

May 28, 2019

FILED

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PUBLIC UTILITIES
COMMISSION

The Honorable Chair and Members of
the Hawai'i Public Utilities Commission
Kekuanaoa Building, 1st Floor
465 South King Street
Honolulu, Hawai'i 96813

Dear Commissioners:

Subject: Transmittal Nos. 19-01, 19-02, 19-03 Consolidated (Decoupling)
2019 RBA Rate Adjustment Tariff Filings
Parties Stipulated Revision to Reply Statement of Position

By this letter, the Hawaiian Electric Companies¹ and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate") (individually referred to as "Party" and collectively referred to as the "Parties") hereby notify the Commission that they have reached a stipulated settlement of matters in this proceeding ("Stipulated Settlement").

On May 21, 2019, the Hawaiian Electric Companies filed their reply to the *Division of Consumer Advocacy's Statement of Position* ("RSOP"), on Transmittal Nos. 19-01, 19-02 and 19-03, the Companies' Revenue Balancing Account ("RBA") Rate Adjustment tariff filings for 2019. This Stipulated Settlement resolves all issues in this proceeding as between the Parties², except whether the Measured Performance for the System Average Interruption Duration Index ("SAIDI") and the System Average Interruption Frequency Index ("SAIFI") Performance Incentive Mechanisms ("PIM") for 2018 should exclude planned maintenance outages for a 25 kV splice replacement project that occurred in Honolulu in July 2018, as Hawaiian Electric proposed in Transmittal Nos. 18-05 and 19-01. In addition, the outcome of Docket No. 2016-0342 for the West Loch PV project will determine whether the project will receive recovery through the Major Project Interim Recovery ("MPIR") mechanism³ or be included as

¹ The "Hawaiian Electric Companies" or "Companies" are Hawaiian Electric Company, Inc. ("Hawaiian Electric"), Hawai'i Electric Light Company, Inc. ("Hawai'i Electric Light"), and Maui Electric Company, Limited ("Maui Electric").

² The agreements in the Stipulated Settlement are for the purpose of simplifying and expediting resolution of this proceeding, represent a negotiated compromise, and do not constitute an admission by either Party with respect to any of the matters agreed upon. The Parties expressly reserve their right to take positions in other dockets different than as stipulated herein.

³ If the Commission approves MPIR recovery for the West Loch PV project, the RBA Rate Adjustment for 2019 will exclude recovery of MPIR revenues since the project's scheduled in-service date is September 2019. In

a major project plant addition in the calculation of the Rate Adjustment Mechanism (“RAM”) Revenue Adjustment.

Subsequent to the Companies filing their RSOP and as a result of informal discussions between the Parties, the Hawaiian Electric Companies agree to the Consumer Advocate’s recommendation to remove the adjustments (“ADIT – Joint Pole Capital Transfer Price”) in revised Schedule D1 of \$243,215 for Hawaiian Electric (line 33), \$169,224 for Hawai‘i Electric Light (line 30) and \$43,535 for Maui Electric (line 31). These amounts were a subtraction in the calculation of ADIT for plant additions in the 2019 RAM period and were part of the Companies’ effort to exclude items associated with the joint pole transfer from the 2019 RAM rate base.⁴ The removal of these adjustments to the incremental ADIT in 2019 was appropriate because the transfer of the joint poles was recorded in 2018 and the change in the 2019 RAM ADIT reserve calculation is not impacted by this addition. As a result of this removal, rate base decreased and the changes flowed through to Schedules A, A1, B, B1 and D in addition to D1 in each Company’s Attachment 2 decoupling template.

The table below provides the revised RBA Rate Adjustment for each Company:

Hawaiian Electric 2019 RBA Rate Adjustment

Attachment 2 (Scenario #)	West Loch in RAM Revenue Adjustment	25kV Excluded from SAIDI/SAIFI PIM	RBA Rate Adjustment RSOP	RBA Rate Adjustment Revised
Att 2 (1)	Yes	Yes	0.9980¢	0.9978¢
Att 2A (2)	No	Yes	0.9582¢	0.9580¢
Att 2B (3)	Yes	No	0.9776¢	0.9775¢
Att 2C (4)	No	No	0.9378¢	0.9376¢

Company	RBA Rate Adjustment RSOP	RBA Rate Adjustment Revised
Hawai‘i Electric Light	0.9077¢	0.9069¢
Maui Electric	0.8718¢	0.8716¢

accordance with the MPIR Guidelines in Order No. 34514 in Docket No. 2013-0141, the MPIR revenues will flow through the RBA and will be included in the calculation of the 2020 RBA Rate Adjustment. If the Commission rejects MPIR recovery, the West Loch project will be included as a major project plant addition in the calculation of the 2019 RAM Revenue Adjustment.

⁴Regarding the proposed RAM joint pole adjustment, as discussed in the May 17, 2019 meeting, the Companies proposed in their RSOP an adjustment to remove the joint pole assets, related depreciation, ADIT, unbilled pole credits, and Hawaiian Telcom existing pole revenues from the calculation of the 2019 RAM Revenue Adjustment. *Hawaiian Electric Companies Reply Statement of Position* filed on May 21, 2019, page 3.

The only changes to the tariffs filed with the Companies' RSOP on May 21, 2019 are to revise the RBA Rate Adjustment, the target revenues currently in effect, and the annual decoupling filing entries for the effective target revenue and change in target revenue in the historical reference table, as shown below:

TARIFF SHEETS REVISED RESULTING FROM JOINT POLE ADIT REMOVAL

Company	RBA Rate Adjustment	Annual Target Revenue Currently in Effect	Target Revenues Historical Reference
Hawaiian Electric	92D	92E	92F
Hawai'i Electric Light	91D	91E	91F
Maui Electric			
Maui	97E	97F	97G
Lana'i	108E	108F	108G
Molokai	152E	152F	152G

The Companies are also submitting in this filing the other proposed tariff sheets attached to the Companies' RSOP to provide a complete set of proposed tariff sheets for Transmittal Nos. 19-01, 19-02 and 19-03 Consolidated.

The Hawaiian Electric Companies request the Commission to approve by May 29, 2019 the tariff changes proposed in this Stipulated Settlement to go into effect on June 1, 2019. The Companies need this lead time to perform certain internal control procedures to allow completion and verification of the rate changes.

The Companies have incorporated the applicable adjustment in their revised decoupling templates.⁵ As a result of this adjustment:

- Hawaiian Electric's proposed RBA Revenue Adjustment for Attachment 2⁶ decreased from \$69,808,410 to \$64,758,869 and its 2019 RBA Rate Adjustment decreased by 0.0778¢, from 1.0756¢ (in the original Transmittal No. 19-01 filing dated March 29,

⁵ Tabs containing revisions have been highlighted along with the individually revised cells within each tab.

⁶ The revised RBA Rate shown reflects the first scenario listed below.

1. Attachment 2- Decoupling template includes recovery of West Loch PV as a Major Project and exclusion of 25kV outages in the SAIDI and SAIFI PIM adjustment.
2. Attachment 2A- Decoupling template excludes recovery of West Loch PV and 25kV outages in the SAIDI and SAIFI PIM adjustment.
3. Attachment 2B- Decoupling template includes recovery of West Loch PV as a Major Project and 25kV outages in the SAIDI and SAIFI PIM adjustment.
4. Attachment 2C- Decoupling template excludes recovery of West Loch PV but includes 25kV outages in the SAIDI and SAIFI PIM adjustment.

2019) to 0.9978¢ per kWh. The overall incremental impact of the RBA Rate Adjustment proposed in this filing compared to the current RBA Rate Adjustment on a typical customer's monthly bill is a decrease of (\$0.19) for Hawaiian Electric's customers (based on an average usage of 500 kWh).

- Hawai'i Electric Light's proposed RBA Revenue Adjustment decreased from \$12,130,866 to \$9,638,354 and its 2019 RBA Rate Adjustment decreased by 0.2345¢, from 1.1414¢ (in the original Transmittal No. 19-02 filing dated March 29, 2019) to 0.9069¢ per kWh. The overall incremental impact of the RBA Rate Adjustment proposed in this filing compared to the current RBA Rate Adjustment on a typical customer's monthly bill is a decrease of (\$0.47) for Hawai'i Electric Light's customers (based on an average usage of 500 kWh).
- Maui Electric's proposed RBA Revenue Adjustment decreased from \$9,822,924 to \$9,160,885 and its 2019 RBA Rate Adjustment decreased by 0.0630¢, from 0.9346¢ (in the original Transmittal No. 19-03 filing dated March 29, 2019) to 0.8716¢ per kWh. The overall incremental impact of the RBA Rate Adjustment proposed in this filing compared to the current RBA Rate Adjustment on a typical customer's monthly bill is an increase of \$2.77 for Maui Electric's customers (based on an average usage of 500 kWh) and \$2.22 (based on an average usage of 400 kWh).

EXHIBIT AND ATTACHMENTS

This filing includes the following attachments:

1. Revised tariff sheet (in clean and blacklined versions) with Hawaiian Electric's revised proposed RBA Rate Adjustment, and the supporting revised Attachment 2
2. Revised tariff sheet (in clean and blacklined versions) with Hawai'i Electric Light's revised proposed RBA Rate Adjustment, and the supporting revised Attachment 2
3. Revised tariff sheet (in clean and blacklined versions) with Maui Electric's revised proposed RBA Rate Adjustment, and the supporting revised Attachment 2⁷

⁷ On May 16, 2019, in Order No. 36323 in Docket No. 2017-0150 (Maui Electric's 2018 test year rate case), the Commission approved, among other things, Maui Electric's proposed Performance Incentive Mechanism Tariff revisions. Included in these revisions were the requested changes that Maui Electric proposed in its Transmittal No. 19-03 filing on March 29, 2019, on Tariff Sheet Nos. 101E, 112D.1, and 156D.1. Because the Performance Incentive Mechanism Tariff revisions were approved in Docket No. 2017-0150, Maui Electric is not including its Performance Incentive Mechanism Tariffs in this filing.

The Honorable Chair and Members of
the Hawai'i Public Utilities Commission
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DATED: Honolulu, Hawai'i, May 28, 2019.



JOSEPH P. VIOLA
Vice President
Hawaiian Electric Company, Inc.
Maui Electric Company, Limited
Hawai'i Electric Light, Inc.



DEAN NISHINA
Executive Director
Division of Consumer Advocacy
Department of Commerce and Consumer Affairs

Enclosures

Attachments

cc: Division of Consumer Advocacy

HAWAIIAN ELECTRIC

SCENARIO 1

WEST LOCH PV PROJECT IN RAM

REVENUE ADJUSTMENT

25kV EXCLUDED FROM 2018 SAIDI AND

SAIFI PIM CALCULATIONS

HAWAIIAN ELECTRIC
ATTACHMENT 1

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
92	"RBA"	September 1, 2018	Revenue Balancing Account Provision
92A	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92A.1	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92B	"RBA"	February 16, 2018	Revenue Balancing Account Provision
92C	"RBA"	January 1, 2018	Revenue Balancing Account Provision
92D	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92E	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92F	"RBA"	June 1, 2019	Revenue Balancing Account Provision
93	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93A	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93B	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93C	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93D	"RAM"	June 1, 2017	Rate Adjustment Mechanism Provision
93E	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93F	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93G	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93H	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93I	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
94	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause
94A	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause
94B	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause

HAWAIIAN ELECTRIC COMPANY, INC.

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
95	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95A	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95B	EV-F	December 12, 2017	Commercial Public Electric Vehicle Charging Facility Service Pilot
96	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
96A	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
97	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97A	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
97B	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97C	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
98	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98A	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98B	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98C	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98D	"PIM"	June 1, 2019	Performance Incentive Mechanism Provision
98E	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
99	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99A	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99B	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99C	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service

HAWAIIAN ELECTRIC COMPANY, INC.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Supplement To:

- Schedule R - Residential Service
- Schedule G - General Service - Non-Demand
- Schedule J - General Service - Demand
- Schedule DS - Large Power Directly Served Service
- Schedule P - Large Power Service
- Schedule F - Public Street Lighting, Highway
Lighting and Park and Playground
Floodlighting
- Schedule U - Time-of-Use Service
- 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 Commercial Time-of-Use Service
- Schedule SS - Standby Service
- Schedule TOU EV- Residential Time-of-Use Service with
Electric Vehicle Pilot
- Schedule EV-F - Commercial Public Electric Vehicle
Charging Facility Service Pilot
- Schedule TOU-RI- Residential Interim Time-of-Use Service

All terms and provisions of the above listed rate schedules applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism ("RAM") Provision, and any revenue adjustment provided in accordance with the Performance Incentive Mechanism Provision, over the subsequent June 1st through May 31st period. Tracking of target revenue and recorded adjusted revenue commenced on the effective date of the tariff that implemented the Final Decision and Order in Hawaiian Electric's 2009 test year rate case, Docket No. 2008-0083, consistent with the Final Decision and Order in the Decoupling case, Docket No. 2008-0274.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018.

