



June 27, 2018

FILED

2018 JUN 27 P 3:29

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: Hawaiian Electric Energy Cost Adjustment Factor for July 2018

Hawaiian Electric Company Inc.'s ("Hawaiian Electric" or "Company") July 2018 energy cost adjustment factor is 1.204 cents per kilowatt-hour ("kWh"), a decrease of 0.325 cents per kWh from last month. A residential customer consuming 500 kWh of electricity will be paying \$158.27, an increase of \$3.41 compared to rates effective June 1, 2018. The increase in the typical residential bill is due to the increase in the Purchased Power Adjustment Clause rate (+\$4.96) and the increase in the Public Benefits Fund Surcharge (+\$0.21), partially offset by a decrease in the Energy Cost Adjustment factor (-\$1.63) and a decrease in the Green Infrastructure Fee (-\$0.13).

The Company's fuel composite cost of generation increased 131.70 cents per million BTU to 1,435.11 cents per million BTU. The Company's Distributed Generation ("DG") energy component decreased 0.039 cents per kWh to 0.036 cents per kWh. The composite cost of purchased energy decreased 1.349 cents per kWh to 10.091 cents per kWh.

Schofield Generating Station was placed in-service on June 7, 2018. The Company will track the annual ratio of biodiesel to ultra-low sulfur diesel (ULSD) used at Schofield Generating Station from June 7, 2018 to May 31, 2019, and will include an adjustment for the Second Quarter 2019 reconciliation should the ratio exceed 50:50 on a volume (i.e., gallons) basis, in accordance with Order No. 33658, filed April 22, 2016 in Docket No. 2014-0113. The Company will show the actual ratio of biodiesel to ULSD in future filings.

The attached sheets set forth the energy cost adjustment factor in cents per kWh for each rate schedule that is applicable for *pro rata* use beginning July 1, 2018.

Very truly yours,

Dean K. Matsuura
Manager, Regulatory Rate Proceedings

Attachments

cc: Division of Consumer Advocacy

Hawaiian Electric Company, Inc.
ENERGY COST ADJUSTMENT FACTOR

	<u>Effective Dates</u>		<u>Change</u>
	<u>06/01/18</u>	<u>07/01/18</u>	
Composite Cost Of Generation, ¢/mmbtu	1,303.41	1,435.11	131.70
DG Energy Component, ¢/kWh	0.075	0.036	(0.039)
Composite Cost Of Purchased Energy, ¢/kWh	11.440	10.091	(1.349)
 <u>Residential, Schedule "R"</u>			
Energy Cost Adjustment, ¢/kWh	1.529	1.204	(0.325)
 <u>Others, Schedules "G,J,DS,P,F"</u>			
Energy Cost Adjustment, ¢/kWh	1.529	1.204	(0.325)
 <u>Residential Customer with:</u>			
500 kWh Consumption, \$/bill	154.86	158.27	3.41
600 kWh Consumption, \$/bill	184.50	188.61	4.11

Supercedes Sheet Effective:

June 1, 2018

Hawaiian Electric Company, Inc.
ENERGY COST ADJUSTMENT FILING

ENERGY COST ADJUSTMENT (ECA) FILING - July 1, 2018 (page 1 of 2)

