

SHARON M. SUZUKI President

September 26, 2019

2019 SEP 26 P 3: 17 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 October 2019

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light") Energy Cost Recovery factor for October 2019 is 14.692 cents per kilowatt-hour ("kWh"), a decrease of 0.15 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$174.93, a decrease of \$0.77 compared to rates effective September 1, 2019. The decrease in the residential bill is due to the decrease in the Energy Cost Recovery factor.

Hawai'i Electric Light's fuel composite cost of generation decreased 58.26 cents per million BTU to 1,271.95 cents per million BTU. The composite cost of distributed generation decreased 0.78 cents per kWh to 15.313 cents per kWh. The composite cost of purchased energy increased 0.26 cents per kWh to 12.487 cents per kWh.

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 October 1, 2019.

Sincerely,

Shara M. Agle

Haraka (K. 2012), Haraka (K. 2012)

Attachments

cc: Division of Consumer Advocacy

### ENERGY COST RECOVERY FACTOR

### EFFECTIVE DATES

	<u>9/01/19</u>	<u>10/01/19</u>	<u>Change</u>
Composite Cost			
Generation, ¢/mmbtu Dispersed Generation Energy, ¢/kWh Purchased Energy, ¢/kWh	1,330.21 16.091 12.231	1,271.95 15.313 12.487	(58.26) (0.78) 0.26
Residential Schedule "R"			
Energy Cost Recovery - ¢/kWh	14.845	14.692	(0.15)
Others - "G,J,P,F"			
Energy Cost Recovery - ¢/kWh	14.845	14.692	(0.15)
Residential Customer with:			
500 KWH Consumption - \$/Bill 600 KWH Consumption - \$/Bill	\$175.70 \$210.32	\$174.93 \$209.40	(\$0.77) (\$0.92)

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

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

October 1, 2019 September 1, 2019

Line 1 Effective Date 2 Supercedes Factors of

#### **GENERATION COMPONENT**

	C	ENTRAL STATION WITH WIND/HYDRO COMPO	NENT		
		FUEL PRICES, ¢/mmbtu			
1	3				
	4	Hill Industrial	940.62		
	5	Puna Industrial	962.25		
	6	Keahole Diesel	1,569.42		
	6a	Keahole ULSD	1,638.31		
	7	Waimea ULSD Diesel	1,635.15		
	8	Hilo Diesel	1,537.01		
	8a	Hilo (Kanoelehua) ULSD Diesel <sup>1</sup>	1,607.83		
	9	Puna Diesel	1,535.70	DG ENERGY COMPONENT	
	10	Wind	0.00	35 COMPOSITE COST OF DG	
	11	Hydro	0.00	ENERGY, ¢/kWh	15.
		Tiyaro	0.00	36 % Input to System kWh Mix	0.
		BTU MIX, %			0.
	12			37 WEIGHTED COMPOSITE DG ENERGY COST,	
	13	Hill Industrial	33.595	¢/kWh (Lines 35 x 36)	0.01
	14	Puna Industrial	5.681	¢/KWII (Lilies 55 × 56)	0.01
	14	Keahole Diesel	44.875	38 BASE DG ENERGY COMPOSITE COS	0.
15a	10	Keahole ULSD	0.406	JU DAGE DU LIVERUUT CONTE COU	0.
JJd	16	Waimea ULSD Diesel	0.406	39 Base % Input to System kWh Mix	C
		Hilo Diesel	2.936	40 WEIGHTED BASE DG ENERGY COST,	U
47.	17			40 WEIGHTED DAGE DU ENERUT COOT,	
17a	40	Hilo (Kanoelehua) ULSD Diesel <sup>1</sup>	0.372		0.00
	18		8.533	¢/kWh (Line 38 x 39)	0.00
	19	Wind	0.000		
	20	Hydro	3.100	41 Cost Less Base (Line 37 - 40)	0.01
			100.000	42 Loss Factor	1.
	21	COMPOSITE COST OF GENERATION,		43 Revenue Tax Req Multiplier	1.0
	~~	CENTRAL STATION + WIND/HYDRO ¢/mmbtu	1,271.95	44 DG FACTOR, ¢/kWh	0.00
	22	% Input to System kWh Mix	53.029	(Line 41 x 42 x 43)	0.02
		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 0.014569 39.276	0.005722		
	24	Diesel 0.010480 57.624	0.006039		
	25	Other 0.012395 3.100	0.000384		
	~~	(Lines 23, 2 100.0000			
	26	Weighted Efficiency Factor, mmbtu/kWh	0.0404450		
		[Lines 23(D) + 24(D) + 25(D)]	0.0121450		
I I	~7				
I I	27	WEIGHTED COMPOSITE CENTRAL STATION +			
		WIND/HYDRO GENERATION COST, ¢/kWh	0.40400		
		(Lines (21 x 22 x 26))	8.19183		
I I	00				
	28	BASE CENTRAL STATION + WIND/HYDRO			
	00	GENERATION COST, ¢/mmbtu	0.00		
		Base % Input to Sys kWh Mix	0.00		
		Efficiency Factor, mmbtu/kwh	0.000000		
	31	WEIGHTED BASE CENTRAL STATION +			
		WIND/HYDRO GENERATION COST ¢/kWh	0.00000		
		(Lines (28 x 29 x 30))	0.00000		
			0.1010-	SUMMARY OF	
		COST LESS BASE (Line 27 - 31)	8.19183	TOTAL GENERATION FACTOR, ¢/kWh	
		Revenue Tax Req Multiplier	1.0975	45 Cntrl Stn+Wind/Hydro (line 34)	8.99
	34	CENTRAL STATION + WIND/HYDRO		46 DG (line 44)	0.02
	01				
	01	GENERATION FACTOR, ¢/kWh (Line (32 x 33))	8.99053	47 TOTAL GENERATION FACTOR, ¢/kWh (lines 45 + 46)	9.01

