

JAY IGNACIO, P. E. President

March 27, 2018

Carter of Contract Contract Contract

2018 MAR 27 P 3:59

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 April 2018

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Adjustment factor for April 2018 is -0.912 cents per kilowatt-hour ("kWh"), a decrease of 1.728 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$176.46, a decrease of \$9.41 compared to rates effective March 1, 2018. The decrease in the typical residential bill is due to the decrease in the Energy Cost Adjustment factor (-\$8.64), the decrease in the Purchase Power Adjustment Clause rate (-\$0.04), and the credit for the Solar Saver Adjustment (-\$0.73).

Hawai'i Electric Light's fuel composite cost of generation decreased 148.02 cents per million BTU to 1,313.97 cents per million BTU. The distributed generation increased 0.011 cents per kWh to 14.562 cents per kWh. The composite cost of purchased energy decreased 0.662 cents per kWh to 12.616 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 April 1, 2018.

Sincerely,

Attachments

cc:

Division of Consumer Advocacy

HAWAII ELECTRIC LIGHT COMPANY, INC.

ENERGY COST ADJUSTMENT FACTOR

EFFECTIVE DATES

	<u>03/01/18</u>	04/01/18	<u>Change</u>
Composite Cost			
Generation, ¢/mmbtu Dispersed Generation Energy, ¢/kWh Purchased Energy, ¢/kWh	1,461.99 14.551 13.278	1,313.97 14.562 12.616	(148.02) 0.011 (0.662)
Residential Schedule "R"			
Energy Cost Adjustment - ¢/kWh	0.816	(0.912)	(1.728)
Others - "G,J,P,F"			
Energy Cost Adjustment - ¢/kWh	0.816	(0.912)	(1.728)
Residential Customer with:			
500 KWH Consumption - \$/Bill 600 KWH Consumption - \$/Bill	\$185.87 \$222.68	\$176.46 \$211.39	(\$9.41) (\$11.29)

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

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

Line

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

GENERATION COMPONENT

	CE	NTRAL STATIO	N WITH WIND/I	HYDRO COMPC	DNENT		
		FUEL PRICES,	¢/mmbtu				
	3						
	4	Hill Industrial			973.33		
	5	Puna Industria	l		992.79		
	6	Keahole Diese)		1,519.37		
	6a	Keahole ULSE)		1,479.46		
	7	Waimea ULSD	Diesel		1,471.74		
	8	Hilo Diesel			1,489.91		
	8a	Hilo (Kanoelehu	ia) ULSD Diesel	1	1,454.55		
	9	Puna Diesel			1,494.51	DG ENERGY COMPONENT	
	10	Wind			0.00	35 COMPOSITE COST OF DG	
	11	Hydro			0.00	ENERGY, ¢/kWh	14.562
	•••	i i jui o			0100	36 % Input to System kWh Mix	0.737
		BTU MIX, %					011 01
	12	_ · • • · · · · , / •				37 WEIGHTED COMPOSITE DG ENERGY COST,	
	13	Hill Industrial			29.957	¢/kWh (Lines 35 x 36)	0.10732
	14	Puna Industria	1		6.072		
	15	Keahole Diese			59.352	38 BASE DG ENERGY COMPOSITE COS	15.702
15a	-	Keahole ULSE			0.622		
	16	Waimea ULSE			0.303	39 Base % Input to System kWh Mix	0.06
	17	Hilo Diesel			0.102	40 WEIGHTED BASE DG ENERGY COST,	
17a		Hilo (Kanoelehu	ia) ULSD Diesel	1	0.031		
	18	Puna Diesel			2.991	¢/kWh (Line 38 x 39)	0.00942
	19	Wind			0.000		0.000 12
	20	Hydro			0.570	41 Cost Less Base (Line 37 - 40)	0.09790
					100.000	42 Loss Factor	1.067
	21	COMPOSITE C	OST OF GENE	RATION,		43 Revenue Tax Reg Multiplier	1.0975
				/HYDRO ¢/mmb	1,313.97	44 DG FACTOR, ¢/kWh	
	22	% Input to Syste			41.364	(Line 41 x 42 x 43)	0.11464
		EFFICIENCY F	ACTOR, mmbtu	/kWh			
		(A)	(B)	(C)	(D)		
				Percent of			
			Eff Factor	Centrl Stn +	Weighted		
		<u>Fuel Type</u>	<u>mmbtu/kwh</u>	Wind/Hydro	Eff Factor		
	23	Industrial	0.015148	25.669	0.003888		
	24	Diesel	0.010424	68.324	0.007122		
1	25	Other	0.012621	6.007	0.000758		
1		(Lines 23, 24	, 25): Col(B) x C	Col(C) = Col(D)			
1	26	Weighted Efficie	ency Factor, mm				
1		[Linco $22(D)$:	24(D) + 25(D)1		0.0117600		

