

JAY IGNACIO, P. E. President

March 29, 2016

HAR 29 P

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 2016

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") energy cost adjustment factor for April 2016 is -4.715 cents per kilowatt-hour ("kWh"), a decrease of 0.404 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$150.76, a decrease of \$3.50 compared to the rates effective March 1, 2016. The decrease in the typical residential bill is due to the decrease in the energy cost adjustment factor (-\$2.02), the decrease in the Purchased Power Adjustment Clause rate (-\$0.09), and the credit for the SolarSaver Adjustment (-\$1.39).

Hawai'i Electric Light's fuel composite cost of generation decreased 76.00 cents per million BTU to 706.19 cents per million BTU. The composite cost of distributed generation decreased 2.065 cents per kWh to 11.020 cents per kWh. The composite cost of purchased energy decreased 0.094 cents per kWh to 10.908 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, 2016.

Sincerely,

Attachments

cc: Division of Consumer Advocacy

ENERGY COST ADJUSTMENT FACTOR

EFFECTIVE DATES

	<u>3/01/16</u>	<u>4/01/16</u>	<u>Change</u>
Composite Cost			
Generation, ¢/mmbtu Dispersed Generation Energy, ¢/kWh Purchased Energy, ¢/kWh	782.19 13.085 11.002	706.19 11.020 10.908	(76.00) (2.065) (0.094)
Residential Schedule "R"			
Energy Cost Adjustment - ¢/kWh	(4.311)	(4.715)	(0.404)
<u>Others - "G,J,P,F"</u>			
Energy Cost Adjustment - ¢/kWh	(4.311)	(4.715)	(0.404)
Residential Customer with:			
500 KWH Consumption - \$/Bill 600 KWH Consumption - \$/Bill	\$154.26 \$184.76	\$150.76 \$180.57	(\$3.50) (\$4.19)

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

ENERGY COST ADJUSTMENT (ECA) FILING - April 1, 2016 (Page 1 of 2)

Line		
1	Effective Date	April 1, 2016
2	Supercedes Factors of	March 1, 2016

GENERATION COMPONENT

C	ENTRAL STATION WITH WIND/HYDRO COMP	ONENT	
-	FUEL PRICES, ¢/mmbtu	ONLIN	
3			
4	Hill Industrial	467.20	
5	Puna Industrial	497.08	
6	Keahole Diesel	990.56	
6a	Keahole ULSD	1,287.91	
7	Waimea ULSD Diesel	1,281.38	
8	Hilo Diesel	959.47	
	Hilo (Kanoelehua) ULSD Diesel ¹	1,256.00	
9	Puna Diesel	964.48	DG ENERGY COMPONENT
10	Wind	0.00	35 COMPOSITE COST OF DG
11	Hydro	0.00	ENERGY, ¢/kWh 11.020
			36 % Input to System kWh Mix 0.078
	BTU MIX, %		
12			37 WEIGHTED COMPOSITE DG ENERGY COST,
13	Hill Industrial	42.963	¢/kWh (Lines 35 x 36) 0.00860
14	Puna Industrial	0.000	
15	Keahole Diesel	49.952	38 BASE DG ENERGY COMPOSITE COS 15.702
15a	Keahole ULSD	0.376	20 Deep % Input to Sustern W//h Miss
16 17	Waimea ULSD Diesel Hilo Diesel	0.251 0.075	 39 Base % Input to System kWh Mix 0.06 40 WEIGHTED BASE DG ENERGY COST,
	· · · · ·		40 WEIGHTED BASE DG ENERGT COST,
17a	Hilo (Kanoelehua) ULSD Diesel ¹	0.150	
18		0.000	¢/kWh (Line 38 x 39) 0.00942
19	Wind	0.000	41 Cost Less Base (Line 37 - 40) (0.00082)
20	Hydro	6.233	
21	COMPOSITE COST OF GENERATION,	100.000	42 Loss Factor 1.067 43 Revenue Tax Reg Multiplier 1.0975
21	CENTRAL STATION + WIND/HYDRO ¢/mmb	706.19	44 DG FACTOR, ¢/kWh
22	% Input to System kWh Mix	41.808	(Line 41 x 42 x 43) (0.00096)
		41.000	(0.00000)
	EFFICIENCY FACTOR, mmbtu/kWh		
	(A) (B) (C)	(D)	
	Percent of	. ,	
	Eff Factor Centrl Stn +	Weighted	
	Fuel Type mmbtu/kwh Wind/Hydro	Eff Factor	
23	Industrial 0.015148 36.207	0.005485	
24	Diesel 0.010424 57.561	0.006000	
25	Other 0.012621 6.233	0.000787	
	(Lines 23, 24, 25): Col(B) x Col(C) = Col(D)		
26	Weighted Efficiency Factor, mmbtu/kWh		
	[Lines 23(D) + 24(D) + 25(D)]	0.0122720	
27	WEIGHTED COMPOSITE CENTRAL STATION	N +	
	WIND/HYDRO GENERATION COST, ¢/kWh	0.00000	
	(Lines (21 x 22 x 26))	3.62323	
20			
20	BASE CENTRAL STATION + WIND/HYDRO GENERATION COST, ¢/mmbtu	1,224.44	
20	Base % Input to Sys kWh Mix	46.06	
	Efficiency Factor, mmbtu/kwh	46.06	
	WEIGHTED BASE CENTRAL STATION +	0.012021	
	WIND/HYDRO GENERATION COST ¢/kWh		
1	(Lines (28 x 29 x 30))	7.11795	
1			SUMMARY OF
32	COST LESS BASE (Line 27 - 31)	(3.49472)	TOTAL GENERATION FACTOR, ¢/kWh
	Revenue Tax Req Multiplier	1.0975	45 Cntrl Stn+Wind/Hydro (line 34) (3.83546)
	CENTRAL STATION + WIND/HYDRO		46 DG (line 44) (0.00096)
1	GENERATION FACTOR,		47 TOTAL GENERATION FACTOR,
1	¢/kWh (Line (32 x 33))	(3.83546)	¢/kWh (lines 45 + 46) (3.83642)
L		7	

