SHARON M. SUZUKI
President

January 29, 2020

FILED

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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 Recovery Factor for February 2020

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Recovery factor for February 2020 is 17.547 cents per kilowatt-hour ("kWh"), an increase of 0.78 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying $189.22, an increase of $3.85 compared to rates effective January 1, 2020. The increase in the residential bill is due to the increase in the Energy Cost Recovery Factor (+$3.90), partially offset by the decrease in Purchased Power Adjustment Clause (-$0.05).

Hawai'i Electric Light's fuel composite cost of generation decreased 1.76 cents per million BTU to 1,313.33 cents per million BTU. The composite cost of distributed generation increased 0.14 cents per kWh to 16.603 cents per kWh. The composite cost of purchased energy increased 0.04 cents per kWh to 15.097 cents per kWh.

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, 2020.

Sincerely,

Sharon M. Suzuki

Attachments

cc: Division of Consumer Advocacy

ATTACHMENT 1

HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		
	1/01/20	2/01/20	Change
Composite Cost			
Generation, ¢/mmbtu	1,315.09	1,313.33	(1.76)
Dispersed Generation Energy, ¢/kWh	16.464	16.603	0.14
Purchased Energy, ¢/kWh	15.062	15.097	0.04
Residential Schedule "R"			
Energy Cost Recovery - ¢/kWh	16.768	17.547	0.78
Others - "G,J,P,F"			
Energy Cost Recovery - ¢/kWh	16.768	17.547	0.78
Residential Customer with:			
500 KWH Consumption - $/Bill	$185.37	$189.22	$3.85
600 KWH Consumption - $/Bill	$221.88	$226.49	$4.61

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

ENERGY COST RECOVERY (ECR) FILING - February 1, 2020 (Page 1 of 2)

Line		
1	Effective Date	February 1, 2020
2	Supercedes Factors of	January 1, 2020

GENERATION COMPONENT

CENTRAL STATION WITH WIND/HYDRO COMPONENT

	FUEL PRICES, ¢/mmbtu	
3		
4	Hill Industrial	964.19
5	Puna Industrial	985.14
6	Keahole Diesel	1,577.81
6a	Keahole ULSD	1,675.58
7	Waimea ULSD Diesel	1,671.50
8	Hilo Diesel	1,544.28
8a	Hilo (Kanoelehua) ULSD Diesel[1]	1,639.95
9	Puna Diesel	1,548.44
10	Wind	0.00
11	Hydro	0.00
	BTU MIX, %	
12		
13	Hill Industrial	33.934
14	Puna Industrial	6.502
15	Keahole Diesel	50.697
15a	Keahole ULSD	0.040
16	Waimea ULSD Diesel	0.254
17	Hilo Diesel	1.376
17a	Hilo (Kanoelehua) ULSD Diesel[1]	0.152
18	Puna Diesel	6.040
19	Wind	0.000
20	Hydro	1.005
		100.000
21	COMPOSITE COST OF GENERATION, CENTRAL STATION + WIND/HYDRO ¢/mmbtu	1,313.33
22	% Input to System kWh Mix	56.209

EFFICIENCY FACTOR, mmbtu/kWh

	(A)	(B)	(C)	(D)
	Fuel Type	Eff Factor mmbtu/kwh	Percent of Centrl Stn + Wind/Hydro	Weighted Eff Factor
23	Industrial	0.014389	40.436	0.005818
24	Diesel	0.010580	58.559	0.006196
25	Other	0.011999	1.0050	0.0001
	(Lines 23, 24, 25): Col(B) x Col(C) = Col(D)		100.0000	

26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]	0.0121350
27	WEIGHTED COMPOSITE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/kWh (Lines (21 x 22 x 26))	8.95817
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)	8.95817
33	Revenue Tax Req Multiplier	1.0975
34	CENTRAL STATION + WIND/HYDRO GENERATION FACTOR, ¢/kWh (Line (32 x 33))	9.83159

DG ENERGY COMPONENT

35	COMPOSITE COST OF DG ENERGY, ¢/kWh	16.603
36	% Input to System kWh Mix	0.010
37	WEIGHTED COMPOSITE DG ENERGY COST, ¢/kWh (Lines 35 x 36)	0.00166
38	BASE DG ENERGY COMPOSITE COST	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)	0.00166
42	Loss Factor	1.072
43	Revenue Tax Req Multiplier	1.0975
44	DG FACTOR, ¢/kWh (Line 41 x 42 x 43)	0.00195

SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh

45	Cntrl Stn+Wind/Hydro (line 34)	9.83159
46	DG (line 44)	0.00195
47	TOTAL GENERATION FACTOR, ¢/kWh (lines 45 + 46)	9.83354

[1] Hilo ULSD same location as Kanoelehua ULSD

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

ENERGY COST RECOVERY (ECR) FILING - February 1, 2020 (Page 2 of 2)