	[Lines 23(D) + 24(D) + 25(D)]	0.0117680
27	WEIGHTED COMPOSITE CENTRAL STATION WIND/HYDRO GENERATION COST, ¢/kWh	N +
	(Lines (21 x 22 x 26))	6.39603
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)	(0.72192)
	Revenue Tax Reg Multiplier	1.0975
	CENTRAL STATION + WIND/HYDRO	
	GENERATION FACTOR,	
	¢/kWh (Line (32 x 33))	(0.79231)

¹ Hilo ULSD same location as Kanoelehua ULSD

SUMMARY OF	
TOTAL GENERATION FACTOR, ¢/kWh	
45 Cntrl Stn+Wind/Hydro (line 34)	(0.79231)
46 DG (line 44)	0.11464
47 TOTAL GENERATION FACTOR,	
¢/kWh (lines 45 + 46)	(0.67767)

REVISED \$HELCO ECAC eff 04-01-18 filed with apr 2018 budget with price update v2.xlsm

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

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

Line	PURCHASED EN	NERGY COMPON	ENT
	PURCHASED ENERGY PI	RICE ¢/kW/h	
48	HEP		14.939
	PGV	On Peak	12.888
-	PGV	Off Peak	13.136
	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	12.888
	Wailuku Hydro	Off Peak	13.136
	Hawi Renewable Dev.	On Peak	12.888
58	Hawi Renewable Dev.	Off Peak	13.136
59	Tawhiri (Pakini Nui)	On Peak	12.020
60	Tawhiri (Pakini Nui)	Off Peak	11.690
61			
62	Small Hydro (>100 KW)	On Peak	12.888
63	Small Hydro (>100 KW)	Off Peak	13.136
64	Sch Q Hydro (<100 KW)		12.640
65	FIT		23.800
	PURCHASED ENERGY K	MH MIX %	
66	HEP		22.370
67	PGV	On Peak	16.874
-	PGV	Off Peak	10.608
	PGV - Addt'l	On Peak	3.375
	PGV - Addt'l	Off Peak	2.604
-	PGV - Add'l 8 MW	On Peak	4.543
	PGV - Add'l 8 MW	Off Peak	5.210
73	Wailuku Hydro	On Peak	3.170
	Wailuku Hydro	Off Peak	2.022
	Hawi Renewable Dev.	On Peak	4.770
76	Hawi Renewable Dev.	Off Peak	2.463
77	Tawhiri (Pakini Nui)	On Peak	12.553
78	Tawhiri (Pakini Nui)	Off Peak	8.607
79			
80	Small Hydro (>100 KW)	On Peak	0.000
81	Small Hydro (>100 KW)	Off Peak	0.000
82	Sch Q Hydro (<100 KW)		0.231
83	FIT		0.600
			100.000
84	COMPOSITE COST OF PI	URCHASED	
01	ENERGY, ¢/kWh		12.616
85	% Input to System kWh Mix	x	57.899
	WEIGHTED COMPOSITE		
	COST, ¢/kWh (Lines (84)	x 85))	7.30454
07	BASE PURCHASED ENER	PCV	
٥/	COMPOSITE COST, ¢/kV		13.354
88	Base % Input to Sys kWh N		53.88
89			55.00
	COST, ¢/kWh (Lines (87)		7.19514
00	COST LESS BASE (Lines	(86 - 89))	0.10940
	Loss Factor	(00 - 09))	1.067
	Revenue Tax *		1.007
	PURCHASED ENERGY F/		0.12811
50	(Lines (90 x 91 x 92))		0.12011
	((CC / CC / CC /)		

<u>Line</u>

SYSTEM COMPOSITE

94 GENERATION AND PURCHASED ENERG	Y
FACTOR, ¢/kWh (Lines (47 + 93))	(0.54956)
95 Not Used	0.000
96 Not Used	0.000
97 ECA Reconciliation Adjustment	(0.362)
98 ECA FACTOR, ¢/kWh	(0.912)
(Lines (94 + 95+ 96 + 97))	

Hawaii Electric Light Company, Inc.

