

JAY IGNACIO, P. E. President November 28, 2017

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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 December 2017

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Adjustment factor for December 2017 is -1.405 cents per kilowatt-hour ("kWh"), a decrease of 0.520 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$175.02, a decrease of -\$2.58 compared to rates effective November 1, 2017. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$2.60) and the increase in the Purchase Power Adjustment Clause rate (+\$0.02).

Hawai'i Electric Light's fuel composite cost of generation decreased 111.07 cents per million BTU to 1,119.68 cents per million BTU. The distributed generation decreased 3.244 cents per kWh to 10.687 cents per kWh. The composite cost of purchased energy increased 0.129 cents per kWh to 12.473 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 December 1, 2017.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST ADJUSTMENT FACTOR

EFFECTIVE DATES

	<u>11/01/17</u>	<u>12/01/17</u>	<u>Change</u>
Composite Cost			
Generation, ¢/mmbtu Dispersed Generation Energy, ¢/kWh Purchased Energy, ¢/kWh	1,230.75 13.931 12.344	1,119.68 10.687 12.473	(111.07) (3.244) 0.129
Residential Schedule "R"			
Energy Cost Adjustment - ¢/kWh	(0.885)	(1.405)	(0.520)
<u>Others - "G,J,P,F"</u>			
Energy Cost Adjustment - ¢/kWh	(0.885)	(1.405)	(0.520)
Residential Customer with:			
500 KWH Consumption - \$/Bill 600 KWH Consumption - \$/Bill	\$177.60 \$212.80	\$175.02 \$209.69	(\$2.58) (\$3.11)

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

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

Line

1	Effective Date	December 1, 2017
2	Supercedes Factors of	November 1, 2017

GENERATION COMPONENT

	CE	NTRAL STATIO	N WITH WIND/H	IYDRO COMPO	NENT			
		FUEL PRICES,	¢/mmbtu					
	3							
	4	Hill Industrial			882.21			
	5	Puna Industria	il i		899.16			
	6	Keahole Diese	ł		1,527.93			
	6a	Keahole ULSE)		1,428.25			
	7	Waimea ULSD	Diesel		1,419.50			
	8	Hilo Diesel			1,503.56			
	8a	Hilo (Kanoelehu	ia) ULSD Diesel	1	1,400.38			
	9	Puna Diesel			1,502.93		DG ENERGY COMPONENT	
	10	Wind			0.00	35	COMPOSITE COST OF DG	
	11	Hydro			0.00		ENERGY, ¢/kWh	10.687
		-				36	% Input to System kWh Mix	0.003
		BTU MIX, %						
	12					37	WEIGHTED COMPOSITE DG ENERGY COST,	
	13	Hill Industrial			54.910		¢/kWh (Lines 35 x 36)	0.00032
	14	Puna Industria	il i		7.443			
	15	Keahole Diese	;l		36.206	38	BASE DG ENERGY COMPOSITE COS	15.702
15a		Keahole ULSE			0.004			
	16	Waimea ULSE) Diesel		0.003		Base % Input to System kWh Mix	0.06
	17	Hilo Diesel			0.000	40	WEIGHTED BASE DG ENERGY COST,	
17a		,	ua) ULSD Diesel ¹	1	0.000			
	18				1.000		¢/kWh (Line 38 x 39)	0.00942
	19	Wind			0.000			
	20	Hydro			0.434		Cost Less Base (Line 37 - 40)	(0.00910)
					100.000		Loss Factor	1.067
	21						Revenue Tax Req Multiplier	1.0975
	00		ATION + WIND/	HYDRO ¢/mmb	1,119.68	44	DG FACTOR, ¢/kWh	(0.04000)
	22	% Input to Syste	em kvvn ivlix		41.615		(Line 41 x 42 x 43)	(0.01066)
				// / / / / -				
			ACTOR, mmbtu/					
		(A)	(B)	(C) Percent of	(D)			
			Eff Factor	Centrl Stn +	Weighted			
		Fuel Type	mmbtu/kwh	Wind/Hydro	Eff Factor			
	23	Industrial	0.015148	51.242	0.007762			
	23	Diesel	0.010424	43.824	0.004568			
	25	Other	0.012621	4.934	0.000623			
	_0		, 25): Col(B) x C		0.000020			
		(,,,,,,,,					

