



July 27, 2017

JAY IGNACIO, P. E.
President

The Honorable Chair and Members
of the Hawai'i Public Utilities Commission
Kekuanaoa Building, First Floor
465 South King Street
Honolulu, Hawai'i 96813

FILED
2017 JUL 27 P 2:49
PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

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

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Adjustment factor for August 2017 is -3.643 cents per kilowatt-hour ("kWh"), a decrease of 0.423 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$160.39, an increase of \$1.60 compared to rates effective July 1, 2017. The increase in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$2.12) and the increase in the Purchase Power Adjustment Clause rate (+\$3.72).

Hawai'i Electric Light's fuel composite cost of generation decreased 48.11 cents per million BTU to 931.08 cents per million BTU. The distributed generation decreased 6.149 cents per kWh to 7.540 cents per kWh. The composite cost of purchased energy decreased 0.340 cents per kWh to 10.963 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 August 1, 2017.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST ADJUSTMENT FACTOR

	<u>EFFECTIVE DATES</u>		
	<u>7/01/17</u>	<u>8/01/17</u>	<u>Change</u>
<u>Composite Cost</u>			
Generation, ¢/mmbtu	979.19	931.08	(48.11)
Dispersed Generation Energy, ¢/kWh	13.689	7.540	(6.149)
Purchased Energy, ¢/kWh	11.303	10.963	(0.340)
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment - ¢/kWh	(3.220)	(3.643)	(0.423)
<u>Others - "G,J,P,F"</u>			
Energy Cost Adjustment - ¢/kWh	(3.220)	(3.643)	(0.423)
Residential Customer with:			
500 KWH Consumption - \$/Bill	\$158.79	\$160.39	\$1.60
600 KWH Consumption - \$/Bill	\$190.22	\$192.15	\$1.93

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

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

<u>Line</u>		
1	Effective Date	August 1, 2017
2	Supercedes Factors of	July 1, 2017

GENERATION COMPONENT

CENTRAL STATION WITH WIND/HYDRO COMPONENT					
FUEL PRICES, ¢/mmbtu					
3					
4	Hill Industrial		744.76		
5	Puna Industrial		762.96		
6	Keahole Diesel		1,155.64		
6a	Keahole ULSD		1,347.31		
7	Waimea ULSD Diesel		1,338.11		
8	Hilo Diesel		1,128.06		
8a	Hilo (Kanoelehua) ULSD Diesel ¹		1,318.38		
9	Puna Diesel		1,126.64		
10	Wind		0.00		
11	Hydro		0.00		
BTU MIX, %					
12					
13	Hill Industrial		49.455		
14	Puna Industrial		4.192		
15	Keahole Diesel		45.332		
15a	Keahole ULSD		0.006		
16	Waimea ULSD Diesel		0.000		
17	Hilo Diesel		0.000		
17a	Hilo (Kanoelehua) ULSD Diesel ¹		0.000		
18	Puna Diesel		0.605		
19	Wind		0.000		
20	Hydro		0.410		
			100.000		
21	COMPOSITE COST OF GENERATION, CENTRAL STATION + WIND/HYDRO ¢/mmb		931.08		
22	% Input to System kWh Mix		46.870		
EFFICIENCY FACTOR, mmbtu/kWh					
	(A)	(B)	(C)	(D)	
		Eff Factor	Percent of	Weighted	
	Fuel Type	mmbtu/kwh	Centrl Stn +	Eff Factor	
			Wind/Hydro		
23	Industrial	0.015148	42.322	0.006411	
24	Diesel	0.010424	53.266	0.005552	
25	Other	0.012621	4.412	0.000557	
	(Lines 23, 24, 25): Col(B) x Col(C) = Col(D)				
26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]			0.0125200	
27	WEIGHTED COMPOSITE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/kWh (Lines (21 x 22 x 26))			5.46369	
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)			(1.65426)	
33	Revenue Tax Req Multiplier			1.0975	
34	CENTRAL STATION + WIND/HYDRO GENERATION FACTOR, ¢/kWh (Line (32 x 33))			(1.81555)	
				DG ENERGY COMPONENT	
	35	COMPOSITE COST OF DG ENERGY, ¢/kWh		7.540	
	36	% Input to System kWh Mix		0.004	
	37	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 35 x 36)		0.00030	
	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)		(0.00912)	
	42	Loss Factor		1.067	
	43	Revenue Tax Req Multiplier		1.0975	
	44	DG FACTOR, ¢/kWh (Line 41 x 42 x 43)		(0.01068)	
				SUMMARY OF	
	45	Cntrl Stn+Wind/Hydro (line 34)		(1.81555)	
	46	DG (line 44)		(0.01068)	
	47	TOTAL GENERATION FACTOR, ¢/kWh (lines 45 + 46)		(1.82623)	

