



May 31, 2019

FILED

2019 MAY 31 P 12:25

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 Recovery Factor for June 2019
Revised Attachments Reflecting RBA Rate Adjustment

Enclosed for filing are revised Attachments 1, 6A, 6B, 7, and 8 of Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or "Company") June 2019 Energy Cost Recovery Factor filing, reflecting the impact of the Company's Revenue Balancing Account ("RBA") rate adjustment, as approved by the Commission in Order No. 36336 issued on May 29, 2019.

On May 29, 2019, Hawaiian Electric filed its Energy Cost Recovery Factor for June 2019. Since the filing, the Company received the Commission's decision on the Company's RBA rate adjustment proposal submitted in Transmittal No. 19-01 to be effective June 1, 2019. To reflect the approved RBA adjusted rate, attached are the revised versions of Attachments 1, 6A, 6B, 7, and 8 to incorporate the impact in the customer bill analysis. There is no change to the Energy Cost Recovery Factor as filed May 29, 2019.

A residential customer consuming 500 kWh of electricity will be paying \$163.47, a decrease of \$0.09 compared to rates effective May 1, 2019. The decrease in the typical residential bill is due decrease in the Purchased Power Adjustment Clause rate (-\$1.99) and decrease in the RBA rate adjustment (-\$0.49) largely offset by the increase in the Energy Cost Recovery Factor (+\$2.39).

For the Commission's convenience, Hawaiian Electric is refileing all of the attachment included in the May 29, 2019 filing. The revised attachments are notated with "Revised 5/31/2019" in the headers; the other attachments are unchanged.

Very truly yours,

Dean K. Matsuura
Director, Regulatory Rate Proceedings

Enclosures

cc: Division of Consumer Advocacy

Hawaiian Electric Company, Inc.
ENERGY COST RECOVERY FACTOR

	<u>Effective Dates</u>		<u>Change</u>
	<u>05/01/19</u>	<u>06/01/19</u>	
Composite Cost Of Major Energy, ¢/mmbtu	1,374.14	1,335.95	(38.19)
Composite Cost Of Minor Energy, ¢/kwh	17.278	17.178	(0.100)
Composite Cost Of Purchased Energy, ¢/kWh	9.994	10.937	0.943
 <u>Residential, Schedule "R"</u>			
Energy Cost Recovery, ¢/kWh	14.721	15.199	0.478
 <u>Others, Schedules "G,J,DS,P,F"</u>			
Energy Cost Recovery, ¢/kWh	14.721	15.199	0.478
 <u>Residential Customer with:</u>			
500 kWh Consumption, \$/bill	163.56	163.47	(0.09)
600 kWh Consumption, \$/bill	194.50	194.39	(0.11)

Supercedes Sheet Effective:

May 1, 2019

Hawaiian Electric Company, Inc.
ENERGY COST RECOVERY FILING

ENERGY COST RECOVERY (ECR) FILING - June 1, 2019 (page 2 of 2)