26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]	0.0129530
27	WEIGHTED COMPOSITE CENTRAL STATION	N +
	WIND/HYDRO GENERATION COST, ¢/kWh	0.00554
	(Lines (21 x 22 x 26))	6.03551
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)	(1.08244)
	Revenue Tax Reg Multiplier	1.0975
	CENTRAL STATION + WIND/HYDRO	
	GENERATION FACTOR,	
	¢/kWh (Line (32 x 33))	(1.18798)

¹ Hilo ULSD same location as Kanoelehua ULSD

 SUMMARY OF

 TOTAL GENERATION FACTOR, ¢/kWh

 45 Cntrl Stn+Wind/Hydro (line 34)
 (1.18798)

 46 DG (line 44)
 (0.01066)

 47 TOTAL GENERATION FACTOR,
 (1.19864)

HELCO ECAC eff 12-01-17 filed with price update v1a.xlsm

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

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

Line	Line PURCHASED ENERGY COMPONENT							
	PURCHASED ENERGY P	RICE. ¢/kWh						
48	HEP		14.381					
-	PGV	On Peak	11.966					
50	PGV	Off Peak	12.136					
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					
	Wailuku Hydro	On Peak	11.966					
	Wailuku Hydro	Off Peak	12.136					
-	Hawi Renewable Dev.	On Peak	11.966					
	Hawi Renewable Dev.	Off Peak	12.136					
59		On Peak	12.540					
60 61	Tawhiri (Pakini Nui)	Off Peak	11.920					
	Small Hydro (>100 KW)	On Peak	11.966					
63		Off Peak	12.136					
64			11.710					
65	FIT		23.800					
	PURCHASED ENERGY K	WH MIX. %						
66			24.393					
	PGV	On Peak	20.265					
	PGV	Off Peak	12.451					
	PGV - Addt'l	On Peak	4.053					
	PGV - Addt'l	Off Peak	2.895					
71	PGV - Add'l 8 MW	On Peak	2.555					
72	PGV - Add'l 8 MW	Off Peak	5.178					
73	Wailuku Hydro	On Peak	0.591					
74	Wailuku Hydro	Off Peak	0.334					
	Hawi Renewable Dev.	On Peak	3.837					
	Hawi Renewable Dev.	Off Peak	2.071					
	Tawhiri (Pakini Nui)	On Peak	11.483					
	Tawhiri (Pakini Nui)	Off Peak	7.951					
79		On Darah	0.000					
	Small Hydro (>100 KW)	On Peak	0.000					
81	, , ,	Off Peak	0.000					
	Sch Q Hydro (<100 KW) FIT		0.172 1.771					
03	FII		100.000					
			100.000					
84	COMPOSITE COST OF P	URCHASED						
	ENERGY, ¢/kWh		12.473					
	% Input to System kWh Mi		58.382					
86	WEIGHTED COMPOSITE							
	COST, ¢/kWh (Lines (84	x 00 <i>))</i>	7.28199					
87	BASE PURCHASED ENE							
	COMPOSITE COST, ¢/k		13.354					
	Base % Input to Sys kWh		53.88					
89	WEIGHTED BASE PURCI COST, ¢/kWh (Lines (87		7.19514					
			1.13314					
	COST LESS BASE (Lines	(86 - 89))	0.08685					
	Loss Factor		1.067					
	Revenue Tax *		1.0975					
93	PURCHASED ENERGY F	ACTOR, ¢/kWh	0.10170					
	(Lines (90 x 91 x 92))							

Line

SYSTEM COMPOSITE

94 GENERATION AND PURCHASED ENERGY	
FACTOR, ¢/kWh (Lines (47 + 93))	(1.09694)
95 Not Used	0.000
96 Not Used	0.000
97 ECA Reconciliation Adjustment	(0.308)
98 ECA FACTOR, ¢/kWh	(1.405)
(Lines (94 + 95+ 96 + 97))	

Hawaii Electric Light Company, Inc.

