



FILED

JAY IGNACIO, P. E.
President

August 31, 2017 2017 AUG 31 P 3:50

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

PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

Subject: Hawai'i Electric Light Energy Cost Adjustment Factor for September 2017
Revised Attachments Reflecting 2016 Interim Rate Increase and RBA Rate Adjustment

Enclosed for filing are revised Attachments 1, 8, 9A, 9B, and 10 of Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") energy cost adjustment filing, reflecting the impact of the Company's 2016 Interim Rate Increase and revised Revenue Balancing Account ("RBA") Rate Adjustment, as approved by the Commission in Order No. 34772.

On August 29, 2017, Hawai'i Electric Light filed its energy cost adjustment factor for September 2017 excluding the 2016 Interim Increase and the revised RBA Rate Adjustment in the September typical residential bill. The 2016 Interim Increase and revised RBA Rate Adjustment were approved to be effective on August 31, 2017. There is no change to the energy cost adjustment factor as filed on August 29, 2017.

A residential customer consuming 500 kWh of electricity will be paying \$171.52, an increase of \$11.13 compared to the rates effective August 1, 2017. The increase in the typical bill is due to the Interim Rate Increase (+\$9.08), decrease in the RBA Rate Adjustment (-\$4.11), increase in the Purchased Power Adjustment (+0.18), and an increase in the Energy Cost Adjustment Factor (+\$5.98).

For the Commission's convenience, Hawai'i Electric Light is refiling all of the attachments included in the August 29, 2017 filing. The revised attachments are notated with "Revised 8/31/17" in the headers; the other attachments are unchanged.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST ADJUSTMENT FACTOR

	<u>EFFECTIVE DATES</u>		
	<u>8/01/17</u>	<u>9/01/17</u>	<u>Change</u>
<u>Composite Cost</u>			
Generation, ¢/mmbtu	931.08	1,079.80	148.72
Dispersed Generation Energy, ¢/kWh	7.540	11.734	4.194
Purchased Energy, ¢/kWh	10.963	11.371	0.408
<u>Residential Schedule "R"</u>			
Energy Cost Adjustment - ¢/kWh	(3.643)	(2.447)	1.196
<u>Others - "G,J,P,F"</u>			
Energy Cost Adjustment - ¢/kWh	(3.643)	(2.447)	1.196
Residential Customer with:			
500 KWH Consumption - \$/Bill	\$160.39	\$171.52	\$11.13
600 KWH Consumption - \$/Bill	\$192.15	\$205.50	\$13.35

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

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

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

GENERATION COMPONENT

CENTRAL STATION WITH WIND/HYDRO COMPONENT					
FUEL PRICES, \$/mmbtu					
3					
4	Hill Industrial	800.74			
5	Puna Industrial	818.51			
6	Keahole Diesel	1,403.98			
6a	Keahole ULSD	1,372.54			
7	Waimea ULSD Diesel	1,362.63			
8	Hilo Diesel	1,372.70			
8a	Hilo (Kanoelehua) ULSD Diesel ¹	1,342.35			
9	Puna Diesel	1,375.34			
10	Wind	0.00			
11	Hydro	0.00			
BTU MIX, %					
12					
13	Hill Industrial	48.839			
14	Puna Industrial	4.007			
15	Keahole Diesel	46.056			
15a	Keahole ULSD	0.008			
16	Waimea ULSD Diesel	0.002			
17	Hilo Diesel	0.000			
17a	Hilo (Kanoelehua) ULSD Diesel ¹	0.000			
18	Puna Diesel	0.667			
19	Wind	0.000			
20	Hydro	0.421			
		100.000			
21	COMPOSITE COST OF GENERATION, CENTRAL STATION + WIND/HYDRO \$/mmb		1,079.80		
22	% Input to System kWh Mix		48.277		
EFFICIENCY FACTOR, mmbtu/kWh					
	(A)	(B)	(C)	(D)	
		Eff Factor	Percent of	Weighted	
	<u>Fuel Type</u>	<u>mmbtu/kwh</u>	<u>Centrl Stn +</u>	<u>Eff Factor</u>	
			<u>Wind/Hydro</u>		
23	Industrial	0.015148	42.100	0.006377	
24	Diesel	0.010424	54.795	0.005712	
25	Other	0.012621	3.105	0.000392	
	(Lines 23, 24, 25): Col(B) x Col(C) = Col(D)				
26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]			0.0124810	
27	WEIGHTED COMPOSITE CENTRAL STATION + WIND/HYDRO GENERATION COST, \$/kWh (Lines (21 x 22 x 26))			6.50628	
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)			(0.61167)	
33	Revenue Tax Req Multiplier			1.0975	
34	CENTRAL STATION + WIND/HYDRO GENERATION FACTOR, \$/kWh (Line (32 x 33))			(0.67131)	
				<u>DG ENERGY COMPONENT</u>	
				35 COMPOSITE COST OF DG ENERGY, \$/kWh	11.734
				36 % Input to System kWh Mix	0.006
				37 WEIGHTED COMPOSITE DG ENERGY COST, \$/kWh (Lines 35 x 36)	0.00070
				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)	(0.00872)
				42 Loss Factor	1.067
				43 Revenue Tax Req Multiplier	1.0975
				44 DG FACTOR, \$/kWh (Line 41 x 42 x 43)	(0.01021)
				SUMMARY OF	
				TOTAL GENERATION FACTOR, \$/kWh	
				45 Cntrl Stn+Wind/Hydro (line 34)	(0.67131)
				46 DG (line 44)	(0.01021)
				47 TOTAL GENERATION FACTOR, \$/kWh (lines 45 + 46)	(0.68152)

