



January 29, 2019

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
2019 JAN 29 P 3:50
PUBLIC UTILITIES
COMMISSION

Dear Commissioners:

Subject: Hawai'i Electric Light Energy Cost Recovery Factor for February 2019

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Recovery factor for February 2019 is 14.631 cents per kilowatt-hour ("kWh"), an increase of 7.76 cents per kWh from last month. The Energy Cost Recovery Factor includes recovery of base fuel beginning February 1, 2019. The Efficiency Factors used reflect the factors for 2019 provided in Hawai'i Electric Light's January 24, 2019 filing in Docket No. 2015-0170.

Hawai'i Electric Light's fuel composite cost of generation decreased 164.25 per million BTU to 1,266.51 cents per million BTU. The distributed generation increased 0.20 cents per kWh to 15.769 cents per kWh. The composite cost of purchased energy decreased 0.84 cents per kWh to 12.303 cents per kWh.

A residential customer consuming 500 kWh of electricity will be paying \$174.25, a decrease of \$13.61 compared to rates effective January 1, 2019. The decrease in the typical residential bill is due to the decrease of (-\$51.22) due to the termination of the base fuel energy charge from the implementation of the Energy Cost Recovery Factor, decrease in the Purchased Power Adjustment rate (-\$1.21), and the implementation of the Energy Cost Recovery Factor (+\$38.82).

The attached sheets set forth the energy cost recovery factor in cents per kWh for each rate schedule that is applicable for pro rata use beginning February 1, 2019.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST RECOVERY FACTOR

	<u>EFFECTIVE DATES</u>		
	<u>1/01/19</u>	<u>2/01/19</u>	<u>Change</u>
<u>Composite Cost</u>			
Generation, ¢/mmbtu	1,430.76	1,266.51	(164.25)
Dispersed Generation Energy, ¢/kWh	15.569	15.769	0.20
Purchased Energy, ¢/kWh	13.139	12.303	(0.84)
<u>Residential Schedule "R"</u>			
Energy Cost Recovery - ¢/kWh	6.867	14.631	7.76
<u>Others - "G,J,P,F"</u>			
Energy Cost Recovery - ¢/kWh	6.867	14.631	7.76
Residential Customer with:			
500 KWH Consumption - \$/Bill	\$187.86	\$174.25	(\$13.61)
600 KWH Consumption - \$/Bill	\$224.86	\$208.53	(\$16.33)

HAWAII ELECTRIC LIGHT COMPANY, INC.
ENERGY COST RECOVERY (ECR) FILING

ENERGY COST RECOVERY (ECR) FILING - February 1, 2019 (Page 1 of 2)

<u>Line</u>		
1	Effective Date	February 1, 2019
2	Supersedes Factors of	January 1, 2019

GENERATION COMPONENT

<u>CENTRAL STATION WITH WIND/HYDRO COMPONENT</u>					
FUEL PRICES, ¢/mmbtu					
3					
4	Hill Industrial		984.47		
5	Puna Industrial		1,008.65		
6	Keahole Diesel		1,462.85		
6a	Keahole ULSD		1,688.90		
7	Waimea ULSD Diesel		1,691.09		
8	Hilo Diesel		1,425.61		
8a	Hilo (Kanoelehua) ULSD Diesel ¹		1,652.13		
9	Puna Diesel		1,419.45		
10	Wind		0.00		
11	Hydro		0.00		
BTU MIX, %					
12					
13	Hill Industrial		34.587		
14	Puna Industrial		6.097		
15	Keahole Diesel		50.061		
15a	Keahole ULSD		0.343		
16	Waimea ULSD Diesel		0.455		
17	Hilo Diesel		1.660		
17a	Hilo (Kanoelehua) ULSD Diesel ¹		0.315		
18	Puna Diesel		6.329		
19	Wind		0.000		
20	Hydro		0.153		
			100.00		
21	COMPOSITE COST OF GENERATION, CENTRAL STATION + WIND/HYDRO ¢/mmbtu		1,266.51		
22	% Input to System kWh Mix		55.145		
EFFICIENCY FACTOR, mmbtu/kWh					
	(A)	(B)	(C)	(D)	
		Eff Factor	Percent of	Weighted	
	<u>Fuel Type</u>	<u>mmbtu/kwh</u>	<u>Centrl Stn + Wind/Hydro</u>	<u>Eff Factor</u>	
23	Industrial	0.014569	40.684	0.005927	
24	Diesel	0.010480	59.163	0.006200	
25	Other	0.012395	0.153	0.000019	
	(Lines 23, 2				
26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]			0.0121460	
27	WEIGHTED COMPOSITE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/kWh (Lines (21 x 22 x 26))			8.48297	
28	BASE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/mmbtu			0.00	
29	Base % Input to Sys kWh Mix			0.00	
30	Efficiency Factor, mmbtu/kwh			0.000000	
31	WEIGHTED BASE CENTRAL STATION + WIND/HYDRO GENERATION COST ¢/kWh (Lines (28 x 29 x 30))			0.00000	
32	COST LESS BASE (Line 27 - 31)			8.48297	
33	Revenue Tax Req Multiplier			1.0975	
34	CENTRAL STATION + WIND/HYDRO GENERATION FACTOR, ¢/kWh (Line (32 x 33))			9.31006	
				<u>DG ENERGY COMPONENT</u>	
				35	COMPOSITE COST OF DG ENERGY, ¢/kWh
					15.769
				36	% Input to System kWh Mix
					0.118
				37	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 35 x 36)
					0.01853
				38	BASE DG ENERGY COMPOSITE COS
					0.000
				39	Base % Input to System kWh Mix
					0.00
				40	WEIGHTED BASE DG ENERGY COST, ¢/kWh (Line 38 x 39)
					0.00000
				41	Cost Less Base (Line 37 - 40)
					0.01853
				42	Loss Factor
					1.072
				43	Revenue Tax Req Multiplier
					1.0975
				44	DG FACTOR, ¢/kWh (Line 41 x 42 x 43)
					0.02180
				SUMMARY OF	
				TOTAL GENERATION FACTOR, ¢/kWh	
				45	Cntrl Stn+Wind/Hydro (line 34)
					9.31006
				46	DG (line 44)
					0.02180
				47	TOTAL GENERATION FACTOR, ¢/kWh (lines 45 + 46)
					9.33186

