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JAY IGNACIO, P. E.
President

December 27, 2016

2016 DEC 27 P 3:48

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

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") energy cost adjustment factor for January 2017 is -2.842 cents per kilowatt-hour ("kWh"), a decrease of 0.258 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$163.27, a decrease of \$1.14 compared to the rates effective December 1, 2016. The decrease in the typical residential bill is due to the decrease in the energy cost adjustment factor (-\$1.29), the increase in the Purchased Power Adjustment Clause rate (+\$0.01), and the increase in the Green Infrastructure Fee (+0.14).

Hawai'i Electric Light's fuel composite cost of generation increased 6.29 cents per million BTU to 1,056.09 cents per million BTU. The composite cost of distributed generation increased 0.218 cents per kWh to 12.065 cents per kWh. The composite cost of purchased energy decreased 0.854 cents per kWh to 11.047 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 January 1, 2017.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST ADJUSTMENT FACTOR

	<u>EFFECTIVE DATES</u>		
	<u>12/01/16</u>	<u>1/01/17</u>	<u>Change</u>
<u>Composite Cost</u>			
Generation, ¢/mmbtu	1,049.80	1,056.09	6.29
Dispersed Generation Energy, ¢/kWh	11.847	12.065	0.218
Purchased Energy, ¢/kWh	11.901	11.047	(0.854)
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment - ¢/kWh	(2.584)	(2.842)	(0.258)
<u>Others - "G,J,P,F"</u>			
Energy Cost Adjustment - ¢/kWh	(2.584)	(2.842)	(0.258)
Residential Customer with:			
500 KWH Consumption - \$/Bill	\$164.41	\$163.27	(\$1.14)
600 KWH Consumption - \$/Bill	\$196.97	\$195.58	(\$1.39)

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

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

<u>Line</u>		
1	Effective Date	January 1, 2017
2	Supercedes Factors of	December 1, 2016

GENERATION COMPONENT

<u>CENTRAL STATION WITH WIND/HYDRO COMPONENT</u>						
FUEL PRICES, ¢/mmbtu						
3						
4	Hill Industrial		826.96			
5	Puna Industrial		837.74			
6	Keahole Diesel		1,346.17			
6a	Keahole ULSD		1,296.37			
7	Waimea ULSD Diesel		1,281.92			
8	Hilo Diesel		1,313.02			
8a	Hilo (Kanoelehua) ULSD Diesel ¹		1,255.68			
9	Puna Diesel		1,321.61			
10	Wind		0.00			
11	Hydro		0.00			
BTU MIX, %						
12						
13	Hill Industrial		48.614			
14	Puna Industrial		6.547			
15	Keahole Diesel		43.621			
15a	Keahole ULSD		0.006			
16	Waimea ULSD Diesel		0.002			
17	Hilo Diesel		0.000			
17a	Hilo (Kanoelehua) ULSD Diesel ¹		0.000			
18	Puna Diesel		0.901			
19	Wind		0.000			
20	Hydro		0.309			
			100.000			
21	COMPOSITE COST OF GENERATION, CENTRAL STATION + WIND/HYDRO ¢/mmb		1,056.09			
22	% Input to System kWh Mix		49.544			
EFFICIENCY FACTOR, mmbtu/kWh						
	(A)	(B)	(C)	(D)		
			Percent of	Weighted		
	Fuel Type	Eff Factor	Centrl Stn +	Eff Factor		
		mmbtu/kwh	Wind/Hydro			
23	Industrial	0.015148	43.822	0.006638		
24	Diesel	0.010424	52.791	0.005503		
25	Other	0.012621	3.387	0.000427		
	(Lines 23, 24, 25): Col(B) x Col(C) = Col(D)					
26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]			0.0125680		
27	WEIGHTED COMPOSITE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/kWh (Lines (21 x 22 x 26))			6.57594		
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)			(0.54201)		
33	Revenue Tax Req Multiplier			1.0975		
34	CENTRAL STATION + WIND/HYDRO GENERATION FACTOR, ¢/kWh (Line (32 x 33))			(0.59486)		
				<u>DG ENERGY COMPONENT</u>		
				35	COMPOSITE COST OF DG ENERGY, ¢/kWh	12.065
				36	% Input to System kWh Mix	0.006
				37	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 35 x 36)	0.00072
				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)	(0.00870)
				42	Loss Factor	1.067
				43	Revenue Tax Req Multiplier	1.0975
				44	DG FACTOR, ¢/kWh (Line 41 x 42 x 43)	(0.01019)
				SUMMARY OF		
				TOTAL GENERATION FACTOR, ¢/kWh		
				45	Cntrl Stn+Wind/Hydro (line 34)	(0.59486)
				46	DG (line 44)	(0.01019)
				47	TOTAL GENERATION FACTOR, ¢/kWh (lines 45 + 46)	(0.60505)