Line		
1	Effective Date	- July 1, 2018
2	Supercedes Factor	- June 1, 2018

GENERATION COMPONENT

<u>CENTRAL STATION</u>								
FUEL PRICES, ¢/MBTU								
3	Honolulu			1,432.55				
4	Kahe			1,432.87				
5	Waiau-Steam			1,432.55				
6	Waiau-Diesel			1,741.05				
7	CIP-Diesel			2,074.20				
8	CIP-Biodiesel			2,952.52				
9	Other			0				
BTU MIX, %								
10	Honolulu			0.00				
11	Kahe			76.94				
12	Waiau-Steam			22.31				
13	Waiau-Diesel			0.75				
14	CIP-Diesel			0.00				
15	CIP-Biodiesel			0.00				
16	Other			0.00				
17 COMPOSITE COST OF GENERATION, CNTRL STN + OTHER ¢/mmbtu					1,435.11			
18	% Input to system kWh Mix			45.64				
EFFICIENCY FACTOR, mmbtu/kWh								
	(A)	(B)	(C)	(D)				
		Eff Factor	Percent of	Weighted				
	Fuel Type	mmbtu/kwh	Centrl Stn +	Eff Factor				
			Other					
19	LSFO	0.011079	99.72	0.011048				
20	Diesel	0.019721	0.28	0.000055				
21	Biodiesel	0.020169	0.00	0.000000				
22	Other	0.011143	0.00	0.000000				
(Lines 19 through 22): Col(B) x Col(C) = Col(D)								
23	Weighted Efficiency Factor, mmbtu/kWh [(lines 19(D) + 20(D) + 21(D) + 22(D))]			0.011103				
24	WGTD. COMPOSITE CNTRL STN + OTHER GEN COST, ¢/kWh (lines 17 x 18 x 23)			7.27229				
25	BASE CNTRL STN + OTHER GEN. COST, ¢/Mbtu			1,354.58				
26	Base % Input to System kWh Mix			57.59				
27	Efficiency Factor, Mbtu/kWh			0.011142				
28	WEIGHTED BASE CNTRL STN + OTHER GEN COST ¢/KWH (lines 25 x 26 x 27)			8.69190				
29	Cost Less Base (Line 24 - 28)			(1.41961)				
30	Revenue Tax Req Multiplier			1.0975				
31	CNTRL STN + OTHER GENERATION FACTOR, ¢/KWH (Line 29 x 30)			(1.55802)				
					<u>DG ENERGY COMPONENT</u>			
					32 COMPOSITE COST OF DG ENERGY, ¢/kWh	32.310		
					33 % Input to System kWh Mix	0.11		
					34 WTD COMP DG ENRGY COST, ¢/kWh (Lines 32 x 33)	0.03554		
					35 BASE DG ENERGY COMP COST	0.000		
					36 Base % Input to System kWh Mix	0.00		
					37 WTD BASE DG ENERGY COST, ¢/kWh (Line 35 x 36)	0.00000		
					38 Cost Less Base (Line 34 - 37)	0.03554		
					39 Loss Factor	1.053		
					40 Revenue Tax Req Multiplier	1.0975		
					41 DG FACTOR, ¢/kWh (Line 38 x 39 x 40)	0.04107		
					SUMMARY OF TOTAL GENERATION FACTOR, ¢/kWh			
					42 CNTRL STN + OTHER (line 31)	(1.55802)		
					43 DG (line 41)	0.04107		
					44 TOTAL GENERATION FACTOR, ¢/KWH (lines 42 + 43)	(1.51695)		

Hawaiian Electric Company, Inc.
ENERGY COST ADJUSTMENT FILING

ENERGY COST ADJUSTMENT (ECA) FILING - July 1, 2018 (page 2 of 2)