¹ Hilo ULSD same location as Kanoelehua ULSD

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

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

Line	<u>PURCHASED ENERGY COMPONENT</u>		
	PURCHASED ENERGY PRICE, ¢/kWh		
48	HEP		12.198
49	PGV	On Peak	9.869
50	PGV	Off Peak	10.062
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	9.869
56	Wailuku Hydro	Off Peak	10.062
57	Hawi Renewable Dev.	On Peak	9.869
58	Hawi Renewable Dev.	Off Peak	10.062
59	Tawhiri (Pakini Nui)	On Peak	13.280
60	Tawhiri (Pakini Nui)	Off Peak	12.240
61			
62	Small Hydro (>100 KW)	On Peak	9.869
63	Small Hydro (>100 KW)	Off Peak	10.062
64	Sch Q Hydro (<100 KW)		9.630
65	FIT		23.800
	PURCHASED ENERGY KWH MIX, %		
66	HEP		15.592
67	PGV	On Peak	21.846
68	PGV	Off Peak	13.422
69	PGV - Addt'l	On Peak	4.369
70	PGV - Addt'l	Off Peak	3.121
71	PGV - Add'l 8 MW	On Peak	2.243
72	PGV - Add'l 8 MW	Off Peak	5.747
73	Wailuku Hydro	On Peak	2.780
74	Wailuku Hydro	Off Peak	1.926
75	Hawi Renewable Dev.	On Peak	5.693
76	Hawi Renewable Dev.	Off Peak	2.714
77	Tawhiri (Pakini Nui)	On Peak	11.398
78	Tawhiri (Pakini Nui)	Off Peak	7.524
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)		0.234
83	FIT		1.391
			100.000
84	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		10.963
85	% Input to System kWh Mix		53.126
86	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (Lines (84 x 85))		5.82420
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))		(1.37094)
91	Loss Factor		1.067
92	Revenue Tax *		1.0975
93	PURCHASED ENERGY FACTOR, ¢/kWh (Lines (90 x 91 x 92))		(1.60542)

Line	<u>SYSTEM COMPOSITE</u>		
94	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93))		(3.43165)
95	Not Used		0.000
96	Not Used		0.000
97	ECA Reconciliation Adjustment		(0.211)
98	ECA FACTOR, ¢/kWh (Lines (94 + 95+ 96 + 97))		(3.643)

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

INDUSTRIAL FUEL COSTS:

	<u>HILO</u>	<u>PUNA</u>
Average Industrial Fuel Cost - \$/BBL	46.9196	46.9196
Land Transportation Cost - \$/BBL	--	1.1470
Industrial Costs For Filing - \$/BBL	46.9196	48.0666
Conversion Factors - mmbtu/BBL	6.30	6.30
Industrial Costs For Filing - ¢/mmbtu	744.76	762.96

DIESEL FUEL COSTS:

	KEAHOLE	PUNA CT-3	HILO
Average Diesel Fuel Cost - \$/BBL	64.8776	64.8776	64.8776
Land Transportation Cost - \$/BBL	2.8429	1.1433	1.2266
Diesel Costs For Filing - \$/BBL	67.7205	66.0209	66.1042
Conversion Factors - mmbtu/BBL	5.86	5.86	5.86
Diesel Costs For Filing - ¢/mmbtu	1,155.64	1,126.64	1,128.06

ULSD FUEL COSTS:

	KEAHOLE	WAIMEA	HILO	DISPERSED GENERATION
Average ULSD Fuel Cost - \$/BBL	74.3192	74.3192	74.3192	74.3192
Land Transportation Cost - \$/BBL	2.8817	2.3547	1.2238	-
ULSD Costs For Filing - \$/BBL	77.2009	76.6738	75.5430	74.3192
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,347.31	1,338.11	1,318.38	1,297.02

Dispersed Generation, cents per kWh

	<u>COMPOSITE COST OF DISP. GEN.</u>
BBIs Fuel:	4.0583
\$/BBI Inv Cost:	74.3192
Fuel \$ (Prod Sim Consumption x Unit Cost)	301.61
Net kWh (from Prod Sim)	4,000
cents/kWh:	7.540