¹ Hilo ULSD same location as Kanoelehua ULSD

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

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

Line	<u>PURCHASED ENERGY COMPONENT</u>		
	PURCHASED ENERGY PRICE, ¢/kWh		
48	HEP		11.740
49	PGV	On Peak	10.505
50	PGV	Off Peak	10.332
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	9.660
54	PGV - Add'l 8 MW	Off Peak	6.440
55	Wailuku Hydro	On Peak	10.505
56	Wailuku Hydro	Off Peak	10.332
57	Hawi Renewable Dev.	On Peak	10.505
58	Hawi Renewable Dev.	Off Peak	10.332
59	Tawhiri (Pakini Nui)	On Peak	14.580
60	Tawhiri (Pakini Nui)	Off Peak	12.810
61			
62	Small Hydro (>100 KW)	On Peak	10.505
63	Small Hydro (>100 KW)	Off Peak	10.332
64	Sch Q Hydro (<100 KW)		10.110
65	FIT		23.800
	PURCHASED ENERGY KWH MIX, %		
66	HEP		22.114
67	PGV	On Peak	23.728
68	PGV	Off Peak	14.578
69	PGV - Addt'l	On Peak	4.746
70	PGV - Addt'l	Off Peak	3.390
71	PGV - Add'l 8 MW	On Peak	2.592
72	PGV - Add'l 8 MW	Off Peak	6.045
73	Wailuku Hydro	On Peak	4.778
74	Wailuku Hydro	Off Peak	3.423
75	Hawi Renewable Dev.	On Peak	2.352
76	Hawi Renewable Dev.	Off Peak	1.547
77	Tawhiri (Pakini Nui)	On Peak	6.269
78	Tawhiri (Pakini Nui)	Off Peak	3.911
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)		0.155
83	FIT		0.372
			100.000
84	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		11.047
85	% Input to System kWh Mix		50.450
86	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (Lines (84 x 85))		5.57321
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))		(1.62193)
91	Loss Factor		1.067
92	Revenue Tax R		1.0975
93	PURCHASED ENERGY FACTOR, ¢/kWh (Lines (90 x 91 x 92))		(1.89933)

Line	SYSTEM COMPOSITE	
94	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93))	(2.50438)
95	Not Used	0.000
96	Not Used	0.000
97	ECA Reconciliation Adjustment	(0.338)
98	ECA FACTOR, ¢/kWh (Lines (94 + 95+ 96 + 97))	(2.842)

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

INDUSTRIAL FUEL COSTS:

	<u>HILO</u>	<u>PUNA</u>
Average Industrial Fuel Cost - \$/BBL	52.0985	52.0985
Land Transportation Cost - \$/BBL	--	0.6788
Industrial Costs For Filing - \$/BBL	52.0985	52.7773
Conversion Factors - mmbtu/BBL	6.30	6.30
Industrial Costs For Filing - ¢/mmbtu	826.96	837.74

DIESEL FUEL COSTS:

	KEAHOLE	PUNA CT-3	HILO
Average Diesel Fuel Cost - \$/BBL	76.0822	76.0822	76.0822
Land Transportation Cost - \$/BBL	2.8032	1.3639	0.8607
Diesel Costs For Filing - \$/BBL	78.8855	77.4461	76.9429
Conversion Factors - mmbtu/BBL	5.86	5.86	5.86
Diesel Costs For Filing - ¢/mmbtu	1,346.17	1,321.61	1,313.02