<u>Line</u>	Effective Date	- July 1, 2018
1		
2	Supercedes Factor	- June 1, 2018

<u>Line</u>	<u>PURCHASED ENERGY COMPONENT</u>			
PURCHASED ENERGY PRICE - ¢/KWH				
45	PAR Hawaii	- On Peak		15.061
46	(f.k.a HIE/Tesoro)	- Off Peak		14.645
47	HRRV	- On Peak		17.19
48		- Off Peak		16.70
49	HRRV	- On Peak	(excess)	10.95
50		- Off Peak	(excess)	6.57
51	IES Downstream	- On Peak		15.061
52		- Off Peak		14.645
53	Kalaeloa			13.288
54	AES-HI			3.286
55	Kawailoa			22.064
56	Kahuku Wind			20.704
57	Waianae Solar PV			14.500
58	As Available I			22.058
59	FIT			19.242
PURCHASED ENERGY KWH MIX, %				
60	PAR Hawaii	- On Peak		0.21
61	(f.k.a HIE/Tesoro)	- Off Peak		0.15
62	HRRV	- On Peak		6.69
63		- Off Peak		2.33
64	HRRV	- On Peak	(excess)	0.00
65		- Off Peak	(excess)	2.30
66	IES Downstream	- On Peak		0.01
67	(f.k.a Chevron)	- Off Peak		0.01
68	Kalaeloa			36.84
69	AES-HI			40.84
70	Kawailoa			3.57
71	Kahuku Wind			2.83
72	Waianae Solar PV			2.03
73	As Available I			0.61
74	FIT			1.58
				100.00
75	COMPOSITE COST OF PURCHASED ENERGY, ¢/KWH			10.091
76	% Input to System kWh Mix			54.25
77	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 75 x 76)			5.47437
78	BASE PURCH ENERGY COMP COST			8.328
79	Base % Input to System kWh Mix			42.41
80	WEIGHTED COMP. PURCH. ENERGY COST, ¢/KWH (lines 78 x 79)			3.53190
81	Cost Less Base (Line 77 - 80)			1.94247
82	Loss Factor			1.053
83	Revenue Tax Req Multiplier			1.0975
84	PURCHASED ENERGY FACTOR, ¢/KWH (lines 81 x 82 x 83)			2.24485

<u>Line</u>	<u>SYSTEM COMPOSITE</u>	
85	GEN AND PURCHASED ENERGY FACTOR, ¢/kWh (lines 44 + 84)	0.72790
86	Kahuku Wind D-VAR Adjustment, ¢/kWh	0.000
87	ECA Reconciliation Adjustment	0.476
88	ECA FACTOR, ¢/kWh (lines 85 + 86 + 87)	1.204

Hawaiian Electric Company, Inc.
FUEL OIL INVENTORY PRICES FOR 07-01-18

	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiau</u>
Average Low Sulfur Fuel Oil, ¢/Mbtu	1,432.55	1,432.55	1,432.55
Kahe Fuel Additive, ¢/Mbtu	-	0.32	-
Honolulu Trucking Cost, ¢/Mbtu	-	-	-
	<hr/> <hr/>		
Low Sulfur Fuel Oil Prices Used For Filing, ¢/Mbtu	1,432.55	1,432.87	1,432.55
	<hr/> <hr/>		
	<u>Waiau</u>	<u>CIP Biodiesel</u>	<u>CIP Diesel</u>
Average Diesel / Biodiesel Oil, ¢/Mbtu	1,741.05	2,952.52	2074.2
Thruput Charges, ¢/Mbtu	-	-	0
	<hr/> <hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	1,741.05	2,952.52	2,074.20
	<hr/> <hr/>		
	<u>Honolulu</u>	<u>Kahe</u>	<u>Waiau</u>
Average Low Sulfur Fuel Oil, \$/bbl	90.27	90.27	90.27
Kahe Fuel Additive, \$/bbl	-	0.02	-
Honolulu Trucking Cost, \$/bbl	-	-	-
	<hr/> <hr/>		
Low Sulfur Fuel Oil Prices Used For Filing, \$/bbl	90.27	90.29	90.27
	<hr/> <hr/>		
	<u>Waiau</u>	<u>CIP Biodiesel</u>	<u>CIP Diesel</u>
Average Diesel / Biodiesel Oil, \$/bbl	99.87	154.06	118.40
Thruput Charges, ¢/Mbtu	-	-	-
	<hr/> <hr/>		
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	99.87	154.06	118.40
	<hr/> <hr/>		
Distibuted Generation Fuel Prices Used for Filing, ¢/kWh			32.310