Line		
1	Effective Date	- June 1, 2019
2	Supercedes Factor	- May 1, 2019

Line	PURCHASED ENERGY COMPONENT		
	PURCHASED ENERGY PRICE - FOSSIL - ¢/KWH		
48	PAR Hawaii	- On Peak	12.890
49	PAR Hawaii	- Off Peak	14.149
50	IES Downstream	- On Peak	12.890
51	IES Downstream	- Off Peak	14.149
52	Kalaeloa		13.288
53	AES-HI		3.381
	PURCHASED ENERGY PRICE - RENEWABLE - ¢/KWH		
54	HRRV	- On Peak	17.63
55		- Off Peak	17.13
56	HRRV	- On Peak (excess)	11.23
57		- Off Peak (excess)	6.74
58	Kawaiiloa		22.395
59	Kahuku Wind		21.013
60	Waianae Solar PV		14.500
61	As Available I		22.402
62	FIT		19.250
63	CBRE PV		15.000
64	(Future IPP)		0.000
65	(Future IPP)		0.000
66	(Future IPP)		0.000
67	(Future IPP)		0.000
	PURCHASED ENERGY KWH MIX - FOSSIL - %		
68	PAR Hawaii	- On Peak	0.24
69	PAR Hawaii	- Off Peak	0.17
70	IES Downstream	- On Peak	0.01
71	IES Downstream	- Off Peak	0.01
72	Kalaeloa		40.47
73	AES-HI		34.53
73a	Subtotal Fossil %		75.43
	PURCHASED ENERGY KWH MIX - RENEWABLE - %		
74	HRRV	- On Peak	7.12
75		- Off Peak	2.57
76	HRRV	- On Peak (excess)	0.00
77		- Off Peak (excess)	2.53
78	Kawaiiloa		4.54
79	Kahuku Wind		2.88
80	Waianae Solar PV		2.35
81	As Available I		0.67
82	FIT		1.63
83	CBRE PV		0.28
84	(Future IPP)		0.00
85	(Future IPP)		0.00
86	(Future IPP)		0.00
87	(Future IPP)		0.00
87a	Subtotal Renewable %		24.57
87b	Total Purchased Energy %		100.00
87c	Composite Cost of Purchased Energy, Fossil		8.75
87d	Composite Cost of Purchased Energy, Renewable		17.64
88	COMPOSITE COST OF PURCHASED ENERGY, ¢/KWH		10.937
89	% Input to System kWh Mix		52.90
90	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 88 x 89)		5.78567
91	2017 TY Loss Factor		1.0490
92	WTD CMP PURCH ENRGY COST, ¢/KWH (lines 90 x 91)		6.06917
93	BASE PURCHASED ENERGY COMPOSITE COST, ¢/KWH		0.000
94	Base % Input to System kWh Mix		0.0000
95	WEIGHTED BASE PURCHASED ENERGY COST, ¢/KWH SALES (lines 93 x 94)		0.00000
96	2017 TY Loss Factor		1.049
97	WTD CMP PURCH ENRGY COST, ¢/KWH sales (lines 95 x 96)		0.00000
98	Cost Less Base (Line 92 - 97)		6.06917
99	Revenue Tax Adjustment (1 / (1-0.08885))		1.097514
100	PURCHASED ENERGY FACTOR, ¢/KWH (lines 98 x 99)		6.66100

Calculation of Monthly Fossil Fuel Cost Risk Sharing Component		
Baseline LSFO (Actual)		
101	LSFO \$, baseline month	\$44,129,782
102	LSFO mmbtu, baseline	3,300,499
103	Baseline LSFO, ¢/mmbtu	1337.06
Baseline Diesel (Actual)		
104	Diesel \$, baseline month	\$1,726,670
105	Diesel mmbtu, baseline	107,471
106	Baseline Diesel, ¢/mmbtu	1,606.64
Month LSFO		
107	LSFO mmbtu, budget	2,744,540
108	LSFO Cost, ¢/mmbtu	1,335.95
109	LSFO ECRC Fossil Cost	\$36,665,753
110	LSFO Base ECRC Recovery Target	\$36,696,258
111	LSFO differential	-\$30,505
Month Diesel		
112	Diesel mmbtu, budget	54,128
113	Diesel Cost, ¢/mmbtu	1,710.17
114	Diesel ECRC Fossil Cost	\$925,683
115	Diesel Base ECRC Recovery Target	\$869,642
116	Diesel differential	\$56,041
117	Total Fossil	\$25,536
118	2% of above	\$511
118A	Total Monthly Fossil Fuel Cost Risk Sharing, Prior Months in Year	-\$197,579
118B	Maximum Annual Cap (bi-directional)	\$2,500,000
118C	Applicable Monthly Fossil Fuel Cost Risk Sharing	\$511
118D	Total Monthly Fossil Fuel Cost Risk Sharing, Including This Month	-\$197,068
119	Fossil Cost Risk Sharing before taxes	\$511
120	Revenue Tax Adjustment	1.097514
121	Fossil Cost Risk Sharing w/revenue tax	\$561
122	Forecasted Month MWh Sales	536,400
123	Fossil Fuel Cost Risk Sharing Component, ¢/kWh	-0.0001

Derivation of Non-Adjustable Component:		
80A	Fuel Handling Exp, \$000 Final Settlement, HECO-603, p1	\$7,604.5
80B	Revenue Tax Adjustment	1.097514
80C	Non-Adj Revenues, \$000	\$8,346.0
80D	2017 TY Sales, MWh HECO-301, p1	6,660,200
80E	Non-Adj Revenues, ¢/kWh	0.12531

Line	SYSTEM COMPOSITE	
124	GEN AND PURCHASED ENERGY FACTOR, ¢/kWh (lines 47 + 100)	14.4335
125	(Future Use) Adjustment, ¢/kWh	0.0000
126	ECR Reconciliation Adjustment	0.6400
127	Non-Adjustable Component (line 80E)	0.1253
128	Fossil Fuel Cost Risk Sharing Component (line 123)	-0.0001
129	Monthly Energy Cost Recovery Factor (lines 124 + 125 + 126 + 127 + 128)	15.199

