

SHARON M. SUZUKI President April 26, 2019

FILED

2019 APR 25 P 3:55

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 May 2019

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Recovery factor for May 2019 is 17.396 cents per kilowatt-hour ("kWh"), an increase of 0.93 cents per kWh from last month.

Hawai'i Electric Light's fuel composite cost of generation increased 52.56 per million BTU to 1,491.69 cents per million BTU. The distributed generation increased 0.26 cents per kWh to 15.506 cents per kWh. The composite cost of purchased energy increased 0.61 cents per kWh to 13.916 cents per kWh.

A residential customer consuming 500 kWh of electricity will be paying \$188.74, an increase of \$5.62 compared to rates effective April 1, 2019. The increase in the typical residential bill is due to the increase of (+\$4.63) of the Energy Cost Recovery Factor, the increase in the Purchased Power Adjustment rate (+\$0.61), and the termination of the April 2019 credit for the SolarSaver Adjustment (+\$0.38).

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 May 1, 2019.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

Shara M. Agled

# **ENERGY COST RECOVERY FACTOR**

	<u>EFFECTIV</u>	E DATES	
	4/01/19	5/01/19	<u>Change</u>
Composite Cost			
Generation, ¢/mmbtu Dispersed Generation Energy, ¢/kWh Purchased Energy, ¢/kWh	1,439.13 15.245 13.309	,	52.56 0.26 0.61
Residential Schedule "R"			
Energy Cost Recovery - ¢/kWh	16.469	17.396	0.93
Others - "G,J,P,F"			
Energy Cost Recovery - ¢/kWh	16.469	17.396	0.93
Residential Customer with:			
500 KWH Consumption - \$/Bill 600 KWH Consumption - \$/Bill	\$183.12 \$219.17	\$188.74 \$225.93	\$5.62 \$6.76

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

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

Line

1 Effective Date May 1, 2019 2 Supercedes Factors of April 1, 2019

#### **GENERATION COMPONENT**

		ENTRAL STATIC	ON WITH WIND	HYDRO COMPON	JENT		
		FUEL PRICES,		III DICO COMII OI	NEINI		
	3	. 5221 111020,	p,				
	4	Hill Industrial			1,195.17		
	5	Puna Industrial			1,218.13		
	6	Keahole Diesel			1,728.61		
		Keahole ULSD			1.662.83		
		Waimea ULSD [			1,663.93		
	8	Hilo Diesel	Diesei				
					1,699.08		
		Hilo (Kanoelehu	a) ULSD Diesei.		1,631.84		
	9	Puna Diesel			1,693.49	DG ENERGY COMPONENT	
	10	Wind			0.00	35 COMPOSITE COST OF DG	
	11	Hydro			0.00	ENERGY, ¢/kWh	15.5
						36 % Input to System kWh Mix	0.1
		BTU MIX, %					
	12	,				37 WEIGHTED COMPOSITE DG ENERGY COST,	
	13	Hill Industrial			26.927	¢/kWh (Lines 35 x 36)	0.019
	14	Puna Industrial			5.887	,,,,,,,,( <u>-</u>	
	15	Keahole Diesel			46.098	38 BASE DG ENERGY COMPOSITE COS	0.0
5a	. •	Keahole ULSD			0.349	.,	0.0
Ju	16	Waimea ULSD			0.428	39 Base % Input to System kWh Mix	0.
		Hilo Diesel	2,0001		5.114	40 WEIGHTED BASE DG ENERGY COST,	0.
_	17		\			40 WEIGHTED BASE DG ENERGT COST,	
7a		Hilo (Kanoelehu	a) ULSD Diesel		0.373		
		Puna Diesel			11.538	¢/kWh (Line 38 x 39)	0.000
	19	Wind			0.000		
	20	Hydro			3.286	41 Cost Less Base (Line 37 - 40)	0.019
					100.000	42 Loss Factor	1.0
	21	COMPOSITE CO	OST OF GENER	RATION,		43 Revenue Tax Req Multiplier	1.09
		CENTRAL STA	ATION + WIND/H	HYDRO ¢/mmbtu	1,491.69	44 DG FACTOR, ¢/kWh	
	22	% Input to Syste	m kWh Mix		56.994	(Line 41 x 42 x 43)	0.022
		EFFICIENCY FA	ACTOR, mmbtu/l	κWh			
		(A)	(B)	(C)	(D)		
				Percent of	, ,		
			Eff Factor	Centrl Stn +	Weighted		
		Fuel Type	mmbtu/kwh	Wind/Hydro	Eff Factor		
	23	Industrial	0.014569	32.814	0.004781		
	24	Diesel	0.010480	63.900	0.006697		
	25	Other	0.012395	3.286	0.000407		
		(Lines 23, 2	2.0.2000	0.200	3.000.07		
	26	Weighted Efficie	ency Factor, mmh	ntu/kWh			
	20	[Lines 23(D) +	•	/ CON 1 ( V V I I	0.0118850		
		[LINOS 20(D) +	(0) . 20(0)]		3.0113030		
	27	WEIGHTED CO	MPOSITE CENT	FRAL STATION +			
	۲,		GENERATION				
		(Lines (21 x 22		οσοι, <i>φι</i> κννιι	10.10437		
		(LIIIG3 (Z I X ZZ	A 20))		10.10431		
	28	BASE CENTRA	I STΔΤΙΩΝΙ ± \Λ/	IND/HVDPO			
	20				0.00		
	20		ON COST, ¢/mm	Diu	0.00		
		Base % Input to			0.00		
		Efficiency Factor		TATION:	0.000000		
	31	WEIGHTED BA					
			GENERATION	COST ¢/kWh	0.00000		
		(Lines (28 x 2	9 x 30))		0.00000		
						SUMMARY OF	
		COST LESS BA		)	10.10437	TOTAL GENERATION FACTOR, ¢/kWh	
		Revenue Tax Re			1.0975	45 Cntrl Stn+Wind/Hydro (line 34)	11.089
	34	CENTRAL STAT	TION + WIND/H	YDRO		46 DG (line 44)	0.022
		<b>GENERATION F</b>	FACTOR			47 TOTAL GENERATION FACTOR,	
		0	,,			" TOTAL CLITETION THOU	