FOAC July 2018

<u>LSFO</u>	<u>BARRELS</u>	<u>MBTU</u>	<u>AMOUNT</u>	<u>AVE \$/MBTU</u>
Per FOAC run	768,407	4,842,185.02	69,366,512.13	14.325457
Additional	-	-	-	-
Forecast Amt	768,407	4,842,185.02	69,366,512.13	14.325457
	-	6.20	-	ADD'L BBL
	4,842,185	768,407	6.3016	MBTU / BBL
	69,366,512	768,407	90.27	DOLLARS / BBL
<u>WAIKU DIESEL</u>	19,063	109,345.36	1,903,759.07	17.410515
	1,903,759	19,063	99.87	DOLLARS / BBL
<u>CIP BIODIESEL</u>	3,583	18,695.65	551,992.94	29.525210
	551,993	3,583	154.06	DOLLARS / BBL
<u>CIP DIESEL</u>	9,141	52,178.12	1,082,280.85	20.742042
	1,082,281	9,141	118.40	DOLLARS / BBL
KAHE FUEL ADDITIVE *				
Additional	-	-	-	0.003194
Forecast Amt	-	-	-	0.003194
\$ / BBL =			0.02	DOLLARS / BBL
HONOLULU TRUCKING COST				
Per FOAC run	-	-	-	-
Additional	-	-	-	-
Forecast Amt	-	-	-	-
\$ / BBL =	-	-	-	DOLLARS / BBL

* Annualized amount per HECO T-4 in Docket No. 2010-0080

Hawaiian Electric Company, Inc.

CONTRACT PRICES EFFECTIVE 6-1-18

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
LOW SULFUR FUEL OIL		
Tax *	5.4592	88.06
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
DIESEL		
Tax *	6.7495	115.19
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
BIODIESEL		
Tax *	7.5204	143.30
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00

* Tax includes HGET, Hawaii Use Tax, Liquid Fuel Tax, LUST, Federal Oil Spill Recovery Fee, and Environmental Response, Energy and FS Tax.

Note: Since these components are not accounted for separately in inventory, contract prices for the current month are being provided. Contract prices are considered accurate pending actual delivery of the fuel.

HAWAIIAN ELECTRIC COMPANY, INC.

DETERMINATION OF DISTRIBUTED GENERATION EXPENSE

Line No.				
L1		Estimated Distributed Generation Fuel Cost (\$/mbtu)	\$	31.34
L2		Estimated Distributed Generation Fuel Transport Cost (\$/mbtu)		\$0.00
L3 = L1+ L2		Estimated Total Fuel and Transportation Cost (\$/mbtu)	\$	31.34
L4	Sum of (B)	Estimated Mbtu Generation for month (July 2018)		6,315
L5 = L3 x L4	Sum of (C)	Estimated Distributed Generation Total Fuel Cost (\$)		\$197,899
L6	Sum of (D)	Estimated Distributed Generation kWh Produced (July 2018)		612,462
L7 = (L5 ÷ L6) x 100		Distributed Generation Fuel Prices Used for Filing, (¢/kWh)		32.3100

	<u>Airport DG Biodiesel</u>	<u>Schofield Biodiesel</u>	<u>Schofield ULSD</u>	
(A)	\$ 28.70	\$ 32.83	\$ 20.01	Estimated Distributed Generation Fuel Cost (\$/MBTU)
(B)	539	5,214	562	Estimated MBTU Consumption
(B1)	103	994	98	Estimated fuel consumption barrels
(C) = (A) x (B)	\$15,470	\$171,175	\$11,254	Estimated Distributed Generation Fuel Cost (\$)
(D)	48,000	514,955	49,508	Estimated Distributed Generation kWh
(E) = ((C) ÷ (D)) x 100	32.230	33.240	22.730	Fuel Prices for Avoided Cost Filing, Page 2 of 9 (¢/kWh)

Hawaiian Electric Company, Inc.
ECA RECONCILIATION ADJUSTMENT
July 2018

1.	Amount to be collected	\$	7,499,100
2.	Monthly Amount (Line 1 x 1/3)	\$	2,499,700
3.	Revenue Tax Divisor		0.91115
4.	Total (Line 2 / Line 3)	\$	2,743,456
5.	Estimated MWh Sales (June 2018)		576,200
6.	ECA Reconciliation Adjustment, ¢/kWh (Line 4 ÷ Line 5)		<u><u>0.476</u></u>