FUEL OIL INVENTORY PRICES FOR December 1, 2017

INDUSTRIAL FUEL COSTS: Average Industrial Fuel Cost - \$/BBL	<u>HILO</u> 55.5793	<u>PUNA</u> 55.5793		
Land Transportation Cost - \$/BBL		1.0678		
Industrial Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	55.5793 6.30	56.6471 6.30		
Industrial Costs For Filing - ¢/mmbtu	882.21	899.16		
DIESEL FUEL COSTS:	KEAHOLE	PUNA CT-3	HILO	
Average Diesel Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	86.8762 2.6605	86.8762 1.1957	86.8762 1.2321	
Diesel Costs For Filing - \$/BBL	89.5367	88.0719	88.1084	
Conversion Factors - mmbtu/BBL	5.86	5.86	5.86	
Diesel Costs For Filing - ¢/mmbtu	1,527.93	1,502.93	1,503.56	
				DISPERSED
ULSD FUEL COSTS:	KEAHOLE	WAIMEA	HILO	GENERATION
Average ULSD Fuel Cost - \$/BBL	78.9989	78.9989	78.9989	78.9989
Land Transportation Cost - \$/BBL	2.8397	2.3387	1.2428	-
ULSD Costs For Filing - \$/BBL	81.8386	81.3376	80.2417	78.9989
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,428.25	1,419.50	1,400.38	1,378.69

Dispersed Generation, cents per kWh

	COMPOSITE COST OF DISP. GEN.
BBIs Fuel:	4.0583
\$/BBI Inv Cost:	78.9989
Fuel \$ (Prod Sim Consumption x Unit Cost)	320.60
Net kWh (from Prod Sim)	3,000
cents/kWh:	10.687

	SHIPMAN INDUSTRIAL		HILL INDU	JSTRIAL			
						REL	
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 10/31/2017	0	0.00	42,478	2,412,677.62			
Less: Est'd Inventory Addn			0	0.00			
Purchases: Estimate	xxxxxx xx	xxxxxxxxxxxx	XXXXXXXXX	****			
Actual	XXXXXX XX	*****	XXXXXXXXX	*****			
Transfers out: Estimate	xxxxxx xx	****	xxxxxxxx	****			
Actual	XXXXXX XX	*****	XXXXXXXXX	*****			
Transfers in: Estimate	0	0.00	(37,751)	(2,175,439.18)			
Actual	0	0.00	32,237	1,828,161.46			
Consumed: Estimate	0	0.00	35,537	1,802,046.31			
Actual	0	0.00	(35,564)	(1,803,415.46)			
Balance Per G/L 10/31/2017	0	0.00	36,937	2,064,030.75			
Purchases	xxxxxx xx	xxxxxxxxxxxx	XXXXXXXXX	****			
Transfer out	xxxxxx xx	xxxxxxxxxxxx	*****				
Transfer in	0	0.00	39,210	2,207,241.11			
Consumed	0	0.00	(34,704)	(1,970,298.78)	106.5901	0.0000	106.5901
Balance @ 11/30/2017	0	0.00	41,443	2,300,973.08			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 11/30/2017	0	0.00	41,443	2,300,973.08			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxxx	(2,300,973.08)			
Fuel Bal @ Avg Price	xxxxxx	0.00	*****	2,303,372.87			
Total @ 12/01/2017 Avg Price	0	0.00	41,443	2,303,372.87			
Weighted Avg Cost/BBL by Location		#DIV/0!		55.5214			
Weighted Avg Cost/BBL @ Avg Cost		#DIV/0!		55.5793			

	PUNA INDUST	RIAL				
			LAND	COST PER BA	RREL	
	BBL	COST	TRANSP	EXCLUDE LT	LT	TOTAL
Balance at 10/31/2017	6,550	357,827.44	6,244.47			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate	xxxxxxxx x	****	****			
Actual	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*****	*****			
Transfers out: Estimate	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	****	****			
Actual	XXXXXXXXXXXX X	*****	*****			
Transfers in: Estimate	(2,161)	(131,419.53)	(2,583.99)			
Actual	2,114	129,228.75	2,644.98			
Consumed: Estimate	2,629	133,314.00	2,146.82			
Actual	(2,725)	(138,182.07)	(2,225.22)			
Balance Per G/L 10/31/2017	6,407	350,768.59	6,227.06	-		
Purchases	xxxxxxxx x	****	*****			
Transfer out	xxxxxxxx x	****	*****			
Transfer in	2,836	164,195	3,391.12			
Consumed	(2,198)	(124,790.13)	(2,095.57)	56.7744	0.9534	57.7278
Balance @ 11/30/2017	7,045	390,173.02	7,522.61			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	7,045	390,173.02	7,522.61		1.0678	
Reverse Fuel Balance	xxxxxxxxxxx	(390,173.02)	****			
Fuel Balance @ Avg Price	****		****			
Total @ 12/01/2017 Avg Price	7,045	391,556.16	7,522.61	-		
Weighted Avg Cost/BBL by Location		55.3830	1.0678			
Weighted Avg Cost/BBL @ Avg Cost		55.5793	1.0678			

