALLONS	COST	COST/BBL
Balance at 12/31/2016	81.5	3,422	5,750.45	
Less: Est'd Inven Addition	0.0	XXXXXXXXXXXXXXXXXXXX		
Purchases: Estimate	(11.9)	(498)	(872.55)	
Actual	19.0	797	1,423.30	
Consumed: Estimate	5.5	233	389.11	
Actual	(6.3)	(265)	(50.64)	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Balance Per G/L 12/31/2016	87.83	3,689	6,639.67	75.5940
Purchases	0.0	0	0.00	0.0000
Transfer out	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Transfer in	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Consumed	(1.4)	(59)	(99.87)	71.0927
Balance @ 01/31/2017	86.4	3,630	6,539.80	75.6671
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 01/31/2017	86.4	3,630	6,539.80	
Reverse Fuel Balance	XXXXXXXXXX	XXXXXXXXXX	(6,539.80)	xxxx
Fuel Balance @ Avg Price	XXXXXXXXXX	XXXXXXXXXX	6,149.46	xxxx
Total @ 02/01/2017 Avg Price	86.4	3,630	6,149.46	71.1508

HAWAII ELECTRIC LIGHT COMPANY, INC.
CONTRACT PRICES EFFECTIVE January 1, 2017

TYPE OF OIL BURNED

INDUSTRIAL *	<u>Hill Industrial</u>		<u>Puna Industrial</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	57.54	3.1044	57.54	3.4819
Ocean Transportation	53.85	3.3922	51.90	3.1692
Storage	24.14	1.5208	16.12	0.9818
Wharfage	3.97	0.2500	3.05	0.1875
Fees ²	1.1300	0.0712	2.14	0.1875
	<u>Hilo Diesel</u>		<u>Waimea Diesel</u>	
DIESEL *	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	81.16	4.7557	77.57	4.5452
Ocean Transportation	47.13	2.7615	62.55	3.6655
Storage	11.29	0.6615	18.31	1.0729
Wharfage	4.27	0.1250	4.27	0.2500
Fees ²	1.665	0.01665	1.67	0.0167
	<u>Kona Diesel</u>		<u>CT3 Diesel</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	77.57	4.5452	77.57	4.5452
Ocean Transportation	62.55	3.6655	62.55	3.6655
Storage	18.31	1.0729	18.31	1.0729
Wharfage	4.27	0.2500	4.27	0.2500
Fees ²	1.665	0.01665	1.665	0.01665
	<u>ULSD</u>			
ULSD **	<u>¢/MBTU</u>	<u>\$/BBL</u>		
Tax ¹	20.65	1.6226		
Ocean Transportation	0.00	0.0000		
Storage	0.00	0.0000		
Wharfage	0.00	0.0000		
Fees ²	1.665	0.01665		

¹ Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST Tax and Environmental Response Tax.

² Fees include Custom Duty and Fed Oil Spill Recovery

inventory, contract prices for the current month are being provided.
 Contract prices are considered accurate pending actual delivery of fuel.

* Land Transportation Costs are shown in Attachment 3, Sheet 1.

** ULSD includes Waimea, Kanoelehua, and Keahole.

Reference: Decision and Order No. 16134, Docket No. 96-0040.

Hawaii Electric Light Company, Inc.
PURCHASED POWER PRICES FOR February 1, 2017

		February 1, 2017 <u>(¢/kWh)</u>	Floor Rates <u>(¢/kWh)</u>
PGV (25 MW)	- on peak	10.733	6.560
PGV (22 MW)	- off peak	10.852	5.430
WAILUKU HYDRO	- on peak	10.733	7.240
	.	10.852	5.970
Other: (<100 KW)	Sch Q Rate	10.460	
		February 1, 2017 <u>(¢/kWh)</u>	Floor Rates <u>(¢/kWh)</u>
HEP		12.823	
PGV Addtl 5 MW	- on peak	12.6700	0.0000
	- off peak	12.6700	0.0000
PGV Addtl 8 MW	- on peak	6.4400	0.0000
	- off peak	6.4400	0.0000

Hawaii Electric Light Company, Inc.
Energy Cost Reconciliation Adjustment
February 1, 2017