Transmittal Letter Dated July 23, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company's most recent test year general rate case, excluding revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause; excluding revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism; and excluding amounts for applicable revenue taxes;

Plus: Any effective RAM Revenue Adjustment calculated under the RAM provision for years subsequent to the most recent rate case test year for which the Commission has issued a Decision & Order; and any Performance Incentive Adjustment provided for in accordance with the Performance Incentive Mechanism Provision; and

Less: Any applicable Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits calculated under the RAM provision.

Adjusted by: Other adjustments, as applicable, in accordance with Commission's Order authorizing such adjustment. Other adjustments, if any, are shown in the table *Target Revenue Currently in Effect*, provided in section H.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment, Performance Incentive Adjustment, recorded adjusted revenues or other RBA accounting determinations (collectively "target revenue determinations") for any previous period and for revisions to RAM Revenue Adjustments or Performance Incentive Adjustments as a result of subsequent Commission orders that change the basis of previously calculated RAM Revenue Adjustments and/or Performance Incentive Adjustments. For any corrections of errors in previously calculated target revenue determinations, the target revenue shall be adjusted as of the date that the correct determinations would have been reflected in target revenue. For changes in the RAM Revenue Adjustment and/or Performance Incentive Adjustments as a result of subsequently issued Commission orders, the target revenue shall be adjusted as of the effective date of changes that are implemented pursuant to the subsequently issued Commission order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

The Commission and the Consumer Advocate will be notified of the target revenue revisions or corrections prior to implementation by the Company. There is no presumption that the target revenue changes are ultimately warranted or correct. In the annual RBA review transmittal ("RBA Review Transmittal") filed on or before March 31 of each year, the utility will have the burden to demonstrate that the interim changes for the previous calendar year are warranted and correctly applied. The Consumer Advocate will provide comments regarding the changes with its Statement of Position. The RBA balance and RBA Rate Adjustment for the following year will reflect any appropriate modifications to the change made by the utility in the prior year if necessary.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.19%
February	7.59%
March	8.10%
April	7.98%
May	8.40%
June	8.07%
July	8.70%
August	8.94%
September	8.65%
October	8.84%
November	8.26%
December	8.28%
Total	<u>100.00%</u>

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2017 test year rate case and shall be updated in any subsequent test year rate case.

C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be the short term debt rate as established in deriving the consolidated cost of capital in the Company's last full rate case. The Interest Rate prior to March 1, 2014 shall be 6 percent.

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

In its annual RBA Review Transmittal, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations.

HAWAIIAN ELECTRIC COMPANY, INC.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, any Performance Incentive Adjustment provided in accordance with the Performance Incentive Mechanism Provision and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

On or before March 31 of each year, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, an RBA Review Transmittal supporting the implementation of the RBA Provision, including RBA reconciliation, implementation of applicable components of the RAM Provision and Performance Incentive Mechanism Provision, determination and adjustments of target revenues, determination of the RBA Rate Adjustment; and documenting any errors, corrections and adjustments to Target Revenues in the preceding calendar year and prior to the transmittal date.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA and target revenue determinations shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, as part of the annual RBA Review Transmittal filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

All Rate Schedules 0.9978 ¢/kWh

F. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual RBA Review Transmittal filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

G: COMMISSION'S AUTHORITY

The Commission may modify or suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

H: TARGET REVENUE CURRENTLY IN EFFECT

Hawaiian Electric Company, Inc.
Annual Target Revenue (\$000s)

	<u>Description</u>	<u>Amount</u>
1	Electric Sales Revenue (Unadjusted)	\$1,531,852
2	Tax Act Implementation Lag	<u>(\$2,143)</u>
3	Electric Sales Revenue (Adjusted)	\$1,529,709
	Less:	
4	Fuel Expense	(\$327,609)
5	Purchase Power Expense	(\$466,211)
6	Revenue Tax on Electric Sales Revenue	<u>(\$135,915)</u>
7	Last Rate Order Target Revenues	\$599,974
8	Authorized RAM Revenues	\$22,938
9	Revenue Tax	<u>(\$2,038)</u>
10	Net RAM Adjustment	\$20,900
11	Authorized MPIR Revenues	\$19,811
12	Revenue Tax	<u>(\$1,760)</u>
13	Net MPIR Adjustment	\$18,051
14	Earnings Sharing Revenue Credits	\$0
15	Revenue Tax	<u>\$0</u>
16	Net Earnings Sharing Revenue Credits	\$0
17	Performance Incentive Mechanism (PIM)	\$54
18	Revenue Tax	<u>(\$5)</u>
19	Net PIM Reward (Penalty)	\$49
20	2017 Test Year Final D&O Refund	(\$48)
21	Revenue Tax	<u>\$4</u>
22	Net 2017 Test Year Final D&O Refund	(\$44)
23	On-Bill Financing Pgm Implementation Costs	\$844
24	Revenue Tax	<u>(\$75)</u>
25	Net On-Bill Financing Adjustment	\$769
26	Effective Target Revenue	\$639,699

Notes:

Totals may not add, due to rounding.

Lines 1,4,5: Final Decision and Order No. 35545, issued June 22, 2018 in Docket No. 2016-0328. Exhibit A.

Line 2: Hawaiian Electric March 2018 Settlement Tariff Sheets, Attachment 1, Line 2. Filed March 16, 2018 in Docket No. 2016-0328.

Lines 6,9,12,15,18,21,24: Revenue Tax based on 8.885% statutory rates.

Lines 8,11,14,17,20,23,26 Transmittal Nos. 19-01, 19-02, 19-03 Consolidated (Decoupling) Schedule B1 (Scenario 2), filed May 28, 2019.

Change in Effective Target Revenue for MPIR is effective January 1, 2019. See Order 35556, filed June 27, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

I: HISTORICAL REFERENCE

Category	Effective Period	Effective Target Revenue (\$000)	Change in Target Revenue (\$000)	Source
Annual Decoupling Filing	6/1/2017 thru 2/15/2018	\$604,302	N/A (1/1/2018 Baseline)	Schedule B1 filed in Transmittal No. 17-02 on 3/31/2017.
2017 Test Year Rate Case (Interim)	2/16/2018 thru 4/12/2018	\$637,077	\$32,775	Schedule B1 filed in Docket No. 2016-0328 on 1/19/2018.
2017 Test Year Rate Case (Interim)	4/13/2018 thru 5/31/2018	\$599,960	(37,117)	Schedule B1 filed in Docket No. 2016-0328 on 3/16/2018.
Annual Decoupling Filing	6/1/2018 thru 6/30/2018	\$612,574	\$12,614	Schedule B1 filed in Transmittal No. 18-01 on 3/29/2018.
MPIR (Schofield)	7/1/2018 thru 9/30/2018	\$618,587	\$6,013	Schedule B1 filed in Docket No. 2017-0213 on 7/18/2018.
MPIR (Schofield)	10/1/2018 thru 12/31/2018	\$620,374	\$1,787	Schedule B1 filed in Docket No. 2017-0213 on 12/21/2018.
MPIR (Schofield)	1/1/2019 thru 5/31/2019	\$630,624	\$10,250	Schedule B1 filed in Transmittal No. 19-01 on 2/7/2019.
Annual Decoupling Filing	6/1/2019 (current)	\$639,699	\$9,075	Schedule B1 (Scenario 2) filed in Transmittal No. 19-01 on 5/28/2019.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

PERFORMANCE INCENTIVE MECHANISM PROVISION

Introduction

This Performance Incentive Mechanism ("PIM") Provision provides for the determination of a PIM Financial Incentive for each approved PIM for each Evaluation Period, based on Measured Performance compared to an established Performance Target for each PIM, as specified below.

The sum of the PIM Financial Incentives determined for all PIMs for the Evaluation Period will be the Performance Incentive Adjustment, which will be applied as an adjustment to the effective Target Revenue and will be recovered from or credited to customers through the RBA Rate Adjustment, as defined by and in accordance with the terms of the Revenue Balancing Account ("RBA") Provision.

Annual PIM Provision Transmittal

On or before March 31 of the year following an Evaluation Period, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, a transmittal documenting the Measured Performance and calculation of the PIM Financial Incentives and Performance Incentive Adjustment for the Evaluation Period. Complete, indexed schedules, workpapers and electronic files supporting the transmittal shall be provided with the transmittal. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, other rate case parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

The review of the annual PIM Provision transmittal will be conducted concurrent with and in conjunction with the annual RBA Review Transmittal. The Performance Incentive Adjustment will be determined annually based on the PIM Provision transmittal and, after review and subject to explicit approval by the Commission, will become effective on June 1 of the year following the Evaluation Period, concurrent and in conjunction with determination of Target Revenues and the RBA Rate Adjustment in accordance with the RBA Provision. Any approved Performance Incentive Adjustment will be applied as monthly adjustments to Target Revenues for the twelve month period commencing June 1 of the year following the Evaluation Period in accordance with the Monthly Allocation Factors identified in the RBA Provision.

The Performance Targets, Deadbands and the amount of Maximum Financial Incentives used to determine the PIM Financial Incentive

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

levels for each of the PIMs shall be re-determined upon issuance of an interim or final order in a general rate case for each Company and shall remain constant in interim periods, unless otherwise amended, as necessary, by order of the Commission.

In the event that Performance Targets, Deadbands or the amounts of Maximum Financial Incentives are updated or amended by order of the Commission during the Evaluation Period, the Performance Targets, Deadbands and the amounts of Maximum Financial Incentives used in determining the amount of PIM Financial Incentives shall be a pro-rated weighted average based on the number of days of the Evaluation Period each parameter was effective.

Any revenue adjustments approved in accordance with this PIM Provision shall be excluded from the determination of Earnings Sharing Credits provided for in the Rate Adjustment Mechanism Provision ("RAM Provision").

The Performance Incentive Adjustment, and any prior year Performance Incentive Adjustment, shall be recalculated for errors in prior calculations and for subsequent Commission orders that change the basis for prior calculations. The effect of such changes shall be implemented as described in the RBA Provision, except that, the Performance Target, Deadband and Maximum Financial Incentive amounts determined in this PIM Provision shall not be recalculated based on errors in the calculation of these parameters and shall remain as specified unless and until changed by order of the Commission.

Evaluation Period

The Evaluation Period is defined as the annual twelve month calendar year period ending December 31, over which Measured Performance is determined and compared to the established Performance Target for each PIM described below. The first Evaluation Period shall begin January 1, 2018.

PIM Financial Incentive Calculation

For each PIM below, a Performance Target is specified, developed based on historical performance data. A Deadband is specified for each Performance Target in order to provide a satisfactory range of performance within which no reward or penalty amount is assessed.

A Maximum Financial Incentive amount is specified for each PIM with separate identification of a Maximum Reward Amount and a Maximum Penalty Amount.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Measured Performance for the Evaluation Period is compared to the Performance Target for each PIM. If the difference between Measured Performance and the Performance Target is less than or equal to the Deadband amount, no reward or penalty is awarded and the amount of the PIM Financial Incentive is zero. If the difference between Measured Performance and the Performance Target exceeds the Deadband amount, a reward or penalty ratio is calculated where the difference between Measured Performance and the Performance Target, less the Deadband amount, is the numerator and the Deadband amount is the denominator. This ratio is multiplied by either the Maximum Reward Amount or Maximum Penalty Amount, as applicable, to determine the PIM Financial Incentive for each PIM. The magnitude of the PIM Financial Incentive for each PIM shall not exceed 100% of the magnitude of the applicable Maximum Reward Amount or Maximum Penalty Amount established for each PIM.

Reliability Performance Incentive Mechanisms

There are two reliability PIMs: 1) System Average Interruption Frequency Index ("SAIFI"); and 2) System Average Interruption Duration Index ("SAIDI"). SAIFI is a measure of the average frequency of outages, defined as the annual total number of customer interruptions divided by the total number of customers served. SAIDI is a measure of the average duration of outage, defined as the sum of all customer interruption durations (in minutes) divided by the total number of customers served. The SAIFI and SAIDI Measured Performance and Performance Targets are determined using the IEEE Standard 1366 methodology.

For the Reliability Performance Incentive Mechanisms, the 2008-2017 record of historical performance data was used to establish the Performance Target and the Deadband. The Deadband was calculated as ± 1 standard deviation of the historical performance data. Accordingly, 100% of the penalty is achieved when Measured Performance is equal to or greater than 2 standard deviations from the Performance Target.