 $<sup>^{\</sup>mathrm{1}}\,$  Hilo ULSD same location as Kanoelehua ULSD

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

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

ne	PURCHASED EI	NERGY COMPONE	<u>NT</u>			
	PURCHASED ENERGY PRI	ICF d/kWh Fossil				
48	HEP	OL, p/KVVII 1 03311	14.054			
	PURCHASED ENERGY PRI	, ,				
	PGV	On Peak	16.368			
	PGV	Off Peak	15.030			
	PGV - Add'l 5 MW	On Peak	13.050			
	PGV - Add'l 5 MW	Off Peak	13.050			
	PGV - Add'l 8 MW	On Peak	9.950			
	PGV - Add'l 8 MW	Off Peak	6.640			
	Wailuku Hydro	On Peak	16.368			
	Wailuku Hydro	Off Peak	15.030			
	Hawi Renewable Dev.	On Peak	16.368			
	Hawi Renewable Dev.	Off Peak	15.030			
	Tawhiri (Pakini Nui)	On Peak	11.870			
	Tawhiri (Pakini Nui)	Off Peak	11.940			
61		On Dock	16 200			
	Small Hydro (>100 KW)	On Peak	16.368			
	Small Hydro (>100 KW)	Off Peak	15.030			
	Sch Q Hydro (<100 KW)		15.440			
ob	FIT		23.800			
	DUDCHASED FAIFBOV ION	LIMIV % Essail				
66	PURCHASED ENERGY KW HEP	IIIVIIA, 70, FUSSII	64.630			
00	ПСР		04.030			
	PURCHASED ENERGY KW	H MIY % Panawahla				
67	PGV	On Peak	0.000			
	PGV	Off Peak	0.000			
	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	3.257			
	Wailuku Hydro	Off Peak	2.413			
	Hawi Renewable Dev.	On Peak	5.161			
	Hawi Renewable Dev.	Off Peak	2.230			
	Tawhiri (Pakini Nui)	On Peak		Derivation (	of No	on-Adjustable Component:
	Tawhiri (Pakini Nui)	Off Peak	8.795	Denvalion	או ועכ	on-Adjustable Component.
79	` ,	Officak	0.795	93A		Ocean Cargo Insurance Exp, \$000
		On Peak	0.000	95A		
	Small Hydro (>100 KW)	Off Peak	0.000	93B		HELCO-R-503, page 1, line 4 Revenue Tax Adjustment
	Small Hydro (>100 KW)	OII FEAK				
	Sch Q Hydro (<100 KW)		0.267	93C		Non-Adj Revenues, \$000
ರತ	FIT		0.784	93D		2016 TY Sales, MWh
			100.000	005		HELCO-WP-302z
00	Comm. Cont. District	m. Faail 40000	44.0540	93E		Non-Adj Revenues, ¢/kWh
	a Comp. Cost Purchased Ener	• • • • • • • • • • • • • • • • • • • •	14.0540			
	COMPOSITE COST OF BUILD		13.6641			
04	COMPOSITE COST OF PUI	NOHASED	12.040			
Q۲	ENERGY, ¢/kWh		13.916			
	% Input to System kWh Mix	I IDCUAGED ENERGY	42.881			
00	WEIGHTED COMPOSITE P		5 06722			
86		oə))	5.96733			
86	COST, ¢/kWh (Lines (88 x					
		2V				
	BASE PURCHASED ENERG		0.000	line		CVCTEM COMPOCITI
87	BASE PURCHASED ENERG COMPOSITE COST, ¢/kW	h	0.000	<u>Line</u>		SYSTEM COMPOSITI
87 88	BASE PURCHASED ENERG COMPOSITE COST, ¢/kW Base % Input to Sys kWh Mi	h x	0.000 0.00	<u>Line</u>	0.4	·
87 88	BASE PURCHASED ENERG COMPOSITE COST, ¢/kW Base % Input to Sys kWh Mi WEIGHTED BASE PURCHA	h X ASED ENERGY	0.00	<u>Line</u>	94	GENERATION AND PURCHASED ENERG
87 88	BASE PURCHASED ENERG COMPOSITE COST, ¢/kW Base % Input to Sys kWh Mi	h X ASED ENERGY		<u>Line</u>		GENERATION AND PURCHASED ENERG FACTOR, ¢/kWh (Lines (47 + 93))
87 88 89	BASE PURCHASED ENERG COMPOSITE COST, ¢/kW Base % Input to Sys kWh Mi WEIGHTED BASE PURCHA COST, ¢/kWh (Lines (91 x	h x ASED ENERGY 92))	0.00	<u>Line</u>	95	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93)) Not Used
87 88 89 90	BASE PURCHASED ENERG COMPOSITE COST, ¢/kW Base % Input to Sys kWh Mi WEIGHTED BASE PURCHA COST, ¢/kWh (Lines (91 x	h x ASED ENERGY 92))	0.00 0.00000 5.96733	<u>Line</u>	95 96	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93)) Not Used Non-Adjustable Component
87 88 89 90 91	BASE PURCHASED ENERGY COMPOSITE COST, ¢/kW Base % Input to Sys kWh Mi WEIGHTED BASE PURCHATOST, ¢/kWh (Lines (91 x COST LESS BASE (Lines (9 Loss Factor	h x ASED ENERGY 92))	0.00 0.00000 5.96733 1.072	<u>Line</u>	95 96 97	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93)) Not Used Non-Adjustable Component ECA Reconciliation Adjustment
87 88 89 90 91 92	BASE PURCHASED ENERG COMPOSITE COST, ¢/kW Base % Input to Sys kWh Mi WEIGHTED BASE PURCHA COST, ¢/kWh (Lines (91 x	h x ASED ENERGY 92)) 10 - 93))	0.00 0.00000 5.96733	<u>Line</u>	95 96 97	GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93)) Not Used Non-Adjustable Component

# Hawaii Electric Light Company, Inc.

FUEL OIL INVENTORY PRICES FOR May 1, 2019

INDUSTRIAL FUEL COSTS: Average Industrial Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	<u>HILO</u> 75.2958 	<u>PUNA</u> 75.2958 1.4465		
Industrial Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	75.2958 6.30	76.7423 6.30		
Industrial Costs For Filing - ¢/mmbtu	1,195.17	1,218.13		
DIESEL FUEL COSTS: Average Diesel Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 98.5318 2.7647	PUNA CT-3 98.5318 0.7070	HILO 98.5318 1.0341	
Diesel Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	101.2965 5.86	99.2388 5.86	99.5659 5.86	
Diesel Costs For Filing - ¢/mmbtu	1,728.61	1,693.49	1,699.08	
ULSD FUEL COSTS: Average ULSD Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 92.0300 3.2501	WAIMEA 92.0300 3.3133	HILO 92.0300 1.4744	DISPERSED GENERATION 92.0300 -
ULSD Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	95.2801 5.73	95.3434 5.73	93.5044 5.73	92.0300 5.73
ULSD Costs For Filing - ¢/mmbtu	1,662.83	1,663.93	1,631.84	1,606.11