Line	PURCHASED ENERGY COMPONENT		
	PURCHASED ENERGY PRICE, ¢/kWh -- Fossil		
48	HEP		15.623
	PURCHASED ENERGY PRICE, ¢/kWh -- Renewable		
49	PGV	On Peak	14.865
50	PGV	Off Peak	14.234
51	PGV - Add'l 5 MW	On Peak	13.250
52	PGV - Add'l 5 MW	Off Peak	13.250
53	PGV - Add'l 8 MW	On Peak	10.100
54	PGV - Add'l 8 MW	Off Peak	6.740
55	Wailuku Hydro	On Peak	14.865
56	Wailuku Hydro	Off Peak	14.234
57	Hawi Renewable Dev.	On Peak	14.865
58	Hawi Renewable Dev.	Off Peak	14.234
59	Tawhiri (Pakini Nui)	On Peak	12.760
60	Tawhiri (Pakini Nui)	Off Peak	12.660
61	HEP Biodiesel		15.623
62	Small Hydro (>100 KW)	On Peak	14.865
63	Small Hydro (>100 KW)	Off Peak	14.234
64	Sch Q Hydro (<100 KW)		14.230
65	FIT		23.800
	PURCHASED ENERGY KWH MIX, %,		
66	HEP, Fossil		65.849
	PURCHASED ENERGY KWH MIX, %, Renewable		
67	PGV	On Peak	0.000
68	PGV	Off Peak	0.000
69	PGV - Addt'l	On Peak	0.000
70	PGV - Addt'l	Off Peak	0.000
71	PGV - Add'l 8 MW	On Peak	0.000
72	PGV - Add'l 8 MW	Off Peak	0.000
73	Wailuku Hydro	On Peak	0.526
74	Wailuku Hydro	Off Peak	0.820
75	Hawi Renewable Dev.	On Peak	3.349
76	Hawi Renewable Dev.	Off Peak	1.467
77	Tawhiri (Pakini Nui)	On Peak	10.580
78	Tawhiri (Pakini Nui)	Off Peak	8.181
79	HEP Biodiesel		8.242
80	Small Hydro (>100 KW)	On Peak	0.000
81	Small Hydro (>100 KW)	Off Peak	0.000
82	Sch Q Hydro (<100 KW)		0.000
83	FIT		0.986
			100.000
83a	Comp. Cost Purchased Energy Fossil, ¢/kWh		15.6230
83b	Comp. Cost Purchased Energy Renewable, ¢/kWh		14.0833
84	COMPOSITE COST OF PURCHASED ENERGY, ¢/kWh		15.097
85	% Input to System kWh Mix		43.781
86	WEIGHTED COMPOSITE PURCHASED ENERGY COST, ¢/kWh (Lines (84 x 85))		6.60962
87	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kWh		0.000
88	Base % Input to Sys kWh Mix		0.00
89	WEIGHTED BASE PURCHASED ENERGY COST, ¢/kWh (Lines (87 x 88))		0.00000
90	COST LESS BASE (Lines (86 - 89))		6.60962
91	Loss Factor		1.072
92	Revenue Tax *		1.0975
93	PURCHASED ENERGY FACTOR, ¢/kWh (Lines (90 x 91 x 92))		7.77635

Derivation of Non-Adjustable Component:

93A	Ocean Cargo Insurance Exp, $000 HELCO-603, page 1, line 4	$13.1
93B	Revenue Tax Adjustment	1.097514
93C	Non-Adj Revenues, $000	$14.4
93D	2019 TY Sales, MWh HELCO-301	1,061,718
93E	Non-Adj Revenues, ¢/kWh	0.00135

Line	SYSTEM COMPOSITE	
94	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93))	17.60989
95	Not Used	0.000
96	Non-Adjustable Component	0.00135
97	ECA Reconciliation Adjustment	(0.064)
98	ECA FACTOR, ¢/kWh (Lines (94 + 95+ 96 + 97))	17.547

Hawaii Electric Light Company, Inc.
FUEL OIL INVENTORY PRICES FOR February 1, 2020

INDUSTRIAL FUEL COSTS:	HILO	PUNA
Average Industrial Fuel Cost - $/BBL	60.7443	60.7443
Land Transportation Cost - $/BBL	--	1.3197
Industrial Costs For Filing - $/BBL	60.7443	62.0640
Conversion Factors - mmbtu/BBL	6.30	6.30
Industrial Costs For Filing - ¢/mmbtu	964.19	985.14

DIESEL FUEL COSTS:	KEAHOLE	PUNA CT-3	HILO
Average Diesel Fuel Cost - $/BBL	89.5002	89.5002	89.5002
Land Transportation Cost - $/BBL	2.9595	1.2387	0.9946
Diesel Costs For Filing - $/BBL	92.4597	90.7389	90.4948
Conversion Factors - mmbtu/BBL	5.86	5.86	5.86
Diesel Costs For Filing - ¢/mmbtu	1,577.81	1,548.44	1,544.28

ULSD FUEL COSTS:	KEAHOLE	WAIMEA	HILO	DISPERSED GENERATION
Average ULSD Fuel Cost - $/BBL	92.8505	92.8505	92.8505	92.8505
Land Transportation Cost - $/BBL	3.1602	2.9267	1.1185	-
ULSD Costs For Filing - $/BBL	96.0106	95.7772	93.9690	92.8505
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,675.58	1,671.50	1,639.95	1,620.43

Dispersed Generation, cents per kWh

	COMPOSITE COST OF DISP. GEN.
BBls Fuel:	15.1991
$/BBl Inv Cost:	92.8505
Fuel $ (Prod Sim Consumption x Unit Cost)	1,411.24
Net kWh (from Prod Sim)	8,500
cents/kWh:	16.603

HAWAII ELECTRIC LIGHT CO., INC.

