

January 27, 2022

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

Dear Commissioners:

Subject: Hawai'i Electric Light Energy Cost Recovery Factor for February 2022

Hawai'i Electric Light Company, Inc.'s ("Hawai'i Electric Light" or "Company") Energy Cost Recovery factor for February 2022 is 20.361 cents per kilowatt-hour ("kWh"), a decrease of 0.581 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$207.20, a decrease of \$3.16 compared to rates effective January 1, 2022. The decrease in the residential bill is due to the decrease in the Energy Cost Recovery Factor (-\$2.90) and decrease in the Purchased Power Adjustment Clause rate (-\$0.27), partially offset by the increase in the Residential DSM Adjustment (+0.01).

Hawai'i Electric Light's fuel composite cost of generation decreased 40.20 cents per million BTU to 1,560.49 cents per million BTU. The composite cost of distributed generation increased 0.075 cents per kWh to 16.673 cents per kWh. The composite cost of purchased energy decreased 1.218 cents per kWh to 14.988 cents per kWh.

Hawai'i Electric Light has determined that the target sales heat rates will be revised to 0.014970 million BTU per kilowatt-hour for industrial fuel oil and 0.010915 million BTU per kilowatt-hour for diesel fuel for 2022. The Company includes supporting calculations for the target sales heat rate adjustment in Attachment 10. A revised ECRC tariff reflecting the revised target sales heat rates for 2022 is included as Attachment 11. A blackline version of the revised ECRC tariff is included as Attachment 12. The Company files the ECRC tariff sheets in accordance with the Hawai'i Electric Light tariff, which states:

2. The target heat rates for industrial fuel and diesel shall be reestablished each calendar year. The target heat rate for each calendar year shall be equal to the target heat rate in effect for the prior calendar year plus one-half of the difference between the target heat rate and the actual heat rate for the prior calendar year.¹

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¹ See Hawai'i Electric Light's ECRC Tariff, Sheet No. 63B.

The Honorable Chair and Members of the Hawai'i Public Utilities Commission January 27, 2022 Page 2

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 February 1, 2022.

Very truly yours,

/s/ Dean K. Matsuura

Dean K. Matsuura Director, Regulatory Rate Proceedings

Attachments

cc: Division of Consumer Advocacy

ENERGY COST RECOVERY FACTOR

	EFFECTIVE DATES		
	1/01/22	2/01/22	<u>Change</u>
Composite Cost			
Generation, ¢/mmbtu Dispersed Generation Energy, ¢/kWh Purchased Energy, ¢/kWh	1,600.69 16.598 16.206	1,560.49 16.673 14.988	(40.20) 0.075 (1.218)
Residential Schedule "R"			
Energy Cost Recovery - ¢/kWh	20.942	20.361	(0.581)
Others - "G,J,P,F"			
Energy Cost Recovery - ¢/kWh	20.942	20.361	(0.581)
Residential Customer with:			
500 KWH Consumption - \$/Bill 600 KWH Consumption - \$/Bill	210.36 251.90	\$207.20 \$248.09	(\$3.16) (\$3.81)

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

ENERGY COST RECOVERY (ECR) FILING - February 1, 2022 (Page 1 of 2)

Line

1 Effective Date February 1, 2022 2 Supercedes Factors of January 1, 2022

GENERATION COMPONENT

С	CENTRAL STAT	ION WITH WIND	HYDRO COMPON	IENT			
	FUEL PRICES,						
3	,						
4	Hill Industrial			1,390.18			
5	Puna Industria	ıl		1,415.22			
6	Keahole Diese			1.761.31			
	Keahole ULSE			1,683.07			
	Waimea ULSD			1,671.88			
8		Diesei		,			
-	Hilo Diesel	\		1,719.24			
		ua) ULSD Diesel¹		1,644.94			
9	Puna Diesel			1,733.06		DG ENERGY COMPONENT	
10	Wind			0.00	35	COMPOSITE COST OF DG	
11	Hydro			0.00		ENERGY, ¢/kWh	16.67
	•				36	% Input to System kWh Mix	0.15
	BTU MIX, %					,	
12					37	WEIGHTED COMPOSITE DG ENERGY COST,	
13	Hill Industrial			34.761	01	¢/kWh (Lines 35 x 36)	0.0258
14	Puna Industria	d		13.163		y/KVVII (Ellies 05 X 50)	0.0230
15	Keahole Diese			46.144	20	BASE DG ENERGY COMPOSITE COST	0.00
					30	BASE DG ENERGY COMPOSITE COST	0.00
	Keahole ULSE			0.103	20	Dana O/ Iranit ta Contant IAMIr Min	
16	Waimea ULSI	ופseו כ		0.599		Base % Input to System kWh Mix	0.0
17	Hilo Diesel			0.020	40	WEIGHTED BASE DG ENERGY COST,	
17a	Hilo (Kanoelehu	ua) ULSD Diesel¹		0.073		¢/kWh (Line 38 x 39)	0.0000
18	Puna Diesel			3.746			
19	Wind			0.000	41	Cost Less Base (Line 37 - 40)	0.0258
20	Hydro			1.390	42	Loss Factor	1.06
	•			100.00000	43	Revenue Tax Req Multiplier	1.097
21	COMPOSITE C	OST OF GENER	ATION			DG FACTOR, ¢/kWh	
		ATION + WIND/H		1,560.49		(Line 41 x 42 x 43)	0.0301
22	% Input to Syste		TI DI CO PITITIDIO	53.729		(Ellio 41 X 42 X 40)	0.0001
	(A)	ACTOR, mmbtu/k (B) Eff Factor mmbtu/kwh	(C) Percent of Centrl Stn + Wind/Hydro	(D) Weighted Eff Factor			
23	Industrial	0.014970	47.924	0.007174			
24		0.010915	50.686	0.005532			
25	Other	0.012426	1.390	0.000173			
			100.0000	0.000173			
		ency Factor, mmb 24(D) + 25(D)]		0.0128790			
27		OMPOSITE CENT O GENERATION (2 x 26))		10.79821			
28		AL STATION + WI ON COST, ¢/mmb		0.00			
	Base % Input to			0.00			
30	Efficiency Facto	or, mmbtu/kwh		0.000000			
31	WEIGHTED BA	ASE CENTRAL ST	TATION +				
	WIND/HYDRO	GENERATION (COST ¢/kWh				
	(Lines (28 x 2		•	0.00000			
	, - , , -	//				SUMMARY OF	
32	COSTLESS BA	ASE (Line 27 - 31)	10.79821		TOTAL GENERATION FACTOR, ¢/kWh	
	Revenue Tax R		,	1.0975	45	Cntrl Stn+Wind/Hydro (line 34)	11.8510
		TION + WIND/HY	/DRO	1.0373		DG (line 44)	0.0301
:34	OLIVINAL OIA						0.0001
34	GENIERATION	FACTOR				TOTAL GENERATION FACTOR	
34	GENERATION ¢/kWh (Line (,		11.85104	47	TOTAL GENERATION FACTOR, ¢/kWh (lines 45 + 46)	11.8811

 $^{^{\}mathrm{1}}\,$ Hilo ULSD same location as Kanoelehua ULSD

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

ENERGY COST RECOVERY (ECR) FILING - February 1, 2022 (Page 2 of 2)

Line	PURCHASED I	ENERGY COMPONEN	<u>IT</u>	<u>Line</u>	Calculation of Monthly Fossil Fuel Cost Risk Sharing Compone	<u>nt</u>
	PURCHASED ENERGY PR	RICE, ¢/kWh Fossil			Baseline IFO	
48	HEP	• •	19.884	94	IFO \$, baseline month	\$3,767,797
				95	IFO mmbtu, baseline	273,732
	PURCHASED ENERGY PR	RICE ¢/kWh Renewable		96	Baseline IFO, ¢/mmbtu	1376.45
49	PGV	On Peak	16.644	00	Date in C, principle	10.0.10
	PGV	Off Peak	17.381		Baseline Diesel	
	PGV - Add'l 5 MW	On Peak	13.650	97	Diesel \$, baseline month	\$5,283,114
	PGV - Add'l 5 MW	Off Peak	13.650	98	Diesel mmbtu, baseline	278,017
	PGV - Add'l 8 MW	On Peak	6.940	99	Baseline Diesel, c/mmbtu	1,900.28
	PGV - Add'l 8 MW	Off Peak	6.940			
55	Wailuku Hydro	On Peak	16.644		Month IFO	
56	Wailuku Hydro	Off Peak	17.381	100	IFO mmbtu, budget	239,502
57	Hawi Renewable Dev.	On Peak	16.644	101	IFO Cost, ¢/mmbtu	1,397.06
58	Hawi Renewable Dev.	Off Peak	17.381	102	IFO ECRC Fossil Cost	\$3,345,986
59	Tawhiri (Pakini Nui)	On Peak	14.360	103	IFO Base ECRC Recovery Target	\$3,296,642
	Tawhiri (Pakini Nui)	Off Peak	13.730	104	IFO differential	\$49,344
	HEP Biodiesel	on roun	19.884			ψ.ο,σ
	Small Hydro (>100 KW)	On Peak	16.644		Month Diesel	
		Off Peak	17.381	105		253,301
	Small Hydro (>100 KW)	Oil Peak		105	Diesel mmbtu, budget	
	CBRE		15.000	106	Diesel Cost, ¢/mmbtu	1,757.82
	Sch Q Hydro (<100 KW)		16.580	107	Diesel ECRC Fossil Cost	\$4,452,577
65	FIT		23.800	108	Diesel Base ECRC Recovery Target	\$4,813,436
				109	Diesel differential	-\$360,860
	PURCHASED ENERGY KV	NH MIX, %,		110	Total Fossil	-\$311,516
66	HEP, Fossil		3.570	111	2% of above	-\$6,230
	PURCHASED ENERGY KV			112	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	\$0
67	PGV	On Peak	25.203	113	Maximum Annual Cap (bi-directional)	\$600,000
68	PGV	Off Peak	15.842	114	Number of Days in year from implementation	365
69	PGV - Addt'l	On Peak	5.040	115	Fossil Risk % Proration (based on 365 day year)	100.00%
70	PGV - Addt'l	Off Peak	3.598	116	Maximum Annual Cap (bi-directional) prorated	\$600,000
	PGV - Add'l 8 MW	On Peak	7.590	117	Applicable Monthly Fossil Fuel Cost Risk Sharing	-\$6,230
	PGV - Add'l 8 MW	Off Peak	7.793	118	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$6,230
	Wailuku Hydro	On Peak	1.440	110	rotal Monthly roots ruoi Goot ruoi Ghanng, molading rino Month	ψ0,200
	Wailuku Hydro	Off Peak	1.002	119	Fossil Cost Risk Sharing before taxes	-\$6,230
	Hawi Renewable Dev.	On Peak	2.894	120	Revenue Tax Adjustment	1.097514
	Hawi Renewable Dev.	Off Peak	1.877	121	Fossil Cost Risk Sharing w/revenue tax	-\$6,838
	Tawhiri (Pakini Nui)	On Peak	9.584	122	Forecasted Month MWh Sales	75,338
	Tawhiri (Pakini Nui)	Off Peak	7.047	123	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	0.0091
	HEP Biodiesel		6.372			
	Small Hydro (>100 KW)	On Peak	0.000	Derivation of No	on-Adjustable Component:	
81	Small Hydro (>100 KW)	Off Peak	0.000			
	CBRE		0.258			
	Sch Q Hydro (<100 KW)		0.000	93A	Ocean Cargo Insurance Exp, \$000	\$13.1
	FIT		0.890		HELCO-603, page 1, line 4	,
I			100.000	93B	Revenue Tax Adjustment	1.097514
			100.000	93D 93C	Non-Adj Revenues, \$000	\$14.4
00-	Comp. Coat Durahas - 1 5	rm, Fassil 4/k/Mb	10.0040			
	Comp. Cost Purchased Ene		19.8840	93D	2019 TY Sales, MWh	1,061,718
	Comp. Cost Purchased Ene		14.8066	_	HELCO-301	
84	COMPOSITE COST OF PU	IRCHASED		93E	Non-Adj Revenues, ¢/kWh	0.00135
	ENERGY, ¢/kWh		14.988			
85	% Input to System kWh Mix		46.116			
	WEIGHTED COMPOSITE I					
	COST, ¢/kWh (Lines (84 x		6.91187			
87	BASE PURCHASED ENER	RGY				_
1	COMPOSITE COST, ¢/kW		0.000	Line	SYSTEM COMPOSITE	
88	Base % Input to Sys kWh M		0.00			
	WEIGHTED BASE PURCH		0.00	124	GENERATION AND PURCHASED ENERGY	
1	COST, ¢/kWh (Lines (87 x		0.00000	124	FACTOR, ¢/kWh (Lines (47 + 93))	19.93726
	CCCT, WINVIII (LINES (OT X	.00,,	5.00000	105	Fossil Fuel Cost Risk Sharing Component (Line 123)	0.009
00	COST FOO DAGE # : /	06 90))	6.04407			
	COST LESS BASE (Lines (oo - oa))	6.91187		Non-Adjustable Component (Line 93E)	0.00135
	Loss Factor		1.062		ECA Reconciliation Adjustment	0.413
	Revenue Tax *		1.0975	128	ECA FACTOR, ¢/kWh	20.361
93	PURCHASED ENERGY FA	ACTOR, ¢/kWh	8.05610		(Lines (124 + 125 + 126 + 127))	
	(Lines (90 x 91 x 92))					