COMPOSITE COST

# Dispersed Generation, cents per kWh

	OF DISP. GEN.
BBIs Fuel:	192.0792
\$/BBI Inv Cost:	92.0300
Fuel \$ (Prod Sim Consumption x Unit Cost)	17,677.05
Net kWh (from Prod Sim)	114,000
cents/kWh:	15.506

Estimated Weighted Average April 2019

SHIPMAN INDUSTRIAL HILL INDUSTRIAL

	SHIFIVIAIN	INDUSTRIAL	HILL INDU	JOINIAL			
					COST PER BARREL		
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 03/31/2019	0	0.00	39,945	3,093,889.26			
Less: Est'd Inventory Addn			0	0.00			
Purchases: Estimate	XXXXXX XXX	xxxxxxxxxxx	xxxxxxx	xxxxxxxxxxxx			
Actual	xxxxxx xxx	xxxxxxxxxx	xxxxxxxx	xxxxxxxxxxx			
Transfers out: Estimate	XXXXXX XXX	xxxxxxxxxxx	xxxxxxx	xxxxxxxxxxxx			
Actual	XXXXXX XXX	xxxxxxxxxx	xxxxxxxx	xxxxxxxxxxx			
Transfers in: Estimate	0	0.00	(30,805)	(2,500,280.88)			
Actual	0	0.00	30,086	2,471,580.73			
Consumed: Estimate	0	0.00	29,515	1,851,391.77			
Actual	0	0.00	(31,521)	(1,977,222.43)			
Balance Per G/L 03/31/2019	0	0.00	37,220	2,939,358.45			
Purchases	xxxxxx xxx	xxxxxxxxxxx	xxxxxxx	xxxxxxxxxxxx			
Transfer out	xxxxxx xxx	xxxxxxxxxxx	xxxxxxx	xxxxxxxxxxxx			
Transfer in	0	0.00	39,165	2,901,310.07			
Consumed	0	0.00	(31,498)	(2,248,361.18)	106.5901	0.0000	106.5901
Balance @ 04/30/2019	0	0.00	44,887	3,592,307.34			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 04/30/2019	0	0.00	44,887	3,592,307.34			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxx	(3,592,307.34)			
Fuel Bal @ Avg Price	XXXXXX	0.00	XXXXXXXX	3,379,802.20			
Total @ 05/01/2019 Avg Price	0	0.00	44,887	3,379,802.20			

Weighted Avg Cost/BBL by Location #DIV/0! 80.0300
Weighted Avg Cost/BBL @ Avg Cost #DIV/0! 75.2958

Estimated Weighted Average April 2019

### PUNA INDUSTRIAL

	I ONA INDOSTI	(1) (L				
			LAND	COST PER BA	RREL	
	BBL	COST	TRANSP	EXCLUDE LT	LT	TOTAL
Balance at 03/31/2019	7,635	301,331.27	5,691.19			
	•	2.22	2.22			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate	**************************************	····	xxxxxxxxxxxxxxxxxx			
Actual			XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
Actual		***************************************	***************************************			
Transfers out: Estimate	xxxxxxxxxx x	xxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
Actual	xxxxxxxxxx x	xxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
Transfers in: Estimate	(4,434)	(339,598.52)	(5,301.91)	1		
Actual	4,291	342,796.49	5,300.72			
Consumed: Estimate	4,593	288,105.79	5,510.80			
Actual	(6,368)	(399,446.48)	(4,789.55)			
D   D   C   L   02   24   2040	5 <b>7</b> 47	402 400 55	6 444 25			
Balance Per G/L 03/31/2019	5,717	193,188.55	6,411.25	_		
Purchases	VVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVVV	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	***************************************			
Fulctiases	*********	******	xxxxxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxxx x	xxxxxxxxxxxx	xxxxxxxxxxxxxxxxxx			
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Transfer in	10,828	814,645	12,947.47			
Consumed	(6,523)	(465,618.77)	(4,862.29)	71.3811	0.7454	72.1265
Balance @ 04/30/2019	10,022	542,215.26	14,496.43			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Firel Del @ Ave Dries	10.022	E42 24E 26	14 400 42		1 4465	
Fuel Bal @ Avg Price	10,022	542,215.26	14,496.43		1.4465	
Reverse Fuel Balance	VVVVVVVVV	(EA2 24E 26)	VVVVVVVVVVV			
Fuel Balance @ Avg Price	XXXXXXXXXXXX		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
I del balance @ Avg Price	XXXXXXXXXXX	/ 34,014.42	^^^XXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
Total @ 05/01/2019 Avg Price	10,022	754,614.42	14,496.43	_		
1		,	1,150.45			
Weighted Avg Cost/BBL by Location		54.1025	1.4465			
- 5		22023				
Weighted Avg Cost/BBL @ Avg Cost		75.2958	1.4465			

Estimated Weighted Average April 2019

#### KEAHOLE CT

		REARIOLE CI	COST	LAND	COST DES	0.4.0.0.51	
			COST	LAND	COST PER		
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 03/31/2019	43,063.6	1,808,670.0	4,379,874.2	117,407.2			
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		xxxxxxxxxxxx	xxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Actual		xxxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfers in: Estimate	(48,611.1)	(2,041,666.0)	(4,751,065.7)	(138,220.8)			
Actual	50,866.6	2,136,396.0	5,011,936.9	140,548.92			
Consumed: Estimate	54,653.9	2,295,462.0	4,511,069.9	173,371.85			
Actual	(54,077.7)				82.5389		
Balance Per G/L 03/31/2019	45,895.2	1,927,597	4,688,297.71	121,562.90	102.1523		
Purchases	xxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer in	49,888.7	2,095,325.0	4,772,969.9	141,853.5	95.6724		
Consumed	(36,402.4)	(1,528,900.0)	(3,612,154.4)	(99,246.35)	99.2285	2.7264	101.9549
Balance @ 04/30/2019	59,381.5	2,494,022	5,849,113.22	164,170.05	98.5006		
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	59,381.5	2,494,022	5,849,113.22	164,170.05	98.5006		
Reverse Fuel Balance Fuel Balance @ Avg Price		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	. , , ,	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx			
Total @ 05/01/2019 Avg Price	59,381.5	2,494,022	5,850,965.40	164,170.05	98.5318		
Weighted Avg Cost/BBL by Location			98.5006	2.7647			