Estimated Weighted Average
January 2020

	SHIPMAN INDUSTRIAL		HILL INDUSTRIAL		COST PER BARREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 12/31/2019	0	0.00	37,897	2,191,808.58			
Less: Est'd Inventory Addn			0	0.00			
Purchases: Estimate	xxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxx			
Actual	xxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxx			
Transfers out: Estimate	xxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxx			
Actual	xxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxx			
Transfers in: Estimate	0	0.00	(45,871)	(2,680,511.54)			
Actual	0	0.00	39,128	2,313,430.69			
Consumed: Estimate	0	0.00	39,014	2,294,253.75			
Actual	0	0.00	(38,855)	(2,284,903.61)			
Balance Per G/L 12/31/2019	0	0.00	31,313	1,834,077.87			
Purchases	xxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxx			
Transfer out	xxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxxxx			
Transfer in	0	0.00	47,802	2,835,856.74			
Consumed	0	0.00	(37,234)	(2,167,867.03)	106.5901	0.0000	106.5901
Balance @ 01/31/2020	0	0.00	41,881	2,502,067.58			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 01/31/2020	0	0.00	41,881	2,502,067.58			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxxx	(2,502,067.58)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxxxx	2,544,030.62			
Total @ 02/01/2020 Avg Price	0	0.00	41,881	2,544,030.62			

Weighted Avg Cost/BBL by Location	#DIV/0!	59.7423
Weighted Avg Cost/BBL @ Avg Cost	#DIV/0!	60.7443

HAWAII ELECTRIC LIGHT CO., INC.

Estimated Weighted Average
January 2020

PUNA INDUSTRIAL

	BBL	COST	LAND TRANSP	COST PER BARREL EXCLUDE LT	LT	TOTAL
Balance at 12/31/2019	14,084	824,570.90	22,046.36			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Actual	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfers out: Estimate	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Actual	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfers in: Estimate	(9,473)	(557,259.05)	(12,459.93)			
Actual	6,712	414,085.17	9,115.10			
Consumed: Estimate	1,417	83,327.97	2,288.41			
Actual	(4,362)	(256,511.38)	(7,044.50)			
Balance Per G/L 12/31/2019	8,378	508,213.62	13,945.44			
Purchases	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxxxx			
Transfer in	9,413	578,247	12,381.01			
Consumed	(11,592)	(674,918.48)	(18,145.51)	58.2228	1.5653	59.7881
Balance @ 01/31/2020	6,199	411,542.19	8,180.94			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	6,199	411,542.19	8,180.94		1.3197	
Reverse Fuel Balance	xxxxxxxxxxxx	(411,542.19)	xxxxxxxxxxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	376,553.71	xxxxxxxxxxxxxxxxxxxx			
Total @ 02/01/2020 Avg Price	6,199	376,553.71	8,180.94			
Weighted Avg Cost/BBL by Location		66.3885	1.3197			
Weighted Avg Cost/BBL @ Avg Cost		60.7443	1.3197			

HAWAII ELECTRIC LIGHT CO., INC.

Estimated Weighted Average
January 2020

KEAHOLE DIESEL

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	LT	TOTAL
Balance at 12/31/2019	49,393.0	2,074,506.0	4,409,523.6	148,705.4			
Less: Est'd Inventory Addition	(25,165.9)	(1,056,967.0)	(2,271,021.6)	(72,988.6)			
Purchases: Estimate	0.0	0.0	0.0	0.0			
Actual	0.0	0.0	0.0	0.0			
Transfers out: Estimate		xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
Transfers in: Estimate	(46,932.6)	(1,971,169.0)	(4,190,007.1)	(133,448.1)			
Actual	47,812.8	2,008,138.0	4,284,868.6	135,425.72			
Consumed: Estimate	52,409.3	2,201,192.0	4,697,674.9	158,966.48			
Actual	(46,960.1)	(1,972,326.0)	(4,279,430.3)	(137,782.9)	91.1290		
Balance Per G/L 12/31/2019	30,556.5	1,283,374	2,651,608.10	98,877.91	86.7772		
Purchases	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
Transfer in	53,331.8	2,239,935.0	4,798,332.8	151,643.6	89.9714		
Consumed	(44,044.9)	(1,849,887.0)	(3,937,923.4)	(132,604.16)	89.4070	3.0107	92.4176
Balance @ 01/31/2020	39,843.4	1,673,422	3,512,017.58	117,917.34	88.1456		
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	39,843.4	1,673,422	3,512,017.58	117,917.34	88.1456		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	(3,512,017.6)	xxxxxxxxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxxxxx	3,565,991.2	xxxxxxxxxxxxxxxxxx			
Total @ 02/01/2020 Avg Price	39,843.4	1,673,422	3,565,991.25	117,917.34	89.5002		

Weighted Avg Cost/BBL by Location	88.1456	2.9595
Weighted Avg Cost/BBL @ Avg Cost	89.5002	2.9595

HAWAII ELECTRIC LIGHT CO., INC.

Estimated Weighted Average
January 2020

PUNA CT-3

HS Diesel	BBL	GALLONS	COST EXCLUD LT	LAND TRANSP	COST PER BARREL EXCL LT	LT	TOTAL
Balance at 12/31/2019	7,211.7	302,890.0	646,553.9	8,854.8			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate		xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxx			
Transfers out: Estimate		xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxx			
Actual		xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxx			
Transfers in: Estimate	(7,686.6)	(322,838.0)	(691,466.1)	(8,522.9)			
Actual	4,377.0	183,835.0	407,774.7	5,022.8			
Consumed: Estimate	4,735.5	198,889.0	424,459.0	4,845.4			
Actual	(4,067.8)	(170,848.0)	(390,774.7)	(4,162.2)			
Balance Per G/L 12/31/2019	4,569.7	191,928	396,546.79	6,037.86			
Purchases	xxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxx			
Transfer out	xxxxxxxxxxx	xxxxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxx			
Transfer in	3,175.0	133,352.0	295,383.0	3,520.5	93.0326		
Consumed	(3,213.9)	(134,982)	(287,341.21)	(3,946.13)	89.4070	1.2278	90.6348
Balance @ 01/31/2020	4,530.9	190,298	404,588.62	5,612.22	89.2953		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 01/31/2020	4,530.9	190,298	404,588.62	5,612.22	89.2953		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxxxxxxx	(404,588.62)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxx	xxxxxxxxxxxxxxxx	405,516.96	xxxxxxxxxxx			
Total @ 02/01/2020 Avg Price	4,530.9	190,298	405,516.96	5,612.22	89.5002		
Weighted Avg Cost/BBL by Location			89.2953	1.2387			
Weighted Avg Cost/BBL @ Avg Cost			89.5002	1.2387			

HAWAII ELECTRIC LIGHT CO., INC.