ULSD FUEL COSTS:

	KEAHOLE	WAIMEA	HILO	DISPERSED GENERATION
Average ULSD Fuel Cost - \$/BBL	71.0927	71.0927	71.0927	71.0927
Land Transportation Cost - \$/BBL	3.1891	2.3612	0.8577	-
ULSD Costs For Filing - \$/BBL	74.2819	73.4540	71.9505	71.0927
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,296.37	1,281.92	1,255.68	1,240.71

Dispersed Generation, cents per kWh

	<u>COMPOSITE COST OF DISP. GEN.</u>
BBIs Fuel:	8.4855
\$/BBI Inv Cost:	71.0927
Fuel \$ (Prod Sim Consumption x Unit Cost)	603.26
Net kWh (from Prod Sim)	5,000
cents/kWh:	12.065

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

	SHIPMAN INDUSTRIAL		HILL INDUSTRIAL		COST PER BARREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 11/30/2016	0	0.00	41,039	2,061,171.14			
Less: Est'd Inventory Addn			0	0.00			
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	(37,084)	(1,892,774.95)			
Actual	0	0.00	34,938	1,777,130.63			
Consumed: Estimate	0	0.00	35,113	1,529,768.07			
Actual	0	0.00	(34,778)	(1,479,161.55)			
Balance Per G/L 11/30/2016	0	0.00	39,228	1,996,133.34			
Purchases	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer out	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer in	0	0.00	28,101	1,444,379.98			
Consumed	0	0.00	(33,094)	(1,684,153.66)	106.5901	0.0000	106.5901
Balance @ 12/31/2016	0	0.00	34,235	1,756,359.66			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	3,797	205,213.44			
Fuel Balance @ 12/31/2016	0	0.00	38,032	1,961,573.10			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxx	(1,961,573.10)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxxx	1,981,389.02			
Total @ 9/30/2013 Avg Price	0	0.00	38,032	1,981,389.02			

Weighted Avg Cost/BBL by Location #DIV/0! 51.5775

Weighted Avg Cost/BBL @ Avg Cost #DIV/0! 52.0985

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

PUNA INDUSTRIAL

	BBL	COST	LAND TRANSP	COST PER BARREL		TOTAL
				EXCLUDE LT	LT	
Balance at 11/30/2016	7,305	345,821.45	4,162.55			
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	(1,067)	(61,688.36)	(1,275.85)			
Actual	490	31,089.39	663.64			
Consumed: Estimate	2,601	113,317.77	2,055.83			
Actual	(2,489)	(80,483.96)	(1,967.31)			
Balance Per G/L 11/30/2016	<u>6,840</u>	<u>348,056.29</u>	<u>3,638.86</u>			
Purchases	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer in	1,451	60,284	1,735.02			
Consumed	(1,708)	(86,920.12)	(905.24)	50.8900	0.5300	51.4200
Balance @ 12/31/2016	<u>6,583</u>	<u>321,420.65</u>	<u>4,468.64</u>			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	<u>6,583</u>	<u>321,420.65</u>	<u>4,468.64</u>		<u>0.6788</u>	
Reverse Fuel Balance	xxxxxxxxxxxx	(321,420.65)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	342,964.37	xxxxxxxxxxxx			
Total @ 01/01/2017 Avg Price	<u>6,583</u>	<u>342,964.37</u>	<u>4,468.64</u>			