¹ Hilo ULSD same location as Kanoelehua ULSD

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

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

Line	PURCHASED ENERGY COMPONENT		
	PURCHASED ENERGY PRICE, ¢/kWh		
48	HEP		12.159
49	PGV	On Peak	10.619
50	PGV	Off Peak	10.611
51	PGV - Add'l 5 MW	On Peak	12.670
52	PGV - Add'l 5 MW	Off Peak	12.670
53	PGV - Add'l 8 MW	On Peak	6.440
54	PGV - Add'l 8 MW	Off Peak	6.440
55	Wailuku Hydro	On Peak	10.619
56	Wailuku Hydro	Off Peak	10.611
57	Hawi Renewable Dev.	On Peak	10.619
58	Hawi Renewable Dev.	Off Peak	10.611
59	Tawhiri (Pakini Nui)	On Peak	13.100
60	Tawhiri (Pakini Nui)	Off Peak	12.160
61			
62	Small Hydro (>100 KW)	On Peak	10.619
63	Small Hydro (>100 KW)	Off Peak	10.611
64	Sch Q Hydro (<100 KW)		10.300
65	FIT		23.800
	PURCHASED ENERGY KWH MIX, %		
66	HEP		17.810
67	PGV	On Peak	23.180
68	PGV	Off Peak	14.231
69	PGV - Add'l	On Peak	4.636
70	PGV - Add'l	Off Peak	3.312
71	PGV - Add'l 8 MW	On Peak	2.363
72	PGV - Add'l 8 MW	Off Peak	6.149
73	Wailuku Hydro	On Peak	0.444
74	Wailuku Hydro	Off Peak	0.276
75	Hawi Renewable Dev.	On Peak	4.583
76	Hawi Renewable Dev.	Off Peak	1.736
77	Tawhiri (Pakini Nui)	On Peak	11.139
78	Tawhiri (Pakini Nui)	Off Peak	7.795
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)		0.249
83	FIT		2.097
			100.000
84	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		
			11.371
85	% Input to System kWh Mix		
			51.717
86	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (Lines (84 x 85))		
			5.88074
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))		
			(1.31440)
91	Loss Factor		
			1.067
92	Revenue Tax *		
			1.0975
93	PURCHASED ENERGY FACTOR, ¢/kWh (Lines (90 x 91 x 92))		
			(1.53921)

Line	SYSTEM COMPOSITE		
94	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93))		(2.22073)
95	Not Used		0.000
96	Not Used		0.000
97	ECA Reconciliation Adjustment		(0.226)
98	ECA FACTOR, ¢/kWh (Lines (94 + 95+ 96 + 97))		(2.447)

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

INDUSTRIAL FUEL COSTS:

	<u>HILO</u>	<u>PUNA</u>
Average Industrial Fuel Cost - \$/BBL	50.4465	50.4465
Land Transportation Cost - \$/BBL	--	1.1195
Industrial Costs For Filing - \$/BBL	50.4465	51.5660
Conversion Factors - mmbtu/BBL	6.30	6.30
Industrial Costs For Filing - ¢/mmbtu	800.74	818.51