Hawaii Electric Light Company, Inc.

FUEL OIL INVENTORY PRICES FOR February 1, 2022

INDUSTRIAL FUEL COSTS: Average Industrial Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	<u>HILO</u> 87.5813 	<u>PUNA</u> 87.5813 1.5775		
Industrial Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	87.5813 6.30	89.1588 6.30		
Industrial Costs For Filing - ¢/mmbtu	1,390.18	1,415.22		
DIESEL FUEL COSTS: Average Diesel Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 99.5518 3.6612	PUNA CT-3 99.5518 2.0054	HILO 99.5518 1.1958	
Diesel Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	103.2130 5.86	101.5572 5.86	100.7476 5.86	
Diesel Costs For Filing - ¢/mmbtu	1,761.31	1,733.06	1,719.24	1
ULSD FUEL COSTS: Average ULSD Fuel Cost - \$/BBL Land Transportation Cost - \$/BBL	KEAHOLE 92.8968 3.5430	WAIMEA 92.8968 2.9022	HILO 92.8968 1.3582	DISPERSED GENERATION 92.8968 -
ULSD Costs For Filing - \$/BBL Conversion Factors - mmbtu/BBL	96.4397 5.73	95.7989 5.73	94.2550 5.73	92.8968 5.73
ULSD Costs For Filing - ¢/mmbtu	1,683.07	1,671.88	1,644.94	1,621.24

Dispersed Generation, cents per kWh

	COMPOSITE COST
	<u>OF DISP. GEN.</u>
BBIs Fuel:	224.7975
\$/BBI Inv Cost:	92.8968
Fuel \$ (Prod Sim Consumption x Unit Cost)	20,882.96
Net kWh (from Prod Sim)	125,250
cents/kWh:	16.673

Estimated Weighted Average February 2022

SHIPMAN INDUSTRIAL HILL INDUSTRIAL COST PER BARREL BBL COST BBL COST EXCL LT LT Total 31,439 0.00 Balance at 12/31/2021 0 2,745,381.00 Less: Est'd Inventory Addn 0 0.00 Purchases: Estimate xxxxxx xxxxxxxxxxxxxxxxx XXXXXXXXX XXXXXXXXXXXXXXXX Actual XXXXXX XXXXXXXXXXXXXXXX XXXXXXXXX XXXXXXXXXXXXXXXX Transfers out: Estimate XXXXXX XXXXXXXXXXXXXXXXX XXXXXXXXX XXXXXXXXXXXXXXXX Actual XXXXXX XXXXXXXXXXXXXXXXX XXXXXXXXX XXXXXXXXXXXXXXXX Transfers in: Estimate 0 0.00 (32,740)(2,887,769.40) 0 0.00 Actual 30,834 2,834,251.18 Consumed: Estimate 0 0.00 32,452 2,931,560.62 Actual 0 0.00 (2,924,062.80) (32,369)Balance Per G/L 12/31/2021 0 0.00 29,616 2,699,360.61 Purchases XXXXXX XXXXXXXXXXXXXXXX XXXXXXXXX XXXXXXXXXXXXXXXX Transfer out XXXXXXXXX XXXXXXXXXXXXXXX XXXXXX XXXXXXXXXXXXXXXX Transfer in 0 0.00 45,267 3,864,874.68 Consumed 0 0.00 0.0000 106.5901 (33,173)(2,863,102.32) 106.5901

41,710

41,710

xxxxxxxx

xxxxxxxxx

41,710

0

0

3,701,132.97

3,701,132.97

(3,701,132.97)

3,653,014.11

3,653,014.11

0.00

0.00

Weighted Avg Cost/BBL by Location #DIV/0! 88.7349
Weighted Avg Cost/BBL @ Avg Cost #DIV/0! 87.5813

0.00

0.00

0.00

0.00

0.00

0.00

0.00

0

0

0

0

xxxxx

xxxxx

0

Balance @ 01/31/2022

Inv From Offsite/Transfers

Fuel Balance @ 01/31/2022

Total @ 02/01/2022 Avg Price

Est'd Inventory Addition

Reverse Fuel Balance

Fuel Bal @ Avg Price

Estimated Weighted Average February 2022

PUNA INDUSTRIAL

			LAND	COST PER BARRI		
	BBL	COST	TRANSP	EXCLUDE LT	LT	TOTAL
Balance at 12/31/2021	8,141	736,003.79	12,583.21			
Less: Est'd Inventory Addition	0	0.00	0.00			
Durch acces Setiments						
Purchases: Estimate			XXXXXXXXXXXXXXXXXXXXXX			
Actual	XXXXXXXXXXXX	CXXXXXXXXXXXXXXX	xxxxxxxxxxxxxxxx			
Transfers out: Estimate	xxxxxxxxxxx	«xxxxxxxxxxx	xxxxxxxxxxxxxxxxx			
Actual			xxxxxxxxxxxxxxxxx			
Transfers in: Estimate	(1,973)	(186,234.27)	(2,595.11)			
Actual	1,973	186,237.30	2,735.84			
Consumed: Estimate	3,127	282,478.43	4,626.42			
Actual	(1,715)	(154,925.01)	(2,280.45)			
Balance Per G/L 12/31/2021	9,553	863,560.24	15,069.92	_		
Purchases	xxxxxxxxxxx	«xxxxxxxxxxx	XXXXXXXXXXXXXXXXXXXXXX			
Transfer out	vvvvvvvvvvv	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	xxxxxxxxxxxxxxxxx			
Transfer out	**********	***********	*****************			
Transfer in	0	0	0.00			
	-					
Consumed	0	0.00	0.00	86.3082	1.5457	87.8539
	_		-			
Balance @ 01/31/2022	9,553	863,560.24	15,069.92			
Inventory From Offsite/Transfers	0	0.00	0.00			
Est'd Inventory Addition	0	0.00	0.00			
Fuel Bal @ Avg Price	9,553	863,560.24	15,069.92		1.5775	
Poverse Fuel Pelez ss		(962.500.24)				
Reverse Fuel Balance	XXXXXXXXXXX		xxxxxxxxxxxxxxxxxx			
Fuel Balance @ Avg Price	XXXXXXXXXXX	830,063.72	xxxxxxxxxxxxxxxxx			
Total @ 02/01/2022 Avg Price	9,553	836,663.72	15,069.92	-		
1. 552. 6 52/52/2522/10611166	3,333	333,003.72	13,003.32			
Weighted Avg Cost/BBL by Location		90.3968	1.5775			
		30.0330	2.3773			
Weighted Avg Cost/BBL @ Avg Cost		87.5813	1.5775			
5 5 5 6 6 6		3 	=:=,,,			

Estimated Weighted Average February 2022

PUNA CT-3

Р	UNA CI-3					
		COST	LAND	COST PER E	BARREL	
BBL	GALLONS	EXCLUD LT	TRANSP	EXCL LT	LT	TOTAL
6 705 0	202.072.0	755 400 4	4 740 0			
6,/35.0	282,872.0	/55,439.4	4,/12.2			
0.0	0.0	0.0	0.0			
х	xxxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx			
X	xxxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx			
х	xxxxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx			
Х	xxxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx			
(13,649.2)	(573,265.0)	(1,450,568.0)	(17,599.2)			
8,725.3	366,464.0	926,924.4	11,197.8			
11,858.0	498,035.0	1,220,396.0	26,965.2			
(9,921.8)	(416,716.0)	(1,050,992.7)	(21,772.2)			
3,747.4	157,390	401,199.16	3,503.82			
xxxxxxxxxx x	xxxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx			
xxxxxxxxxx x	xxxxxxxxxxxx	xxxxxxxxxxx	xxxxxxxxxx			
8,027.7	337,164.0	800,863.0	11,385.7	99.7623		
(6,681.5)	(280,624)	(723,423.5)	(4,674.80)	108.2722	0.6997	108.9719
5.093.6	213.930	478.638.60	10.214.73	93.9692		
0.0	0	0.00	0.00			
0.0	0	0.00	0.00			
5,093.6	213,930	478,638.60	10,214.73	93.9692		
XXXXXXXXXXX X	xxxxxxxxxxxxx	. , ,				
XXXXXXXXXXX X	xxxxxxxxxxxxx	507,074.10	XXXXXXXXXXX			
5,093.6	213,930	507,074.10	10,214.73	99.5518		
	BBL 6,735.0 0.0 0.0 x x x x (13,649.2) 8,725.3 11,858.0 (9,921.8) 3,747.4 xxxxxxxxxxxx x xxxxxxxxxx x 8,027.7 (6,681.5) 5,093.6 0.0 0.0 5,093.6 xxxxxxxxxxx x xxxxxxxxxx x xxxxxxxxxx	6,735.0 282,872.0 0.0 0.0 XXXXXXXXXXXXXXXXXXXXXXXXXXX	BBL GALLONS EXCLUD LT 6,735.0 282,872.0 755,439.4 0.0 0.0 0.0 XXXXXXXXXXXXXXX XXXXXXXXXX	BBL GALLONS EXCLUD LT TRANSP 6,735.0 282,872.0 755,439.4 4,712.2 0.0 0.0 0.0 0.0 0.0 XXXXXXXXXXXXXXXXX	BBL GALLONS EXCLUD LT TRANSP EXCL LT 6,735.0 282,872.0 755,439.4 4,712.2 0.0 0.0 0.0 0.0 0.0 XXXXXXXXXXXXXXXXX	COST