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

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

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

Line	PURCHASED EN	ERGY COMPONEN	IT					
	PURCHASED ENERGY PRIC	F d/k/Wb Eossil	_					
48	HEP	, ¢/kwn 1 033ii	12.108					
	PURCHASED ENERGY PRIC	E, ¢/kWh Renewable	е					
	PGV	On Peak	14.417					
	PGV	Off Peak	12.931					
	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	14.417					
	Wailuku Hydro	Off Peak	12.931					
-	Hawi Renewable Dev.	On Peak	14.417					
	Hawi Renewable Dev.	Off Peak	12.931					
	Tawhiri (Pakini Nui)	On Peak	12.310					
60 61	Tawhiri (Pakini Nui)	Off Peak	12.310					
	Small Hydro (>100 KW)	On Peak	14.417					
	Small Hydro (>100 KW)	Off Peak	12.931					
64	Sch Q Hydro (<100 KW)		13.450					
65	FIT		23.800					
	PURCHASED ENERGY KWH	HMIX, %, Fossil						
66	HEP	, ,	63.791					
	PURCHASED ENERGY KWH	MIX % Banawahla						
67	PORCHASED ENERGY KWP	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					
73	Wailuku Hydro	On Peak	4.713					
	Wailuku Hydro	Off Peak	3.400					
75	Hawi Renewable Dev.	On Peak	4.141					
76	Hawi Renewable Dev.	Off Peak	2.263					
77	Tawhiri (Pakini Nui)	On Peak	12.502	Derivation of	of No	on-Adjustable Component:		
78	Tawhiri (Pakini Nui)	Off Peak	8.315					
79				93A		Ocean Cargo Insurance Exp, \$000		\$8.2
80	Small Hydro (>100 KW)	On Peak	0.000			HELCO-R-503, page 1, line 4		
81	Small Hydro (>100 KW)	Off Peak	0.000	93B		Revenue Tax Adjustment		1.097514
82	Sch Q Hydro (<100 KW)		0.163	93C		Non-Adj Revenues, \$000		\$9.0
83	FIT		0.713	93D		2016 TY Sales, MWh		1,040,692
			100.000			HELCO-WP-302z		
				93E		Non-Adj Revenues, ¢/kWh		0.00086
	Comp. Cost Purchased Energ	•	12.1080					
	Comp. Cost Purchased Energ		13.1536					
84	COMPOSITE COST OF PUR	CHASED						
	ENERGY, ¢/kWh		12.487					
	% Input to System kWh Mix		46.851					
86	WEIGHTED COMPOSITE PL							
	COST, ¢/kWh (Lines (88 x 8	9))	5.85028					
87	BASE PURCHASED ENERG	Y						
	COMPOSITE COST, ¢/kWh		0.000	Line		SYSTEM COMPOS	ITE	
88	Base % Input to Sys kWh Mix		0.00					
	WEIGHTED BASE PURCHAS				94	GENERATION AND PURCHASED ENER	RGY	
	COST, ¢/kWh (Lines (91 x 9		0.00000			FACTOR, ¢/kWh (Lines (47 + 93))		15.89512
					95	Not Used		0.000
90	COST LESS BASE (Lines (90	) - 93))	5.85028		96	Non-Adjustable Component		0.00086
91	Loss Factor		1.072		97	ECA Reconciliation Adjustment		(1.204)
92	Revenue Tax *		1.0975		98	ECA FACTOR, ¢/kWh		14.692
93	PURCHASED ENERGY FAC	TOR, ¢/kWh	6.88297			(Lines (94 + 95+ 96 + 97))		
	(Lines (94 x 95 x 96))							

### Hawaii Electric Light Company, Inc.

FUEL OIL INVENTORY PRICES FOR October 1, 2019

INDUSTRIAL FUEL COSTS: Average Industrial Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	<u>HILO</u> 59.2594 	<u>PUNA</u> 59.2594 1.3626		
Industrial Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	59.2594 6.30	60.6220 6.30		
Industrial Costs For Filing - ¢/mmbtu	940.62	962.25		
<b>DIESEL FUEL COSTS:</b> Average Diesel Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 88.9496 3.0186	PUNA CT-3 88.9496 1.0422	HILO 88.9496 1.1192	
Diesel Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	91.9682 5.86	89.9918 5.86	90.0688 5.86	
Diesel Costs For Filing - ¢/mmbtu	1,569.42	1,535.70	1,537.01	
<b>ULSD FUEL COSTS:</b> Average ULSD Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 90.8808 2.9943	WAIMEA 90.8808 2.8133	HILO 90.8808 1.2479	DISPERSED GENERATION 90.8808 -
ULSD Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	93.8751 5.73	93.6941 5.73	92.1287 5.73	90.8808 5.73
ULSD Costs For Filing - ¢/mmbtu	1,638.31	1,635.15	1,607.83	1,586.05