<u>Line No.</u>	<u>Description</u>	<u>Amount</u>
1	Amount to be (returned) or collected	(\$1,366,400)
2	Monthly Amount ($\frac{1}{3}$ x Line 1)	(\$455,467)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$499,881)
5	Estimated MWh Sales (February 1, 2017)	75,757 mwh
6	Adjustment (Line 4 / Line 5)	(0.660) ¢/kwh

HAWAII ELECTRIC LIGHT COMPANY, INC.
2016 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand \$)

LINE	DESCRIPTION	Info Only December 2016 YTD Total No Deadband	collectn by company*	Basis for Recon December 2016 YTD Total Deadband	Collection or Refund by Company
ACTUAL COSTS:					
1	Generation	\$55,085.7		\$55,085.7	
2	Distributed Generation	\$8.1		\$8.1	
3	Purch Power	\$62,309.8		\$62,309.8	
4	TOTAL	<u>\$117,403.6</u>		<u>\$117,403.6</u>	
FUEL FILING COST (1)					
5	Generation	\$55,491.0		\$55,700.1	
6	Distributed Generation	\$8.1		\$8.1	
7	Purch Power	\$62,309.8		\$62,309.8	
8	TOTAL	<u>\$117,808.9</u>		<u>\$118,018.0</u>	
BASE FUEL COST					
9	Generation	\$77,896.9		\$77,896.9	
10	Distributed Generation	\$6.5		\$6.5	
11	Purch Power	\$79,421.5		\$79,421.5	
12	TOTAL	<u>\$157,324.9</u>		<u>\$157,324.9</u>	
13	FUEL-BASE COST (Line 8-12)				
		-\$39,516.0		-\$39,306.9	
14	ACTUAL FOA LESS TAX				
		-\$37,659.8		-\$37,659.8	
15	Less: FOA reconciliation adj for prior year				
		\$18.9		\$18.9	
16	ADJUSTED FOA LESS TAX				
		<u>-\$37,678.7</u>		<u>-\$37,678.7</u>	
17	FOA-(FUEL-BASE) (Line 16-13)				
		\$1,837.3	over	\$1,628.2	over
ADJUSTMENTS:					
18	Current year FOA accrual reversal	\$3,489.7		\$3,489.7	
19	Other prior year FOA	\$0.0		\$0.0	
20	Other	\$0.0		\$0.0	
21	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	<u>\$5,327.0</u>	over	<u>\$5,117.9</u>	over
22	Third Quarter FOA reconciliation			3,751.5	over
23	FOA Reconciliation to be Returned or Collected			1,366.4	over

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

**Hawai'i Electric Light Company
DEADBAND CALCULATION
2016**

Jan 1 - Dec 2016
YTD

Industrial

	Notes	
Industrial Efficiency Factor (per D&O), BTU/kWh*	f	15,148
Industrial Deadband Definition, +/- BTU/kWh	d	100
Industrial Portion of Recorded Sales, kWh	a	222,867,331
Industrial Consumption (Recorded), MMBTU	b	3,209,861
Industrial Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	14,403
Lower limit of Industrial Deadband, BTU/kWh	e= f-d	15,048
Higher limit of Industrial Deadband, BTU/kWh	g=f+d	15,248
Industrial Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	15,048

Diesel

Diesel Efficiency Factor (per D&O), BTU/kWh*	f	10,424
Diesel Deadband Definition, +/- BTU/kWh	d	100
Diesel Portion of Recorded Sales, MWh	a	289,962,594
Diesel Consumption (Recorded), MMBTU	b	3,072,558
Diesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	10,596
Lower limit of Diesel Deadband, BTU/kWh	e= f-d	10,324
Higher limit of Diesel Deadband, BTU/kWh	g=f+d	10,524
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	10,524

Biodiesel

Biodiesel Efficiency Factor (per D&O), BTU/kWh*	f	0
Biodiesel Deadband Definition, +/- BTU/kWh	d	100
Biodiesel Portion of Recorded Sales, MWh	a	0
Biodiesel Consumption (Recorded), MMBTU	b	0
Biodiesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	0
Lower limit of Biodiesel Deadband, BTU/kWh	e= f-d	-100
Higher limit of Biodiesel Deadband, BTU/kWh	g=f+d	100
Biodiesel Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	0

