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JAY IGNACIO, P. E. President

April 26, 2018

#### 2018 APR 26 P 3:56

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

Dear Commissioners:

Subject: Hawai'i Electric Light Energy Cost Adjustment Factor for May 2018

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Adjustment factor for May 2018 is -0.452 cents per kilowatt-hour ("kWh"), an increase of 0.460 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$174.38, a decrease of \$2.08 compared to rates effective April 1, 2018. The decrease in the typical residential bill is due to the decrease in the Interim Rate Increase (-\$5.22), partially offset by the increase in the Energy Cost Adjustment factor (+\$2.30), the increase in the Purchase Power Adjustment Clause rate (+\$0.11), and the termination of the April 2018 credit for the SolarSaver Adjustment (+\$0.73).

Hawai'i Electric Light's fuel composite cost of generation decreased 19.41 cents per million BTU to 1,294.56 cents per million BTU. The distributed generation increased 0.067 cents per kWh to 14.629 cents per kWh. The composite cost of purchased energy increased 0.410 cents per kWh to 13.026 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 May 1, 2018.

Sincerely,

Attachments

cc:

Division of Consumer Advocacy

# HAWAII ELECTRIC LIGHT COMPANY, INC.

#### ENERGY COST ADJUSTMENT FACTOR

#### EFFECTIVE DATES

	<u>04/01/18</u>	<u>05/01/18</u>	<u>Change</u>
Composite Cost			
Generation, ¢/mmbtu Dispersed Generation Energy, ¢/kWh Purchased Energy, ¢/kWh	1,313.97 14.562 12.616	1,294.56 14.629 13.026	(19.41) 0.067 0.410
Residential Schedule "R"			
Energy Cost Adjustment - ¢/kWh	(0.912)	(0.452)	0.460
<u>Others - "G,J,P,F"</u>			
Energy Cost Adjustment - ¢/kWh	(0.912)	(0.452)	0.460
Residential Customer with:			
500 KWH Consumption - \$/Bill 600 KWH Consumption - \$/Bill	\$176.46 \$211.39	\$174.38 \$208.90	(\$2.08) (\$2.49)

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

#### ENERGY COST ADJUSTMENT (ECA) FILING - May 1, 2018 (Page 1 of 2)

Line

1 Effective Date	May 1, 2018
2 Supercedes Factors of	April 1, 2018

### **GENERATION COMPONENT**

	CE	NTRAL STATIO	N WITH WIND/H	IYDRO COMPO	NENT			
		FUEL PRICES,	¢/mmbtu					
	3							
	4	Hill Industrial			1,011.82			
	5	Puna Industria	I		1,031.99			
	6	Keahole Diese	I		1,649.23			
	6a	Keahole ULSD	)		1,485.99			
	7	Waimea ULSD	Diesel		1,478.27			
	8	Hilo Diesel			1,620.17			
	8a	Hilo (Kanoelehu	a) ULSD Diesel	1	1,461.44			
	9	Puna Diesel			1,624.40		DG ENERGY COMPONENT	
	10	Wind			0.00	35	COMPOSITE COST OF DG	
	11	Hydro			0.00		ENERGY, ¢/kWh	14.629
		<b>)</b>					% Input to System kWh Mix	0.613
		BTU MIX, %						
	12					37	WEIGHTED COMPOSITE DG ENERGY COST,	
	13	Hill Industrial			47.311		¢/kWh (Lines 35 x 36)	0.08968
	14	Puna Industria	I		6.796			
	15	Keahole Diese	I		42.929	38	BASE DG ENERGY COMPOSITE COS	15.702
15a		Keahole ULSD	)		0.633			
	16	Waimea ULSD	) Diesel		0.265	39	Base % Input to System kWh Mix	0.06
	17	Hilo Diesel			0.000	40	WEIGHTED BASE DG ENERGY COST,	
17a		Hilo (Kanoelehu	a) ULSD Diesel	1	0.030			
	18	Puna Diesel			1.475		¢/kWh (Line 38 x 39)	0.00942
	19	Wind			0.000			
	20	Hydro			0.561	41	Cost Less Base (Line 37 - 40)	0.08026
					100.000	42	Loss Factor	1.067
	21	COMPOSITE C	OST OF GENE	RATION,		43	Revenue Tax Req Multiplier	1.0975
		CENTRAL ST	ATION + WIND/	HYDRO ¢/mmb	1,294.56	44	DG FACTOR, ¢/kWh	
	22	% Input to Syste	em kWh Mix		37.808		(Line 41 x 42 x 43)	0.09399
		EFFICIENCY F			(=)			
		(A)	(B)	(C)	(D)			
				Percent of				
		E 1 F	Eff Factor	Centrl Stn +	Weighted			
	~~	Fuel Type	mmbtu/kwh	Wind/Hydro	Eff Factor			
	23	Industrial	0.015148	44.231	0.006700			
	24	Diesel	0.010424	49.457	0.005155			
	25	Other	0.012621	6.312	0.000797			
	~ ~	(Lines 23, 24,	, 25): Col(B) x C	O(C) = CO(D)				