DIESEL FUEL COSTS:

	<u>KEAHOLE</u>	<u>PUNA CT-3</u>	<u>HILO</u>
Average Diesel Fuel Cost - \$/BBL	79.3550	79.3550	79.3550
Land Transportation Cost - \$/BBL	2.9182	1.2398	1.0850
Diesel Costs For Filing - \$/BBL	82.2732	80.5948	80.4400
Conversion Factors - mmbtu/BBL	5.86	5.86	5.86
Diesel Costs For Filing - ¢/mmbtu	1,403.98	1,375.34	1,372.70

ULSD FUEL COSTS:

	<u>KEAHOLE</u>	<u>WAIMEA</u>	<u>HILO</u>	<u>DISPERSED GENERATION</u>
Average ULSD Fuel Cost - \$/BBL	75.7270	75.7270	75.7270	75.7270
Land Transportation Cost - \$/BBL	2.9196	2.3514	1.1894	-
ULSD Costs For Filing - \$/BBL	78.6466	78.0784	76.9164	75.7270
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,372.54	1,362.63	1,342.35	1,321.59

Dispersed Generation, cents per kWh

	<u>COMPOSITE COST OF DISP. GEN.</u>
BBIs Fuel:	7.7476
\$/BBI Inv Cost:	75.7270
Fuel \$ (Prod Sim Consumption x Unit Cost)	586.71
Net kWh (from Prod Sim)	5,000
cents/kWh:	11.734

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

	SHIPMAN INDUSTRIAL		HILL INDUSTRIAL		COST PER BARREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 07/31/2017	0	0.00	41,523	1,967,032.96			
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	(32,012)	(1,491,665.04)			
Actual	0	0.00	32,633	1,545,804.15			
Consumed: Estimate	0	0.00	32,039	1,601,309.22			
Actual	0	0.00	(32,120)	(1,580,249.40)			
Balance Per G/L 07/31/2017	0	0.00	42,063	2,042,231.89			
Purchases	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer out	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer in	0	0.00	23,900	1,168,643.17			
Consumed	0	0.00	(28,137)	(1,320,176.79)	106.5901	0.0000	106.5901
Balance @ 08/31/2017	0	0.00	37,826	1,890,698.27			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 08/31/2017	0	0.00	37,826	1,890,698.27			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxx	(1,890,698.27)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxxx	1,908,190.90			
Total @ 09/01/2017 Avg Price	0	0.00	37,826	1,908,190.90			

Weighted Avg Cost/BBL by Location #DIV/0! 49.9841

Weighted Avg Cost/BBL @ Avg Cost #DIV/0! 50.4465

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

PUNA INDUSTRIAL

	BBL	COST	LAND TRANSP	COST PER BARREL		TOTAL
				EXCLUDE LT	LT	
Balance at 07/31/2017	5,673	270,730.23	6,506.90			
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	(2,940)	(134,133.70)	(3,515.48)			
Actual	3,421	156,247.16	3,965.07			
Consumed: Estimate	3,368	168,332.64	3,671.12			
Actual	<u>(3,508)</u>	<u>(172,587.64)</u>	<u>(4,023.33)</u>			
Balance Per G/L 07/31/2017	<u>6,014</u>	<u>288,588.69</u>	<u>6,604.28</u>			
Purchases	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer in	2,590	129,519	3,096.97			
Consumed	<u>(2,515)</u>	<u>(118,002.79)</u>	<u>(2,884.71)</u>	46.9196	1.1470	48.0666
Balance @ 08/31/2017	<u>6,089</u>	<u>300,104.62</u>	<u>6,816.54</u>			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	<u>6,089</u>	<u>300,104.62</u>	<u>6,816.54</u>		1.1195	
Reverse Fuel Balance	xxxxxxxxxxxx	(300,104.62)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	307,168.99	xxxxxxxxxxxx			
Total @ 09/01/2017 Avg Price	<u>6,089</u>	<u>307,168.99</u>	<u>6,816.54</u>			