Weighted Avg Cost/BBL by Location

48.8259

0.6788

Weighted Avg Cost/BBL @ Avg Cost

52.0985

0.6788

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

KEAHOLE CT

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER EXCLUD LT	BARREL LT	TOTAL
Balance at 11/30/2016	47,272.0	1,985,422.0	3,398,229.4	159,355.4			
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	(38,211.5)	(1,604,884.0)	(2,842,291.0)	(102,131.8)			
Actual	43,082.5	1,809,466.0	3,209,613.8	113,424.47			
Consumed: Estimate	43,415.2	1,823,439.0	2,988,673.0	122,014.12			
Actual	(41,677.5)	(1,750,453.0)	(2,689,999.9)	(118,430.9)	64.5433		
Balance Per G/L 11/30/2016	53,880.7	2,262,990	4,064,225.40	174,231.30	75.4301		
Purchases	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer in	36,438.0	1,530,397.0	2,765,279.2	97,391.6	75.8899		
Consumed	(43,205.5)	(1,814,631.0)	(3,266,335.8)	(139,553.77)	75.6000	3.2300	78.8300
Balance @ 12/31/2016	47,113.2	1,978,756	3,563,168.80	132,069.09	75.6299		
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	47,113.2	1,978,756	3,563,168.80	132,069.09	75.6299		
Reverse Fuel Balance	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	(3,563,168.8)	xxxxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	3,584,480.8	xxxxxxxxxxxxxx			
Total @ 01/01/2017 Avg Price	47,113.2	1,978,756	3,584,480.77	132,069.09	76.0822		

Weighted Avg Cost/BBL by Location 75.6299 2.8032

Weighted Avg Cost/BBL @ Avg Cost 76.0822 2.8032

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

PUNA CT-3

HS Diesel	BBL	GALLONS	COST EXCLUD LT	LAND TRANSP	COST PER EXCL LT	BARREL LT	TOTAL
Balance at 11/30/2016	3,447.6	144,800.0	300,708.0	4,674.8			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate		xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfers out: Estimate		xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfers in: Estimate	(945.0)	(39,689.0)	(71,375.6)	(985.0)			
Actual	884.7	37,157.0	88,477.5	1,179.5			
Consumed: Estimate	864.6	36,313.0	59,518.1	1,190.2			
Actual	(633.0)	(26,588.0)	(104,355.7)	(858.9)			
Balance Per G/L 11/30/2016	3,618.9	151,993	272,972.40	5,200.65			
Purchases		xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer out		xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer in	768.5	32,277.0	59,477.2	801.0	77.3939		
Consumed	(235.0)	(9,869)	(17,764.20)	(338.37)	75.6000	1.4400	77.0400
Balance @ 12/31/2016	4,152.4	174,401	314,685.42	5,663.29	75.7839		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 12/31/2016	4,152.4	174,401	314,685.42	5,663.29	75.7839		
Reverse Fuel Balance		xxxxxxxxxxxxxx	(314,685.42)	xxxxxxxxxxxxxx			
Fuel Balance @ Avg Price		xxxxxxxxxxxxxx	315,924.26	xxxxxxxxxxxxxx			
Total @ 01/01/2017 Avg Price	4,152.4	174,401	315,924.26	5,663.29	76.0822		

Weighted Avg Cost/BBL by Location 75.7839 1.3639

Weighted Avg Cost/BBL @ Avg Cost 76.0822 1.3639

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

TOTAL HILO HS-DIESEL

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER EXCL LT	BARREL LT	TOTAL
Balance at 11/30/2016	1667.7	70,045	117,715	1,074			
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	0.9	38.0	0.0	0.8			
Actual	-220.6	-9267.0	0.0	0.0			
Consumed: Estimate	25.4	1066.0	1747.2	16.6			
Actual	-25.9	-1086.0	-10275.3	155.0			
Balance Per G/L 11/30/2016	1447.5	60,796	109,186.81	1,246.00	75.4301		
Purchases		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer out		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer in	-2.7	-114.0	0.0	-2.5	0.0000		
Consumed	-10.0	-422.0	-759.6	-8.6	75.6000	0.8600	76.4600
Balance @ 12/31/2016	1,434.8	60,260	108,427.21	1,234.86	75.5716		
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	1,434.8	60,260	108,427.21	1,234.86	75.5716		
Reverse Fuel Balance		XXXXXXXXXXXX	XXXXXXXXXXXX -108,427.21	XXXXXXXXXXXX			
Fuel Balance @ Avg Price		XXXXXXXXXXXX	XXXXXXXXXXXX 109,159.90	XXXXXXXXXXXX			
Total @ 01/01/2017 Avg Price	1,434.8	60,260	109,159.90	1,234.86	76.0822		