Weighted Avg Cost/BBL by Location 93.9692 2.0054

Weighted Avg Cost/BBL @ Avg Cost 99.5518 2.0054

HAWAII ELECTRIC LIGHT CO., INC. Estimated Weighted Average February 2022

KEAHOLE DIESEL

Weighted Avg Cost/BBL @ Avg Cost

		REATIOLE DIESEL	COST	LAND	COST PER B	ΔRRFI	
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
	552	3,1220113	LAGEODE ET	110 (140)	1.010D L1		
Balance at 12/31/2021	50,452.3	2,118,995.0	5,436,251.4	178,191.1			
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		***************************************	***************************************	xxxxxxxxxxxxxxx			
Actual				XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			
Actual							
Transfers in: Estimate	(30,954.7)	(1,300,097.0)	(3,259,867.5)	(102,577.7)			
Actual	30,727.8	1,290,569.0	3,475,543.8	108,187.92			
Consumed: Estimate	31,493.9	1,322,744.0	3,241,281.3	120,500.73			
Actual	(32,066.5)	(1,346,792.0)	(3,577,316.1)	(128,138.0)	111.5594		
Balance Per G/L 12/31/2021	49,652.8	2,085,419	5,315,892.75	176,164.13	107.0612		
Balance Fel G/L 12/31/2021	49,032.8	2,005,419	3,313,632.73	170,104.13	107.0012		
Purchases	xxxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxxx	xxxxxxxxxxxxxxx			
Transfer out	xxxxxxxxxx	xxxxxxxxxxxx	xxxxxxxxxxxxx	xxxxxxxxxxxxxx			
Transfer in	45,662.3	1,917,816.0	4,605,281.1	166,448.2	100.8552		
Transier in	43,002.3	1,517,010.0	4,005,201.1	100,440.2	100.8332		
Consumed	(49,138.4)	(2,063,811.0)	(5,320,319.9)	(173,550.60)	108.2722	3.5319	111.8041
Balance @ 01/31/2022	46,176.8	1,939,424	4,600,853.91	169,061.70	99.6357		
Inventory From Offsite/Transfers	0.0	0.0	0.0	0.00			
Est'd Inventory Addition	0.0	0	0.0	0.00			
Eugl Balanca @ Aug Brica	46,176.8	1,939,424	4,600,853.91	169,061.70	99.6357		
Fuel Balance @ Avg Price	40,170.8	1,939,424	4,000,853.91	109,001.70	75.035/		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxxx	(4.600.853.9)	xxxxxxxxxxxxxx			
Fuel Balance @ Avg Price		XXXXXXXXXXXXX		XXXXXXXXXXXXXXXX			
			,,-				
Total @ 02/01/2022 Avg Price	46,176.8	1,939,424	4,596,978.81	169,061.70	99.5518		
Weighted Avg Cost/BBL by Location			99.6357	3.6612			

99.5518

3.6612

HAWAII ELECTRIC LIGHT CO., INC. Estimated Weighted Average February 2022

TOTAL HILO HS-DIESEL

			000=	1 4 4	000= 55=	D.4.D.E.=:	1
luc Birral	D.S.1	CALLONG	COST	LAND	COST PER		TOTA:
HS Diesel	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCL LT	LT	TOTAL
Palance at 12/21/2021	1202.2	E0 E20	152 600	1 202			
Balance at 12/31/2021	1393.3	58,520	153,666	1,392			
Less: Est'd Inven Addition	0.0	0	0	0			
Less. Est a liveli Addition	0.0	U	U	O			
Purchases: Estimate		xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx			
Actual		xxxxxxxxxx	xxxxxxxxxx	xxxxxxxxxx			
Transfers out: Estimate		xxxxxxxxx	xxxxxxxxx	xxxxxxxxx			
Actual		xxxxxxxxxx	xxxxxxxxx	xxxxxxxxxx			
Transfers in: Estimate	-944.8	-39680.0	-101022.2	-1075.3			
Actual	750.1	31505.0	80713.4	860.7			
Consumed: Estimate	1497.4	62889.0	154104.6	2318.0			
Actual	-1193.6	-50130.0	-126604.5	-1797.1			
Balance Per G/L 12/31/2021	1502.5	63,104	160,856.93	1,698.04	107.0612		
Bl.							
Purchases	xxxxxxxxxx	XXXXXXXXXX	XXXXXXXXXX	xxxxxxxxxx			
Transfer out		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Transfer out	*****	XXXXXXXXXX	*****	XXXXXXXXXX			
Transfer in	562.5	23626.0	57300.1	704.3	#DIV/0!		
Transfer in	302.3	23020.0	37300.1	704.3	#DIV/0:		
Consumed	-340.5	-14299.0	-36861.5	-340.1	108.2722	0 9989	109.2711
consumed	3.0.3	1 123310	50002.5	3.0.1	100.2722	0.5505	103.2711
Balance @ 01/31/2022	1,724.5	72,431	181,295.52	2,062.25	105.1264		
Inven From Offsite/Transfers	0.0	· ·	-				
Est'd Inventory Addition	0.0						
· ·							
Fuel Balance @ Avg Price	1,724.5	72,431	181,295.52	2,062.25	105.1264		
Reverse Fuel Balance	xxxxxxxxx	xxxxxxxxxx	-181,295.52	xxxxxxxxxx			
Fuel Balance @ Avg Price	xxxxxxxxx	xxxxxxxxxx	171,681.78	xxxxxxxxxx			
Total @ 02/01/2022 Avg Price	1,724.5	72,431	171,681.78	2,062.25	99.5518		
		-					
Weighted Avg Cost/BBL by Location			105.1264	1.1958			
Weighted Avg Cost/BBL @ Avg Cost			99.5518	1.1958			

Estimated Weighted Average February 2022

KEAHOLE ULSD

			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP	EXCLUD LT	LT	TOTAL
	555	3/1220113	LACEODE ET	110 (145)	LACEOD ET		TOTAL
Balance at 12/31/2021	2,298.9	96,552	208,751.77	8,643.92			
, ,	,	,	,	,			
Less: Est'd Inventory Addition	0.0						
Purchases: Estimate	(190.0)	(7,980)	(20,588.40)				
Actual	0.0	0	0.00	0.00			
Transfers out: Estimate		vvvvvvvvvv	xxxxxxxxxxxx	·			
Actual							
Actual		**********	xxxxxxxxxxxx	*********			
Transfers in: Estimate		(2)	0.00	(0.16)			
Actual		178	0.00	0.00			
Consumed: Estimate	211.4	8,879	18,866.05	909.45			
Actual	(207.5)	(8,714)	(18,515.46)	(1,412.73)	89.2414		
Balance Per G/L 12/31/2021	2,117.0	88,913	188,513.96	7,510.86	89.0487		
			0.00	0.00	0.000		
Purchases	0.0	0	0.00	0.00	0.0000		
Estimated Purchases	190.0	7,980	20,588.40	692.59			
		,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Transfer in	2.2	92	0.00	7.98	0.00		
Consumed	(138.8)	(5,831)	(12,839.34)	(522.03)	92.4802	3.7601	96.2403
Consumed	(130.0)	(3,831)	(12,033.34)	(322.03)	32.4602	3.7001	30.2403
Balance @ 01/31/2022	2,170.3	91,154	196,263.02	7,689.41	90.4299		
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	2,170.3	91,154	196,263.02	7,689.41	90.4299		
Reverse Fuel Balance	XXXXXXXXXX	xxxxxxxxxx	(196,263.02)	xxxxxxxxxx			
Fuel Balance @ Avg Price		xxxxxxxxxx	. , ,	xxxxxxxxxx			
			,				
Total @ 02/01/2022 Avg Price	2,170.3	91,154	201,616.96	7,689.41	92.8968		
Maintand Ave Cont (SS)			00.4000	2.5420			
Weighted Avg Cost/BBL by Location			90.4299	3.5430			

92.8968

3.5430

Weighted Avg Cost/BBL @ Avg Cost

HAWAII ELECTRIC LIGHT CO., INC. Estimated Weighted Average February 2022

WAIMEA DIESEL

			COST	LAND	COST PER BARREL		
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP		LT	TOTAL
Balance at 12/31/2021	855.9	35,949.0	83,899.9	2,422.33			
Less: Est'd Inven Addition	0.0	0.0	0.00	0.00			
Purchases: Estimate		(15,921)					
Actual		15,884.0	40,989.5	0.00			
Transfers out: Estimate			xxxxxxxxxxxx				
Actual		XXXXXXXXXXXX	XXXXXXXXXXXXXX	XXXXXXXXXXX			
Transfers in: Estimate	(5.9)			0.00			
Actual	(1.6)	(67)	0.00	1,043.58			
Consumed: Estimate	254.0	10,666	22,663.06	712.61			
Actual	(342.0)	(14,364)	(30,520.55)	(959.67)			
Balance Per G/L 12/31/2021	759.5	31,900	75,153.28	2,172.84	98.9479		
ULSD Purchases	0.0	0	0.00	0.00	#DIV/0!		
Estimated Purchases	190.0	7,980	20,588.40	576.71			
Transfer in	xxxxxxxxxx	48	0.00	0.00	#DIV/0!		
Consumed	(131.0)	(5,504)	(12,119.31)	(370.87)	92.4802	2.8301	95.3103
Balance @ 01/31/2022	819.6	34,424	83,622.37	2,378.67	102.0259		
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	819.6	34,424	83,622.37	2,378.67	102.0259		
Reverse Fuel Balance	xxxxxxxxxxx	xxxxxxxxxxx	(83,622.37)	xxxxxxxxxx			
Fuel Balance @ Avg Price		xxxxxxxxxxx		xxxxxxxxxx			
Total @ 02/01/2022 Avg Price	819.6	34,424	76,139.96	2,378.67	92.8968		
Weighted Avg Cost/BBL by Location			102.0259	2.9022			
Weighted Avg Cost/BBL @ Avg Cost			92.8968	2.9022			

