

JAY IGNACIO, P. E. President

September 26, 2018

FILED

2018 SEP 26 P 3: 43

PUBLIC UTILITIES COMMISSION

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

Dear Commissioners:

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

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Adjustment factor for October 2018 is 8.359 cents per kilowatt-hour ("kWh"), an increase of 6.33 cents per kWh from last month. Base Energy Cost factors are reset to the 2016 rate case approved levels effective October 1, 2018 in Docket No. 2015-0170.

Hawai'i Electric Light's fuel composite cost of generation increased 55.83 cents per million BTU to 1,504.96 cents per million BTU. The distributed generation increased 0.61 cents per kWh to 16.393 cents per kWh. The composite cost of purchased energy increased 0.14 cents per kWh to 14.903 cents per kWh.

A residential customer consuming 500 kWh of electricity will be paying \$194.21, an increase of \$9.23 compared to rates effective September 1, 2018. The increase in the residential typical bill is comprised of the increase in the Energy Cost Adjustment Factor (\$31.66), and an increase in the Purchased Power Adjustment Clause (\$1.32), partially offset by the termination of the 2016 Interim Rate Increase (-\$3.86), and the Implementation of the 2016 Final Rates effective October 1, 2018 (-\$19.89).

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 October 1, 2018.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

#### **ENERGY COST ADJUSTMENT FACTOR**

#### **EFFECTIVE DATES**

	09/01/18	<u>10/01/18</u>	<u>Change</u>
Composite Cost			
Generation, ¢/mmbtu Dispersed Generation Energy, ¢/kWh Purchased Energy, ¢/kWh	1,449.13 15.780 14.763	1,504.96 16.393 14.903	55.83 0.61 0.14
Residential Schedule "R"			
Energy Cost Adjustment - ¢/kWh	2.027	8.359	6.33
Others - "G,J,P,F"			
Energy Cost Adjustment - ¢/kWh	2.027	8.359	6.33
Residential Customer with:			
500 KWH Consumption - \$/Bill 600 KWH Consumption - \$/Bill	\$184.98 \$221.62	\$194.21 \$232.50	\$9.23 \$10.88

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

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

<u>Line</u>

1 Effective Date October 1, 2018 2 Supercedes Factors of September 1, 2018

### **GENERATION COMPONENT**

	CEI	NTRAL STATION WITH WIND/HYDRO CO	MPONENT_		
		FUEL PRICES, ¢/mmbtu			
	3				
	4	Hill Industrial	1,208.97		
	5	Puna Industrial	1,228.13		
	6	Keahole Diesel	1,818.52		
	6a	Keahole ULSD	1,659.50		
	7	Waimea ULSD Diesel	1,651.32		
	8	Hilo Diesel	1,784.78		
	8a	Hilo (Kanoelehua) ULSD Diesel <sup>1</sup>	1,635.75		
	9	Puna Diesel	1,790.34	DG ENERGY COMPONENT	
	10	Wind	0.00	35 COMPOSITE COST OF DG	
				ENERGY, ¢/kWh	46.202
	11	Hydro	0.00	• •	16.393
		DTH MIN OF		36 % Input to System kWh Mix	0.955
	4.0	BTU MIX, %			
	12			37 WEIGHTED COMPOSITE DG ENERGY COST,	
	13	Hill Industrial	38.189	¢/kWh (Lines 35 x 36)	0.15655
	14	Puna Industrial	2.515		
	15	Keahole Diesel	49.265	38 BASE DG ENERGY COMPOSITE COS	13.932
a		Keahole ULSD	1.373		
	16	Waimea ULSD Diesel	0.505	39 Base % Input to System kWh Mix	0.01
	17	Hilo Diesel	0.105	40 WEIGHTED BASE DG ENERGY COST,	
'a		Hilo (Kanoelehua) ULSD Diesel1	0.091		
	18	Puna Diesel	4.580	¢/kWh (Line 38 x 39)	0.00139
	19	Wind	0.000	,,,,,,,,	
	20	Hydro	3.377	41 Cost Less Base (Line 37 - 40)	0.15516
	20	riyaro	100.000	42 Loss Factor	1.072
	21	COMPOSITE COST OF GENERATION,	100.000	43 Revenue Tax Reg Multiplier	1.0975
	<b>Z</b> I	•	mmh 150406	·	1.0975
	22	CENTRAL STATION + WIND/HYDRO ¢/r	· · · · · · · · · · · · · · · · · · ·	44 DG FACTOR, ¢/kWh	0.40055
	22	% Input to System kWh Mix	51.903	(Line 41 x 42 x 43)	0.18255
		EFFICIENCY FACTOR, mmbtu/kWh	(5)		
		(A) (B) (C)	(D)		
		Percent			
		Eff Factor Centrl St	•		
		Fuel Type mmbtu/kwh Wind/Hy			
	23	Industrial 0.014437 40.704			
	24	Diesel 0.010515 55.919			
	25	Other 0.012351 3.377	0.000417		
		(Lines 23, 2			
	26	Weighted Efficiency Factor, mmbtu/kWh			
		- · · · · · · · · · · · · · · · · · · ·			
		[Lines 23(D) + 24(D) + 25(D)]	0.0121730		
		[Lines 23(D) + 24(D) + 25(D)]	0.0121730		
	27	[Lines 23(D) + 24(D) + 25(D)] WEIGHTED COMPOSITE CENTRAL STA			
	27	WEIGHTED COMPOSITE CENTRAL STA	TION +		
	27	WEIGHTED COMPOSITE CENTRAL STAWIND/HYDRO GENERATION COST, ¢/k	TION + Wh		
	27	WEIGHTED COMPOSITE CENTRAL STA	TION +		
		WEIGHTED COMPOSITE CENTRAL STAWIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))	TION + Wh 9.50857		
		WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR	TION + Wh 9.50857		
	28	WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu	TION + Wh 9.50857 RO 661.02		
	28 29	WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix	TION + Wh 9.50857 RO 661.02 53.67		
	28 29 30	WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh	TION + Wh 9.50857 RO 661.02 53.67 0.012451		
	28 29 30	WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION +	TION + Wh 9.50857 SO 661.02 53.67 0.012451		
	28 29 30	WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION + WIND/HYDRO GENERATION COST ¢/kk	TION + Wh 9.50857 RO 661.02 53.67 0.012451		
	28 29 30	WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION +	TION + Wh 9.50857 SO 661.02 53.67 0.012451		
	28 29 30 31	WEIGHTED COMPOSITE CENTRAL STAT WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION + WIND/HYDRO GENERATION COST ¢/k\(\) (Lines (28 x 29 x 30))	TION + Wh 9.50857  O 661.02 53.67 0.012451  Wh 4.41723	SUMMARY OF	
	28 29 30 31	WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION + WIND/HYDRO GENERATION COST ¢/kk	TION + Wh 9.50857 RO 661.02 53.67 0.012451	TOTAL GENERATION FACTOR, ¢/kWh	
	28 29 30 31	WEIGHTED COMPOSITE CENTRAL STAT WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION + WIND/HYDRO GENERATION COST ¢/k\(\) (Lines (28 x 29 x 30))	TION + Wh 9.50857  O 661.02 53.67 0.012451  Wh 4.41723		5.58775
	28 29 30 31 32 33	WEIGHTED COMPOSITE CENTRAL STATE WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION + WIND/HYDRO GENERATION COST ¢/kk (Lines (28 x 29 x 30))  COST LESS BASE (Line 27 - 31)	TION + Wh 9.50857  O 661.02 53.67 0.012451  Wh 4.41723 5.09134	TOTAL GENERATION FACTOR, ¢/kWh	5.58775 0.18255
	28 29 30 31 32 33	WEIGHTED COMPOSITE CENTRAL STAT WIND/HYDRO GENERATION COST, ¢/k (Lines (21 x 22 x 26))  BASE CENTRAL STATION + WIND/HYDR GENERATION COST, ¢/mmbtu Base % Input to Sys kWh Mix Efficiency Factor, mmbtu/kwh WEIGHTED BASE CENTRAL STATION + WIND/HYDRO GENERATION COST ¢/k\(\text{k}\) (Lines (28 x 29 x 30))  COST LESS BASE (Line 27 - 31) Revenue Tax Req Multiplier	TION + Wh 9.50857  O 661.02 53.67 0.012451  Wh 4.41723 5.09134	TOTAL GENERATION FACTOR, ¢/kWh 45 Cntrl Stn+Wind/Hydro (line 34)	

