



FILED

JAY IGNACIO, P. E.  
President

April 27, 2016

2016 APR 27 P 3:42

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 May 2016

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") energy cost adjustment factor for May 2016 is -5.554 cents per kilowatt-hour ("kWh"), a decrease of 0.839 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$146.66, a decrease of \$4.10 compared to the rates effective April 1, 2016. The decrease in the typical residential bill is due to the decrease in the energy cost adjustment factor (-\$4.19), the decrease in the Purchased Power Adjustment Clause rate (-\$1.30), and the termination of the April 2016 credit for the SolarSaver Adjustment (+\$1.39).

Hawai'i Electric Light's fuel composite cost of generation increased 21.14 cents per million BTU to 727.33 cents per million BTU. The composite cost of distributed generation increased 0.931 cents per kWh to 11.951 cents per kWh. The composite cost of purchased energy increased 0.264 cents per kWh to 11.172 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 May 1, 2016.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

## HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST ADJUSTMENT FACTOR

	<u>EFFECTIVE DATES</u>		
	<u>4/01/16</u>	<u>5/01/16</u>	<u>Change</u>
<u>Composite Cost</u>			
Generation, ¢/mmbtu	706.19	727.33	21.14
Dispersed Generation Energy, ¢/kWh	11.020	11.951	0.931
Purchased Energy, ¢/kWh	10.908	11.172	0.264
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment - ¢/kWh	(4.715)	(5.554)	(0.839)
<u>Others - "G,J,P,F"</u>			
Energy Cost Adjustment - ¢/kWh	(4.715)	(5.554)	(0.839)
Residential Customer with:			
500 KWH Consumption - \$/Bill	\$150.76	\$146.66	(\$4.10)
600 KWH Consumption - \$/Bill	\$180.57	\$175.64	(\$4.93)

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

ENERGY COST ADJUSTMENT (ECA) FILING - May 1, 2016 (Page 1 of 2)

<u>Line</u>		
1	Effective Date	May 1, 2016
2	Supercedes Factors of	April 1, 2016

**GENERATION COMPONENT**

<b>CENTRAL STATION WITH WIND/HYDRO COMPONENT</b>						
FUEL PRICES, ¢/mmbtu						
3						
4	Hill Industrial		466.12			
5	Puna Industrial		492.71			
6	Keahole Diesel		998.57			
6a	Keahole ULSD		1,249.87			
7	Waimea ULSD Diesel		1,241.01			
8	Hilo Diesel		965.64			
8a	Hilo (Kanoelehua) ULSD Diesel <sup>1</sup>		1,217.06			
9	Puna Diesel		974.59			
10	Wind		0.00			
11	Hydro		0.00			
BTU MIX, %						
12						
13	Hill Industrial		42.620			
14	Puna Industrial		0.000			
15	Keahole Diesel		48.267			
15a	Keahole ULSD		1.638			
16	Waimea ULSD Diesel		1.472			
17	Hilo Diesel		0.285			
17a	Hilo (Kanoelehua) ULSD Diesel <sup>1</sup>		0.427			
18	Puna Diesel		0.000			
19	Wind		0.000			
20	Hydro		5.291			
			100.000			
21	COMPOSITE COST OF GENERATION, CENTRAL STATION + WIND/HYDRO ¢/mmb		727.33			
22	% Input to System kWh Mix		42.406			
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	36.455	0.005522		
24	Diesel	0.010424	58.255	0.006073		
25	Other	0.012621	5.291	0.000668		
	(Lines 23, 24, 25): Col(B) x Col(C) = Col(D)					
26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]			0.0122630		
27	WEIGHTED COMPOSITE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/kWh (Lines (21 x 22 x 26))				3.78230	
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)				(3.33565)	
33	Revenue Tax Req Multiplier				1.0975	
34	CENTRAL STATION + WIND/HYDRO GENERATION FACTOR, ¢/kWh (Line (32 x 33))				(3.66088)	
				<b>DG ENERGY COMPONENT</b>		
				35	COMPOSITE COST OF DG ENERGY, ¢/kWh	11.951
				36	% Input to System kWh Mix	0.339
				37	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 35 x 36)	0.04051
				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)	0.03109
				42	Loss Factor	1.067
				43	Revenue Tax Req Multiplier	1.0975
				44	DG FACTOR, ¢/kWh (Line 41 x 42 x 43)	0.03641
				<b>SUMMARY OF</b>		
				TOTAL GENERATION FACTOR, ¢/kWh		
				45	Cntrl Stn+Wind/Hydro (line 34)	(3.66088)
				46	DG (line 44)	0.03641
				47	TOTAL GENERATION FACTOR, ¢/kWh (lines 45 + 46)	(3.62447)

<sup>1</sup> Hilo ULSD same location as Kanoelehua ULSD

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

ENERGY COST ADJUSTMENT (ECA) FILING - May 1, 2016 (Page 2 of 2)