Estimated Weighted Average February 2022

KANOELEHUA DIESEL

			COST	LAND
ULSD	BBL	GALLONS	EXCLUDE LT	TRANSP
Balance at 12/31/2021	1,272.6	53,451.0	117,188.6	1733.6
Less: Est'd Inventory Addition	0.0	0	0.00	0.00
Purchases: Estimate Actual	(190.0) 0.0	(7,980) 0	(20,588.40) 0.00	(216.26) 0.00
Transfers out: Estimate Actual		x x	x x	x x
Transfers in: Estimate Actual		0 500	0.00 0.00	0.00 0.00
Consumed: Estimate Actual	198.3 (159.5)	8,328 (6,698)		216.76 (174.33)
Balance Per G/L 12/31/2021	1,133.4	47,601	100,063.57	1,559.81
ULSD Purchases	0	0	0.00	0.00
Estimated Purchases	190	-	-	-
Transfer in	0	0	0.00	0.00
Consumed	(73.0)	(3,067)	(6,753.26)	(99.48)
Balance @ 01/31/2022 Inventory From Offsite/Transfers	1,250.3 0.0	52,514 0	113,898.71 0.00	1,698.21 0.00
Est'd Inventory Addition	0.0	0	0.00	0.00
Fuel Balance @ Avg Price	1,250.3	52,514	113,898.71	1,698.21
Reverse Fuel Balance Fuel Balance @ Avg Price	x x	x x	(113,898.71) 116,151.93	x x
Total @ 02/01/2022 Avg Price	1,250.3	52,514	116,151.93	1,698.21
Weighted Avg Cost/BBL by Location			91.0947	1.3582
Weighted Avg Cost/BBL @ Avg Cost			92.8968	1.3582

Estimated Weighted Average February 2022

DISPERSED GENERATION

	ISI LINGLD C			
	BBL	GALLONS	COST	COST/BBL
Balance at 12/31/2021	120.1	5,044	10,715.86	
Less: Est'd Inven Addition	0.0	xxxxxxx	xxxxxxxx	
Purchases: Estimate Actual	0.0 34.3	_	0.00 3,721.17	
Consumed: Estimate Actual		217 (595)		
		xxxxxxxxxx xxxxxxxxxx		
		xxxxxxxxxx		
Balance Per G/L 12/31/2021	145.43	6,108	13,633.86	93.7495
Purchases	0.0	0	0.00	0.0000
Transfer out	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	
Transfer in	xxxxxxxxx	xxxxxxxxx	xxxxxxxxx	
Consumed	(1.8)	(74)	(162.94)	92.4802
Balance @ 01/31/2022	143.7	6,034	13,470.92	93.7651
Est'd Inventory Addition	0.0	0	0.00	
Fuel Balance @ 01/31/2022	143.7	6,034	13,470.92	
Reverse Fuel Balance Fuel Balance @ Avg Price		xxxxxxxxxxx	(13,470.92) xx 13,346.17 xx	
Total @ 02/01/2022 Avg Price	143.7	6,034	13,346.17	92.8968

Hawaii Electric Light Company, Inc. PURCHASED POWER PRICES FOR February 1, 2022

		February 1, 2022 (¢/kWh)	Floor Rates (¢/kWh)
PGV (25 MW) PGV (22 MW)	- on peak - off peak	16.644 17.381	6.560 5.430
WAILUKU HYDRO	- on peak off peak	16.644 17.381	7.240 5.970
Other: (<100 KW)	Sch Q Rate	16.580	
		February 1, 2022 (¢/kWh)	Floor Rates (¢/kWh)
HEP		=	
HEP PGV Addtl 5 MW	- on peak - off peak	(¢/kWh)	

Hawaii Electric Light Company, Inc. Energy Cost Reconciliation Adjustment

February 1, 2022

Line No.	<u>Description</u>	<u>Amount</u>	
1	Amount to be (returned) or collected	\$849,900	
2	Monthly Amount (1/3 x Line 1)	\$283,300	
3	Revenue Tax Divisor	0.91115	
4	Total (Line 2 / Line 3)	\$310,926	
5	Estimated MWh Sales (February 1, 2022)	75,338	mwh
6	Adjustment (Line 4 / Line 5)	0.413	¢/kwh

HAWAII ELECTRIC LIGHT COMPANY, INC. 2021 FUEL OIL ADJUSTMENT RECONCILIATION SUMMARY (Thousand \$)

<u>LINE</u>	<u>DESCRIPTION</u>	Info Only December 2021 YTD Total No Deadband	collectn by company*	Basis for Recon December 2021 YTD Total <u>Deadband</u>	
1 2 3 4	ACTUAL COSTS: Generation Distributed Generation Purch Power TOTAL	\$80,071.1 \$14.4 \$89,947.4 \$170,032.9	-	\$80,071.1 \$14.4 \$89,947.4 \$170,032.9	
5 6 7 8	FUEL FILING COST Generation Distributed Generation Purch Power TOTAL	\$75,456.6 \$14.4 <u>\$89,947.4</u> \$165,418.4	-	\$76,541.4 \$14.4 \$89,947.4 \$166,503.2	
9 10 11 12	BASE FUEL COST Generation Distributed Generation Purch Power TOTAL	\$0.0 \$0.0 \$0.0 \$0.0	-	\$0.0 \$0.0 \$0.0 \$0.0	
13	FUEL-BASE COST (Line 8-12)	\$165,418.4		\$166,503.2	
14 15 15A 16	ACTUAL FOA LESS TAX Less: FOA reconciliation adj for prior year Less: Non-Adjustable Component Revenues Less Tax ADJUSTED FOA LESS TAX	\$164,368.2 -\$635.7 <u>\$12.8</u> \$164,991.1	-	\$164,368.2 -\$635.7 \$12.8 \$164,991.1	
17	FOA-(FUEL-BASE) (Line 16-13)	-\$427.3	under	-\$1,512.1	under
18 19 20	ADJUSTMENTS: Current year FOA accrual reversal Other prior year FOA Other	-\$1,318.2 \$0.0 \$0.0	_	-\$1,318.2 \$0.0 \$0.0	
21 21A 21B	QUARTERLY FOA RECONCILIATION (Line 17+18+19+20) YTD Fossil Fuel Cost Risk Sharing Adjustment QUARTERLY FOA RECON w/Fossil Risk Adj (L21+L21A)	-\$1,745.5 \$397.5 -\$1,348.0	under -	-\$2,830.3 \$397.5 -\$2,432.8	
22	Third Quarter reconciliation			-1,583.0	
23	FOA Reconciliation to be Returned or Collected			-849.9	under

^{*} Over means an over-collection by the Company. Under means an under-collection by the Company.

Hawai`i Electric Light Company DEADBAND CALCULATION For Period: January 1, 2021 to December 31, 2021

	Notes	YTD
<u>Industrial</u>		
Industrial Efficiency Factor (per D&O), BTU/kWh* Industrial Deadband Definition, +/- BTU/kWh	f d	14,663 100
Industrial Portion of Recorded Sales, kWh Industrial Consumption (Recorded), MMBTU Industrial Efficiency Factor (Recorded), BTU/kWh	a b c=(b/a) x 1000	166,170,461 2,538,467 15,276
Lower limit of Industrial Deadband, BTU/kWh Higher limit of Industrial Deadband, BTU/kWh	e= f-d g=f+d	14,563 14,763
Industrial Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	14,763
Diesel		
Diesel Efficiency Factor (per D&O), BTU/kWh*	f	10,557
Diesel Deadband Definition, +/- BTU/kWh	d	200
Diesel Portion of Recorded Sales, MWh Diesel Consumption (Recorded), MMBTU	a b	307,239,596 3,463,588
Diesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	11,273
Lower limit of Diesel Deadband, BTU/kWh Higher limit of Diesel Deadband, BTU/kWh	e= f-d g=f+d	10,357 10,757
Diesel Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	10,757
Biodiesel		
Biodiesel Efficiency Factor (per D&O), BTU/kWh* Biodiesel Deadband Definition, +/- BTU/kWh	f d	0 100
Biodiesel Portion of Recorded Sales, MWh	а	0
Biodiesel Consumption (Recorded), MMBTU	b	0
Biodiesel Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	0
Lower limit of Biodiesel Deadband, BTU/kWh	e= f-d	-100
Higher limit of Biodiesel Deadband, BTU/kWh	g=f+d	100
Biodiesel Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	0
<u>Hydro</u>		
Hudes Efficiency Foots (comp. 000) PTI//JM/ht		40.007
Hydro Efficiency Factor (per D&O), BTU/kWh* Hydro Deadband Definition, +/- BTU/kWh	f d	12,087 100
Hydro Portion of Recorded Sales, MWh	а	8,479,305
Hydro Consumption (Recorded), MMBTU	b	107,618
Hydro Efficiency Factor (Recorded), BTU/kWh	c=(b/a) x 1000	12,692
Lower limit of Hydro Deadband, BTU/kWh	e= f-d	11,987
Higher limit of Hydro Deadband, BTU/kWh	g=f+d	12,187
Hydro Efficiency Factor for cost-recovery, BTU/kWh	h=c, e, or g	12,187

 $^{^\}star$ YTD Efficiency Factor (per D&O) is actual YTD & projected to the end of the year weighted by calendar days in the year.

HAWAII ELECTRIC LIGHT COMPANY, INC. GENERATION FUEL FILING COST AND GENERATION BASE FUEL COST WITHOUT and WITH DEADBAND

2021

		With Deadband
	Without Deadband	As Filed
	Jan 1 - Dec 31	Jan 1 - Dec 31
INDUSTRIAL FUEL FILING COST		
Industrial Portion of Recorded Sales , kWh	166,170,461	166,170,461
Industrial Efficiency Factor (mmbtu/kwh)	0.014663	0.014763
Mmbtu adjusted for Sales Efficiency Factor	2,436,557	2,453,175
\$/mmbtu	<u>\$11.6670</u>	<u>\$11.6670</u>
TOTAL INDUSTRIAL \$000s TO BE RECOVERED	\$28,427.270	\$28,621.141
DIESEL FUEL FILING COST		
Diesel Portion of Recorded Sales, kWh	307,239,596	307,239,596
Diesel Efficiency Factor (mmbtu/kwh)	0.014563	0.010757
Mmbtu adjusted for Sales Efficiency Factor	4,474,330	3,304,976
\$/mmbtu	\$10.510 <u>9</u>	\$14.4994
TOTAL DIESEL \$000s TO BE RECOVERED	\$47,029.343	\$47,920.303
TOTAL DIESEL \$000\$ TO BE RECOVERED	φ4 <i>1</i> ,029.343	φ47,920.303
HYDRO FUEL FILING COST		
Hydro Portion of Recorded Sales , kWh	8,479,305	8,479,305
Hydro Efficiency Factor (mmbtu/kwh)	0.012087	0.012187
Mmbtu adjusted for Sales Efficiency Factor	102,489	103,337
\$/mmbtu	<u>\$0.0000</u>	<u>\$0.0000</u>
TOTAL HYDRO \$000s TO BE RECOVERED	\$0.000	\$0.000
TOTAL GENERATION FUEL FILING COST, \$000s	\$75,456.6	\$76,541.4
CALCULATION OF GENERATION BASE FUEL COST		
TOTAL GENERATION BASE FUEL COST, \$000s	\$0.0	\$0.0
1017 L GENERALITATION DATE TOLL GOOT, \$40003	ψ0.0	Ψ0.0
TOTAL GENERATION FUEL FILING COST, \$000s YTD	\$75,456.6	\$76,541.4
TOTAL GENERATION BASE FUEL COST YTD	\$0.0	