¹ Hilo ULSD same location as Kanoelehua ULSD

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

ENERGY COST ADJUSTMENT (ECA) FILING - April 1, 2016 (Page 2 of 2)

<u>Line</u>	PURCHASED EN	IERGY COMPO	NENT
	PURCHASED ENERGY PF		
48	HEP	RICE, ¢/KWII	11.016
	PGV	On Peak	8.182
50	PGV	Off Peak	9.423
51	PGV - Add'l 5 MW	On Peak	12.480
52	PGV - Add'l 5 MW	Off Peak	12.480
53	PGV - Add'l 8 MW	On Peak	9.520
54	PGV - Add'l 8 MW	Off Peak	6.340
55	Wailuku Hydro	On Peak	8.182
56	Wailuku Hydro	Off Peak	9.423
-	Hawi Renewable Dev.	On Peak	8.182
	Hawi Renewable Dev.	Off Peak	9.423
	Tawhiri (Pakini Nui)	On Peak	16.700
	Tawhiri (Pakini Nui)	Off Peak	13.750
61			
	Small Hydro (>100 KW)	On Peak	8.182
	Small Hydro (>100 KW)	Off Peak	9.423
	Sch Q Hydro (<100 KW)		8.420
65	FIT		23.800
	PURCHASED ENERGY KV	VH MIX, %	
66	HEP		26.380
67	PGV	On Peak	20.089
68	PGV	Off Peak	12.446
69	PGV - Addt'l	On Peak	3.202
70	PGV - Addt'l	Off Peak	2.884
	PGV - Add'l 8 MW	On Peak	0.792
72	PGV - Add'l 8 MW	Off Peak	3.411
	Wailuku Hydro	On Peak	0.832
	Wailuku Hydro	Off Peak	0.584
75	Hawi Renewable Dev.	On Peak	5.563
76	Hawi Renewable Dev.	Off Peak	3.173
	Tawhiri (Pakini Nui)	On Peak	12.615
78 79	Tawhiri (Pakini Nui)	Off Peak	7.225
-	Small Hydro (>100 KW)	On Peak	0.000
81	Small Hydro (>100 KW)	Off Peak	0.000
	Sch Q Hydro (<100 KW)	on roun	0.227
	FIT		0.577
			100.000
84	COMPOSITE COST OF PL	IRCHASED	10.000
05	ENERGY, ¢/kWh		10.908 58.114
	% Input to System kWh Mix WEIGHTED COMPOSITE		
00	COST, ¢/kWh (Lines (84 x		6.33908
		,,	0.00000
87	BASE PURCHASED ENER		
	COMPOSITE COST, ¢/kW		13.354
88	Base % Input to Sys kWh M		53.88
89	WEIGHTED BASE PURCH COST, ¢/kWh (Lines (87 ×		7.19514
90	COST LESS BASE (Lines (86 - 89))	(0.85606)
90	Loss Factor	00 - 00))	(0.85000) 1.067
92	Revenue Tax Reg Multiplier		1.0975
	PURCHASED ENERGY FA		(1.00247)
	(Lines (90 x 91 x 92))		(1.002-17)
	(

SYSTEM COMPOSITE

94 GENERATION AND PURCHASED ENERGY FACTOR, ¢/kWh (Lines (47 + 93)) (4.83889)

Hawaii Electric Light Company, Inc.

FUEL OIL INVENTORY PRICES FOR April 1, 2016

INDUSTRIAL FUEL COSTS: Average Industrial Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	<u>HILO</u> 29.4337 	<u>PUNA</u> 29.4337 1.8825		
Industrial Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	29.4337 6.30	31.3163 6.30		
Industrial Costs For Filing - ¢/mmbtu	467.20	497.08		
DIESEL FUEL COSTS:	KEAHOLE	PUNA CT-3	HILO	
Average Diesel Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	55.3694 2.6774	55.3694 1.1492	55.3694 0.8556	
Diesel Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	58.0469 5.86	56.5186 5.86	56.2250 5.86	
Diesel Costs For Filing - ¢/mmbtu	990.56	964.48	959.47	
				DISPERSED
ULSD FUEL COSTS:	KEAHOLE	WAIMEA	HILO	GENERATION
Average ULSD Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	71.1761 2.6212	71.1761 2.2468	71.1761 0.7928	71.1761
ULSD Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	73.7973 5.73	73.4230 5.73	71.9689 5.73	71.1761 5.73
ULSD Costs For Filing - ¢/mmbtu	1,287.91	1,281.38	1,256.00	1,242.17