Line	<b>PURCHASED ENERGY COMPONENT</b>		
	PURCHASED ENERGY PRICE, ¢/kWh		
48	HEP		11.618
49	PGV	On Peak	8.524
50	PGV	Off Peak	9.808
51	PGV - Add'l 5 MW	On Peak	12.480
52	PGV - Add'l 5 MW	Off Peak	12.480
53	PGV - Add'l 8 MW	On Peak	9.520
54	PGV - Add'l 8 MW	Off Peak	6.340
55	Wailuku Hydro	On Peak	8.524
56	Wailuku Hydro	Off Peak	9.808
57	Hawi Renewable Dev.	On Peak	8.524
58	Hawi Renewable Dev.	Off Peak	9.808
59	Tawhiri (Pakini Nui)	On Peak	16.440
60	Tawhiri (Pakini Nui)	Off Peak	13.630
61			
62	Small Hydro (>100 KW)	On Peak	8.524
63	Small Hydro (>100 KW)	Off Peak	9.808
64	Sch Q Hydro (<100 KW)		8.780
65	FIT		23.800
	PURCHASED ENERGY KWH MIX, %		
66	HEP		25.028
67	PGV	On Peak	20.612
68	PGV	Off Peak	12.543
69	PGV - Addt'l	On Peak	3.700
70	PGV - Addt'l	Off Peak	2.947
71	PGV - Add'l 8 MW	On Peak	1.454
72	PGV - Add'l 8 MW	Off Peak	3.369
73	Wailuku Hydro	On Peak	2.815
74	Wailuku Hydro	Off Peak	1.744
75	Hawi Renewable Dev.	On Peak	3.828
76	Hawi Renewable Dev.	Off Peak	0.943
77	Tawhiri (Pakini Nui)	On Peak	12.705
78	Tawhiri (Pakini Nui)	Off Peak	7.553
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)		0.219
83	FIT		0.540
			100.000
84	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		11.172
85	% Input to System kWh Mix		57.255
86	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (Lines (84 x 85))		6.39653
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))		(0.79861)
91	Loss Factor		1.067
92	Revenue Tax Req Multiplier		1.0975
93	PURCHASED ENERGY FACTOR, ¢/kWh (Lines (90 x 91 x 92))		(0.93520)

Line	<b>SYSTEM COMPOSITE</b>	
94	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93)) (4.55967)	
95	Not Used 0.000	
96	Not Used 0.000	
97	ECA Reconciliation Adjustment (0.994)	
98	ECA FACTOR, ¢/kWh (Lines (94 + 95+ 96 + 97)) (5.554)	

**Hawaii Electric Light Company, Inc.**  
FUEL OIL INVENTORY PRICES FOR May 1, 2016

**INDUSTRIAL FUEL COSTS:**

	<u>HILO</u>	<u>PUNA</u>
Average Industrial Fuel Cost - \$/BBL	29.3656	29.3656
Land Transportation Cost - \$/BBL	--	1.6754
Industrial Costs For Filing - \$/BBL	29.3656	31.0410
Conversion Factors - mmbtu/BBL	6.30	6.30
Industrial Costs For Filing - ¢/mmbtu	466.12	492.71

**DIESEL FUEL COSTS:**

	<u>KEAHOLE</u>	<u>PUNA CT-3</u>	<u>HILO</u>
Average Diesel Fuel Cost - \$/BBL	55.9039	55.9039	55.9039
Land Transportation Cost - \$/BBL	2.6125	1.2068	0.6829
Diesel Costs For Filing - \$/BBL	58.5164	57.1107	56.5867
Conversion Factors - mmbtu/BBL	5.86	5.86	5.86
Diesel Costs For Filing - ¢/mmbtu	998.57	974.59	965.64

**ULSD FUEL COSTS:**

	<u>KEAHOLE</u>	<u>WAIMEA</u>	<u>HILO</u>	<u>DISPERSED GENERATION</u>
Average ULSD Fuel Cost - \$/BBL	68.8075	68.8075	68.8075	68.8075
Land Transportation Cost - \$/BBL	2.8101	2.3021	0.9299	-
ULSD Costs For Filing - \$/BBL	71.6176	71.1096	69.7373	68.8075
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,249.87	1,241.01	1,217.06	1,200.83

**Dispersed Generation, cents per kWh**

	<u>COMPOSITE COST OF DISP. GEN.</u>
BBIs Fuel:	541.8848
\$/BBI Inv Cost:	68.8075
Fuel \$ (Prod Sim Consumption x Unit Cost)	37,285.73
Net kWh (from Prod Sim)	312,000
cents/kWh:	11.951