FUEL OIL INVENTORY PRICES FOR April 1, 2018

INDUSTRIAL FUEL COSTS: Average Industrial Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	<u>HILO</u> 61.3195 	<u>PUNA</u> 61.3195 1.2259		
Industrial Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	61.3195 6.30	62.5455 6.30		
Industrial Costs For Filing - ¢/mmbtu	973.33	992.79		
DIESEL FUEL COSTS: Average Diesel Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 86.2161 2.8191	PUNA CT-3 86.2161 1.3624	HILO 86.2161 1.0925	
Diesel Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	89.0352 5.86	87.5785 5.86	87.3086 5.86	
Diesel Costs For Filing - ¢/mmbtu	1,519.37	1,494.51	1,489.91	
ULSD FUEL COSTS: Average ULSD Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 81.9733 2.8000	WAIMEA 81.9733 2.3572	HILO 81.9733 1.3727	DISPERSED GENERATION 81.9733 -
ULSD Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	84.7732 5.73	84.3304 5.73	83.3460 5.73	81.9733 5.73
ULSD Costs For Filing - ¢/mmbtu	1,479.46	1,471.74	1,454.55	1,430.60

Dispersed Generation, cents per kWh

	COMPOSITE COST
	OF DISP. GEN.
BBIs Fuel:	1172.4716
\$/BBI Inv Cost:	81.9733
Fuel \$ (Prod Sim Consumption x Unit Cost)	96,111.31
Net kWh (from Prod Sim)	660,000
cents/kWh:	14.562

	SHIPMAN	I INDUSTRIAL	HILL INDU	ISTRIAL			
					COST PER BAF	RREL	
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 02/28/2018	0	0.00	34,458	2,390,445.19			
Less: Est'd Inventory Addn			0	0.00			
Purchases: Estimate	xxxxxx xx		xxxxxxx	****			
Actual	XXXXXX XX	*****	XXXXXXXXXX	*****			
Transfers out: Estimate	xxxxxx xx		xxxxxxxx	****			
Actual	xxxxxx xx	****	XXXXXXXXXX	*****			
Transfers in: Estimate	0	0.00	(31,439)	(2,169,677.05)			
Actual	0	0.00	28,861	1,886,795.67			
Consumed: Estimate	0	0.00	27,671	1,765,619.44			
Actual	0	0.00	(27,775)	(1,772,255.43)			
Balance Per G/L 02/28/2018	0	0.00	31,776	2,100,927.82			
Purchases	xxxxxx xx		XXXXXXXXXX	****			
Transfer out	xxxxxx xx		xxxxxxxx	****			
Transfer in	0	0.00	22,962	1,473,947.39			
Consumed	0	0.00	(22,338)	(1,536,501.46)	106.5901	0.0000	106.5901
Balance @ 03/31/2018	0	0.00	32,400	2,038,373.75			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 03/31/2018	0	0.00	32,400	2,038,373.75			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxxx	(2,038,373.75)			
Fuel Bal @ Avg Price	xxxxxx	0.00	*****	1,986,752.82			
Total @ 04/01/2018 Avg Price	0	0.00	32,400	1,986,752.82			
Weighted Avg Cost/BBL by Location		#DIV/0!		62.9128			
Weighted Avg Cost/BBL @ Avg Cost		#DIV/0!		61.3195			