Dispersed Generation, cents per kWh

	COMPOSITE COST OF DISP. GEN.
BBIs Fuel:	108.3770
\$/BBI Inv Cost:	71.1761
Fuel \$ (Prod Sim Consumption x Unit Cost)	7,713.85
Net kWh (from Prod Sim)	70,000
cents/kWh:	11.020

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Μ	arch 2016	

	SHIPMAN	INDUSTRIAL	HILL INDUS	TRIAL			
						COST PER BARREL	
	BBL	COST	BBL	COST	EXCL LT	LT Total	
Balance at 02/29/2016	0	0.00	30,830	745,453.08			
Less: Est'd Inventory Addn			0	0.00			
Purchases: Estimate	xxxxxx xx	****	xxxxxxx xx	****			
Actual	XXXXXX XX	*****	xxxxxxx xx	*****			
Transfers out: Estimate	xxxxxx xx	****	xxxxxxx xx	****			
Actual	XXXXXX XX	*****	xxxxxxx xx	*****			
Transfers in: Estimate	0	0.00	(55,495) (1,714,844.32)			
Actual	0	0.00	56,448	1,768,562.69			
Consumed: Estimate	0	0.00	47,576	1,602,150.35			
Actual	0	0.00	(46,641) (1,415,587.97)			
Balance Per G/L 02/29/2016	0	0.00	32,718	985,733.83			
Purchases	xxxxxx xx	xxxxxxxxxxxx	xxxxxxx xx	****			
Transfer out	xxxxxx xx	xxxxxxxxxxxx	xxxxxxx xx	****			
Transfer in	0	0.00	53,866	1,585,684.83			
Consumed	0	0.00	(42,213) ([1,271,801.71]	106.5901	0.0000	106.5901
Balance @ 03/31/2016	0	0.00	44,371	1,299,616.95			
Inv From Offsite/Transfers	0	0.00	0	0.00			
Est'd Inventory Addition	0	0.00	0	0.00			
Fuel Balance @ 03/31/2016	0	0.00	44,371	1,299,616.95			
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxxx (1,299,616.95)			
Fuel Bal @ Avg Price	xxxxxx	0.00	xxxxxxxx	1,306,002.94			
Total @ 9/30/2013 Avg Price	0	0.00	44,371	1,306,002.94			
Weighted Avg Cost/BBL by Location		#DIV/0!		29.2898			
Weighted Avg Cost/BBL @ Avg Cost		#DIV/0!		29.4337			

	PUNA INDUST	RIAL				
			LAND	COST PER BA	RREL	
	BBL	COST	TRANSP	EXCLUDE LT	LT	TOTAL
Balance at 02/29/2016	8,321	410,432.33	15,705.71			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate	xxxxxxxx x	****	****			
Actual	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*****	*****			
Transfers out: Estimate	xxxxxxxx x	****	****			
Actual	XXXXXXXXXXXXX X	*****	*****			
Transfers in: Estimate	9	0.00	10.76			
Actual	18	0.00	0.00			
Consumed: Estimate	423	14,244.78	798.07			
Actual	(321)	(170,093.98)	(605.64)			
Balance Per G/L 02/29/2016	8,450	254,583.13	15,908.90	_		
Purchases	xxxxxxx x	****	*****			
Transfer out	xxxxxxxx x	****	*****			
Transfer in	2	0	2.39			
Consumed	(3)	(90.38)	(5.65)	30.1282	1.8827	32.0109
Balance @ 03/31/2016	8,449	254,492.75	15,905.64			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	8,449	254,492.75	15,905.64		1.8825	
Reverse Fuel Balance	****	(254,492,75)	****			
Fuel Balance @ Avg Price	****		****			
Total @ 04/01/2016 Avg Price	8,449	248,685.38	15,905.64	-		
Weighted Avg Cost/BBL by Location		30.1210	1.8825			
Weighted Avg Cost/BBL @ Avg Cost		29.4337	1.8825			