Weighted Avg Cost/BBL by Location

49.2864

1.1195

Weighted Avg Cost/BBL @ Avg Cost

50.4465

1.1195

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

KEAHOLE CT

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	BARREL LT	TOTAL
Balance at 07/31/2017	51,314.2	2,155,198.0	3,328,068.9	145,880.6			
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	(47,126.6)	(1,979,317.0)	(3,047,914.7)	(133,999.8)			
Actual	46,892.7	1,969,493.0	3,058,066.3	130,602.31			
Consumed: Estimate	47,928.8	2,013,011.0	3,261,077.8	138,514.33			
Actual	(49,419.4)	(2,075,613.0)	(3,258,569.1)	(136,618.8)	65.9371		
Balance Per G/L 07/31/2017	49,589.8	2,082,772	3,340,729.21	144,378.67	67.3673		
Purchases	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer in	46,866.2	1,968,380.0	3,570,105.1	133,259.3	76.1766		
Consumed	(50,974.7)	(2,140,937.0)	(3,307,115.6)	(144,915.95)	64.8776	2.8429	67.7205
Balance @ 08/31/2017	45,481.3	1,910,215	3,603,718.70	132,722.05	79.2352		
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	45,481.3	1,910,215	3,603,718.70	132,722.05	79.2352		
Reverse Fuel Balance	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	(3,603,718.7)	xxxxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx	3,609,171.0	xxxxxxxxxxxxxx			
Total @ 09/01/2017 Avg Price	45,481.3	1,910,215	3,609,170.99	132,722.05	79.3550		

Weighted Avg Cost/BBL by Location 79.2352 2.9182

Weighted Avg Cost/BBL @ Avg Cost 79.3550 2.9182

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

TOTAL HILO HS-DIESEL

HS Diesel	BBL	GALLONS	COST		LAND	COST PER BARREL		TOTAL
			EXCLUDE LT	TRANSP	EXCL LT	LT		
Balance at 07/31/2017	1522.0	63,922	103,659		1,867			
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	3.6	152.0	0.0		3.5			
Actual	-4.5	-190.0	0.0		0.0			
Consumed: Estimate	13.2	553.0	895.9		16.2			
Actual	-14.8	-621.0	-974.9		-18.3			
Balance Per G/L 07/31/2017	1519.4	63,816	103,579.90		1,868.32	68.1703		
Purchases		XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXXXX			
Transfer out		XXXXXXXXXXXX	XXXXXXXXXXXX		XXXXXXXXXXXX			
Transfer in	188.4	7913.0	15294.1		-0.9	80.7887		
Consumed	-102.0	-4283.0	-6616.0		-125.1	64.8776	1.2266	66.1042
Balance @ 08/31/2017	1,605.9	67,446	112,258.00		1,742.35	69.9053		
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	1,605.9	67,446	112,258.00		1,742.35	69.9053		
Reverse Fuel Balance		XXXXXXXXXXXX	XXXXXXXXXXXX	-112,258.00		XXXXXXXXXXXX		
Fuel Balance @ Avg Price		XXXXXXXXXXXX	XXXXXXXXXXXX	127,432.85		XXXXXXXXXXXX		
Total @ 09/01/2017 Avg Price	1,605.9	67,446	127,432.85		1,742.35	79.3550		
Weighted Avg Cost/BBL by Location			69.9053		1.0850			
Weighted Avg Cost/BBL @ Avg Cost			79.3550		1.0850			

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

KEAHOLE DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	LT	TOTAL
Balance at 07/31/2017	2,171.1	91,185	161,364.07	6,256.46			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(190.0)	(7,980)	(12,230.58)	(540.25)			
Actual	188.6	7,922	12,848.95	0.00			
Transfers out: Estimate		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Actual		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfers in: Estimate		44	0.00	2.98			
Actual		(9)	0.00	536.32			
Consumed: Estimate	166.9	7,011	12,549.69	482.42			
Actual	(218.7)	(9,186)	(15,302.51)	(542.46)	69.9658		
Balance Per G/L 07/31/2017	2,118.7	88,987	159,229.62	6,195.47	75.1530		
Purchases	188.2	7,903	15,451.18	535.03	0.0000		
Estimated Purchases	0.0	0	0.00	0.00			
Transfer in	4.3	181	0.00	12.25	0.00		
Consumed	(135.5)	(5,693)	(10,073.79)	(390.61)	74.3192	2.8817	77.2009
Balance @ 08/31/2017	2,175.7	91,378	164,607.01	6,352.15	75.6582		
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	2,175.7	91,378	164,607.01	6,352.15	75.6582		
Reverse Fuel Balance	XXXXXXXXXXXX	XXXXXXXXXXXX	(164,607.01)	XXXXXXXXXXXX			
Fuel Balance @ Avg Price	XXXXXXXXXXXX	XXXXXXXXXXXX	164,756.67	XXXXXXXXXXXX			
Total @ 09/01/2017 Avg Price	2,175.7	91,378	164,756.67	6,352.15	75.7270		