98.5318

Weighted Avg Cost/BBL @ Avg Cost

2.7647

## Estimated Weighted Average April 2019

#### PUNA CT-3

	<u> </u>	PUNA CT-3						
			COST	LAND	COST PER B	ARREL		
HS Diesel	BBL	GALLONS	EXCLUD LT	TRANSP	EXCL LT	LT	TOTAL	
Balance at 03/31/2019	6,040.3	253,691.0	592,888.9	6,983.1				
Balance at 03/31/2019	0,040.3	233,091.0	332,000.3	0,365.1				
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0				
B. okaza Estimata								
Purchases: Estimate  Actual		«XXXXXXXXXXXXXXXXXX						
Actual	,	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*****	. **********				
Transfers out: Estimate	>	«xxxxxxxxxxxx	xxxxxxxxxx	( xxxxxxxxxxx				
Actual	)	XXXXXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXX						
Transfers in: Estimate	(4,771.8)	(200,414.0)	(435,797.6)	(5,290.9)				
Actual	4,771.8)	198,443.0	465,262.9	5,440.9				
/ tetad.	1,72 1.0	130,113.0	103,202.3	3,110.3				
Consumed: Estimate	2,732.8	114,776.0	225,559.2	4,119.2				
Actual	(4,770.4)	(200,357.0)	(393,744.0)	(8,023.4)				
Balance Per G/L 03/31/2019	3,955.7	166,139	454,169.30	3,228.87				
Purchases	xxxxxxxxxxxx	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxxx	( XXXXXXXXXXXX				
Transfer out	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXX	( XXXXXXXXXXXX				
Transfer in	4,849.3	203,671.0	445,368.7	5,376.9	91.8417			
Consumed	(5,301.1)	(222,648)	(526,024.56)	(6,128.63)	99.2285	1.1561	100.3846	
Balance @ 04/30/2019	3,503.9	147,162	373,513.41	2,477.15	106.6006			
Inven From Offsite/Transfers	0.0	0	0.00	0.00	100.0000			
Est'd Inventory Addition	0.0	0	0.00	0.00				
		<u>-</u>						
Fuel Balance @ 04/30/2019	3,503.9	147,162	373,513.41	2,477.15	106.6006			
Reverse Fuel Balance		·xxxxxxxxxxxxxx						
Fuel Balance @ Avg Price	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	(XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	345,241.45	XXXXXXXXXXX				
Total @ 05/01/2019 Avg Price	3,503.9	147,162	345,241.45	2,477.15	98.5318			
Weighted Avg Cost/BBL by Location			106.6006	0.7070				
Weighted Aug Cost/DDL @ Aug Cost			00 5210	0.7070				
Weighted Avg Cost/BBL @ Avg Cost			98.5318	0.7070				

# Estimated Weighted Average April 2019

#### TOTAL HILO HS-DIESEL

		TOTAL HILO	HS-DIESEL				
			COST	LAND	COST PER	BARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 03/31/2019	1961.8	82,396	167,403	2,083			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate	:	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx			
Actual	:	XXXXXXXXXXX	XXXXXXXXXX	XXXXXXXXXXX			
Transfers out: Estimate			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Actual			XXXXXXXXXXX				
Actual	•	*****	XXXXXXXXXXX	xxxxxxxxxx			
Transfers in: Estimate	-376.0	-15793.0	-34624.2	-370.0			
Actual	371.4	15599.0		368.8			
7.0000	0,2	20000.0	0070112	200.0			
Consumed: Estimate	91.0	3822.0	7511.0	99.1			
Actual	-409.5	-17201.0	-33803.6	-447.2			
Balance Per G/L 03/31/2019	1638.6	68,823	142,220.47	1,734.06	86.7916		
Purchases	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxx			
Transfer out	XXXXXXXXXXX	xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx			
T	562.4	22662.0	F2002.0	554.2	"D" / / 0.1		
Transfer in	563.4	23662.0	52982.9	551.3	#DIV/0!		
Consumed	-297.0	-12475.0	-29473.2	-315.4	99.2285	1 0620	100.2905
Consumed	-297.0	-12473.0	-234/3.2	-313.4	99.2263	1.0020	100.2903
Balance @ 04/30/2019	1,905.0	80.010	165,730.09	1,969.96	86.9974		
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	1,905.0	80,010	165,730.09	1,969.96	86.9974		
_							
Reverse Fuel Balance	xxxxxxxxxx	xxxxxxxxxx	-165,730.09	xxxxxxxxxx			
Fuel Balance @ Avg Price			187,703.13				
_							
Total @ 05/01/2019 Avg Price	1,905.0	80,010	187,703.13	1,969.96	98.5318		
··					<del></del>		
Weighted Avg Cost/BBL by Location			86.9974	1.0341			
•							

Weighted Avg Cost/BBL by Location 86.9974 1.0341
Weighted Avg Cost/BBL @ Avg Cost 98.5318 1.0341

# Estimated Weighted Average April 2019

#### KEAHOLE DIESEL

		KEAHOLE DIES					
			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 03/31/2019	2,157.9	90,632	193,678.34	7,102.13			
Less: Est'd Inventory Addition	0.0						
		<i>i</i>					
Purchases: Estimate	(190.0)	(7,980)	(16,678.20)	(540.25)			
Actual	0.0	0	0.00	0.00			
Transfers out: Estimate			xxxxxxxxxxxx				
Actual	:	XXXXXXXXXXX	xxxxxxxxxxxx	XXXXXXXXXXX			
Transfors in Estimata		27	0.00	2.50			
Transfers in: Estimate		37	0.00	2.50			
Actual		(10)	0.00	0.00			
Consumed: Estimate	73.3	3,078	6,721.81	241.06			
Actual	(199.5)	•	•		89.7394		
Actual	(199.5)	(8,381)	(17,907.29)	(656.38)	09.7394		
Balance Per G/L 03/31/2019	1,842.3	77,376	165,814.67	6,149.07	90.0049		
Balance 1 cl	1,042.5	77,370	105,014.07	0,143.07	30.0043		
Purchases	0.0	0	0.00	0.00	0.0000		
i di	0.0	Ü	0.00	0.00	0.0000		
Estimated Purchases	0.0	0	0.00	0.00			
		_					
Transfer in	378.0	15,874	35,613.47	1,074.67	94.23		
		,	,	•			
Consumed	(189.8)	(7,973)	(17,175.95)	(624.78)	90.4791	3.2912	93.7703
Balance @ 04/30/2019	2,030.4	85,277	184,252.19	6,598.96	90.7465		
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	2,030.4	85,277	184,252.19	6,598.96	90.7465		
	=						
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxx	(184,252.19)	xxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxxxx	xxxxxxxxxx	186,858.16	xxxxxxxxxxx			
- 0							
Total @ 05/01/2019 Avg Price	2,030.4	85,277	186,858.16	6,598.96	92.0300		
	<del></del>	•					
Weighted Avg Cost/BBL by Location			90.7465	3.2501			
5 5 2 2 4 2 7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2				<del>-</del>			
Weighted Avg Cost/BBL @ Avg Cost			92.0300	3.2501			
- 0 0 0 0							