26	Weighted Efficiency Factor, mmbtu/kWh [Lines 23(D) + 24(D) + 25(D)]	0.0126520	
27	WEIGHTED COMPOSITE CENTRAL STATION WIND/HYDRO GENERATION COST, ¢/kWh	1 +	
	(Lines (21 x 22 x 26))	6.19249	
28	BASE CENTRAL STATION + WIND/HYDRO		
	GENERATION COST, ¢/mmbtu	1,224.44	
29	Base % Input to Sys kWh Mix	46.06	
30	Efficiency Factor, mmbtu/kwh	0.012621	
31	WEIGHTED BASE CENTRAL STATION +		
	WIND/HYDRO GENERATION COST ¢/kWh		
	(Lines (28 x 29 x 30))	7.11795	
32	COST LESS BASE (Line 27 - 31)	(0.92546)	
33	Revenue Tax Req Multiplier	1.0975	
34	CENTRAL STATION + WIND/HYDRO		
	GENERATION FACTOR,		
	¢/kWh (Line (32 x 33))	(1.01569)	

<sup>1</sup> Hilo ULSD same location as Kanoelehua ULSD

SUMMARY OF	
TOTAL GENERATION FACTOR, ¢/kWh	
45 Cntrl Stn+Wind/Hydro (line 34)	(1.01569)
46 DG (line 44)	0.09399
47 TOTAL GENERATION FACTOR,	
¢/kWh (lines 45 + 46)	(0.92170)

REVISED \$HELCO ECAC eff 05-01-18 filed with May 2018 budget with price update v1.xlsm

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

ENERGY COST ADJUSTMENT (ECA) FILING - May 1, 2018 (Page 2 of 2)

Line	PURCHASED EN	NERGY COMPON	ENT
	PURCHASED ENERGY PI		
48	HEP		15.205
	PGV	On Peak	13.503
-	PGV	Off Peak	13.695
	PGV - Add'l 5 MW	On Peak	12.860
• •	PGV - Add'l 5 MW	Off Peak	12.860
-	PGV - Add'I 8 MW	On Peak	6.540
	PGV - Add'I 8 MW	Off Peak	6.540
	Wailuku Hydro	On Peak	13.503
	Wailuku Hydro	Off Peak	13.695
	Hawi Renewable Dev.	On Peak	13.503
-	Hawi Renewable Dev.	Off Peak	13.695
59		On Peak	11.910
60	Tawhiri (Pakini Nui)	Off Peak	11.640
61			
62	Small Hydro (>100 KW)	On Peak	13.503
63	Small Hydro (>100 KW)	Off Peak	13.695
64	Sch Q Hydro (<100 KW)		13.230
65	FIT		23.800
	PURCHASED ENERGY K	WH MIX. %	
66	HEP	, , , , , , , , , , , , , , , , , , , ,	27.870
	PGV	On Peak	17.461
	PGV	Off Peak	10.976
	PGV - Addt'l	On Peak	3.492
	PGV - Addt'l	Off Peak	2.495
	PGV - Add'l 8 MW	On Peak	4.976
	PGV - Add'l 8 MW	Off Peak	5.124
	Wailuku Hydro	On Peak	2.339
	Wailuku Hydro	Off Peak	1.768
	Hawi Renewable Dev.	On Peak	3.843
	Hawi Renewable Dev.	Off Peak	1.744
77	Tawhiri (Pakini Nui)	On Peak	10.206
	Tawhiri (Pakini Nui)	Off Peak	6.956
79			
	Small Hydro (>100 KW)	On Peak	0.000
81	,	Off Peak	0.000
	Sch Q Hydro (<100 KW)		0.215
	FIT		0.535
			100.000
0.4	COMPOSITE COST OF PI		
04	ENERGY, ¢/kWh		13.026
85	% Input to System kWh Mix	x	61.579
	WEIGHTED COMPOSITE		
	COST, ¢/kWh (Lines (84)		8.02128
87	BASE PURCHASED ENER	RGY	
	COMPOSITE COST, ¢/kV		13.354
88	Base % Input to Sys kWh M		53.88
89	1		
	COST, ¢/kWh (Lines (87		7.19514
90	COST LESS BASE (Lines	(86 - 89))	0.82614
	Loss Factor	(//	1.067
	Revenue Tax *		1.0975
	PURCHASED ENERGY FA	ACTOR. ¢/kWh	0.96744
00	(Lines (90 x 91 x 92))		0.007 11
	((CC / C / / C / / C / /		

Line

#### SYSTEM COMPOSITE

94 GENERATION AND PURCHASED ENERGY	
FACTOR, ¢/kWh (Lines (47 + 93))	0.04574
95 Not Used	0.000
96 Not Used	0.000
97 ECA Reconciliation Adjustment	(0.498)
98 ECA FACTOR, ¢/kWh	(0.452)
(Lines (94 + 95+ 96 + 97))	

REVISED \$HELCO ECAC eff 05-01-18 filed with May 2018 budget with price update v1.xlsm

# Hawaii Electric Light Company, Inc.

FUEL OIL INVENTORY PRICES FOR May 1, 2018

INDUSTRIAL FUEL COSTS: Average Industrial Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	<u>HILO</u> 63.7444 	<u>PUNA</u> 63.7444 1.2709		
Industrial Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	63.7444 6.30	65.0154 6.30		
Industrial Costs For Filing - ¢/mmbtu	1,011.82	1,031.99		
<b>DIESEL FUEL COSTS:</b> Average Diesel Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 93.8413 2.8034	PUNA CT-3 93.8413 1.3488	HILO 93.8413 1.1008	
Diesel Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	96.6447 5.86	95.1901 5.86	94.9421 5.86	
Diesel Costs For Filing - ¢/mmbtu	1,649.23	1,624.40	1,620.17	
				DISPERSED
ULSD FUEL COSTS:	KEAHOLE	WAIMEA	HILO	GENERATION
Average ULSD Fuel Cost - \$/BBL	82.3496	82.3496	82.3496	82.3496
Land Transportation Cost - \$/BBL	2.7975	2.3551	1.3908	-
ULSD Costs For Filing - \$/BBL	85.1471	84.7047	83.7404	82.3496
Conversion Factors - mmbtu/BBL	5.73	5.73	5.73	5.73
ULSD Costs For Filing - ¢/mmbtu	1,485.99	1,478.27	1,461.44	1,437.17