¹ Hilo ULSD same location as Kanoelehua ULSD

Hawaii Electric Light Company, Inc.
FUEL OIL INVENTORY PRICES FOR February 1, 2019

INDUSTRIAL FUEL COSTS:

	<u>HILO</u>	<u>PUNA</u>
Average Industrial Fuel Cost - \$/BBL	62.0217	62.0217
Land Transportation Cost - \$/BBL	--	1.5235
Industrial Costs For Filing - \$/BBL	62.0217	63.5452
Conversion Factors - mmbtu/BBL	6.30	6.30
Industrial Costs For Filing - ¢/mmbtu	984.47	1,008.65

DIESEL FUEL COSTS:

	<u>KEAHOLE</u>	<u>PUNA CT-3</u>	<u>HILO</u>
Average Diesel Fuel Cost - \$/BBL	82.5796	82.5796	82.5796
Land Transportation Cost - \$/BBL	3.1435	0.5999	0.9612
Diesel Costs For Filing - \$/BBL	85.7231	83.1795	83.5409
Conversion Factors - mmbtu/BBL	5.86	5.86	5.86
Diesel Costs For Filing - ¢/mmbtu	1,462.85	1,419.45	1,425.61

ULSD FUEL COSTS:

	<u>KEAHOLE</u>	<u>WAIMEA</u>	<u>HILO</u>	<u>DISPERSED GENERATION</u>
Average ULSD Fuel Cost - \$/BBL	93.5883	93.5883	93.5883	93.5883
Land Transportation Cost - \$/BBL	3.1856	3.3114	1.0788	-
ULSD Costs For Filing - \$/BBL	96.7739	96.8997	94.6672	93.5883
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,688.90	1,691.09	1,652.13	1,633.30

Dispersed Generation, cents per kWh

	<u>COMPOSITE COST OF DISP. GEN.</u>
BBIs Fuel:	171.0179
\$/BBI Inv Cost:	93.5883
Fuel \$ (Prod Sim Consumption x Unit Cost)	16,005.27
Net kWh (from Prod Sim)	101,500
cents/kWh:	15.769

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

	SHIPMAN INDUSTRIAL		HILL INDUSTRIAL		COST PER BARREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 12/31/2018	0	0.00	35,357	2,564,239.58			
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	(23,223)	(1,861,899.26)			
Actual	0	0.00	24,022	1,743,562.03			
Consumed: Estimate	0	0.00	28,416	2,437,688.16			
Actual	0	0.00	(29,346)	(2,517,468.92)			
Balance Per G/L 12/31/2018	<u>0</u>	<u>0.00</u>	<u>35,226</u>	<u>2,366,121.59</u>			
Purchases	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer out	xxxxxx	xxxxxxxxxxxxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer in	0	0.00	26,748	1,899,510.95			
Consumed	<u>0</u>	<u>0.00</u>	<u>(25,260)</u>	<u>(1,894,340.26)</u>	106.5901	0.0000	106.5901
Balance @ 1/31/2019	0	0.00	36,714	2,371,292.28			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 1/31/2019	<u>0</u>	<u>0.00</u>	<u>36,714</u>	<u>2,371,292.28</u>			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxx	(2,371,292.28)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxx	2,277,063.53			
Total @ 02/01/2019 Avg Price	<u>0</u>	<u>0.00</u>	<u>36,714</u>	<u>2,277,063.53</u>			

Weighted Avg Cost/BBL by Location #DIV/0! 64.5882

Weighted Avg Cost/BBL @ Avg Cost #DIV/0! 62.0217

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

PUNA INDUSTRIAL

	BBL	COST	LAND TRANSP	COST PER BARREL		TOTAL
				EXCLUDE LT	LT	
Balance at 12/31/2018	8,462	655,020.71	10,597.25			
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	(5,446)	(446,548.26)	(6,512.00)			
Actual	5,290	397,464.92	6,622.01			
Consumed: Estimate	3,003	257,614.64	3,733.96			
Actual	(3,551)	(304,625.23)	(2,687.62)			
Balance Per G/L 12/31/2018	<u>7,758</u>	<u>558,926.78</u>	<u>11,753.60</u>			
Purchases	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer out	XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer in	4,493	244,812	5,372.46			
Consumed	(5,673)	(425,439.13)	(7,104.49)	74.9937	1.2523	76.2460
Balance @ 1/31/2019	<u>6,578</u>	<u>378,299.46</u>	<u>10,021.57</u>			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	<u>6,578</u>	<u>378,299.46</u>	<u>10,021.57</u>		<u>1.5235</u>	
Reverse Fuel Balance	XXXXXXXXXXXX	(378,299.46)	XXXXXXXXXXXX			
Fuel Balance @ Avg Price	XXXXXXXXXXXX	407,978.53	XXXXXXXXXXXX			
Total @ 02/01/2019 Avg Price	<u>6,578</u>	<u>407,978.53</u>	<u>10,021.57</u>			