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

	SHIPMAN INDUSTRIAL		HILL INDUSTRIAL		COST PER BARREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 06/30/2017	0	0.00	43,641	2,155,269.56			
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	(33,851)	(1,673,370.00)			
Actual	0	0.00	34,409	1,725,646.92			
Consumed: Estimate	0	0.00	25,053	1,233,359.19			
Actual	0	0.00	(27,702)	(1,364,228.53)			
Balance Per G/L 06/30/2017	<u>0</u>	<u>0.00</u>	<u>41,550</u>	<u>2,076,677.14</u>			
Purchases	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer out	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer in	0	0.00	32,012	1,491,665.04			
Consumed	<u>0</u>	<u>0.00</u>	<u>(32,039)</u>	<u>(1,601,309.22)</u>	106.5901	0.0000	106.5901
Balance @ 07/31/2017	0	0.00	41,523	1,967,032.96			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 07/31/2017	<u>0</u>	<u>0.00</u>	<u>41,523</u>	<u>1,967,032.96</u>			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxx	(1,967,032.96)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxx	1,948,242.10			
Total @ 08/01/2017 Avg Price	<u>0</u>	<u>0.00</u>	<u>41,523</u>	<u>1,948,242.10</u>			

Weighted Avg Cost/BBL by Location

#DIV/0!

47.3721

Weighted Avg Cost/BBL @ Avg Cost

#DIV/0!

46.9196

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

PUNA INDUSTRIAL

	BBL	COST	LAND TRANSP	COST PER BARREL		TOTAL
				EXCLUDE LT	LT	
Balance at 06/30/2017	5,923	277,656.07	6,792.92			
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	(3,786)	(172,460.92)	(4,527.07)			
Actual	3,717	174,219.46	4,134.87			
Consumed: Estimate	3,114	153,302.22	3,300.84			
Actual	(2,867)	(127,787.66)	(3,039.02)			
Balance Per G/L 06/30/2017	<u>6,101</u>	<u>304,929.17</u>	<u>6,662.54</u>			
Purchases	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer out	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer in	2,940	134,134	3,515.48			
Consumed	(3,368)	<u>(168,332.64)</u>	(3,671.12)	49.9800	1.0900	51.0700
Balance @ 07/31/2017	<u>5,673</u>	<u>270,730.23</u>	<u>6,506.90</u>			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	<u>5,673</u>	<u>270,730.23</u>	<u>6,506.90</u>		<u>1.1470</u>	
Reverse Fuel Balance	XXXXXXXXXXXX	(270,730.23)	XXXXXXXXXXXX			
Fuel Balance @ Avg Price	XXXXXXXXXXXX	266,174.83	XXXXXXXXXXXX			
Total @ 08/01/2017 Avg Price	<u>5,673</u>	<u>266,174.83</u>	<u>6,506.90</u>			

Weighted Avg Cost/BBL by Location

47.7226

1.1470

Weighted Avg Cost/BBL @ Avg Cost

46.9196

1.1470

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

KEAHOLE CT

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER EXCLUD LT	BARREL LT	TOTAL
Balance at 06/30/2017	56,032.4	2,353,362.0	3,688,170.5	155,508.0			
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		XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX			
Actual		XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX			
Transfers in: Estimate	(46,276.1)	(1,943,597.0)	(3,075,503.6)	(131,581.5)			
Actual	46,682.4	1,960,662.0	3,162,923.6	129,981.43			
Consumed: Estimate	25,389.5	1,066,359.0	1,588,874.9	61,950.38			
Actual	(29,711.8)	(1,247,894.0)	(1,823,233.3)	(65,463.1)	61.3640		
Balance Per G/L 06/30/2017	52,116.5	2,188,892	3,541,232.02	150,395.13	67.9484		
Purchases	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX			
Transfer out	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX			
Transfer in	47,126.6	1,979,317.0	3,047,914.6	133,999.8	64.6750		
Consumed	(47,928.8)	(2,013,011.0)	(3,261,077.8)	(138,514.33)	68.0400	2.8900	70.9300
Balance @ 07/31/2017	51,314.2	2,155,198	3,328,068.85	145,880.56	64.8566		
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	51,314.2	2,155,198	3,328,068.85	145,880.56	64.8566		
Reverse Fuel Balance	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	(3,328,068.8)	XXXXXXXXXXXXXXXXXX			
Fuel Balance @ Avg Price	XXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXX	3,329,143.8	XXXXXXXXXXXXXXXXXX			
Total @ 08/01/2017 Avg Price	51,314.2	2,155,198	3,329,143.80	145,880.56	64.8776		