### Dispersed Generation, cents per kWh

	COMPOSITE COST
	OF DISP. GEN.
BBIs Fuel:	199.2400
\$/BBI Inv Cost:	90.8808
Fuel \$ (Prod Sim Consumption x Unit Cost)	18,107.09
Net kWh (from Prod Sim)	118,250
cents/kWh:	15.313

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

	SHIPMAN	INDUSTRIAL	HILL INDUSTRIAL					
				COST PER BA	ARREL			
	BBL	COST	BBL COST	EXCL LT	LT Total			
Balance at 08/31/2019	0	0.00	28,466 1,765,530	.12				
Less: Est'd Inventory Addn			(895) (55,386	.71)				
Purchases: Estimate	xxxxxx xx:	****	*****	xxxx				
Atual	XXXXXX XXX	xxxxxxxxxxxxxx	XXXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXX	XXX				
Transfers out: Estimate	XXXXXX XX	****	*****	xxx				
Atual	XXXXXX XXX	*****	******	xxx				
Transfers in: Estimate	0	0.00	(23,673) (1,470,197	.55)				
Atual	0	0.00	34,252 2,135,929	.39				
Consumed: Estimate	0	0.00	37,112 2,335,250	.33				
Atual	0	0.00	(37,774) (2,376,905	.04)				
Balance Per G/L 08/31/2019	0	0.00	37,488 2,334,220	.54				
Purchases	xxxxxx xx:	xxxxxxxxxxxxx	******	xxxx				
Transfer out	XXXXXX XX	xxxxxxxxxxxx	******	xxxx				
Transfer in	0	0.00	26,338 1,562,069	.40				
Consumed	0	0.00	(23,280) (1,449,896	.59) 106.5901	L 0.0000 106.5902			
Balance @ 09/30/2019	0	0.00	40,546 2,446,393	.35				
Inv From Offsite/Transfers	0	0.00	0 0	.00				
Est'd Inventory Addition	0	0.00	0 0	.00				
Fuel Balance @ 09/30/2019	0	0.00	40,546 2,446,393	.35				
Reverse Fuel Balance	xxxxxx	0.00	xxxxxxxx (2,446,393	.35)				
Fuel Bal @ Avg Price	XXXXXX	0.00	xxxxxxx 2,402,729	.77				
Total @ 10/01/2019 Avg Price	0	0.00	40,546 2,402,729	.77				
Weighted Avg Cost/BBL by Location		#DIV/0!	60.33	362				
Weighted Avg Cost/BBL @ Avg Cost		#DIV/0!	59.25	594				

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

	PUNA INDUST	RIAL				
			LAND	COST PER BA	RREL	
	BBL	COST	TRANSP	EXCLUDE LT	LT	TOTAL
Balance at 08/31/2019	7,555	485,301.16	10,150.63			
Less: Est'd Inventory Addition	0	0.00	0.00			
Purchases: Estimate	xxxxxxxx x	****	****			
Actual	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	*****	*****			
Transfers out: Estimate	xxxxxxxx x	****	****			
Actual	XXXXXXXXXXXX X	*****	*****			
Transfers in: Estimate	(7,812)	(502,523.17)	(10,275.20)			
Actual	7,930	502,963.27	10,556.68			
Consumed: Estimate	8,334	524,411.95	12,717.68			
Actual	(7,487)	(471,114.74)	(11,057.92)			
Balance Per G/L 08/31/2019	8,520	539,038.47	12,091.87	-		
Purchases	****	****	*****			
Transfer out	*****	****	*****			
Transfer in	15,773	933,024	20,746.38			
Consumed	(13,849)	(862,526.54)	(18,607.02)	62.2808	1.3436	63.6243
Balance @ 09/30/2019	10,444	609,535.99	14,231.23			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	10,444	609,535.99	14,231.23		1.3626	
Reverse Fuel Balance	xxxxxxxxxxx	(609,535,99)	****			
Fuel Balance @ Avg Price	xxxxxxxxxxx		*****			
Total @ 10/01/2019 Avg Price	10,444	618,904.69	14,231.23	-		
Weighted Avg Cost/BBL by Location		58.3623	1.3626			
Weighted Avg Cost/BBL @ Avg Cost		59.2594	1.3626			