Estimated Weighted Average
January 2020

TOTAL HILO HS-DIESEL

HS Diesel	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCL LT	LT	TOTAL
Balance at 12/31/2019	1629.2	68,428	145,085	1,758			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate		xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx			
Actual		xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx			
Transfers out: Estimate		xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx			
Actual		xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx			
Transfers in: Estimate	-191.7	-8051.0	-17043.7	-187.6			
Actual	191.7	8051.0	16991.9	184.7			
Consumed: Estimate	41.5	1744.0	3722.0	47.5			
Actual	-49.8	-2091.0	-8091.3	-186.8			
Balance Per G/L 12/31/2019	1621.0	68,081	140,663.69	1,615.50	86.7771		
Purchases	xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx			
Transfer out	xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx			
Transfer in	-0.9	-36.0	0.0	0.0	0.0000		
Consumed	-49.0	-2057.0	-4378.8	-52.8	89.4070	1.0788	90.4858
Balance @ 01/31/2020	1,571.1	65,988	136,284.88	1,562.66	86.7425		
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	1,571.1	65,988	136,284.88	1,562.66	86.7425		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxx	-136,284.88	xxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxx	xxxxxxxxxxx	140,617.63	xxxxxxxxxxx			
Total @ 02/01/2020 Avg Price	1,571.1	65,988	140,617.63	1,562.66	89.5002		
Weighted Avg Cost/BBL by Location			86.7425	0.9946			
Weighted Avg Cost/BBL @ Avg Cost			89.5002	0.9946			

HAWAII ELECTRIC LIGHT CO., INC.

Estimated Weighted Average
January 2020

KEAHOLE ULSD

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL EXCLUD LT	LT	TOTAL
Balance at 12/31/2019	2,238.3	94,010	205,430.34	7,443.71			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(378.9)	(15,915)	(34,786.46)	(1,077.45)			
Actual	188.9	7,935	17,344.05	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxx			
Transfers in: Estimate		272	0.00	18.41			
Actual		(255)	0.00	537.20			
Consumed: Estimate	144.1	6,052	13,364.86	465.62			
Actual	(116.9)	(4,909)	(10,840.73)	(669.91)	92.7502		
Balance Per G/L 12/31/2019	2,076.0	87,190	190,512.06	6,717.58	91.7709		
Purchases	189.0	7,938	18,043.99	537.40	0.0000		
Estimated Purchases	190.0	7,980	18,139.46	540.25			
Transfer in	(1.8)	(76)	0.00	(5.15)	0.00		
Consumed	(228.2)	(9,583)	(21,007.64)	(758.78)	92.0715	3.3256	95.3970
Balance @ 01/31/2020	2,225.0	93,449	205,687.87	7,031.30	92.4450		
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	2,225.0	93,449	205,687.87	7,031.30	92.4450		
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxxx	(205,687.87)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxxx	206,590.09	xxxxxxxxxxxx			
Total @ 02/01/2020 Avg Price	2,225.0	93,449	206,590.09	7,031.30	92.8505		
Weighted Avg Cost/BBL by Location			92.4450	3.1602			
Weighted Avg Cost/BBL @ Avg Cost			92.8505	3.1602			

HAWAII ELECTRIC LIGHT CO., INC.

Estimated Weighted Average
January 2020

WAIMEA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP	COST PER BARREL	LT	TOTAL
Balance at 12/31/2019	1,180.8	49,592.0	108,707.0	3,459.21			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		0	0.00	0.00			
Actual		0.0	0.0	0.00			
Transfers out: Estimate		xxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxx			
Transfers in: Estimate	7.7	322	0.00	0.00			
Actual	(4.8)	(202)	0.00	0.00			
Consumed: Estimate	75.6	3,177	7,015.89	216.66			
Actual	(82.6)	(3,470)	(7,662.93)	(236.64)			
Balance Per G/L 12/31/2019	1,176.6	49,419	108,059.93	3,439.23	91.8375		
ULSD Purchases	0.0	0	0.00	0.00	#DIV/0!		
Estimated Purchases	-	0	0.00	0.00			
Transfer in	xxxxxxxxxxx	(72)	0.00	0.00	#DIV/0!		
Consumed	(177.8)	(7,467)	(16,368.99)	(520.85)	92.0715	2.9296	95.0011
Balance @ 01/31/2020	997.1	41,880	91,690.94	2,918.39	91.9537		
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	997.1	41,880	91,690.94	2,918.39	91.9537		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxxx	(91,690.94)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxx	xxxxxxxxxxxx	92,585.19	xxxxxxxxxxx			
Total @ 02/01/2020 Avg Price	997.1	41,880	92,585.19	2,918.39	92.8505		
Weighted Avg Cost/BBL by Location			91.9537	2.9267			
Weighted Avg Cost/BBL @ Avg Cost			92.8505	2.9267			

HAWAII ELECTRIC LIGHT CO., INC.