Weighted Avg Cost/BBL by Location

64.8566 2.8429

Weighted Avg Cost/BBL @ Avg Cost

64.8776 2.8429

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

PUNA CT-3

HS Diesel	BBL	GALLONS	COST EXCLUD LT	LAND TRANSP	COST PER EXCL LT	BARREL LT	TOTAL
Balance at 06/30/2017	2,913.5	122,369.0	188,677.5	3,432.0			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate		XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX			
Actual		XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX			
Transfers out: Estimate		XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX			
Actual		XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX			
Transfers in: Estimate	(1,565.0)	(65,728.0)	(104,088.2)	(1,735.2)			
Actual	2,380.2	99,968.0	184,280.6	2,919.7			
Consumed: Estimate	1,875.8	78,783.0	117,386.7	2,382.3			
Actual	(1,403.9)	(58,962.0)	(100,824.7)	(1,782.9)			
Balance Per G/L 06/30/2017	4,200.7	176,430	285,431.88	5,215.83			
Purchases		XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX			
Transfer out		XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX			
Transfer in	4,282.8	179,877.0	270,588.8	4,748.8	63.1806		
Consumed	(2,744.5)	(115,271)	(186,739.02)	(3,403.24)	68.0400	1.2400	69.2800
Balance @ 07/31/2017	5,739.0	241,036	369,281.68	6,561.34	64.3465		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 07/31/2017	5,739.0	241,036	369,281.68	6,561.34	64.3465		
Reverse Fuel Balance		XXXXXXXXXXXXXXXXXXXX	(369,281.68)	XXXXXXXXXXXXXXXXXXXX			
Fuel Balance @ Avg Price		XXXXXXXXXXXXXXXXXXXX	372,329.37	XXXXXXXXXXXXXXXXXXXX			
Total @ 08/01/2017 Avg Price	5,739.0	241,036	372,329.37	6,561.34	64.8776		

Weighted Avg Cost/BBL by Location

64.3465 1.1433

Weighted Avg Cost/BBL @ Avg Cost

64.8776 1.1433

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

TOTAL HILO HS-DIESEL

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCL LT	BARREL LT	TOTAL
Balance at 06/30/2017	1507.5	63,315	94,363	1,865			
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	-1.2	-50.0	0.0	-0.9			
Actual	2.1	88.0	20.0	0.0			
Consumed: Estimate	117.9	4952.0	7378.5	146.2			
Actual	-87.6	-3678.0	2793.7	-123.5			
Balance Per G/L 06/30/2017	1538.7	64,627	104,554.82	1,886.61	67.9484		
Purchases		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		
Transfer out		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX		
Transfer in	-3.6	-152.0	0.0	-3.5	0.0000		
Consumed	-13.2	-553.0	-895.9	-16.2	68.0400	1.2300	69.2700
Balance @ 07/31/2017	1,522.0	63,922	103,658.96	1,866.87	68.1092		
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	1,522.0	63,922	103,658.96	1,866.87	68.1092		
Reverse Fuel Balance		XXXXXXXXXXXX	XXXXXXXXXXXX -103,658.96	XXXXXXXXXXXX			
Fuel Balance @ Avg Price		XXXXXXXXXXXX	XXXXXXXXXXXX 98,740.59	XXXXXXXXXXXX			
Total @ 08/01/2017 Avg Price	1,522.0	63,922	98,740.59	1,866.87	64.8776		

Weighted Avg Cost/BBL by Location

68.1092 1.2266

Weighted Avg Cost/BBL @ Avg Cost

64.8776 1.2266

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

KEAHOLE DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	BARREL LT	TOTAL
Balance at 06/30/2017	2,097.0	88,074	156,975.13	5,200.94			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(188.7)	(7,926)	(13,366.25)	(536.59)			
Actual	188.7	7,926	13,366.25	0.00			
Transfers out: Estimate		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Actual		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfers in: Estimate		(71)	0.00	(4.81)			
Actual		74	0.00	536.59			
Consumed: Estimate	256.7	10,783	19,301.57	626.44			
Actual	(204.8)	(8,600)	(14,593.52)	379.04	71.2707		
Balance Per G/L 06/30/2017	2,149.0	90,260	161,683.18	6,201.61	75.2348		
Purchases	0.0	0	(1,495.02)	0.00	0.0000		
Estimated Purchases	190.0	7,980	13,725.60	540.25			
Transfer in	(1.0)	(44)	0.00	(2.98)	0.00		
Consumed	(166.9)	(7,011)	(12,549.69)	(482.42)	75.1800	2.8900	78.0700
Balance @ 07/31/2017	2,171.1	91,185	161,364.07	6,256.45	74.3246		
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	2,171.1	91,185	161,364.07	6,256.45	74.3246		
Reverse Fuel Balance	XXXXXXXXXXXX	XXXXXXXXXXXX	(161,364.07)	XXXXXXXXXXXX			
Fuel Balance @ Avg Price	XXXXXXXXXXXX	XXXXXXXXXXXX	161,352.21	XXXXXXXXXXXX			
Total @ 08/01/2017 Avg Price	2,171.1	91,185	161,352.21	6,256.45	74.3192		