# Dispersed Generation, cents per kWh

	COMPOSITE COST
	OF DISP. GEN.
BBIs Fuel:	992.6038
\$/BBI Inv Cost:	82.3496
Fuel \$ (Prod Sim Consumption x Unit Cost)	81,740.51
Net kWh (from Prod Sim)	558,750
cents/kWh:	14.629

	SHIPMAN	I INDUSTRIAL	HILL INDU	JSTRIAL			
				COST PER BAR	RREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 03/31/2018	0	0.00	32,400	2,038,373.75			
Less: Est'd Inventory Addn			0	0.00			
Purchases: Estimate	xxxxxx xx	****	xxxxxxxxx	****			
Actual	XXXXXX XX	*****	XXXXXXXXX	*****			
Transfers out: Estimate	xxxxxx xx	****	xxxxxxxx	****			
Actual	xxxxxx xx	*****	XXXXXXXXXX	*****			
Transfers in: Estimate	0	0.00	(22,962)	(1,473,947.39)			
Actual	0	0.00	28,676	1,839,656.15			
Consumed: Estimate	0	0.00	22,338	1,536,501.46			
Actual	0	0.00	(25,197)	(1,733,156.08)			
Balance Per G/L 03/31/2018	0	0.00	35,255	2,207,427.89			
Purchases	xxxxxx xx	xxxxxxxxxxxx	XXXXXXXXXX	****			
Transfer out	xxxxxx xx	xxxxxxxxxxxx	XXXXXXXXXX	****			
Transfer in	0	0.00	25,755	1,581,803.30			
Consumed	0	0.00	(29,648)	(1,818,001.47)	106.5901	0.0000	106.5901
Balance @ 04/30/2018	0	0.00	31,362	1,971,229.72			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 04/30/2018	0	0.00	31,362	1,971,229.72			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxxx	(1,971,229.72)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxxxx	1,999,152.14			
Total @ 05/01/2018 Avg Price	0	0.00	31,362	1,999,152.14			
Weighted Avg Cost/BBL by Location		#DIV/0!		62.8541			
Weighted Avg Cost/BBL @ Avg Cost		#DIV/0!		63.7444			

	PUNA INDUST	RIAL				
			LAND	COST PER BARREL		
	BBL	COST	TRANSP	EXCLUDE LT	LT	TOTAL
Balance at 03/31/2018	5,883	408,631.27	7,212.22			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	****	****			
Actual	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*****	*****			
Transfers out: Estimate	xxxxxxxx x	****	****			
Actual	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*****	*****			
Transfers in: Estimate	(841)	(74,516.49)	(1,005.62)			
Actual	876	74,507.57	1,327.27			
Consumed: Estimate	716	49,249.49	862.71			
Actual	(556)	(38,244.03)	(669.92)			
Balance Per G/L 03/31/2018	6,078	419,627.81	7,726.66	-		
Purchases	xxxxxxxx x	****	*****			
Transfer out	xxxxxxxx x	****	*****			
Transfer in	1,639	103,359	1,959.82			
Consumed	(2,698)	(165,440.10)	(3,307.59)	61.3195	1.2259	62.5455
Balance @ 04/30/2018	5,019	357,546.27	6,378.89			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	5,019	357,546.27	6,378.89		1.2709	
Reverse Fuel Balance	xxxxxxxxxx	(357.546.27)	****			
Fuel Balance @ Avg Price	****		****			
Total @ 05/01/2018 Avg Price	5,019	319,933.19	6,378.89	-		
Weighted Avg Cost/BBL by Location		71.2385	1.2709			
Weighted Avg Cost/BBL @ Avg Cost		63.7444	1.2709			

		KEAHOLE CT					
			COST	LAND	COST PER BARREL		
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 03/31/2018	52,333.3	2,197,998.0	4,503,742.4	147,532.4			
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		****	****	xxxxxxxxxxxxxxxxx			
Actual		****	****	*****			
Transfers in: Estimate	(45,460.9)	(1,909,359.0)	(4,021,740.1)	(129,263.6)			
Actual	42 <i>,</i> 980.5	1,805,181.0	3,848,466.8	120,287.13			
Consumed: Estimate	38,410.4	1,613,237.0	3,847,478.1	107,633.64			
Actual	(41,262.5)	(1,733,025.0)	(4,133,166.1)	(115,623.9)	100.1676		
Balance Per G/L 03/31/2018	47,000.8	1,974,032	4,044,781.02	130,565.70	86.0578		
Purchases	****	* ****	****	****			
Transfer out	****	* ****	****	****			
Transfer in	47,319.7	1,987,428.0	4,402,246.0	134,548.9	93.0320		
Consumed	(44,312.0)	(1,861,104.0)	(3,820,407.4)	(124,919.66)	86.2161	2.8191	89.0352
Balance @ 04/30/2018	50,008.5	2,100,356	4,626,619.67	140,194.92	92.5167		
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	50,008.5	2,100,356	4,626,619.67	140,194.92	92.5167		
Reverse Fuel Balance	****	*	(4.626.619.7)	xxxxxxxxxxxxxx			
Fuel Balance @ Avg Price		* ****	• • • • •	*****			
Total @ 05/01/2018 Avg Price	50,008.5	2,100,356	4,692,859.03	140,194.92	93.8413		
Weighted Avg Cost/BBL by Location			92.5167	2.8034			
Weighted Avg Cost/BBL @ Avg Cost			93.8413	2.8034			