<sup>&</sup>lt;sup>1</sup> Hilo ULSD same location as Kanoelehua ULSD

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

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

Line	PURCHASED F	NERGY COMPONE	NT
	I GROTIAGED L		<u></u>
	PURCHASED ENERGY F	PRICE, ¢/kWh	
	HEP		15.724
	PGV	On Peak	16.233
	PGV	Off Peak	15.872
	PGV - Add'l 5 MW	On Peak	12.860
	PGV - Add'l 5 MW	Off Peak	12.860
	PGV - Add'l 8 MW	On Peak	6.540
	PGV - Add'l 8 MW	Off Peak	6.540
	Wailuku Hydro	On Peak	16.233
	Wailuku Hydro Hawi Renewable Dev.	Off Peak	15.872
	Hawi Renewable Dev.	On Peak Off Peak	16.233 15.872
		On Peak	11.510
	Tawhiri (Pakini Nui) Tawhiri (Pakini Nui)	Off Peak	11.510
61	rawiiii (Faniii Nui)	Oli Feak	11.550
	Small Hydro (>100 KW)	On Peak	16.233
63	• ` '	Off Peak	15.872
	Sch Q Hydro (<100 KW)	On roun	15.670
	FIT		23.800
			_0.000
	PURCHASED ENERGY K	(WH MIX, %	
66	HEP		63.669
67	PGV	On Peak	0.000
68	PGV	Off Peak	0.000
69	PGV - Addt'l	On Peak	0.000
	PGV - Addt'l	Off Peak	0.000
	PGV - Add'l 8 MW	On Peak	0.000
	PGV - Add'l 8 MW	Off Peak	0.000
	Wailuku Hydro	On Peak	3.901
	Wailuku Hydro	Off Peak	2.671
	Hawi Renewable Dev.	On Peak	4.738
	Hawi Renewable Dev.	Off Peak	1.892
	Tawhiri (Pakini Nui)	On Peak	13.469
78 79	Tawhiri (Pakini Nui)	Off Peak	8.696
	Small Hydro (>100 KW)	On Peak	0.000
	Small Hydro (>100 KW)	Off Peak	0.000
	Sch Q Hydro (<100 KW)	On reak	0.000
	FIT		0.727
	• • •		100.000
			100.000
84	COMPOSITE COST OF F	PURCHASED	
	ENERGY, ¢/kWh		14.903
85	% Input to System kWh M	lix	47.142
86	WEIGHTED COMPOSITE		ЭΥ
	COST, ¢/kWh (Lines (84	x 85))	7.02557
	D. 05 5115 6111 6	'D 0 \ /	
87	BASE PURCHASED ENE		0.00-
	COMPOSITE COST, ¢/k		9.895
	Base % Input to Sys kWh WEIGHTED BASE PURC		46.32
89	COST, ¢/kWh (Lines (87	_	4.58336
		,,	
	COST LESS BASE (Lines	s (86 - 89))	2.44221
	Loss Factor		1.072
	Revenue Tax *		1.0975
93	PURCHASED ENERGY F	·ACTOR, ¢/kWh	2.87331
	(Lines (90 x 91 x 92))		