	Fossil Fuel Cost Risk Sharing Mechanism and	Non-Adjustable Com	ponent,
	LSFO/IFO Fossil Fuel Cost Risk Sharing	Baseline	YTD Subject to Fossil Risk
A	MMBtu	224,069	2,538,467
В	\$ cost, actuals	\$1,974,001	29,575,185
C = B / A (Baseline Column)	Baseline \$/mmbtu	8.809801	8.809801
D	IFO Gen kWh		177,529,702
E	Total kWh, Gen, Purch Pwr, DG		1,115,169,319
F	Sales kWh		1,043,782,863
G = (D / E) x F	IFO kWh-sales		166,165,315
Н	Target Heat Rate		14,663
l1	Calculated Heat Rate (YTD subject to fossil risk	k, before deadband)	15,276
1	Recovery Heat Rate (YTD subject to fossil risk,	•	14,763
J = B / A ytd	Actual Cost \$/MMbtu	,	11.6508055
K = C x H x G / 1,000,000	Base Cost Recovery w/Target Heat Rate		\$21,464,923
L = I x J x G / 1,000,000	Fuel Filing Cost Recovery		\$28,580,574
M = 0.02 x (L-K)	IFO Cost Risk Sharing		\$142,313
	Diesel with target heat rate Fossil Fuel Cos	st Risk Sharing	
AA	MMBtu	308,091	3,463,588
ВВ	\$ cost, actuals	3,363,554	50,495,933
CC = BB / AA (Baseline Column)		10.9174224	10.9174224
DD	Diesel Gen kWh		327,952,975
EE	Total kWh, Gen, Purch Pwr, DG		1,115,169,319
FF	Sales kWh		1,043,782,863
GG = (DD / EE) x FF	Diesel kWh-sales		306,959,391
НН	Target Heat Rate		10,557
II1	Calculated Heat Rate (YTD subject to fossil risk	k, before deadband)	11,273
II	Recovery Heat Rate (YTD subject to fossil risk,	•	10,757
JJ = BB/AA (YTD Column)	Actual Cost \$/MMbtu	,	14.5790833
KK = CC x HH x GG / 1,000,000	Base Cost Recovery w/Target Heat Rate		\$35,378,675
LL = II x JJ x GG / 1,000,000	Fuel Filing Cost Recovery		\$48,139,581
MM = 0.02 x (LL-KK)	Diesel Cost Risk Sharing (with target heat rat	e)	\$255,218
FFF	Annual Cap (non-prorated)		600,000
GGG	# Days		365
ннн	Annual Cap (pro-rated, if applicable)		\$600,000
III = M + MM + E, up to cap	Total Fossil Fuel Cost Risk Sharing Adjustmen	nt, subject to cap	\$397,531
		· ·	•
	Non-Adjustable Component		4 0 40 700 000
AAAA = F	YTD kWh under ECRC		1,043,782,863
BBBB	Non-Adjustable Component, cents/kWh		0.00135
CCCC	Non-Adjustable Component Revenues w/tax		\$14,091
DDDD	Non-Adjustable Component Revenues less tax	(\$12,839

2021 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>	Collect	<u>Collect</u>	<u>Balance</u>
January 20					(642,633)	(673,144)	(5,060)
February	141,300	[4]	(9,952)	151,252	(47,100)	(45,511)	100,681
March			,		(47,100)	(46,650)	54,031
April					(47,100)	(40,115)	13,916
May	2,567,100	(1)	(28,472)	2,595,572	(855,700)	(882,167)	1,727,321
June					(855,700)	(879,772)	847,549
July					(855,700)	(862,349)	(14,800)
August	(359,300)	[2]	(43,554)	(315,746)	119,767	114,005	(216,541)
September					119,767	115,511	(101,030)
October					119,767	117,423	16,393
November	784,000	[3]	(16,667)	800,667	(261,333)	(266,872)	550,188
December					(261,333)	(262,859)	287,329
January 21	074000	- 4-	(0.400)	000 700	(261,333)	(275,071)	12,258
February 21	374,300	[4]	(9,409)	383,709	(124,767)	(125,584)	270,383
March					(124,767)	(134,386)	135,997
April	(707.400)	(4)	(04.474)	(000,000)	(124,767)	(131,121)	4,876
May	(707,400)	(1)	(24,174)	(683,226)	235,800	261,182	(417,168)
June					235,800	262,654	(154,514)
July	(00,000)	[2]	45 000	(100 700)	235,800	253,310	98,796
August	(80,900)	[2]	45,882	(126,782)	26,967	29,218	1,232
September					26,967	28,336	29,568 57,215
October	(704 600)	[2]	21,130	(815,730)	26,967	27,747 280,992	57,315 (477,422)
November December	(794,600)	[3]	21,130	(615,730)	264,867 264,867	292,531	(477,423) (184,892)
January 22					264,867 264,867	232,551	(104,032)
February 22	(849,900)	[4]	44,569	(894,469)	283,300		
i Guidaly 22	. (043,300)	[+]	44,509	(034,403)	200,000		

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

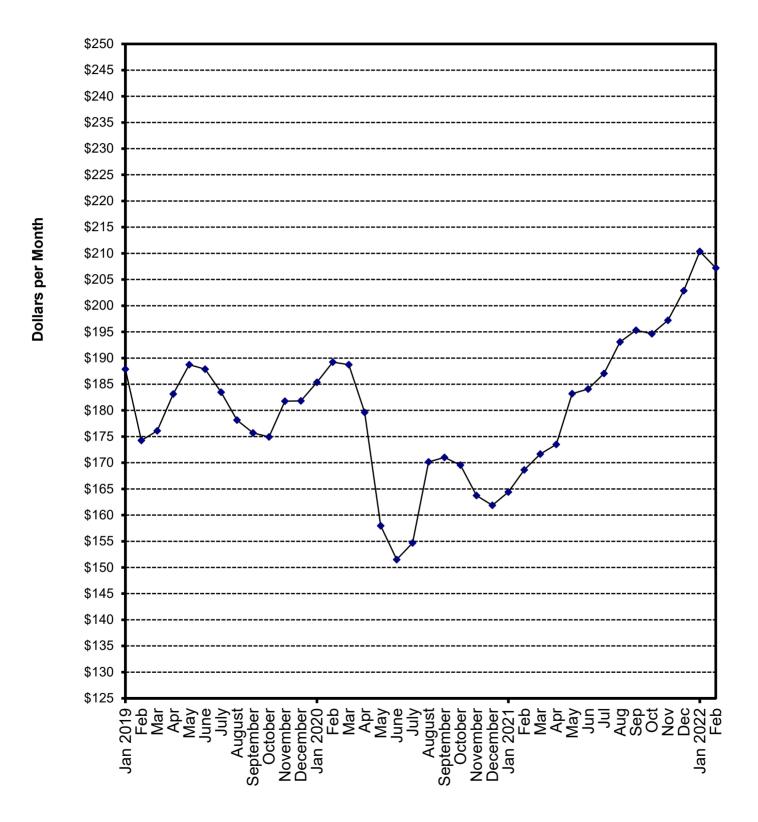
difference minus the adjustment variance. Col(1)-Col(2)

Amount that the FOA reconciliation adjustment is trying to collect. (Col(1) * 1/3) Col(4):

Actual collected amount. (recorded sales * \$/kwh adjustment/1.09751) Col(5):

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

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



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

FUEL FACTOR CENTS / KWH

	RESIDENTIAL &	RESIDENT	IAL BILL (\$)
EFFECTIVE DATE	COMMERCIAL		` '
<u>ETTEOTIVE BITTE</u>	OOMMERCONE	(0, 000 KWIII	<u>(a) 000 1(W11</u>
January 1, 2019	6.867	187.86	224.86
February 1, 2019	14.631	174.25	208.53
March 1, 2019	14.976	174.25	210.75
April 1, 2019	16.469	183.12	219.17
May 1, 2019	17.396	188.74	225.93
June 1, 2019	17.318	187.89	223.93
July 1, 2019	16.450	183.46	219.63
August 1, 2019	15.331	178.14	213.25
September 1, 2019	14.845	175.70	210.32
October 1, 2019	14.692	174.93	209.40
November 1, 2019	16.302	181.76	217.59
December 1, 2019	16.288	181.82	217.67
January 1, 2020	16.768	185.37	221.88
February 1, 2020	17.547	189.22	226.49
March 1, 2020	17.424	188.72	225.90
April 1, 2020	15.644	179.61	214.96
May 1, 2020	11.215	157.94	188.96
June 1, 2020	10.575	151.51	181.25
July 1, 2020	11.359	154.68	185.07
August 1, 2020	14.389	170.16	203.65
September 1, 2020	14.569	171.01	204.67
October 1, 2020	14.274	169.56	202.93
November 1, 2020	13.426	163.74	195.96
December 1, 2020	13.032	161.87	193.70
December 1, 2020	13.032	101.07	193.70
January 1, 2021	13.543	164.41	196.74
February 1, 2021	14.523	168.63	201.81
	15.091	171.67	201.61
March 1, 2021			
April 1, 2021	15.486	173.51	207.68
May 1, 2021	16.982	183.19	219.28
June 1, 2021	16.726	184.08	220.35
July 1, 2021	17.040	187.04	223.92
August 1, 2021	18.134	193.08	231.16
September 1, 2021	18.588	195.30	233.83
October 1, 2021	18.447	194.63	233.01
November 1, 2021	19.470	197.22	236.14
December 1, 2021	20.549	202.87	242.91
January 1, 2022	20.942	210.36	251.90
February 1, 2022	20.361	207.20	248.09
• ,			