SAIFI:

Performance Target: 1.103 interruptions per customer during the one-year Evaluation Period

Deadband: ± 0.088 interruptions (1 Standard Deviation)

HAWAIIAN ELECTRIC COMPANY, INC

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Range for no penalty: 1.015 interruptions to 1.191 interruptions per customer (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 1.191 interruptions per customer

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

SAIDI:

Target: 99.23 minutes per outage

Deadband: \pm 8.96 minutes (1 Standard Deviation)

Range for no penalty: 90.27 minutes to 108.19 minutes per outage (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 108.19 minutes per outage

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Call Center Performance Incentive Mechanism

The Call Center Performance PIM measures the performance of the utility call center in terms of the percentage of calls answered within thirty (30) seconds. The calculation of the call center performance shall exclude blocked calls from the denominator.

The Performance Target for the Call Center Performance Incentive Mechanism was calculated based on the average of quarterly data from Quarter 3 of 2016 to Quarter 2 of 2018.

HAWAIIAN ELECTRIC COMPANY, INC

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Call Center Performance:

Performance Target: 80.10% of calls answered within 30 seconds

Deadband: +/- 3.00% of calls answered within 30 seconds

Range for no reward or penalty: 77.10 % of calls answered to 83.10% of calls answered.

Rewards apply for greater than 83.10 % of calls answered
Penalties apply for less than 77.10 % of calls answered

Maximum Reward Amount: \$910,567.

Maximum Penalty Amount: \$910,567.

The magnitude of the Maximum Reward Amount and Maximum Penalty Amount were determined to be equal to 0.08% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Additional PIMs:

The Commission may order the establishment of one or more PIMs, and the targets, deadbands, rewards, penalties, and allocations for that PIM, as applicable, shall be implemented as specified in the Commission's order that approved the applicable PIM, and the applicable PIM Financial Incentive shall be included in the Performance Incentive Adjustment.

Commission's Authority

The Commission may suspend any or all parts of this PIM Provision. Such suspension shall remain in place until removed by Commission order.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Historical Reference

The following table summarizes the prior PIMs in effect, as these values may be applicable during certain portions of the Evaluation Period.

PIM:	Effective Period:	Performance Target:	Deadband:	Maximum Reward:	Maximum Penalty:
SAIFI	1/1/2018 thru 2/15/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,039,094
SAIFI	2/16/2018 thru 4/12/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,260,799
SAIFI	4/13/2018 thru 8/31/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,276,417
SAIDI	1/1/2018 thru 2/15/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,039,094
SAIDI	2/16/2018 thru 4/12/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,260,799
SAIDI	4/13/2018 thru 8/31/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,276,417
Call Center	1/1/2018 thru 2/15/2018	79.07% of calls answered within 30 sec.	+/- 3.00%	\$815,638	\$815,638
Call Center	2/16/2018 thru 4/12/2018	79.46% of calls answered within 30 sec.	+/- 3.00%	\$904,320	\$904,320
Call Center	4/13/2018 thru 8/31/2018	79.56% of calls answered within 30 sec.	+/- 3.00%	\$910,567	\$910,567

HAWAIIAN ELECTRIC COMPANY, INC

HAWAIIAN ELECTRIC
ATTACHMENT 1A

Superseding Revised Sheet No. 50E
Effective May 1, 2019

REVISED SHEET NO. 50E
Effective June 1, 2019

Deleted: February 1, 2019

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
92	"RBA"	September 1, 2018	Revenue Balancing Account Provision
92A	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
<u>92A.1</u>	<u>"RBA"</u>	<u>June 1, 2019</u>	<u>Revenue Balancing Account Provision</u>
92B	"RBA"	February 16, 2018	Revenue Balancing Account Provision
92C	"RBA"	January 1, 2018	Revenue Balancing Account Provision
92D	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
92E	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
<u>92F</u>	<u>"RBA"</u>	<u>June 1, 2019</u>	<u>Revenue Balancing Account Provision</u>
93	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93A	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93B	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93C	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93D	"RAM"	June 1, 2017	Rate Adjustment Mechanism Provision
93E	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93F	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93G	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93H	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93I	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
94	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause
94A	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause
94B	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

Deleted: February 22, 2019

Superseding SHEET NO. 50F
Effective January 1, 2019

REVISED SHEET NO. 50F
Effective June 1, 2019

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
95	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95A	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95B	EV-F	December 12, 2017	Commercial Public Electric Vehicle Charging Facility Service Pilot
96	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
96A	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
97	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97A	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
97B	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97C	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
98	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98A	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98B	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98C	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98D	"PIM"	<u>June 1, 2019</u>	Performance Incentive Mechanism Provision
98E	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
99	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99A	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99B	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99C	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

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Superseding REVISED SHEET NO. 92
Effective January 1, 2018

REVISED SHEET NO. 92
Effective September 1, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Supplement To:

Schedule R - Residential Service
Schedule G - General Service - Non-Demand
Schedule J - General Service - Demand
Schedule DS - Large Power Directly Served Service
Schedule P - Large Power Service
Schedule F - Public Street Lighting, Highway
Lighting and Park and Playground
Floodlighting
Schedule U - Time-of-Use Service
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 Commercial Time-of-Use Service
Schedule SS - Standby Service
Schedule TOU EV- Residential Time-of-Use Service with
Electric Vehicle Pilot
Schedule EV-F - Commercial Public Electric Vehicle
Charging Facility Service Pilot
Schedule TOU-RI- Residential Interim Time-of-Use Service

All terms and provisions of the above listed rate schedules applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism ("RAM") Provision, and any revenue adjustment provided in accordance with the Performance Incentive Mechanism Provision, over the subsequent June 1st through May 31st period. Tracking of target revenue and recorded adjusted revenue commenced on the effective date of the tariff that implemented the Final Decision and Order in Hawaiian Electric's 2009 test year rate case, Docket No. 2008-0083, consistent with the Final Decision and Order in the Decoupling case, Docket No. 2008-0274.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018.

Transmittal Letter Dated July 23, 2018

Superseding REVISED SHEET NO. 92A
Effective January 1, 2018.

REVISED SHEET NO. 92A
Effective June 1, 2019.

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company's most recent test year general rate case, excluding revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause; excluding revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism; and excluding amounts for applicable revenue taxes;

Plus: Any effective RAM Revenue Adjustment calculated under the RAM provision for years subsequent to the most recent rate case test year for which the Commission has issued a Decision & Order; and any Performance Incentive Adjustment provided for in accordance with the Performance Incentive Mechanism Provision; and

Less: Any applicable Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits calculated under the RAM provision.

Adjusted by: Other adjustments, as applicable, in accordance with Commission's Order authorizing such adjustment. Other adjustments, if any, are shown in the table Target Revenue Currently in Effect, provided in section H.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment, Performance Incentive Adjustment, recorded adjusted revenues or other RBA accounting determinations (collectively "target revenue determinations") for any previous period and for revisions to RAM Revenue Adjustments or Performance Incentive Adjustments as a result of subsequent Commission orders that change the basis of previously calculated RAM Revenue Adjustments and/or Performance Incentive Adjustments. For any corrections of errors in previously calculated target revenue determinations, the target revenue shall be adjusted as of the date that the correct determinations would have been reflected in target revenue. For changes in the RAM Revenue Adjustment and/or Performance Incentive Adjustments as a result of subsequently issued Commission orders, the target revenue shall be adjusted as of the effective date of changes that are implemented pursuant to the subsequently issued Commission order.

Deleted: Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

SHEET NO. 92A.1
Effective June 1, 2019

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

The Commission and the Consumer Advocate will be notified of the target revenue revisions or corrections prior to implementation by the Company. There is no presumption that the target revenue changes are ultimately warranted or correct. In the annual RBA review transmittal ("RBA Review Transmittal") filed on or before March 31 of each year, the utility will have the burden to demonstrate that the interim changes for the previous calendar year are warranted and correctly applied. The Consumer Advocate will provide comments regarding the changes with its Statement of Position. The RBA balance and RBA Rate Adjustment for the following year will reflect any appropriate modifications to the change made by the utility in the prior year if necessary.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

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Superseding REVISED SHEET NO. 92B
Effective June 1, 2017

REVISED SHEET NO. 92B
Effective February 16, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.19%
February	7.59%
March	8.10%
April	7.98%
May	8.40%
June	8.07%
July	8.70%
August	8.94%
September	8.65%
October	8.84%
November	8.26%
December	8.28%
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2017 test year rate case and shall be updated in any subsequent test year rate case.

C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be the short term debt rate as established in deriving the consolidated cost of capital in the Company's last full rate case. The Interest Rate prior to March 1, 2014 shall be 6 percent.

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

In its annual RBA Review Transmittal, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Order No. 35280, issued February 9, 2018.
Transmittal Letter Dated February 12, 2018.

Superseding REVISED SHEET NO. 92C
Effective June 1, 2017

REVISED SHEET NO. 92C
Effective January 1, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, any Performance Incentive Adjustment provided in accordance with the Performance Incentive Mechanism Provision and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

On or before March 31 of each year, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, an RBA Review Transmittal supporting the implementation of the RBA Provision, including RBA reconciliation, implementation of applicable components of the RAM Provision and Performance Incentive Mechanism Provision, determination and adjustments of target revenues, determination of the RBA Rate Adjustment; and documenting any errors, corrections and adjustments to Target Revenues in the preceding calendar year and prior to the transmittal date.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA and target revenue determinations shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, as part of the annual RBA Review Transmittal filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

Superseding REVISED SHEET NO. 92D
Effective June 1, 2018

REVISED SHEET NO. 92D
Effective June 1, 2019

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

All Rate Schedules 0.9978 ¢/kWh

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F. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual RBA Review Transmittal filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

G: COMMISSION'S AUTHORITY

The Commission may modify or suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

Superseding REVISED SHEET NO. 92E
Effective January 1, 2019.

REVISED SHEET NO. 92E
Effective June 1, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

H: TARGET REVENUE, CURRENTLY IN EFFECT.

Hawaiian Electric Company, Inc.
Annual Target Revenue (\$000s)

	Description	Amount
1	Electric Sales Revenue (Unadjusted)	\$1,531,852
2	Tax Act Implementation Lag	(\$2,143)
3	Electric Sales Revenue (Adjusted)	\$1,529,709
	Less:	
4	Fuel Expense	(\$327,609)
5	Purchase Power Expense	(\$466,211)
6	Revenue Tax on Electric Sales Revenue	(\$135,915)
7	Last Rate Order Target Revenues	\$599,974
8	Authorized RAM Revenues	\$22,938
9	Revenue Tax	(\$2,038)
10	Net RAM Adjustment	\$20,900
11	Authorized MPIR Revenues	\$19,811
12	Revenue Tax	(\$1,760)
13	Net MPIR Adjustment	\$18,051
14	Earnings Sharing Revenue Credits	\$0
15	Revenue Tax	\$0
16	Net Earnings Sharing Revenue Credits	\$0
17	Performance Incentive Mechanism (PIM)	\$54
18	Revenue Tax	(\$5)
19	Net PIM Reward (Penalty)	\$49
20	2017 Test Year Final D&O Refund	(\$48)
21	Revenue Tax	\$4
22	Net 2017 Test Year Final D&O Refund	(\$44)
23	On-Bill Financing Pgm Implementation Costs	\$844
24	Revenue Tax	(\$75)
25	Net On-Bill Financing Adjustment	\$769
26	Effective Target Revenue	\$639,699

Notes:

Totals may not add, due to rounding.

Lines 1,4,5: Final Decision and Order No. 35545, issued June 22, 2018 in Docket No. 2016-0328. Exhibit A.

Line 2: Hawaiian Electric March 2018 Settlement Tariff Sheets, Attachment 1, Line 2. Filed March 16, 2018 in Docket No. 2016-0328.

Lines 6,9,12,15,18,21,24: Revenue Tax based on 8.885% statutory rates.

Lines 8,11,14,17,20,23,26 Transmittal Nos. 19-01, 19-02, 19-03 Consolidated (Decoupling) Schedule B1 (Scenario 2), filed May 28, 2019.

Change in Effective Target Revenue for MPIR is effective January 1, 2019. See Order 35556, filed June 27, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

I: HISTORICAL REFERENCE

<u>Category</u>	<u>Effective Period</u>	<u>Effective Target Revenue (\$000)</u>	<u>Change in Target Revenue (\$000)</u>	<u>Source</u>
Annual Decoupling Filing	6/1/2017 thru 2/15/2018	\$604,302	N/A (1/1/2018 Baseline)	Schedule B1 filed in Transmittal No. 17-02 on 3/31/2017.
2017 Test Year Rate Case (Interim)	2/16/2018 thru 4/12/2018	\$637,077	\$32,775	Schedule B1 filed in Docket No. 2016-0328 on 1/19/2018.
2017 Test Year Rate Case (Interim)	4/13/2018 thru 5/31/2018	\$599,960	(37,117)	Schedule B1 filed in Docket No. 2016-0328 on 3/16/2018.
Annual Decoupling Filing	6/1/2018 thru 6/30/2018	\$612,574	\$12,614	Schedule B1 filed in Transmittal No. 18-01 on 3/29/2018.
MPIR (Schofield)	7/1/2018 thru 9/30/2018	\$618,587	\$6,013	Schedule B1 filed in Docket No. 2017-0213 on 7/18/2018.
MPIR (Schofield)	10/1/2018 thru 12/31/2018	\$620,374	\$1,787	Schedule B1 filed in Docket No. 2017-0213 on 12/21/2018.
MPIR (Schofield)	1/1/2019 thru 5/31/2019	\$630,624	\$10,250	Schedule B1 filed in Transmittal No. 19-01 on 2/7/2019.
Annual Decoupling Filing	6/1/2019 (current)	\$639,699	\$9,075	Schedule B1 (Scenario 2) filed in Transmittal No. 19-01 on 5/28/2019.