KEAHOLE CT									
			COST	COST LAND		ARREL			
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL		
Balance at 10/31/2017	52,345.8	2,198,524.0	5,026,858.3	147,084.6					
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		****	****	xxxxxxxxxxxxxxxx					
Actual		****	****	*****					
Transfers in: Estimate	(44,057.4)	(1,850,412.0)	(4,366,392.5)	(125,272.9)					
Actual	44,760.7	1,879,951.0	4,250,590.9	118,161.87					
Consumed: Estimate	42,893.3	1,801,520.0	3,494,086.9	120,033.48					
Actual	(41,073.1)	(1,725,072.0)	(3,345,814.4)	(114,939.8)	81.4599				
Balance Per G/L 10/31/2017	54,869.3	2,304,511	5,059,329.23	145,067.20	92.2069				
Purchases	****	****	****	*****					
Transfer out	****	****	*****	xxxxxxxxxxxxxxxxx					
Transfer in	23,467.9	985,651.0	2,041,754.0	66,728.6	87.0021				
Consumed	(22,610.7)	(949,648.0)	(2,166,411.6)	(63,533.71)	95.8137	2.8099	98.6236		
Balance @ 11/30/2017	55,726.5	2,340,514	4,934,671.57	148,262.06	88.5516				
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	55,726.5	2,340,514	4,934,671.57	148,262.06	88.5516				
Reverse Fuel Balance	****		(4.934.671.6)	xxxxxxxxxxxx					
Fuel Balance @ Avg Price		*****	• • • •	****					
Total @ 12/01/2017 Avg Price	55,726.5	2,340,514	4,841,309.57	148,262.06	86.8762				
Weighted Avg Cost/BBL by Location			88.5516	2.6605					
Weighted Avg Cost/BBL @ Avg Cost			86.8762	2.6605					

	P	UNA CT-3					
			COST	LAND	COST PER B	ARREL	
HS Diesel	BBL	GALLONS	EXCLUD LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 10/31/2017	3,569.5	149,920.0	314,693.2	4,453.2			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate Actual		*****					
Transfers out: Estimate	x	****	xxxxxxxxxx	xxxxxxxxxxx			
Actual	X	*****	*****	*****			
Transfers in: Estimate	(956.5)	(40,171.0)	(101,657.0)	(1,060.5)			
Actual	1,423.2	59,774.0	146,213.6	1,570.7			
Consumed: Estimate	1,239.1	52,044.0	100,940.5	1,548.6			
Actual	(1,309.4)	(54,996.0)	(106,665.9)	(1,636.5)			
Balance Per G/L 10/31/2017	3,966.0	166,571	353,524.33	4,875.51			
Purchases	*****	****	****	****			
Transfer out	xxxxxxx xx	****	****	****			
Transfer in	1,191.5	50,042.0	112,813.8	1,321.1	94.6841		
Consumed	(573.0)	(24,068)	(54,905.81)	(714.93)	95.8137	1.2476	97.0613
Balance @ 11/30/2017	4,584.4	192,545	411,432.34	5,481.68	89.7461		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 11/30/2017	4,584.4	192,545	411,432.34	5,481.68	89.7461		
Reverse Fuel Balance	****	****	(411,432.34)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	<u> </u>	****	398,275.74	*****			
Total @ 12/01/2017 Avg Price	4,584.4	192,545	398,275.74	5,481.68	86.8762		
Weighted Avg Cost/BBL by Location			89.7461	1.1957			
Weighted Avg Cost/BBL @ Avg Cost			86.8762	1.1957			