HAWAII ELECTRIC LIGHT COMPANY, INC. RESIDENTIAL SURCHARGE DATA

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
1/1/2020-10/31/2020	INTERIM RATE ADJUSTMENT 2019	4.0900 PERCENT ON BASE
1/1/2020-6/30/2020	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.7437 CENTS/KWH
2/1/2020- 2/29/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.7631 CENTS/KWH
3/1/2020- 3/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.7883 CENTS/KWH
4/1/2020- 4/30/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.7717 CENTS/KWH
4/1/2020- 4/30/2020	SOLARSAVER ADJUSTMENT	-0.0267 CENTS/KWH
05/01/2020-5/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.8396 CENTS/KWH
5/1/2020 -3/31/2021	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
06/01/2020-6/30/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.8413 CENTS/KWH
6/1/2020-5/31/2021	RBA RATE ADJUSTMENT	-0.4623 CENTS/KWH
07/01/2020-7/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.8592 CENTS/KWH
7/1/2020- 6/30/2021	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.5882 CENTS/KWH
7/1/2020	GREEN INFRASTRUCTURE FEE	1.19 DOLLARS/MONTH
8/1/2020-8/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.9261 CENTS/KWH
9/1/2020-9/30/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.9161 CENTS/KWH
10/1/2020-10/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.9222 CENTS/KWH
11/1/2020-11/30/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.9106 CENTS/KWH
11/1/2020	Final Rates (TY2019), Docket No. 2018-0368, Order N	lo. 37395
12/1/2020-12/31/2020	PURCHASED POWER ADJUSTMENT CLAUSE	1.9291 CENTS/KWH
1/1/2021-1/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	1.9133 CENTS/KWH
1/1/2021-6/30/2021	GREEN INFRASTRUCTURE FEE	1.25 DOLLARS/MONTH
2/1/2021-2/28/2021	PURCHASED POWER ADJUSTMENT CLAUSE	1.7782 CENTS/KWH
3/1/2021-3/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	1.8172 CENTS/KWH
4/1/2021-4/30/2021	PURCHASED POWER ADJUSTMENT CLAUSE	1.7966 CENTS/KWH
4/1/2021-4/30/2021	SOLARSAVER ADJUSTMENT	-0.0033 CENTS/KWH
5/1/2021-5/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.2319 CENTS/KWH
5/1/2021	SOLARSAVER ADJUSTMENT	0.0000 CENTS/KWH
6/1/2021-6/30/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.2333 CENTS/KWH
6/1/2021-12/31/2021	RBA RATE ADJUSTMENT	-0.0299 CENTS/KWH
7/1/2021-12/31/2021	GREEN INFRASTRUCTURE FEE	1.19 DOLLARS/MONTH
7/1/2021-7/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.4649 CENTS/KWH
7/1/2021	RESIDENTIAL PBF SURCHARGE ADJUSTMENT	0.6478 CENTS/KWH
8/1/2021-8/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.4876 CENTS/KWH
8/1/2021-10/31/2021	RESIDENTIAL DSM ADJUSTMENT	0.0893 CENTS/KWH
9/1/2021-9/30/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.4776 CENTS/KWH
10/1/2021-10/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.4838 CENTS/KWH
11/1/2021-11/30/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.0761 CENTS/KWH
11/1/2021-1/31/2022	RESIDENTIAL DSM ADJUSTMENT	-0.0051 CENTS/KWH
12/1/2021-12/31/2021	PURCHASED POWER ADJUSTMENT CLAUSE	2.1263 CENTS/KWH
1/1/2022	GREEN INFRASTRUCTURE FEE	1.25 DOLLARS/MONTH
1/1/2022	RBA RATE ADJUSTMENT	1.0380 CENTS/KWH
1/1/2022-1/31/2022	PURCHASED POWER ADJUSTMENT CLAUSE	2.1529 CENTS/KWH
2/1/2022-2/28/2022	PURCHASED POWER ADJUSTMENT CLAUSE	2.0987 CENTS/KWH
2/1/2022	RESIDENTIAL DSM ADJUSTMENT	-0.0043 CENTS/KWH

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

Calculations of the Average Residential Customer Bill

Base Rates
Base Fuel Energy Charge
Non-Fuel Energy Charge
First 300 kWh per month
Next 700 kWh per month
Customer Charge
Total Base Charges
Interim Rate Adjustment 2019 TY
RBA Rate Adjustment
Purchased Power Adj. Clause
PBF Surcharge
DSM Adjustment

9
Interim Rate Adjustment 2019 TY
RBA Rate Adjustment
Purchased Power Adj. Clause
PBF Surcharge
DSM Adjustment
SolarSaver Adjustment
Energy Cost Recovery
Green Infrastructure Fee

Avg	Residentia	I Bill at	500	kwh
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Rate				
	1/01/22	2/01/22		
effective date: ¢/kwh	11/01/2020	11/01/2020		
¢/kwh ¢/kwh	13.4059	13.4059		
¢/kwh \$	16.7577 11.50	16.7577 11.50		
φ	11.50	11.50		
% on base	0.0000%	0.0000%		
¢/kwh	1.0380	1.0380		
¢/kwh	2.1529	2.0987		
¢/kwh	0.6478	0.6478		
¢/kwh	(0.0051)	(0.0043)		
¢/kwh	0.0000	0.0000		
¢/kwh	20.9420	20.3610		
\$	1.25	1.25		

Charg	je (\$) at 500) Kwh
1/01/22	2/01/22	Difference
\$0.00	\$0.00	\$0.00
\$73.74	\$73.74	\$0.00
\$40.22	\$40.22	\$0.00
\$33.52	\$33.52	\$0.00
\$11.50	\$11.50	\$0.00
\$85.24	\$85.24	\$0.00
\$0.00	\$0.00	\$0.00
\$5.19	\$5.19	\$0.00
\$10.76	\$10.49	-\$0.27
\$3.24	\$3.24	\$0.00
-\$0.03	-\$0.02	\$0.01
\$0.00	\$0.00	\$0.00
\$104.71	\$101.81	-\$2.90
\$1.25	\$1.25	\$0.00
\$210.36	\$207.20	

Increase (Decrease -) % Change

-\$3.16 -1.50%

Base Rates
Base Fuel/Energy Charge
Non-Fuel Energy Charge
First 300 kWh per month
Next 700 kWh per month
Customer Charge
Total Base Charges
Interim Rate Adjustment 201
RRA Rate Adjustment

19 TY RBA Rate Adjustment Purchased Power Adj. Clause **PBF Surcharge DSM Adjustment** SolarSaver Adjustment **Energy Cost Recovery Green Infrastructure Fee**

Avg Residential Bill at 600 kwh

Rate				
	1/01/22	2/01/22		
effective date: ¢/kwh ¢/kwh	11/01/2020	11/01/2020		
¢/kwh	13.4059	13.4059		
¢/kwh	16.7577	16.7577		
\$	11.50	11.50		
% on base	0.0000%	0.0000%		
¢/kwh	1.0380	1.0380		
¢/kwh ¢/kwh	2.1529 0.6478	2.0987 0.6478		
¢/kwh	(0.0051)	(0.0043)		
¢/kwh	0.0000	0.0000		
¢/kwh	20.9420	20.3610		
\$	1.25	1.25		

01:	- (A) -1 000	\ 17l.		
Charge (\$) at 600 Kwh 1/01/22 2/01/22 Difference				
1/01/22	1/01/22 2/01/22			
\$0.00	\$0.00	\$0.00		
\$90.49	\$90.49	\$0.00		
\$40.22	\$40.22	\$0.00		
\$50.27	\$50.27	\$0.00		
\$11.50	\$11.50	\$0.00		
\$101.99	\$101.99	\$0.00		
\$0.00	\$0.00	\$0.00		
\$6.23	\$6.23	\$0.00		
\$12.92	\$12.59	-\$0.33		
\$3.89	\$3.89	\$0.00		
-\$0.03	-\$0.03	\$0.00		
\$0.00	\$0.00	\$0.00		
\$125.65	\$122.17	-\$3.48		
\$1.25	\$1.25	\$0.00		
\$251.90	\$248.09			

Increase (Decrease -) % Change

-\$3.81 -1.51%

HELCO Annual ECRC Adjustment, Based on Recorded Statistics for : 2021

		Industrial A	Diesel B	Notes
1	Target Heat Rate, 2021	0.014663	0.010557	MBTU/kWh Sales
3	Fuel consumed during 2021	2,538,467	3,463,588	MBTU
4	Allocated Sales during 2021	166,170,461	307,239,596	kWh
5	2021 Sales Heat Rate, Recorded	0.015276	0.011273	MBTU/kWh Sales
6				
7	Difference: 2021 Recorded less Start of Year	0.000613	0.000716	MBTU/kWh Sales
8	Adjustment: One-half the difference	0.000307	0.000358	MBTU/kWh Sales
9				
10	Target Heat Rate prior to Adjustment, Start of 2021	0.014663	0.010557	MBTU/kWh Sales
11				
12	Target Heat Rate, Start of 2022	0.014970	0.010915	MBTU/kWh Sales

Derivation of "Other" Efficiency Factor, to be used in the ECRC Tariff

	Industrial A	<u>Diesel</u> B	Other C	<u>Total</u> D	
1 Fixed Efficiency Factor	0.014970	0.010915	0.012426		MBTU/kWh
2 Gen MWh %	36.16	60.87	2.97	100.00	%
3 Weighted Efficiency Factor (line 1 x line 2)	0.005413	0.006644	0.000369	0.012426	MBTU/kWh

Goal seek (make this value equal zero by changing cell Line 1, Col C):

0.0

Effective January 1, 2021

ENERGY COST RECOVERY CLAUSE

Applicable To

Schedule Schedule	"G" "J" "P" "F" "U" "TOU-R" "TOU-G" "TOU-J"	- - - - -	Residential Service General Service - Non Demand General Service Demand Large Power Service Street Light Service Time-of-Use Service Residential Time-of-Use Service Small Commercial Time-of-Use Service Commercial Time-of-Use Service Large Power Time-of-Use Service Standby Service
Schedule	"TOU EV"	_	Residential Time-of-Use Service with Electric Vehicle Pilot
			Residential Interim Time-of-Use Service Commercial Public Electric Vehicle Charging Facility Service Pilot
Schedule	"E-BUS-J"	-	Commercial Electric Bus Charging Facility Service Pilot
Schedule	"E-BUS-P"	,	-Commercial Electric Bus Charging Facility Service Pilot

All terms and provisions of the above listed rate Schedules are applicable, except that the Monthly Energy Cost Recovery Factor described below will be multiplied by the billed kWh and added to the customer bill.

All base rate schedule discounts, surcharges, and all other adjustments will not apply to the Energy Cost Recovery Clause.

The Energy Cost Recovery Clause shall be consistent with the terms of fuel contracts, distributed generation contracts, and purchased energy contracts. Changes to the Energy Cost Recovery Clause may be proposed by application to the Commission.

Monthly Energy Cost Recovery Factor:

The Monthly Energy Cost Recovery Factor shall be the sum of the Company-Owned Generation Factor, the Purchased Energy Factor, the DG Energy Generation Factor, the Non-Adjustable Component, and the Monthly Fossil Fuel Cost Risk Sharing Component.

The Monthly Energy Cost Recovery Factor shall normally be effective on the 1st day of the month. When a customer's billing period includes more than one applicable Monthly Energy Cost Recovery Factor, each Monthly Energy Cost Recovery Factor will be prorated to the customer bill for the number of days each factor was in effect.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Effective February 1, 2022

Energy Cost Recovery Clause - (Continued)

COMPANY-OWNED GENERATION FACTOR - The Company-Owned Generation Factor shall be determined by the current Weighted Composite Central Station + Wind/Hydro Generation Cost, adjusted for additional revenue taxes. The current Weighted Composite Central Station + Wind/Hydro Generation Cost shall be determined by the current Composite Cost of Generation in cents per million BTU weighted by the proportion of current company-owned central station + wind/hydro generation to total system net energy, multiplied by the 2022 efficiency factors of 0.014970 million Btu per kWh for industrial fuel, 0.010915 million Btu per kWh for diesel fuel, and 0.012426 million Btu per kWh for other company generation sources, weighted by the current proportion of generation produced by each generation source to the total company-owned generation.

PURCHASED ENERGY FACTOR - The Purchased Energy Factor shall be the current Composite Cost of Purchased Energy, in cents per kWh, weighted by the proportion of current purchased energy to total system net energy, adjusted to the sales delivery level and adjusted for revenue taxes. The Company shall also show the composite cost of fossil fuel purchased energy and the composite cost of renewable purchased energy that comprise the composite cost of purchased energy.

DG ENERGY GENERATION FACTOR - The DG Energy Generation Factor shall be the current Composite Cost of Distributed Generation Energy, in cents per kWh, weighted by the proportion of current DG energy to total system net energy, adjusted to the sales delivery level and adjusted for revenue taxes.