Line	SYSTEM COMPOSI	TF

94 GENERATION AND PURCHASED ENERGY	
FACTOR, ¢/kWh (Lines (47 + 93))	8.64361
95 Not Used	0.000
96 Not Used	0.000
97 ECA Reconciliation Adjustment	(0.285)
98 ECA FACTOR, ¢/kWh	8.359
(Lines (94 + 95+ 96 + 97))	

# Hawaii Electric Light Company, Inc.

FUEL OIL INVENTORY PRICES FOR October 1, 2018

INDUSTRIAL FUEL COSTS: Average Industrial Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	<u>HILO</u> 76.1649 	PUNA 76.1649 1.2072		
Industrial Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	76.1649 6.30	77.3721 6.30		
Industrial Costs For Filing - ¢/mmbtu	1,208.97	1,228.13		
DIESEL FUEL COSTS: Average Diesel Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 103.7374 2.8278	PUNA CT-3 103.7374 1.1766	HILO 103.7374 0.8507	
Diesel Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	106.5652 5.86	104.9141 5.86	104.5881 5.86	
Diesel Costs For Filing - ¢/mmbtu	1,818.52	1,790.34	1,784.78	
ULSD FUEL COSTS: Average ULSD Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 92.2783 2.8110	WAIMEA 92.2783 2.3422	HILO 92.2783 1.4502	DISPERSED GENERATION 92.2783 -
ULSD Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	95.0893 5.73	94.6205 5.73	93.7285 5.73	92.2783 5.73
ULSD Costs For Filing - ¢/mmbtu	1,659.50	1,651.32	1,635.75	1,610.44

COMPOSITE COST

# Dispersed Generation, cents per kWh

	OF DISP. GEN.
BBIs Fuel:	1208.0011
\$/BBI Inv Cost:	92.2783
Fuel \$ (Prod Sim Consumption x Unit Cost)	111,472.32
Net kWh (from Prod Sim)	680,000
cents/kWh:	16.393

# Estimated Weighted Average September 2018

	SHIPMAN INDUSTRIAL		HILL INDU	JSTRIAL			
					COST PER BAR	RREL	
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 08/31/2018	0	0.00	38,351	2,952,590.39			
Less: Est'd Inventory Addn			0	0.00			
Purchases: Estimate	XXXXXX XX	xxxxxxxxxxx	xxxxxxx	xxxxxxxxxxxx			
Actual	XXXXXX XX	xxxxxxxxxxx	xxxxxxx	xxxxxxxxxxxx			
Transfers out: Estimate	xxxxxx xx	xxxxxxxxxxxx	xxxxxxxx	xxxxxxxxxxxx			
Actual	XXXXXX XX	xxxxxxxxxxx	xxxxxxx	xxxxxxxxxxx			
Transfers in: Estimate	0	0.00	(25,386)	(1,919,515.96)			
Actual	0	0.00	24,179	1,845,338.77			
Consumed: Estimate	0	0.00	21,894	1,658,008.22			
Actual	0	0.00	(20,331)	(1,539,643.97)			
Balance Per G/L 08/31/2018	0	0.00	38,707	2,996,777.45			
Purchases	xxxxxx xx	xxxxxxxxxxx	xxxxxxx	xxxxxxxxxxxx			
Transfer out	xxxxxx xx	xxxxxxxxxxx	xxxxxxx xxxxxxxxxxxxx				
Transfer in	0	0.00	14,782	1,094,712.21			
Consumed	0	0.00	(18,868)	(1,444,564.40)	106.5901	0.0000	106.5901
Balance @ 09/30/2018	0	0.00	34,621	2,646,925.26			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 09/30/2018	0	0.00	34,621	2,646,925.26			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxxx	(2,646,925.26)			
Fuel Bal @ Avg Price	xxxxx	0.00	xxxxxxx	2,636,905.61			
Total @ 10/01/2018 Avg Price	0	0.00	34,621	2,636,905.61			
Weighted Avg Cost/BBL by Location		#DIV/0!		76.4543			
Weighted Avg Cost/BBL @ Avg Cost		#DIV/0!		76.1649			

Estimated Weighted Average September 2018

#### PUNA INDUSTRIAL

	PUNA INDUSTI					
			LAND	COST PER BA		
	BBL	COST	TRANSP	EXCLUDE LT	LT	TOTAL
Balance at 08/31/2018	6,467	511,916.11	8,087.72			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate			xxxxxxxxxxxxxxxxxxxx			
Actual	XXXXXXXXXXXX X	xxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
Transfers out: Estimate	XXXXXXXXXXX X	xxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	(		
Actual	XXXXXXXXXXX X	xxxxxxxxxxx	xxxxxxxxxxxxxxxxxxx			
Transfers in: Estimate	(6,725)	(523,310.76)	(8,041.35)	)		
Actual	6,616	526,527.70	8,272.13			
Consumed: Estimate	5,797	439,000.35	6,856.30			
Actual	(5,840)	(442,256.69)	(6,907.16)	)		
Balance Per G/L 08/31/2018	6,315	511,876.71	8,267.64	_		
Purchases	xxxxxxxxxx x	xxxxxxxxxxx	xxxxxxxxxxxxxxxxxx	:		
Transfer out	xxxxxxxxxx x	xxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
Transfer in	10,078	774,975	12,050.67			
Consumed	(12,175)_	(932,137.56)	(15,226.23)	76.5616	1.2506	77.8122
Balance @ 09/30/2018	4,218	354,714.60	5,092.08			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	4,218	354,714.60	5,092.08		1.2072	
Reverse Fuel Balance	XXXXXXXXXXX	(354,714.60)	xxxxxxxxxxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxx		xxxxxxxxxxxxxxxxxxx			
Total @ 10/01/2018 Avg Price	4,218	321,263.62	5,092.08	-		
Weighted Avg Cost/BBL by Location		84.0954	1.2072			
Weighted Avg Cost/BBL @ Avg Cost		76.1649	1.2072			