Hawaiian Electric Company, Inc.
FUEL OIL INVENTORY PRICES FOR 06-01-19

	Honolulu	Kahe	Waiau
Average Low Sulfur Fuel Oil, ¢/Mbtu	1,335.72	1,335.72	1,335.72
Kahe Fuel Additive, ¢/Mbtu	-	0.32	-
Honolulu Trucking Cost, ¢/Mbtu	-	-	-
Low Sulfur Fuel Oil Prices Used For Filing, ¢/Mbtu	1,335.72	1,336.04	1,335.72
	Waiau	CIP Biodiesel	CIP Diesel
Average Diesel / Biodiesel Oil, ¢/Mbtu	1,737.09	-	1,622.67
Thruput Charges, ¢/Mbtu	-	-	0
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	1,737.09	-	1,622.67
	SGS ULSD	SGS Biodiesel	
Average Diesel / Biodiesel Oil, ¢/Mbtu	2,000.71	3,644.31	
Thruput Charges, ¢/Mbtu	-	-	
Diesel / Biodiesel Oil Prices Used for Filing, ¢/Mbtu	2,000.71	3,644.31	
	Honolulu	Kahe	Waiau
Average Low Sulfur Fuel Oil, \$/bbl	83.60	83.60	83.60
Kahe Fuel Additive, \$/bbl	-	0.02	-
Honolulu Trucking Cost, \$/bbl	-	-	-
Low Sulfur Fuel Oil Prices Used For Filing, \$/bbl	83.60	83.62	83.60
	Waiau	CIP Biodiesel	CIP Diesel
Average Diesel / Biodiesel Oil, \$/bbl	99.64	-	93.05
Thruput Charges, ¢/Mbtu	-	-	-
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	99.64	-	93.05
	SGS ULSD	SGS Biodiesel	
Average Diesel / Biodiesel Oil, \$/bbl	115.96	191.51	
Thruput Charges, ¢/Mbtu	-	-	
Diesel / Biodiesel Oil Prices Used for Filing, \$/bbl	115.96	191.51	
Distributed Generation Fuel Prices Used for Filing, ¢/kWh			35.640

FOAC June 2019

<u>LSFO</u>	<u>BARRELS</u>	<u>MBTU</u>	<u>AMOUNT</u>	<u>AVE \$/MBTU</u>
Per FOAC run	1,174,586	7,351,196.00	98,191,218.42	13.357176
Additional	-	-	-	-
Forecast Amt	1,174,586	7,351,196.00	98,191,218.42	13.357176
	-	6.20	-	ADD'L BBL
	7,351,196	1,174,586	6.2585	MBTU / BBL
	98,191,218	1,174,586	83.60	DOLLARS / BBL
<u>WAIU DIESEL</u>	20,993	120,412.42	2,091,671.05	17.370891
	2,091,671	20,993	99.64	DOLLARS / BBL
<u>CIP BIODIESEL</u>	-	-	-	-
	-	-	-	DOLLARS / BBL
<u>CIP DIESEL</u>	47,920	274,786.01	4,458,867.62	0.000000
	4,458,868	47,920	93.05	DOLLARS / BBL
<u>SGS ULSD</u>	426	2,469	49,399.63	20.00714025
	49,399.63	426	115.96	DOLLARS / BBL
<u>SGS BIODIESEL</u>	10,277	54,005.29	1,968,120.54	36.44310612
	1,968,121	10,277	191.51	DOLLARS / BBL
KAHE FUEL ADDITIVE *				0.003194
Additional				
Forecast Amt	-	-		0.003194
\$ / BBL =	-	-	0.02	DOLLARS / BBL
HONOLULU TRUCKING COST				
Per FOAC run	-	-	-	-
Additional				
Forecast Amt	-	-	-	-
\$ / BBL =	-	-	-	DOLLARS / BBL

Hawaiian Electric Company, Inc.