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

PERFORMANCE INCENTIVE MECHANISM PROVISION

Introduction

This Performance Incentive Mechanism ("PIM") Provision provides for the determination of a PIM Financial Incentive for each approved PIM for each Evaluation Period, based on Measured Performance compared to an established Performance Target for each PIM, as specified below.

The sum of the PIM Financial Incentives determined for all PIMs for the Evaluation Period will be the Performance Incentive Adjustment, which will be applied as an adjustment to the effective Target Revenue and will be recovered from or credited to customers through the RBA Rate Adjustment, as defined by and in accordance with the terms of the Revenue Balancing Account ("RBA") Provision.

Annual PIM Provision Transmittal

On or before March 31 of the year following an Evaluation Period, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, a transmittal documenting the Measured Performance and calculation of the PIM Financial Incentives and Performance Incentive Adjustment for the Evaluation Period. Complete, indexed schedules, workpapers and electronic files supporting the transmittal shall be provided with the transmittal. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, other rate case parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

The review of the annual PIM Provision transmittal will be conducted concurrent with and in conjunction with the annual RBA Review Transmittal. The Performance Incentive Adjustment will be determined annually based on the PIM Provision transmittal and, after review and subject to explicit approval by the Commission, will become effective on June 1 of the year following the Evaluation Period, concurrent and in conjunction with determination of Target Revenues and the RBA Rate Adjustment in accordance with the RBA Provision. Any approved Performance Incentive Adjustment will be applied as monthly adjustments to Target Revenues for the twelve month period commencing June 1 of the year following the Evaluation Period in accordance with the Monthly Allocation Factors identified in the RBA Provision.

The Performance Targets, Deadbands and the amount of Maximum Financial Incentives used to determine the PIM Financial Incentive

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

levels for each of the PIMs shall be re-determined upon issuance of an interim or final order in a general rate case for each Company and shall remain constant in interim periods, unless otherwise amended, as necessary, by order of the Commission.

In the event that Performance Targets, Deadbands or the amounts of Maximum Financial Incentives are updated or amended by order of the Commission during the Evaluation Period, the Performance Targets, Deadbands and the amounts of Maximum Financial Incentives used in determining the amount of PIM Financial Incentives shall be a pro-rated weighted average based on the number of days of the Evaluation Period each parameter was effective.

Any revenue adjustments approved in accordance with this PIM Provision shall be excluded from the determination of Earnings Sharing Credits provided for in the Rate Adjustment Mechanism Provision ("RAM Provision").

The Performance Incentive Adjustment, and any prior year Performance Incentive Adjustment, shall be recalculated for errors in prior calculations and for subsequent Commission orders that change the basis for prior calculations. The effect of such changes shall be implemented as described in the RBA Provision, except that, the Performance Target, Deadband and Maximum Financial Incentive amounts determined in this PIM Provision shall not be recalculated based on errors in the calculation of these parameters and shall remain as specified unless and until changed by order of the Commission.

Evaluation Period

The Evaluation Period is defined as the annual twelve month calendar year period ending December 31, over which Measured Performance is determined and compared to the established Performance Target for each PIM described below. The first Evaluation Period shall begin January 1, 2018.

PIM Financial Incentive Calculation

For each PIM below, a Performance Target is specified, developed based on historical performance data. A Deadband is specified for each Performance Target in order to provide a satisfactory range of performance within which no reward or penalty amount is assessed.

A Maximum Financial Incentive amount is specified for each PIM with separate identification of a Maximum Reward Amount and a Maximum Penalty Amount.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017. Transmittal Letter dated January 11, 2018.

Superseding Sheet no. 98B
Effective January 1, 2018

REVISED SHEET NO. 98B
Effective September 1, 2018

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Measured Performance for the Evaluation Period is compared to the Performance Target for each PIM. If the difference between Measured Performance and the Performance Target is less than or equal to the Deadband amount, no reward or penalty is awarded and the amount of the PIM Financial Incentive is zero. If the difference between Measured Performance and the Performance Target exceeds the Deadband amount, a reward or penalty ratio is calculated where the difference between Measured Performance and the Performance Target, less the Deadband amount, is the numerator and the Deadband amount is the denominator. This ratio is multiplied by either the Maximum Reward Amount or Maximum Penalty Amount, as applicable, to determine the PIM Financial Incentive for each PIM. The magnitude of the PIM Financial Incentive for each PIM shall not exceed 100% of the magnitude of the applicable Maximum Reward Amount or Maximum Penalty Amount established for each PIM.

Reliability Performance Incentive Mechanisms

There are two reliability PIMs: 1) System Average Interruption Frequency Index ("SAIFI"); and 2) System Average Interruption Duration Index ("SAIDI"). SAIFI is a measure of the average frequency of outages, defined as the annual total number of customer interruptions divided by the total number of customers served. SAIDI is a measure of the average duration of outage, defined as the sum of all customer interruption durations (in minutes) divided by the total number of customers served. The SAIFI and SAIDI Measured Performance and Performance Targets are determined using the IEEE Standard 1366 methodology.

For the Reliability Performance Incentive Mechanisms, the 2008-2017 record of historical performance data was used to establish the Performance Target and the Deadband. The Deadband was calculated as ± 1 standard deviation of the historical performance data. Accordingly, 100% of the penalty is achieved when Measured Performance is equal to or greater than 2 standard deviations from the Performance Target.

SAIFI:

Performance Target: 1.103 interruptions per customer during the one-year Evaluation Period

Deadband: ± 0.088 interruptions (1 Standard Deviation)

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Superseding Sheet No. 98C
Effective January 1, 2018

REVISED SHEET NO. 98C
Effective September 1, 2018

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Range for no penalty: 1.015 interruptions to 1.191
interruptions per customer (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 1.191 interruptions per customer

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

SAIDI:

Target: 99.23 minutes per outage

Deadband: \pm 8.96 minutes (1 Standard Deviation)

Range for no penalty: 90.27 minutes to 108.19 minutes per outage (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 108.19 minutes per outage

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Call Center Performance Incentive Mechanism

The Call Center Performance PIM measures the performance of the utility call center in terms of the percentage of calls answered within thirty (30) seconds. The calculation of the call center performance shall exclude blocked calls from the denominator.

The Performance Target for the Call Center Performance Incentive Mechanism was calculated based on the average of quarterly data from Quarter 3 of 2016 to Quarter 2 of 2018.

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Superseding Sheet No. 98D
Effective September 1, 2018

REVISED SHEET NO. 98D
Effective June 1, 2019

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PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Call Center Performance:

Performance Target: 80.10% of calls answered within 30 seconds

Deadband: +/- 3.00% of calls answered within 30 seconds

Range for no reward or penalty: 77.10 % of calls answered to 83.10% of calls answered.

Rewards apply for greater than 83.10 % of calls answered
Penalties apply for less than 77.10 % of calls answered

Maximum Reward Amount: \$910,567.
Maximum Penalty Amount: \$910,567.

The magnitude of the Maximum Reward Amount and Maximum Penalty Amount were determined to be equal to 0.08% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Additional PIMs:

The Commission may order the establishment of one or more PIMs, and the targets, deadbands, rewards, penalties, and allocations for that PIM, as applicable, shall be implemented as specified in the Commission's order that approved the applicable PIM, and the applicable PIM Financial Incentive shall be included in the Performance Incentive Adjustment.

Commission's Authority

The Commission may suspend any or all parts of this PIM Provision. Such suspension shall remain in place until removed by Commission order.

Deleted: Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.¶

HAWAIIAN ELECTRIC COMPANY, INC

Transmittal Letter dated May 28, 2019.

SHEET NO. 98E
Effective September 1, 2018

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Historical Reference

The following table summarizes the prior PIMs in effect, as these values may be applicable during certain portions of the Evaluation Period.

PIM:	Effective Period:	Performance Target:	Deadband:	Maximum Reward:	Maximum Penalty:
SAIFI	1/1/2018 thru 2/15/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,039,094
SAIFI	2/16/2018 thru 4/12/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,260,799
SAIFI	4/13/2018 thru 8/31/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,276,417
SAIDI	1/1/2018 thru 2/15/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,039,094
SAIDI	2/16/2018 thru 4/12/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,260,799
SAIDI	4/13/2018 thru 8/31/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,276,417
Call Center	1/1/2018 thru 2/15/2018	79.07% of calls answered within 30 sec.	+/- 3.00%	\$815,638	\$815,638
Call Center	2/16/2018 thru 4/12/2018	79.46% of calls answered within 30 sec.	+/- 3.00%	\$904,320	\$904,320
Call Center	4/13/2018 thru 8/31/2018	79.56% of calls answered within 30 sec.	+/- 3.00%	\$910,567	\$910,567

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Attachment 2 – List of Schedules and Workpapers

Schedule A (REVISED)	HECO-WP-A-001
Schedule A1 (REVISED)	HECO-WP-B-001
Schedule B (REVISED)	HECO-WP-C-001
Schedule B1 (REVISED)	HECO-WP-C-002
Schedule B2	HECO-WP-C-003
Schedule C	HECO-WP-D1-001
Schedule C1	HECO-WP-D2-001
Schedule C2	HECO-WP-D2-002
Schedule D (REVISED)	HECO-WP-D2-003
Schedule D1 (REVISED)	HECO-WP-D2-004
Schedule D2	HECO-WP-D3-001
Schedule D3	HECO-WP-D4-001
Schedule D4	HECO-WP-D4-002
Schedule D5 (REVISED)	HECO-WP-D4-003
Schedule E (REVISED)	HECO-WP-E-001
Schedule F (REVISED)	HECO-WP-F-001
Schedule F1	HECO-WP-F1-001
Schedule F2	HECO-WP-F1-002
Schedule G	HECO-WP-F1-003
Schedule H (REVISED)	HECO-WP-H-001
Schedule I	HECO-WP-H-002
Schedule J	HECO-WP-H-003
Schedule K	HECO-WP-H-004
Schedule L	HECO-WP-H-005
Schedule L1	HECO-WP-H-006
Schedule M	HECO-WP-H-007
Schedule N	HECO-WP-H-008
	HECO-WP-H-009
	HECO-WP-L1-001
	HECO-WP-L1-002
	HECO-WP-L1-003
	HECO-WP-M-001
	HECO-WP-M-002
	HECO-WP-M-003
	HECO-WP-M-004
	HECO-WP-M-005

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF 2019 REVENUE BALANCING ACCOUNT RATE ADJUSTMENT
SCENARIO 1 - WEST LOCH PV PROJECT IN RAM REVENUE ADJUSTMENT /
25 KV EXCLUDED FROM 2018 SAIDI AND SAIFI PIM CALCULATIONS

Line No.	Description (a)	Reference (b)	Amount (c)	6/1/2019 Rate Amount (d)
RECONCILIATION OF RBA BALANCE:				
1	RBA Prior calendar year-end balance	Schedule B	\$ 37,331,443	
1a	OBF Program Implementation Cost Recovery - Year 1 of 2	Schedule N	\$ 768,575	
			\$ 38,100,018	
2	Revenue Tax Factor	Schedule C	1.0975	
3	Revenue for RBA Balance			\$ 41,814,770
RATE ADJUSTMENT MECHANISM "RAM" AMOUNT:				
4	Total RAM Revenue Adjustment Allowed (Note 2)	Schedule A1		\$ 22,938,101
5	EARNINGS SHARING REVENUE CREDITS - 2019 ROE:	Schedule H		\$ -
6	PERFORMANCE INCENTIVE MECHANISM REWARD (PENALTY)	Schedule M		\$ 53,998
7	2017 TEST YEAR RATE CASE FINAL D&O REFUND	Note (3)		\$ (48,000)
8	PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS	Schedule I		\$ -
9	TOTAL RBA REVENUE ADJUSTMENT	Sum Col. (d)		\$ 64,758,869
10	GWH SALES VOLUME ESTIMATE JUNE 2019 - MAY 2020	HECO-WP-A-001		6,489.900
11	RBA RATE ADJUSTMENT - cents per kWh	Note (1)		<u>0.9978</u> <u>6/1/2018</u> <u>Incremental</u> <u>1.0350</u> <u>(0.0372)</u>
12	MONTHLY BILL IMPACT @ 600 KWH			<u>\$ 5.99</u> <u>\$ 6.21</u> <u>\$ (0.22)</u>
	MONTHLY BILL IMPACT @ 500 KWH			<u>\$ 4.99</u> <u>\$ 5.18</u> <u>\$ (0.19)</u>

Note (1): 2019 RBA Rate Adjustment Breakdown

	Col. (d)	Rate Adjustment cents per kWh	Percentage Share
RBA Balance	\$ 41,814,770	0.64430530	64.5700%
RAM Amount	\$ 22,938,101	0.35344306	35.4208%
Earnings Sharing Revenue Credits	\$ -	0.00000000	0.0000%
Performance Incentive Mechanism Reward (Penalty)	\$ 53,998	0.00083204	0.0834%
2017 Test Year Rate Case Final D&O Refund	\$ (48,000)	-0.00073961	-0.0741%
Major or Baseline Capital Projects Credits	\$ -	0.00000000	0.0000%
	\$ 64,758,869	0.99784078	100.0000%

Note (2): Total RAM Revenue Adjustment Allowed is the sum of the RAM Cap + Exceptional and Other Projects. See Order No. 32735, filed March 31, 2015, paragraph 107, page 94, which states that the Total RAM Revenue Adjustment is to be comprised of the RAM Cap plus recovery of Exceptional And Other Matters.