		KEAHOLE CT					
			COST	LAND	COST PER	BARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 08/31/2019	42,709.1	1,793,781.0	3,866,023.1	125,604.1			
Less: Est'd Inventory Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate	0.0	0.0	0.0	0.0			
Atocual	0.0	0.0	0.0	0.0			
Transfers out: Estimate Atɑal				xxxxxxxxxxxxxxxxxxxxxx xxxxxxxxxxxxxxx			
Transfers in: Estimate	(32,742.3)	(1,375,178.0)	(2,966,523.5)	(93,099.6)			
Atcual	36,741.0	1,543,120.0	3,318,574.6	102,233.08			
Consumed: Estimate	41,978.4	1,763,094.0	3,815,562.1	118,954.27			
Atocial	(41,405.6)	(1,739,034.0)	(3,763,491.1)	(106,893.0)	90.8934		
Balance Per G/L 08/31/2019	47,280.5	1,985,783	4,270,145.12	146,798.86	90.3151		
Purchases	*****	« xxxxxxxxxxxxxx	****	****			
Transfer out	*****	« xxxxxxxxxxxxxxx	****	****			
Transfer in	41,024.7	1,723,036.0	3,762,940.1	116,649.5	91.7238		
Consumed	(40,050.3)	(1,682,114.0)	(3,654,223.8)	(117,784.94)	91.2408	2.9409	94.1817
Balance @ 09/30/2019	48,254.9	2,026,705	4,378,861.42	145,663.45	90.7444		
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	48,254.9	2,026,705	4,378,861.42	145,663.45	90.7444		
Reverse Fuel Balance	****	<pre></pre>	(4.378.861.4)	****			
Fuel Balance @ Avg Price		(		*****			
Total @ 10/01/2019 Avg Price	48,254.9	2,026,705	4,292,252.92	145,663.45	88.9496		
Weighted Avg Cost/BBL by Location			90.7444	3.0186			
Weighted Avg Cost/BBL @ Avg Cost			88.9496	3.0186			

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

September 2019

	P	UNA CT-3					
			COST	LAND	COST PER B		
HS Diesel	BBL	GALLONS	EXCLUD LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 08/31/2019	5,245.5	220,310.0	482,438.5	6,754.1			
Less: Est'd Inven Addition	0.0	0.0	0.0	0.0			
Purchases: Estimate	x>		****	****			
Actal	Xک	(XXXXXXXXXXXXXXXXXXXXX	XXXXXXXXXXXXXXXX	XXXXXXXXXXXXX			
Transfers out: Estimate	хх		****	xxxxxxxxxxxx			
Actal	XX	****	*****	xxxxxxxxxxxx			
Transfers in: Estimate	(6,915.9)	(290,467.0)	(634,735.8)	(7,668.3)			
Atcual	6,487.1	272,459.0	614,060.4	7,308.6			
Consumed: Estimate	5,467.2	229,623.0	496,933.7	6,439.3			
Atual	(5,688.1)	(238,902.0)	(517,014.4)	(6,699.6)			
Balance Per G/L 08/31/2019	4,595.8	193,023	441,682.39	6,134.04			
Purchases	xxxxxxxxx xx	****	****	****			
Transfer out	*****	****	****	****			
Transfer in	8,337.3	350,167.0	734,837.3	9,244.4	88.1384		
Consumed	(7,740.1)	(325,086)	(706,216.69)	(9,966.18)	91.2408	1.2876	92.5284
Balance @ 09/30/2019	5,193.0	218,104	470,302.97	5,412.27	90.5656		
Inven From Offsite/Transfers	0.0	0	0.00	0.00			
Est'd Inventory Addition	0.0	0	0.00	0.00			
Fuel Balance @ 09/30/2019	5,193.0	218,104	470,302.97	5,412.27	90.5656		
Reverse Fuel Balance	XXXXXXXXXXXX XX		(470,302.97)	****			
Fuel Balance @ Avg Price		*****		****			
Total @ 10/01/2019 Avg Price	5,193.0	218,104	461,911.10	5,412.27	88.9496		
Weighted Avg Cost/BBL by Location			90.5656	1.0422			
Weighted Avg Cost/BBL @ Avg Cost			88.9496	1.0422			

		TOTAL HILO I	HS-DIESEL				
			COST	LAND	COST PER	BARREL	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCL LT	LT	TOTAL
Balance at 08/31/2019	1640.6	68,905	149,288	1,805			
Less: Est'd Inven Addition	0.0	0	0	0			
Purchases: Estimate		xxxxxxxxxxx	****	xxxxxxxxxxx			
Actul		*****	XXXXXXXXXXXXXXXX	*****			
Transfers out: Estimate		****	*****	xxxxxxxxxxxx			
Actal		*****	XXXXXXXXXXXXXXXX	*****			
Transfers in: Estimate	-187.2	-7862.0		-183.2			
Actal	187.2	7862.0	17474.2	183.6			
Consumed: Estimate	384.5	16151.0		488.2			
Actual	-304.7	-12796.0	-27692.2	-368.7			
Balance Per G/L 08/31/2019	1720.5	72,260	156,612.97	1,924.59	91.0289		
Purchases	****	xxxxxxxxxxx	*****	xxxxxxxxxxx			
Transfer out	****	xxxxxxxxxxx	*****	****			
Transfer in	0.0	0.0	0.0	0.0	#DIV/0!		
Consumed	-52.2	-2193.0	-4764.1	-57.4	91.2408	1.1000	92.3408
Balance @ 09/30/2019	1,668.3	70,067	151,848.90	1,867.15	91.0222		
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	1,668.3	70,067	151,848.90	1,867.15	91.0222		
Reverse Fuel Balance	****	****	-151,848.90	xxxxxxxxxxx			
Fuel Balance @ Avg Price	****						
Total @ 10/01/2019 Avg Price	1,668.3	70,067	148,391.25	1,867.15	88.9496		
Weighted Avg Cost/BBL by Location			91.0222	1.1192			
Weighted Avg Cost/BBL @ Avg Cost			88.9496	1.1192			