**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

	SHIPMAN INDUSTRIAL		HILL INDUSTRIAL		COST PER BARREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 03/31/2016	0	0.00	44,371	1,299,616.95			
Less: Est'd Inventory Addn			0	0.00			
Purchases: Estimate	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Actual	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfers out: Estimate	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Actual	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfers in: Estimate	0	0.00	(53,866)	(1,585,684.83)			
Actual	0	0.00	51,386	1,528,098.38			
Consumed: Estimate	0	0.00	42,213	1,271,801.71			
Actual	0	0.00	(44,115)	(1,317,737.11)			
Balance Per G/L 03/31/2016	0	0.00	39,989	1,196,095.10			
Purchases	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer out	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer in	0	0.00	30,359	860,085.88			
Consumed	0	0.00	(36,537)	(1,075,419.10)	106.5901	0.0000	106.5901
Balance @ 04/30/2016	0	0.00	33,811	980,761.88			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 04/30/2016	0	0.00	33,811	980,761.88			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxx	(980,761.88)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxx	992,879.28			
Total @ 9/30/2013 Avg Price	0	0.00	33,811	992,879.28			

Weighted Avg Cost/BBL by Location #DIV/0! 29.0072

Weighted Avg Cost/BBL @ Avg Cost #DIV/0! 29.3656

**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

PUNA INDUSTRIAL

	BBL	COST	LAND TRANSP	COST PER BARREL		TOTAL
				EXCLUDE LT	LT	
Balance at 03/31/2016	8,449	254,492.75	15,905.64			
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	(2)	0.00	(2.39)			
Actual	11	0.00	0.00			
Consumed: Estimate	3	90.38	5.65			
Actual	(2)	(59.74)	(3.78)			
Balance Per G/L 03/31/2016	<u>8,459</u>	<u>254,523.39</u>	<u>15,905.12</u>			
Purchases	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer in	2,588	77,389	3,094.58			
Consumed	(2,373)	(69,846.17)	(4,467.17)	29.4337	1.8825	31.3162
Balance @ 04/30/2016	<u>8,674</u>	<u>262,066.21</u>	<u>14,532.52</u>			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	<u>8,674</u>	<u>262,066.21</u>	<u>14,532.52</u>		<u>1.6754</u>	
Reverse Fuel Balance	xxxxxxxxxxxx	(262,066.21)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	254,716.95	xxxxxxxxxxxx			
Total @ 05/01/2016 Avg Price	<u>8,674</u>	<u>254,716.95</u>	<u>14,532.52</u>			

Weighted Avg Cost/BBL by Location

30.2128

1.6754

Weighted Avg Cost/BBL @ Avg Cost

29.3656

1.6754

**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

KEAHOLE CT

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	LT	TOTAL
Balance at 03/31/2016	40,006.8	1,680,287.0	2,207,653.8	107,116.2			
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		xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx			
Transfers in: Estimate	(43,257.2)	(1,816,802.0)	(2,407,950.5)	(115,617.8)			
Actual	44,198.9	1,856,353.0	2,426,185.6	115,793.40			
Consumed: Estimate	48,414.8	2,033,421.0	2,983,602.7	126,632.52			
Actual	(48,320.4)	(2,029,457.0)	(2,950,241.0)	(126,505.1)	61.0558		
Balance Per G/L 03/31/2016	41,042.9	1,723,802	2,259,250.66	107,419.19	55.0461		
Purchases	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx			
Transfer in	46,870.6	1,968,566.0	2,553,030.9	125,275.8	54.4697		
Consumed	(46,551.7)	(1,955,173.0)	(2,577,541.8)	(124,637.62)	55.3694	2.6774	58.0468
Balance @ 04/30/2016	41,361.8	1,737,195	2,234,739.73	108,057.36	54.0291		
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	41,361.8	1,737,195	2,234,739.73	108,057.36	54.0291		
Reverse Fuel Balance	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	(2,234,739.7)	xxxxxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxx	2,312,284.0	xxxxxxxxxxxxxxx			
Total @ 05/01/2016 Avg Price	41,361.8	1,737,195	2,312,283.95	108,057.36	55.9039		

Weighted Avg Cost/BBL by Location 54.0291 2.6125

Weighted Avg Cost/BBL @ Avg Cost 55.9039 2.6125



**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

PUNA CT-3

HS Diesel	BBL	GALLONS	COST EXCLUD LT	LAND TRANSP	COST PER EXCL LT	BARREL LT	TOTAL
Balance at 03/31/2016	3,598.6	151,140.0	221,845.1	4,135.4			
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	56.3	2,366.0	3,392.4	67.4			
Actual	(55.4)	(2,325.0)	0.0	0.0			
Consumed: Estimate	197.0	8,273.0	12,138.8	226.5			
Actual	(218.9)	(9,192.0)	(13,362.5)	(207.9)			
Balance Per G/L 03/31/2016	3,577.7	150,262	224,013.76	4,221.37			
Purchases		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer out		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer in	1,785.4	74,986.0	100,681.5	2,134.9	56.3922		
Consumed	(2,014.0)	(84,589)	(111,515.29)	(2,314.52)	55.3694	1.1492	56.5186
Balance @ 04/30/2016	3,349.0	140,659	213,180.00	4,041.71	63.6544		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 04/30/2016	3,349.0	140,659	213,180.00	4,041.71	63.6544		
Reverse Fuel Balance		xxxxxxxxxxxx	(213,180.00)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price		xxxxxxxxxxxx	187,223.40	xxxxxxxxxxxx			
Total @ 05/01/2016 Avg Price	3,349.0	140,659	187,223.40	4,041.71	55.9039		