#### Estimated Weighted Average September 2018

#### **KEAHOLE CT**

		KLAHOLL CI				242251	
			COST	LAND	COST PER		
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 08/31/2018	42,088.8	1,767,729.0	4,090,935.4	119,002.6			
Less: Est'd Inventory Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate	0.0	0.0	0.0	0.0			
Actual	0.0	0.0	0.0	0.0			
Transfers out: Estimate		xxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Actual		xxxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfers in: Estimate	(51,725.9)	(2,172,486.0)	(4,993,096.9)	(147,077.3)			
Actual	49,161.2		• • • • • •	139,014.23			
/ totadi	13,101.2	2,001,772.0	1,032,302.1	133,01 1123			
Consumed: Estimate	58,207.9	2,444,731.0	5,533,986.4	163,767.87			
Actual	(57,356.0)			·	94.0007	,	
Actual	(37,336.0)	(2,406,931.0)	(5,591,502.5)	(101,392.4)	94.0007		
Polones Por C/L 09/31/3019	40.276.1	1 605 705	4 122 624 52	112 215 02	102 2522	<b>1</b>	
Balance Per G/L 08/31/2018	40,376.1	1,695,795	4,132,624.53	113,315.02	102.3533	•	
D. valores							
Purchases	xxxxxxxxxx	( XXXXXXXXXXXXXXX	xxxxxxxxxxxxx	XXXXXXXXXXXXXXXXX			
Transfer out	XXXXXXXXXXX	( XXXXXXXXXXXXXXX	XXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXXX			
Transfer in	53,982.1	2,267,247.0	5,388,016.8	153,492.6	99.8112	2	
Consumed	(48,079.0)	(2,019,319.0)	(4,681,684.3)	(135,939.47)	97.3748	2.8274	100.2022
Balance @ 09/30/2018	46,279.1	1,943,723	4,838,957.02	130,868.17	104.5603	}	
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	46,279.1	1,943,723	4,838,957.02	130,868.17	104.5603	3	
		, ,	<u> </u>	· · · · · · · · · · · · · · · · · · ·			
Reverse Fuel Balance	XXXXXXXXXXXX	( xxxxxxxxxxxxxx	(4 838 957 N	xxxxxxxxxxxxxx			
Fuel Balance @ Avg Price				XXXXXXXXXXXXXXXXX			
AVE FILE	^^^^	( XXXXXXXXXXXXXXX	4,000,070.2	^^^^^^^			
Total @ 10/01/2018 Avg Price	46,279.1	1,943,723	4,800,876.20	130,868.17	103.7374	<u> </u>	
Total & To/OT/ZOTO AVE PILLE	40,279.1	1,343,723	4,000,070.20	130,000.17	103.7374	•	
W-1-1-1-4 A - 0 (22)			404 = 600	2.0270			
Weighted Avg Cost/BBL by Location			104.5603	2.8278			
Weighted Avg Cost/BBL @ Avg Cost			103.7374	2.8278			

### Estimated Weighted Average September 2018

#### PUNA CT-3

	ſ	PUNA CT-3					
			COST	LAND	COST PER E	BARREL	
HS Diesel	BBL	GALLONS	EXCLUD LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 08/31/2018	3,502.5	147,103.0	343,309.5	3,821.5			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate	>	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxxx	XXXXXXXXXXX			
Actual	>	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxxx	XXXXXXXXXXX			
Transfers out: Estimate	>	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX					
Actual	>	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxxx	XXXXXXXXXXX			
Transfers in: Estimate	(5,551.9)	(233,181.0)	(536,934.8)	• •			
Actual	7,027.7	295,164.0	727,807.4	7,927.4			
Consumed: Estimate	6,277.8	263,669.0	596,851.2	7,385.9			
Actual	(7,377.1)	(309,839.0)	(734,009.8)	(8,679.0)			
5 6 (1 00 (04 (00 40		160.016	207 222 54	4 200 00			
Balance Per G/L 08/31/2018	3,879.0	162,916	397,023.61	4,299.83			
Purchases	XXXXXXXXXXXX >	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxxx	x xxxxxxxxxxx			
Transfer out	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Transfer out	XXXXXXXXXXXXX	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	XXXXXXXXXXXX			
Transfer in	7,156.5	300,574.0	702,896.4	7,935.2	98.2176		
Transier in	7,130.3	300,374.0	702,830.4	7,933.2	38.2170		
Consumed	(8,765.6)	(368,154)	(853,545.58)	(9,564.12)	97.3748	1.0911	98.4659
Consumed	(8,703.0)	(300,134)	(655,545.56)	(3,304.12)	37.3740	1.0311	30.4033
Balance @ 09/30/2018	2,269.9	95,336	246,374.44	2,670.86	108.5396		
Inven From Offsite/Transfers	0.0	0	0.00	0.00	100.5550		
Est'd Inventory Addition	0.0	0	0.00	0.00			
a michiel, maniel			0.00	0.00			
Fuel Balance @ 09/30/2018	2,269.9	95,336	246,374.44	2,670.86	108.5396		
		33,000					
Reverse Fuel Balance	xxxxxxxxxxxx	(XXXXXXXXXXXXXXXXX	(246.374.44)	xxxxxxxxxx			
Fuel Balance @ Avg Price		(XXXXXXXXXXXXXXXXX	• • •	XXXXXXXXXXX			
Total @ 10/01/2018 Avg Price	2,269.9	95,336	235,474.05	2,670.86	103.7374		
. , ,	, , , , , , ,	/ 0	,	,: 3:00			
Weighted Avg Cost/BBL by Location			108.5396	1.1766			
- 5							
Weighted Avg Cost/BBL @ Avg Cost			103.7374	1.1766			
			_00.7074	2.2700			