Estimated Weighted Average
January 2020

KANOELEHUA DIESEL

ULSD	BBL	GALLONS	COST EXCLUDE LT	LAND TRANSP		
Balance at 12/31/2019	806.0	33,852.0	74,938.5	878.4		
Less: Est'd Inventory Addition	(14.7)	(617)	(1,348.67)	(14.38)		
Purchases: Estimate	0.0	0	0.00	0.00		
Actual	0.0	0	0.00	0.00		
Transfers out: Estimate		x	x	x		
Actual		x	x	x		
Transfers in: Estimate		0	0.00	0.00		
Actual		0	0.00	0.00		
Consumed: Estimate	23.1	970	967.04	26.58		
Actual	(12.7)	(532)	(1,174.84)	(15.20)		
Balance Per G/L 12/31/2019	801.7	33,673	73,382.06	875.45		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	0	0	0.00	0.00		
Consumed	(42.8)	(1,798)	(967.04)	(26.58)	92.07147329	1.0899
Balance @ 01/31/2020	758.9	31,875	72,415.02	848.87		
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	758.9	31,875	72,415.02	848.87		
Reverse Fuel Balance	x	x	(72,415.02)	x		
Fuel Balance @ Avg Price	x	x	70,466.88	x		
Total @ 02/01/2020 Avg Price	758.9	31,875	70,466.88	848.87		
Weighted Avg Cost/BBL by Location			95.4174	1.1185		
Weighted Avg Cost/BBL @ Avg Cost			92.8505	1.1185		

HAWAII ELECTRIC LIGHT CO., INC.
Estimated Weighted Average
January 2020

DISPERSED GENERATION

	BBL	GALLONS	COST	COST/BBL
Balance at 12/31/2019	116.3	4,885	10,643.69	
Less: Est'd Inven Addition	0.0	XXXXXXXX	XXXXXXXXX	
Purchases: Estimate	0.0	0	0.00	
Actual	0.0	0	0.00	
Consumed: Estimate	3.5	146	322.42	
Actual	(2.6)	(111)	(245.13)	
	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	
	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	
	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	
	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	
Balance Per G/L 12/31/2019	117.14	4,920	10,720.98	91.5206
Purchases	0.0	0	0.00	0.0000
Transfer out	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	
Transfer in	xxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx	
Consumed	(5.3)	(222)	(486.66)	92.0715
Balance @ 01/31/2020	111.9	4,698	10,234.32	91.4945
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 01/31/2020	111.9	4,698	10,234.32	
Reverse Fuel Balance	xxxxxxxxxxxx	xxxxxxxxxxx	(10,234.32) xxxx	
Fuel Balance @ Avg Price	xxxxxxxxxxxx	xxxxxxxxxxx	10,385.99 xxxx	
Total @ 02/01/2020 Avg Price	111.9	4,698	10,385.99	92.8505

HAWAII ELECTRIC LIGHT COMPANY, INC.
CONTRACT PRICES EFFECTIVE January 1, 2020

TYPE OF OIL BURNED

	Hill Industrial		Puna Industrial	
INDUSTRIAL *	¢/MBTU	$/BBL	¢/MBTU	$/BBL
Tax [1]	41.02	2.5841	41.02	2.5841
Ocean Transportation	16.67	1.0500	16.67	1.0500
Storage	33.98	2.1410	33.98	1.6606
Wharfage	6.35	0.0000	6.35	1.3153
Fees [2]	0.00	0.0000	0.00	0.0000

	Hilo Diesel		Waimea Diesel	
DIESEL *	¢/MBTU	$/BBL	¢/MBTU	$/BBL
Tax [1]	76.34	4.4727	76.34	4.4727
Ocean Transportation	17.92	1.0500	17.92	1.0500
Storage	33.72	2.6061	33.72	2.6061
Wharfage	28.34	1.6606	28.34	1.6606
Fees [2]	0.00	0.0000	0.00	0.0000

	Kona Diesel		CT3 Diesel	
	¢/MBTU	$/BBL	¢/MBTU	$/BBL
Tax [1]	76.34	4.4727	76.34	4.4727
Ocean Transportation	17.92	1.0500	17.92	1.0500
Storage	33.72	2.6061	33.72	2.6061
Wharfage	28.34	1.6606	28.34	1.6606
Fees [2]	0.00	0.0000	0.00	0.0000

	ULSD	
ULSD **	¢/MBTU	$/BBL
Tax [1]	82.62	4.7341
Ocean Transportation	0.73	0.0420
Storage	0.00	0.0000
Wharfage	0.00	0.0000
Fees [2]	0.00	0.0000

[1] Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST Tax and Environmental Response Tax.
[2] With the change in supplier to PAR some fees have been taken off the pricing sheet.

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 February 1, 2020

		February 1, 2020 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW)	- on peak	14.865	6.560
PGV (22 MW)	- off peak	14.234	5.430
WAILUKU HYDRO	- on peak	14.865	7.240
	off peak	14.234	5.970
Other: (<100 KW)	Sch Q Rate	14.230	

		February 1, 2020 (¢/kWh)	Floor Rates (¢/kWh)
HEP		15.623	
PGV Addtl 5 MW	- on peak	13.250	0.0000
	- off peak	13.250	0.0000
PGV Addtl 8 MW	- on peak	10.100	0.0000
	- off peak	6.740	0.0000

Hawaii Electric Light Company, Inc.
Energy Cost Reconciliation Adjustment
February 1, 2020