	PUNA INDUST	RIAL				
			LAND	COST PER BA	RREL	
	BBL	COST	TRANSP	EXCLUDE LT	LT	TOTAL
Balance at 02/28/2018	5,830	368,545.27	7,024.55			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	****	*****			
Actual	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*****	*****			
Transfers out: Estimate	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	****	****			
Actual	XXXXXXXXXXXX X	*****	****			
Transfers in: Estimate	(2,156)	(128,787.55)	(2,578.02)			
Actual	2,108	145,137.93	2,650.96			
Consumed: Estimate	2,139	136,484.41	2,511.64			
Actual	(2,163)	(138,015.79)	(2,539.82)			
Balance Per G/L 02/28/2018	5,758	383,364.27	7,069.31			
Purchases	xxxxxxxx x	****	*****			
Transfer out	xxxxxxxx x	****	*****			
Transfer in	841	74,516	1,005.62			
Consumed	(716)	(49,249.49)	(862.71)	68.7842	1.2049	69.9891
Balance @ 03/31/2018	5,883	408,631.27	7,212.22			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	5,883	408,631.27	7,212.22		1.2259	
Reverse Fuel Balance	xxxxxxxxxxx	(408,631.27)	*****			
Fuel Balance @ Avg Price	*****		*****			
Total @ 04/01/2018 Avg Price	5,883	360,742.80	7,212.22	-		
Weighted Avg Cost/BBL by Location		69.4597	1.2259			
Weighted Avg Cost/BBL @ Avg Cost		61.3195	1.2259			

		KEAHOLE CT					
			COST	LAND	COST PER E	BARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 02/28/2018	44,474.4	1,867,925.0	4,724,879.4	124,624.1			
Less: Est'd Inventory Addition	(2,952.8)	(124,019.0)	(259,339.3)	(8,564.1)			
Purchases: Estimate	0.0	0.0	0.0	0.0			
Actual	0.0	0.0	0.0	0.0			
Transfers out: Estimate		****	****	****			
Actual		****	*****	*****			
Transfers in: Estimate	(40,347.9)	(1,694,612.0)	(4,375,799.5)	(114,725.2)			
Actual	41,250.7	1,732,531.0	3,988,944.8	116,456.59			
Consumed: Estimate	46,156.0	1,938,553.0	4,049,772.5	130,975.54			
Actual	(43,297.7)	(1,818,502.0)	(3,798,977.6)	(122,864.5)	87.7409		
Balance Per G/L 02/28/2018	45,282.8	1,901,876	4,329,480.32	125,902.44	95.6099		
Purchases	xxxxxxxxxxx	* ****	****	****			
Transfer out	****	* ****	*****	****			
Transfer in	45,460.9	1,909,359.0	4,021,740.1	129,263.6	88.4659		
Consumed	(38,410.4)	(1,613,237.0)	(3,847,478.1)	(107,633.64)	100.1676	2.8022	102.9698
Balance @ 03/31/2018	52,333.3	2,197,998	4,503,742.38	147,532.41	86.0588		
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	52,333.3	2,197,998	4,503,742.38	147,532.41	86.0588		
Reverse Fuel Balance	****	*	(4.503.742.4)	****			
Fuel Balance @ Avg Price	*****	* ****		****			
Total @ 04/01/2018 Avg Price	52,333.3	2,197,998	4,511,971.28	147,532.41	86.2161		
Weighted Avg Cost/BBL by Location			86.0588	2.8191			
Weighted Avg Cost/BBL @ Avg Cost			86.2161	2.8191			

	Р	UNA CT-3					
			COST	LAND	COST PER B		
HS Diesel	BBL	GALLONS	EXCLUD LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 02/28/2018	3,103.2	130,333.0	313,449.1	4,134.6			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate		****					
Actual	X	xxxxxxxxxxxxxxxx	*****	****			
Transfers out: Estimate	x	****	xxxxxxxxxxxx	xxxxxxxxxxx			
Actual	x	****	*****	****			
Transfers in: Estimate	(1,378.2)	(57,886.0)	(163,106.0)	(1,528.2)			
Actual	1,497.5	62,896.0	170,874.0	1,881.8			
Consumed: Estimate	1,863.8	78,278.0	163,528.2	2,469.4			
Actual	(1,265.1)	(53,133.0)	(110,998.5)	(1,676.1)			
Balance Per G/L 02/28/2018	3,821.1	160,488	373,746.76	5,281.52			
Purchases	*****	****	xxxxxxxxxxx	****			
Transfer out	*****	****	xxxxxxxxxxx	****			
Transfer in	340.6	14,305.0	25,064.9	377.7	73.5915		
Consumed	(360.2)	(15,128)	(36,079.42)	(479.92)	100.1676	1.3324	101.5000
Balance @ 03/31/2018	3,801.5	159,665	362,732.26	5,179.25	95.4170		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 03/31/2018	3,801.5	159,665	362,732.26	5,179.25	95.4170		
Reverse Fuel Balance	xxxxxxx xx	****	(362,732.26)	xxxxxxxxxx			
Fuel Balance @ Avg Price		****	• • •	****			
Total @ 04/01/2018 Avg Price	3,801.5	159,665	327,754.57	5,179.25	86.2161		
Weighted Avg Cost/BBL by Location			95.4170	1.3624			
Weighted Avg Cost/BBL @ Avg Cost			86.2161	1.3624			