Weighted Avg Cost/BBL by Location

57.5098

1.5235

Weighted Avg Cost/BBL @ Avg Cost

62.0217

1.5235

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

KEAHOLE CT

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	BARREL LT	TOTAL
Balance at 12/31/2018	60,249.1	2,530,463.0	5,433,093.1	190,472.5			
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	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx			
Transfers in: Estimate	(50,333.9)	(2,114,023.0)	(5,006,166.8)	(143,119.4)			
Actual	45,721.0	1,920,280.0	4,138,769.5	128,161.65			
Consumed: Estimate	36,190.4	1,519,997.0	4,015,326.6	102,364.63			
Actual	(36,868.4)	(1,548,473.0)	(4,090,550.8)	(93,338.4)	110.9500		
Balance Per G/L 12/31/2018	54,958.2	2,308,244	4,490,471.55	184,541.09	81.7070		
Purchases		xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx			
Transfer out		xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx			
Transfer in	36,768.6	1,544,282.0	3,366,319.8	104,547.9	91.5542		
Consumed	(41,704.9)	(1,751,605.0)	(3,817,733.7)	(131,846.47)	91.5417	3.1614	94.7031
Balance @ 1/31/2019	50,021.9	2,100,921	4,039,057.62	157,242.51	80.7457		
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	50,021.9	2,100,921	4,039,057.62	157,242.51	80.7457		
Reverse Fuel Balance		xxxxxxxxxxxxxxxx	(4,039,057.6)	xxxxxxxxxxxxxxxx			
Fuel Balance @ Avg Price		xxxxxxxxxxxxxxxx	4,130,792.2	xxxxxxxxxxxxxxxx			
Total @ 02/01/2019 Avg Price	50,021.9	2,100,921	4,130,792.20	157,242.51	82.5796		

Weighted Avg Cost/BBL by Location

80.7457

3.1435

Weighted Avg Cost/BBL @ Avg Cost

82.5796

3.1435

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

PUNA CT-3

HS Diesel	BBL	GALLONS	COST EXCLUD LT	LAND TRANSP	COST PER BARREL EXCL LT	BARREL LT	TOTAL
Balance at 12/31/2018	4,831.6	202,928.0	452,911.8	5,592.8			
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	(1,379.0)	(57,918.0)	(138,337.1)	(1,529.0)			
Actual	1,754.4	73,686.0	180,457.2	2,193.9			
Consumed: Estimate	1,238.5	52,018.0	137,414.3	1,400.2			
Actual	(1,794.5)	(75,369.0)	(199,099.8)	(4,112.6)			
Balance Per G/L 12/31/2018	4,651.1	195,345	433,346.39	3,545.24			
Purchases		XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX			
Transfer out		XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXXXXX			
Transfer in	1,958.8	82,269.0	164,426.9	2,171.9	83.9433		
Consumed	(3,141.8)	(131,955)	(287,604.26)	(3,636.72)	91.5417	1.1575	92.6992
Balance @ 1/31/2019	3,468.1	145,659	310,169.05	2,080.42	89.4356		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 1/31/2019	3,468.1	145,659	310,169.05	2,080.42	89.4356		
Reverse Fuel Balance		XXXXXXXXXXXXXXXXXXXX	(310,169.05)	XXXXXXXXXXXXXXXXXXXX			
Fuel Balance @ Avg Price		XXXXXXXXXXXXXXXXXXXX	286,392.05	XXXXXXXXXXXXXXXXXXXX			
Total @ 02/01/2019 Avg Price	3,468.1	145,659	286,392.05	2,080.42	82.5796		

Weighted Avg Cost/BBL by Location 89.4356 0.5999

Weighted Avg Cost/BBL @ Avg Cost 82.5796 0.5999

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

TOTAL HILO HS-DIESEL

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER EXCL LT	BARREL LT	TOTAL
Balance at 12/31/2018	1794.3	75,361	172,434	1,971			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Actual		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfers out: Estimate		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Actual		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfers in: Estimate	0.9	39.0	0.0	0.0			
Actual	-0.9	-39.0	0.0	0.0			
Consumed: Estimate	36.7	1543.0	4076.1	33.7			
Actual	-112.0	-4706.0	-12431.7	-146.4			
Balance Per G/L 12/31/2018	1719.0	72,198	164,078.19	1,857.94	95.4498		
Purchases		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer out		XXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer in	191.0	8024.0	16062.6	0.0	84.0766		
Consumed	-159.9	-6717.0	-14640.1	-175.6	91.5417	1.0982	92.6399
Balance @ 1/31/2019	1,750.1	73,505	165,500.69	1,682.30	94.5654		
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	1,750.1	73,505	165,500.69	1,682.30	94.5654		
Reverse Fuel Balance		XXXXXXXXXXXX	XXXXXXXXXXXX -165,500.69	XXXXXXXXXXXX			
Fuel Balance @ Avg Price		XXXXXXXXXXXX	XXXXXXXXXXXX 144,524.18	XXXXXXXXXXXX			
Total @ 02/01/2019 Avg Price	1,750.1	73,505	144,524.18	1,682.30	82.5796		