Estimated Weighted Average March 2016

		KEAHOLE CT					
			COST	LAND	COST PER B	ARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 02/29/2016	45,351.9	1,904,779.0	2,830,422.6	124,745.1			
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		****	****	****			
Actual		****	*****	*****			
Transfers in: Estimate	(37,569.6)	(1,577,924.0)	(2,219,150.7)				
Actual	37,725.1	1,584,454.0	2,211,330.3	99,337.09			
Consumed: Estimate	42,851.9	1,799,778.0	3,007,831.9	113,805.96			
Actual	(43,194.8)	(1,814,181.0)	(3,047,128.1)	(119,341.2)	70.5439		
Balance Per G/L 02/29/2016	45,164.4	1,896,906	2,783,305.99	118,130.89	61.6261		
Purchases	*****	* ****	****	****			
Transfer out	****	* ***	****	*****			
Transfer in	43,257.2	1,816,802.0	2,407,950.5	115,617.8	55.6659		
Consumed	(48,414.8)	(2,033,421.0)	(2,983,602.7)	(126,632.52)	61.6259	2.6156	64.2414
Balance @ 03/31/2016	40,006.8	1,680,287	2,207,653.80	107,116.19	55.1819		
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	40,006.8	1,680,287	2,207,653.80	107,116.19	55.1819		
Reverse Fuel Balance	****		(2,207,653.8)	****			
Fuel Balance @ Avg Price		*****		****			
Total @ 04/01/2016 Avg Price	40,006.8	1,680,287	2,215,155.96	107,116.19	55.3694		
Weighted Avg Cost/BBL by Location			55.1819	2.6774			
Weighted Avg Cost/BBL @ Avg Cost			55.3694	2.6774			

Estimated Weighted Average

March 2016

		PUNA CT-3					
			COST	LAND	COST PER E	BARREL	
HS Diesel	BBL	GALLONS	EXCLUD LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 02/29/2016	2,892.0	121,464.0	225,429.6	3,244.6			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate		xxxxxxxxxxxxxxx	****	xxxxxxxxxxx			
Actual		*****	*****	*****			
Transfers out: Estimate		****	****	****			
Actual		*****	*****	XXXXXXXXXXXXX			
Transfers in: Estimate	132.5	5,566.0	10,463.6	158.5			
Actual	440.3	18,494.0	31,700.2	589.5			
Consumed: Estimate	1,603.4	67,341.0	112,541.9	1,809.2			
Actual	(1,216.3)	(51,086.0)	(142,759.0)				
Balance Per G/L 02/29/2016	3,851.9	161,779	237,376.26	4,429.30			
Purchases	****	****	****	****			
Transfer out	****	****	****	****			
Transfer in	(56.3)	(2,366.0)	(3,392.4)	(67.4)	60.2196		
Consumed	(197.0)	(8,273)	(12,138.83)	(226.50)	61.6259	1.1499	62.7758
Balance @ 03/31/2016	3,598.6	151,140	221,845.07	4,135.44	61.6481		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 03/31/2016	3,598.6	151,140	221,845.07	4,135.44	61.6481		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxxxxxx	(221,845.07)	xxxxxxxxxxxx			
Fuel Balance @ Avg Price	*****	*****	199,250.89	****			
Total @ 04/01/2016 Avg Price	3,598.6	151,140	199,250.89	4,135.44	55.3694		
Weighted Avg Cost/BBL by Location			61.6481	1.1492			
Weighted Avg Cost/BBL @ Avg Cost			55.3694	1.1492			

Estimated Weighted Average March 2016

		TOTAL HILO I	HS-DIESEL				
			COST	LAND	COST PER	BARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 02/29/2016	1450.2	60,909	95,791	925			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate			*****				
Actual		*****	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	xxxxxxxxxxxx			
Transfers out: Estimate	:	****	*****	xxxxxxxxxxx			
Actual	:	*****	*****	*****			
Transfers in: Estimate	-188.2	-7904.0	0.0	-173.1			
Actual	187.1	7858.0	10545.4	173.1			
Consumed: Estimate	167.0	7014.0	11722.0	107.0			
Actual	-180.5	-7582.0		177.5			
Balance Per G/L 02/29/2016	1435.6	60,295	88,470.08	1,209.35	61.6261		
Purchases	xxxxxxxxxxx	****	*****	****			
Transfer out	*****	****	****	xxxxxxxxxxx			
Transfer in	187.2	7862.0	10256.7	172.2	0.0000		
Consumed	-520.1	-21846.0	-32054.2	-438.2	61.6259	0.8424	62.4683
Balance @ 03/31/2016	1,102.6	46,311	66,672.56	943.38	60.4661		
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	1,102.6	46,311	66,672.56	943.38	60.4661		
Reverse Fuel Balance	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	****	-66,672.56	xxxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXXXX	xxxxxxxxxxx	-	****			
Total @ 04/01/2016 Avg Price	1,102.6	46,311	61,052.72	943.38	55.3694		
Weighted Avg Cost/BBL by Location			60.4661	0.8556			
Weighted Avg Cost/BBL @ Avg Cost			55.3694	0.8556			

Estimated Weighted Average March 2016

KEAHOLE DIESEL							
			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 02/29/2016	1,999.4	83,974	148,987.46	573.15			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(379.1)	(15,921)	(20,761.00)	(1,013.18)			
Actual	378.0	15,875	20,542.23	0.00			
Transfers out: Estimate		****	*****	xxxxxxxxxxxx			
Actual		****	*****	*****			
Transfers in: Estimate		(179)	0.00	(11.39)			
Actual		266	0.00	1,010.25			
Consumed: Estimate	417.1	17,519	32,929.25	358.93			
Actual	(346.9)	(14,568)	(31,048.28)	4,498.10	89.5132		
Balance Per G/L 02/29/2016	2,070.6	86,966	150,649.66	5,415.86	72.7559		
Purchases	0.0	0	0.00	0.00	0.0000		
Estimated Purchases	190.0	7,980	9,850.52	507.83			
Transfer in	0.2	8	0.00	0.51	0.00		
Consumed	(318.9)	(13,395)	(23,202.82)	(834.19)	72.7524	2.6156	75.3680
Balance @ 03/31/2016	1,941.9	81,559	137,297.36	5,090.01	70.7033		
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	1,941.9	81,559	137,297.36	5,090.01	70.7033		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxx	(137,297.36)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	*****	****	138,215.57				
Total @ 04/01/2016 Avg Price	1,941.9	81,559	138,215.57	5,090.01	71.1761		
Weighted Avg Cost/BBL by Location			70.7033	2.6212			
Weighted Avg Cost/BBL @ Avg Cost			71.1761	2.6212			