Note (3): Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Hawaiian Electric Proposed PIM Tariff Revisions and Refund Calculation, Exhibit 4, filed July 23, 2018, and approved by the Commission in Order No. 35661, filed August 30, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TOTAL RAM REVENUE ADJUSTMENT ALLOWED

Line No.	Description (a)	Reference (b)	Amount (c)
RAM REVENUE ADJUSTMENT DETERMINED ACCORDING TO EXISTING TARIFFS AND PROCEDURES			
1	O&M RAM	Schedule C	\$ 8,622,195
2	Rate Base RAM - Return on Investment	Schedule D	\$ 11,376,190
3	Depreciation & Amortization RAM Expense	Schedule E	\$ 2,939,716
4	Total RAM Revenue Adjustment		\$ 22,938,101
RAM REVENUE ADJUSTMENT CAP			
5	RAM Cap for 2019 RAM Revenue Adjustment	Schedule J	\$ 27,945,687
6	Plus: Exceptional and Other Matters	Schedule K	\$ -
7	2019 Cap - Total RAM Revenue Adjustment (Note 2)		\$ 27,945,687
8	Total RAM Revenue Adjustment Allowed (Note 1)	Lesser of Line 4 or Line 7	\$ 22,938,101

To Sch A

Note 1 RAM Revenue Adjustment Allowed:
 See Order No. 32735, filed March 31, 2015, paragraph 106, page 94:
 "The RAM Revenue Adjustment to be applied to determine effective Target Revenues will be the lesser of (a) the RAM Revenue Adjustment determined according to existing tariffs and procedures or (b) a RAM Revenue Adjustment Cap ("RAM Cap) to be calculated as specified."

Note 2 Total RAM Cap:
 See Order No. 32735, filed March 31, 2015, paragraph 110, page 96:
 "The RAM Cap will apply to the entire RAM Revenue Adjustment including the O&M RAM, Rate Base RAM (including Major Capital Projects and Baseline Projects), and the Depreciation and Amortization RAM."

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
SUMMARY OF ACCUMULATED REVENUE BALANCING ACCOUNT

Line No.	Month	Beginning Balance	Target Revenues	Recorded Adjusted Revenue	Variance to RBA	Adjustment for prior year RBA accrual	Tax-effected Balance Subject to Interest	Interest at 1.75%/year	Ending Balance
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Monthly RBA Balance and Activity (Monthly PUC Rpt)									
		\$ 18,013,624							
1	2017 December	\$ 46,306,327	\$ 49,915,326	\$ 43,730,598	\$ 6,184,728	\$ (3,302,057)	29,169,047	\$ 42,538	\$ 49,231,536
2									
3	2018 January	\$ 49,231,536	\$ 48,948,443	\$ 43,871,232	\$ 5,077,211	\$ (3,369,650)	\$ 37,188,347	\$ 54,233	\$ 50,993,330
4	February	\$ 50,993,330	\$ 45,953,154	\$ 40,430,219	\$ 5,522,935	\$ (4,185,853)	\$ 38,358,939	\$ 55,940	\$ 52,386,352
5	March	\$ 52,386,352	\$ 51,603,222	\$ 46,365,780	\$ 5,237,442	\$ (3,345,112)	\$ 39,599,394	\$ 57,749	\$ 54,336,431
6	April	\$ 54,336,431	\$ 49,061,587	\$ 45,638,864	\$ 3,422,723	\$ (3,430,466)	\$ 40,341,925	\$ 58,832	\$ 54,387,520
7	May	\$ 54,387,520	\$ 50,396,658	\$ 43,802,261	\$ 6,594,397	\$ (3,440,553)	\$ 41,553,464	\$ 60,599	\$ 57,601,782
8	June	\$ 57,601,782	\$ 49,434,694	\$ 46,747,403	\$ 2,687,291	\$ (4,129,862)	\$ 42,233,769	\$ 61,591	\$ 56,220,802
9	July	\$ 56,220,802	\$ 53,817,091	\$ 50,144,604	\$ 3,672,487	\$ (4,451,628)	\$ 41,454,689	\$ 60,455	\$ 55,502,116
10	August	\$ 55,502,116	\$ 55,301,701	\$ 50,148,289	\$ 5,153,412	\$ (4,546,694)	\$ 41,435,565	\$ 60,427	\$ 56,169,261
11	September	\$ 56,169,261	\$ 53,507,798	\$ 54,077,963	\$ (570,165)	\$ (4,315,858)	\$ 39,891,740	\$ 58,175	\$ 51,341,413
12	October	\$ 51,341,413	\$ 54,683,113	\$ 56,214,832	\$ (1,531,719)	\$ (4,543,142)	\$ 35,865,707	\$ 52,304	\$ 45,318,856
13	November	\$ 45,318,856	\$ 51,095,307	\$ 51,711,892	\$ (616,585)	\$ (4,111,538)	\$ 31,893,935	\$ 46,512	\$ 40,637,245
14	Oct/Nov True-Up		\$ 305,574		\$ 305,574			\$ 453	\$ 40,943,272
15	December	\$ 40,943,272	\$ 51,366,986	\$ 51,070,061	\$ 296,925	\$ (3,951,109)	\$ 29,043,764	\$ 42,355	\$ 37,331,443
16			\$ 615,475,328	\$ 580,223,400	\$ 35,251,928	\$ (47,821,465)		\$ 669,625	
17									
18									
19	2019 January	\$ -	\$ 51,648,125	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	February	\$ -	\$ 47,864,379	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	March	\$ -	\$ 51,080,563	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April	\$ -	\$ 50,323,814	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	May	\$ -	\$ 52,972,435	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	OBF Recovery	\$ 1,537,150							\$ -
24a	June	\$ -	\$ 51,623,710	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	July	\$ -	\$ 55,653,814	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	August	\$ -	\$ 57,189,092	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	September	\$ -	\$ 55,333,965	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	October	\$ -	\$ 56,549,393	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	November	\$ -	\$ 52,839,139	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	December	\$ -	\$ 52,967,078	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
31									

Sources of Data: Sch. B1 Sch B2 Cols (c)-(d) Note (1) Col ((b)+(e)+(f))/2/(k) Cols (b)+(e)+(f)+(h)
Note (3)

Composite Federal & State Income Tax Rate 25.75% (j)
Income Tax Factor (1 / 1-tax rate) 1.346801347 (k)

Note (1):
Amounts represent recovery of prior years' RBA balance through the RBA rate adjustment effective June 1, 2017 for the period June 2017 through May 2018 and June 1, 2018 for the period June 2018 through May 2019.

Note (2):
In May 2018, the Company identified an inadvertent transposition error in the DSM adjustment (\$67,965) used to derive Recorded Adjusted Revenues. May 2018 Recorded Adjusted Revenues includes a true-up of -\$135,930 (-\$123,853 net of revenue taxes) to properly state the RBA Balance as of May 2018. The May 2018 balance includes an adjustment of -\$181 related to interest resulting from this correction.

Note (3):
In December 2018, the Company recorded a RBA Target true-up adjustment resulting from the Schofield Generating Station MPIR Order No. 35953, issued 12/14/18 in Docket No. 2017-0213, effective October 1, 2018. The RBA balance includes an adjustment of \$306,027 related to the incremental Target Revenues (\$305,574) and related interest (\$453) to properly state the RBA balance as of December 2018.

SCHEDULE B1
(REVISED 05-28-19)
(REVISED 05-21-19)

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description	Reference	Docket No. 2010-0080 Amounts (c)	Docket No. 2016-0328 Amounts (d)	Docket No. 2016-0328 Amounts (e)	Docket No. 2016-0328 Amounts (f)	Docket No. 2016-0328 Amounts (g)	Docket No. 2016-0328 Amounts (h)	
1	<u>Last Rate Case Annual Electric Revenue at Approved Rate</u>	Note (3), (5), (5a)	\$ 1,765,954	\$ 1,581,445	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	
1a	Less: Holdback of Interim Revenues	Note (3)	\$ 0	\$ (5,000)	\$ -	\$ -	\$ -	\$ -	
1b	Less: Customer Benefit Adjustment	Note (3)	\$ 0	\$ (6,000)	\$ -	\$ -	\$ -	\$ -	
2	Less: Fuel Expense	Note (3), (5), (5a)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	
3	Purchased Power Expense	Note (3), (5), (5a)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rate)		\$ (156,905)	\$ (139,534)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)	
5	Last Rate Order Target Annual Revenues	Sum Lines 1...4	\$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974	
6	Authorized RAM Revenues	Note (1a)	\$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -	
7	Less: Revenue Taxes on Line 6 at 8.885%		\$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -	
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -	
9	Authorized RAM Revenues	Note (7)	\$ -	\$ -	\$ -	\$ 13,828	\$ 13,828	\$ 13,828	
10	Less: Revenue Taxes on Line 9 at 8.885%		\$ -	\$ -	\$ -	\$ (1,229)	\$ (1,229)	\$ (1,229)	
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ 12,599	\$ 12,599	\$ 12,599	
12	Authorized RAM Revenues	Sch A, Line 4	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
14	Net RAM Adjustment - Test Year +2	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
15	Authorized MPR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ 6,600	\$ 8,561	
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ (586)	\$ (761)	
17	Net MPR Adjustment	Lines 15 + 16	\$ -	\$ -	\$ -	\$ -	\$ 6,014	\$ 7,800	
18	Less: <u>EARNINGS SHARING REVENUE CREDITS</u>	Note (1a)	\$ (16)	\$ (16)	\$ (16)	\$ -	\$ -	\$ -	
19	Less: Revenue Taxes on Line 18 at 8.885%		\$ 1	\$ 1	\$ 1	\$ -	\$ -	\$ -	
20	Net Earnings Sharing Revenue Credits	Lines 18 + 19	\$ (14)	\$ (14)	\$ (14)	\$ -	\$ -	\$ -	
21	Less: <u>PERFORMANCE INCENTIVE MECHANISM</u>	Sch A, Line 6	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
22	Less: Revenue Taxes on Line 24 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
23	Net Performance Incentive Mechanism	Lines 21 + 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
24	Less: <u>2017 TEST YEAR FINAL D&O REFUND</u>	Sch A, Line 8	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
25	Less: Revenue Taxes on Line 27 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
26	Net 2017 Test Year Final D&O Refund	Lines 24 + 25	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
27	Add: <u>OBF PROGRAM IMPLEMENTATION COSTS</u>	Sch A, Line 1a * 1.0975	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
28	Less: Revenue Taxes on Line 21 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
29	Net OBF Program Implementation Costs	Lines 27 + 28	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
30	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:</u>	Note (1a)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
31	Total Annual Target Revenues								
32	June 1, 2017 Annualized Revenues w/RAM Increase	Col (c), lines (5+8+20+30)	\$ 604,302						
33	February 16, 2018 Annualized Revenues w/Interim Increase	Col (d), lines (5+8+20+30)		\$ 637,077					
34	April 13, 2018 Annualized Revenues w/2nd Interim Increase	Col (e), lines (5+11+20+30)			\$ 599,960				
35	June 1, 2018 Annualized Revenues w/RAM Increase	Col (f), lines (5+11+20+30)				\$ 612,574			
36	June 1, 2018 Annualized Revenues w/RAM Increase & MPR accrued 7/1/18	Col (g), lines (5+11+17+20+30)					\$ 618,587		
37	June 1, 2018 Annualized Revenues w/RAM Increase & MPR accrued 10/1/18	Col (h), lines (5+11+17+20+30)						\$ 620,374	
38	June 1, 2018 Annualized Revenues w/RAM Increase & MPR accrued 1/1/19	Col (i), lines (5+11+17+20+30)							
39	June 1, 2019 Annualized Revenues w/RAM Increase & MPR accrued 1/1/19	Col (j), lines (5+14+17+20+23+26+29+30)							
40	<u>Distribution of Target Revenues by Month:</u>	Note (1)	Note (2)	Note (4) 2018	Note (4), (6) 2018	Note (6) 2018	2018	Note (8) 2018	Note (8a) 2018
41	January	8.10%	8.19%	\$48,948,443					
42	February	7.26%	7.59%	\$23,503,022	\$22,450,132				
43	March	8.10%	8.10%		\$51,603,222				
44	April	7.84%	7.98%		\$20,335,492	\$28,726,095			
45	May	8.44%	8.40%			\$50,396,658			
46	June	8.47%	8.07%				\$49,434,694		
47	July	8.77%	8.70%					\$53,817,090	
48	August	9.04%	8.94%					\$55,301,700	
49	September	8.68%	8.65%					\$53,507,797	
50	October	8.78%	8.84%						\$54,841,062
51	November	8.26%	8.26%						\$51,242,893
52	December	8.26%	8.28%						\$51,366,968
53	Total Distributed Target Revenues	100.00%	100.00%	\$72,451,465	\$94,388,846	\$79,122,753	\$49,434,694	\$162,626,587	\$157,450,923