Weighted Avg Cost/BBL by Location

74.3246 2.8817

Weighted Avg Cost/BBL @ Avg Cost

74.3192 2.8817

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

WAIMEA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL	LT	TOTAL
Balance at 06/30/2017	1,491.5	62,643.0	111,713.8	3,512.10			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(7,917)	(14,275.27)	(446.52)			
Actual		7,917.0	14,275.3	0.00			
Transfers out: Estimate		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Actual		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfers in: Estimate	(9.4)	(394)	0.00	0.00			
Actual	7.7	324	0.00	446.52			
Consumed: Estimate	176.9	7,429	13,297.91	419.21			
Actual	(155.5)	(6,532)	(11,317.57)	(368.59)			
Balance Per G/L 06/30/2017	1,511.2	63,470	113,694.13	3,562.72	75.2348		
ULSD Purchases	188.5	7,915	12,115.56	446.41	64.2898		
Estimated Purchases	-	0	0.00	0.00			
Transfer in	XXXXXXXXXXXX	104	0.00	0.00	#DIV/0!		
Consumed	(229.4)	(9,633)	(17,243.07)	(541.28)	75.1800	2.3600	77.5400
Balance @ 07/31/2017	1,472.8	61,856	108,566.62	3,467.84	73.7163		
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	1,472.8	61,856	108,566.62	3,467.84	73.7163		
Reverse Fuel Balance	XXXXXXXXXXXX	XXXXXXXXXXXX	(108,566.62)	XXXXXXXXXXXX			
Fuel Balance @ Avg Price	XXXXXXXXXXXX	XXXXXXXXXXXX	109,454.43	XXXXXXXXXXXX			
Total @ 08/01/2017 Avg Price	1,472.8	61,856	109,454.43	3,467.84	74.3192		

Weighted Avg Cost/BBL by Location

73.7163 2.3547

Weighted Avg Cost/BBL @ Avg Cost

74.3192 2.3547

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

KANOELEHUA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP		
Balance at 06/30/2017	1,620.7	68,070.0	122,759.3	1,849.9		
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	(187.9)	(7,890)	(14,224.37)	(183.84)		
Actual	187.9	7,890	14,224.37	0.00		
Transfers out: Estimate			x	x	x	
Actual			x	x	x	
Transfers in: Estimate		351	0.00	8.18		
Actual		(542)	0.00	184.12		
Consumed: Estimate	31.1	1,306	2,337.74	147.88		
Actual	(29.0)	(1,218)	(3,347.45)	(22.14)		
Balance Per G/L 06/30/2017	1,618.3	67,967	121,749.62	1,984.12		
ULSD Purchases	0	0	(1,488.23)	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	(11)	(457)	0.00	(10.65)		
Consumed	(17.7)	(743)	(1,329.97)	(27.97)	75.18	1.2300
Balance @ 07/31/2017	1,589.7	66,767	118,931.42	1,945.50		
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	1,589.7	66,767	118,931.42	1,945.50		
Reverse Fuel Balance	x	x	(118,931.42)	x		
Fuel Balance @ Avg Price	x	x	118,144.46	x		
Total @ 08/01/2017 Avg Price	1,589.7	66,767	118,144.46	1,945.50		

Weighted Avg Cost/BBL by Location

74.8142 1.2238

Weighted Avg Cost/BBL @ Avg Cost

74.3192 1.2238

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

DISPERSED GENERATION

	BBL	GALLONS	COST	COST/BBL
Balance at 06/30/2017	100.4	4,216	7,560.11	
Less: Est'd Inven Addition	0.0	XXXXXXXXXXXXXXXXXXXX		
Purchases: Estimate	0.0	0	0.00	
Actual	0.0	0	0.00	
Consumed: Estimate	7.1	300	537.00	
Actual	(7.0)	(296)	(537.80)	
	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	
Balance Per G/L 06/30/2017	100.48	4,220	7,559.31	75.2348
Purchases	0.0	0	0.00	0.0000
Transfer out	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	
Transfer in	XXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX	
Consumed	(3.5)	(147)	(263.13)	75.1800
Balance @ 07/31/2017	97.0	4,073	7,296.18	75.2368
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 07/31/2017	97.0	4,073	7,296.18	
Reverse Fuel Balance	XXXXXXXXXXXX	XXXXXXXXXXXX	(7,296.18)	xxxx
Fuel Balance @ Avg Price	XXXXXXXXXXXX	XXXXXXXXXXXX	7,207.19	xxxx
Total @ 08/01/2017 Avg Price	97.0	4,073	7,207.19	74.3192