Hydro

Hydro Efficiency Factor (per D&O), BTU/kWh*	f	12,621
Hydro Deadband Definition, +/- BTU/kWh	d	100
Hydro Portion of Recorded Sales, MWh	a	15,675,363
Hydro Consumption (Recorded), MMBTU	b	193,191
Hydro Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	12,325
Lower limit of Hydro Deadband, BTU/kWh	e= f-d	12,521
Higher limit of Hydro Deadband, BTU/kWh	g=f+d	12,721
Hydro Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	12,521

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

HAWAII ELECTRIC LIGHT COMPANY, INC.
GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST
WITHOUT and WITH DEADBAND
2016

	<u>Without Deadband</u>	<u>With Deadband</u>
	<u>Jan 1 - Dec 31</u>	<u>As Filed</u>
	<u>Jan 1 - Dec 31</u>	<u>Jan 1 - Dec 31</u>
<u>INDUSTRIAL FUEL FILING COST</u>		
Industrial Portion of Recorded Sales , kWh	222,867,331	222,867,331
Industrial Efficiency Factor (mmbtu/kwh)	0.015148	0.015048
Mmbtu adjusted for Sales Efficiency Factor	3,375,994	3,353,708
\$/mmbtu	<u>\$5.9122</u>	<u>\$5.9122</u>
TOTAL INDUSTRIAL \$000s TO BE RECOVERED	\$19,959.673	\$19,827.908
<u>DIESEL FUEL FILING COST</u>		
Diesel Portion of Recorded Sales, kWh	289,962,594	289,962,594
Diesel Efficiency Factor (mmbtu/kwh)	0.010424	0.010524
Mmbtu adjusted for Sales Efficiency Factor	3,022,570	3,051,566
\$/mmbtu	<u>\$11.7553</u>	<u>\$11.7553</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$35,531.310	\$35,872.171
<u>HYDRO FUEL FILING COST</u>		
Hydro Portion of Recorded Sales , kWh	15,675,363	15,675,363
Hydro Efficiency Factor (mmbtu/kwh)	0.012621	0.012521
Mmbtu adjusted for Sales Efficiency Factor	197,839	196,271
\$/mmbtu	<u>\$0.0000</u>	<u>\$0.0000</u>
TOTAL HYDRO \$000s TO BE RECOVERED	\$0.000	\$0.000
TOTAL GENERATION FUEL FILING COST, \$000s	\$55,491.0	\$55,700.1
<u>CALCULATION OF GENERATION BASE FUEL COST</u>		
TOTAL GENERATION BASE FUEL COST, \$000s	\$77,896.9	\$77,896.9
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$55,491.0	\$55,700.1
TOTAL GENERATION BASE FUEL COST YTD	\$77,896.9	\$77,896.9