Footnotes:

- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328: \$35,971 \$000s
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days: 0.46429
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328: -\$603 \$000s
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335): -\$2,143 \$000s
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days: 0.60000
- Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.
- MPR Revenue accrual starting effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213. Excerpt filed at HECO-WP-L1-003.
- MPR Revenue accrual starting October 1, 2018 approved in Order No. 35953, issued December 14, 2018 in Docket No. 2017-0213. Excerpt filed at HECO-WP-L1-003.
- MPR Revenue accrual starting January 1, 2019 filed in Transmittal 19-01, filed February 7, 2019. Excerpt filed at HECO-WP-L1-003.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description (a)	Reference (b)		Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)
1	<u>Last Rate Case Annual Electric Revenue at Approved Rate</u>	Note (3), (5), (5a)	\$000s	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (3)	\$000s	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (3)	\$000s	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (3), (5), (5a)	\$000s	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (3), (5), (5a)	\$000s	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rat		\$000s	\$ (135,915)	\$ (135,915)	\$ (135,915)
5	Last Rate Order Target Annual Revenues	Sum Lines 1...4	\$000s	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (1a)	\$000s	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 6 at 8.885%		\$000s	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$000s	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (7)	\$000s	\$ 13,828	\$ -	\$ -
10	Less: Revenue Taxes on Line 9 at 8.885%		\$000s	\$ (1,229)	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$000s	\$ 12,599	\$ -	\$ -
12	Authorized RAM Revenues	Sch A, Line 4	\$000s	\$ -	\$ 22,938	\$ 22,938
13	Less: Revenue Taxes on Line 12 at 8.885%		\$000s	\$ -	\$ (2,038)	\$ (2,038)
14	Net RAM Adjustment - Test Year +2	Lines 12 + 13	\$000s	\$ -	\$ 20,900	\$ 20,900
15	Authorized MPIR Revenues	Schedule L	\$000s	\$ 19,811	\$ 19,811	\$ 19,811
16	Less: Revenue Taxes on Line 15 at 8.885%		\$000s	\$ (1,760)	\$ (1,760)	\$ (1,760)
17	Net MPIR Adjustment	Lines 15 + 16	\$000s	\$ 18,051	\$ 18,051	\$ 18,051
18	Less: <u>EARNINGS SHARING REVENUE CREDITS</u>	Note (1a)	\$000s	\$ -	\$ -	\$ -
19	Less: Revenue Taxes on Line 18 at 8.885%		\$000s	\$ -	\$ -	\$ -
20	Net Earnings Sharing Revenue Credits	Lines 18 + 19	\$000s	\$ -	\$ -	\$ -
21	Less: <u>PERFORMANCE INCENTIVE MECHANISM</u>	Sch A, Line 6	\$000s	\$ -	\$ 54	\$ 54
22	Less: Revenue Taxes on Line 24 at 8.885%		\$000s	\$ -	\$ (5)	\$ (5)
23	Net Performance Incentive Mechanism	Lines 21 + 2	\$000s	\$ -	\$ 49	\$ 49
24	Less: <u>2017 TEST YEAR FINAL D&O REFUND</u>	Sch A, Line 8	\$000s	\$ -	\$ (48)	\$ (48)
25	Less: Revenue Taxes on Line 27 at 8.885%		\$000s	\$ -	\$ 4	\$ 4
26	Net 2017 Test Year Final D&O Refund	Lines 24 + 25	\$000s	\$ -	\$ (44)	\$ (44)
27	Add: <u>OBF PROGRAM IMPLEMENTATION COSTS</u>	Sch A, Line 1a * 1.0975	\$000s	\$ -	\$ 844	\$ 844
28	Less: Revenue Taxes on Line 21 at 8.885%		\$000s	\$ -	\$ (75)	\$ (75)
29	Net OBF Program Implementation Costs	Lines 27 + 28	\$000s	\$ -	\$ 769	\$ 769
30	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:</u>	Note (1a)	\$000s	\$ -	\$ -	\$ -
31	Total Annual Target Revenues					
	June 1, 2017 Annualized Revenues					
32	w/RAM Increase	Col (c), lines (5+8+20+30)	\$000s			
	February 16, 2018 Annualized Revenues					
33	w/Interim Increase	Col (d), lines (5+8+20+30)	\$000s			
	April 13, 2018 Annualized Revenues	Col (e), lines				
34	w/2nd Interim Increase	(5+11+20+30)	\$000s			
	June 1, 2018 Annualized Revenues	Col (f), lines				
35	w/RAM Increase	(5+11+20+30)	\$000s			
36	June 1, 2018 Annualized Revenues	Col (g), lines	\$000s			
	w/RAM Increase & MPIR accrued 7/1/18	(5+11+17+20+30)				
37	June 1, 2018 Annualized Revenues	Col (h), lines	\$000s			
	w/RAM Increase & MPIR accrued 10/1/18	(5+11+17+20+30)				
38	June 1, 2018 Annualized Revenues	Col (i), lines	\$000s	\$ 630,624		
	w/RAM Increase & MPIR accrued 1/1/19	(5+11+17+20+30)				
39	June 1, 2019 Annualized Revenues	Col (j), lines (5+14+17	\$000s		\$ 639,699	\$ 639,699
	w/RAM Increase & MPIR accrued 1/1/19	+20+23+26+29+30)				
				Note (8b)	Note (8b)	Note (8b)
40	<u>Distribution of Target Revenues by Month:</u>	Note (1)	Note (2)	2019	2019	2020
41	January	8.10%	8.19%	\$51,648,125		\$52,391,349
42	February	7.26%	7.59%	\$47,864,379		\$48,553,155
43	March	8.10%	8.10%	\$51,080,563		\$51,815,620
44	April	7.84%	7.98%	\$50,323,814		\$51,047,981
45	May	8.44%	8.40%	\$52,972,435		\$53,734,717
46	June	8.47%	8.07%		\$51,623,710	
47	July	8.77%	8.70%		\$55,653,814	
48	August	9.04%	8.94%		\$57,189,092	
49	September	8.68%	8.65%		\$55,333,965	
50	October	8.78%	8.84%		\$56,549,393	
51	November	8.26%	8.26%		\$52,839,139	
52	December	8.26%	8.28%		\$52,967,078	
53	Total Distributed Target Revenues	100.00%	100.00%	\$253,889,316	\$382,156,191	\$257,542,822

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF O&M RAM ADJUSTMENT
(\$ in Thousands)

Line No.	Description	Reference	Docket No. 2016-0328 Approved	Footnote 4 Previously Approved RAM	O&M Subject to Escalation Col (c) + (d) (e)	Net Inflation Indices Footnote 2 (f)	2019 O&M RAM Adjustment Col (e) * (f) (g)
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Base BU Labor Expenses	Schedule C1	\$ 47,048		\$ 47,048	4.19%	\$ 1,973
2	Base Non-Labor Expense	Schedule C2	\$ 134,734		\$ 134,734	4.24%	\$ 5,718
3	Payroll Taxes	Footnote 1	\$ 3,943		\$ 3,943	4.19%	\$ 165
4	Subtotal Expense Increase - RAM Adjustment before revenue taxes						\$ 7,856
5	Revenue Tax Factor (Footnote 3)						1.0975
6	O&M RAM (SubTotal Expenses x Rev Tax Factor)						\$ 8,622
							To Sch A1

Footnotes:

1: Payroll Taxes per Stipulated Settlement Letter, filed March 5, 2018 in Docket No. 2016-0328, Exhibit 2C, page 6, approved in Order No. 35545, filed June 22, 2018.	\$ 9,342
Less: Portion of payroll taxes related to non-BU labor ^A (57.79% * 9,342)	\$ (5,399)
Payroll Taxes related to Bargaining Unit labor	\$ 3,943

^A See Schedule C1 for calculation of percentage related to non-BU labor.

2: Escalation Rates

Labor:	2018	2019	
Bargaining Unit Wage Increase	2.67%	3.00%	(See HECO-WP-C-001)
Less: Labor Productivity Offset	0.76%	0.76%	Approved in Final D&O in Docket No. 2008-0274, page 51, filed on August 31, 2010
Labor Cost Escalation Rate	1.91%	2.24%	

Calculation of 2018 Compounded Labor Cost Escalation

2018 Labor Cost Escalation	1.0191	A (2018 labor escalation plus 1)
2019 Labor Cost Escalation	1.0224	B (2019 labor escalation plus 1)
2018-2019 Compounded Labor Cost Escalation	1.0419	C = A * B
2018-2019 Compounded Labor Cost %	0.0419	D = C - 1

Non-Labor:

	2018	2019	
GDP Price Index	2.10%	2.10%	(See HECO-WP-C-002)

Calculation of 2018 Compounded Non-Labor Cost Escalation

2018 Non-Labor Cost Escalation	1.0210	A (2018 non-labor escalation plus 1)
2019 Non-Labor Cost Escalation	1.0210	B (2019 non-labor escalation plus 1)
2018-2019 Compounded Non-Labor Cost Escalation	1.0424	C = A * B
2018-2019 Compounded Non-Labor Cost %	0.0424	D = C - 1

3: Computation of Revenue Tax Factor

Public Service Tax Rate	0.05885	
PUC Fees Rate	0.00500	Revenue Tax Factor
Franchise Tax Rate	0.02500	= 1 / (1 - Total Revenue Tax Rate)
Total Revenue Tax Rate	0.08885	1.0975

4: Column d "Previously Approved RAM" is not used as the labor and non-labor escalation is accomplished through the use of a compounded escalation rate in column f, as shown in footnote 2.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKSHEET
RATE ADJUSTMENT MECHANISM SUMMARY OF
OPERATIONS AND MAINTENANCE LABOR AND NON-LABOR EXPENSE
BY BLOCK OF ACCOUNTS
Interim D&O - Docket No. 2016-0328
(\$ in Thousands)

DESCRIPTION	Footnote 1		Footnote 2		(e) TOTAL
	(a) BU LABOR	(b) NON-BU LABOR	(c)=(a)+(b) TOTAL LABOR	(d) NON-LABOR	
Production	21,744	13,212	34,956	44,350	79,306
Transmission	2,420	2,933	5,353	10,454	15,807
Distribution	12,086	7,321	19,407	27,418	46,825
Customer Accounts	8,258	3,618	11,876	8,478	20,354
Allowance for Uncoll Accounts	-	-	-	732	732
Customer Service	134	5,582	5,716	9,936	15,652
Administrative & General	2,406	31,769	34,175	85,583	119,758
Customer Benefit Adjustment (Footnote 3)	-	-	-	(10,023)	(10,023)
Operation and Maintenance	47,048	64,435	111,483	176,928	288,411
	To Sch C			To Sch C2	X
Percentage of Total O&M Labor	42.20%	57.79%	100%		

* amounts may not add due to rounding

Footnotes:

1 SOURCE: 2017 test year breakdown of BU and non-BU labor obtained from UI Planner Budget files.

2 O&M breakdown below includes fuel and purchase power expenses consistent with the presentation in the Results of Operations.