Estimated Weighted Average September 2018

#### TOTAL HILO HS-DIESEL

		TOTAL HILO	10 212022				
			COST	LAND	COST PER	BARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 08/31/2018	1740.4	73,096	167,357	1,949			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate			xxxxxxxxxx				
Actual		xxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX			
Transfers out: Estimate		xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx			
Actual		xxxxxxxxxxx	XXXXXXXXXXX	XXXXXXXXXXX			
Transfers in: Estimate	-566.4	-23790.0	-55379.4	-555.0			
Actual	931.4	39119.0	95901.0	921.9			
Consumed: Estimate	92.5	3885.0	8794.2	113.9			
Actual	-227.1	-9538.0	-14958.9	-279.6			
Balance Per G/L 08/31/2018	1970.8	82,772	201,714.00	2,150.47	102.3533		
Purchases	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx			
Transfer out	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx			
Transfer in	192.5	8084.0	18649.6	0.0	96.8932		
Consumed	-1151.8	-48374.0	-112152.6	-1290.0	97.3748	1.1200	98.4948
Balance @ 09/30/2018	1,011.5	42,482	108,211.07	860.49	106.9833		
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	1,011.5	42,482	108,211.07	860.49	106.9833		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxx	-108,211.07	xxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxx	xxxxxxxxxx	104,927.93	xxxxxxxxxx			
Total @ 10/01/2018 Avg Price	1,011.5	42,482	104,927.93	860.49	103.7374		
Weighted Avg Cost/BBL by Location			106.9833	0.8507			
Weighted Avg Cost/BBL @ Avg Cost			103.7374	0.8507			

# Estimated Weighted Average September 2018

#### KEAHOLE DIESEL

		KEAHOLE DIES	COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 08/31/2018	1,977.5	83,056	172,433.92	5,527.10			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	0.0	0	0.00	0.00			
Actual	0.0	0	0.00	0.00			
Transfers out: Estimate		xxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxx			
Actual		XXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXX			
Transfers in: Estimate		64	0.00	4.33			
Actual		(47)	0.00	0.00			
Consumed: Estimate	148.6	6,242	13,094.19	412.67			
Actual	(164.7)	(6,919)	(14,514.37)	(438.30)	88.1057		
Balance Per G/L 08/31/2018	1,961.8	82,396	171,013.74	5,505.80	87.1714		
Purchases	187.8	7,887	19,081.89	533.95	0.0000		
Estimated Purchases	0.0	0	0.00	0.00			
Transfer in	(2.1)	(89)	0.00	(6.03)	0.00		
Consumed	(172.1)	(7,227)	(15,289.99)	(480.93)	88.8584	2.7950	91.6534
Balance @ 09/30/2018	1,975.4	82,967	174,805.64	5,552.79	88.4910		
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	1,975.4	82,967	174,805.64	5,552.79	88.4910		
Reverse Fuel Balance	XXXXXXXXXXX	xxxxxxxxxx	(174,805.64)	xxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxx			xxxxxxxxxx			
Total @ 10/01/2018 Avg Price	1,975.4	82,967	182,287.04	5,552.79	92.2783		
Weighted Avg Cost/BBL by Location			88.4910	2.8110			
Weighted Avg Cost/BBL @ Avg Cost			92.2783	2.8110			

#### Estimated Weighted Average September 2018

#### WAIMEA DIESEL

		WAIIVILA DILS					
			COST	LAND	COST PER BARR		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		LT	TOTAL
Balance at 08/31/2018	1,515.5	63,651.0	132,211.8	3,543.07			
Data ince at 08/31/2018	1,515.5	03,031.0	132,211.8	3,343.07			
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		vvvvvvvvvvvvv	xxxxxxxxxxxxx	**********			
Actual			XXXXXXXXXXXXXXX				
Actual		*********	^^^^^	********			
Transfers in: Estimate	2.3	96	0.00	0.00			
Actual	(4.4)	(184)	0.00	0.00			
Consumed: Estimate	149.7	6,289	13,192.78	349.99			
Actual	(123.0)	(5,168)	(10,841.20)	(287.61)			
Balance Per G/L 08/31/2018	1,540.1	64,684	134,563.41	3,605.45	87.3734		
Balance 1 cl 3/2 35/31/2015	1,540.1	04,004	134,303.41	3,003.43	07.3734		
ULSD Purchases	188.6	7,922	19,166.57	446.80	101.6152		
Estimated Purchases	-	0	0.00	0.00			
Transfer in	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	73	0.00	0.00	#DIV/0!		
Transfer in	xxxxxxxxxx	/3	0.00	0.00	#DIV/U!		
Consumed	(182.8)	(7,677)	(16,242.05)	(427.33)	88.8584	2.3379	91.1963
Balance @ 09/30/2018	1,547.7	65,002	137,487.93	3,624.92	88.8356		
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 5/17 7	65,002	127 /197 02	3,624.92	88.8356		
Fuel Balance @ Avg Frice	1,547.7	65,002	137,487.93	3,024.92	00.0330		
Reverse Fuel Balance	XXXXXXXXXXXX	xxxxxxxxxxx	(137.487.93)	xxxxxxxxxx			
Fuel Balance @ Avg Price		xxxxxxxxxxx		xxxxxxxxxx			
- 0			,				
Total @ 10/01/2018 Avg Price	1,547.7	65,002	142,816.09	3,624.92	92.2783		
Weighted Avg Cost/BBL by Location			88.8356	2.3422			
Weighted Avg Cost/BBL @ Avg Cost			92.2783	2.3422			
Weighten Avg Cost/ DDL @ Avg Cost			32.2703	2.3422			