		TOTAL HILO I	HS-DIESEL				
			COST	LAND	COST PER	BARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 02/28/2018	1393.9	58,543	121,897	1,739			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate	:	xxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxxx			
Actual	2	*****	XXXXXXXXXXXXXX	*****			
Transfers out: Estimate	:	****	xxxxxxxxxxx	xxxxxxxxxxxx			
Actual	2	*****	XXXXXXXXXXXXX	*****			
Transfers in: Estimate	0.0	0.0	0.0	0.0			
Actual	190.6	8006.0	19052.6	0.0			
Consumed: Estimate	49.3	2069.0	4322.3	61.5			
Actual	-31.0	-1303.0	-2722.1	-38.7			
Balance Per G/L 02/28/2018	1602.7	67,315	142,549.59	1,761.33	88.9413		
Purchases	XXXXXXXXXXXXXXXXX	xxxxxxxxxxx	XXXXXXXXXXXXX	xxxxxxxxxxx			
Transfer out	XXXXXXXXXXXX	xxxxxxxxxxx	XXXXXXXXXXXXX	xxxxxxxxxxx			
Transfer in	-5.4	-228.0	0.0	-5.3	#DIV/0!		
Consumed	-70.9	-2979.0	-7104.7	-88.5	100.1676	1.2473	101.4149
Balance @ 03/31/2018	1,526.4	64,108	135,444.85	1,667.55	88.7359		
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	1,526.4	64,108	135,444.85	1,667.55	88.7359		
Reverse Fuel Balance	XXXXXXXXXXXXXXXX	xxxxxxxxxxx	-135,444.85	xxxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXXXXXX	****	131,598.60	xxxxxxxxxxxx			
Total @ 04/01/2018 Avg Price	1,526.4	64,108	131,598.60	1,667.55	86.2161		
Weighted Avg Cost/BBL by Location			88.7359	1.0925			
Weighted Avg Cost/BBL @ Avg Cost			86.2161	1.0925			

		KEAHOLE DIES	SEL				
			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 02/28/2018	2,253.7	94,656	184,794.45	6,319.37			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(379.4)	(15,934)	(36,087.63)	(1,078.74)			
Actual	189.4	7,954	18,014.37	0.00			
Transfers out: Estimate		xxxxxxxxxxx	xxxxxxxxxxxxxx	xxxxxxxxxxxxx			
Actual		XXXXXXXXXXXXX	*****	* ****			
Transfers in: Estimate		(120)	0.00	(8.12)			
Actual		123	0.00	538.49			
Consumed: Estimate	136.7	5,742	10,903.57	381.39			
Actual	(110.3)	(4,632)	(8,795.77)	(307.67)	79.7544		
Balance Per G/L 02/28/2018	2,090.2	87,789	168,828.99	5,844.72	80.7711		
Purchases	0.0	0	0.00	0.00	0.0000		
Estimated Purchases	190.0	7,980	17,157.00	540.25			
Transfer in	(0.9)	(37)	0.00	(2.50)	0.00		
Consumed	(106.6)	(4,479)	(8,735.01)	(299.03)	81.9090	2.8040	84.7130
Balance @ 03/31/2018	2,172.7	91,253	177,250.98	6,083.43	81.5813		
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	2,172.7	91,253	177,250.98	6,083.43	81.5813		
Reverse Fuel Balance	xxxxxxxxxxx	****	(177,250.98)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	*****			****			
Total @ 04/01/2018 Avg Price	2,172.7	91,253	178,102.50	6,083.43	81.9733		
Weighted Avg Cost/BBL by Location			81.5813	2.8000			
Weighted Avg Cost/BBL @ Avg Cost			81.9733	2.8000			