	Footnote 2a			Footnote 2b	
	LABOR	NON-LABOR	TOTAL	ADJUST- MENT	STIPULATED SETTLEMENT
FUEL	-	327,609	327,609		327,609
PURCHASE POWER	-	466,211	466,211		466,211
PRODUCTION	34,956	44,350	79,306		79,306
TRANSMISSION	5,354	10,454	15,808		15,808
DISTRIBUTION	19,407	27,418	46,825		46,825
CUSTOMER ACCOUNTS	11,876	8,478	20,354		20,354
UNCOLLECTIBLE ACCOUNTS	-	732	732		732
CUSTOMER SERVICE	5,715	9,936	15,651		15,651
ADMIN & GENERAL	34,265	85,945	120,210	(452)	119,758
CUSTOMER BENEFIT ADJUSTMENTS	-	-	-	(10,023)	(10,023)
TOTAL	111,573	981,133	1,092,706	(10,475)	1,082,231
TOTAL O&M EXPENSE (Excl Fuel & Purch Po	111,573	187,313	298,886	(10,475)	288,411

X

2a See Order No. 35280, For Approval of General Rate Case and Revised Schedules/Rules, filed on February 9, 2018, in which the Commission approved the revised schedules or operations and tariff sheets filed January 19, 2018, Exhibit A, Page 1 of 4.

See Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229 and Order No. 35220, filed January 19, 2018, Exhibit 2, Attachment 1, Page 1 for Labor/Non-Labor breakdown.

2b See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 1 of 13.

3 Customer Benefit Adjustments identified in the Results of Operations have been included as a reduction to O&M non-labor subject to escalation. See Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, Appendix A, page 1 of 4, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK

Non-Labor Exclusion
Adjustment for O&M RAM
(\$ thousands)

<u>Line No.</u>	<u>Decription</u> (a)	<u>Amount</u> (b)	<u>Reference</u> (c)
1	Pension Expense	73,940	Note 1
2			
3			
4	OPEB Expense	(470)	Note 1
5			
6			
7	Total before amounts transferred	73,470	
8			
9	O&M %	57.43%	See Parties' Stipulated Settlement Letter, filed November 15, 2017, in Docket No. 2016-0328, HECO T-16 Attachment 4, page 1
10	(1- transfer rate of 42.57%)		
11			
12			
13	Adjustment to Non-Labor O&M Expense		
14	for O&M RAM base	42,194	
15			
16			
17	Non-Labor O&M Expense per Interim D&O	176,928	Schedule C1
18			
19			
20	Non-Labor O&M Expense Base for		
21	O&M RAM base	<u>134,734</u>	Schedule C

Note 1: See Parties' Stipulated Settlement Letter, filed November 15, 2017 in Docket No. 2016-0328, Exhibit 1, page 63 for the summary of the pension and OPEB cost the Parties agreed to. In Parties' Stipulated Settlement Letter on Remaining Issues, filed March 5, 2018 in Docket No. 2016-0328, Exhibit 1, page 4, amortization of the excess pension contribution from the test year was reduced to zero. Approved in Final Decision and Order No. 35545, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RATE BASE RAM ADJUSTMENT - RETURN ON INVESTMENT

Line No.	Description	AMOUNTS IN THOUSANDS	PERCENT OF TOTAL	COST RATE	POST TAX WEIGHTED EARNINGS REQMTS	INCOME TAX FACTOR (Note 1)	PRETAX WEIGHTED EARNINGS REQMTS
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	<u>PUC APPROVED CAPITAL STRUCTURE & COSTS (Note 2):</u>						
2	Short-Term Debt	\$ 27,770	1.18%	1.75%	0.02%	1.000000	0.02%
3	Long-Term Debt	928,748	39.59%	5.03%	1.99%	1.000000	1.99%
4	Hybrid Securities	28,651	1.22%	7.19%	0.09%	1.000000	0.09%
5	Preferred Stock	21,137	0.90%	5.37%	0.05%	1.346835	0.07%
6	Common Equity	1,339,335	57.10%	9.50%	5.42%	1.346835	7.31%
7	Total Capitalization	<u>\$ 2,345,641</u>	<u>100.00%</u>		<u>7.57%</u>		<u>9.47%</u>
8	RAM CHANGE IN RATE BASE \$000 (From Schedule D1)						\$ 109,457
9	PRETAX RATE OF RETURN (Line 7, Col g)						9.47%
10	PRETAX RETURN REQUIREMENT						\$ 10,365.5
11	REVENUE TAX FACTOR (1/(1-8.885%))						1.0975
12	RATE BASE RAM - RETURN ON INVESTMENT \$000						\$ 11,376.2

To Sch A1

Footnotes:

1 Composite Federal & State Income Tax Rate 25.75% See HECO-WP-F-001
 Income Tax Factor (1 / 1-tax rate) 1.346835

2 See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 2 of 13. Approved in Final Decision and Order No. 35545 filed June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RATE BASE RAM ADJUSTMENT - CHANGE IN RATE BASE
\$ in thousands

Line No.	Description (a)	HECO 2017 Test Year Rate Base (Note 2)		HECO 2019 RAM Rate Base			
		Beg. Balance 12/31/2017 (b)	Budgeted Balance 12/31/2017 (c)	Adjusted Recorded at 12/31/2018 (d) (Note 1)	RAM Projected Amounts (e) See Detail Below	Estimated at 12/31/2019 (f)	
1	Net Cost of Plant in Service, Net of CIAC	\$ 2,595,452	\$ 2,770,695	\$ 2,437,105	\$ 129,932	\$ 2,567,037	(Note 3)
2	Property Held for Future Use	-	-	-	-	-	
3	Fuel Inventory	46,200	46,200				
4	Materials & Supplies Inventories	28,427	28,427				
5	Unamort Net ASC 740 Reg Asset	70,144	74,887				
6	Unamort EOTP Reg Asset	444	89				
7	CIP CT-1 Reg Asset	2,306	1,352				
8	Unamort Sys Dev Costs	15,932	13,496				
9	RO Pipeline Reg Asset	4,958	4,842				
10	Pension Tracking	97,620	113,828				
11	Contrib in Excess of NPPC	6,470	6,470				
12	Total Additions	\$ 2,867,953	\$ 3,060,286	\$ 2,718,151	\$ 129,932	\$ 2,848,083	
13	Unamortized CIAC/CIAC in CWIP	\$ (347,826)	\$ (395,134)	\$ (30,110)	\$ -	\$ (30,110)	(Note 3)
13a	Developer Advances	-	-	\$ (21,345)	\$ -	\$ (21,345)	(Note 3)
14	Customer Advances	(3,581)	(3,925)				(Note 3)
15	Customer Deposits	(12,101)	(12,005)				(Note 3)
16	Accumulated Def Income Taxes	(520,643)	(333,360)	(282,714)	(7,226)	(289,939)	(Note 4)
17	ADIT Excess Reg Liability	-	(203,950)	(277,406)	10,381	(267,025)	(Note 4), Sch D5
18	Unamortized State ITC (Gross)	(56,323)	(54,903)				
19	Unamortized Gain on Sale	(248)	(182)				
20	Pension Reg Liability	-	-				
21	OPEB Reg Liability	(2,817)	(2,331)				
22	Total Deductions	\$ (943,539)	\$ (1,005,790)	\$ (685,783)	\$ 3,155	\$ (682,628)	
23	Working Cash	3,904	3,904	3,904	Not Updated	3,904	
24	Rate Base at Proposed Rates	\$ 1,928,318	\$ 2,058,400	\$ 2,036,272		\$ 2,169,359	
25	Average Rate Base		\$ 1,993,359			\$ 2,102,816	
26	Change in Rate Base					\$ 109,457	

Line No.	Description	Reference	Amount \$000
27	<u>Column (e) Projected Changes to Rate Base:</u>		
28	Plant - Baseline Capital Project Additions, Net of CIAC	Schedule D2	200,583
29	Major Project Additions, Net of CIAC	Schedule D3	69,023
30	Accumulated Depreciation/Amortization Change	Schedule E	(139,674)
31	Net Plant	Sum: Lines 28-30	129,932
32	ADIT - Baseline and Major Capital Projects	Schedule F	(7,226)
33	ADIT - Joint Pole Capital Transfer Price	Note 6	-
34	ADIT Excluding Joint Pole	Sum: Line 32-33	(7,226)
35	Excess ADIT Reg Liability Amortization (Plant 282 excess def amort beginning 6/1/2019)	Schedule D5	10,381

Footnotes:

1 Amounts are recorded, except for the following adjustments:

	Plant in Service	Acc. Depr.	ADIT	Schedule D4
[A] Unadjusted Balance	\$ 4,496,539	\$ (1,565,762)	\$ (283,658)	
Add:				
[A] RWIP		41,901		
[A] Asset Retirement Obligation		(4,780)		
[A] Reg Liab-Cost of Removal (net salvage)		(356,926)		
Tenant Improvement Allowance (Sch E)	(14,132)	9,824		
Major Project Adjustments:	HECO-WP-D2-001	HECO-WP-E-001	HECO-WP-D4-002	
ERP EAM Hardware	(14)	3	2	
Koolau-Wailupe #1 Str 30 P9 Replace	(142)	4	14	
Total Adjustments	\$ (156)	\$ 7	\$ 16	Schedule D4
Major Project Interim Recovery Adjustments:	HECO-WP-D2-001	HECO-WP-E-001	HECO-WP-D4-003	
Schofield Generation Station	(144,744)	-	1,832	Schedule D4
Total Adjustments	\$ (144,744)	\$ -	\$ 1,832	
Joint Pole Capital Transfer Price	Note 6 \$ (24,666)	\$ -	\$ (904)	Note 6
Adjusted Balance	\$ 4,312,841	\$ (1,875,736)	\$ (282,714)	

2 See Final Decision and Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, filed on June 22, 2018, Exhibit B, Page 1 of 2. Revised for presentation purposes only to properly reflect the Unamortized Net ASC 740 Reg Asset, ADIT, and ADIT Excess Reg Liability balances. No change to Total Average Rate Base.

3 Per PowerPlan extract. Effective October 2018, the Company reclassified CIAC to Plant in Service or CWIP consistent with FERC guidelines. In 2018, CIAC has been netted with either Plant in Service or CWIP and Developer Advances (Cash CIAC received from developers, subject to refund) which has been included as a reduction to rate base. See further discussion of the Company's treatment of CIAC at HECO-WP-D1-001.

4 As a result of the 2017 Tax Reform Act, Regulatory Liability accounts were created and recorded as of December 31, 2017 to isolate the 2017 excess accumulated deferred taxes resulting from the lower federal tax rate. The bifurcated Regulatory Liabilities are included as a reduction to Rate Base. See further discussion at Schedule F.

5 HECO 2017 Test Year Rate Base includes CIS deferred costs in Unamortized System Development Costs. See detail in November 15, 2017, Stipulated Settlement Letter, HECO T-17, Attachment 1, Page 2.

6 See Decision and Order No. 35768, Docket No. 2018-0075 filed October 16, 2018. Commission approved the Asset Transfer, Pole Licensing and Amended Joint Pole Agreements and the accounting and ratemaking treatment described in Exhibit E of the Application. The change in ADIT represents the tax effect of the book - tax difference on depreciation for the Joint Pole assets.