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

TYPE OF OIL BURNED

	<u>Hill Industrial</u>		<u>Puna Industrial</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
INDUSTRIAL *				
Tax ¹	46.40	2.9227	46.40	2.9227
Ocean Transportation	47.58	2.8890	45.86	2.8890
Storage	28.69	1.9687	31.25	1.9687
Wharfage	4.78	0.2900	4.60	0.2900
Fees ²	1.13	0.0712	1.13	0.0900
	<u>Hilo Diesel</u>		<u>Waimea Diesel</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
DIESEL *				
Tax ¹	73.71	4.3191	77.04	4.5142
Ocean Transportation	49.30	1.9761	47.50	2.7832
Storage	26.13	1.5312	26.13	1.5312
Wharfage	4.95	0.2900	4.95	0.2900
Fees ²	1.67	0.0975	1.67	0.0975
	<u>Kona Diesel</u>		<u>CT3 Diesel</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	77.04	4.5142	73.71	4.3191
Ocean Transportation	47.50	2.7832	49.30	2.8890
Storage	26.13	1.5312	26.13	1.5312
Wharfage	4.95	0.2900	4.95	0.2900
Fees ²	1.67	0.0975	1.67	0.0975
	<u>ULSD</u>			
	<u>¢/MBTU</u>	<u>\$/BBL</u>		
ULSD **				
Tax ¹	26.38	1.8638		
Ocean Transportation	0.00	0.0000		
Storage	0.00	0.0000		
Wharfage	0.00	0.0000		
Fees ²	1.67	0.0975		

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 August 1, 2017

		<u>August 1, 2017</u> (¢/kWh)	<u>Floor Rates</u> (¢/kWh)
PGV (25 MW)	- on peak	9.869	6.560
PGV (22 MW)	- off peak	10.062	5.430
WAILUKU HYDRO	- on peak	9.869	7.240
	.	10.062	5.970
Other: (<100 KW)	Sch Q Rate	9.630	
		<u>August 1, 2017</u> (¢/kWh)	<u>Floor Rates</u> (¢/kWh)
HEP		12.198	
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
August 1, 2017

<u>Line No.</u>	<u>Description</u>	<u>Amount</u>
1	Amount to be (returned) or collected	(\$500,800)
2	Monthly Amount ($\frac{1}{3}$ x Line 1)	(\$166,933)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$183,212)
5	Estimated MWh Sales (August 1, 2017)	86,822 mwh
6	Adjustment (Line 4 / Line 5)	(0.211) ¢/kwh

HAWAII ELECTRIC LIGHT COMPANY, INC.
2017 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand \$)

LINE	DESCRIPTION	Info Only June 2017 YTD Total No Deadband	collectn by company*	Basis for Recon June 2017 YTD Total Deadband	Collection or Refund by Company
ACTUAL COSTS:					
1	Generation	\$31,729.3		\$31,729.3	
2	Distributed Generation	\$2.3		\$2.3	
3	Purch Power	\$32,439.2		\$32,439.2	
4	TOTAL	<u>\$64,170.8</u>		<u>\$64,170.8</u>	
FUEL FILING COST (1)					
5	Generation	\$32,329.2		\$32,049.5	
6	Distributed Generation	\$2.3		\$2.3	
7	Purch Power	\$32,439.2		\$32,439.2	
8	TOTAL	<u>\$64,770.7</u>		<u>\$64,491.0</u>	
BASE FUEL COST					
9	Generation	\$35,452.4		\$35,452.4	
10	Distributed Generation	\$1.8		\$1.8	
11	Purch Power	\$39,672.8		\$39,672.8	
12	TOTAL	<u>\$75,127.0</u>		<u>\$75,127.0</u>	
13	FUEL-BASE COST (Line 8-12)	-\$10,356.4		-\$10,636.0	
14	ACTUAL FOA LESS TAX	-\$11,615.2		-\$11,615.2	
15	Less: FOA reconciliation adj for prior year	-\$1,628.3		-\$1,628.3	
16	ADJUSTED FOA LESS TAX	<u>-\$9,986.9</u>		<u>-\$9,986.9</u>	
17	FOA-(FUEL-BASE) (Line 16-13)	\$369.5	over	\$649.1	over
ADJUSTMENTS:					
18	Current year FOA accrual reversal	\$296.8		\$296.8	
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>\$666.3</u>	over	<u>\$945.9</u>	over
22	First Quarter FOA reconciliation			445.1	over
23	FOA Reconciliation to be Returned or Collected			500.8	over