CONTRACT PRICES EFFECTIVE 5-1-19

<u>TYPE OF OIL BURNED</u>	<u>\$/BBL</u>	<u>¢/MBTU</u>
LOW SULFUR FUEL OIL		
Tax *	5.2979	85.46
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
DIESEL		
Tax *	6.3932	109.11
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
ULTRA LOW SULFUR DIESEL		
Tax *	6.8039	118.73
Ocean Transportation	0.0000	0.00
Land Transportation	0.0000	0.00
Storage	0.0000	0.00
Wharfage	0.0000	0.00
BIODIESEL		
Tax *	7.9800	152.06
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

<u>Line No.</u>	<u>Airport DG Biodiesel</u>	<u>Schofield Biodiesel</u>	<u>Schofield ULSD</u>	
(A)	\$ 31.74	\$ 36.44	\$ 20.01	Estimated Distributed Generation Fuel Cost (\$/MBTU)
(B)	225	22,594	1218	Estimated MBTU Consumption
(B1)	43	4,305	213	Estimated fuel consumption barrels
(C) = (A) x (B)	\$7,129	\$823,400	\$24,362	Estimated Distributed Generation Fuel Cost (\$)
(D)	20,000	2,449,861	131,902	Estimated Distributed Generation kWh
(E) = ((C) ÷ (D)) x 100	<u>35.640</u>	<u>33.610</u>	<u>18.470</u>	¢/kWh

Hawaiian Electric Company, Inc.
ECA RECONCILIATION ADJUSTMENT
June 2019

1.	Amount to be collected	\$	9,386,800
2.	Monthly Amount (Line 1 x 1/3)	\$	3,128,933
3.	Revenue Tax Divisor		0.91115
4.	Total (Line 2 / Line 3)	\$	3,434,049
5.	Estimated MWh Sales (June 2019)		536,400
6.	ECA Reconciliation Adjustment, ¢/kWh (Line 4 ÷ Line 5)		<u><u>0.640</u></u>

HAWAIIAN ELECTRIC COMPANY, INC.
2019 Cumulative Reconciliation Balance

	(1)		(2)	(3)	(4)	(5)	(6)
	YTD FOA		FOA Rec	FOA Rec	Try to	Actual	Month-end
<u>Month</u>	<u>Reconciliation</u>	<u>Qtr</u>	<u>Adjust</u>	<u>Less</u>	<u>Collect</u>	<u>Collect</u>	<u>Cumulative</u>
			<u>Variance</u>	<u>Variance</u>			<u>Balance</u>
November '18	(3,451,000)	(3)	46,479	(3,497,479)	1,150,333	1,163,303	(2,284,162)
December					1,150,333	1,102,163	(1,181,999)
January '19					1,150,333	1,121,708	(60,291)
February	(8,214,600)	(4)	(31,672)	(8,182,928)	2,738,200	2,387,566	(5,855,653)
March					2,738,200	2,502,912	(3,352,741)
April					2,738,200	2,610,703	(742,038)
May	(9,386,800)	(1)	(614,547)	(8,772,253)	3,128,933		
June					3,128,933		

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.
ENERGY COST RECOVERY FACTOR DATA

<u>EFFECTIVE DATE</u>	ENERGY COST FACTOR CENTS / KWH <u>RESIDENTIAL & COMMERCIAL</u>	RESIDENTIAL BILL (\$)	
		<u>@ 500 KWH</u>	<u>@ 600 KWH</u>
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
August 1, 2018	0.802	158.79	189.22
September 1, 2018	4.201	169.09	201.16
October 1, 2018	4.008	168.13	200.01
November 1, 2018	5.151	167.62	199.40
December 1, 2018	5.553	169.64	201.82
January 1, 2019	14.095	161.36	191.85
February 1, 2019	12.044	147.31	175.01
March 1, 2019	13.449	154.51	183.63
April 1, 2019	14.338	158.42	188.34
May 1, 2019	14.721	163.56	194.50
June 1, 2019	15.199	163.47	194.39