Weighted Avg Cost/BBL by Location

94.5654 0.9612

Weighted Avg Cost/BBL @ Avg Cost

82.5796 0.9612

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

KEAHOLE DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	LT	TOTAL
Balance at 12/31/2018	2,064.3	86,702	189,679.08	6,669.76			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(189.1)	(7,943)	(18,398.66)	(537.74)			
Actual	189.1	7,943	16,431.51	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate		(70)	0.00	(4.74)			
Actual		14	0.00	537.74			
Consumed: Estimate	100.7	4,231	9,735.24	283.78			
Actual	(216.2)	(9,081)	(2,496.09)	(609.07)	11.5445		
Balance Per G/L 12/31/2018	1,947.5	81,796	194,951.08	6,339.72	100.1020		
Purchases	189.2	7,948	16,658.12	538.08	0.0000		
Estimated Purchases	190.0	7,980	16,725.19	540.25			
Transfer in	(0.3)	(12)	0.00	(0.81)	0.00		
Consumed	(131.9)	(5,539)	(12,186.29)	(426.10)	92.4037	3.2310	95.6347
Balance @ 1/31/2019	2,194.6	92,173	216,148.10	6,991.14	98.4911		
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	2,194.6	92,173	216,148.10	6,991.14	98.4911		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(216,148.10)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	205,388.48	xxxxxxxxxxxx			
Total @ 02/01/2019 Avg Price	2,194.6	92,173	205,388.48	6,991.14	93.5883		

Weighted Avg Cost/BBL by Location

98.4911 3.1856

Weighted Avg Cost/BBL @ Avg Cost

93.5883 3.1856

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

WAIMEA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL	LT	TOTAL
Balance at 12/31/2018	1,534.4	64,445.0	137,868.6	3,533.72			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(7,943)	(18,398.66)	(447.99)			
Actual		7,943.0	16,431.5	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate	(36.9)	(1,550)	0.00	0.00			
Actual	41.2	1,732	0.00	447.99			
Consumed: Estimate	99.2	4,165	9,583.37	232.72			
Actual	(158.9)	(6,674)	(15,356.41)	1,387.50			
Balance Per G/L 12/31/2018	1,479.0	62,118	130,128.44	5,153.94	87.9841		
ULSD Purchases	189.2	7,947	16,656.03	448.21	88.0273		
Estimated Purchases	190.0	7,980	16,725.19	450.07			
Transfer in	xxxxxxxxxxxx	83	0.00	0.00	#DIV/0!		
Consumed	(106.7)	(4,480)	(9,856.39)	(245.65)	92.4037	2.3030	94.7067
Balance @ 1/31/2019	1,753.5	73,648	153,653.27	5,806.57	87.6254		
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	1,753.5	73,648	153,653.27	5,806.57	87.6254		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(153,653.27)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	164,109.35	xxxxxxxxxxxx			
Total @ 02/01/2019 Avg Price	1,753.5	73,648	164,109.35	5,806.57	93.5883		

Weighted Avg Cost/BBL by Location

87.6254 3.3114

Weighted Avg Cost/BBL @ Avg Cost

93.5883 3.3114

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

KANOELEHUA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP		
Balance at 12/31/2018	1,482.6	62,269.0	142,034.2	1,645.3		
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	(189.1)	(7,944)	(18,401.21)	(185.10)		
Actual	189.1	7,944	16,433.83	0.00		
Transfers out: Estimate			x	x		x
Actual			x	x		x
Transfers in: Estimate		0	0.00	0.00		
Actual		0	0.00	185.10		
Consumed: Estimate	65.5	2,752	967.04	26.58		
Actual	(64.0)	(2,689)	(6,187.20)	(67.85)		
Balance Per G/L 12/31/2018	1,484.1	62,332	134,846.62	1,604.05		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	0	0	0.00	0.00		
Consumed	(21.9)	(920)	(967.04)	(26.58)	92.40370004	1.1098
Balance @ 1/31/2019	1,462.2	61,412	133,879.58	1,577.47		
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	1,462.2	61,412	133,879.58	1,577.47		
Reverse Fuel Balance	x	x	(133,879.58)	x		
Fuel Balance @ Avg Price	x	x	136,843.95	x		
Total @ 02/01/2019 Avg Price	1,462.2	61,412	136,843.95	1,577.47		