	Р	UNA CT-3					
			COST	LAND	COST PER E	BARREL	
HS Diesel	BBL	GALLONS	EXCLUD LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 03/31/2018	3,801.5	159,665.0	362,732.3	5,179.2			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate		****					
Actual	X	*****	****	*****			
Transfers out: Estimate	x	****	****	****			
Actual	X	*****	****	*****			
Transfers in: Estimate	(340.6)	(14,305.0)	(25,064.9)	(377.7)			
Actual	837.1	35,159.0	95,546.1	1,252.5			
Consumed: Estimate	360.2	15,128.0	36,079.4	479.9			
Actual	(784.5)	(32,950.0)					
Balance Per G/L 03/31/2018	3,873.7	162,697	390,709.01	5,488.71			
Purchases	*****	****	****	****			
Transfer out	*****	xxxxxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxx			
Transfer in	1,026.6	43,118.0	97,120.1	1,138.3	94.6019		
Consumed	(1,269.2)	(53,307)	(109,426.69)	(1,729.19)	86.2161	1.3624	87.5785
Balance @ 04/30/2018	3,631.1	152,508	378,402.43	4,897.83	104.2103		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 04/30/2018	3,631.1	152,508	378,402.43	4,897.83	104.2103		
Reverse Fuel Balance	xxxxxxx xx	xxxxxxxxxxxx	(378,402.43)	****			
Fuel Balance @ Avg Price		*****	•	****			
Total @ 05/01/2018 Avg Price	3,631.1	152,508	340,751.07	4,897.83	93.8413		
Weighted Avg Cost/BBL by Location			104.2103	1.3488			
Weighted Avg Cost/BBL @ Avg Cost			93.8413	1.3488			

		TOTAL HILO	HS-DIESEL				
			COST	LAND	COST PER	BARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 03/31/2018	1526.4	64,108	135,445	1,668			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate	:	xxxxxxxxxxx	****	****			
Actual	2	*****	XXXXXXXXXXXXXX	*****			
Transfers out: Estimate		****	xxxxxxxxxxx	****			
Actual		*****	XXXXXXXXXXXXX	xxxxxxxxxxxx			
Transfers in: Estimate	5.4	228.0	0.0	5.3			
Actual	-13.5	-569.0	0.0	0.0			
Consumed: Estimate	70.9	2979.0	7104.7	88.5			
Actual	-82.2	-3454.0	-8237.6	-102.6			
Balance Per G/L 03/31/2018	1507.0	63,292	134,312.00	1,658.76	89.1282		
Purchases	XXXXXXXXXXXXXXXXX	****	XXXXXXXXXXXXXXXXX	xxxxxxxxxxx			
Transfer out	XXXXXXXXXXXXXXXX	xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx			
Transfer in	0.0	0.0	0.0	0.0	#DIV/0!		
Consumed	-9.4	-396.0	-812.9	-10.3	86.2161	1.0925	87.3086
Balance @ 04/30/2018	1,497.5	62,896	133,499.11	1,648.46	89.1466		
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	1,497.5	62,896	133,499.11	1,648.46	89.1466		
Reverse Fuel Balance	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	****	-133,499.11	xxxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXXXX			****			
Total @ 05/01/2018 Avg Price	1,497.5	62,896	140,529.54	1,648.46	93.8413		
Weighted Avg Cost/BBL by Location			89.1466	1.1008			
Weighted Avg Cost/BBL @ Avg Cost			93.8413	1.1008			

		KEAHOLE DIES	SEL				
			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 03/31/2018	2,172.7	91,253	177,250.98	6,083.43			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(190.0)	(7,980)	(17,157.00)	(540.25)			
Actual	189.4	7,953	16,637.95	0.00			
Transfers out: Estimate		xxxxxxxxxxx	xxxxxxxxxxxxxx				
Actual		XXXXXXXXXXXXX	*****	* ****			
Transfers in: Estimate		37	0.00	2.50			
Actual		70	0.00	538.42			
Consumed: Estimate	106.6	4,479	8,735.01	299.03			
Actual	(153.6)	(6,450)	(12,578.89)	(430.70)	81.9091		
Balance Per G/L 03/31/2018	2,127.7	89,362	172,888.05	5,952.44	81.2571		
Purchases	0.0	0	0.00	0.00	0.0000		
Estimated Purchases	0.0	0	0.00	0.00			
Transfer in	(1.4)	(59)	0.00	(3.99)	0.00		
Consumed	(104.8)	(4,401)	(8,589.63)	(293.40)	81.9733	2.8000	84.7732
Balance @ 04/30/2018	2,021.5	84,902	164,298.42	5,655.05	81.2765		
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	2,021.5	84,902	164,298.42	5 <i>,</i> 655.05	81.2765		
Reverse Fuel Balance	xxxxxxxxxxx	****	(164,298.42)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXXXX			****			
Total @ 05/01/2018 Avg Price	2,021.5	84,902	166,467.72	5,655.05	82.3496		
Weighted Avg Cost/BBL by Location			81.2765	2.7975			
Weighted Avg Cost/BBL @ Avg Cost			82.3496	2.7975			