#### Estimated Weighted Average September 2018

#### KANOELEHUA DIESEL

		MANULLLIIOA				
			COST	LAND		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		
Balance at 08/31/2018	1,367.4	57,430.0	127,176.5	1,723.5		
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	0.0	0	0.00	0.00		
Actual	0.0	0	0.00	0.00		
Transfers out: Estimate		х	x	x		
Actual		х	х	х		
Transfers in: Estimate		0	0.00	0.00		
Actual		0	0.00	0.00		
Consumed: Estimate	102.2	4,292	967.04	26.58		
Actual	(107.9)	(4,530)	(9,502.83)	54.40		
Balance Per G/L 08/31/2018	1,361.7	57,192	118,640.75	1,804.44		
ULSD Purchases	188	7,902	19,118.18	184.12	2.42	
Estimated Purchases	0	-	-	-		
Transfer in	0	0	0.00	0.00		
Consumed	(196.9)	(8,271)	(967.04)	(26.58)	88.85839487	1.2604
Balance @ 09/30/2018	1,352.9	56,823	136,791.89	1,961.97		
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	1,352.9	56,823	136,791.89	1,961.97		
Reverse Fuel Balance	x	x	(136,791.89)	x		
Fuel Balance @ Avg Price	x	х		x		
Total @ 10/01/2018 Avg Price	1,352.9	56,823	124,845.98	1,961.97		
Weighted Avg Cost/BBL by Location			101.1080	1.4502		
Weighted Avg Cost/BBL @ Avg Cost			92.2783	1.4502		

Estimated Weighted Average September 2018

#### **DISPERSED GENERATION**

	0. 2. (023 0	ENERATION		
	BBL	GALLONS	COST	COST/BBL
Balance at 08/31/2018	88.7	3,725	7,946.37	
Less: Est'd Inven Addition	0.0	xxxxxxxx	xxxxxxxx	
Purchases: Estimate Actual	(18.9) 18.9	(794)	` ,	
Actual	10.9	794	1,959.31	
Consumed: Estimate	29.2	1,226	2,571.85	
Actual	(21.7)	(912)	(982.69)	
	xxxxxxxx	xxxxxxxxx	xxxxxxxxx	
	XXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
	xxxxxxxx	xxxxxxxxx	xxxxxxxxx	
	XXXXXXXXX	XXXXXXXXXX	XXXXXXXXXX	
Balance Per G/L 08/31/2018	96.17	4,039	9,607.14	99.9009
Purchases	0.0	0	0.00	0.0000
Transfer out	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	
Transfer in	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	
Consumed	(38.2)	(1,604)	(3,393.54)	88.8584
Balance @ 09/30/2018	58.0	2,435	6,213.60	107.1750
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 09/30/2018	58.0	2,435	6,213.60	
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxx	(6,213.60) x	xxx
Fuel Balance @ Avg Price	xxxxxxxxxx	xxxxxxxxxx	5,349.95 x	
Total @ 10/01/2018 Avg Price	58.0	2,435	5,349.95	92.2783

CONTRACT PRICES EFFECTIVE September 1, 2018

TYPE	OF	OIL	BL	JRNE	ΞD
------	----	-----	----	------	----

TYPE OF OIL BURNED				
	<u>Hill Indu</u>	<u>strial</u>	Puna Ind	<u>ustrial</u>
INDUSTRIAL *	¢/MBTU	<u>\$/BBL</u>	¢/MBTU	\$/BBL
Tax ¹	64.57	4.0682	64.57	4.0682
Ocean Transportation	40.43	2.4548	38.97	2.4548
Storage	29.89	2.0521	32.57	2.0521
Wharfage	6.43	0.3900	6.19	0.3900
Fees <sup>2</sup>	2.26	0.1425	2.26	0.1425
	Hilo Die	esel	Waimea	Diesel
DIESEL *	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax <sup>1</sup>	97.01	5.6841	97.01	5.6841
Ocean Transportation	41.89	2.4548	41.89	2.4548
Storage	27.20	1.5937	27.20	1.5937
Wharfage	6.66	0.3900	6.66	0.3900
Fees <sup>2</sup>	3.33	0.1950	3.33	0.1950
	Kona Di	esel	CT3 Di	esel
	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax 1	97.01	5.6841	97.01	5.6841
Ocean Transportation	41.89	2.4548	41.89	2.4548
Storage	27.20	1.5937	27.20	1.5937
Wharfage	6.66	0.3900	6.66	0.3900
Fees <sup>2</sup>	3.33	0.1950	3.33	0.1950
	ULSI	)		
ULSD **	¢/MBTU	\$/BBL		
Tax ¹	26.38	2.0100		
Ocean Transportation	0.00	0.0000		
Storage	0.00	0.0000		
Wharfage	0.00	0.0000		
Fees <sup>2</sup>	3.40	0.1950		

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

inventory, contract prices for the current month are being provided. Contract prices are considered accurate pending actual delivery of fuel.

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

<sup>&</sup>lt;sup>2</sup> Fees include Custom Duty and Fed Oil Spill Recovery

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

<sup>\*\*</sup> ULSD includes Waimea, Kanoelehua, and Keahole.