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

**Hawai'i Electric Light Company
DEADBAND CALCULATION
2017**

	Notes	Jan 1 - Jun 2017 YTD
<u>Industrial</u>		
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	80,165,596
Industrial Consumption (Recorded), MMBTU	b	1,193,072
Industrial Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	14,883
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
<u>Diesel</u>		
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	156,203,822
Diesel Consumption (Recorded), MMBTU	b	1,601,776
Diesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	10,254
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	10,324
<u>Biodiesel</u>		
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
<u>Hydro</u>		
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	4,163,918
Hydro Consumption (Recorded), MMBTU	b	49,477
Hydro Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	11,882
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
2017

	Without Deadband	With Deadband
	<u>Jan 1 - Jun 30</u>	<u>As Filed</u> <u>Jan 1 - Jun 30</u>
<u>INDUSTRIAL FUEL FILING COST</u>		
Industrial Portion of Recorded Sales , kWh	80,165,596	80,165,596
Industrial Efficiency Factor (mmbtu/kwh)	0.015148	0.015048
Mmbtu adjusted for Sales Efficiency Factor	1,214,348	1,206,332
\$/mmbtu	<u>\$8.3868</u>	<u>\$8.3868</u>
TOTAL INDUSTRIAL \$000s TO BE RECOVERED	\$10,184.529	\$10,117.295
<u>DIESEL FUEL FILING COST</u>		
Diesel Portion of Recorded Sales, kWh	156,203,822	156,203,822
Diesel Efficiency Factor (mmbtu/kwh)	0.010424	0.010324
Mmbtu adjusted for Sales Efficiency Factor	1,628,269	1,612,648
\$/mmbtu	<u>\$13.6001</u>	<u>\$13.6001</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$22,144.652	\$21,932.213
<u>HYDRO FUEL FILING COST</u>		
Hydro Portion of Recorded Sales , kWh	4,163,918	4,163,918
Hydro Efficiency Factor (mmbtu/kwh)	0.012621	0.012521
Mmbtu adjusted for Sales Efficiency Factor	52,553	52,136
\$/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	\$32,329.2	\$32,049.5
<u>CALCULATION OF GENERATION BASE FUEL COST</u>		
TOTAL GENERATION BASE FUEL COST, \$000s	\$35,452.4	\$35,452.4
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$32,329.2	\$32,049.5
TOTAL GENERATION BASE FUEL COST YTD	\$35,452.4	\$35,452.4

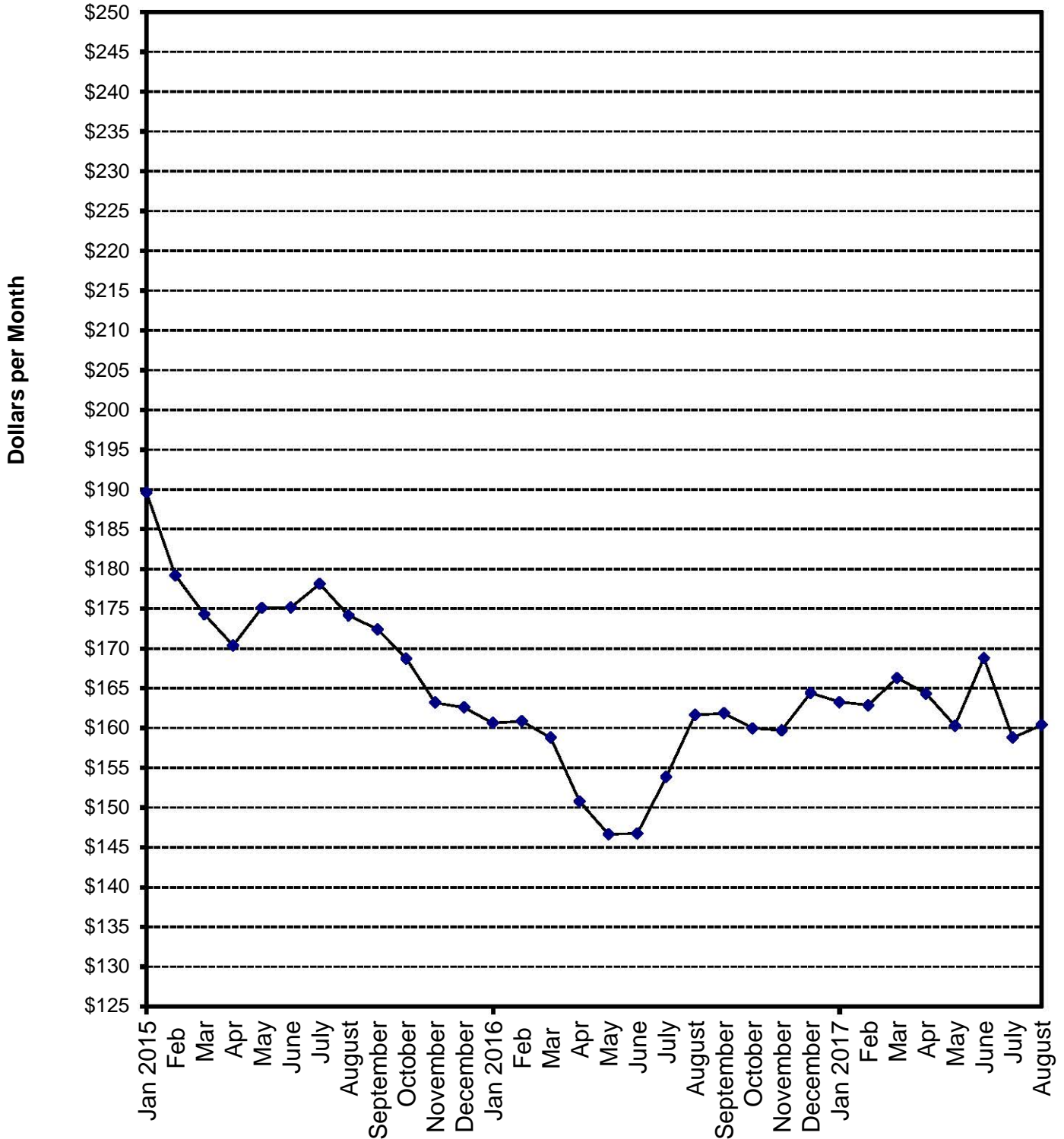
HAWAII ELECTRIC LIGHT COMPANY, INC.
2017 Cumulative Reconciliation Balance