		WAIMEA DIESI	EL				
			COST	LAND	COST PER BARRE	L	
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		LT	TOTAL
Balance at 03/31/2018	1,538.5	64,617.0	124,857.9	3,626.53			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		0	0.00	0.00			
Actual		0.0	(460.0)	0.00			
Transfers out: Estimate	:	****	****	****			
Actual	:	*****	*****	*****			
Transfers in: Estimate	0.8	35	0.00	0.00			
Actual	(0.6)	(27)	0.00	0.00			
Consumed: Estimate	48.5	2,037	3,972.59	114.30			
Actual	(86.0)	(3,614)	(7,048.08)	(202.79)			
Balance Per G/L 03/31/2018	1,501.1	63,048	121,322.45	3,538.04	80.8201		
ULSD Purchases	188.9	7,935	17,624.15	447.53	93.2847		
Estimated Purchases	-	0	0.00	0.00			
Transfer in	****	91	0.00	0.00	#DIV/0!		
Consumed	(107.5)	(4,517)	(8,816.03)	(253.51)	81.9733	2.3572	84.3304
Balance @ 04/30/2018	1,584.7	66,557	130,130.57	3,732.06	82.1173		
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	1,584.7	66,557	130,130.57	3,732.06	82.1173		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxx	(130,130.57)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXXXXX	*****	130,498.60	****			
Total @ 05/01/2018 Avg Price	1,584.7	66,557	130,498.60	3,732.06	82.3496		
Weighted Avg Cost/BBL by Location			82.1173	2.3551			
Weighted Avg Cost/BBL @ Avg Cost			82.3496	2.3551			

	I	KANOELEHUA	DIESEL			
			COST	LAND		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		
Balance at 03/31/2018	1,455.3	61,122.0	121,535.5	1,997.7	1	
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	(190.0)	(7,980)	(17,157.00)	(185.93)		
Actual	189.4	7,956	17,104.36	0.00		
Transfers out: Estimate		x	х	x		
Actual		х	Х	х		
Transfers in: Estimate		0	0.00	0.00		
Actual		(686)	0.00	185.37		
Consumed: Estimate	0.0	2,527	967.04	26.58		
Actual	(59.8)	(2,511)	(4,896.99)	(71.82)		
Balance Per G/L 03/31/2018	1,438.8	60,428	117,552.93	1,951.94		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	0	0	0.00	0.00		
Consumed	(54.4)	(2,285)	(967.04)	(26.58)	81.97325169	1.3727
Balance @ 04/30/2018	1,384.4	58,143	116,585.89	1,925.36		
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	1,384.4	58,143	116,585.89	1,925.36		
Reverse Fuel Balance	х	х	(116,585.89)	x		
Fuel Balance @ Avg Price	х	х	114,001.23	x		
Total @ 05/01/2018 Avg Price	1,384.4	58,143	114,001.23	1,925.36		
Weighted Avg Cost/BBL by Location			84.2166	1.3908		
Weighted Avg Cost/BBL @ Avg Cost			82.3496	1.3908		

# HAWAII ELECTRIC LIGHT CO., INC. Estimated Weighted Average April 2018

#### DISPERSED GENERATION

	ENERATION		
BBL	GALLONS	COST	COST/BBL
96.0	4,031	7,735.94	
0.0	xxxxxxxx	****	
· · /	· · ·		
11.9	499	1,072.85	
(12.4)	(520)	(1,014.11)	
xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	
XXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	
XXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXX	
91.62	3,848	7,379.10	80.5411
10.6	447	992.83	93.2860
****	****	xxxxxxxxxx	
xxxxxxxxx	****	xxxxxxxxxxx	
(5.2)	(218)	(425.48)	81.9733
97.1	4,077	7,946.45	81.8619
0.0	0	0.00	
97.1	4,077	7,946.45	
xxxxxxxxxxx	****	(7,946.45) xx	xx
		7,993.79 xx	
97.1	4,077	7,993.79	82.3496
	BBL 96.0 0.0 (11.9) 11.9 8.0 (12.4) XXXXXXXXXX XXXXXXXXX XXXXXXXXX 91.62 10.6 XXXXXXXXXX 91.62 10.6 XXXXXXXXXX (5.2) 97.1 0.0 97.1	BBL GALLONS   96.0 4,031   0.0 XXXXXXXXX   (11.9) (499)   11.9 499   8.0 337   (12.4) (520)   XXXXXXXXX XXXXXXXXXX   XXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	BBL GALLONS COST   96.0 4,031 7,735.94   0.0 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