NON-ADJUSTABLE COMPONENT - The Non-Adjustable Component is the ocean cargo insurance expense per kWh established in the Company's rate case, adjusted for revenue taxes. The Non-Adjustable Component is excluded from the Reconciliation Adjustment described below.

MONTHLY FOSSIL FUEL COST RISK SHARING COMPONENT - The Monthly Fossil Fuel Cost Risk Sharing Component shall equal 2% of the difference of the Monthly Fossil Cost for all fossil fuel types less the Monthly Base Fossil Recovery Target for all fossil fuel types, divided by the forecast sales for the month, multiplied by negative one (-1), and adjusted for revenue taxes. The year-to-date sum of the Monthly Fossil Fuel Cost Risk Sharing Components shall be subject to a calendar year maximum of ±\$600,000, provided that if this provision first becomes effective on a date other than January 1, the above maximum shall be pro-rated for the remainder of the initial calendar year based on the number of days remaining in the calendar year from the date this section becomes effective.

The Monthly Fossil Cost for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the forecasted cost per million Btu for that fossil type.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Superseding Revised Sheet No. 63B REVISED SHEET No. 63B Effective February 1, 2021

Effective February 1, 2022

Energy Cost Recovery Clause - (Continued)

The Monthly Base Fossil Recovery Target for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the Fossil Fuel Baseline Cost for that fossil fuel type.

The Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year, provided that if actual fuel costs are not yet known, forecasted fossil fuel costs may be used in the above calculation, and provided that if actual million Btu in the first applicable month are not yet known, forecasted million Btu may be used in the above calculation. The first applicable month of the year shall be January of each year, provided that when this provision first becomes effective, the month this provision becomes effective shall be used as the first applicable month for the calculation of the Fossil Fuel Baseline Cost for the initial calendar year.

Revenue taxes shall be calculated using current rates of the Franchise Tax, Public Service Company Tax, and Public Utility Commission

TARGET HEAT RATES AND DEADBANDS

Target Heat Rates:

- The target heat rates shall be the 2022 efficiency factors of 0.014970 million BTU per kWh for industrial fuel, 0.010915 million BTU per kWh for diesel fuel, and 0.012426 million BTU per kWh for other company generation sources. The overall target heat rate shall be the weighted average efficiency factor of all sources.
- The target heat rates for industrial fuel and diesel shall be reestablished each calendar year. The target heat rate for each calendar year shall be equal to the target heat rate in effect for the prior calendar year plus one-half of the difference between the target heat rate and the actual heat rate for the prior calendar year.

Deadbands:

- 3. Application of the Deadbands
 - The deadband shall be applied around its respective target heat rate for each fuel type. The deadband shall be ± 100 Btu/kWh-sales for industrial fuel. The deadband shall be ±200 Btu/kWh-sales for diesel fuel.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Superseding Revised Sheet No. 63C Effective February 1, 2019

REVISED SHEET No. 63C Effective January 1, 2021

Energy Cost Recovery Clause - (Continued)

b. If target heat rates are modified, the deadband levels described in Sections 3.a above shall apply around the modified target heat rate.

Modifications to Target Heat Rates and Deadbands:

- 4. Modifications to target heat rates and/or deadbands may be determined in a rate case.
- 5. Modifications to target heat rates and/or deadbands may be made outside of a rate case proceeding by application by the Company or the Consumer Advocate, or by an investigation by the Commission on its own motion.
 - a. An applicant must make a separate request to the Commission, and provide appropriate justification and support.
 - 1. Sufficient basis for justification of a change in target heat rate and/or deadband may include but not be limited to the following:
 - a. Addition or retirement of non-utility firm or non-utility non-firm renewable resources (such as wind or photovoltaics) from which the utility will purchase capacity and/or energy under a Power Purchase Agreement that exceed 5 MW;
 - b. Addition or retirement of utility firm and non-firm renewable resources (such as wind or photovoltaics) that exceed 5 MW. Modifications to the target heat rate and/or deadband may be determined as part of the application for approval to expend funds (in accordance with General Order No. 7) for the resource that would cause the change;
 - c. Additions, retirements or modifications to the generating systems, or modifications to the generating system operating procedures, that are expected to increase or decrease the target heat rates by more than the deadband amount; or
 - d. The recorded heat rate is outside of the deadband around the target heat rate and is expected to remain outside of the deadband.
 - b. Any proposed modifications to target heat rates and/or deadbands under this provision shall not take effect until approved by the Commission.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Superseding Revised Sheet No. 63D Effective February 1, 2019

REVISED SHEET No. 63D Effective January 1, 2021

Energy Cost Recovery Clause - (Continued)

YEAR-TO DATE FOSSIL FUEL COST RISK SHARING ADJUSTMENT

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be subject to an annual maximum of $\pm \$600,000$ across all company-generation fossil fuel types subject to fossil fuel cost risk sharing. This section shall take effect as of January 1, 2021, and the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be included in the Reconciliation Adjustment, beginning with the First Quarter of 2021. The annual maximum sharing for the initial calendar year shall be pro-rated based on the number days remaining in the calendar year from the date this section becomes effective in the initial calendar year.

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be excluded from the determination of Earnings Sharing Revenue Credits provided for in the Rate Adjustment Mechanism Provision.

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall equal 2% of the difference between the sum of the Year-To-Date Fuel Filing Cost Recovery Amount across all fossil fuel types and the sum of the Year-To-Date Base Cost Recovery Target across all fossil fuel types.

The Year-To-Date Fuel Filing Cost Recovery Amount for a fossil fuel type shall be the sum of the Eligible Revenue for fuel for that fossil type for all months, as determined in the Reconciliation Adjustment section below.

The Year-To-Date Base Cost Recovery Target for a fossil fuel type shall equal the applicable target heat rate, multiplied by the sales kWh for that fossil fuel type, multiplied by the Reconciliation Fossil Fuel Baseline Cost for that fossil fuel type.

The Reconciliation Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year. The first applicable month of the year for the initial calendar year shall be the month in which this provision takes effect.

RECONCILIATION ADJUSTMENT:

In order to reconcile any differences that may occur between recorded revenue and eligible revenue from the Energy Cost Recovery Clause, the year-to-date recorded revenue from the Energy Cost Recovery Clause will be compared with the year-to-date eligible revenue from the Energy Cost Recovery Clause on a quarterly basis. If there is a variance between the year-to-date recorded revenue from the Energy Cost Recovery Clause and the year-to-date eligible revenue from the Energy Cost Recovery Clause, a reconciliation adjustment shall be added to the rate calculated under the Energy Cost Recovery Clause to reconcile the revenue variance.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Superseding Revised Sheet No. 63E Effective February 1, 2019

REVISED SHEET No. 63E Effective January 1, 2021

Energy Cost Recovery Clause - (Continued)

This reconciliation adjustment shall be applied at the beginning of the second month after the end of the quarter, and shall be set to recover the revenue variance over the estimated sales for the subsequent three months.

The Non-Adjustable Component revenue will be excluded from the Energy Cost Recovery Clause revenue for the purposes of this reconciliation. The Non-Adjustable Component revenue is the Non-Adjustable Component multiplied by the year-to-date sales kWh.

The eligible revenue from the Energy Cost Recovery Clause shall be equal to the eligible revenue for fuel, DG, and purchased energy expense, adjusted by the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment.

The eligible revenue for fuel is calculated for each fuel type each month as:

The sales kWh for that fuel type multiplied by the adjusted target heat rate for that fuel type multiplied by the average fuel cost per million BTU and then summed across all fuel types.

The adjusted target heat rate for each fuel type is established by comparing the applicable target heat rate, adjusted by a plus or minus sales heat rate deadband identified above versus the year-to-date actual heat rate. The year-to-date actual heat rate is derived by dividing the fuel type's year-to-date million Btu usage by the fuel type's share of year-to-date recorded sales kWh. If the year-to-date actual heat rate is greater than the applicable target heat rate plus the amount of the deadband in Btu/kWh, then the adjusted target heat rate is the applicable target heat rate plus the amount of the deadband in Btu/kWh. If the yearto-date actual heat rate is less than the applicable target heat rate less the amount of the deadband in Btu/kWh, then the adjusted target heat rate is the applicable target heat rate less the amount of the deadband in Btu/kWh. If the year-to-date actual heat rate falls between the applicable target heat rate adjusted by a plus or minus amount of the deadband in Btu/kWh, then the adjusted target heat rate is the year-to-date actual heat rate.

The eligible revenue for DG and purchased energy expenses is equal to the amount of their respective expenses.

Revenue from the Energy Cost Recovery Clause excludes revenue taxes on that amount for the purpose of this reconciliation.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Superseding Revised Sheet No. 63 REVISED SHEET No. 63
Effective February 1, 2019 Effective January 1, 2021

ENERGY COST RECOVERY CLAUSE

Applicable To - Residential Service

Schedule "G" - General Service - Non Demand Schedule "J" - General Service Demand Schedule "P" - Large Power Service Schedule "F" - Street Light Service - Time-of-Use Service Schedule "U" Schedule "TOU-R" - Residential Time-of-Use Service
Schedule "TOU-G" - Small Commercial Time-of-Use Service Schedule "TOU-J" - Commercial Time-of-Use Service Schedule "TOU-P" - Large Power Time-of-Use Service Schedule "SS" - Standby Service Schedule "TOU EV" - Residential Time-of-Use Service with Electric Vehicle Pilot Schedule "TOU-RI" - Residential Interim Time-of-Use Service Schedule "EV-F" - Commercial Public Electric Vehicle Charging Facility Service Pilot Schedule "E-BUS-J" - Commercial Electric Bus Charging Facility Service Pilot Schedule "E-BUS-P" -Commercial Electric Bus Charging Facility Service Pilot

All terms and provisions of the above listed rate Schedules are applicable, except that the Monthly Energy Cost Recovery Factor described below will be multiplied by the billed kWh and added to the customer bill.

All base rate schedule discounts, surcharges, and all other adjustments will not apply to the Energy Cost Recovery Clause.

The Energy Cost Recovery Clause shall be consistent with the terms of fuel contracts, distributed generation contracts, and purchased energy contracts. Changes to the Energy Cost Recovery Clause may be proposed by application to the Commission.

Monthly Energy Cost Recovery Factor:

Schedule "R"

The Monthly Energy Cost Recovery Factor shall be the sum of the Company-Owned Generation Factor, the Purchased Energy Factor, the DG Energy Generation Factor, the Non-Adjustable Component, and the Monthly Fossil Fuel Cost Risk Sharing Component.

The Monthly Energy Cost Recovery Factor shall normally be effective on the $1^{\rm st}$ day of the month. When a customer's billing period includes more than one applicable Monthly Energy Cost Recovery Factor, each Monthly Energy Cost Recovery Factor will be prorated to the customer bill for the number of days each factor was in effect.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Superseding Revised Sheet No. 63A REVISED SHEET No. 63A Effective February 1, 2021 Effective February 1, 2022

Energy Cost Recovery Clause - (Continued)

COMPANY-OWNED GENERATION FACTOR - The Company-Owned Generation Factor shall be determined by the current Weighted Composite Central Station + Wind/Hydro Generation Cost, adjusted for additional revenue taxes. The current Weighted Composite Central Station + Wind/Hydro Generation Cost shall be determined by the current Composite Cost of Generation in cents per million BTU weighted by the proportion of current company-owned central station + wind/hydro generation to total system net energy, multiplied by the 2022 efficiency factors of 0.014970 million Btu per kWh for industrial fuel, 0.010915 million Btu per kWh for diesel fuel, and 0.012426 million Btu per kWh for other company generation sources, weighted by the current proportion of generation produced by each generation source to the total company-owned generation.