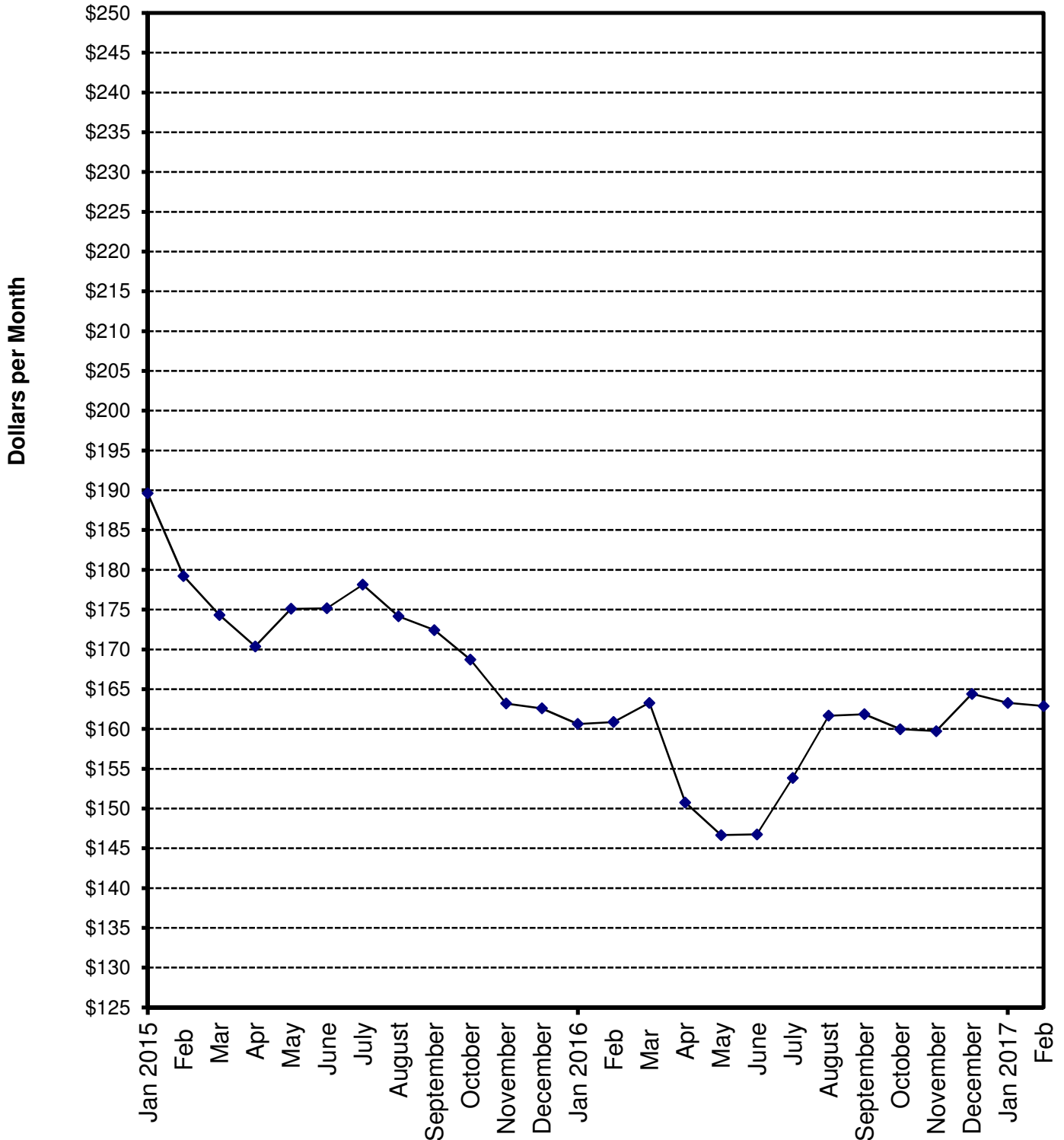
HAWAII ELECTRIC LIGHT COMPANY, INC.
2016 Cumulative Reconciliation Balance

Month	(1) YTD FOA Reconciliation	Qtr	(2) FOA Rec Adjust Variance	(3) FOA Rec Less Variance	(4) Try to Collect	(5) Actual Collect	(6) Month-end Cumulative Balance
November	791,200	[3]	44,375	746,825	(263,733)	(262,906)	565,708
December 15					(263,733)	(256,311)	309,397
January 16					(263,733)	(264,541)	44,856
February	(282,600)	[4]	10,260	(292,860)	94,200	95,382	(152,622)
March					94,200	96,004	(56,618)
April					94,200	97,345	40,727
May	2,320,900	[1]	2,178	2,318,722	(773,633)	(790,776)	1,568,673
June					(773,633)	(817,839)	750,834
July					(773,633)	(821,946)	(71,112)
August	645,200	[2]	(58,204)	703,404	(215,067)	(232,600)	399,692
September					(215,067)	(231,769)	167,923
October					(215,067)	(232,984)	(65,061)
November	785,400	[3]	(82,548)	867,948	(261,800)	(268,646)	534,241
December					(261,800)	(283,626)	250,615
January 17					(261,800)		
February	1,366,400	[4]	(46,589)	1,412,989	(455,467)		

NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 6)
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))

Hawaii Electric Light Company, Inc. Residential Bill at 500 KWH/Month Consumption