Line No.	Description	Amount	
1	Amount to be (returned) or collected	($141,300)	
2	Monthly Amount ($^1/_3$ x Line 1)	($47,100)	
3	Revenue Tax Divisor	0.91115	
4	Total (Line 2 / Line 3)	($51,693)	
5	Estimated MWh Sales (February 1, 2020)	81,313	mwh
6	Adjustment (Line 4 / Line 5)	(0.064)	¢/kwh

HAWAII ELECTRIC LIGHT COMPANY, INC.
2019 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY
(Thousand $)

LINE	DESCRIPTION	Info Only December 2019 YTD Total No Deadband	collectn by company*	Basis for Recon December 2019 YTD Total Deadband	Collection or Refund by Company
	ACTUAL COSTS:				
1	Generation	$84,554.2		$84,554.2	
2	Distributed Generation	$11.0		$11.0	
3	Purch Power	$73,490.6		$73,490.6	
4	TOTAL	$158,055.8		$158,055.8	
	FUEL FILING COST				
5	Generation	$81,753.1		$82,953.2	
6	Distributed Generation	$11.0		$11.0	
7	Purch Power	$73,490.6		$73,490.6	
8	TOTAL	$155,254.8		$156,454.8	
	BASE FUEL COST				
9	Generation	$3,791.0		$3,791.0	
10	Distributed Generation	$0.3		$0.3	
11	Purch Power	$4,516.2		$4,516.2	
12	TOTAL	$8,307.6		$8,307.6	
13	FUEL-BASE COST (Line 8-12)	$146,947.2		$148,147.3	
14	ACTUAL FOA LESS TAX	$146,034.2		$146,034.2	
15	Less: FOA reconciliation adj for prior year	-$2,904.6		-$2,904.6	
15A	Less: Non-Adjustable Component Revenues Less Tax	$7.5		$7.5	
16	ADJUSTED FOA LESS TAX	$148,931.3		$148,931.3	
17	FOA-(FUEL-BASE) (Line 16-13)	$1,984.0	over	$784.0	over
	ADJUSTMENTS:				
18	Current year FOA accrual reversal	$6,059.1		$6,059.1	
19	Other prior year FOA	$0.0		$0.0	
20	Other	$0.0		$0.0	
21	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	$8,043.1	over	$6,843.1	over
22	Third Quarter FOA reconciliation	6,701.7	over		
23	FOA Reconciliation to be Returned or Collected	141.3	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, 2019 to December 31, 2019

	Notes	YTD
Industrial		
Industrial Efficiency Factor (per D&O), BTU/kWh*	f	14,569
Industrial Deadband Definition, +/- BTU/kWh	d	100
Industrial Portion of Recorded Sales, kWh	a	193,405,223
Industrial Consumption (Recorded), MMBTU	b	2,875,179
Industrial Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	14,866
Lower limit of Industrial Deadband, BTU/kWh	e= f-d	14,469
Higher limit of Industrial Deadband, BTU/kWh	g=f+d	14,669
Industrial Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	**14,669**
Diesel		
Diesel Efficiency Factor (per D&O), BTU/kWh*	f	10,480
Diesel Deadband Definition, +/- BTU/kWh	d	**200**
Diesel Portion of Recorded Sales, MWh	a	309,198,944
Diesel Consumption (Recorded), MMBTU	b	3,369,804
Diesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	10,898
Lower limit of Diesel Deadband, BTU/kWh	e= f-d	10,280
Higher limit of Diesel Deadband, BTU/kWh	g=f+d	10,680
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	**10,680**
Biodiesel		
Biodiesel Efficiency Factor (per D&O), BTU/kWh*	f	0
Biodiesel Deadband Definition, +/- BTU/kWh	d	**100**
Biodiesel Portion of Recorded Sales, MWh	a	0
Biodiesel Consumption (Recorded), MMBTU	b	0
Biodiesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	0
Lower limit of Biodiesel Deadband, BTU/kWh	e= f-d	-100
Higher limit of Biodiesel Deadband, BTU/kWh	g=f+d	100
Biodiesel Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	**0**
Hydro		
Hydro Efficiency Factor (per D&O), BTU/kWh*	f	12,395
Hydro Deadband Definition, +/- BTU/kWh	d	**100**
Hydro Portion of Recorded Sales, MWh	a	10,714,892
Hydro Consumption (Recorded), MMBTU	b	133,576
Hydro Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	12,466
Lower limit of Hydro Deadband, BTU/kWh	e= f-d	12,295
Higher limit of Hydro Deadband, BTU/kWh	g=f+d	12,495
Hydro Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	**12,466**

* 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
2019

	Without Deadband Jan 1 -Dec 31	With Deadband As Filed Jan 1 -Dec 31
INDUSTRIAL FUEL FILING COST		
Industrial Portion of Recorded Sales , kWh	193,405,223	193,405,223
Industrial Efficiency Factor (mmbtu/kwh)	0.014569	0.014669
Mmbtu adjusted for Sales Efficiency Factor	2,817,721	2,837,061
$/mmbtu	$10.4590	$10.4590
TOTAL INDUSTRIAL $000s TO BE RECOVERED	$29,470.615	$29,672.898
DIESEL FUEL FILING COST		
Diesel Portion of Recorded Sales, kWh	309,198,944	309,198,944
Diesel Efficiency Factor (mmbtu/kwh)	0.010480	0.010680
Mmbtu adjusted for Sales Efficiency Factor	3,240,405	3,302,245
$/mmbtu	$16.1346	$16.1346
TOTAL DIESEL $000s TO BE RECOVERED	$52,282.510	$53,280.268
HYDRO FUEL FILING COST		
Hydro Portion of Recorded Sales , kWh	10,714,892	10,714,892
Hydro Efficiency Factor (mmbtu/kwh)	0.012395	0.012466
Mmbtu adjusted for Sales Efficiency Factor	132,811	133,572
$/mmbtu	$0.0000	$0.0000
TOTAL HYDRO $000s TO BE RECOVERED	$0.000	$0.000
TOTAL GENERATION FUEL FILING COST, $000s	$81,753.1	$82,953.2
CALCULATION OF GENERATION BASE FUEL COST		
TOTAL GENERATION BASE FUEL COST, $000s	$3,791.0	$3,791.0
TOTAL GENERATION FUEL FILING COST, $000s YTD	$81,753.1	$82,953.2
TOTAL GENERATION BASE FUEL COST YTD	$3,791.0	$3,791.0

ATTACHMENT 7

HAWAII ELECTRIC LIGHT COMPANY, INC.