		WAIMEA DIES	EL					
			COST	LAND	COST PE	R BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP			LT	TOTAL
Balance at 02/29/2016	1,311.1	55,067.0	79,253.0	2,964.70				
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00				
Purchases: Estimate		(23,848)	(31,097.80)	(1,264.34)				
Actual		23,781.0	30,851.6	0.00				
Transfers out: Estimate		****	*****	xxxxxxxxxxx				
Actual		*****	*****	xxxxxxxxxxx				
Transfers in: Estimate	0.2	8	0.00	0.00				
Actual	64.7	2,716	0.00	1,260.79				
Consumed: Estimate	558.3	23,450	44,077.35	1,240.17				
Actual	(503.8)	(21,160)		•				
Balance Per G/L 02/29/2016	1,428.9	60,014	103,961.18	3,064.34	7	72.7558		
ULSD Purchases	189.0	7,937	9,797.44	420.79	5	51.8448		
Estimated Purchases	190.0	7,980	9,850.52	423.07				
Transfer in	****	(2,309)	0.00	0.00	#DIV/	0!		
Consumed	(296.0)	(12,430)	(21,531.25)	(634.68)	7	72.7524	2.1445	74.8969
Balance @ 03/31/2016	1,457.0	61,192	102,077.89	3,273.52	7	70.0626		
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	1,457.0	61,192	102,077.89	3,273.52		70.0626		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxxx	(102,077.89)	xxxxxxxxxxx				
Fuel Balance @ Avg Price	*****	*****	103,700.23	****				
Total @ 04/01/2016 Avg Price	1,457.0	61,192	103,700.23	3,273.52	7	71.1761		
Weighted Avg Cost/BBL by Location			70.0626	2.2468				
Weighted Avg Cost/BBL @ Avg Cost			71.1761	2.2468				

	ł	KANOELEHUA	DIESEL			
			COST	LAND		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		
Balance at 02/29/2016	1,395.7	58,619.0	120,772.7	1,287.7		
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	(190.0)	(7,980)	(13,556.42)	(174.78)		
Actual	188.9	7,932	10,263.91	0.00		
Transfers out: Estimate		x	x	х		
Actual		х	х	x		
Transfers in: Estimate		114	0.00	2.50		
Actual		(53)	0.00	346.80		
Consumed: Estimate	195.9	8,228	15,465.60	181.33		
Actual	(155.0)	(6,509)	(28,400.84)	(433.10)		
Balance Per G/L 02/29/2016	1,436.9	60,351	104,544.97	1,210.48		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	(4)	(152)	0.00	(3.33)		
Consumed	(76.3)	(3,203)	(5,548.24)	(131.33)	72.7524	0.8424
Balance @ 03/31/2016	1,357.0	56,996	98,996.73	1,075.82		
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	1,357.0	56,996	98,996.73	1,075.82		
Reverse Fuel Balance	х	x	(98,996.73)	x		
Fuel Balance @ Avg Price	x	x		×		
Total @ 04/01/2016 Avg Price	1,357.0	56,996	96,589.40	1,075.82		
Weighted Avg Cost/BBL by Location			72.9501	0.7928		
Weighted Avg Cost/BBL @ Avg Cost			71.1761	0.7928		

DISPERSED GENERATION

	BBL	GALLONS	COST	COST/BBL
Balance at 02/29/2016	60.0	2,518	4,893.98	
Less: Est'd Inven Addition	0.0	xxxxxxxx	***	
Purchases: Estimate Actual	· · /	(1,340) 2,333	(,	
Consumed: Estimate Actual	38.5 (30.0)	1,616 (1,260)	3,037.48 (2,527.59)	
		xxxxxxxxxxx xxxxxxxxxx		
		xxxxxxxxxxx xxxxxxxxxx		
Balance Per G/L 02/29/2016	92.07	3,867	6,698.74	72.7559
Purchases	0.0	0	0.00	0.0000
Transfer out	****	****	xxxxxxxxxx	
Transfer in	****	****	xxxxxxxxxx	
Consumed	(7.8)	(326)	(564.70)	72.7524
Balance @ 03/31/2016	84.3	3,541	6,134.04	72.7562
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 03/31/2016	84.3	3,541	6,134.04	
Reverse Fuel Balance Fuel Balance @ Avg Price		xxxxxxxxxxxxx xxxxxxxxxxxx	(6,134.04) xxx 6,000.83 xxx	
Total @ 04/01/2016 Avg Price	84.3	3,541	6,000.83	71.1761