		WAIMEA DIES	EL				
			COST	LAND	COST PER BARRE		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		LT	TOTAL
Balance at 02/28/2018	1,753.7	73,655.0	144,876.5	4,132.98			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(15,931)	(36,015.16)	(898.51)			
Actual		7,951.0	18,007.6	0.00			
Transfers out: Estimate		****	****	****			
Actual		*****	*****	XXXXXXXXXXXXX			
Transfers in: Estimate	(4.3)	(179)		0.00			
Actual	3.8	160	0.00	448.44			
Consumed: Estimate	128.6	5,402	10,257.93	302.89			
Actual	(104.0)	(4,369)		(244.97)			
Balance Per G/L 02/28/2018	1,587.8	66,689	128,830.48	3,740.83	81.1360		
ULSD Purchases	0.0	0	0.00	0.00	#DIV/0!		
Estimated Purchases	-	0	0.00	0.00			
Transfer in	****	(35)	0.00	0.00	#DIV/0!		
Consumed	(48.5)	(2,037)	(3,972.59)	(114.30)	81.9090	2.3567	84.2657
Balance @ 03/31/2018	1,538.5	64,617	124,857.89	3,626.53	81.1556		
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	1,538.5	64,617	124,857.89	3,626.53	81.1556		
Reverse Fuel Balance	****	****	(124,857.89)	****			
Fuel Balance @ Avg Price	*****	****	126,115.85	****			
Total @ 04/01/2018 Avg Price	1,538.5	64,617	126,115.85	3,626.53	81.9733		
Weighted Avg Cost/BBL by Location			81.1556	2.3572			
Weighted Avg Cost/BBL @ Avg Cost			81.9733	2.3572			

	I	KANOELEHUA	DIESEL			
			COST	LAND		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		
Balance at 02/28/2018	1,512.7	63,534.0	122,703.9	ا 1,817.1 ا		
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	(190.0)	(7,980)	(18,034.80)	(185.93)		
Actual	0.0	0	0.00	0.00		
Transfers out: Estimate		x	x	x		
Actual		х	х	x		
Transfers in: Estimate		0	0.00	0.00		
Actual		0	0.00	185.19		
Consumed: Estimate	0.0	268	967.04	26.58		
Actual	(3.6)	(153)	(290.53)	(4.59)		
Balance Per G/L 02/28/2018 –	1,325.5	55,669	105,345.56	1,838.39		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	190	-	-	-		
Transfer in	0	0	0.00	0.00		
Consumed	(60.2)	(2,527)	(967.04)	(26.58)	81.909	1.2012
Balance @ 03/31/2018	1,455.3	61,122	121,535.52	1,997.74		
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	1,455.3	61,122	121,535.52	1,997.74		
Reverse Fuel Balance	х	x	(121,535.52)	x		
Fuel Balance @ Avg Price	x	x		x		
Total @ 04/01/2018 Avg Price	1,455.3	61,122	119,294.50	1,997.74		
Weighted Avg Cost/BBL by Location			83.5132	1.3727		
Weighted Avg Cost/BBL @ Avg Cost			81.9733	1.3727		

HAWAII ELECTRIC LIGHT CO., INC. Estimated Weighted Average March 2018

DISPERSED GENERATION

F

	BBL	GALLONS	COST	COST/BBL
Balance at 02/28/2018	93.1	3,910	7,398.21	
Less: Est'd Inven Addition	0.0	xxxxxxxx	*XXXXXXXXX	
Purchases: Estimate	0.0	0	0.00	
Actual	0.0	0	0.00	
Consumed: Estimate	3.5	149	282.94	
Actual	(4.5)	(190)	(360.79)	
	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	
	XXXXXXXXXXX	XXXXXXXXXXX	XXXXXXXXXXX	
	xxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx	
	XXXXXXXXXXX	XXXXXXXXXXX	xxxxxxxxxx	
Balance Per G/L 02/28/2018	92.12	3,869	7,320.36	79.4663
Purchases	11.9	499	1,072.80	90.2958
Transfer out	****	****	xxxxxxxxxx	
Transfer in	****	****	xxxxxxxxxx	
Consumed	(8.0)	(337)	(657.22)	81.9090
Balance @ 03/31/2018	96.0	4,031	7,735.94	80.6027
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 03/31/2018	96.0	4,031	7,735.94	
Reverse Fuel Balance	****	****	(7,735.94) xxx	x
Fuel Balance @ Avg Price	****	*****	7,867.48 xxx	x
Total @ 04/01/2018 Avg Price	96.0	4,031	7,867.48	81.9733