#### HAWAII ELECTRIC LIGHT COMPANY, INC.

CONTRACT PRICES EFFECTIVE April 1, 2018

#### TYPE OF OIL BURNED

I TPE OF OIL BURNED	Hill Indu	strial	Puna Industrial	
INDUSTRIAL *	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax <sup>1</sup> Ocean Transportation Storage Wharfage Fees <sup>2</sup>	55.83 50.00 29.89 5.60 2.26	3.5165 3.0359 2.0521 0.3400 0.1425	55.83 48.19 32.57 5.40 2.26	3.5165 3.0359 2.0521 0.3400 0.1800
	Hilo Die	esel	Waimea I	Diesel
DIESEL * Tax <sup>1</sup> Ocean Transportation Storage Wharfage Fees <sup>2</sup>	¢/MBTU 90.40 51.81 27.20 5.80 3.33	\$/BBL 5.2973 1.9761 1.5937 0.3400 0.1950	¢/MBTU 90.40 51.81 27.20 5.80 3.33	\$/BBL 5.2973 3.0359 1.5937 0.3400 0.1950
	Kona Diesel		CT3 Di	esel
	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax <sup>1</sup> Ocean Transportation Storage Wharfage Fees <sup>2</sup>	90.40 51.81 27.20 5.80 3.33	5.2973 3.0359 1.5937 0.3400 0.1950	90.40 51.81 27.20 5.80 3.33	5.2973 3.0359 1.5937 0.3400 0.1950
	ULSI	D		
ULSD ** Tax <sup>1</sup> Ocean Transportation Storage Wharfage Fees <sup>2</sup>	¢/MBTU 26.38 0.00 0.00 0.00 3.33	\$/BBL 1.9686 0.0000 0.0000 0.0000 0.1950		

<sup>1</sup> Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST Tax and Environmental Response Tax.

<sup>2</sup> 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.

<sup>\*</sup> Land Transportation Costs are shown in Attachment 3, Sheet 1.

<sup>\*\*</sup> 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 May 1, 2018

		May 1, 2018 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW) PGV (22 MW)	- on peak - off peak	13.503 13.695	6.560 5.430
WAILUKU HYDRO	- on peak off peak	13.503 13.695	7.240 5.970
Other: (<100 KW)	Sch Q Rate	13.230	
		May 1, 2018 (¢/kWh)	Floor Rates (¢/kWh)
HEP		15.205	
PGV Addtl 5 MW	- on peak - off peak	12.8600 12.8600	0.0000 0.0000
PGV Addtl 8 MW	- on peak	6.5400	0.0000

#### Hawaii Electric Light Company, Inc. Energy Cost Reconciliation Adjustment May 1, 2018

<u>Line No.</u>	Description	Amount
1	Amount to be (returned) or collected	(\$1,153,900)
2	Monthly Amount ( $^{1}/_{3}$ x Line 1)	(\$384,633)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$422,141)
5	Estimated MWh Sales (May 1, 2018)	84,769 mwh
6	Adjustment (Line 4 / Line 5)	(0.498) ¢/kwh

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

LINE	DESCRIPTION	Info Only March 2018 YTD Total <u>No Deadband</u>	collectn by <u>company*</u>	Basis for Recon March 2018 YTD Total <u>Deadband</u>	Collection or Refund by <u>Company</u>
	ACTUAL COSTS:				
1	Generation	\$18,485.3		\$18,485.3	
2	Distributed Generation	\$1.7		\$1.7	
3	Purch Power	\$18,482.4		\$18,482.4	
4	TOTAL	\$36,969.4	-	\$36,969.4	
	FUEL FILING COST (1)				
5	Generation	\$18,757.0		\$18,681.7	
6	Distributed Generation	\$1.7		\$1.7	
7	Purch Power	\$18,482.4		\$18,482.4	
8	TOTAL	\$37,241.1		\$37,165.7	
	BASE FUEL COST				
9	Generation	\$17,702.0		\$17,702.0	
10	Distributed Generation	\$0.7		\$0.7	
11	Purch Power	\$20,175.5		\$20,175.5	
12	TOTAL	\$37,878.2		\$37,878.2	
13	FUEL-BASE COST (Line 8-12)	-\$637.1		-\$712.5	
14	ACTUAL FOA LESS TAX	-\$346.7		-\$346.7	
15	Less: FOA reconciliation adj for prior year	-\$788.1		-\$788.1	
16	ADJUSTED FOA LESS TAX	\$441.4	-	\$441.4	
17	FOA-(FUEL-BASE) (Line 16-13)	\$1,078.5	over	\$1,153.9	over
	ADJUSTMENTS:				
18	Current year FOA accrual reversal	\$0.0		\$0.0	
19	Other prior year FOA	\$0.0		\$0.0	
20	Other	\$0.0	-	\$0.0	
21	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20)	\$1,078.5	over	\$1,153.9	over