Weighted Avg Cost/BBL by Location 63.6544 1.2068

Weighted Avg Cost/BBL @ Avg Cost 55.9039 1.2068

**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

TOTAL HILO HS-DIESEL

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER EXCL LT	BARREL LT	TOTAL
Balance at 03/31/2016	1102.6	46,311	66,673	943			
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	-187.2	-7862.0	-10256.7	-172.2			
Actual	186.8	7847.0	10147.1	173.6			
Consumed: Estimate	520.1	21846.0	32054.3	438.2			
Actual	-418.9	-17595.0	-25578.0	-440.3			
Balance Per G/L 03/31/2016	1203.5	50,547	73,039.15	942.71	60.6889		
Purchases		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer out		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer in	1509.2	63385.0	87125.8	1214.9	0.0000		
Consumed	-1766.9	-74210.0	-97832.5	-1511.8	55.3694	0.8556	56.2250
Balance @ 04/30/2016	945.8	39,722	62,332.54	645.83	65.9072		
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	945.8	39,722	62,332.54	645.83	65.9072		
Reverse Fuel Balance		XXXXXXXXXXXX	XXXXXXXXXXXX	-62,332.54	XXXXXXXXXXXX		
Fuel Balance @ Avg Price		XXXXXXXXXXXX	XXXXXXXXXXXX	52,871.75	XXXXXXXXXXXX		
Total @ 05/01/2016 Avg Price	945.8	39,722	52,871.75	645.83	55.9039		

Weighted Avg Cost/BBL by Location

65.9072 0.6829

Weighted Avg Cost/BBL @ Avg Cost

55.9039 0.6829

**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

KEAHOLE DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	LT	TOTAL
Balance at 03/31/2016	1,941.9	81,559	137,297.36	5,090.01			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(190.0)	(7,980)	(9,850.52)	(507.83)			
Actual	188.8	7,928	9,788.79	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate		(8)	0.00	(0.51)			
Actual		77	0.00	504.52			
Consumed: Estimate	318.9	13,395	23,202.82	834.19			
Actual	(270.9)	(11,377)	(20,114.10)	(342.61)	74.2544		
Balance Per G/L 03/31/2016	1,990.3	83,594	140,324.35	5,577.77	70.5029		
Purchases	190.1	7,985	10,742.23	508.15	0.0000		
Estimated Purchases	190.0	7,980	10,735.50	507.83			
Transfer in	(1.0)	(41)	0.00	(2.61)	0.00		
Consumed	(356.8)	(14,987)	(25,398.01)	(935.33)	71.1761	2.6212	73.7973
Balance @ 04/30/2016	2,012.6	84,531	136,404.08	5,655.81	67.7736		
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	2,012.6	84,531	136,404.08	5,655.81	67.7736		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(136,404.08)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	138,484.90	xxxxxxxxxxxx			
Total @ 05/01/2016 Avg Price	2,012.6	84,531	138,484.90	5,655.81	68.8075		

Weighted Avg Cost/BBL by Location

67.7736      2.8101

Weighted Avg Cost/BBL @ Avg Cost

68.8075      2.8101

**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

WAIMEA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL	LT	TOTAL
Balance at 03/31/2016	1,457.0	61,192.0	102,077.9	3,273.52			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(15,917)	(19,647.96)	(843.86)			
Actual		15,867.0	19,583.8	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate	55.0	2,309	0.00	0.00			
Actual	(54.7)	(2,297)	0.00	841.22			
Consumed: Estimate	296.0	12,430	21,531.25	634.68			
Actual	(302.1)	(12,690)	(22,435.44)	(602.75)			
Balance Per G/L 03/31/2016	1,449.9	60,894	101,109.50	3,302.81	69.7376		
ULSD Purchases	188.9	7,935	10,674.97	420.69	56.5027		
Estimated Purchases	190.0	7,980	10,735.51	423.07			
Transfer in	xxxxxxxxxxxx	(738)	0.00	0.00	#DIV/0!		
Consumed	(417.5)	(17,533)	(29,712.63)	(937.93)	71.1761	2.2468	73.4229
Balance @ 04/30/2016	1,393.8	58,538	92,807.35	3,208.64	66.5877		
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	1,393.8	58,538	92,807.35	3,208.64	66.5877		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(92,807.35)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	95,901.26	xxxxxxxxxxxx			
Total @ 05/01/2016 Avg Price	1,393.8	58,538	95,901.26	3,208.64	68.8075		