		TOTAL HILO H			COCT DED	DADDEL	
HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER EXCL LT	LT	TOTAL
	DDL	0, 1220110					
Balance at 10/31/2017	1524.2	64,017	117,855	1,878			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate	:	****	****	****			
Actual	· · · · ·	*****	*****	*****			
Transfers out: Estimate		****	xxxxxxxxxxx	xxxxxxxxxxxx			
Actual		*****	*****	*****			
Transfers in: Estimate	2.3	96.0	0.0	1.8			
Actual	-0.2	-8.0	0.0	0.0			
Consumed: Estimate	49.0	2058.0	3991.5	60.2			
Actual	-45.3	-1903.0	-3690.9	-55.7			
Balance Per G/L 10/31/2017	1530.0	64,260	118,155.66	1,884.50	77.2259		
Purchases	****	xxxxxxxxxxx	****	xxxxxxxxxxx			
Transfer out	****	xxxxxxxxxxx	XXXXXXXXXXXX	****			
Transfer in	-2.7	-114.0	0.0	-2.7	#DIV/0!		
Consumed	-9.8	-410.0	-935.3	-12.0	95.8137	1.2323	97.0460
Balance @ 11/30/2017	1,517.5	63,736	117,220.34	1,869.81	77.2445		
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	1,517.5	63,736	117,220.34	1,869.81	77.2445		
Reverse Fuel Balance	xxxxxxxxxxx	****	-117,220.34	xxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXXX			****			
Total @ 12/01/2017 Avg Price	1,517.5	63,736	131,836.73	1,869.81	86.8762		
Weighted Avg Cost/BBL by Location			77.2445	1.2321			
Weighted Avg Cost/BBL @ Avg Cost			86.8762	1.2321			

		KEAHOLE DIES	SEL				
			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 10/31/2017	2,263.1	95,049	177,191.77	6,467.15			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(378.5)	(15,898)	(34,599.96)	(1,076.30)			
Actual	188.5	7,918	17,232.51	0.00			
Transfers out: Estimate		xxxxxxxxxxx	****	****			
Actual		XXXXXXXXXXXXX	*****	xxxxxxxxxxxx			
Transfers in: Estimate		(111)	0.00	(7.51)			
Actual		102	0.00	503.89			
Consumed: Estimate	138.8	5,828	10,556.52	396.76			
Actual	(157.0)	(6,596)	(11,947.64)	(449.05)	76.0765		
Balance Per G/L 10/31/2017	2,054.6	86,292	158,433.20	5,834.94	77.1125		
Purchases	189.1	7,941	16,180.29	537.61	0.0000		
Estimated Purchases	190.0	7,980	16,758.00	540.25			
Transfer in	5.1	216	0.00	14.62	0.00		
Consumed	(109.5)	(4,598)	(8,667.53)	(312.85)	79.1727	2.8577	82.0304
Balance @ 11/30/2017	2,329.3	97,831	182,703.96	6,614.56	78.4370		
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	2,329.3	97,831	182,703.96	6,614.56	78.4370		
Reverse Fuel Balance	XXXXXXXXXXXXX	xxxxxxxxxxx	(182,703.96)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXXX			*****			
Total @ 12/01/2017 Avg Price	2,329.3	97,831	184,012.87	6,614.56	78.9989		
Weighted Avg Cost/BBL by Location			78.4370	2.8397			
Weighted Avg Cost/BBL @ Avg Cost			78.9989	2.8397			

		WAIMEA DIES	EL				
			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		LT	TOTAL
Balance at 10/31/2017	1,782.5	74,865.0	146,266.0	4,201.88			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(15,905)	(38,672.07)	(897.04)			
Actual		7,925.0	19,269.2	0.00			
Transfers out: Estimate		****	****	xxxxxxxxxxx			
Actual		*****	****	****			
Transfers in: Estimate	2.7	112	0.00	0.00			
Actual	0.5	20	0.00	420.16			
Consumed: Estimate	156.7	6,580	11,918.65	368.39			
Actual	(158.5)	(6 <i>,</i> 659)	(12,061.75)	(372.81)			
Balance Per G/L 10/31/2017	1,593.8	66,938	126,719.97	3,720.58	79.5100		
ULSD Purchases	0.0	0	(520.72)	0.00	#DIV/0!		
Estimated Purchases	190.0	7,980	16,758.00	450.07			
Transfer in	xxxxxxxxxxx	(52)	0.00	0.00	#DIV/0!		
Consumed	(98.6)	(4,140)	(7,804.17)	(232.36)	79.1727	2.3573	81.5300
Balance @ 11/30/2017	1,684.0	70,726	135,153.08	3,938.29	80.2594		
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	1,684.0	70,726	135,153.08	3,938.29	80.2594		
Reverse Fuel Balance	****	****	(135,153.08)	****			
Fuel Balance @ Avg Price		****		****			
Total @ 12/01/2017 Avg Price	1,684.0	70,726	133,030.37	3,938.29	78.9989		
Weighted Avg Cost/BBL by Location			80.2594	2.3387			
Weighted Avg Cost/BBL @ Avg Cost			78.9989	2.3387			