# Hawaii Electric Light Company, Inc. PURCHASED POWER PRICES FOR October 1, 2018

		October 1, 2018 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW)	- on peak	16.233	6.560
PGV (22 MW)	- off peak	15.872	5.430
WAILUKU HYDRO	- on peak	16.233	7.240
	off peak	15.872	5.970
Other: (<100 KW)	Sch Q Rate	15.670	
		October 1, 2018 (¢/kWh)	Floor Rates (¢/kWh)
HEP		15.724	
PGV Addtl 5 MW	- on peak	12.8600	0.0000
	- off peak	12.8600	0.0000
PGV Addtl 8 MW	- on peak	6.5400	0.0000
	- off peak	6.5400	0.0000

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

October 1, 2018

Line No.	<u>Description</u>	<u>Amount</u>
1	Amount to be (returned) or collected	(\$699,900)
2	Monthly Amount ( <sup>1</sup> / <sub>3</sub> x Line 1)	(\$233,300)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$256,050)
5	Estimated MWh Sales (October 1, 2018)	89,810 mwh
6	Adjustment (Line 4 / Line 5)	(0.285) ¢/kwh

2018 Cumulative Reconciliation Balance

<u>Month</u>	(1) YTD FOA Reconciliation	<u>Qtr</u>	(2) FOA Rec Adjust <u>Variance</u>	(3) FOA Rec Less <u>Variance</u>	(4) Try to Collect	(5) Actual <u>Collect</u>	(6) Month-end Cumulative <u>Balance</u>
November December		[3]	(82,548)	867,948	(261,800) (261,800)	(268,646) (283,626)	534,241 250,615
January 17 February March April	1,366,400	[4]	(46,589)	1,412,989	(261,800) (455,467) (455,467) (455,467)	(265,764) (473,124) (479,559) (478,693)	(15,149) 924,716 445,157 (33,536)
May June July	445,100	(1)	(45,713)	490,813	(148,367) (148,367) (148,367)	(154,562) (151,295) (157,548)	302,715 151,420 (6,128)
August September October	500,800	[2]	(32,349)	533,149	(166,933) (166,933) (166,933)	(180,924) (178,788) (178,629)	346,097 167,309 (11,320)
November December January 18	714,200	[3]	(35,027)	749,227	(238,067) (238,067) (238,067)	(250,818) (243,403) (242,224)	487,089 243,686 1,462
February March April	825,100	[4]	(29,783)	854,883	(275,033) (275,033) (275,033)	(279,869) (283,895) (291,829)	576,476 292,581 752
May June July	1,153,900	(1)	(17,855)	1,171,755	(384,633) (384,633) (384,633)	(398,709) (387,715) (399,033)	773,798 386,083 (12,950)
August September October	699,900	[2]	(33,954)	733,854	(233,300) (233,300) (233,300)	(244,658)	476,246

#### NOTES:

Col(1):	Quarterly FOA reconciliation amounts. (Refer to Attachment 6)
	A manifely and make a sign of a constant of the state of

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

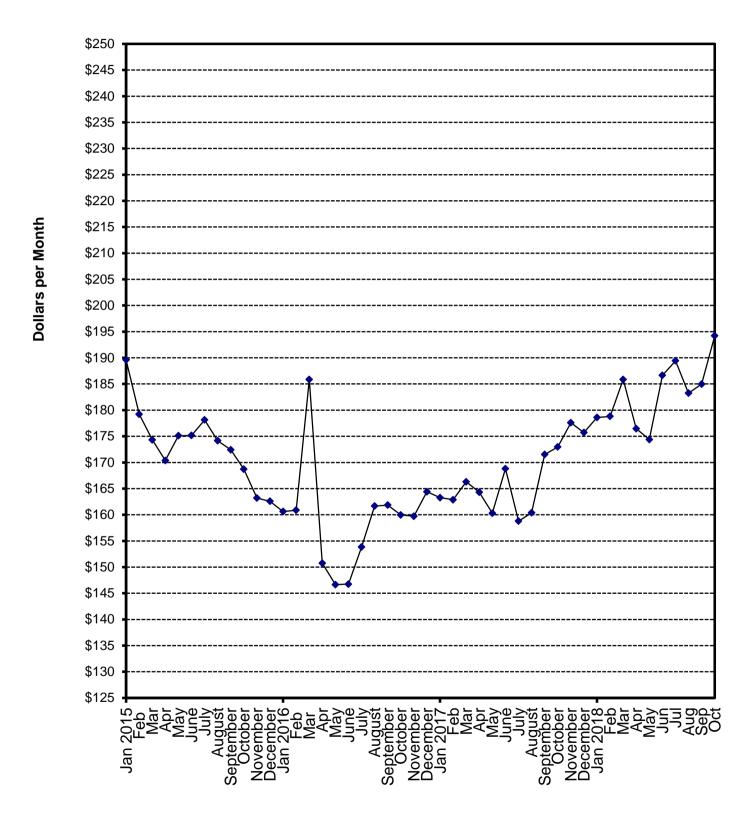
difference minus the adjustment variance. Col(1)-Col(2)