Weighted Avg Cost/BBL by Location

66.5877 2.3021

Weighted Avg Cost/BBL @ Avg Cost

68.8075 2.3021

**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

KANOELEHUA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP		
Balance at 03/31/2016	1,357.0	56,996.0	98,996.7	1,075.8		
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		152	0.00	3.33		
Actual		(152)	0.00	173.62		
Consumed: Estimate	76.3	3,203	5,548.24	131.33		
Actual	(63.5)	(2,665)	(4,711.62)	(59.09)		
Balance Per G/L 03/31/2016	1,369.9	57,534	99,833.35	1,325.01		
ULSD Purchases	189	7,934	10,673.60	173.77	56.502546	
Estimated Purchases	0	-	-	-		
Transfer in	(12)	(495)	0.00	(10.84)		
Consumed	(149.4)	(6,276)	(10,635.74)	(188.42)	71.1761	0.7928
Balance @ 04/30/2016	1,397.5	58,697	99,871.21	1,299.52		
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	1,397.5	58,697	99,871.21	1,299.52		
Reverse Fuel Balance	x	x	(99,871.21)	x		
Fuel Balance @ Avg Price	x	x	96,161.74	x		
Total @ 05/01/2016 Avg Price	1,397.5	58,697	96,161.74	1,299.52		

Weighted Avg Cost/BBL by Location

71.4618 0.9299

Weighted Avg Cost/BBL @ Avg Cost

68.8075 0.9299

**HAWAII ELECTRIC LIGHT CO., INC.**  
Estimated Weighted Average  
April 2016

DISPERSED GENERATION

	BBL	GALLONS	COST	COST/BBL
Balance at 03/31/2016	84.3	3,541	6,134.04	
Less: Est'd Inven Addition	0.0	XXXXXXXXX	XXXXXXXXXX	
Purchases: Estimate	0.0	0	0.00	
Actual	0.0	0	0.00	
Consumed: Estimate	7.8	326	564.70	
Actual	(7.2)	(302)	630.16	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXX	
Balance Per G/L 03/31/2016	84.88	3,565	7,328.90	86.3433
Purchases	0.0	0	0.00	0.0000
Transfer out	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXX	
Transfer in	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXXX	
Consumed	(9.8)	(411)	(696.51)	71.1761
Balance @ 04/30/2016	75.1	3,154	6,632.39	88.3197
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 04/30/2016	75.1	3,154	6,632.39	
Reverse Fuel Balance	XXXXXXXXXXXX	XXXXXXXXXXXX	(6,632.39)	xxxx
Fuel Balance @ Avg Price	XXXXXXXXXXXX	XXXXXXXXXXXX	5,167.11	xxxx
Total @ 05/01/2016 Avg Price	75.1	3,154	5,167.11	68.8075

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

TYPE OF OIL BURNED

<b>INDUSTRIAL *</b>	<u>Hill Industrial</u>		<u>Puna Industrial</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax <sup>1</sup>	32.81	2.0669	32.81	2.0669
Ocean Transportation	51.74	3.2598	51.74	3.2598
Storage	17.03	1.0729	17.03	1.0729
Wharfage	3.81	0.2400	3.81	0.2400
<b>DIESEL *</b>	<u>Hilo Diesel</u>		<u>Waimea Diesel</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax <sup>1</sup>	61.13	3.7057	63.25	3.7057
Ocean Transportation	55.63	3.2598	55.63	3.2598
Storage	18.31	1.0729	18.31	1.0729
Wharfage	4.10	0.2400	4.10	0.2400
	<u>Kona Diesel</u>		<u>CT3 Diesel</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax <sup>1</sup>	61.13	3.7057	61.13	3.7057
Ocean Transportation	55.63	3.2598	55.63	3.2598
Storage	18.31	1.0729	18.31	1.0729
Wharfage	4.10	0.2400	4.10	0.2400
<b>ULSD **</b>	<u>ULSD</u>			
	<u>¢/MBTU</u>	<u>\$/BBL</u>		
Tax <sup>1</sup>	26.38	1.5120		
Ocean Transportation	0.00	0.0000		
Storage	0.00	0.0000		
Wharfage	0.00	0.0000		

<sup>1</sup> 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 May 1, 2016

		<u>May 1, 2016</u> <u>(¢/kWh)</u>	<u>Floor Rates</u> <u>(¢/kWh)</u>
PGV (25 MW)	- on peak	8.524	6.560
PGV (22 MW)	- off peak	9.808	5.430
WAILUKU HYDRO	- on peak	8.524	7.240
	.	9.808	5.970
Other: (<100 KW)	Sch Q Rate	8.780	
		<u>May 1, 2016</u> <u>(¢/kWh)</u>	<u>Floor Rates</u> <u>(¢/kWh)</u>
HEP		11.618	
PGV Addtl 5 MW	- on peak	12.4800	0.0000
	- off peak	12.4800	0.0000
PGV Addtl 8 MW	- on peak	9.5200	0.0000
	- off peak	6.3400	0.0000