Hawaiian Electric Company, Inc.
RESIDENTIAL SURCHARGE DATA

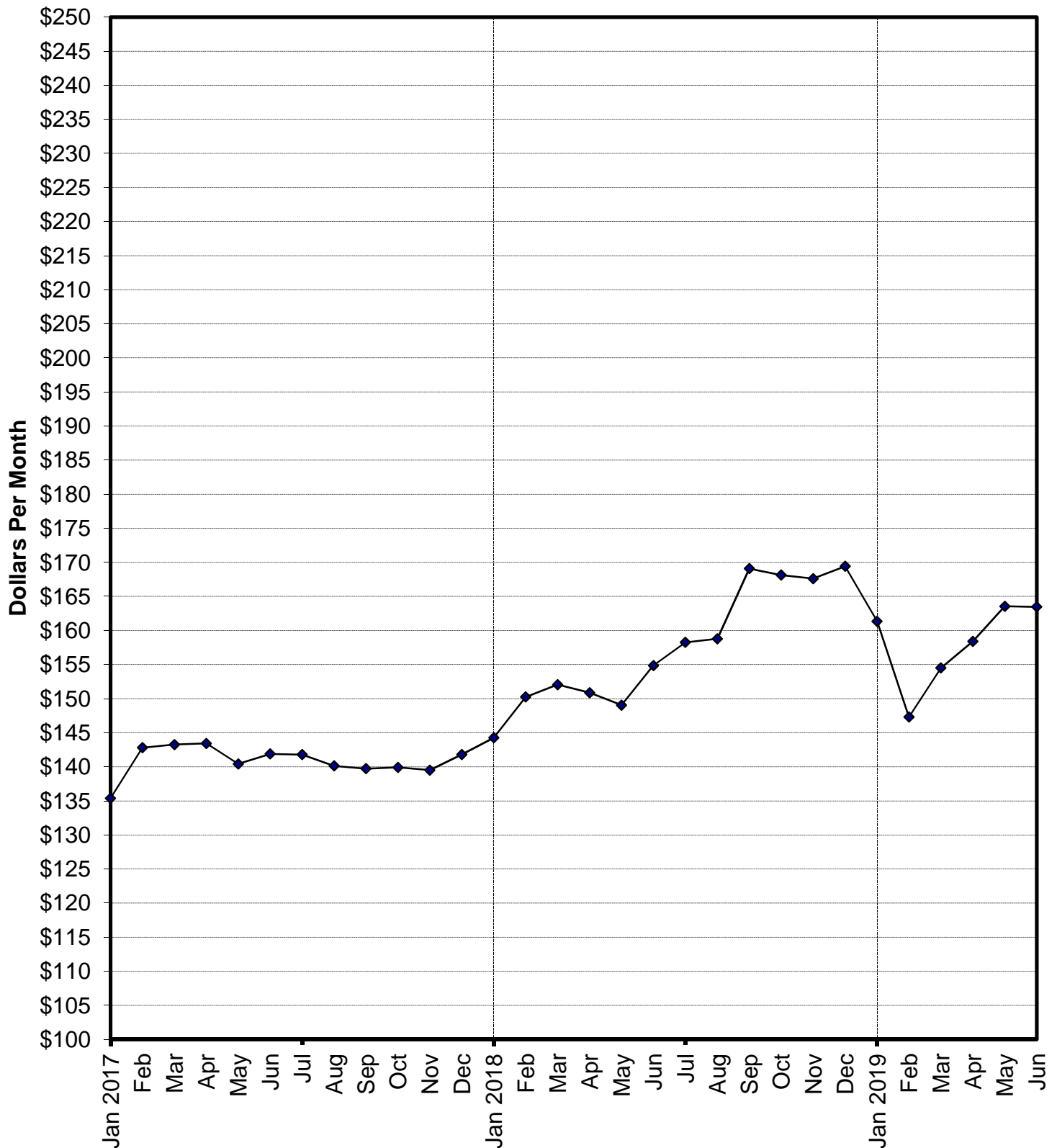
ATTACHMENT 6B
Revised 5/31/2019

EFFECTIVE DATE	DESCRIPTION OF SURCHARGE	RATE
09/01/12 - 8/31/2018	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 -04/12/2018	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 - 7/31/2018	RESIDENTIAL DSM ADJUSTMENT	-0.0513 CENTS/KWH
4/13/2018 -8/31/2018	INTERIM RATE INCREASE 2017 TEST YEAR	5.8900 PERCENT ON BASE
5/1/2018 - 3/31/19	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 - 5/31/2019	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	1.0350 CENTS/KWH
7/1/2018 - 12/31/2018	GREEN INFRASTRUCTURE FEE	1.2100 DOLLARS/MONTH
7/1/2018	RESID. PBF SURCHARGE ADJUSTMENT	0.4658 CENTS/KWH
7/1/2018 - 7/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.4959 CENTS/KWH
8/1/2018 - 8/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.9557 CENTS/KWH
8/1/2018 - 10/31/2018	RESIDENTIAL DSM ADJUSTMENT	-0.0064 CENTS/KWH
9/1/2018 - 9/30/2018	PURCHASED POWER ADJUSTMENT CLAUSE	4.3234 CENTS/KWH
9/1/2018	INTERIM RATE INCREASE 2017 TEST YEAR	0.0000 PERCENT ON BASE
9/1/2018	FINAL RATE INCREASE (TY2017) -0.039% EFFECTIVE 09/01/18, DOCKET NO. 2016-0328	
10/1/2018 - 10/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	4.3252 CENTS/KWH
11/1/2018 - 11/1/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.0539 CENTS/KWH
11/1/2018 - 1/31/2019	RESIDENTIAL DSM ADJUSTMENT	0.0203 CENTS/KWH
12/1/2018 - 12/31/2018	PURCHASED POWER ADJUSTMENT CLAUSE	3.0553 CENTS/KWH
1/1/2019 - 1/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	3.0574 CENTS/KWH
1/1/2019	GREEN INFRASTRUCTURE FEE	1.35 DOLLARS/MONTH
2/1/2019 - 4/30/2019	RESIDENTIAL DSM ADJUSTMENT	0.0000 CENTS/KWH
2/1/2019 - 2/28/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.3209 CENTS/KWH
3/1/2019 - 3/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.3532 CENTS/KWH
4/1/2019 - 4/30/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.3341 CENTS/KWH
4/1/2019 - 4/30/2019	SOLAR SAVER ADJUSTMENT	-0.0857 CENTS/KWH
5/1/2019 - 5/31/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.8780 CENTS/KWH
5/1/2019	SOLAR SAVER ADJUSTMENT	0.0000 CENTS/KWH
5/1/2019	RESIDENTIAL DSM ADJUSTMENT	0.0133 CENTS/KWH