# HAWAII ELECTRIC LIGHT CO., INC. Estimated Weighted Average April 2019

### WAIMEA DIESEL

		WAIIVILA DILS					
			COST	LAND	COST PER BARRE	L	
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		LT	TOTAL
Balance at 03/31/2019	1,443.7	60,635.0	130,292.4	4,783.01			
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		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Actual			XXXXXXXXXXXXXXX				
Actual		xxxxxxxxxxx	xxxxxxxxxxxx	XXXXXXXXXXX			
Transfers in: Estimate	(3.0)	(128)	0.00	0.00			
Actual	1.4	60	0.00	0.00			
, totadi	2	00	0.00	0.00			
Consumed: Estimate	94.5	3,971	8,671.97	313.97			
Actual	(252.9)	•	•				
	(====,	(,,	(,,	(555.55)			
Balance Per G/L 03/31/2019	1,283.7	53,915	116,042.15	4,257.05	90.3973		
		•	•	·			
ULSD Purchases	0.0	0	0.00	0.00	#DIV/0!		
Estimated Purchases	-	0	0.00	0.00			
Transfer in	xxxxxxxxxx	48	0.00	0.00	#DIV/0!		
	(4= 4 = )	(5.155)	(	(= 4 4 = 0)			
Consumed	(154.5)	(6,488)	(13,976.87)	(511.79)	90.4791	3.3130	93.7922
Palanca @ 04/20/2010	1 120 4	47 475	102,065.29	3,745.27	90.2947		
Balance @ 04/30/2019 Inven From Offsite/Transfers	1,130.4 0.0	47,475 0	0.00	0.00	90.2947		
1	0.0		0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ Avg Price	1,130.4	47,475	102,065.29	3,745.27	90.2947		
raci Balance & Avg i rice	1,150.4	47,473	102,003.23	3,7 43.27	30.2347		
Reverse Fuel Balance	XXXXXXXXXXXX	xxxxxxxxxxx	(102 065 29)	xxxxxxxxxxx			
Fuel Balance @ Avg Price		XXXXXXXXXXXXX		XXXXXXXXXXXX			
r der Balance & 717g i nee	700000000000000000000000000000000000000	700000000000000000000000000000000000000	101,020.77	70000000000			
Total @ 05/01/2019 Avg Price	1,130.4	47,475	104,026.77	3,745.27	92.0300		
II C 11,1 , 121 III B 1 III B		,	- ,===://	-,			
Weighted Avg Cost/BBL by Location			90.2947	3.3133			
2.5			30.2317	3.3233			
Weighted Avg Cost/BBL @ Avg Cost			92.0300	3.3133			
5 5 , 5 3 5 5 5 5							

Estimated Weighted Average April 2019

## KANOELEHUA DIESEL

			COST	LAND	1	
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		
Balance at 03/31/2019	1,499.9	62,995.0	136,902.2	1,999.5	l I	
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	(190.0)	(7,980)	(16,678.20)	(185.93)		
Actual	0.0	0	0.00	0.00		
Transfers out: Estimate Actual		x x	x x	x		
Actual		^	^	^		
Transfers in: Estimate		0	0.00	0.00		
Actual		0	0.00	0.00		
Consumed: Estimate	61.8	2,595	967.04	26.58		
Actual	(168.5)	(7,078)	(15,457.11)	(193.36)		
Balance Per G/L 03/31/2019	1,203.1	50,532	105,733.92	1,646.83		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	0	0	0.00	0.00		
Consumed	(104.2)	(4,377)	(967.04)	(26.58)	90.47911087	1.3331
Balance @ 04/30/2019	1,098.9	46,155	104,766.88	1,620.25		
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	1,098.9	46,155	104,766.88	1,620.25		
Reverse Fuel Balance	х	x	(104,766.88)	x		
Fuel Balance @ Avg Price	х	x	101,134.40	x		
Total @ 05/01/2019 Avg Price =	1,098.9	46,155	101,134.40	1,620.25		
Weighted Avg Cost/BBL by Location			95.3355	1.4744		
Weighted Avg Cost/BBL @ Avg Cost			92.0300	1.4744		

Estimated Weighted Average April 2019

# **DISPERSED GENERATION**

1		ENERATION		
	BBL	GALLONS	COST	COST/BBL
Balance at 03/31/2019	117.4	4,932	11,328.93	
Less: Est'd Inven Addition	0.0	xxxxxxx	xxxxxxxx	
Purchases: Estimate Actual	0.0 0.0	0	0.00 0.00	
Consumed: Estimate		146		
Actual		(880)		
		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		
		xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx		
Balance Per G/L 03/31/2019	99.95	4,198	9,603.06	96.0764
Purchases	65.2	2,738	6,490.61	99.5638
Transfer out	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	
Transfer in	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	
Consumed	(25.4)	(1,067)	(2,298.60)	90.4791
Balance @ 04/30/2019	139.7	5,869	13,795.07	98.7209
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 04/30/2019	139.7	5,869	13,795.07	
Reverse Fuel Balance Fuel Balance @ Avg Price	XXXXXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXX		(13,795.07) xxx 12,860.10 xxx	
Total @ 05/01/2019 Avg Price	139.7	5,869	12,860.10	92.0300