**Hawaii Electric Light Company, Inc.**  
**Energy Cost Reconciliation Adjustment**  
May 1, 2016

<u>Line No.</u>	<u>Description</u>	<u>Amount</u>
1	Amount to be returned or collected	(\$2,320,900)
2	Monthly Amount ( $\frac{1}{3}$ x Line 1)	(\$773,633)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$849,074)
5	Estimated MWh Sales (May 1, 2016)	85,417 mwh
6	Adjustment (Line 4 / Line 5)	(0.994) ¢/kwh

HAWAII ELECTRIC LIGHT COMPANY, INC.  
2015 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY  
(Thousand \$)

LINE	DESCRIPTION	Info Only	collectn	Basis for Recon	Collection
		March 2016 YTD Total No Deadband	by company*	March 2016 YTD Total Deadband	or Refund by Company
ACTUAL COSTS:					
1	Generation	\$14,370.6		\$14,370.6	
2	Distributed Generation	\$3.1		\$3.1	
3	Purch Power	\$12,851.3		\$12,851.3	
4	TOTAL	<u>\$27,225.0</u>		<u>\$27,225.0</u>	
FUEL FILING COST (1)					
5	Generation	\$14,553.9		\$14,610.4	
6	Distributed Generation	\$3.1		\$3.1	
7	Purch Power	\$12,851.3		\$12,851.3	
8	TOTAL	<u>\$27,408.4</u>		<u>\$27,464.9</u>	
BASE FUEL COST					
9	Generation	\$20,396.2		\$20,396.2	
10	Distributed Generation	\$2.3		\$2.3	
11	Purch Power	\$17,634.0		\$17,634.0	
12	TOTAL	<u>\$38,032.5</u>		<u>\$38,032.5</u>	
13	FUEL-BASE COST (Line 8-12)	-\$10,624.1		-\$10,567.6	
14	ACTUAL FOA LESS TAX	-\$8,322.0		-\$8,322.0	
15	Less: FOA reconciliation adj for prior year	-\$75.3		-\$75.3	
16	ADJUSTED FOA LESS TAX	<u>-\$8,246.7</u>		<u>-\$8,246.7</u>	
17	FOA-(FUEL-BASE) (Line 16-13)	\$2,377.4 over		\$2,320.9 over	
ADJUSTMENTS:					
18	Current year FOA accrual reversal	\$0.0		\$0.0	
19	Other prior year FOA	\$0.0		\$0.0	
20	Other	<u>\$0.0</u>		<u>\$0.0</u>	
21	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	<u>\$2,377.4 over</u>		<u>\$2,320.9 over</u>	

\* 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 - Mar 2016  
YTD

	Notes	
<b><u>Industrial</u></b>		
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	62,038,451
Industrial Consumption (Recorded), MMBTU	b	885,743
Industrial Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	14,277
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	<b>15,048</b>
<b><u>Diesel</u></b>		
Diesel Efficiency Factor (per D&O), BTU/kWh*	f	10,424
Diesel Deadband Definition, +/- BTU/kWh	d	<b>100</b>
Diesel Portion of Recorded Sales, MWh	a	74,969,578
Diesel Consumption (Recorded), MMBTU	b	789,207
Diesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	10,527
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	<b>10,524</b>
<b><u>Biodiesel</u></b>		
Biodiesel Efficiency Factor (per D&O), BTU/kWh*	f	0
Biodiesel Deadband Definition, +/- BTU/kWh	d	<b>100</b>
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	<b>0</b>
<b><u>Hydro</u></b>		
Hydro Efficiency Factor (per D&O), BTU/kWh*	f	12,621
Hydro Deadband Definition, +/- BTU/kWh	d	<b>100</b>
Hydro Portion of Recorded Sales, MWh	a	1,373,275
Hydro Consumption (Recorded), MMBTU	b	17,223
Hydro Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	12,541
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	<b>12,541</b>