HAWAII ELECTRIC LIGHT COMPANY, INC. CONTRACT PRICES EFFECTIVE March 1, 2018

TYPE OF OIL BURNED

Fees²

	<u>Hill Indu</u>	<u>strial</u>	<u>Puna Ind</u>	<u>ustrial</u>
INDUSTRIAL *	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax ¹	54.90	3.4579	54.90	3.4579
Ocean Transportation	42.56	2.5843	41.02	2.5843
Storage	29.89	2.0521	32.57	2.0521
Wharfage	5.60	0.3400	5.40	0.3400
Fees ²	2.26	0.1425	2.26	0.1800
	Hilo Die	esel	Waimea I	Diesel
DIESEL *	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax ¹	88.04	5.1586	88.04	5.1586
Ocean Transportation	44.10	1.9761	44.10	2.5843
Storage	27.20	1.5937	27.20	1.5937
Wharfage	5.80	0.3400	5.80	0.3400
Fees ²	3.33	0.1950	3.33	0.1950
	Kona Di	esel	CT3 Di	esel
	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax ¹	88.04	5.1586	88.04	5.1586
Ocean Transportation	44.10	2.5843	44.10	2.5843
Storage	27.20	1.5937	27.20	1.5937
Wharfage	5.80	0.3400	5.80	0.3400
Fees ²	3.33	0.1950	3.33	0.1950
	ULSI)		
ULSD **	¢/MBTU	\$/BBL		
Tax ¹	26.38	1.9537		
Ocean Transportation	0.00	0.0000		
Storage	0.00	0.0000		
Wharfage	0.00	0.0000		

¹ Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST Tax and Environmental Response Tax.

3.33

0.1950

² 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.

^{*} Land Transportation Costs are shown in Attachment 3, Sheet 1.

^{**} ULSD includes Waimea, Kanoelehua, and Keahole.

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

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

		April 1, 2018 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW)	- on peak	12.888	6.560
PGV (22 MW)	- off peak	13.136	5.430
WAILUKU HYDRO	- on peak	12.888	7.240
	off peak	13.136	5.970
Other: (<100 KW)	Sch Q Rate	12.640	
		April 1, 2018 (¢/kWh)	Floor Rates (¢/kWh)
HEP		14.939	
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 April 1, 2018

<u>Line No.</u>	Description	Amount
1	Amount to be (returned) or collected	(\$825,100)
2	Monthly Amount ($\frac{1}{3}$ x Line 1)	(\$275,033)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$301,853)
5	Estimated MWh Sales (April 1, 2018)	83,297 mwh
6	Adjustment (Line 4 / Line 5)	(0.362) ¢/kwh

HAWAII ELECTRIC LIGHT COMPANY, INC.

2017 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>
November	785,400	[3]	(82,548)	867,948	(261,800)	(268,646)	534,241
December	16				(261,800)	(283,626)	250,615
January 17					(261,800)	(265,764)	(15,149)
February	1,366,400	[4]	(46,589)	1,412,989	(455,467)	(473,124)	924,716
March					(455,467)	(479,559)	445,157
April					(455,467)	(478,693)	(33,536)
May	445,100	(1)	(45,713)	490,813	(148,367)	(154,562)	302,715
June					(148,367)	(151,295)	151,420
July					(148,367)	(157,548)	(6,128)
August	500,800	[2]	(32,349)	533,149	(166,933)	(180,924)	346,097
September					(166,933)	(178,788)	167,309
October					(166,933)	(178,629)	(11,320)
November	714,200	[3]	(35,027)	749,227	(238,067)	(250,818)	487,089
December					(238,067)	(243,403)	243,686
January 18					(238,067)	(242,224)	1,462
February	825,100	[4]	(29,783)	854,883	(275,033)	(279,869)	576,476
March					(275,033)		
April					(275,033)		

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): EOA reconciliation generated in the current quarter. The YTD EOA reconciliation