HAWAIIAN ELECTRIC COMPANY, INC.
2018 Cumulative Reconciliation Balance

	(1)		(2)	(3)	(4)	(5)	(6)
<u>Month</u>	<u>YTD FOA Reconciliation</u>	<u>Qtr</u>	<u>FOA Rec Adjust Variance</u>	<u>FOA Rec Less Variance</u>	<u>Try to Collect</u>	<u>Actual Collect</u>	<u>Month-end Cumulative Balance</u>
November '17	(988,400)	(3)	140,027	(1,128,427)	329,467	323,129	(663,027)
December					329,467	305,191	(357,836)
January '18					329,467	320,330	(37,506)
February	(6,640,300)	(4)	(28,376)	(6,611,924)	2,213,433	2,088,724	(4,560,707)
March					2,213,433	2,155,118	(2,405,589)
April					2,213,433	2,229,374	(176,215)
May	(7,499,100)	(1)	(192,161)	(7,306,939)	2,499,700	2,387,495	(5,095,658)
June					2,499,700		
July					2,499,700		

NOTES:

- Col(1): Quarterly FOA reconciliation amounts. (Refer to Attachment 4)
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))

Hawaiian Electric Company, Inc.
FUEL OIL ADJUSTMENT FACTOR DATA

<u>EFFECTIVE DATE</u>	FUEL FACTOR CENTS / KWH <u>RESIDENTIAL & COMMERCIAL</u>	RESIDENTIAL BILL (\$)	
		<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
January 1, 2016	-3.748	129.34	153.97
February 1, 2016	-4.637	127.47	151.74
March 1, 2016	-5.498	123.06	146.43
April 1, 2016	-5.393	123.34	146.76
May 1, 2016	-5.527	124.85	148.58
June 1, 2016	-4.651	129.34	153.95
July 1, 2016	-3.854	133.43	158.90
August 1, 2016	-3.176	134.73	160.45
September 1, 2016	-3.345	133.98	159.57
October 1, 2016	-3.964	130.77	155.71
November 1, 2016	-3.848	131.04	156.03
December 1, 2016	-3.578	132.32	157.56
January 1, 2017	-2.091	135.39	161.22
February 1, 2017	-1.863	142.81	170.13
March 1, 2017	-1.730	143.26	170.66
April 1, 2017	-1.608	143.43	170.86
May 1, 2017	-2.347	140.42	167.26
June 1, 2017	-2.215	141.89	169.01
July 1, 2017	-2.003	141.79	168.91
August 1, 2017	-2.180	140.14	166.92
September 1, 2017	-2.288	139.74	166.45
October 1, 2017	-2.216	139.91	166.65
November 1, 2017	-2.109	139.52	166.18
December 1, 2017	-1.629	141.82	168.96
January 1, 2018	-1.145	144.26	171.84
February 1, 2018	-0.261	150.24	179.01
March 1, 2018	-0.389	152.06	181.14
April 1, 2018	-0.483	152.06	181.14
May 1, 2018	0.923	149.05	177.53
June 1, 2018	1.529	154.86	184.50
July 1, 2018	1.204	158.27	188.61