2019 Cumulative Reconciliation Balance

Month	(1) YTD FOA Reconciliation	Qtr	(2) FOA Rec Adjust Variance	(3) FOA Rec Less Variance	(4) Try to Collect	(5) Actual Collect	(6) Month-end Cumulative Balance
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)	(300,243)	32,773
February	2,598,900	[4]	(8,054)	2,606,954	(866,300)	(800,636)	1,839,091
March					(866,300)	(825,091)	1,014,000
April					(866,300)	(829,484)	184,516
May	1,745,900	(1)	112,297	1,633,603	(581,967)	(565,304)	1,252,815
June					(581,967)	(585,631)	667,184
July					(581,967)	(586,240)	80,944
August	3,027,900	[2]	49,815	2,978,085	(1,009,300)	(1,025,775)	2,033,254
September					(1,009,300)	(1,026,151)	1,007,103
October					(1,009,300)	(1,007,209)	(106)
November	1,927,900	[3]	(37,599)	1,965,499	(642,633)	(651,308)	1,314,085
December 19					(642,633)	(646,001)	668,084
January 20					(642,633)		
February	141,300	[4]	(9,952)	151,252	(47,100)		

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))

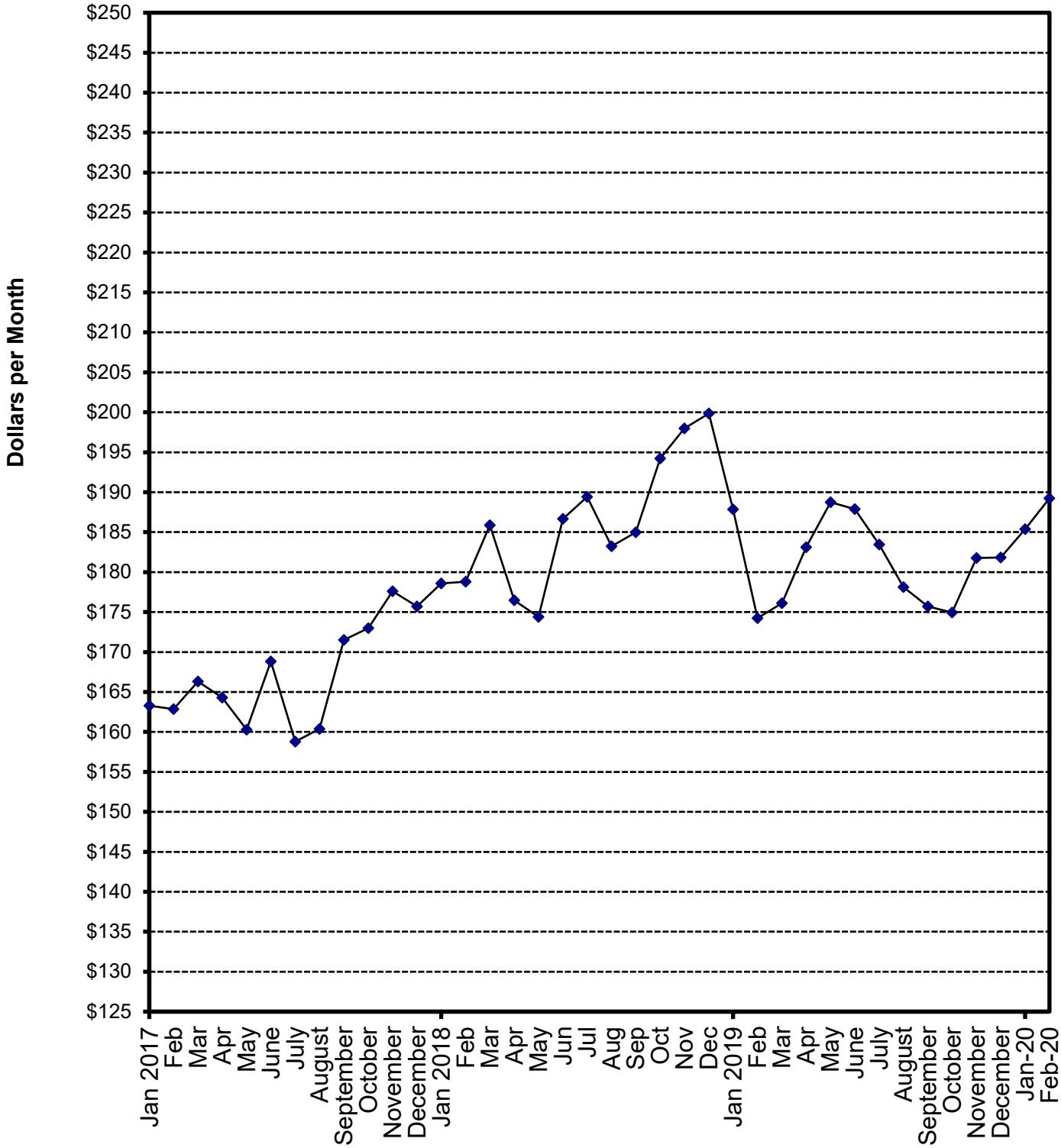
Col(3): FOA reconciliation generated in the current quarter. The YTD FOA reconciliation difference minus the adjustment variance. Col(1)-Col(2)