Weighted Avg Cost/BBL by Location

75.5716 0.8607

Weighted Avg Cost/BBL @ Avg Cost

76.0822 0.8607

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

KEAHOLE DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	LT	TOTAL
Balance at 11/30/2016	1,984.9	83,366	135,133.49	5,145.44			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(188.8)	(7,931)	(13,165.46)	(504.71)			
Actual	188.8	7,931	14,203.63	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate		(19)	0.00	(1.21)			
Actual		51	0.00	504.71			
Consumed: Estimate	178.7	7,504	12,420.64	461.69			
Actual	(141.9)	(5,959)	(6,876.89)	933.98	48.4694		
Balance Per G/L 11/30/2016	2,022.5	84,943	141,715.41	6,539.90	70.0711		
Purchases	189.1	7,943	13,916.93	505.48	0.0000		
Estimated Purchases	0.0	0	0.00	0.00			
Transfer in	(33.7)	(1,416)	0.00	(90.11)	0.00		
Consumed	(240.9)	(10,117)	(16,895.39)	(778.05)	70.1400	3.2300	73.3700
Balance @ 12/31/2016	1,937.0	81,353	138,736.95	6,177.22	71.6255		
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	1,937.0	81,353	138,736.95	6,177.22	71.6255		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(138,736.95)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	137,704.96	xxxxxxxxxxxx			
Total @ 01/01/2017 Avg Price	1,937.0	81,353	137,704.96	6,177.22	71.0927		

Weighted Avg Cost/BBL by Location

71.6255 3.1891

Weighted Avg Cost/BBL @ Avg Cost

71.0927 3.1891

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

WAIMEA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL	LT	TOTAL
Balance at 11/30/2016	1,439.9	60,477.0	99,166.4	3,353.97			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(7,930)	(13,163.80)	(420.42)			
Actual		7,930.0	14,201.8	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate	(2.1)	(87)	0.00	0.00			
Actual	5.3	223	0.00	420.42			
Consumed: Estimate	200.1	8,404	13,910.32	469.22			
Actual	(157.0)	(6,593)	(9,969.08)	(314.50)			
Balance Per G/L 11/30/2016	1,486.3	62,424	104,145.64	3,508.69	70.0711		
ULSD Purchases	189.0	7,939	13,909.92	420.90	73.5882		
Estimated Purchases	-	0	0.00	0.00			
Transfer in	xxxxxxxxxxxx	(460)	0.00	0.00	#DIV/0!		
Consumed	(265.4)	(11,146)	(18,613.82)	(626.30)	70.1400	2.3600	72.5000
Balance @ 12/31/2016	1,399.0	58,757	99,441.74	3,303.29	71.0818		
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	1,399.0	58,757	99,441.74	3,303.29	71.0818		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(99,441.74)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	99,457.06	xxxxxxxxxxxx			
Total @ 01/01/2017 Avg Price	1,399.0	58,757	99,457.06	3,303.29	71.0927		

Weighted Avg Cost/BBL by Location

71.0818 2.3612

Weighted Avg Cost/BBL @ Avg Cost

71.0927 2.3612

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

KANOELEHUA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP		
Balance at 11/30/2016	1,422.6	59,748.0	102,425.1	1,346.2		
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		266	0.00	5.83		
Actual		(342)	0.00	0.00		
Consumed: Estimate	20.7	870	1,440.03	37.15		
Actual	(25.4)	(1,066)	(4,637.85)	(170.24)		
Balance Per G/L 11/30/2016	1,416.1	59,476	99,227.32	1,218.94		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	(6)	(267)	0.00	(5.85)		
Consumed	(21.1)	(885)	(1,477.95)	(21.97)	70.14	0.8600
Balance @ 12/31/2016	1,388.7	58,324	97,749.37	1,191.12		
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	1,388.7	58,324	97,749.37	1,191.12		
Reverse Fuel Balance	x	x	(97,749.37)	x		
Fuel Balance @ Avg Price	x	x	98,724.13	x		
Total @ 01/01/2017 Avg Price	1,388.7	58,324	98,724.13	1,191.12		