		KEAHOLE DIES	EL				
			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
Balance at 08/31/2019	1,983.2	83,293	181,491.91	6,095.28			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(190.0)	(7,980)	(17,992.46)	(540.25)			
Astual	0.0	0	0.00	0.00			
Transfers out: Estimate		xxxxxxxxxxx	****	xxxxxxxxxxx			
Atual		XXXXXXXXXXXXX	*****	XXXXXXXXXXXXX			
Transfers in: Estimate		(442)	0.00	(29.92)			
Astual		(24,396)	(53,461.36)	(1,674.69)			
Consumed: Estimate	419.9	17,636	38,951.54	896.96			
Astual	(302.1)	(12,688)	(28,023.20)	(645.29)	92.7628		
Balance Per G/L 08/31/2019	1,319.6	55,423	120,966.43	4,102.09	91.6693		
Purchases	939.6	39,464	85,628.44	2,671.71	0.0000		
Estimated Purchases	380.0	15,960	34,629.79	1,080.49			
Transfer in	(427.3)	(17,948)	(42,510.01)	(1,215.08)	99.48		
Consumed	(203.3)	(8,537)	(19,412.20)	(624.73)	95.5034	3.0735	98.5769
Balance @ 09/30/2019	2,008.6	84,362	179,302.45	6,014.49	89.2665		
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	2,008.6	84,362	179,302.45	6,014.49	89.2665		
Reverse Fuel Balance	XXXXXXXXXXXXX	xxxxxxxxxxx	(179,302.45)	xxxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXXXX	xxxxxxxxxxxx	182,544.86	*****			
Total @ 10/01/2019 Avg Price	2,008.6	84,362	182,544.86	6,014.49	90.8808		
Weighted Avg Cost/BBL by Location			89.2665	2.9943			
Weighted Avg Cost/BBL @ Avg Cost			90.8808	2.9943			

		WAIMEA DIES	EL					
			COST	LAND	COST PI	ER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP			LT	TOTAL
Balance at 08/31/2019	1,133.2	47,593.0	104,403.8	3,197.82				
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00				
Purchases: Estimate		(15,821)	(35,671.51)	(892.30)				
Atcual		15,821.0	35,671.5	0.00				
Transfers out: Estimate	:	****	****	****				
Atɑal		*****	*****	XXXXXXXXXXXXX				
Transfers in: Estimate	(5.7)	(241)		0.00				
Atcual	8.6	361	0.00	892.30				
Consumed: Estimate	322.7	13,555	29,938.09	1,065.52				
Atocual	(253.4)	(10,642)	(23,504.33)	(703.61)				
Balance Per G/L 08/31/2019	1,205.4	50,626	110,837.60	3,559.73	(	91.9523		
ULSD Purchases	188.1	7,902	14,145.64	445.67	-	75.1856		
Estimated Purchases	190.0	7,980	14,285.27	450.07				
Transfer in	****	(6)	0.00	0.00	#DIV/	0!		
Consumed	(103.5)	(4,347)	(9,884.60)	(292.08)	0	95.5034	2.8220	98.3254
Balance @ 09/30/2019	1,479.9	62,155	129,383.91	4,163.40	8	87.4286		
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	1,479.9	62,155	129,383.91	4,163.40	5	87.4286		
Reverse Fuel Balance	XXXXXXXXXXXXX	xxxxxxxxxxx	(129,383.91)	xxxxxxxxxxx				
Fuel Balance @ Avg Price	XXXXXXXXXXXX	*****	134,492.73	****				
Total @ 10/01/2019 Avg Price	1,479.9	62,155	134,492.73	4,163.40		90.8808		
Weighted Avg Cost/BBL by Location			87.4286	2.8133				
Weighted Avg Cost/BBL @ Avg Cost			90.8808	2.8133				

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

	ŀ	KANOELEHUA	DIESEL			
			COST	LAND		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		
Balance at 08/31/2019	997.0	41,874.0	107,455.3	1,327.4	1	
Less: Est'd Inventory Addition	0.0	0	0.00	0.00		
Purchases: Estimate	0.0	0	0.00	0.00		
Actual	0.0	0	0.00	0.00		
Transfers out: Estimate		х	х	x		
Actual		х	х	x		
Transfers in: Estimate		0	0.00	0.00		
Actual		0	0.00	0.00		
Consumed: Estimate	182.6	7,668	967.04	26.58		
Actual	(122.3)	(5,137)	(11,345.77)	(120.52)		
Balance Per G/L 08/31/2019	1,057.3	44,405	97,076.59	1,233.46		
ULSD Purchases	0	0	0.00	0.00	#DIV/0!	
Estimated Purchases	0	-	-	-		
Transfer in	0	0	0.00	0.00		
Consumed	(90.1)	(3,786)	(967.04)	(26.58)	95.50337435	1.3314
Balance @ 09/30/2019	967.1	40,619	96,109.55	1,206.88		
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	967.1	40,619	96,109.55	1,206.88		
Reverse Fuel Balance	х	х	(96,109.55)	x		
Fuel Balance @ Avg Price	х	х	87,892.53	x		
Total @ 10/01/2019 Avg Price	967.1	40,619	87,892.53	1,206.88		
Weighted Avg Cost/BBL by Location			99.3772	1.2479		
Weighted Avg Cost/BBL @ Avg Cost			90.8808	1.2479		