PURCHASED ENERGY FACTOR - The Purchased Energy Factor shall be the current Composite Cost of Purchased Energy, in cents per kWh, weighted by the proportion of current purchased energy to total system net energy, adjusted to the sales delivery level and adjusted for revenue taxes. The Company shall also show the composite cost of fossil fuel purchased energy and the composite cost of renewable purchased energy that comprise the composite cost of purchased energy.

DG ENERGY GENERATION FACTOR — The DG Energy Generation Factor shall be the current Composite Cost of Distributed Generation Energy, in cents per kWh, weighted by the proportion of current DG energy to total system net energy, adjusted to the sales delivery level and adjusted for revenue taxes.

NON-ADJUSTABLE COMPONENT - The Non-Adjustable Component is the ocean cargo insurance expense per kWh established in the Company's rate case, adjusted for revenue taxes. The Non-Adjustable Component is excluded from the Reconciliation Adjustment described below.

MONTHLY FOSSIL FUEL COST RISK SHARING COMPONENT – The Monthly Fossil Fuel Cost Risk Sharing Component shall equal 2% of the difference of the Monthly Fossil Cost for all fossil fuel types less the Monthly Base Fossil Recovery Target for all fossil fuel types, divided by the forecast sales for the month, multiplied by negative one (-1), and adjusted for revenue taxes. The year-to-date sum of the Monthly Fossil Fuel Cost Risk Sharing Components shall be subject to a calendar year maximum of $\pm \$600,000$, provided that if this provision first becomes effective on a date other than January 1, the above maximum shall be pro-rated for the remainder of the initial calendar year based on the number of days remaining in the calendar year from the date this section becomes effective.

The Monthly Fossil Cost for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the forecasted cost per million Btu for that fossil type.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Transmittal Letter Dated January 27, 2022.

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Superseding Revised Sheet No. 63B

Effective February 1, 2021

Effective February 1, 2022

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Energy Cost Recovery Clause - (Continued)

The Monthly Base Fossil Recovery Target for each fossil fuel type shall equal the forecasted million Btu for that fossil fuel type for the month multiplied by the Fossil Fuel Baseline Cost for that fossil fuel type.

The Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year, provided that if actual fuel costs are not yet known, forecasted fossil fuel costs may be used in the above calculation, and provided that if actual million Btu in the first applicable month are not yet known, forecasted million Btu may be used in the above calculation. The first applicable month of the year shall be January of each year, provided that when this provision first becomes effective, the month this provision becomes effective shall be used as the first applicable month for the calculation of the Fossil Fuel Baseline Cost for the initial calendar year.

Revenue taxes shall be calculated using current rates of the Franchise Tax, Public Service Company Tax, and Public Utility Commission Fee.

TARGET HEAT RATES AND DEADBANDS

Target Heat Rates:

- The target heat rates shall be the 2022 efficiency factors of 0.014970 million BTU per kWh for industrial fuel, 0.010915 million BTU per kWh for diesel fuel, and 0.012426 million BTU per kWh for other company generation sources. The overall target heat rate shall be the weighted average efficiency factor of all sources.
- 2. The target heat rates for industrial fuel and diesel shall be reestablished each calendar year. The target heat rate for each calendar year shall be equal to the target heat rate in effect for the prior calendar year plus one-half of the difference between the target heat rate and the actual heat rate for the prior calendar year.

Deadbands:

- 3. Application of the Deadbands
 - a. The deadband shall be applied around its respective target heat rate for each fuel type. The deadband shall be ± 100 Btu/kWh-sales for industrial fuel. The deadband shall be ± 200 Btu/kWh-sales for diesel fuel.

HAWAII ELECTRIC LIGHT COMPANY, INC.

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Transmittal Letter Dated January 27, 2022.

Superseding Revised Sheet No. 63C Effective February 1, 2019

REVISED SHEET No. 63C Effective January 1, 2021

Energy Cost Recovery Clause - (Continued)

b. If target heat rates are modified, the deadband levels described in Sections 3.a above shall apply around the modified target heat rate.

Modifications to Target Heat Rates and Deadbands:

- Modifications to target heat rates and/or deadbands may be determined in a rate case.
- 5. Modifications to target heat rates and/or deadbands may be made outside of a rate case proceeding by application by the Company or the Consumer Advocate, or by an investigation by the Commission on its own motion.
 - a. An applicant must make a separate request to the Commission, and provide appropriate justification and support.
 - Sufficient basis for justification of a change in target heat rate and/or deadband may include but not be limited to the following:
 - a. Addition or retirement of non-utility firm or non-utility non-firm renewable resources (such as wind or photovoltaics) from which the utility will purchase capacity and/or energy under a Power Purchase Agreement that exceed 5
 - b. Addition or retirement of utility firm and nonfirm renewable resources (such as wind or photovoltaics) that exceed 5 MW. Modifications to the target heat rate and/or deadband may be determined as part of the application for approval to expend funds (in accordance with General Order No. 7) for the resource that would cause the change;
 - c. Additions, retirements or modifications to the generating systems, or modifications to the generating system operating procedures, that are expected to increase or decrease the target heat rates by more than the deadband amount; or
 - d. The recorded heat rate is outside of the deadband around the target heat rate and is expected to remain outside of the deadband.
 - b. Any proposed modifications to target heat rates and/or deadbands under this provision shall not take effect until approved by the Commission.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Superseding Revised Sheet No. 63D Effective February 1, 2019

REVISED SHEET No. 63D Effective January 1, 2021

Energy Cost Recovery Clause - (Continued)

YEAR-TO DATE FOSSIL FUEL COST RISK SHARING ADJUSTMENT

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be subject to an annual maximum of ±\$600,000 across all company-generation fossil fuel types subject to fossil fuel cost risk sharing. This section shall take effect as of January 1, 2021, and the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be included in the Reconciliation Adjustment, beginning with the First Quarter of 2021. The annual maximum sharing for the initial calendar year shall be pro-rated based on the number days remaining in the calendar year from the date this section becomes effective in the initial calendar year.

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall be excluded from the determination of Earnings Sharing Revenue Credits provided for in the Rate Adjustment Mechanism Provision.

The Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment shall equal 2% of the difference between the sum of the Year-To-Date Fuel Filing Cost Recovery Amount across all fossil fuel types and the sum of the Year-To-Date Base Cost Recovery Target across all fossil fuel types.

The Year-To-Date Fuel Filing Cost Recovery Amount for a fossil fuel type shall be the sum of the Eligible Revenue for fuel for that fossil type for all months, as determined in the Reconciliation Adjustment section below.

The Year-To-Date Base Cost Recovery Target for a fossil fuel type shall equal the applicable target heat rate, multiplied by the sales kWh for that fossil fuel type, multiplied by the Reconciliation Fossil Fuel Baseline Cost for that fossil fuel type.

The Reconciliation Fossil Fuel Baseline Cost for each fossil fuel type for the year shall equal the actual fossil fuel costs for the fossil fuel type in the first applicable month of the year divided by the actual million Btu for the fossil fuel type in the first applicable month of the year. The first applicable month of the year for the initial calendar year shall be the month in which this provision takes effect.

RECONCILIATION ADJUSTMENT:

In order to reconcile any differences that may occur between recorded revenue and eligible revenue from the Energy Cost Recovery Clause, the year-to-date recorded revenue from the Energy Cost Recovery Clause will be compared with the year-to-date eligible revenue from the Energy Cost Recovery Clause on a quarterly basis. If there is a variance between the year-to-date recorded revenue from the Energy Cost Recovery Clause and the year-to-date eligible revenue from the Energy Cost Recovery Clause, a reconciliation adjustment shall be added to the rate calculated under the Energy Cost Recovery Clause to reconcile the revenue variance.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Superseding Revised Sheet No. 63E Effective February 1, 2019

REVISED SHEET No. 63E Effective January 1, 2021

Energy Cost Recovery Clause - (Continued)

This reconciliation adjustment shall be applied at the beginning of the second month after the end of the quarter, and shall be set to recover the revenue variance over the estimated sales for the subsequent three months.

The Non-Adjustable Component revenue will be excluded from the Energy Cost Recovery Clause revenue for the purposes of this reconciliation. The Non-Adjustable Component revenue is the Non-Adjustable Component multiplied by the year-to-date sales kWh.

The eligible revenue from the Energy Cost Recovery Clause shall be equal to the eligible revenue for fuel, DG, and purchased energy expense, adjusted by the Year-To-Date Fossil Fuel Cost Risk Sharing Adjustment.

The eligible revenue for fuel is calculated for each fuel type each month as:

The sales kWh for that fuel type multiplied by the adjusted target heat rate for that fuel type multiplied by the average fuel cost per million BTU and then summed across all fuel types.

The adjusted target heat rate for each fuel type is established by comparing the applicable target heat rate, adjusted by a plus or minus sales heat rate deadband identified above versus the year-to-date actual heat rate. The year-to-date actual heat rate is derived by dividing the fuel type's year-to-date million Btu usage by the fuel type's share of year-to-date recorded sales kWh. If the year-to-date actual heat rate is greater than the applicable target heat rate plus the amount of the deadband in Btu/kWh, then the adjusted target heat rate is the applicable target heat rate plus the amount of the deadband in Btu/kWh. If the yearto-date actual heat rate is less than the applicable target heat rate less the amount of the deadband in Btu/kWh, then the adjusted target heat rate is the applicable target heat rate less the amount of the deadband in Btu/kWh. If the year-to-date actual heat rate falls between the applicable target heat rate adjusted by a plus or minus amount of the deadband in Btu/kWh, then the adjusted target heat rate is the year-to-date actual heat rate.

The eligible revenue for DG and purchased energy expenses is equal to the amount of their respective expenses.

Revenue from the Energy Cost Recovery Clause excludes revenue taxes on that amount for the purpose of this reconciliation.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Phillipson, Yvonne

From: puc@hawaii.gov

Sent: Thursday, January 27, 2022 11:50 AM

To: Phillipson, Yvonne

Subject: Hawaii PUC eFiling Confirmation of Filing

[This email is coming from an EXTERNAL source. Please use caution when opening attachments or links in suspicious email.]

Your eFile document has been filed with the Hawaii Public Utilities commision on 2022 Jan 27 AM 11:47. The mere fact of filing shall not waive any failure to comply with Hawaii Administrative Rules Chapter 6-61, Rules of Practice and Procedure Before the Public Utilities Commission, or any other application requirements. Your confirmation number is YVON22114753696. If you have received this email in error please notify the Hawaii Public Utilities Commission by phone at 808 586-2020 or email at hawaii.puc@hawaii.gov.