# HAWAII ELECTRIC LIGHT COMPANY, INC. CONTRACT PRICES EFFECTIVE April 1, 2019

#### TYPE OF OIL BURNED

THE OF OIL BOTTINED	Hill Indus	strial	Puna Ind	ustrial
INDUSTRIAL *	¢/MBTU	 \$/BBL	¢/MBTU	\$/BBL
Tax <sup>1</sup> Ocean Transportation Storage Wharfage Fees <sup>2</sup>	68.04 49.70 31.16 6.43 0.83	4.2862 3.0174 2.1410 0.3900 0.0525	68.04 47.90 33.98 6.19 0.83	4.2862 3.0174 2.1410 0.3900 0.0525
	Hilo Die	esel	Waimea I	Diesel
DIESEL * Tax 1 Ocean Transportation Storage Wharfage Fees 2	¢/MBTU 95.96 51.49 28.34 6.66 1.79	\$/BBL 5.6227 3.0174 1.6606 0.3900 0.1050	¢/MBTU 95.96 51.49 28.34 6.66 1.79	\$/BBL 5.6227 3.0174 1.6606 0.3900 0.1050
	Kona Di	esel	CT3 Die	esel
	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax <sup>1</sup> Ocean Transportation Storage Wharfage Fees <sup>2</sup>	95.96 51.49 28.34 6.66 1.79	5.6227 3.0174 1.6606 0.3900 0.1050	95.96 51.49 28.34 6.66 1.79	5.6227 3.0174 1.6606 0.3900 0.1050
	ULSI	)		
ULSD **  Tax <sup>1</sup> Ocean Transportation Storage Wharfage Fees <sup>2</sup>	¢/MBTU 26.38 0.00 0.00 0.00 1.83	\$/BBL 1.9792 0.0000 0.0000 0.0000 0.1050		

<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 May 1, 2019

		May 1, 2019 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW)	- on peak	16.368	6.560
PGV (22 MW)	- off peak	15.030	5.430
WAILUKU HYDRO	- on peak	16.368	7.240
	off peak	15.030	5.970
Other: (<100 KW)	Sch Q Rate	15.440	
		May 1, 2019 (¢/kWh)	Floor Rates (¢/kWh)
HEP		14.054	
PGV Addtl 5 MW	- on peak	13.0500	0.0000
	- off peak	13.0500	0.0000
PGV Addtl 8 MW	- on peak	9.9500	0.0000
	- off peak	6.6400	0.0000

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

May 1, 2019

Line No.	<u>Description</u>	<u>Amount</u>
1	Amount to be (returned) or collected	(\$1,745,900)
2	Monthly Amount ( <sup>1</sup> / <sub>3</sub> x Line 1)	(\$581,967)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$638,717)
5	Estimated MWh Sales (May 1, 2019)	86,525 mwh
6	Adjustment (Line 4 / Line 5)	(0.738) ¢/kwh

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

<u>LINE</u>	DESCRIPTION	Info Only March 2019 YTD Total No Deadband	collectn by company*	Basis for Recon March 2019 YTD Total <u>Deadband</u>	Collection or Refund by <u>Company</u>
	ACTUAL COSTS:				
1	Generation	\$20,838.2		\$20,838.2	
2	Distributed Generation	\$4.0		\$4.0	
3	Purch Power	\$14,864.8		\$14,864.8	
4	TOTAL	\$35,707.0		\$35,707.0	
	FUEL FILING COST				
5	Generation	\$20,608.1		\$20,681.4	
6	Distributed Generation	\$4.0		\$4.0	
7	Purch Power	\$14,864.8		\$14,864.8	
8	TOTAL	\$35,476.9	<u>.</u>	\$35,550.2	
	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)	\$27,169.4		\$27,242.6	
14	ACTUAL FOA LESS TAX	\$26,951.5		\$26,951.5	
15	Less: FOA reconciliation adj for prior year	-\$2,038.3		-\$2,038.3	
15A	Less: Non-Adjustable Component Revenues Less Tax	\$1.2		\$1.2	
16	ADJUSTED FOA LESS TAX	\$28,988.6		\$28,988.6	
17	FOA-(FUEL-BASE) (Line 16-13)	\$1,819.2	over	\$1,745.9	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)	\$1,819.2	over	\$1,745.9	over
			= :		

<sup>\*</sup> 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 March 31, 2019

	Notes	YTD
<u>Industrial</u>		
Industrial Efficiency Factor (per D&O), BTU/kWh* Industrial Deadband Definition, +/- BTU/kWh	f d	14,569 100
Industrial Portion of Recorded Sales, kWh Industrial Consumption (Recorded), MMBTU Industrial Efficiency Factor (Recorded), BTU/kWh	a b c=(b/a) x 1000	44,508,588 667,103 14,988
Lower limit of Industrial Deadband, BTU/kWh Higher limit of Industrial Deadband, BTU/kWh	e= f-d g=f+d	14,469 14,669
Industrial Efficiency Factor for cost-recovery, BTU/kV	V h=c, e, or g	14,669
<u>Diesel</u>		
Diesel Efficiency Factor (per D&O), BTU/kWh*	f	10,480
Diesel Deadband Definition, +/- BTU/kWh	d	200
Diesel Portion of Recorded Sales, MWh	а	87,261,546
Diesel Consumption (Recorded), MMBTU Diesel Efficiency Factor (Recorded), BTU/kWh	b ==(h/a) x 1000	916,267 10,500
Diesei Liliciency i actor (Necorded), BTO/NWII	c=(b/a) x 1000	10,300
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	10,500
Biodiesel		
Biodiesel Efficiency Factor (per D&O), BTU/kWh* Biodiesel Deadband Definition, +/- BTU/kWh	f d	0 <b>100</b>
Biodiesel Portion of Recorded Sales, MWh	а	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/kV	V h=c, e, or g	0
<u>Hydro</u>		
		40.005
Hydro Efficiency Factor (per D&O), BTU/kWh*  Hydro Deadband Definition, +/- BTU/kWh	f d	12,395 <b>100</b>
Tyune Deadach Deminion, 7 D. e	-	
Hydro Portion of Recorded Sales, MWh	a	2,122,315
Hydro Consumption (Recorded), MMBTU Hydro Efficiency Factor (Recorded), BTU/kWh	b c=(b/a) x 1000	25,415 11,975
,, (	(=.=,	,
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	12,295