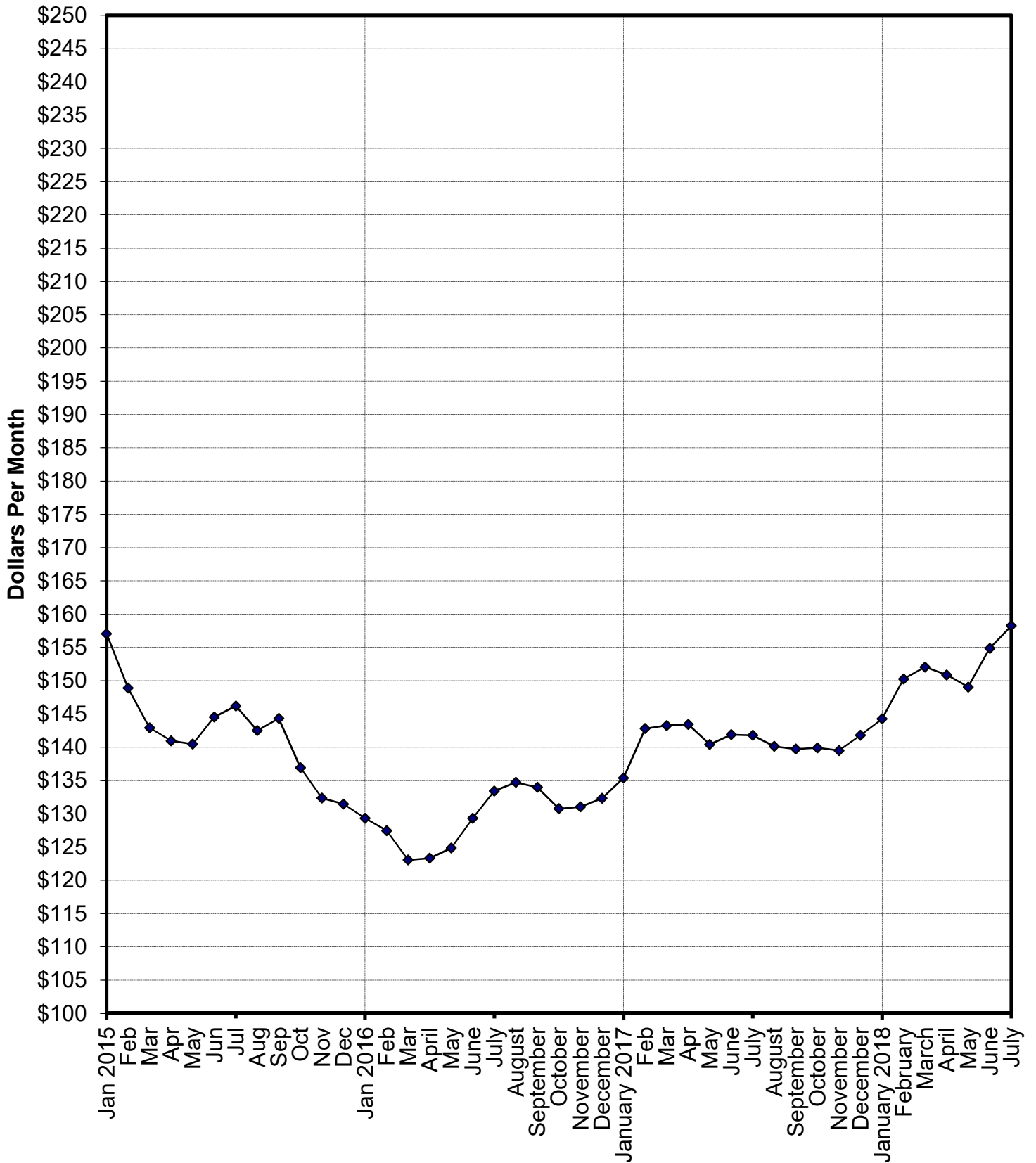
**Hawaiian Electric Company, Inc.
RESIDENTIAL SURCHARGE DATA**