6/1/2019	PURCHASED POWER ADJUSTMENT CLAUSE	2.4806 CENTS/KWH
6/1/2019	REVENUE BALANCING ACCOUNT RATE ADJUSTMENT	0.9376 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			
	5/1/2019	6/1/2019	5/1/2019	6/1/2019	Difference	
Base Rates	effective date:	01/01/19	01/01/19			
Base Fuel/Energy Charge	¢/kWh	-	-	0.00	0.00	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	10.6812	10.6812	37.38	37.38	0.00
Next 850 kWhr per month	¢/kWh	11.8347	11.8347	17.75	17.75	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
Total Base Charges				66.63	66.63	0.00
Purchase Power Adjustment	¢/kWh	2.8780	2.4806	14.39	12.40	-1.99
RBA Rate Adjustment	¢/kWh	1.0350	0.9376	5.18	4.69	-0.49
DSM Adjustment	¢/kWh	0.0133	0.0133	0.07	0.07	0.00
Interim Rate Increase (TY 2017)	% on base	0.000%	0.000%	0.00	0.00	0.00
Refund of 2011 Interim	% on base	0.000%	0.000%	0.00	0.00	0.00
PBF Surcharge	¢/kWh	0.4658	0.4658	2.33	2.33	0.00
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 Recovery	¢/kWh	14.721	15.199	73.61	76.00	2.39
Green Infrastructure Fee	\$	1.35	1.35	1.35	1.35	0.00
Avg Residential Bill at 500 kWh				163.56	163.47	

Increase / (Decrease -) -0.09
% Change -0.06%

	Rate		Charge (\$) at 600 kWh			
	5/1/2019	6/1/2019	5/1/2019	6/1/2019	Difference	
Base Rates	effective date:	01/01/19	01/01/19			
Base Fuel/Energy Charge	¢/kWh	-	-	0.00	0.00	0.00
Non-fuel Fuel Energy Charge						
First 350 kWhr per month	¢/kWh	10.6812	10.6812	37.38	37.38	0.00
Next 850 kWhr per month	¢/kWh	11.8347	11.8347	29.59	29.59	0.00
Customer Charge	\$	11.50	11.50	11.50	11.50	0.00
Total Base Charges				78.47	78.47	0.00
Purchase Power Adjustment	¢/kWh	2.8780	2.4806	17.27	14.88	-2.39
RBA Rate Adjustment	¢/kWh	1.0350	0.9376	6.21	5.63	-0.58
DSM Adjustment	¢/kWh	0.0133	0.0133	0.08	0.08	0.00
Interim Rate Increase (TY 2017)	% on base	0.000%	0.000%	0.00	0.00	0.00
Refund of 2011 Interim	% on base	0.000%	0.000%	0.00	0.00	0.00
PBF Surcharge	¢/kWh	0.4658	0.4658	2.79	2.79	0.00
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 Recovery	¢/kWh	14.721	15.199	88.33	91.19	2.86
Green Infrastructure Fee	\$	1.35	1.35	1.35	1.35	0.00
Avg Residential Bill at 600 kWh				194.50	194.39	

Increase / (Decrease -) -0.11
% Change -0.06%