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 December 1, 2015	2.369	189.62	227.20
	0.485	179.22	214.71
	-0.519	174.32	208.85
	-0.990	170.37	204.10
	-0.420	175.10	209.79
	-0.579	175.16	209.85
	0.264	178.14	213.38
	-0.586	174.16	208.61
	-0.927	172.43	206.54
	-1.671	168.73	202.10
	-2.727	163.20	195.47
	-2.859	162.59	194.74
January 1, 2016 February 1, 2016 March 1, 2016 April 1, 2016 May 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	160.63	192.41
	-2.962	160.87	192.69
	-4.311	154.26	184.76
	-4.715	150.76	180.57
	-5.554	146.66	175.64
	-5.546	146.74	175.74
	-4.248	153.85	184.31
	-3.094	161.67	193.69
	-3.040	161.85	193.90
	-3.427	159.97	191.65
	-3.514	159.72	191.35
	-2.584	164.41	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 December 1, 2017	-2.842	163.27	195.58
	-2.956	162.87	195.09
	-2.274	166.31	199.24
	-2.425	164.31	196.83
	-3.035	160.30	192.02
	-1.343	168.82	202.25
	-3.220	158.79	190.22
	-3.643	160.39	192.15
	-2.447	171.52	205.50
	-2.131	172.97	207.23
	-0.885	177.60	212.80
	-1.405	175.02	209.69
January 1, 2018 February 1, 2018 March 1, 2018 April 1, 2018 May 1, 2018 June 1, 2018 July 1, 2018 August 1, 2018 September 1, 2018 October 1, 2018	-0.723	178.59	213.95
	-0.579	178.81	214.22
	0.816	185.87	222.68
	-0.912	176.46	211.39
	-0.452	174.38	208.90
	2.301	186.65	223.63
	2.831	189.43	226.97
	1.665	183.25	219.55
	2.027	184.98	221.62
	8.359	194.21	232.50

# HAWAII ELECTRIC LIGHT COMPANY, INC. RESIDENTIAL SURCHARGE DATA

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
04/09/12	FINAL RATE INCREASE (1.28%), DOCKET NO. 2009-016	4 (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
8/31/2017-4/3018 8/31/2017	INTERIM RATE INCREASE 2016 RBA RATE ADJUSTMENT	5.8800 PERCENT ON BASE 0.6313 CENTS/KWH
10/1/2017 - 10/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.7257 CENTS/KWH
11/1/2017 - 10/31/17	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	701/10, DUCKET NO. 2015-01/0

<sup>\*\*</sup>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

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Base Fuel Energy Charge
Non-fuel Fuel Energy Charge
First 300 kWh per month
Next 700 kWh per month
Customer Charge

**Total Base Charges** 

Interim Rate Increase 2016 TY RBA Rate Adjustment Purchased Power Adj. Clause PBF Surcharge DSM Adjustment SolarSaver Adjustment Energy Cost Adjustment Green Infrastructure Fee

Avg Residential Bill at 500 kwh

Rate					
	09/01/18	10/01/18			
effective date:	4/9/2012	10/1/2018			
¢/kwh	16.2487	10.2440			
¢/kwh					
¢/kwh	11.2019	13.0289			
¢/kwh	14.5537	16.3807			
\$	10.50	11.50			
% on base	2.5000%	0.0000%			
¢/kwh	1.0006	1.0006			
¢/kwh	1.5950	1.8602			
¢/kwh	0.4658	0.4658			
¢/kwh	0.0000	0.0000			
¢/kwh	0.0000	0.0000			
¢/kwh	2.0270	8.3590			
\$	1.2100	1.2100			

Charge (\$) at 500 Kwh				
09/01/18	10/01/18	Difference		
\$81.24	\$51.22	-\$30.02		
\$62.72	\$71.85	\$9.13		
\$33.61	\$39.09	\$5.48		
\$29.11	\$32.76	\$3.65		
\$10.50	\$11.50	\$1.00		
\$154.46	\$134.57	-\$19.89		
\$3.86	\$0.00	-\$3.86		
\$5.00	\$5.00	\$0.00		
\$7.98	\$9.30	\$1.32		
\$2.33	\$2.33	\$0.00		
\$0.00	\$0.00	\$0.00		
\$0.00	\$0.00	\$0.00		
\$10.14	\$41.80	\$31.66		
\$1.21	\$1.21	\$0.00		
\$184.98	\$194.21			

Increase (Decrease -) % Change

\$9.23 4.99%

#### **Base Rates**

Base Fuel/Energy Charge Non-fuel Fuel Energy Charge First 300 kWh per month Next 700 kWh per month Customer Charge Total Base Charges

Interim Rate Increase 2016 TY RBA Rate Adjustment Purchased Power Adj. Clause PBF Surcharge DSM Adjustment SolarSaver Adjustment Energy Cost Adjustment Green Infrastructure Fee

Avg Residential Bill at 600 kwh

Rate					
	09/01/18	10/01/18			
effective date:	4/9/2012	10/1/2018			
¢/kwh	16.2487	10.2440			
¢/kwh					
¢/kwh	11.2019	13.0289			
¢/kwh	14.5537	16.3807			
\$	10.50	11.50			
% on base	2.5000%	0.0000%			
¢/kwh	1.0006	1.0006			
¢/kwh	1.5950	1.8602			
¢/kwh	0.4658	0.4658			
¢/kwh	0.0000	0.0000			
¢/kwh	0.0000	0.0000			
¢/kwh	2.0270	8.3590			
\$	1.2100	1.2100			

Charge (\$) at 600 Kwh				
09/01/18	10/01/18	Difference		
\$97.49	\$61.46	-\$36.03		
\$77.27	\$88.23	\$10.96		
\$33.61	\$39.09	\$5.48		
\$43.66	\$49.14	\$5.48		
\$10.50	\$11.50	\$1.00		
\$185.26	\$161.19	-\$24.07		
\$4.63	\$0.00	-\$4.63		
\$6.00	\$6.00	\$0.00		
\$9.57	\$11.16	\$1.59		
\$2.79	\$2.79	\$0.00		
\$0.00	\$0.00	\$0.00		
\$0.00	\$0.00	\$0.00		
\$12.16	\$50.15	\$37.99		
\$1.21	\$1.21	\$0.00		
\$221.62	\$232.50			

Increase (Decrease -) % Change

\$10.88 4.91%