Weighted Avg Cost/BBL by Location

75.6582 2.9196

Weighted Avg Cost/BBL @ Avg Cost

75.7270 2.9196

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

WAIMEA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL	LT	TOTAL
Balance at 07/31/2017	1,472.8	61,856.0	108,566.6	3,467.85			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(7,915)	(12,115.56)	(446.41)			
Actual		7,915.0	12,832.9	0.00			
Transfers out: Estimate		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Actual		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfers in: Estimate	(2.5)	(104)	0.00	0.00			
Actual	2.5	104	0.00	446.41			
Consumed: Estimate	229.4	9,633	17,243.07	541.28			
Actual	(205.8)	(8,643)	(15,256.44)	(484.56)			
Balance Per G/L 07/31/2017	1,496.3	62,846	111,270.57	3,524.57	74.3622		
ULSD Purchases	188.4	7,913	15,468.62	446.29	82.1031		
Estimated Purchases	-	0	0.00	0.00			
Transfer in	XXXXXXXXXXXX	156	0.00	0.00	#DIV/0!		
Consumed	(172.0)	(7,222)	(12,779.36)	(404.90)	74.3192	2.3547	76.6739
Balance @ 08/31/2017	1,516.5	63,693	113,959.83	3,565.97	75.1466		
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	1,516.5	63,693	113,959.83	3,565.97	75.1466		
Reverse Fuel Balance	XXXXXXXXXXXX	XXXXXXXXXXXX	(113,959.83)	XXXXXXXXXXXX			
Fuel Balance @ Avg Price	XXXXXXXXXXXX	XXXXXXXXXXXX	114,839.97	XXXXXXXXXXXX			
Total @ 09/01/2017 Avg Price	1,516.5	63,693	114,839.97	3,565.97	75.7270		

Weighted Avg Cost/BBL by Location 75.1466 2.3514

Weighted Avg Cost/BBL @ Avg Cost 75.7270 2.3514

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

KANOELEHUA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP		
Balance at 07/31/2017	1,589.7	66,767.0	118,931.4	1,945.5		
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	0.0	-	1,488.23	-		
Actual	0.0	0	(776.89)	0.00		
Transfers out: Estimate			x	x	x	
Actual			x	x	x	
Transfers in: Estimate		457	0.00	10.65		
Actual		(723)	0.00	0.00		
Consumed: Estimate	17.7	743	1,329.97	27.97		
Actual	(14.5)	(609)	(880.09)	(16.83)		
Balance Per G/L 07/31/2017	1,586.5	66,635	120,092.64	1,967.29		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	(15)	(610)	0.00	(14.21)		
Consumed	(16.6)	(698)	(1,235.11)	(103.00)	74.3192	1.2238
Balance @ 08/31/2017	1,555.4	65,327	118,857.53	1,850.07		
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	1,555.4	65,327	118,857.53	1,850.07		
Reverse Fuel Balance	x	x	x (118,857.53)	x		
Fuel Balance @ Avg Price	x	x	x 117,786.11	x		
Total @ 09/01/2017 Avg Price	1,555.4	65,327	117,786.11	1,850.07		