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

### DISPERSED GENERATION

	ISPERSED G			
	BBL	GALLONS	COST	COST/BBL
Balance at 08/31/2019	137.8	5,786	12,642.87	
Less: Est'd Inven Addition	0.0	****	XXXXXXXXX	
Purchases: Estimate Actual	0.0 0.0	0 0	0.00 0.00	
Consumed: Estimate Actual		981 (730)	•	
		xxxxxxxxxxx xxxxxxxxxxx		
		xxxxxxxxxxx xxxxxxxxxxx		
Balance Per G/L 08/31/2019	143.74	6,037	13,197.24	91.8145
Purchases	0.0	0	0.00	0.0000
Transfer out	****	****	xxxxxxxxxx	
Transfer in	****	****	xxxxxxxxxx	
Consumed	0.0	0	0.00	#DIV/0!
Balance @ 09/30/2019	143.7	6,037	13,197.24	91.8145
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 09/30/2019	143.7	6,037	13,197.24	
Reverse Fuel Balance Fuel Balance @ Avg Price		xxxxxxxxxxxx xxxxxxxxxxx	(13,197.24) xxx 13,063.03 xxx	
Total @ 10/01/2019 Avg Price	143.7	6,037	13,063.03	90.8808

CONTRACT PRICES EFFECTIVE September 1, 2019

### TYPE OF OIL BURNED

<u>TYPE OF OIL BURNED</u>				
	<u>Hill Indu</u>	<u>strial</u>	<u>Puna Ind</u>	ustrial
INDUSTRIAL *	<u>¢/MBTU</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>	<u>\$/BBL</u>
Tax <sup>1</sup>	107.16	6.7506	50.89	3.2058
Ocean Transportation	25.34	2.1410	20.88	1.3153
Storage	3.42	0.0000	6.35	0.4000
Wharfage	0.00	0.0000	0.00	0.0000
Fees <sup>2</sup>	0.00	0.0000	0.00	0.0000
	Hilo Die	esel	Waimea I	Diesel
DIESEL *	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax <sup>1</sup>	146.59	8.5896	146.59	8.5896
Ocean Transportation	33.72	2.3688	40.42	2.3688
Storage	6.83	0.4000	6.83	0.4000
Wharfage	0.00	0.0000	0.00	0.0000
Fees <sup>2</sup>	0.00	0.0000	0.00	0.0000
	Kona Di	esel	CT3 Die	esel
	¢/MBTU	\$/BBL	¢/MBTU	\$/BBL
Tax <sup>1</sup>	146.59	8.5896	146.59	8.5896
Ocean Transportation	48.52	2.8434	18.92	1.1088
Storage	6.83	0.4000	6.83	0.4000
Wharfage	0.00	0.0000	0.00	0.0000
Fees <sup>2</sup>	0.00	0.0000	0.00	0.0000
	ULSI	C		
ULSD **	¢/MBTU	\$/BBL		
Tax <sup>1</sup>	93.02	5.3306		
Ocean Transportation	36.01	2.0636		
Storage	0.00	0.0000		
Wharfage	0.00	0.0000		
Fees <sup>2</sup>	0.00	0.0000		

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

<sup>2</sup> With the change in supplier to PAR some fees have been taken off the pricing sheet.

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

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

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

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

# Hawaii Electric Light Company, Inc. PURCHASED POWER PRICES FOR October 1, 2019

		October 1, 2019 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW)	- on peak	14.417	6.560
PGV (22 MW)	- off peak	12.931	5.430
WAILUKU HYDRO	- on peak	14.417	7.240
	off peak	12.931	5.970
Other: (<100 KW)	Sch Q Rate	13.450	

		October 1, 2019 (¢/kWh)	Floor Rates (¢/kWh)
HEP		12.108	
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 October 1, 2019

Line No.	Description	Amount
1	Amount to be (returned) or collected	(\$3,027,900)
2	Monthly Amount $(^{1}/_{3} \times \text{Line 1})$	(\$1,009,300)
3	Revenue Tax Divisor	0.91115
4	Total (Line 2 / Line 3)	(\$1,107,721)
5	Estimated MWh Sales (October 1, 2019)	91,996 mwh
6	Adjustment (Line 4 / Line 5)	(1.204) ¢/kwh