**HAWAII ELECTRIC LIGHT COMPANY, INC.
FUEL OIL ADJUSTMENT FACTOR DATA**

<u>EFFECTIVE DATE</u>	<u>FUEL FACTOR CENTS / KWH</u>		
	<u>RESIDENTIAL & COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$) @ 500 KWH</u>	<u>RESIDENTIAL BILL (\$) @ 600 KWH</u>
January 1, 2012	9.690	214.24	256.34
January 3, 2012	10.759	219.59	262.75
February 1, 2012	9.220	211.89	253.52
March 1, 2012	10.165	216.62	259.19
April 1, 2012	10.031	215.03	257.28
April 9, 2012	8.553	210.84	252.91
May 1, 2012	8.749	213.77	256.42
June 1, 2012	9.747	218.76	262.41
July 1, 2012	9.320	215.64	258.68
August 1, 2012	7.991	209.09	250.82
September 1, 2012	8.636	212.31	254.69
October 1, 2012	8.294	210.60	252.63
November 1, 2012	6.967	203.82	244.49
December 1, 2012	6.629	202.13	242.46
January 1, 2013	6.897	204.02	244.72
February 1, 2013	7.250	205.19	246.14
March 1, 2013	7.659	207.24	248.59
April 1, 2013	8.128	208.10	249.63
May 1, 2013	7.378	205.53	246.54
June 1, 2013	7.159	207.61	249.02
July 1, 2013	6.537	204.73	245.57
August 1, 2013	6.470	206.02	247.13
September 1, 2013	7.377	210.60	252.62
October 1, 2013	8.458	216.00	259.11
November 1, 2013	7.878	211.84	254.11
December 1, 2013	7.910	212.03	254.35
January 1, 2014	6.796	206.51	247.73
February 1, 2014	7.754	211.65	253.89
March 1, 2014	6.650	206.15	247.28
April 1, 2014	6.679	204.55	245.36
May 1, 2014	7.005	207.96	249.46
June 1, 2014	7.247	213.09	255.62
July 1, 2014	7.697	216.27	259.42
August 1, 2014	8.086	218.71	262.36
September 1, 2014	6.885	212.75	255.20
October 1, 2014	6.447	210.55	252.56
November 1, 2014	5.634	205.93	247.03
December 1, 2014	4.143	198.49	237.84
January 1, 2015	2.369	189.62	227.20
February 1, 2015	0.485	179.22	214.71
March 1, 2015	-0.519	174.32	208.85
April 1, 2015	-0.990	170.37	204.10
May 1, 2015	-0.420	175.10	209.79
June 8, 2015	-0.579	175.16	209.85
July 1, 2015	0.264	178.14	213.38
August 1, 2015	-0.586	174.16	208.61
September 1, 2015	-0.927	172.43	206.54
October 1, 2015	-1.671	168.73	202.10
November 1, 2015	-2.727	163.20	195.47
December 1, 2015	-2.859	162.59	194.74
January 1, 2016	-3.223	160.63	192.41
February 1, 2016	-2.962	160.87	192.69
March 1, 2016	-4.311	154.26	184.76
April 1, 2016	-4.715	150.76	180.57
May 1, 2016	-5.554	146.66	175.64
June 1, 2016	-5.546	146.74	175.74
July 1, 2016	-4.248	153.85	184.31
August 1, 2016	-3.094	161.67	193.69
September 1, 2016	-3.040	161.85	193.90
October 1, 2016	-3.427	159.97	191.65
November 1, 2016	-3.514	159.72	191.35
December 1, 2016	-2.584	164.41	196.97
January 1, 2017	-2.842	163.27	195.58
February 1, 2017	-2.956	162.87	195.09