Weighted Avg Cost/BBL by Location

91.5610 1.0788

Weighted Avg Cost/BBL @ Avg Cost

93.5883 1.0788

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2019

DISPERSED GENERATION

	BBL	GALLONS	COST	COST/BBL
Balance at 12/31/2018	140.8	5,913	12,961.25	
Less: Est'd Inven Addition	0.0	XXXXXXXXX	XXXXXXXXXX	
Purchases: Estimate	(11.9)	(498)	(1,153.55)	
Actual	11.9	498	1,030.61	
Consumed: Estimate	2.7	113	260.01	
Actual	(10.6)	(444)	1,980.11	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Balance Per G/L 12/31/2018	132.90	5,582	15,078.43	113.4529
Purchases	0.0	0	0.00	0.0000
Transfer out	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Transfer in	XXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Consumed	(17.5)	(735)	(1,617.06)	92.4037
Balance @ 1/31/2019	115.4	4,847	13,461.37	116.6448
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 1/31/2019	115.4	4,847	13,461.37	
Reverse Fuel Balance	XXXXXXXXXX	XXXXXXXXXX	(13,461.37)	xxxx
Fuel Balance @ Avg Price	XXXXXXXXXX	XXXXXXXXXX	10,800.54	xxxx
Total @ 02/01/2019 Avg Price	115.4	4,847	10,800.54	93.5883

Hawaii Electric Light Company, Inc.
PURCHASED POWER PRICES FOR February 1, 2019

		February 1, 2019 <u>(¢/kWh)</u>	Floor Rates <u>(¢/kWh)</u>
PGV (25 MW)	- on peak	14.417	6.560
PGV (22 MW)	- off peak	12.961	5.430
WAILUKU HYDRO	- on peak	14.417	7.240
	off peak	12.961	5.970
Other: (<100 KW)	Sch Q Rate	13.460	
		February 1, 2019 <u>(¢/kWh)</u>	Floor Rates <u>(¢/kWh)</u>
HEP		12.168	
PGV Addtl 5 MW	- on peak	13.0500	0.0000
	- off peak	13.0500	0.0000
PGV Addtl 8 MW	- on peak	9.9500	0.0000
	- off peak	6.6400	0.0000

Hawaii Electric Light Company, Inc.
Energy Cost Reconciliation Adjustment
February 1, 2019

<u>Line No.</u>	<u>Description</u>	<u>Amount</u>
1	Amount to be (returned) or collected	(\$2,598,900)
2	Monthly Amount ($\frac{1}{3}$ x Line 1)	(\$866,300)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$950,776)
5	Estimated MWh Sales (February 1, 2019)	80,781 mwh
6	Adjustment (Line 4 / Line 5)	(1.177) ¢/kwh

HAWAII ELECTRIC LIGHT COMPANY, INC.
2018 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand \$)

LINE	DESCRIPTION	Info Only	collectn by company*	Basis for Recon	Collection or Refund by Company
		December 2018 YTD Total No Deadband		December 2018 YTD Total Deadband	
ACTUAL COSTS:					
1	Generation	\$90,756.1		\$90,756.1	
2	Distributed Generation	\$11.9		\$11.9	
3	Purch Power	\$77,343.5		\$77,343.5	
4	TOTAL	\$168,111.5		\$168,111.5	
FUEL FILING COST (1)					
5	Generation	\$91,172.7		\$91,074.7	
6	Distributed Generation	\$11.9		\$11.9	
7	Purch Power	\$77,343.5		\$77,343.5	
8	TOTAL	\$168,528.0		\$168,430.0	
BASE FUEL COST					
9	Generation	\$71,180.4		\$71,180.4	
10	Distributed Generation	\$4.6		\$4.6	
11	Purch Power	\$71,394.4		\$71,394.4	
12	TOTAL	\$142,579.3		\$142,579.3	
13	FUEL-BASE COST (Line 8-12)	\$25,948.7		\$25,850.7	
14	ACTUAL FOA LESS TAX	\$27,692.3		\$27,692.3	
15	Less: FOA reconciliation adj for prior year	-\$1,063.1		-\$1,063.1	
16	ADJUSTED FOA LESS TAX	\$28,755.4		\$28,755.4	
17	FOA-(FUEL-BASE) (Line 16-13)	\$2,806.7	over	\$2,904.7	over
ADJUSTMENTS:					
18	Current year FOA accrual reversal	\$2,465.1		\$2,465.1	
19	Other prior year FOA	\$0.0		\$0.0	
20	Other	\$0.0		\$0.0	
21	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	\$5,271.8	over	\$5,369.8	over
22	Third Quarter FOA reconciliation			2,770.9	over
23	FOA Reconciliation to be Returned or Collected			2,598.9	over

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

**Hawai'i Electric Light Company
DEADBAND CALCULATION
For Period: January 1, 2018 to September 30, 2018**

	<u>Notes</u>	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	124,517,742
Industrial Consumption (Recorded), MMBTU	b	1,826,127
Industrial Efficiency Factor (Recorded), BTU/kWh	c=(b/a)	14,666
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,	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	253,935,302
Diesel Consumption (Recorded), MMBTU	b	2,645,608
Diesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a)	10,418
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,	10,418
<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)	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,	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	15,610,750
Hydro Consumption (Recorded), MMBTU	b	184,471
Hydro Efficiency Factor (Recorded), BTU/kWh	c=(b/a)	11,817
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,	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.