Weighted Avg Cost/BBL by Location

70.3908 0.8577

Weighted Avg Cost/BBL @ Avg Cost

71.0927 0.8577

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
December 2016

DISPERSED GENERATION

	BBL	GALLONS	COST	COST/BBL
Balance at 11/30/2016	75.9	3,186	6,371.74	
Less: Est'd Inven Addition	0.0	XXXXXXXXXXXXXXXXXXXX		
Purchases: Estimate	0.0	0	0.00	
Actual	0.0	0	0.00	
Consumed: Estimate	3.4	144	238.35	
Actual	(4.1)	(173)	(1,343.08)	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Balance Per G/L 11/30/2016	75.17	3,157	5,267.01	70.0711
Purchases	11.9	498	872.55	73.5886
Transfer out	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Transfer in	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Consumed	(5.5)	(233)	(389.11)	70.1400
Balance @ 12/31/2016	81.5	3,422	5,750.45	70.5783
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 12/31/2016	81.5	3,422	5,750.45	
Reverse Fuel Balance	XXXXXXXXXX	XXXXXXXXXX	(5,750.45)	xxxx
Fuel Balance @ Avg Price	XXXXXXXXXX	XXXXXXXXXX	5,792.37	xxxx
Total @ 01/01/2017 Avg Price	81.5	3,422	5,792.37	71.0927

HAWAII ELECTRIC LIGHT COMPANY, INC.
CONTRACT PRICES EFFECTIVE December 1, 2016

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	49.96	3.1473	49.96	3.1473
Ocean Transportation	58.18	3.6655	58.18	3.6655
Storage	17.03	1.0729	17.03	1.0729
Wharfage	3.97	0.2500	3.97	0.2500

DIESEL *	<u>Hilo Diesel</u>		<u>Waimea 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

	<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

ULSD **	<u>ULSD</u>	
	<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

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

Note: Since the components above 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 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 January 1, 2017

		January 1, 2017 <u>(¢/kWh)</u>	Floor Rates <u>(¢/kWh)</u>
PGV (25 MW)	- on peak	10.505	6.560
PGV (22 MW)	- off peak	10.332	5.430
WAILUKU HYDRO	- on peak	10.505	7.240
	.	10.332	5.970
Other: (<100 KW)	Sch Q Rate	10.110	
		January 1, 2017 <u>(¢/kWh)</u>	Floor Rates <u>(¢/kWh)</u>
HEP		11.740	
PGV Addtl 5 MW	- on peak	12.6700	0.0000
	- off peak	12.6700	0.0000
PGV Addtl 8 MW	- on peak	9.6600	0.0000
	- off peak	6.4400	0.0000

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

<u>Line No.</u>	<u>Description</u>	<u>Amount</u>
1	Amount to be returned or collected	(\$785,400)
2	Monthly Amount ($\frac{1}{3}$ x Line 1)	(\$261,800)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$287,329)
5	Estimated MWh Sales (January 1, 2017)	84,898 mwh
6	Adjustment (Line 4 / Line 5)	(0.338) ¢/kwh