 $<sup>^\</sup>star$  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

		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	44,508,588	44,508,588
Industrial Efficiency Factor (mmbtu/kwh)	0.014569	0.014669
Mmbtu adjusted for Sales Efficiency Factor	648,446	652,896
\$/mmbtu	<u>\$10.5585</u>	<u>\$10.5585</u>
TOTAL INDUSTRIAL \$000s TO BE RECOVERED	\$6,846.636	\$6,893.630
DIESEL FUEL FILING COST		
Diesel Portion of Recorded Sales, kWh	87,261,546	87,261,546
Diesel Efficiency Factor (mmbtu/kwh)	0.010480	0.010500
Mmbtu adjusted for Sales Efficiency Factor	914,501	916,246
\$/mmbtu	<u>\$15.0481</u>	<u>\$15.0481</u>
TOTAL DIESEL \$000s TO BE RECOVERED	\$13,761.506	\$13,787.769
HYDRO FUEL FILING COST		
Hydro Portion of Recorded Sales , kWh	2,122,315	2,122,315
Hydro Efficiency Factor (mmbtu/kwh)	0.012395	0.012295
Mmbtu adjusted for Sales Efficiency Factor	26,306	26,094
\$/mmbtu	\$0.0000	\$0.0000
TOTAL HYDRO \$000s TO BE RECOVERED	\$0.000	\$0.000
TO THE TITBING WOODS TO BE NEGOVERED	ψ0.000	ψ0.000
TOTAL GENERATION FUEL FILING COST, \$000s	\$20,608.1	\$20,681.4
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	\$20,608.1	\$20,681.4
TOTAL GENERATION BASE FUEL COST YTD	\$3,791.0	· · ·

2019 Cumulative Reconciliation Balance

	(1)		(2) FOA Rec	(3) FOA Rec	(4)	(5)	(6) Month-end
	YTD FOA		Adjust	Less	Try to	Actual	Cumulative
<u>Month</u>	Reconciliation	<u>Qtr</u>	<u>Variance</u>	<u>Variance</u>	<u>Collect</u>	<u>Collect</u>	<u>Balance</u>
January 18	1				(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)		
May	1,745,900	(1)	112,297	1,633,603	(581,967)		

#### 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.
Cal(2).	FOA reconciliation adjustment variance accumulated during the last three months

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))

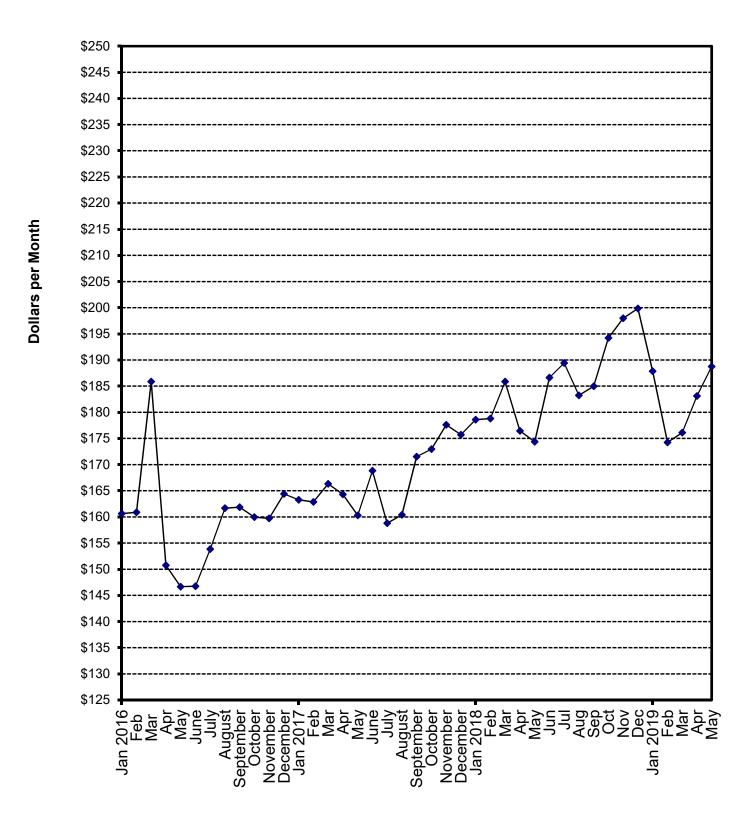
Col(3): FOA reconciliation generated in the current quarter. The YTD FOA reconciliation difference minus the adjustment variance. Col(1)-Col(2)

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 December 1, 2015	2.369 0.485 -0.519 -0.990 -0.420 -0.579 0.264 -0.586 -0.927 -1.671 -2.727 -2.859	189.62 179.22 174.32 170.37 175.10 175.16 178.14 174.16 172.43 168.73 163.20 162.59	227.20 214.71 208.85 204.10 209.79 209.85 213.38 208.61 206.54 202.10 195.47 194.74
January 1, 2016	-3.223	160.63	192.41
February 1, 2016	-2.962	160.87	192.69
March 1, 2016	-4.311	154.26	184.76
April 1, 2016	-4.715	150.76	180.57
May 1, 2016	-5.554	146.66	175.64
June 1, 2016	-5.546	146.74	175.74
July 1, 2016	-4.248	153.85	184.31
August 1, 2016	-3.094	161.67	193.69
September 1, 2016	-3.040	161.85	193.90
October 1, 2016	-3.427	159.97	191.65
November 1, 2016	-3.514	159.72	191.35
December 1, 2016	-2.584	164.41	196.97
January 1, 2017 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	-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