Weighted Avg Cost/BBL by Location 76.4158 1.1894

Weighted Avg Cost/BBL @ Avg Cost 75.7270 1.1894

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

DISPERSED GENERATION

	BBL	GALLONS	COST	COST/BBL
Balance at 07/31/2017	97.0	4,073	7,296.18	
Less: Est'd Inven Addition	0.0	XXXXXXXXXX	XXXXXXXXXX	
Purchases: Estimate	0.0	0	0.00	
Actual	11.8	497	854.84	
Consumed: Estimate	3.5	147	263.13	
Actual	(6.8)	(284)	(508.15)	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Balance Per G/L 07/31/2017	105.55	4,433	7,906.00	74.9046
Purchases	9.4	393	655.96	70.1026
Transfer out	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Transfer in	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Consumed	(69.5)	(2,918)	(5,163.41)	74.3192
Balance @ 08/31/2017	45.4	1,908	3,398.55	74.8107
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 08/31/2017	45.4	1,908	3,398.55	
Reverse Fuel Balance	XXXXXXXXXX	XXXXXXXXXX	(3,398.55)	xxxx
Fuel Balance @ Avg Price	XXXXXXXXXX	XXXXXXXXXX	3,440.17	xxxx
Total @ 09/01/2017 Avg Price	45.4	1,908	3,440.17	75.7270

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

TYPE OF OIL BURNED

INDUSTRIAL *	<u>Hill Industrial</u>		<u>Puna Industrial</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	47.32	2.9810	47.32	2.9810
Ocean Transportation	46.85	2.8446	45.15	2.8446
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

DIESEL *	<u>Hilo Diesel</u>		<u>Waimea Diesel</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	77.44	4.5374	77.44	4.5374
Ocean Transportation	48.54	1.9761	48.54	2.8446
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	69.79	4.0889	77.44	4.5374
Ocean Transportation	24.63	1.4433	48.54	2.8446
Storage	37.34	2.1879	26.13	1.5312
Wharfage	26.74	1.5667	4.95	0.2900
Fees ²	1.67	0.0975	1.67	0.0975

ULSD **	<u>ULSD</u>	
	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	26.38	1.8871
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, Kanoolehua, and Keahole.

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

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

		September 1, 2017 <u>(¢/kWh)</u>	Floor Rates <u>(¢/kWh)</u>
PGV (25 MW)	- on peak	10.619	6.560
PGV (22 MW)	- off peak	10.611	5.430
WAILUKU HYDRO	- on peak	10.619	7.240
	.	10.611	5.970
Other: (<100 KW)	Sch Q Rate	10.300	
		September 1, 2017 <u>(¢/kWh)</u>	Floor Rates <u>(¢/kWh)</u>
HEP		12.159	
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
September 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 (September 1, 2017)	81,116 mwh
6	Adjustment (Line 4 / Line 5)	(0.226) ¢/kwh

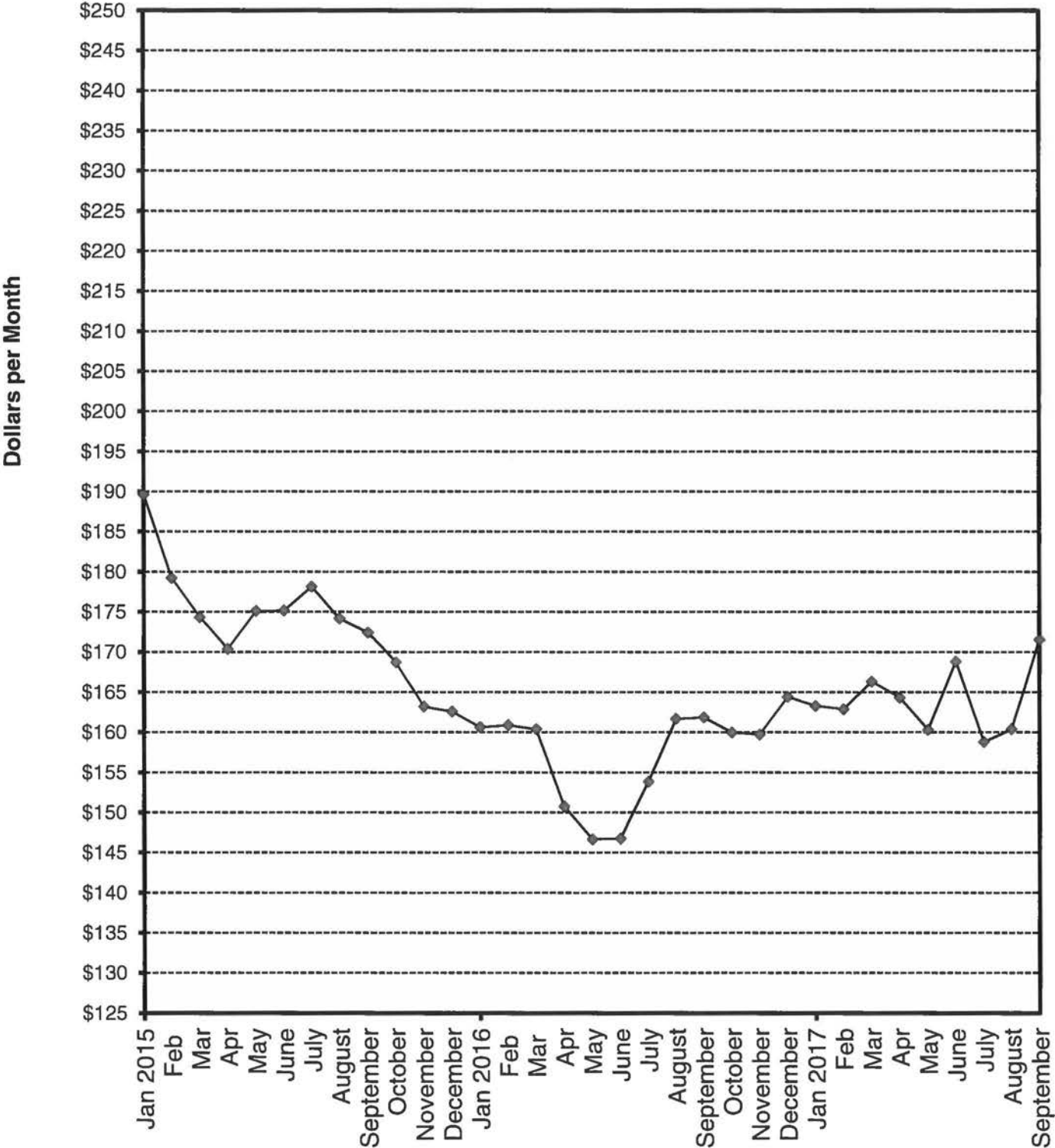
HAWAII ELECTRIC LIGHT COMPANY, INC.
2017 Cumulative Reconciliation Balance