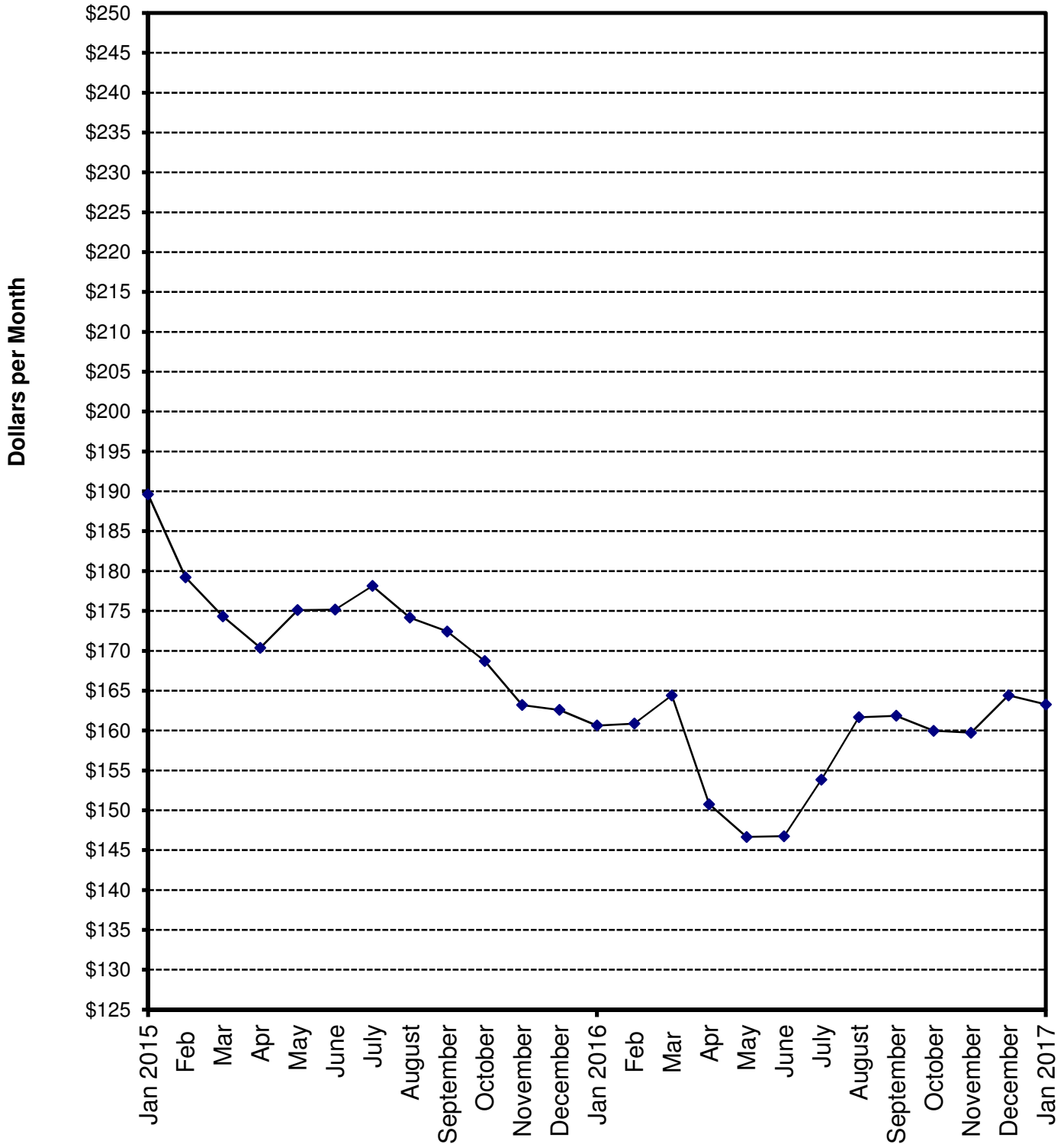
HAWAII ELECTRIC LIGHT COMPANY, INC.
2016 Cumulative Reconciliation Balance

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)		
January 17							

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 BILL (\$)</u>
	<u>RESIDENTIAL & COMMERCIAL</u>	<u>@ 500 KWH @ 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

**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

**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		
	12/01/16	1/01/17	12/01/16	1/01/17	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 2.3371	2.3400	\$11.69	\$11.70	\$0.01
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 (2.5840)	(2.8420)	-\$12.92	-\$14.21	-\$1.29
Green Infrastructure Fee	\$ 1.1300	1.2700	\$1.13	\$1.27	\$0.14
Avg Residential Bill at 500 kwh			\$164.41	\$163.27	
			Increase (Decrease -)		-\$1.14
			% Change		-0.69%

	Rate		Charge (\$) at 600 Kwh		
	12/01/16	1/01/17	12/01/16	1/01/17	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 2.3371	2.3400	\$14.02	\$14.04	\$0.02
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 (2.5840)	(2.8420)	-\$15.50	-\$17.05	-\$1.55
Green Infrastructure Fee	\$ 1.1300	1.2700	\$1.13	\$1.27	\$0.14
Avg Residential Bill at 600 kwh			\$196.97	\$195.58	
			Increase (Decrease -)		-\$1.39
			% Change		-0.71%