**HAWAII ELECTRIC LIGHT COMPANY, INC.
RESIDENTIAL SURCHARGE DATA**

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
01/01/12 - 12/31/12	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.6766 CENTS/KWH
01/01/12 - 04/08/12	INTERIM RATE INCREASE 2010 TEST YEAR	1.74 PERCENT ON BASE
04/01/12 - 04/08/12	FIRM CAPACITY SURCHARGE	0.6427 PERCENT ON BASE
04/01/12 - 04/30/12	SOLARSAVER ADJUSTMENT	-0.3899 CENTS/KWH
04/09/12	FINAL RATE INCREASE (1.28%), DOCKET NO. 2009-0164 (2010 TEST YEAR)	
04/09/12 - 7/31/2012	PURCHASED POWER ADJUSTMENT CLAUSE	2.4355 CENTS/KWH
05/01/12-3/31/13	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/18/12 - 5/31/2013	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	-0.1952 CENTS/KWH
8/1/2012 - 10/31/2012	PURCHASED POWER ADJUSTMENT CLAUSE	2.4540 CENTS/KWH
11/1/2012-1/31/13	PURCHASED POWER ADJUSTMENT CLAUSE	2.4237 CENTS/KWH
01/01/13-6/30/13	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.7850 CENTS/KWH
02/01/13-4/30/13	PURCHASED POWER ADJUSTMENT CLAUSE	2.3063 CENTS/KWH
04/01/13 - 04/30/13	SOLARSAVER ADJUSTMENT	-0.2964 CENTS/KWH
05/01/13 - 03/31/14	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
05/01/13- 07/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	2.2452 CENTS/KWH
6/1/2013-5/31/14	RBA RATE ADJUSTMENT	0.4383 CENTS/KWH
7/1/2013-6/30/14	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.8312 CENTS/KWH
8/1/2013-8/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	2.5712 CENTS/KWH
9/1/2013-9/30/2013	PURCHASED POWER ADJUSTMENT CLAUSE	2.5832 CENTS/KWH
10/1/2013-10/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	2.5802 CENTS/KWH
11/1/2013-11/30/2013	PURCHASED POWER ADJUSTMENT CLAUSE	2.3272 CENTS/KWH
12/1/2013-12/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE	2.3347 CENTS/KWH
1/1/2014-1/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.3444 CENTS/KWH
2/1/2014-2/28/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.4149 CENTS/KWH
3/1/2014-3/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.4170 CENTS/KWH
4/1/2014-4/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.4162 CENTS/KWH
4/1/2014-4/30/2014	SOLARSAVER ADJUSTMENT	-0.3486 CENTS/KWH
5/1/2014-5/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.4248 CENTS/KWH
5/1/2014-5/31/2014	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2014-6/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.4244 CENTS/KWH
6/1/2014-5/31/15	RBA RATE ADJUSTMENT	1.2225 CENTS/KWH
7/1/2014-7/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.4252 CENTS/KWH
7/1/2014-11/30/14	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	1.0157 CENTS/KWH
8/1/2014-8/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.5250 CENTS/KWH
9/1/2014-9/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.5341 CENTS/KWH
10/1/2014-10/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.5314 CENTS/KWH
11/1/2014-11/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.4226 CENTS/KWH
12/1/2014-12/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE	2.4235 CENTS/KWH
12/1/2014-6/30/15	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.7583 CENTS/KWH
12/1/2014-6/30/15	GREEN INFRASTRUCTURE FEE	1.2900 DOLLARS/MONTH
1/1/2015-1/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.4245 CENTS/KWH
2/1/2015-2/28/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.2273 CENTS/KWH
3/1/2015-3/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.2539 CENTS/KWH
4/1/2015-4/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.2424 CENTS/KWH
4/1/2015-4/30/2015	SOLARSAVER ADJUSTMENT	-0.3084 CENTS/KWH
5/1/2015-5/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3109 CENTS/KWH
5/1/2015-4/30/16	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2015-6/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3064 CENTS/KWH
6/1/2015-6/7/2015	RBA RATE ADJUSTMENT	0.0000 CENTS/KWH
6/8/2015-05/31/16	RBA RATE ADJUSTMENT	1.3971 CENTS/KWH
7/1/2015-7/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3157 CENTS/KWH
7/1/2015-06/30/16	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.4749 CENTS/KWH
7/1/2015-12/31/2015	GREEN INFRASTRUCTURE FEE	1.4200 DOLLARS/MONTH
8/1/2015-8/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3703 CENTS/KWH
9/1/2015-9/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3651 CENTS/KWH
10/1/2015-10/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3699 CENTS/KWH
11/1/2015-11/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3204 CENTS/KWH
12/1/2015-12/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3299 CENTS/KWH
1/1/2016-1/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	2.3260 CENTS/KWH
1/1/2016-06/30/16	GREEN INFRASTRUCTURE FEE	1.3000 DOLLARS/MONTH
2/1/2016 - 2/29/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.1114 CENTS/KWH
3/1/2016 - 3/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.1401 CENTS/KWH
4/1/2016 - 4/30/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.1228 CENTS/KWH
4/1/2016 - 4/30/16	SOLARSAVER ADJUSTMENT	-0.2779 CENTS/KWH
5/1/2016 - 5/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	1.8623 CENTS/KWH
5/1/2016	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2016 - 6/30/16	PURCHASED POWER ADJUSTMENT CLAUSE	1.8442 CENTS/KWH
6/1/2016	RBA RATE ADJUSTMENT	1.4241 CENTS/KWH
7/1/2016-7/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	1.8909 CENTS/KWH
7/1/2016	GREEN INFRASTRUCTURE FEE	1.1300 DOLLARS/MONTH
7/1/2016	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
8/1/2016-8/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.3000 CENTS/KWH
9/1/2016-9/30/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.2824 CENTS/KWH
10/1/2016-10/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.2930 CENTS/KWH
11/1/2016-11/30/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.3298 CENTS/KWH
12/1/2016-12/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.3371 CENTS/KWH
1/1/2017-1/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	2.3400 CENTS/KWH
1/1/2017	GREEN INFRASTRUCTURE FEE	1.2700 DOLLARS/MONTH
2/1/2017 - 2/28/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.3737 CENTS/KWH