<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	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)	(157,548)	(6,128)
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 &</u> <u>COMMERCIAL</u>	<u>RESIDENTIAL BILL (\$)</u> <u>@ 500 KWH</u>	<u>@ 600 KWH</u>
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
September 1, 2017	-2.447	171.52	205.50

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

<u>EFFECTIVE DATE</u>	<u>DESCRIPTION OF SURCHARGE</u>	<u>RATE</u>
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
9/1/2017-9/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.7515 CENTS/KWH
8/31/2017	Interim Rate Increase 2016	5.8800 PERCENT ON BASE
8/31/2017	RBA RATE ADJUSTMENT	0.6313 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			
	8/01/17	9/01/17	8/01/17	9/01/17	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
Interim Rate Increase 2016 TY	% on base	0.0000%	5.8800%	\$0.00	\$9.08	\$9.08
RBA Rate Adjustment	¢/kwh	1.4533	0.6313	\$7.27	\$3.16	-\$4.11
Purchased Power Adj. Clause	¢/kwh	2.7161	2.7515	\$13.58	\$13.76	\$0.18
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	(3.6430)	(2.4470)	-\$18.22	-\$12.24	\$5.98
Green Infrastructure Fee	\$	1.1800	1.1800	\$1.18	\$1.18	\$0.00
Avg Residential Bill at 500 kwh				\$160.39	\$171.52	
				Increase (Decrease -)	\$11.13	
				% Change	6.94%	

	Rate		Charge (\$) at 600 Kwh			
	8/01/17	9/01/17	8/01/17	9/01/17	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
Interim Rate Increase 2016 TY	% on base	0.0000%	5.8800%	\$0.00	\$10.89	\$10.89
RBA Rate Adjustment	¢/kwh	1.4533	0.6313	\$8.72	\$3.79	-\$4.93
Purchased Power Adj. Clause	¢/kwh	2.7161	2.7515	\$16.30	\$16.51	\$0.21
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	(3.6430)	(2.4470)	-\$21.86	-\$14.68	\$7.18
Green Infrastructure Fee	\$	1.1800	1.1800	\$1.18	\$1.18	\$0.00
Avg Residential Bill at 600 kwh				\$192.15	\$205.50	
				Increase (Decrease -)	\$13.35	
				% Change	6.95%	