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

#### Hawai`i Electric Light Company DEADBAND CALCULATION 2018

2018		
	Ja	an 1 - Mar 2018
	Ν	YTD
	—	
<u>Industrial</u>		
Industrial Efficiency Factor (per D&O), BTU/kWh*	f	15,148
		100
Industrial Deadband Definition, +/- BTU/kWh	d	100
		10,000,100
Industrial Portion of Recorded Sales, kWh	а	40,006,126
Industrial Consumption (Recorded), MMBTU	b	581,563
Industrial Efficiency Factor (Recorded), BTU/kWh	С	14,537
Lower limit of Industrial Deadband, BTU/kWh	е	15,048
Higher limit of Industrial Deadband, BTU/kWh	g	15,248
	9	,2
Industrial Efficiency Factor for cost-recovery, BTU/kWh	h	15,048
Industrial Efficiency Factor for cost-recovery, BTO/KWIT	h	15,040
Diesel		
Diesel Efficiency Factor (per D&O), BTU/kWh*	f	10,424
Diesel Deadband Definition, +/- BTU/kWh	d	100
Diesel Portion of Recorded Sales, MWh	а	75,587,596
Diesel Consumption (Recorded), MMBTU	b	785,735
Diesel Efficiency Factor (Recorded), BTU/kWh	С	10,395
		10.001
Lower limit of Diesel Deadband, BTU/kWh	е	10,324
Higher limit of Diesel Deadband, BTU/kWh	g	10,524
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h	10,395
Biodiesel		
Biodiesel Efficiency Factor (per D&O), BTU/kWh*	f	0
Biodiesel Deadband Definition, +/- BTU/kWh	d.	100
Biodicsci Deadband Deimition, 17 BTO/RWIT	u	100
Righting of Recorded Color, MW/b		0
Biodiesel Portion of Recorded Sales, MWh	а	0
Biodiesel Consumption (Recorded), MMBTU	b	0
Biodiesel Efficiency Factor (Recorded), BTU/kWh	С	0
Lower limit of Biodiesel Deadband, BTU/kWh	е	-100
Higher limit of Biodiesel Deadband, BTU/kWh	g	100
<b>0</b>	0	
Biodiesel Efficiency Factor for cost-recovery, BTU/kWh	h	0
		U U
Hydro		
<u>Hydro</u>		
		40.004
Hydro Efficiency Factor (per D&O), BTU/kWh*	f	12,621
		12,621 <b>100</b>
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh	f	100
Hydro Efficiency Factor (per D&O), BTU/kWh*	f	
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh	f d	100
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh Hydro Portion of Recorded Sales, MWh Hydro Consumption (Recorded), MMBTU	f d a	<b>100</b> 4,508,662 53,176
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh Hydro Portion of Recorded Sales, MWh	f d a b	<b>100</b> 4,508,662
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh Hydro Portion of Recorded Sales, MWh Hydro Consumption (Recorded), MMBTU Hydro Efficiency Factor (Recorded), BTU/kWh	f d a b c	<b>100</b> 4,508,662 53,176 11,794
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh Hydro Portion of Recorded Sales, MWh Hydro Consumption (Recorded), MMBTU Hydro Efficiency Factor (Recorded), BTU/kWh Lower limit of Hydro Deadband, BTU/kWh	f d a b c	<b>100</b> 4,508,662 53,176 11,794 12,521
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh Hydro Portion of Recorded Sales, MWh Hydro Consumption (Recorded), MMBTU Hydro Efficiency Factor (Recorded), BTU/kWh	f d a b c	<b>100</b> 4,508,662 53,176 11,794
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh Hydro Portion of Recorded Sales, MWh Hydro Consumption (Recorded), MMBTU Hydro Efficiency Factor (Recorded), BTU/kWh Lower limit of Hydro Deadband, BTU/kWh Higher limit of Hydro Deadband, BTU/kWh	f d b c g	<b>100</b> 4,508,662 53,176 11,794 12,521 12,721
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh Hydro Portion of Recorded Sales, MWh Hydro Consumption (Recorded), MMBTU Hydro Efficiency Factor (Recorded), BTU/kWh Lower limit of Hydro Deadband, BTU/kWh	f d a b c	<b>100</b> 4,508,662 53,176 11,794 12,521

\* YTD Efficiency Factor (per D&O) is actual YTD & projected to the end of the year weighted by calendar days in the year.

#### HAWAII ELECTRIC LIGHT COMPANY, INC. GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST WITHOUT and WITH DEADBAND 2018

		With Deadband
	Without Deadband	As Filed
	<u>Jan 1 - Mar 31</u>	<u>Jan 1 - Mar 31</u>
INDUSTRIAL FUEL FILING COST Industrial Portion of Recorded Sales, kWh Industrial Efficiency Factor (mmbtu/kwh)	40,006,126 0.015148	40,006,126 0.015048
Mmbtu adjusted for Sales Efficiency Factor	606,013	602,012
\$/mmbtu	\$10.0197	\$10.0197
TOTAL INDUSTRIAL \$000s TO BE RECOVERED	\$6,072.053	\$6,031.968
DIESEL FUEL FILING COST		
Diesel Portion of Recorded Sales, kWh	75,587,596	75,587,596
Diesel Efficiency Factor (mmbtu/kwh)	0.010424	0.010395
Mmbtu adjusted for Sales Efficiency Factor	787,925	785,733
\$/mmbtu TOTAL DIESEL \$000s TO BE RECOVERED	<u>\$16.0992</u> \$12,684.973	<u>\$16.0992</u> \$12,649.682
TOTAL DIESEL \$0003 TO BE RECOVERED	φ12,004.973	φ12,049.002
HYDRO FUEL FILING COST		
Hydro Portion of Recorded Sales , kWh	4,508,662	4,508,662
Hydro Efficiency Factor (mmbtu/kwh)	0.012621	0.012521
Mmbtu adjusted for Sales Efficiency Factor	56,904	56,453
\$/mmbtu	<u>\$0.0000</u>	<u>\$0.0000</u>
TOTAL HYDRO \$000s TO BE RECOVERED	\$0.000	\$0.000
TOTAL GENERATION FUEL FILING COST, \$000s	\$18,757.0	\$18,681.7
CALCULATION OF GENERATION BASE FUEL COST TOTAL GENERATION BASE FUEL COST, \$000s	\$17,702.0	\$17,702.0
TOTAL GENERATION FUEL FILING COST, \$000s YTE TOTAL GENERATION BASE FUEL COST YTD	0 \$18,757.0 \$17,702.0	\$18,681.7 \$17,702.0