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
09/01/12	FINAL RATE INCREASE (TY2011) 3.39% EFFECTIVE 09/01/12, DOCKET NO. 2010-0080	
2/1/2013	REFUND OF 2011 INTERIM RATE INCREASE	0.00 PERCENT ON BASE
01/1/2016 - 01/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	2.8642 CENTS/KWH
12/17/2015 - 02/29/2016	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0204 CENTS/KWH
01/01/2016 - 06/30/2016	GREEN INFRASTRUCTURE FEE	1.3000 DOLLARS/MONTH
02/1/2016 - 02/29/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.3809 CENTS/KWH
03/1/2016 - 03/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.3578 CENTS/KWH
3/1/2016 - 05/14/2016	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0204 CENTS/KWH
04/1/2016 - 04/30/2016	SOLAR SAVER ADJUSTMENT	-0.1223 CENTS/KWH
04/1/2016 - 04/30/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.3834 CENTS/KWH
4/1/2016 - 3/31/2017	RESIDENTIAL DSM ADJUSTMENT	0.0811 CENTS/KWH
5/1/2016 - 3/31/2017	SOLAR SAVER ADJUSTMENT	0.00 CENTS/KWH
05/1/2016 - 05/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.6989 CENTS/KWH
5/15/2016	RENEWABLE ENERGY INFRASTRUCTURE COST RECOVERY PROVISION	0.0000 CENTS/KWH
06/1/2016 - 06/30/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.7373 CENTS/KWH
6/1/2016 - 5/31/2017	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	2.1098 CENTS/KWH
07/1/2016 - 07/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.6808 CENTS/KWH
7/1/2016 - 12/31/2016	GREEN INFRASTRUCTURE FEE	1.1300 DOLLARS/MONTH
7/1/2016 - 6/30/2017	RESID. PBF SURCHARGE ADJUSTMENT	0.5865 CENTS/KWH
08/1/2016 - 08/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.2621 CENTS/KWH
09/1/2016 - 09/30/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.2827 CENTS/KWH
10/1/2016 - 10/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.2576 CENTS/KWH
11/1/2016 - 11/30/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.1959 CENTS/KWH
12/1/2016 - 12/31/2016	PURCHASED POWER ADJUSTMENT CLAUSE	3.1815 CENTS/KWH
01/1/2017 - 01/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	2.2812 CENTS/KWH
1/01/2017 - 06/30/2017	GREEN INFRASTRUCTURE FEE	1.2700 DOLLARS/MONTH
02/1/2017 - 02/28/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5384 CENTS/KWH
03/1/2017 - 03/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.4937 CENTS/KWH
04/1/2017 - 04/30/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5276 CENTS/KWH
4/1/2017 - 02/15/2018	RESIDENTIAL DSM ADJUSTMENT	0.0774 CENTS/KWH
4/1/2017 - 4/30/2017	SOLAR SAVER ADJUSTMENT	-0.1187 CENTS/KWH
5/1/2017-3/31/2018	SOLAR SAVER ADJUSTMENT	0.0000 CENTS/KWH
05/1/2017 - 05/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5484 CENTS/KWH
06/1/2017 - 06/30/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5894 CENTS/KWH
6/1/2017 - 2/15/2018	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	2.2291 CENTS/KWH
7/1/2017 - 12/31/2017	GREEN INFRASTRUCTURE FEE	1.1800 DOLLARS/MONTH
7/1/2017 - 7/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.5388 CENTS/KWH
7/1/2017 - 6/30/2018	RESID. PBF SURCHARGE ADJUSTMENT	0.4244 CENTS/KWH
8/1/2017 - 8/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.3840 CENTS/KWH
9/1/2017 - 9/30/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.4128 CENTS/KWH
10/1/2017 - 10/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.3748 CENTS/KWH
11/1/2017 - 11/30/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.1890 CENTS/KWH
12/1/2017 - 12/31/2017	PURCHASED POWER ADJUSTMENT CLAUSE	3.1709 CENTS/KWH
1/1/2018 - 1/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.1422 CENTS/KWH
1/1/2018 - 6/30/2018	GREEN INFRASTRUCTURE FEE	1.3400 DOLLARS/MONTH
2/1/2018 - 2/28/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4536 CENTS/KWH
2/16/2018 - 04/12/018	INTERIM RATE INCREASE 2017 TEST YEAR	8.8700 PERCENT ON BASE
2/16/2018 - 5/31/2018	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.7116 CENTS/KWH
2/16/2018 - 3/31/2018	RESIDENTIAL DSM ADJUSTMENT	0.0000 CENTS/KWH
3/1/2018 - 3/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4266 CENTS/KWH
4/1/2018 - 4/30/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4413 CENTS/KWH
4/1/2018 - 4/30/2018	SOLAR SAVER ADJUSTMENT	-0.1063 CENTS/KWH
4/1/2018	RESIDENTIAL DSM ADJUSTMENT	-0.0513 CENTS/KWH
4/13/2018	INTERIM RATE INCREASE 2017 TEST YEAR	5.8900 PERCENT ON BASE
5/1/2018	SOLAR SAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2018 - 5/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	2.2718 CENTS/KWH
6/1/2018 - 6/30/2018	PURCHASED POWER ADJUSTMENT CLAUSE	2.5042 CENTS/KWH
6/1/2018	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.0350 CENTS/KWH
7/1/2018	GREEN INFRASTRUCTURE FEE	1.2100 DOLLARS/MONTH
7/1/2018	RESID. PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
7/1/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4959 CENTS/KWH

~ Surcharges currently in effect are in bold.