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



ATTACHMENT 9A

HAWAII ELECTRIC LIGHT COMPANY, INC.
FUEL OIL ADJUSTMENT FACTOR DATA

EFFECTIVE DATE	FUEL FACTOR CENTS / KWH RESIDENTIAL & COMMERCIAL	RESIDENTIAL BILL ($) @ 500 KWH	@ 600 KWH
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
March 1, 2019	14.976	176.1	210.75
April 1, 2019	16.469	183.12	219.17
May 1, 2019	17.396	188.74	225.93
June 1, 2019	17.318	187.89	224.90
July 1, 2019	16.450	183.46	219.63
August 1, 2019	15.331	178.14	213.25
September 1, 2019	14.845	175.70	210.32
October 1, 2019	14.692	174.93	209.40
November 1, 2019	16.302	181.76	217.59
December 1, 2019	16.288	181.82	217.67
January 1, 2020	16.768	185.37	221.88
February 1, 2020	17.547	189.22	226.49

HAWAII ELECTRIC LIGHT COMPANY, INC.
RESIDENTIAL SURCHARGE DATA

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
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
3/1/2019-3/31/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.8372 CENTS/KWH
04/1/2019-4/30/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.8247 CENTS/KWH
04/1/19-04/30/19	SOLARSAVER ADJUSTMENT	-0.0768 CENTS/KWH
05/01/2019-5/31/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.9460 CENTS/KWH
05/01/2019	**SOLARSAVER ADJUSTMENT**	**0.0000 CENTS/KWH**
06/01/2019-6/30/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.9474 CENTS/KWH
6/1/2019-12/31/2019	RBA RATE ADJUSTMENT	0.9069 CENTS/KWH
7/01/2019-7/31/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.9539 CENTS/KWH
7/1/2019-12/31/2019	GREEN INFRASTRUCTURE FEE	1.1700 DOLLARS/MONTH
7/1/2019-12/31/2019	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.4775 CENTS/KWH
8/1/2019-8/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.0075 CENTS/KWH
9/1/2019-9/30/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.0060 CENTS/KWH
10/1/2019-10/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.0069 CENTS/KWH
11/1/2019-11/30/2019	PURCHASED POWER ADJUSTMENT CLAUSE	1.7616 CENTS/KWH
12/1/2019-12/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	1.7884 CENTS/KWH
1/1/2020-1/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.7730 CENTS/KWH
1/1/2020	**GREEN INFRASTRUCTURE FEE**	**1.2500 DOLLARS/MONTH**
1/1/2020	**RBA RATE ADJUSTMENT**	**0.1852 CENTS/KWH**
1/1/2020	**INTERIM RATE ADJUSTMENT 2019**	**4.0900 PERCENT ON BASE**
1/1/2020	**RESIDENTIAL PBF SURCHARGE ADJUSTMENT**	**0.7437 CENTS/KWH**
2/1/2020- 2/29/2020	**PURCHASED POWER ADJUSTMENT CLAUSE**	**1.7631 CENTS/KWH**

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

ATTACHMENT 10

Calculations of the Average Residential Customer Bill

		Rate		Charge ($) at 500 Kwh		
		1/01/20	2/01/20	1/01/20	2/01/20	Difference
Base Rates	effective date:	2/1/2019	2/1/2019			
Base Fuel Energy Charge	¢/kwh	-	-	$0.00	$0.00	$0.00
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				$83.35	$83.35	$0.00
Interim Rate Adjustment 2019 TY	% on base	4.0900%	4.0900%	$3.41	$3.41	$0.00
RBA Rate Adjustment	¢/kwh	0.1852	0.1852	$0.93	$0.93	$0.00
Purchased Power Adj. Clause	¢/kwh	1.7730	1.7631	$8.87	$8.82	-$0.05
PBF Surcharge	¢/kwh	0.7437	0.7437	$3.72	$3.72	$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	16.7680	17.5470	$83.84	$87.74	$3.90
Green Infrastructure Fee	$	1.2500	1.2500	$1.25	$1.25	$0.00
Avg Residential Bill at 500 kwh				$185.37	$189.22	
				Increase (Decrease -)		$3.85
				% Change		2.08%

		Rate		Charge ($) at 600 Kwh		
		1/01/20	2/01/20	1/01/20	2/01/20	Difference
Base Rates	effective date:	2/1/2019	2/1/2019			
Base Fuel/Energy Charge	¢/kwh	-	-	$0.00	$0.00	$0.00
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				$99.73	$99.73	$0.00
Interim Rate Adjustment 2019 TY	% on base	4.0900%	4.0900%	$4.08	$4.08	$0.00
RBA Rate Adjustment	¢/kwh	0.1852	0.1852	$1.11	$1.11	$0.00
Purchased Power Adj. Clause	¢/kwh	1.7730	1.7631	$10.64	$10.58	-$0.06
PBF Surcharge	¢/kwh	0.7437	0.7437	$4.46	$4.46	$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	16.7680	17.5470	$100.61	$105.28	$4.67
Green Infrastructure Fee	$	1.2500	1.2500	$1.25	$1.25	$0.00
Avg Residential Bill at 600 kwh				$221.88	$226.49	
				Increase (Decrease -)		$4.61
				% Change		2.08%