	I	KANOELEHUA	DIESEL			
			COST	LAND		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		
Balance at 10/31/2017	1,453.0	61,025.0	110,931.8	اا 1,757.7 اا		
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		х	x	x		
Transfers in: Estimate		267	0.00	6.22		
Actual		(343)	0.00	0.00		
Consumed: Estimate	36.5	1,535	2,780.42	92.29		
Actual	(30.8)	(1,295)	(2,345.69)	(37.57)		
Balance Per G/L 10/31/2017	1,456.9	61,189	111,366.50	1,818.61		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	(13)	(534)	0.00	(12.44)		
Consumed	(12.2)	(513)	(967.04)	(26.58)	79.1727	1.2097
Balance @ 11/30/2017	1,432.0	60,142	110,399.46	1,779.58		
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	1,432.0	60,142	110,399.46	1,779.58		
Reverse Fuel Balance	x	х	(110,399.46)	x		
Fuel Balance @ Avg Price	x		113,122.65	x		
Total @ 12/01/2017 Avg Price	1,432.0	60,142	113,122.65	1,779.58		
Weighted Avg Cost/BBL by Location			77.0972	1.2428		
Weighted Avg Cost/BBL @ Avg Cost			78.9989	1.2428		

DISPERSED GENERATION

F

	BBL	GALLONS	COST	COST/BBL
Balance at 10/31/2017	89.1	3,741	7,997.38	
Less: Est'd Inven Addition	0.0	xxxxxxxx	****	
Purchases: Estimate Actual	0.0 18.8	0 790	()	
Consumed: Estimate Actual	11.9 (10.0)		907.48 14.47	
		xxxxxxxxxxx xxxxxxxxxx		
		xxxxxxxxxxx xxxxxxxxxx		
Balance Per G/L 10/31/2017	109.83	4,613	10,638.66	96.8619
Purchases	0.0	0	(51.95)	0.0000
Transfer out	xxxxxxxxx	****	xxxxxxxxxxx	
Transfer in	xxxxxxxxx	****	xxxxxxxxxxx	
Consumed	(3.6)	(150)	(282.76)	79.1727
Balance @ 11/30/2017	106.3	4,463	10,303.95	96.9675
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 11/30/2017	106.3	4,463	10,303.95	
Reverse Fuel Balance Fuel Balance @ Avg Price		xxxxxxxxxxxx xxxxxxxxxxx	(10,303.95) > 8,394.57 >	
Total @ 12/01/2017 Avg Price	106.3	4,463	8,394.57	78.9989

HAWAII ELECTRIC LIGHT COMPANY, INC.

CONTRACT PRICES EFFECTIVE November 1, 2017

TYPE OF OIL BURNED

Wharfage

Fees²

	<u>Hill Indus</u>	<u>strial</u>	<u>Puna Ind</u>	<u>ustrial</u>
INDUSTRIAL *	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	51.47	3.2424	51.47	3.2424
Ocean Transportation	52.74	3.2020	50.83	3.2020
Storage	28.69	1.9687	31.25	1.9687
Wharfage	5.60	0.3400	5.40	0.3400
Fees ²	1.13	0.0712	1.13	0.0900
	Hilo Die	esel	Waimea	Diesel
DIESEL *	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax ¹	86.48	5.0674	86.48	5.0674
Ocean Transportation	54.64	1.9761	54.64	3.2020
Storage	26.13	1.5312	26.13	1.5312
Wharfage	5.80	0.3400	5.80	0.3400
Fees ²	1.67	0.0975	1.67	0.0975
	Kona Di	esel	CT3 Di	esel
	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax ¹	86.48	5.0674	86.48	5.0674
Ocean Transportation	54.64	3.2020	54.64	3.2020
Storage	26.13	1.5312	26.13	1.5312
Wharfage	5.80	0.3400	5.80	0.3400
Fees ²	1.67	0.0975	1.67	0.0975
	ULS)		
ULSD **	¢/MBTU	\$/BBL		
Tax ¹	26.38	1.9439		
Ocean Transportation	0.00	0.0000		
Storage	0.00	0.0000		