# HAWAII ELECTRIC LIGHT COMPANY, INC.

2018 Cumulative Reconciliation Balance

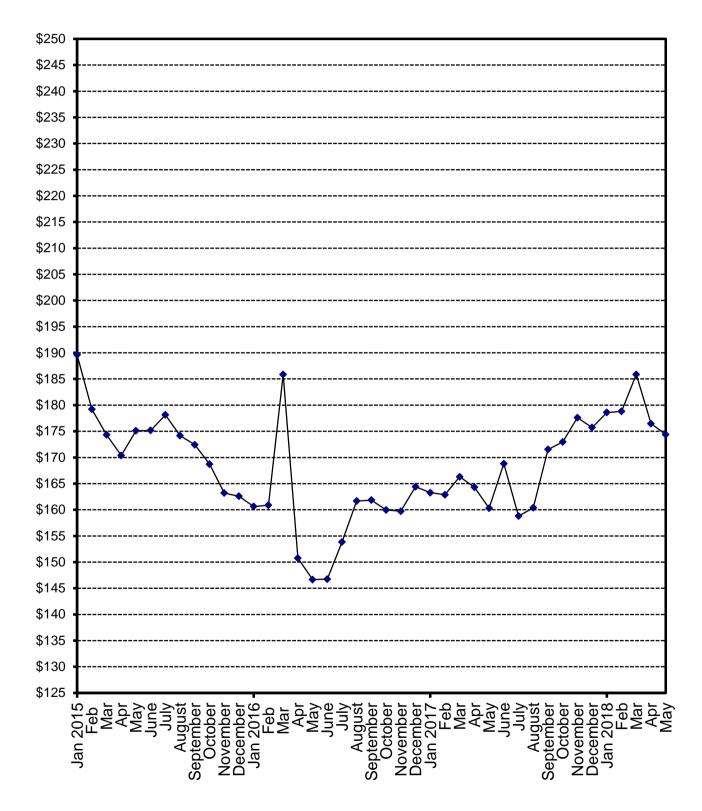
	(1)		(2) FOA Rec	(3) FOA Rec	(4)	(5)	(6) Month-end
	YTD FOA		Adjust	Less	Try to	Actual	Cumulative
<u>Month</u>	Reconciliation	<u>Qtr</u>	Variance	Variance	<u>Collect</u>	<u>Collect</u>	Balance
<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u></u>	<u>D d. d. 100</u>
November	785,400	[3]	(82,548)	867,948	(261,800)	(268,646)	534,241
December <sup>-</sup>	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)		
Мау	1,153,900	(1)	(17,855)	1,171,755	(384,633)		

#### 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

FUEL FACTOR CENTS / KWH RESIDENTIAL & RESIDENTIAL BILL (\$) EFFECTIVE DATE COMMERCIAL @ 500 KWH @ 600 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	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 October 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 -1.405	163.27 162.87 166.31 164.31 160.30 168.82 158.79 160.39 171.52 172.97 177.60 175.02	195.58 195.09 199.24 196.83 192.02 202.25 190.22 192.15 205.50 207.23 212.80 209.69					
January 1, 2018 February 1, 2018 March 1, 2018 April 1, 2018 May 1, 2018	-0.723 -0.579 0.816 -0.912 -0.452	178.59 178.81 185.87 176.46 174.38	213.95 214.22 222.68 211.39 208.90					

#### 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						
4 14 10047 4 104 10047								
1/1/2017-1/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	2.3400 CENTS/KWH						
1/1/2017 2/1/2017 - 2/28/17	GREEN INFRASTRUCTURE FEE PURCHASED POWER ADJUSTMENT CLAUSE	1.2700 DOLLARS/MONTH 2.3737 CENTS/KWH						
3/1/2017 - 3/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.3737 CENTS/KWH 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 CLAUSE	-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						
8/31/2017-4/3018	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						

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

	Rate			Γ	Charge (\$) at 500 Kwh			
		04/01/18	05/01/18		04/01/18	05/01/18	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%	2.5000%		\$9.08	\$3.86	-\$5.22	
RBA Rate Adjustment	¢/kwh	0.6313	0.6313		\$3.16	\$3.16	\$0.00	
Purchased Power Adj. Clause	¢/kwh	2.3184	2.3395		\$11.59	\$11.70	\$0.11	
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	(0.1464)	0.0000		-\$0.73	\$0.00	\$0.73	
Energy Cost Adjustment	¢/kwh	(0.9120)	(0.4520)		-\$4.56	-\$2.26	\$2.30	
Green Infrastructure Fee	\$	1.3400 <sup>´</sup>	1.3400		\$1.34	\$1.34	\$0.00	
	LI							

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

Avg Residential Bill at 500 kwh

\$176.46 \$174.38

Increase (Decrease -) % Change

-\$2.08 -1.18%

	Rate			Charge (\$) at 600 Kwh		
		04/01/18	05/01/18	04/01/18	05/01/18	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%	2.5000%	\$10.89	\$4.63	-\$6.26
RBA Rate Adjustment	¢/kwh	0.6313	0.6313	\$3.79	\$3.79	\$0.00
Purchased Power Adj. Clause	¢/kwh	2.3184	2.3395	\$13.91	\$14.04	\$0.13
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	(0.1464)	0.0000	-\$0.88	\$0.00	\$0.88
Energy Cost Adjustment	¢/kwh	(0.9120)	(0.4520)	-\$5.47	-\$2.71	\$2.76
Green Infrastructure Fee	\$	1.3400	1.3400	\$1.34	\$1.34	\$0.00
				<b>A</b> Q44 QQ	<b>\$</b> 000 00	
Avg Residential Bill at 600 kwh				\$211.39	\$208.90	

Increase (Decrease -) % Change