HAWAII ELECTRIC LIGHT COMPANY, INC. CONTRACT PRICES EFFECTIVE March 1, 2016

TYPE OF OIL BURNED

	Hill Industrial		<u>Puna Industrial</u>		
INDUSTRIAL *	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>	
Tax ¹	33.11	2.0854	33.11	2.0854	
Ocean Transportation	57.09	3.5966	57.09	3.5966	
Storage	17.03	1.0729	17.03	1.0729	
Wharfage	3.81	0.2400	3.81	0.2400	

	Hilo Diesel		Waimea Diesel		
DIESEL *	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL	
Tax ¹	67.06	4.0491	69.10	4.0491	
Ocean Transportation	61.38	3.5966	61.38	3.5966	
Storage	18.31	1.0729	18.31	1.0729	
Wharfage	4.10	0.2400	4.10	0.2400	

	Kona Diesel		CT3 Diesel	
	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax ¹	67.06	4.0491	67.06	4.0491
Ocean Transportation	61.38	3.5966	61.38	3.5966
Storage	18.31	1.0729	18.31	1.0729
Wharfage	4.10	0.2400	4.10	0.2400

	ULSD		
ULSD **	¢/MBTU	\$/BBL	
Tax ¹	33.71	1.9320	
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.

Note: Since the components above are not accounted for separately in 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, 2016

		April 1, 2016 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW)	- on peak	8.182	6.560
PGV (22 MW)	- off peak	9.423	5.430
WAILUKU HYDRO	- on peak	8.182	7.240
		9.423	5.970
Other: (<100 KW)	Sch Q Rate	8.420	
		April 1, 2016 (¢/kWh)	Floor Rates (¢/kWh)
HEP		11.016	
PGV Addtl 5 MW	- on peak	12.4800	0.0000
	- off peak	12.4800	0.0000
PGV Addtl 8 MW	- on peak	9.5200	0.0000
	- off peak	6.3400	0.0000

Hawaii Electric Light Company, Inc. Energy Cost Reconciliation Adjustment April 1, 2016

Line No.	Description	<u>Amount</u>
1	Amount to be returned or collected	\$282,600
2	Monthly Amount $(^{1}/_{3} \times \text{Line 1})$	\$94,200
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	\$103,386
5	Estimated MWh Sales (April 1, 2016)	83,198 mwh
6	Adjustment (Line 4 / Line 5)	0.124 ¢/kwh

2016 Cumulative Reconciliation Balance

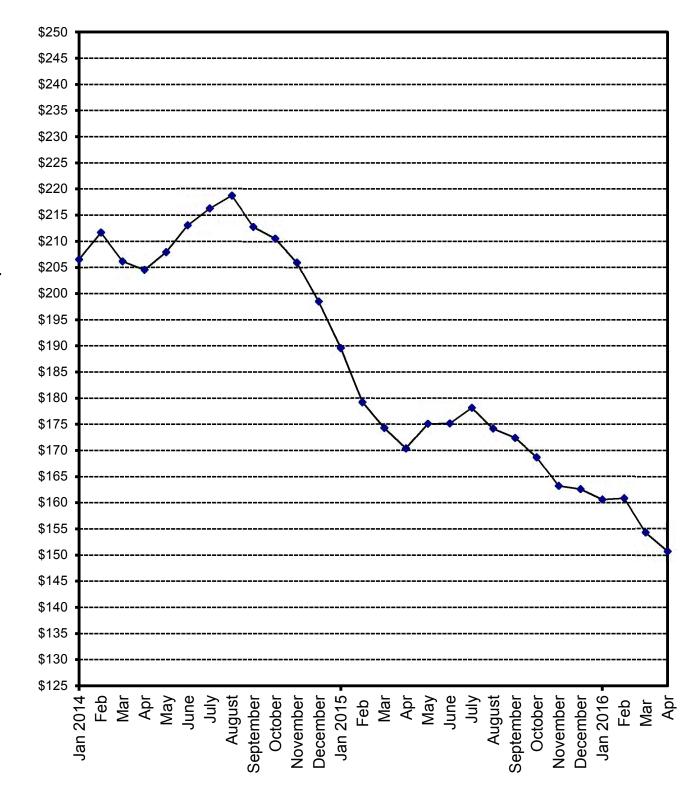
	(1)		(2) FOA Rec	(3) FOA Rec	(4)	(5)	(6) Month-end
	YTD FOA		Adjust	Less	Try to	Actual	Cumulative
<u>Month</u>	Reconciliation	<u>Qtr</u>	Variance	<u>Variance</u>	Collect	<u>Collect</u>	<u>Balance</u>
November	(373,000)	[3]	8,070	(381,070)	124,333	125,960	(208,168)
December	14				124,333	124,559	(83,609)
January 15					124,333	117,173	33,564
February	534,600	[4]	5,320	529,280	(178,200)	(180,037)	382,807
March					(178,200)	(176,746)	206,061
April					(178,200)	(179,220)	26,841
May	(1,118,800)	[1]	(7,543)	(1,111,257)	372,933	373,805	(710,611)
June					372,933	385,321	(325,290)
July					372,933	400,805	75,515
August	(421,800)	[2]	12,240	(434,040)	140,600	148,649	(209,876)
September					140,600	149,054	(60,822)
October					140,600	142,611	81,789
November	791,200	[3]	44,375	746,825	(263,733)	(262,906)	565,708
December					(263,733)	(256,311)	309,397
January 16					(263,733)	(264,541)	44,856
February	(282,600)	[4]	10,260	(292,860)	94,200	95,382	(152,622)
March					94,200		
April					94,200		