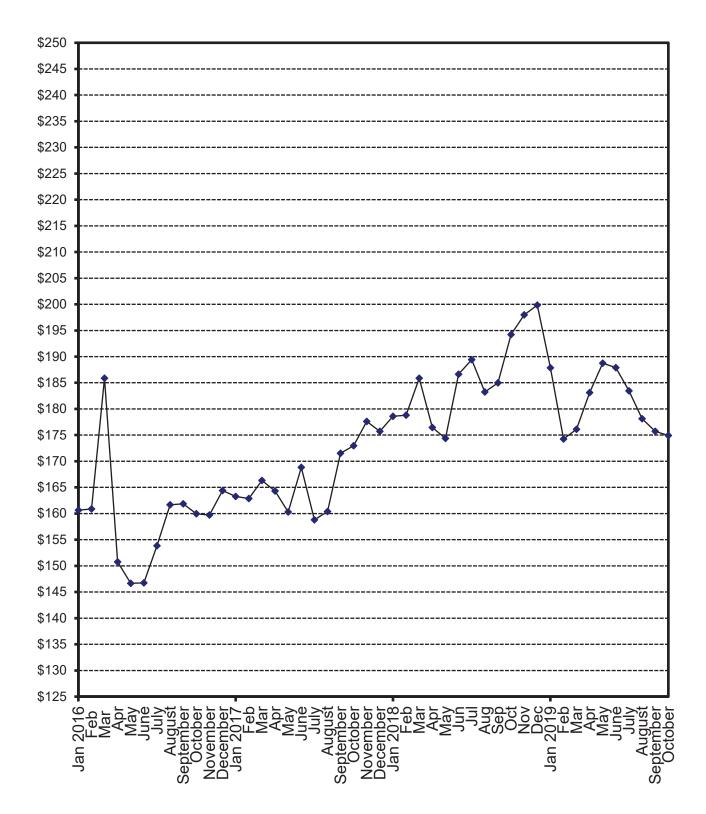
# HAWAII ELECTRIC LIGHT COMPANY, INC. 2019 Cumulative Reconciliation Balance

	(1) YTD FOA		(2) FOA Rec Adjust	(3) FOA Rec Less	(4) Try to	(5) Actual	(6) Month-end Cumulative
<u>Month</u>	Reconciliation	<u>Qtr</u>	Variance	<u>Variance</u>	Collect	<u>Collect</u>	<u>Balance</u>
January 18					(238,067)	(242,224)	1,462
February	825,100	[4]	(29,783)	854,883	(275,033)	(279,869)	576,476
March					(275,033)	(283,895)	292,581
April					(275,033)	(291,829)	752
Мау	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	- / <del>-</del>				(233,300)	(241,346)	(5,210)
November	917,000	[3]	(32,568)	949,568	(305,667)	(309,251)	635,107
December 1	8				(305,667)	(302,091)	333,016
January 19				0 000 054	(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				4 000 000	(866,300)	(829,484)	184,516
May	1,745,900	(1)	112,297	1,633,603	(581,967)	(565,304)	1,252,815
June					(581,967)	(585,631)	667,184
July	0.007.000	101	40.045	0 070 005	(581,967)	(586,240)	80,944
August	3,027,900	[2]	49,815	2,978,085	(1,009,300)	(1,025,775)	2,033,254
September					(1,009,300)		
October					(1,009,300)		

### NOTES:

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

# Hawaii Electric Light Company, Inc. Residential Bill at 500 KWH/Month Consumption



### HAWAII ELECTRIC LIGHT COMPANY, INC. FUEL OIL ADJUSTMENT FACTOR DATA

EFFECTIVE DATE	FUEL FACTOR CENTS / KWH RESIDENTIAL 8 <u>COMMERCIAL</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 June 1, 2017 July 1, 2017 August 1, 2017 September 1, 2017 October 1, 2017 December 1, 2017	-2.842 -2.956 -2.274 -2.425 -3.035 -1.343 -3.220 -3.643 -2.447 -2.131 -0.885 -1.405	163.27 162.87 166.31 164.31 160.30 168.82 158.79 160.39 171.52 172.97 177.60 175.02	195.58 195.09 199.24 196.83 192.02 202.25 190.22 192.15 205.50 207.23 212.80 209.69
January 1, 2018 February 1, 2018 March 1, 2018 April 1, 2018 June 1, 2018 July 1, 2018 August 1, 2018 September 1, 2018 October 1, 2018 November 1, 2018 December 1, 2018	-0.723 -0.579 0.816 -0.912 -0.452 2.301 2.831 1.665 2.027 8.359 8.913 9.292	178.59 178.81 185.87 176.46 174.38 186.65 189.43 183.25 184.98 194.21 197.99 199.86	213.95 214.22 222.68 211.39 208.90 223.63 226.97 219.55 221.62 232.50 237.04 239.29
January 1, 2019 February 1, 2019 March 1, 2019 April 1, 2019 May 1, 2019 June 1, 2019 July 1, 2019 August 1, 2019 September 1, 2019 October 1, 2019	$\begin{array}{c} 6.867 \\ 14.631 \\ 14.976 \\ 16.469 \\ 17.396 \\ 17.318 \\ 16.450 \\ 15.331 \\ 14.845 \\ 14.692 \end{array}$	187.86 174.25 176.1 183.12 188.74 187.89 183.46 178.14 175.70 174.93	224.86 208.53 210.75 219.17 225.93 224.90 219.63 213.25 210.32 209.40