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

0.00

1.67

0.0000

0.0975

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 December 1, 2017

		December 1, 2017 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW)	- on peak	11.966	6.560
PGV (22 MW)	- off peak	12.136	5.430
WAILUKU HYDRO	- on peak	11.966	7.240
		12.136	5.970
Other: (<100 KW)	Sch Q Rate	e 11.710	

		December 1, 2017 (¢/kWh)	Floor Rates (¢/kWh)
HEP		14.381	
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 December 1, 2017

<u>Line No.</u>	Description	<u>Amount</u>
1	Amount to be (returned) or collected	(\$714,200)
2	Monthly Amount $(1/3 x \text{ Line 1})$	(\$238,067)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$261,282)
5	Estimated MWh Sales (December 1, 2017)	84,720 mwh
6	Adjustment (Line 4 / Line 5)	(0.308) ¢/kwh

HAWAII ELECTRIC LIGHT COMPANY, INC.

2017 Cumulative Reconciliation Balance

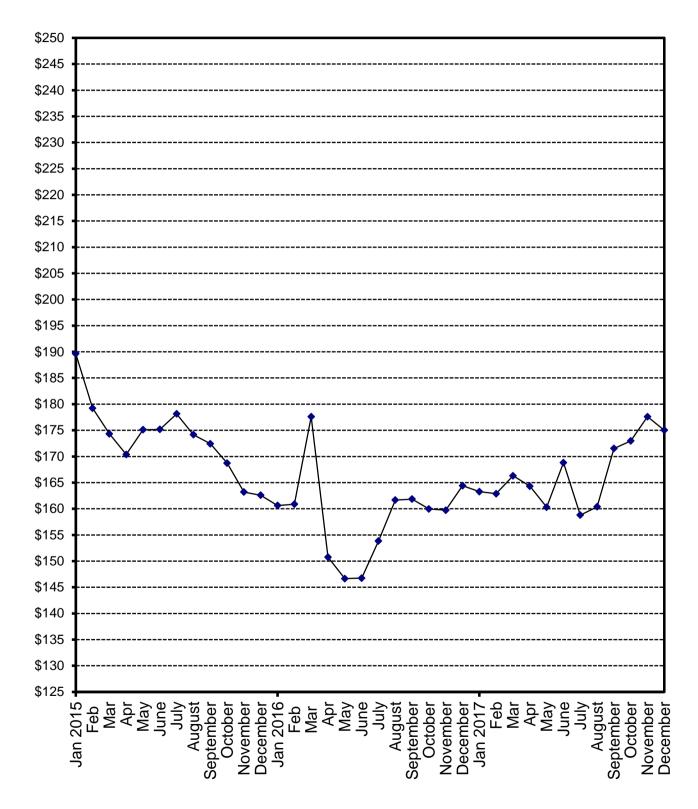
	(1)		(2) FOA Rec	(3) FOA Rec	(4)	(5)	(6) Month-end
	YTD FOA		Adjust	Less	Try to	Actual	Cumulative
<u>Month</u>	Reconciliation	<u>Qtr</u>	<u>Variance</u>	<u>Variance</u>	<u>Collect</u>	<u>Collect</u>	<u>Balance</u>
November	791,200	[3]	44,375	746,825	(263,733)	(262,906)	565,708
December ²	15				(263,733)	(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				007 0 40	(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				1 110 000	(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		(4)		400.010	(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		101	(22.240)	E22 140	(148,367)	(157,548)	(6,128)
August	500,800	[2]	(32,349)	533,149	(166,933)	(180,924)	346,097
September					(166,933)	(178,788)	167,309
October	714 200	101	(25 027)	740 227	(166,933)	(178,629)	(11,320)
November December	714,200	[3]	(35,027)	749,227	(238,067) (238,067)		