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

For Period: October 1, 2018 to December 31, 2018

	<u>Notes</u>	YTD
<u>Industrial</u>		
Industrial Efficiency Factor (per D&O), BTU/kWh*	f	14,437
Industrial Deadband Definition, +/- BTU/kWh	d	100
Industrial Portion of Recorded Sales, kWh	a	44,157,228
Industrial Consumption (Recorded), MMBTU	b	653,660
Industrial Efficiency Factor (Recorded), BTU/kWh	c=(b/a)	14,803
Lower limit of Industrial Deadband, BTU/kWh	e= f-d	14,337
Higher limit of Industrial Deadband, BTU/kWh	g=f+d	14,537
Industrial Efficiency Factor for cost-recovery, BTU/kWh	h=c, e,	14,537
<u>Diesel</u>		
Diesel Efficiency Factor (per D&O), BTU/kWh*	f	10,515
Diesel Deadband Definition, +/- BTU/kWh	d	200
Diesel Portion of Recorded Sales, MWh	a	92,110,736
Diesel Consumption (Recorded), MMBTU	b	968,945
Diesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a)	10,519
Lower limit of Diesel Deadband, BTU/kWh	e= f-d	10,315
Higher limit of Diesel Deadband, BTU/kWh	g=f+d	10,715
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h=c, e,	10,519
<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)	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,	0
<u>Hydro</u>		
Hydro Efficiency Factor (per D&O), BTU/kWh*	f	12,351
Hydro Deadband Definition, +/- BTU/kWh	d	100
Hydro Portion of Recorded Sales, MWh	a	2,732,092
Hydro Consumption (Recorded), MMBTU	b	33,215
Hydro Efficiency Factor (Recorded), BTU/kWh	c=(b/a)	12,157
Lower limit of Hydro Deadband, BTU/kWh	e= f-d	12,251
Higher limit of Hydro Deadband, BTU/kWh	g=f+d	12,451
Hydro Efficiency Factor for cost-recovery, BTU/kWh	h=c, e,	12,251

* 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

	Without Deadband		With Deadband	
	Jan 1 - Sep 30	Jan 1 - Sep 30	Oct 1 - Dec 31	Oct 1 - Dec 31
INDUSTRIAL FUEL FILING COST				
Industrial Portion of Recorded Sales , kWh	124,517,742	124,517,742	44,157,228	44,157,228
Industrial Efficiency Factor (mmbtu/kwh)	0.015148	0.015048	0.014437	0.014537
Mmbtu adjusted for Sales Efficiency Factor	1,886,195	1,873,743	637,498	641,914
\$/mmbtu	<u>\$10.8469</u>	<u>\$10.8469</u>	<u>\$12.6363</u>	<u>\$12.6363</u>
TOTAL INDUSTRIAL \$000s TO BE RECOVERED	\$20,459.276	\$20,324.213	\$8,055.613	\$8,111.412
DIESEL FUEL FILING COST				
Diesel Portion of Recorded Sales, kWh	253,935,302	253,935,302	92,110,736	92,110,736
Diesel Efficiency Factor (mmbtu/kwh)	0.010424	0.010418	0.010515	0.010519
Mmbtu adjusted for Sales Efficiency Factor	2,647,022	2,645,498	968,544	968,913
\$/mmbtu	<u>\$16.8231</u>	<u>\$16.8231</u>	<u>\$18.1268</u>	<u>\$18.1337</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$44,531.022	\$44,505.390	\$18,126.754	\$18,133.650
HYDRO FUEL FILING COST				
Hydro Portion of Recorded Sales , kWh	15,610,750	15,610,750	2,732,092	2,732,092
Hydro Efficiency Factor (mmbtu/kwh)	0.012621	0.012521	0.012351	0.012251
Mmbtu adjusted for Sales Efficiency Factor	197,023	195,462	33,744	33,471
\$/mmbtu	<u>\$0.0000</u>	<u>\$0.0000</u>	<u>\$0.0000</u>	<u>\$0.0000</u>
TOTAL HYDRO \$000s TO BE RECOVERED	\$0.000	\$0.000	\$0.000	\$0.000
TOTAL GENERATION FUEL FILING COST, \$000s	\$64,990.3	\$64,829.6	\$26,182.4	\$26,245.1
CALCULATION OF GENERATION BASE FUEL COST				
TOTAL GENERATION BASE FUEL COST, \$000s	\$58,081.5	\$58,081.5	\$13,098.9	\$13,098.9
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$64,990.3	\$64,829.6	\$91,172.7	\$91,074.7
TOTAL GENERATION BASE FUEL COST YTD	\$58,081.5	\$58,081.5	\$71,180.4	\$71,180.4