### 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 - 5/31/16		
	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 1/1/2017	PURCHASED POWER ADJUSTMENT CLAUSE GREEN INFRASTRUCTURE FEE	2.3400 CENTS/KWH 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	RBA RATE ADJUSTMENT	0.6313 CENTS/KWH
10/1/2017 - 10/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.7257 CENTS/KWH
11/1/2017 - 11/30/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.4067 CENTS/KWH
12/1/2017 - 12/31/17	PURCHASED POWER ADJUSTMENT CLAUSE	2.4090 CENTS/KWH
1/1/2018 - 1/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.4105 CENTS/KWH
1/1/18-6/30/18	GREEN INFRASTRUCTURE FEE	1.3400 DOLLARS/MONTH
2/1/18-2/28/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3101 CENTS/KWH
3/1/18 - 3/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3258 CENTS/KWH
04/1/18-04/30/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3184 CENTS/KWH
04/1/18-04/30/18	SOLARSAVER ADJUSTMENT	-0.1464 CENTS/KWH
05/1/18-05/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	2.3395 CENTS/KWH
05/1/18-05/31/18	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2018	INTERIM RATE INCREASE 2016	2.5000 PERCENT ON BASE
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
7/1/2018-12/31/18	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
08/01/18-08/31/18	PURCHASED POWER ADJUSTMENT CLAUSE	1.6110 CENTS/KWH
	PURCHASED POWER ADJUSTMENT CLAUSE	
09/01/18-09/30/18		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 10/0	
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
06/01/2019-6/30/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.9474 CENTS/KWH
6/1/2019	RBA RATE ADJUSTMENT	0.9069 CENTS/KWH
7/01/2019-7/31/19	PURCHASED POWER ADJUSTMENT CLAUSE	1.9539 CENTS/KWH
7/01/2019-7/31/19 7/1/2019		
	GREEN INFRASTRUCTURE FEE	1.1700 DOLLARS/MONTH
7/1/2019		0.4775 CENTS/KWH
<b>7/1/2019</b> 8/1/2019-8/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.0075 CENTS/KWH
7/1/2019 8/1/2019-8/31/2019 9/1/2019-9/30/2019 10/1/2019-10/31/2019		

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

	Rate			Charge (\$) at 500			Kwh
		09/01/19	10/01/19		09/01/19	10/01/19	Difference
Base Rates	effective date:	2/1/2019	2/1/2019				
Base Fuel Energy Charge	¢/kwh	-	-		\$0.00	\$0.00	\$0.00
Non-Fuel Energy Charge	¢/kwh				\$71.85	\$71.85	\$0.00
First 300 kWh per month	¢/kwh	13.0289	13.0289		\$39.09	\$39.09	\$0.00
Next 700 kWh per month	¢/kwh	16.3807	16.3807		\$32.76	\$32.76	\$0.00
Customer Charge	\$	11.50	11.50		\$11.50	\$11.50	\$0.00
Total Base Charges					\$83.35	\$83.35	\$0.00
Interim Rate Increase 2016 TY	% on base	0.0000%	0.0000%		\$0.00	\$0.00	\$0.00
RBA Rate Adjustment	¢/kwh	0.9069	0.9069		\$4.53	\$4.53	\$0.00
Purchased Power Adj. Clause	¢/kwh	2.0060	2.0069		\$10.03	\$10.03	\$0.00
PBF Surcharge	¢/kwh	0.4775	0.4775		\$2.39	\$2.39	\$0.00
DSM Adjustment	¢/kwh	0.0000	0.0000		\$0.00	\$0.00	\$0.00
SolarSaver Adjustment	¢/kwh	0.0000	0.0000		\$0.00	\$0.00	\$0.00
Energy Cost Recovery	¢/kwh	14.8450	14.6920		\$74.23	\$73.46	-\$0.77
Green Infrastructure Fee	\$	1.1700	1.1700		\$1.17	\$1.17	\$0.00

### Calculations of the Average Residential Customer Bill

Avg Residential Bill at 500 kwh

Increase (Decrease -) % Change

\$174.93

\$175.70

-\$0.77 -0.44%

		Rate			e (\$) at 600	) Kwh
		09/01/19	10/01/19	09/01/19	10/01/19	Difference
Base Rates	effective date:	2/1/2019	2/1/2019			
Base Fuel/Energy Charge	¢/kwh	2/1/2010	2/1/2010	\$0.00	\$0.00	\$0.00
Non-Fuel Energy Charge	¢/kwh	_	_	\$88.23	\$88.23	
••• •	'	12 0200	12 0200			-
First 300 kWh per month	¢/kwh	13.0289	13.0289	\$39.09	\$39.09	\$0.00
Next 700 kWh per month	¢/kwh	16.3807	16.3807	\$49.14	\$49.14	
Customer Charge	\$	11.50	11.50	\$11.50	\$11.50	\$0.00
Total Base Charges				\$99.73	\$99.73	\$0.00
Interim Rate Increase 2016 TY	% on base	0.0000%	0.0000%	\$0.00	\$0.00	\$0.00
RBA Rate Adjustment	¢/kwh	0.9069	0.9069	\$5.44	\$5.44	\$0.00
Purchased Power Adj. Clause	, ¢/kwh	2.0060	2.0069	\$12.04	\$12.04	\$0.00
PBF Surcharge	¢/kwh	0.4775	0.4775	\$2.87	\$2.87	\$0.00
DSM Adjustment	¢/kwh	0.0000	0.0000	\$0.00	\$0.00	\$0.00
SolarSaver Adjustment	¢/kwh	0.0000	0.0000	\$0.00	\$0.00	\$0.00
Energy Cost Recovery	¢/kwh	14.8450	14.6920	\$89.07	\$88.15	-\$0.92
Green Infrastructure Fee	\$	1.1700	1.1700	\$1.17	\$1.17	\$0.00
Avg Residential Bill at 600 kwh				\$210.32	\$209.40	

Increase (Decrease -) % Change -\$0.92 -0.44%