NOTES:

 Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 6) A positive number is an over-collection. A negative number is an under-collection.
 Col(2): FOA reconciliation adjustment variance accumulated during the last three months, starting with the fourth prior month; the difference between the estimated recorded sales used to derive the \$/kwh adjustment and the actual recorded sales. (Col(5)-Col(4))
 Col(3): FOA reconciliation generated in the current quarter. The YTD FOA reconciliation difference minus the adjustment variance. Col(1)-Col(2)
 Col(4): Amount that the FOA reconciliation adjustment is trying to collect. (Col(1) * 1/3)
 Col(5): Actual collected amount. (recorded sales * \$/kwh adjustment/1.09751)

Col(6): Cumulative balance of the FOA reconciliation (Previous balance + Col(3) + Col(5))

ATTACHMENT 8



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 &		AL BILL (\$)
EFFECTIVE DATE	<u>COMMERCIAL</u>		
January 1, 2012 January 3, 2012 February 1, 2012 March 1, 2012 April 1, 2012 April 9, 2012 May 1, 2012 June 1, 2012 July 1, 2012 August 1, 2012 September 1, 2012 October 1, 2012 November 1, 2012 December 1, 2012	9.690 10.759 9.220 10.165 10.031 8.553 8.749 9.747 9.320 7.991 8.636 8.294 6.967 6.629	214.24 219.59 211.89 216.62 215.03 210.84 213.77 218.76 215.64 209.09 212.31 210.60 203.82 202.13	256.34 262.75 253.52 259.19 257.28 252.91 256.42 262.41 258.68 250.82 254.69 252.63 244.49 242.46
January 1, 2013 February 1, 2013 March 1, 2013 April 1, 2013 June 1, 2013 July 1, 2013 July 1, 2013 August 1, 2013 September 1, 2013 October 1, 2013 November 1, 2013	6.897 7.250 7.659 8.128 7.378 7.159 6.537 6.470 7.377 8.458 7.878 7.910	204.02 205.19 207.24 208.10 205.53 207.61 204.73 206.02 210.60 216.00 211.84 212.03	244.72 246.14 248.59 249.63 246.54 249.02 245.57 247.13 252.62 259.11 254.11 254.35
January 1, 2014 February 1, 2014 March 1, 2014 April 1, 2014 June 1, 2014 July 1, 2014 July 1, 2014 August 1, 2014 September 1, 2014 October 1, 2014 November 1, 2014	6.796 7.754 6.650 6.679 7.005 7.247 7.697 8.086 6.885 6.447 5.634 4.143	206.51 211.65 206.15 207.96 213.09 216.27 218.71 212.75 210.55 205.93 198.49	247.73 253.89 247.28 245.36 249.46 255.62 259.42 262.36 255.20 252.56 247.03 237.84
January 1, 2015 February 1, 2015 March 1, 2015 April 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 February 1, 2016 March 1, 2016 April 1, 2016	-3.223 -2.962 -4.311 -4.715	160.63 160.87 154.26 150.76	192.41 192.69 184.76 180.57