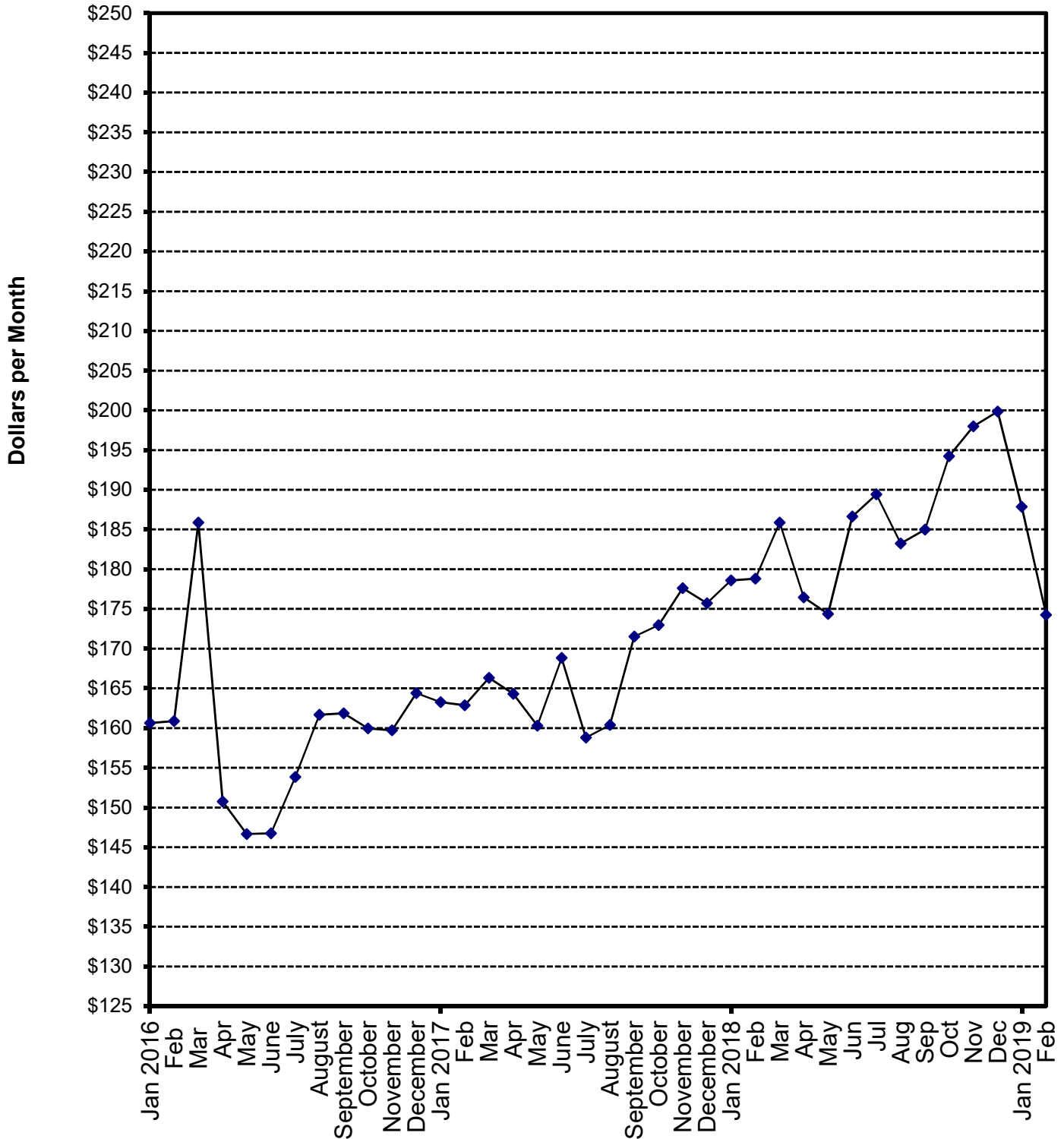
HAWAII ELECTRIC LIGHT COMPANY, INC.
2018 Cumulative Reconciliation Balance

<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	785,400	[3]	(82,548)	867,948	(261,800)	(268,646)	534,241
December 16					(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)	(180,924)	346,097
September					(166,933)	(178,788)	167,309
October					(166,933)	(178,629)	(11,320)
November	714,200	[3]	(35,027)	749,227	(238,067)	(250,818)	487,089
December					(238,067)	(243,403)	243,686
January 18					(238,067)	(242,224)	1,462
February	825,100	[4]	(29,783)	854,883	(275,033)	(279,869)	576,476
March					(275,033)	(283,895)	292,581
April					(275,033)	(291,829)	752
May	1,153,900	(1)	(17,855)	1,171,755	(384,633)	(398,709)	773,798
June					(384,633)	(387,715)	386,083
July					(384,633)	(399,033)	(12,950)
August	699,900	[2]	(33,954)	733,854	(233,300)	(244,658)	476,246
September					(233,300)	(240,110)	236,136
October					(233,300)	(241,346)	(5,210)
November	917,000	[3]	(32,568)	949,568	(305,667)	(309,251)	635,107
December 18					(305,667)	(302,091)	333,016
January 19					(305,667)		
February	2,598,900	[4]	(8,054)	2,606,954	(866,300)		

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, 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
October 1, 2017	-2.131	172.97	207.23
November 1, 2017	-0.885	177.60	212.80
December 1, 2017	-1.405	175.02	209.69
January 1, 2018	-0.723	178.59	213.95
February 1, 2018	-0.579	178.81	214.22
March 1, 2018	0.816	185.87	222.68
April 1, 2018	-0.912	176.46	211.39
May 1, 2018	-0.452	174.38	208.90
June 1, 2018	2.301	186.65	223.63
July 1, 2018	2.831	189.43	226.97
August 1, 2018	1.665	183.25	219.55
September 1, 2018	2.027	184.98	221.62
October 1, 2018	8.359	194.21	232.50
November 1, 2018	8.913	197.99	237.04
December 1, 2018	9.292	199.86	239.29
January 1, 2019	6.867	187.86	224.86
February 1, 2019	14.631	174.25	208.53