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)	(265,764)	(15,149)
February	1,366,400	[4]	(46,589)	1,412,989	(455,467)	(473,124)	924,716
March					(455,467)	(479,559)	445,157
April					(455,467)	(478,693)	(33,536)
May	445,100	(1)	(45,713)	490,813	(148,367)	(154,562)	302,715
June					(148,367)	(151,295)	151,420
July					(148,367)		
August	500,800	[2]	(32,349)	533,149	(166,933)		

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 & COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$)</u> <u>@ 500 KWH</u>	<u>@ 600 KWH</u>
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
March 1, 2017	-2.274	166.31	199.24
April 1, 2017	-2.425	164.31	196.83
May 1, 2017	-3.035	160.30	192.02
June 1, 2017	-1.343	168.82	202.25
July 1, 2017	-3.220	158.79	190.22
August 1, 2017	-3.643	160.39	192.15

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
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
3/1/2017 - 3/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.3809 CENTS/KWH
4/1/2017-4/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.3781 CENTS/KWH
4/1/2017-4/30/17	SOLARSAVER ADJUSTMENT	-0.2462 CENTS/KWH
5/1/2017-5/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	1.9396 CENTS/KWH
5/1/2017	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2017-6/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	1.9225 CENTS/KWH
6/1/2017	RBA RATE ADJUSTMENT	1.4533 CENTS/KWH
7/1/2017 - 7/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	1.9710 CENTS/KWH
7/1/2017- 12/31/17	GREEN INFRASTRUCTURE FEE	1.1800 DOLLARS/MONTH
7/1/2017	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
8/1/2017-8/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.7161 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			
	7/01/17	8/01/17	7/01/17	8/01/17	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	1.4533	1.4533	\$7.27	\$7.27	\$0.00
Purchased Power Adj. Clause	¢/kwh	1.9710	2.7161	\$9.86	\$13.58	\$3.72
PBF Surcharge	¢/kwh	0.4244	0.4244	\$2.12	\$2.12	\$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	(3.2200)	(3.6430)	-\$16.10	-\$18.22	-\$2.12
Green Infrastructure Fee	\$	1.1800	1.1800	\$1.18	\$1.18	\$0.00
Avg Residential Bill at 500 kwh				\$158.79	\$160.39	

Increase (Decrease -)	\$1.60
% Change	1.01%

	Rate		Charge (\$) at 600 Kwh			
	7/01/17	8/01/17	7/01/17	8/01/17	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	1.4533	1.4533	\$8.72	\$8.72	\$0.00
Purchased Power Adj. Clause	¢/kwh	1.9710	2.7161	\$11.83	\$16.30	\$4.47
PBF Surcharge	¢/kwh	0.4244	0.4244	\$2.55	\$2.55	\$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	(3.2200)	(3.6430)	-\$19.32	-\$21.86	-\$2.54
Green Infrastructure Fee	\$	1.1800	1.1800	\$1.18	\$1.18	\$0.00
Avg Residential Bill at 600 kwh				\$190.22	\$192.15	

Increase (Decrease -)	\$1.93
% Change	1.01%