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): Col(5):	Amount that the FOA reconciliation adjustment is trying to collect. (Col(1) * 1/3) 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

EFFECTIVE DATE	FUEL FACTOR CENTS / KWH RESIDENTIAL & <u>COMMERCIAL</u>	RESIDENTI. @ 500 KWH	
January 1, 2015 February 1, 2015 March 1, 2015 April 1, 2015 May 1, 2015 June 8, 2015 July 1, 2015 August 1, 2015 September 1, 2015 October 1, 2015 November 1, 2015 December 1, 2015	2.369 0.485 -0.519 -0.990 -0.420 -0.579 0.264 -0.586 -0.927 -1.671 -2.727 -2.859	189.62 179.22 174.32 170.37 175.10 175.16 178.14 174.16 172.43 168.73 163.20 162.59	227.20 214.71 208.85 204.10 209.79 209.85 213.38 208.61 206.54 202.10 195.47 194.74
January 1, 2016 February 1, 2016 March 1, 2016 April 1, 2016 June 1, 2016 July 1, 2016 August 1, 2016 September 1, 2016 October 1, 2016 November 1, 2016 December 1, 2016	-3.223 -2.962 -4.311 -4.715 -5.554 -5.546 -4.248 -3.094 -3.040 -3.427 -3.514 -2.584	160.63 160.87 154.26 150.76 146.66 146.74 153.85 161.67 161.85 159.97 159.72 164.41	192.41 192.69 184.76 180.57 175.64 175.74 184.31 193.69 193.90 191.65 191.35 196.97
January 1, 2017 February 1, 2017 March 1, 2017 April 1, 2017 May 1, 2017 June 1, 2017 July 1, 2017 August 1, 2017 September 1, 2017 November 1, 2017	-2.842 -2.956 -2.274 -2.425 -3.035 -1.343 -3.220 -3.643 -2.447 -2.131 -0.885	163.27 162.87 166.31 164.31 160.30 168.82 158.79 160.39 171.52 172.97 177.60	195.58 195.09 199.24 196.83 192.02 202.25 190.22 192.15 205.50 207.23 212.80

December 1, 2017 -1.405 175.02

209.69

HAWAII ELECTRIC LIGHT COMPANY, INC. RESIDENTIAL SURCHARGE DATA

EFFECTIVE DATE DESCRIPTION OF SURCHARGE

RATE

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 Ra te Increase 2016	5.8800 PERCENT ON BASE
8/31/2017	RBA RATE ADJUSTMENT	0.6313 CENTS/KWH
10/1/2017 - 10/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.7257 CENTS/KWH
11/1/2017 - 11/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.4067 CENTS/KWH
12/1/2017 - 12/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.4090 CENTS/KWH

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

	Rate			Charge (\$) at 500 Kwh			
		11/01/17	12/01/17	11/01/17	12/01/17	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	5.8800%	5.8800%	\$9.08	\$9.08	\$0.00	
RBA Rate Adjustment	¢/kwh	0.6313	0.6313	\$3.16	\$3.16	\$0.00	
Purchased Power Adj. Clause	¢/kwh	2.4067	2.4090	\$12.03	\$12.05	\$0.02	
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	(0.8850)	(1.4050)	-\$4.43	-\$7.03	-\$2.60	
Green Infrastructure Fee	\$	1.1800 [´]	1.1800 [´]	\$1.18	\$1.18	\$0.00	

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

Avg Residential Bill at 500 kwh

\$177.60 \$175.02

Increase (Decrease -) % Change

-\$2.58 -1.45%

	Rate			Charge (\$) at 600 Kwh		
		11/01/17	12/01/17	11/01/17	12/01/17	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	5.8800%	5.8800%	\$10.89	\$10.89	\$0.00
RBA Rate Adjustment	¢/kwh	0.6313	0.6313	\$3.79	\$3.79	\$0.00
Purchased Power Adj. Clause	¢/kwh	2.4067	2.4090	\$14.44	\$14.45	\$0.01
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	(0.8850)	(1.4050)	-\$5.31	-\$8.43	-\$3.12
Green Infrastructure Fee	\$	1.1800	1.1800	\$1.18	\$1.18	\$0.00
	, .					
Avg Residential Bill at 600 kwh			\$212.80	\$209.69		

Increase (Decrease -) % Change