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
04/09/12	FINAL RATE INCREASE (1.28%), DOCKET NO. 2009-0164 (2010 TEST YEAR)	
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
8/31/2017-4/30/18	INTERIM RATE 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
1/1/2018 - 1/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.4105 CENTS/KWH
1/1/18-6/30/18	GREEN INFRASTRUCTURE FEE	1.3400 DOLLARS/MONTH
2/1/18-2/28/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3101 CENTS/KWH
3/1/18 - 3/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3258 CENTS/KWH
04/1/18-04/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3184 CENTS/KWH
04/1/18-04/30/18	SOLARSAVER ADJUSTMENT	-0.1464 CENTS/KWH
05/1/18-05/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3395 CENTS/KWH
05/1/18-05/31/18	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2018	INTERIM RATE INCREASE 2016	2.5000 PERCENT ON BASE
06/01/18-06/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.6729 CENTS/KWH
6/1/2018	RBA RATE ADJUSTMENT	1.0006 CENTS/KWH
07/01/18-07/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.6811 CENTS/KWH
7/1/2018- 12/31/18	GREEN INFRASTRUCTURE FEE	1.2100 DOLLARS/MONTH
7/1/2018	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
08/01/18-08/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.6110 CENTS/KWH
09/01/18-09/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.5950 CENTS/KWH
10/01/18-10/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.8602 CENTS/KWH
10/1/2018	INTERIM RATE INCREASE 2016	0.0000 PERCENT ON BASE
10/1/2018	FINAL RATE INCREASE (TY 2016) 0.53% EFFECTIVE 10/01/18, DOCKET NO. 2015-0170	
11/1/2018-11/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.0617 CENTS/KWH
12/1/2018-12/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.0577 CENTS/KWH
1/1/2019-1/31/19	PURCHASED POWER ADJUSTMENT CLAUSE	2.0548 CENTS/KWH
1/1/2019- 06/30/19	GREEN INFRASTRUCTURE FEE	1.3500 DOLLARS/MONTH
2/1/2019-2/28/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.8113 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			
	01/01/19	02/01/19	01/01/19	02/01/19	Difference	
Base Rates	effective date:	10/1/2018	2/1/2019			
Base Fuel Energy Charge	¢/kwh	10.2440	-	\$51.22	\$0.00	-\$51.22
Non-Fuel Energy Charge	¢/kwh			\$71.85	\$71.85	\$0.00
First 300 kWh per month	¢/kwh	13.0289	13.0289	\$39.09	\$39.09	\$0.00
Next 700 kWh per month	¢/kwh	16.3807	16.3807	\$32.76	\$32.76	\$0.00
Customer Charge	\$	11.50	11.50	\$11.50	\$11.50	\$0.00
Total Base Charges				\$134.57	\$83.35	-\$51.22
Interim Rate Increase 2016 TY	% on base	0.0000%	0.0000%	\$0.00	\$0.00	\$0.00
RBA Rate Adjustment	¢/kwh	1.0006	1.0006	\$5.00	\$5.00	\$0.00
Purchased Power Adj. Clause	¢/kwh	2.0548	1.8113	\$10.27	\$9.06	-\$1.21
PBF Surcharge	¢/kwh	0.4658	0.4658	\$2.33	\$2.33	\$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 Recovery	¢/kwh	6.8670	14.6310	\$34.34	\$73.16	\$38.82
Green Infrastructure Fee	\$	1.3500	1.3500	\$1.35	\$1.35	\$0.00
Avg Residential Bill at 500 kwh				\$187.86	\$174.25	

Increase (Decrease -)	-\$13.61
% Change	-7.24%

	Rate		Charge (\$) at 600 Kwh			
	01/01/19	02/01/19	01/01/19	02/01/19	Difference	
Base Rates	effective date:	10/1/2018	2/1/2019			
Base Fuel/Energy Charge	¢/kwh	10.2440	-	\$61.46	\$0.00	-\$61.46
Non-Fuel Energy Charge	¢/kwh			\$88.23	\$88.23	\$0.00
First 300 kWh per month	¢/kwh	13.0289	13.0289	\$39.09	\$39.09	\$0.00
Next 700 kWh per month	¢/kwh	16.3807	16.3807	\$49.14	\$49.14	\$0.00
Customer Charge	\$	11.50	11.50	\$11.50	\$11.50	\$0.00
Total Base Charges				\$161.19	\$99.73	-\$61.46
Interim Rate Increase 2016 TY	% on base	0.0000%	0.0000%	\$0.00	\$0.00	\$0.00
RBA Rate Adjustment	¢/kwh	1.0006	1.0006	\$6.00	\$6.00	\$0.00
Purchased Power Adj. Clause	¢/kwh	2.0548	1.8113	\$12.33	\$10.87	-\$1.46
PBF Surcharge	¢/kwh	0.4658	0.4658	\$2.79	\$2.79	\$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 Recovery	¢/kwh	6.8670	14.6310	\$41.20	\$87.79	\$46.59
Green Infrastructure Fee	\$	1.3500	1.3500	\$1.35	\$1.35	\$0.00
Avg Residential Bill at 600 kwh				\$224.86	\$208.53	

Increase (Decrease -)	-\$16.33
% Change	-7.26%