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

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
04/09/12	FINAL RATE INCREASE (1.28%), DOCKET NO. 2009-0164	(2010 TEST YEAR)
1/1/2016-1/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	2.3260 CENTS/KWH
1/1/2016-06/30/16	GREEN INFRASTRUCTURE FEE	1.3000 DOLLARS/MONTH
2/1/2016 - 2/29/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.1114 CENTS/KWH
3/1/2016 - 3/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.1401 CENTS/KWH
4/1/2016 - 4/30/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.1228 CENTS/KWH
4/1/2016 - 4/30/16	SOLARSAVER ADJUSTMENT	-0.2779 CENTS/KWH
5/1/2016 - 5/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	1.8623 CENTS/KWH
5/1/2016	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2016 - 6/30/16	PURCHASED POWER ADJUSTMENT CLAUSE	1.8442 CENTS/KWH
6/1/2016	RBA RATE ADJUSTMENT	1.4241 CENTS/KWH
7/1/2016-7/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	1.8909 CENTS/KWH
7/1/2016	GREEN INFRASTRUCTURE FEE	1.1300 DOLLARS/MONTH
7/1/2016	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
8/1/2016-8/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.3000 CENTS/KWH
9/1/2016-9/30/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.2824 CENTS/KWH
10/1/2016-10/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.2930 CENTS/KWH
11/1/2016-11/30/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.3298 CENTS/KWH
12/1/2016-12/31/16	PURCHASED POWER ADJUSTMENT CLAUSE	2.3371 CENTS/KWH
1/1/2017-1/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	2.3400 CENTS/KWH
1/1/2017	GREEN INFRASTRUCTURE FEE	1.2700 DOLLARS/MONTH
2/1/2017 - 2/28/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.3737 CENTS/KWH
3/1/2017 - 3/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.3809 CENTS/KWH
4/1/2017-4/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.3781 CENTS/KWH
4/1/2017-4/30/17	SOLARSAVER ADJUSTMENT	-0.2462 CENTS/KWH
5/1/2017-5/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	1.9396 CENTS/KWH
5/1/2017	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2017-6/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	1.9225 CENTS/KWH
6/1/2017	RBA RATE ADJUSTMENT	1.4533 CENTS/KWH
7/1/2017 - 7/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	1.9710 CENTS/KWH
7/1/2017- 12/31/17	GREEN INFRASTRUCTURE FEE	1.1800 DOLLARS/MONTH
7/1/2017	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
8/1/2017-8/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.7161 CENTS/KWH
9/1/2017-9/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.7515 CENTS/KWH
8/31/2017-4/3018	INTERIM RATE INCREASE 2016	5.8800 PERCENT ON BASE
8/31/2017 10/1/2017 - 10/31/17	RBA RATE ADJUSTMENT PURCHASED POWER ADJUSTMENT CLAUSE	0.6313 CENTS/KWH 2.7257 CENTS/KWH
11/1/2017 - 11/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.4067 CENTS/KWH
12/1/2017 - 12/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.4090 CENTS/KWH
1/1/2018 - 1/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.4105 CENTS/KWH
1/1/18-6/30/18	GREEN INFRASTRUCTURE FEE	1.3400 DOLLARS/MONTH
2/1/18-2/28/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3101 CENTS/KWH
3/1/18 - 3/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3258 CENTS/KWH
04/1/18-04/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3184 CENTS/KWH
04/1/18-04/30/18	SOLARSAVER ADJUSTMENT	-0.1464 CENTS/KWH
05/1/18-05/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3395 CENTS/KWH
05/1/18-05/31/18	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2018	INTERIM RATE INCREASE 2016	2.5000 PERCENT ON BASE
06/01/18-06/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.6729 CENTS/KWH
6/1/2018	RBA RATE ADJUSTMENT	1.0006 CENTS/KWH
07/01/18-07/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.6811 CENTS/KWH
7/1/2018- 12/31/18	GREEN INFRASTRUCTURE FEE	1.2100 DOLLARS/MONTH
7/1/2018	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
08/01/18-08/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.6110 CENTS/KWH
09/01/18-09/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.5950 CENTS/KWH
10/01/18-10/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.8602 CENTS/KWH
10/1/2018	INTERIM RATE INCREASE 2016	0.0000 PERCENT ON BASE
10/1/2018	FINAL RATE INCREASE (TY 2016) 0.53% EFFECTIVE 10/	01/18, DOCKET NO. 2015-0170
11/1/2018-11/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.0617 CENTS/KWH
12/1/2018-12/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.0577 CENTS/KWH
1/1/2019-1/31/19	PURCHASED POWER ADJUSTMENT CLAUSE	2.0548 CENTS/KWH
1/1/2019- 06/30/19	GREEN INFRASTRUCTURE FEE	1.3500 DOLLARS/MONTH
2/1/2019-2/28/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.8113 CENTS/KWH
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

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

#### Calculations of the Average Residential Customer Bill

#### **Base Rates**

Base Fuel Energy Charge Non-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 Recovery Green Infrastructure Fee

Avg Residential Bill at 500 kwh

Rate				
	04/01/19	05/01/19		
effective date:	2/1/2019	2/1/2019		
¢/kwh	-	-		
¢/kwh				
¢/kwh	13.0289	13.0289		
¢/kwh	16.3807	16.3807		
\$	11.50	11.50		
% on base	0.0000%	0.0000%		
¢/kwh	1.0006	1.0006		
¢/kwh	1.8247	1.9460		
¢/kwh	0.4658	0.4658		
¢/kwh	0.0000	0.0000		
¢/kwh	(0.0768)	0.0000		
¢/kwh	16.4690	17.3960		
\$	1.3500	1.3500		

Charge (\$) at 500 Kwh				
04/01/19	05/01/19	Difference		
\$0.00	\$0.00	\$0.00		
\$71.85	\$71.85	\$0.00		
\$39.09	\$39.09	\$0.00		
\$32.76	\$32.76	\$0.00		
\$11.50	\$11.50	\$0.00		
\$83.35	\$83.35	\$0.00		
\$0.00	\$0.00	\$0.00		
\$5.00	\$5.00	\$0.00		
\$9.12	\$9.73	\$0.61		
\$2.33	\$2.33	\$0.00		
\$0.00	\$0.00	\$0.00		
-\$0.38	\$0.00	\$0.38		
\$82.35	\$86.98	\$4.63		
\$1.35	\$1.35	\$0.00		
\$183.12	\$188.74			

Increase (Decrease -) % Change

\$5.62 3.07%

#### **Base Rates**

Base Fuel/Energy Charge Non-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 Recovery Green Infrastructure Fee

Avg Residential Bill at 600 kwh

Rate				
	04/01/19	05/01/19		
effective date:	2/1/2019	2/1/2019		
¢/kwh	-	-		
¢/kwh				
¢/kwh	13.0289	13.0289		
¢/kwh	16.3807	16.3807		
\$	11.50	11.50		
% on base	0.0000%	0.0000%		
¢/kwh	1.0006	1.0006		
¢/kwh	1.8247	1.9460		
¢/kwh	0.4658	0.4658		
¢/kwh	0.0000	0.0000		
¢/kwh	(0.0768)	0.0000		
¢/kwh	16.4690	17.3960		
\$	1.3500	1.3500		

Charge (\$) at 600 Kwh				
04/01/19	05/01/19	Difference		
\$0.00	\$0.00	\$0.00		
\$88.23	\$88.23	\$0.00		
\$39.09	\$39.09	\$0.00		
\$49.14	\$49.14	\$0.00		
\$11.50	\$11.50	\$0.00		
\$99.73	\$99.73	\$0.00		
\$0.00	\$0.00	\$0.00		
\$6.00	\$6.00	\$0.00		
\$10.95	\$11.68	\$0.73		
\$2.79	\$2.79	\$0.00		
\$0.00	\$0.00	\$0.00		
-\$0.46	\$0.00	\$0.46		
\$98.81	\$104.38	\$5.57		
\$1.35	\$1.35	\$0.00		
\$219.17	\$225.93			

Increase (Decrease -) % Change

\$6.76 3.08%