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

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



Hawaiian Electric Company, Inc.
CALCULATIONS OF THE AVERAGE RESIDENTIAL CUSTOMER BILL

	Rate		Charge (\$) at 500 kWh			
	6/1/2018	7/1/2018	6/1/2018	7/1/2018	Difference	
Base Rates	effective date:	09/01/12	09/01/12			
Base Fuel/Energy Charge	¢/kWh	13.6062	13.6062	68.03	68.03	0.00
Non-fuel Fuel Energy Charge						
First 350 kWh per month	¢/kWh	8.1034	8.1034	28.36	28.36	0.00
Next 850 kWh per month	¢/kWh	9.2569	9.2569	13.89	13.89	0.00
Customer Charge	\$	9.00	9.00	9.00	9.00	0.00
Total Base Charges				119.28	119.28	0.00
Purchase Power Adjustment	¢/kWh	2.5042	3.4959	12.52	17.48	4.96
RBA Rate Adjustment	¢/kWh	1.0350	1.0350	5.18	5.18	0.00
DSM Adjustment	¢/kWh	-0.0513	-0.0513	-0.26	-0.26	0.00
Interim Rate Increase (TY 2017)	% on base	5.890%	5.890%	7.03	7.03	0.00
Refund of 2011 Interim	% on base	0.000%	0.000%	0.00	0.00	0.00
PBF Surcharge	¢/kWh	0.4244	0.4658	2.12	2.33	0.21
Renewable Energy Infrastructure Cost						
Recovery Provision	¢/kWh	-	-	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Energy Cost Adjustment	¢/kWh	1.529	1.204	7.65	6.02	-1.63
Green Infrastructure Fee	\$	1.34	1.21	1.34	1.21	-0.13
Avg Residential Bill at 500 kWh				154.86	158.27	

Increase / (Decrease -)	3.41
% Change	2.20%

	Rate		Charge (\$) at 600 kWh			
	6/1/2018	7/1/2018	6/1/2018	7/1/2018	Difference	
Base Rates	effective date:	09/01/12	09/01/12			
Base Fuel/Energy Charge	¢/kWh	13.6062	13.6062	81.64	81.64	0.00
Non-fuel Fuel Energy Charge						
First 350 kWh per month	¢/kWh	8.1034	8.1034	28.36	28.36	0.00
Next 850 kWh per month	¢/kWh	9.2569	9.2569	23.14	23.14	0.00
Customer Charge	\$	9.00	9.00	9.00	9.00	0.00
Total Base Charges				142.14	142.14	0.00
Purchase Power Adjustment	¢/kWh	2.5042	3.4959	15.03	20.98	5.95
RBA Rate Adjustment	¢/kWh	1.0350	1.0350	6.21	6.21	0.00
DSM Adjustment	¢/kWh	-0.0513	-0.0513	-0.31	-0.31	0.00
Interim Rate Increase (TY 2017)	% on base	5.890%	5.890%	8.37	8.37	0.00
Refund of 2011 Interim	% on base	0.000%	0.000%	0.00	0.00	0.00
PBF Surcharge	¢/kWh	0.4244	0.4658	2.55	2.79	0.24
Renewable Energy Infrastructure Cost						
Recovery Provision	¢/kWh	-	-	0.00	0.00	0.00
SolarSaver Adjustment	¢/kWh	0.0000	0.0000	0.00	0.00	0.00
Energy Cost Adjustment	¢/kWh	1.529	1.204	9.17	7.22	-1.95
Green Infrastructure Fee	\$	1.34	1.21	1.34	1.21	-0.13
Avg Residential Bill at 600 kWh				184.50	188.61	

Increase / (Decrease -)	4.11
% Change	2.23%