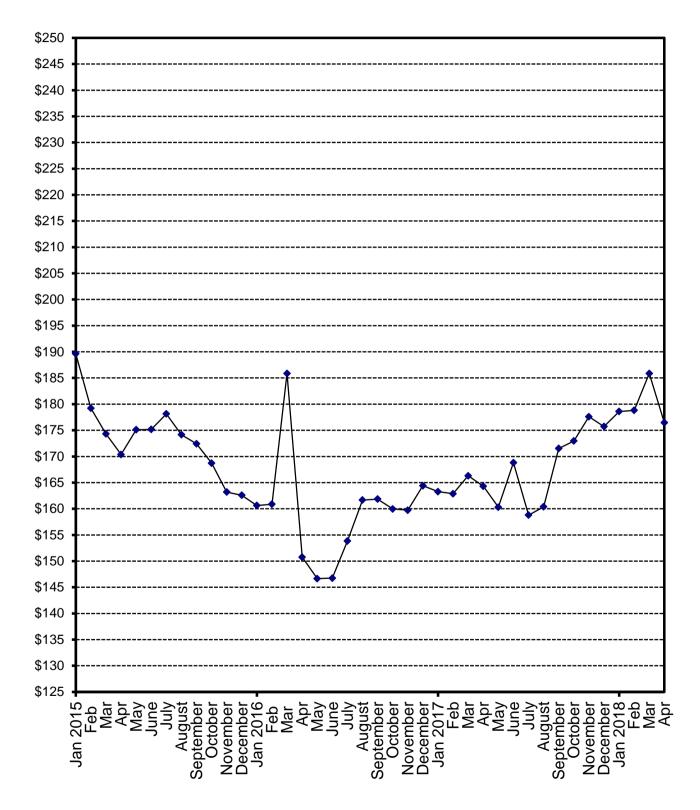
Col(3): FOA reconciliation generated in the current quarter. The YTD FOA reconciliation difference minus the adjustment variance. Col(1)-Col(2)

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

EFFECTIVE DATE	FUEL FACTOR CENTS / KWH RESIDENTIAL & <u>COMMERCIAL</u>	RESIDENTI <u>@ 500 KWH</u>	
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 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	-0.723 -0.579 0.816	178.59 178.81 185.87 176.46	213.95 214.22 222.68 211 20

-0.912

211.39

176.46

April 1, 2018

HAWAII ELECTRIC LIGHT COMPANY, INC. RESIDENTIAL SURCHARGE DATA

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
04/09/12	FINAL RATE INCREASE (1.28%), DOCKET NO. 2009-0	164 (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
12, 1/2010 12,01/10		
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	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

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

	Rate			Charge (\$) at 500 Kwh		
		03/01/18	04/01/18	03/01/18	04/01/18	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%	5.8800%	\$9.08	\$9.08	\$0.00
RBA Rate Adjustment	¢/kwh	0.6313	0.6313	\$3.16	\$3.16	\$0.00
Purchased Power Adj. Clause	¢/kwh	2.3258	2.3184	\$11.63	\$11.59	-\$0.04
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	0.0000	(0.1464)	\$0.00	-\$0.73	-\$0.73
Energy Cost Adjustment	¢/kwh	0.8160	(0.9120)	\$4.08	-\$4.56	-\$8.64
Green Infrastructure Fee	\$	1.3400	1.3400 [´]	\$1.34	\$1.34	\$0.00
	I					

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

Avg Residential Bill at 500 kwh

\$185.87 \$176.46

Increase (Decrease -) % Change

-\$9.41 -5.06%

	Rate			Charge (\$) at 600 Kwh		
		03/01/18	04/01/18	03/01/18	04/01/18	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%	5.8800%	\$10.89	\$10.89	\$0.00
RBA Rate Adjustment	¢/kwh	0.6313	0.6313	\$3.79	\$3.79	\$0.00
Purchased Power Adj. Clause	¢/kwh	2.3258	2.3184	\$13.95	\$13.91	-\$0.04
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	0.0000	(0.1464)	\$0.00	-\$0.88	-\$0.88
Energy Cost Adjustment	¢/kwh	0.8160	(0.9120)	\$4.90	-\$5.47	-\$10.37
Green Infrastructure Fee	\$	1.3400	1.3400	\$1.34	\$1.34	\$0.00
Avg Residential Bill at 600 kwh				\$222.68	\$211.39	

Increase (Decrease -) % Change