\* 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**

	<b>Without Deadband</b>	<b>With Deadband</b>
	<b>Jan 1 - Mar 31</b>	<b>As Filed</b>
	<u>Jan 1 - Mar 31</u>	<u>Jan 1 - Mar 31</u>
<b><u>INDUSTRIAL FUEL FILING COST</u></b>		
Industrial Portion of Recorded Sales , kWh	62,038,451	62,038,451
Industrial Efficiency Factor (mmbtu/kwh)	0.015148	0.015048
Mmbtu adjusted for Sales Efficiency Factor	939,758	933,555
\$/mmbtu	<u>\$5.4599</u>	<u>\$5.4599</u>
<b>TOTAL INDUSTRIAL \$000s TO BE RECOVERED</b>	<b>\$5,130.998</b>	<b>\$5,097.126</b>
<b><u>DIESEL FUEL FILING COST</u></b>		
Diesel Portion of Recorded Sales, kWh	74,969,578	74,969,578
Diesel Efficiency Factor (mmbtu/kwh)	0.010424	0.010524
Mmbtu adjusted for Sales Efficiency Factor	781,483	788,980
\$/mmbtu	<u>\$12.0578</u>	<u>\$12.0578</u>
<b>TOTAL DIESEL \$000s TO BE RECOVERED</b>	<b>\$9,422.926</b>	<b>\$9,513.322</b>
<b><u>HYDRO FUEL FILING COST</u></b>		
Hydro Portion of Recorded Sales , kWh	1,373,275	1,373,275
Hydro Efficiency Factor (mmbtu/kwh)	0.012621	0.012541
Mmbtu adjusted for Sales Efficiency Factor	17,332	17,222
\$/mmbtu	<u>\$0.0000</u>	<u>\$0.0000</u>
<b>TOTAL HYDRO \$000s TO BE RECOVERED</b>	<b>\$0.000</b>	<b>\$0.000</b>
<b>TOTAL GENERATION FUEL FILING COST, \$000s</b>	<b>\$14,553.9</b>	<b>\$14,610.4</b>
<b><u>CALCULATION OF GENERATION BASE FUEL COST</u></b>		
<b>TOTAL GENERATION BASE FUEL COST, \$000s</b>	<b>\$20,396.2</b>	<b>\$20,396.2</b>
<b>TOTAL GENERATION FUEL FILING COST, \$000s YTD</b>	<b>\$14,553.9</b>	<b>\$14,610.4</b>
<b>TOTAL GENERATION BASE FUEL COST YTD</b>	<b>\$20,396.2</b>	<b>\$20,396.2</b>

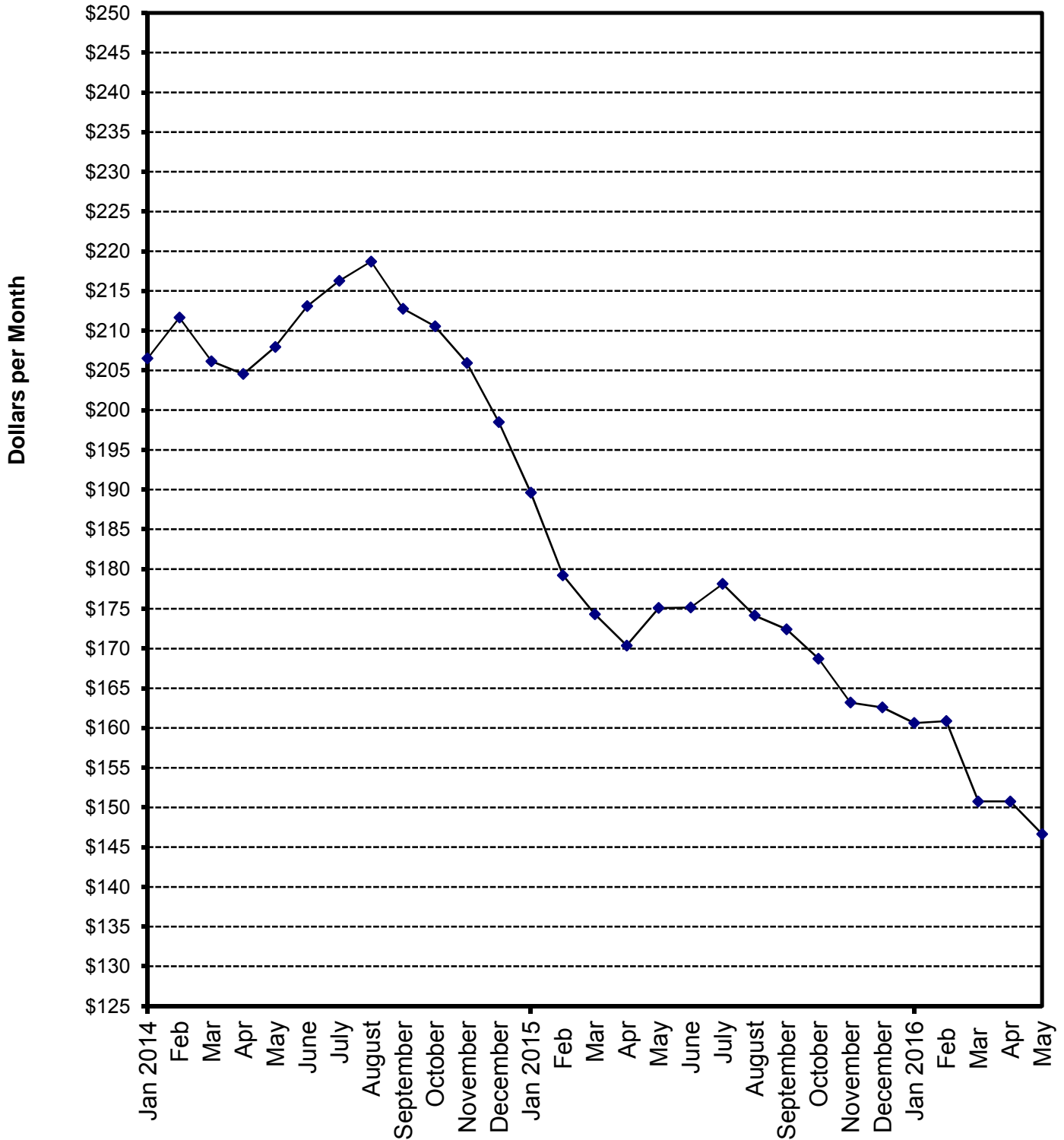
**HAWAII ELECTRIC LIGHT COMPANY, INC.**  
2016 Cumulative Reconciliation Balance