**Base charges include customer charge, demand charge, energy charge, power factor adjustment, voltage discount, and minimum charge.

**Hawaii Electric Light Company, Inc.
Calculations of the Average Residential Customer Bill**

	Rate		Charge (\$) at 500 Kwh		
	1/01/17	2/01/17	1/01/17	2/01/17	Difference
Base Rates					
effective date:	4/9/2012	4/9/2012			
Base Fuel Energy Charge	¢/kwh 16.2487	16.2487	\$81.24	\$81.24	\$0.00
Non-fuel Fuel Energy Charge	¢/kwh		\$62.72	\$62.72	\$0.00
First 300 kWh per month	¢/kwh 11.2019	11.2019	\$33.61	\$33.61	\$0.00
Next 700 kWh per month	¢/kwh 14.5537	14.5537	\$29.11	\$29.11	\$0.00
Customer Charge	\$ 10.50	10.50	\$10.50	\$10.50	\$0.00
Total Base Charges			\$154.46	\$154.46	\$0.00
RBA Rate Adjustment	¢/kwh 1.4241	1.4241	\$7.12	\$7.12	\$0.00
Purchased Power Adj. Clause	¢/kwh 2.3400	2.3737	\$11.70	\$11.87	\$0.17
PBF Surcharge	¢/kwh 0.5865	0.5865	\$2.93	\$2.93	\$0.00
DSM Adjustment	¢/kwh 0.0000	0.0000	\$0.00	\$0.00	\$0.00
SolarSaver Adjustment	¢/kwh 0.0000	0.0000	\$0.00	\$0.00	\$0.00
Energy Cost Adjustment	¢/kwh (2.8420)	(2.9560)	-\$14.21	-\$14.78	-\$0.57
Green Infrastructure Fee	\$ 1.2700	1.2700	\$1.27	\$1.27	\$0.00
Avg Residential Bill at 500 kwh			\$163.27	\$162.87	

Increase (Decrease -)	-\$0.40
% Change	-0.24%

	Rate		Charge (\$) at 600 Kwh		
	1/01/17	2/01/17	1/01/17	2/01/17	Difference
Base Rates					
effective date:	4/9/2012	4/9/2012			
Base Fuel/Energy Charge	¢/kwh 16.2487	16.2487	\$97.49	\$97.49	\$0.00
Non-fuel Fuel Energy Charge	¢/kwh		\$77.27	\$77.27	\$0.00
First 300 kWh per month	¢/kwh 11.2019	11.2019	\$33.61	\$33.61	\$0.00
Next 700 kWh per month	¢/kwh 14.5537	14.5537	\$43.66	\$43.66	\$0.00
Customer Charge	\$ 10.50	10.50	\$10.50	\$10.50	\$0.00
Total Base Charges			\$185.26	\$185.26	\$0.00
RBA Rate Adjustment	¢/kwh 1.4241	1.4241	\$8.54	\$8.54	\$0.00
Purchased Power Adj. Clause	¢/kwh 2.3400	2.3737	\$14.04	\$14.24	\$0.20
PBF Surcharge	¢/kwh 0.5865	0.5865	\$3.52	\$3.52	\$0.00
DSM Adjustment	¢/kwh 0.0000	0.0000	\$0.00	\$0.00	\$0.00
SolarSaver Adjustment	¢/kwh 0.0000	0.0000	\$0.00	\$0.00	\$0.00
Energy Cost Adjustment	¢/kwh (2.8420)	(2.9560)	-\$17.05	-\$17.74	-\$0.69
Green Infrastructure Fee	\$ 1.2700	1.2700	\$1.27	\$1.27	\$0.00
Avg Residential Bill at 600 kwh			\$195.58	\$195.09	

Increase (Decrease -)	-\$0.49
% Change	-0.25%