HAWAII ELECTRIC LIGHT COMPANY, INC. RESIDENTIAL SURCHARGE DATA

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE		RATE
01/01/12 - 12/31/12	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.6766	CENTS/KWH
01/01/12 - 04/08/12	INTERIM RATE INCREASE 2010 TEST YEAR	1.74	PERCENT ON BASE
04/01/12 - 04/08/12	FIRM CAPACITY SURCHARGE	0.6427	PERCENT ON BASE
04/01/12 - 04/30/12	SOLARSAVER ADJUSTMENT	-0.3899	CENTS/KWH
04/09/12	FINAL RATE INCREASE (1.28%), DOCKET NO. 2009-0164	(2010]	FEST YEAR)
04/09/12 - 7/31/2012	PURCHASED POWER ADJUSTMENT CLAUSE	2.4355	CENTS/KWH
05/01/12	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
06/18/12 - 5/31/2013	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	-0.1952	CENTS/KWH
8/1/2012 - 10/31/2012	PURCHASED POWER ADJUSTMENT CLAUSE	2.4540	CENTS/KWH
11/1/2012	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
01/01/13	RESIDENTIAL PBF SURCHARGE ADJUSTMENT		CENTS/KWH
02/01/13	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
04/01/13 - 04/30/13			CENTS/KWH
05/01/13 - 03/31/14	SOLARSAVER ADJUSTMENT		CENTS/KWH
05/01/13- 07/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
6/1/2013	RBA RATE ADJUSTMENT		CENTS/KWH
7/1/2013	RESIDENTIAL PBF SURCHARGE ADJUSTMENT		CENTS/KWH
8/1/2013-8/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
9/1/2013-9/30/2013	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
10/1/2013-10/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
11/1/2013-11/30/2013	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
12/1/2013-12/31/2013	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
1/1/2014-1/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
2/1/2014-2/28/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
3/1/2014-3/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
4/1/2014-4/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
4/1/2014-4/30/2014			CENTS/KWH
5/1/2014-5/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
5/1/2014-5/31/2014	SOLARSAVER ADJUSTMENT		CENTS/KWH
6/1/2014-6/30/2014 6/1/2014-5/31/15	PURCHASED POWER ADJUSTMENT CLAUSE RBA RATE ADJUSTMENT		CENTS/KWH CENTS/KWH
7/1/2014-7/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
7/1/2014	RESIDENTIAL PBF SURCHARGE ADJUSTMENT		CENTS/KWH
8/1/2014-8/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
9/1/2014-9/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
10/1/2014-10/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
11/1/2014-11/30/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
12/1/2014-12/31/2014	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
12/1/2014	RESIDENTIAL PBF SURCHARGE ADJUSTMENT		CENTS/KWH
12/1/2014-6/30/15	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
1/1/2015-1/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
2/1/2015-2/28/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.2273	CENTS/KWH
3/1/2015-3/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
4/1/2015-4/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.2424	CENTS/KWH
4/1/2015-4/30/2015	SOLARSAVER ADJUSTMENT	-0.3084	CENTS/KWH
5/1/2015-5/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3109	CENTS/KWH
5/1/2015	SOLARSAVER ADJUSTMENT	0.0000	CENTS/KWH
6/1/2015-6/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3064	CENTS/KWH
6/1/2015-6/7/2015	RBA RATE ADJUSTMENT	0.0000	CENTS/KWH
6/8/2015	RBA RATE ADJUSTMENT	1.3971	CENTS/KWH
7/1/2015-7/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE	2.3157	CENTS/KWH
7/1/2015	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.4749	CENTS/KWH
7/1/2015-12/31/2015	GREEN INFRASTRUCTURE FEE		DOLLARS/MONTH
8/1/2015-8/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
9/1/2015-9/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
10/1/2015-10/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
11/1/2015-11/30/2015	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
12/1/2015-12/31/2015	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
1/1/2016-1/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
1/1/2016			DOLLARS/MONTH
2/1/2016 - 2/29/16	PURCHASED POWER ADJUSTMENT CLAUSE		CENTS/KWH
3/1/2016 - 3/31/16 4/1/2016 - 4/30/16			CENTS/KWH CENTS/KWH
4/1/2016 - 4/30/16 4/1/2016 - 4/30/16	PURCHASED POWER ADJUSTMENT CLAUSE SOLARSAVER ADJUSTMENT		CENTS/KWH CENTS/KWH
-/1/2010 - 4/30/10		-0.2119	

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

		Rate			Charge (\$) at 500 Kwh		
		3/01/16	4/01/16		3/01/16	4/01/16	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
RBA Rate Adjustment	¢/kwh	1.3971	1.3971		\$6.99	\$6.99	\$0.00
Purchased Power Adj. Clause	¢/kwh	2.1401	2.1228		\$10.70	\$10.61	-\$0.09
PBF Surcharge	¢/kwh	0.4749	0.4749		\$2.37	\$2.37	\$0.00
DSM Adjustment	¢/kwh	0.0000	0.0000		\$0.00	\$0.00	\$0.00
SolarSaver Adjustment	¢/kwh	0.0000	(0.2779)		\$0.00	-\$1.39	-\$1.39
Energy Cost Adjustment	¢/kwh	(4.3110)	(4.7150)		-\$21.56	-\$23.58	-\$2.02
Green Infrastructure Fee	\$	1.3000	1.3000		\$1.30	\$1.30	\$0.00

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

Avg Residential Bill at 500 kwh

Increase (Decrease -) % Change

\$150.76

\$154.26

-\$3.50 -2.27%

	Rate			Charge (\$) at 600 Kwh			
		3/01/16	4/01/16	3/01/16	4/01/16	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	
RBA Rate Adjustment	¢/kwh	1.3971	1.3971	\$8.38	\$8.38	\$0.00	
Purchased Power Adj. Clause	¢/kwh	2.1401	2.1228	\$12.84	\$12.74	-\$0.10	
PBF Surcharge	¢/kwh	0.4749	0.4749	\$2.85	\$2.85	\$0.00	
DSM Adjustment	¢/kwh	0.0000	0.0000	\$0.00	\$0.00	\$0.00	
SolarSaver Adjustment	¢/kwh	0.0000	(0.2779)	\$0.00	-\$1.67	-\$1.67	
Energy Cost Adjustment	¢/kwh	(4.3110)	(4.7150)	-\$25.87	-\$28.29	-\$2.42	
Green Infrastructure Fee	\$	1.3000	1.3000	\$1.30	\$1.30	\$0.00	

Avg Residential Bill at 600 kwh

Increase (Decrease -) % Change

\$180.57

\$184.76

-\$4.19 -2.27%