<u>Month</u>	(1) <u>YTD FOA Reconciliation</u>	<u>Qtr</u>	(2) <u>FOA Rec Adjust Variance</u>	(3) <u>FOA Rec Less Variance</u>	(4) <u>Try to Collect</u>	(5) <u>Actual Collect</u>	(6) <u>Month-end Cumulative Balance</u>
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		
May	2,320,900	[1]	2,178	2,318,722	(773,633)		

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

**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
<b>04/09/12</b>	<b>FINAL RATE INCREASE (1.28%), DOCKET NO. 2009-0164 (2010 TEST YEAR)</b>	
04/09/12 - 7/31/2012	PURCHASED POWER ADJUSTMENT CLAUSE	2.4355 CENTS/KWH
05/01/12	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	PURCHASED POWER ADJUSTMENT CLAUSE	2.4237 CENTS/KWH
01/01/13	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.7850 CENTS/KWH
02/01/13	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	RBA RATE ADJUSTMENT	0.4383 CENTS/KWH
7/1/2013	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	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	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
<b>5/1/2015</b>	<b>SOLARSAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>
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
<b>6/8/2015</b>	<b>RBA RATE ADJUSTMENT</b>	<b>1.3971 CENTS/KWH</b>
7/1/2015-7/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3157 CENTS/KWH
<b>7/1/2015</b>	<b>RESIDENTIAL PBF SURCHARGE ADJUSTMENT</b>	<b>0.4749 CENTS/KWH</b>
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
<b>1/1/2016</b>	<b>GREEN INFRASTRUCTURE FEE</b>	<b>1.3000 DOLLARS/MONTH</b>
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
<b>5/1/2016 - 5/31/16</b>	<b>PURCHASED POWER ADJUSTMENT CLAUSE</b>	<b>1.8623 CENTS/KWH</b>
<b>5/1/2016</b>	<b>SOLARSAVER ADJUSTMENT</b>	<b>0.0000 CENTS/KWH</b>

\*\*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			
	4/01/16	5/01/16	4/01/16	5/01/16	Difference	
<b>Base Rates</b>						
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
<b>Total Base Charges</b>				\$154.46	\$154.46	\$0.00
<b>RBA Rate Adjustment</b>	¢/kwh	1.3971	1.3971	\$6.99	\$6.99	\$0.00
<b>Purchased Power Adj. Clause</b>	¢/kwh	2.1228	1.8623	\$10.61	\$9.31	-\$1.30
<b>PBF Surcharge</b>	¢/kwh	0.4749	0.4749	\$2.37	\$2.37	\$0.00
<b>DSM Adjustment</b>	¢/kwh	0.0000	0.0000	\$0.00	\$0.00	\$0.00
<b>SolarSaver Adjustment</b>	¢/kwh	(0.2779)		-\$1.39	\$0.00	\$1.39
<b>Energy Cost Adjustment</b>	¢/kwh	(4.7150)	(5.5540)	-\$23.58	-\$27.77	-\$4.19
<b>Green Infrastructure Fee</b>	\$	1.3000	1.3000	\$1.30	\$1.30	\$0.00
<b>Avg Residential Bill at 500 kwh</b>				\$150.76	\$146.66	
				Increase (Decrease -)		-\$4.10
				% Change		-2.72%

	Rate		Charge (\$) at 600 Kwh			
	4/01/16	5/01/16	4/01/16	5/01/16	Difference	
<b>Base Rates</b>						
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
<b>Total Base Charges</b>				\$185.26	\$185.26	\$0.00
<b>RBA Rate Adjustment</b>	¢/kwh	1.3971	1.3971	\$8.38	\$8.38	\$0.00
<b>Purchased Power Adj. Clause</b>	¢/kwh	2.1228	1.8623	\$12.74	\$11.17	-\$1.57
<b>PBF Surcharge</b>	¢/kwh	0.4749	0.4749	\$2.85	\$2.85	\$0.00
<b>DSM Adjustment</b>	¢/kwh	0.0000	0.0000	\$0.00	\$0.00	\$0.00
<b>SolarSaver Adjustment</b>	¢/kwh	(0.2779)		-\$1.67	\$0.00	\$1.67
<b>Energy Cost Adjustment</b>	¢/kwh	(4.7150)	(5.5540)	-\$28.29	-\$33.32	-\$5.03
<b>Green Infrastructure Fee</b>	\$	1.3000	1.3000	\$1.30	\$1.30	\$0.00
<b>Avg Residential Bill at 600 kwh</b>				\$180.57	\$175.64	
				Increase (Decrease -)		-\$4.93
				% Change		-2.73%