[A] SOURCE: Hawaiian Electric Company, Inc. Monthly Financial Report - December 2018, filed February 28, 2019.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF BASELINE CAPITAL PROJECTS ADDITIONS, NET OF CIAC

Source: Docket No. 03-0257 General Order No. 7 Plant Additions Annual Reports filed with the PUC dated:

Line No.	Description (a)		3/27/2015	3/29/2016	3/30/2017	3/27/2018	NOTE (1)
			2014	2015	2016	2017	2018
			(c)	(d)	(e)	(f)	(f)
1	Total Plant Additions		269,326,250	266,537,660	241,294,569	276,754,129	358,703,631
2	Less: Non-Utility Plant Additions	NOTE (2)	-	(63)	(3,954)	-	-
3	Adjusted Total Plant Additions		269,326,250	266,537,597	241,290,615	276,754,129	358,703,631
4							
5	<u>Less Major Projects: (+\$2.5 Million)</u>	<u>Dkt No.</u> <u>Item No.</u>					
6	W8 Boiler Controls Upgrade	2007-0365 P7650000	18,503	(70)			
7	EOTP Ph. 2 (Subs/Switch Stations)	2010-0062 Y48500	(7,357)	(55,681)	(682)		
8	W7 Controls Upgrade	2009-0195 P7590000	(8,237)	(35)			
9							
10	<u>2012 In-Service:</u>						
11	Kapolei Substation	2011-0026 Y00127	(6,459)				
12							
13	<u>2013 In-Service:</u>						
14	Pukele 80MVA Tsf #3	2011-0156 P0001494	(28,327)	15,611			
15	Kakaako Makai-Iwilei 25kV DL	2009-0042 Y00038	(485,650)	(496,818)		400,000	
16	North South Road 46kV Line	2008-0070 Y00119		(3,488)			
17							
18	<u>2014 In-Service:</u>						
19	Kaloii Substation	2008-0070 Y00119	(6,548,755)	(925)			
20	Kaloii Sub 46kV & 12kV Distr	2008-0070 Y00119	(1,218,895)				
21	Kaloii Telecomm	2008-0070 Y00119	(171,237)				
22	Kaloii Sub 12kV Work	2008-0070 Y00119	(25,906)				
23	Kakaako Makai-Kewalo 25kV DL	2009-0042 Y00038	(4,958,840)	(464,900)	(111)	400,000	
24	Kakaako Makai DOT Queen-Cook	2009-0042 Y00038	(1,961,600)	(418,816)	(2,890,742)	476,166	
25	BPT Tank 133 Improvements	2010-0318 P0000900	(6,095,787)	(1,092,308)			
26	Pukele 80MVA Tsf #2	2011-0156 P0001492	(3,449,859)	(40,084)			
27	DOT Airport DSG	2008-0329 P0001370	(4,965,396)	(97,130)	(172,652)	(94,001)	3,516
28							
29	<u>2016 In-Service:</u>						
30	Pukele 80MVA Tsf #1	2011-0156 P0002264			(3,839,121)	(7,612)	
31							
32	<u>2017 In-Service:</u>						
33	ERP EAM Hardware	2014-0170 PE.000003 (Y00168)				(2,604,146)	
34	Koolau-Wailupe #1 Str 30 P9 Replace	PE.000104 (P0003465)				(2,684,387)	(13,203)
35							
36	<u>2018 In-Service:</u>						
37	MPIR-Schofield Generating Station	2017-0213 PZ.000016/ PZ.001002 (P0001576)					(144,743,542)
38	Joint Pole Capital Transfer Price	2018-0075 PE.005155					(24,665,897)
39	Total Net Plant Additions (excluding major projects)		239,412,448	263,882,953	234,387,307	272,640,149	189,284,505
40							
41	Last Five-Year Average - Plant Additions					<i>To Sch F1</i>	239,921,472
42							
43	Less: CIAC, including Developer Advances	NOTE (3)	(31,803,050)	(42,140,722)	(36,314,281)	(59,849,268)	(29,568,427)
44							
45	EOTP Ph. 2 (Subs/Switch Stations)-CIAC	2010-0062 Y48500	43,725	15,232	718		
46	Kakaako Makai DOT Queen-Cook-CIAC	2009-0042 Y00038			2,825,023		
47	DOT Airport DSG-CIAC	2008-0329 P0001370					96,602
48	Total CIAC Additions (excluding major projects)		(31,759,325)	(42,125,490)	(33,488,540)	(59,849,268)	(29,471,825)
49							
50	Total Net Plant Additions, Net of CIAC (excluding major projects)		207,653,123	221,757,463	200,898,767	212,790,881	159,812,680
51							
52	Last Five-Year Average - Plant Additions, Net of CIAC					<i>To Sch D1</i>	200,582,583

NOTE (1): Amounts per HECO-WP-D2-002 and the Hawaiian Electric Companies' *Exemption From and Modification of General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2017*, in Docket No. 03-0257, filed on March 27, 2019.

NOTE (2): Source: UI Planner Budget files: Actuals Scenario. Adjustment to remove non-utility plant additions from utility plant. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it.

NOTE (3): See HECO-WP-D2-001 for line 47 - 2018 Major Project CIAC additions, HECO-WP-D2-003 for 2018 CIAC Additions, HECO-WP-D2-004 for 2014 to 2017 CIAC Additions and WP-D1-001 for treatment of CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF MAJOR CAPITAL PROJECT ADDITIONS, NET OF CIAC

Line No.	Description (a)	PUC Docket Reference (b)	Estimated In Service Date (c)	Plant Addition Amount (d)	CIAC Amount (e)
1 2	AES-CEIP #2 138kV OH Trans Line Relocation	Docket No. 2016-0439 (Decision & Order dated 03/02/2018) UI Planner Budget files	Feb-19	3,007,232	
3 4	West Loch Utility Scale PV	Docket No. 2016-0342 (Decision & Order dated 06/30/2017) UI Planner Budget files	Jun-19	52,128,000	
5 6	Ala Wai Canal-46kV Relocation	Docket No. 2016-0416 (Decision & Order dated 09/01/2017) UI Planner Budget files	Jun-19	13,910,207	
7 8	Kakaako Makai	Docket No. 2009-0042 (Decision & Order dated 06/12/2009) UI Planner Budget files	Apr-14		(22,683)
9	Total Major Capital Projects Qualifying for 2019 RAM, Net of CIAC			<u>\$ 69,045,439</u>	<u>\$ (22,683)</u>
10				<i>To Sch D1 & F2</i>	<u>\$ 69,022,756</u>

Source: HECO-WP-D3-001

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF ADJUSTED RECORDED DEFERRED INCOME TAXES

Line No.	NARUC Account (a)	Reference (b)	DR/(CR) Federal ADIT (c)	DR/(CR) State ADIT (d)	DR/(CR) Total ADIT (e)	
1	Recorded Deferred Income Tax Balances December 31, 2018 Recorded Balances					
2	Depreciation Related Account 282	HECO-WP-D4-001	(208,764,869)	(35,223,942)	(243,988,811)	
3	Other Deferred Income Taxes	HECO-WP-D4-001	(33,950,451)	(5,718,989)	(39,669,440)	
4	Total Recorded Deferred Income Taxes		<u>(242,715,320)</u>	<u>(40,942,931)</u>	<u>(283,658,251)</u>	To Sch D1 To HECO-WP-H-001
5	<u>Adjustments to Recorded Balances:</u>					
6	ADIT on Major Project excess depreciation	HECO-WP-D4-002	15,698	898	16,596	
7	ADIT on Major Project Interim Recovery	HECO-WP-D4-003	1,404,184	427,943	1,832,127	To Sch D1
8	Total Adjustments to Recorded ADIT Balances		<u>1,419,882</u>	<u>428,841</u>	<u>1,848,723</u>	To Sch D1
9	Adjusted Recorded ADIT Balances -12/31/18		<u>(241,295,438)</u>	<u>(40,514,090)</u>	<u>\$ (281,809,528)</u>	To Sch D1
10	282 ADIT adjusted for ADIT on Major Project excess depreciation	Line 2 + Line 6	(208,749,171)			To HECO-WP-F1-003

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF ADJUSTED RECORDED EXCESS ADIT REGULATORY LIABILITY

Line	NARUC Account (a)	Reference (b)	DR/(CR) Balance at 12/31/17 (c)	DR/(CR) Adjustments	DR/(CR) Amortization (d)	DR/(CR) Balance at 12/31/18 (e) = (c) + (d)	Life (f)	Amortization (g)	Est Bal at 12/31/19 (h) = (e) + (g)
1	Plant 282 - protected		(215,702,497)	(7,803,210)		(223,505,707)	40	5,587,643	(220,246,249)
2	Plant 283 - unprotected		(35,065,867)		1,668,881	(33,396,986)	15	2,337,723	(31,059,263)
3	Nonplant 283 - unprotected		(23,918,454)		3,415,029	(20,503,425)	5	4,783,679	(15,719,746)
	Total Excess ADIT								
4	Regulatory Liability		<u>(274,686,818)</u>	<u>(7,803,210)</u>	<u>5,083,910</u>	<u>(277,406,118)</u>		<u>12,709,045</u>	<u>(267,025,258)</u>
			Note 1			To Sch D1		To Sch E	To Sch D1 Note 3

Reconciliation of 12/31/18 Balance:

Regulatory Liability in GL	GL#25400023/24	(278,155,753)
Regulatory Asset in GL	GL#18673900	34,112,667
2018 Amortization		<u>587,116</u>
		<u>34,699,783</u>
		(243,455,970)
Add: FAS 109	Note 1	<u>(33,950,008)</u>
Total Excess ADIT		<u>(277,405,978)</u>
Total Excess ADIT	Line 4	<u>(277,406,118)</u>
Remaining Difference		140

Note 1: The 12/31/17 balances represent the amortization base presented in Docket 2016-0328 Hawaiian Electric's 2017 Test Year Rate Case Revised Attachment to the Parties' Stipulated Settlement on Remaining Issues, Attachment 2A, filed March 8, 2018. However, this amortization base inadvertently excluded reclassifications recorded at December 31, 2017 between the 2017 unprotected plant 283 excess net regulatory liability and the portion of ASC 740 regulatory assets/liabilities offsetting the related excess deferred income taxes.

Note 2: Amortization began 4/14/2018.

Note 3: Line 1: Plant 282-protected excess deferred balance calculated as follows: [col (e)/col (f)] * (7 months/12 months) + col (e). Amortization begins on 6/1/2019.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF DEPRECIATION & AMORTIZATION RAM ADJUSTMENT

Line No.	FERC Account	Recorded Depreciable/Amort. Balance (Footnote 3)	Adjustments (Footnote 1)	Adjusted Depreciable/Amort. Balance	PUC Approved Accrual Rate	Annual Accrual
	(a)	(b)	(c)	(d)	(e)	(f)
1	Depreciable Plant					
2	311	107,116,270		107,116,270	0.01600	1,713,860
3	312	407,080,257	(3,423,000)	403,657,257	0.02030	8,194,242
4	314	194,394,996		194,394,996	0.01540	2,993,683
5	315	83,448,693		83,448,693	0.02430	2,027,803
6	Tot - Steam	792,040,216	(3,423,000)	788,617,216	0.01885	14,929,589
7						
8	341	38,255,922		38,255,922	0.00770	294,571
9	342	17,647,714		17,647,714	0.02580	455,311
10	343	212,348,035	(142,147,612)	70,200,423	0.03260	2,288,534
11	344	32,411,015		32,411,015	0.01010	327,351
12	345	34,684,516		34,684,516	0.02510	870,581
13	Tot - Gas Turb	335,347,202	(142,147,612)	193,199,590	0.01263	4,236,348
14						
15	Tot - Prod	1,127,387,418	(145,570,612)	981,816,806		19,165,937
16						
17	3501	3,033,447		3,033,447	-	-
18	352	41,371,948	(2,003,490)	39,368,458	0.01600	629,895
19	353	316,099,319	(352,190)	315,747,129	0.01860	5,872,897
20	354	15,336,208		15,336,208	0.01480	226,976
21	355	377,095,780		377,095,780	0.03240	12,217,903
22	356	184,909,083	(141,971)	184,767,112	0.03270	6,041,885
23	357	60,113,518		60,113,518	0.01590	955,805
24	358	66,198,742		66,198,742	0.01730	1,145,238
25	359	3,235,054		3,235,054	0.01490	48,202
26	Tot - Transm	1,067,393,099	(2,497,651)	1,064,895,448	0.02543	27,138,801
27						
28	3601	2,599,051		2,599,051	0.02340	60,818
29	361	26,265,151		26,265,151	0.01080	283,664
30	362	273,453,197		273,453,197	0.02020	5,523,755
31	363	2,957,666		2,957,666	0.03740	110,617
32	364	245,168,525	(24,665,897)	220,502,628	0.03390	7,475,039
33	365	105,897,935		105,897,935	0.04190	4,437,123
34	366	270,101,616		270,101,616	0.02190	5,915,225
35	367	405,492,451		405,492,451	0.04980	20,193,524
36	368	220,837,260		220,837,260	0.05200	11,483,538
37	369.1	59,534,914		59,534,914	0.05250	3,125,583
38	369.2	174,898,002		174,898,002	0.04070	7,118,349
39	370	40,383,030		40,383,030	0.02660	1,074,189
40	Tot - Distr	1,827,588,798	(24,665,897)	1,802,922,901	0.03655	66,801,423
41						
42	Tot - T & D	2,894,981,897	(27,163,548)	2,867,818,349		93,940,224
43						
44	390	67,940,630		67,940,630	0.02450	1,664,545
45	Tot - General	67,940,630	-	67,940,630	0.02450	1,664,545
46						
47	Sub-Total	4,090,309,945	(172,734,160)	3,917,575,785		114,770,706
48						
49	3902 (King)	8,011,075		8,011,075	0.03010	241,114
50	3902 (CPP)	2,115,809		2,115,809	0.00417	8,814
51	3902 (Waterhouse)	1,517,450		1,517,450	0.00000	-
52	3902 (Hon CI)	523,097		523,097	0.07824	40,929
53	3902 (ASB)	1,463,127		1,463,127	0.06133	89,738
54	3902 (Shinco)	939,475		939,475	0.00000	-
55	3902 (PPP)	372,940		372,940	0.11111	41,438
	3902 (Pauahi)	50,376		50,376	0.33333	16,792
56	3902 (Tenant Allowance)	14,131,757	(14,131,757)	-	-	-
57	Tot - LH Impr	29,125,106	(14,131,757)	14,993,349		438,824
58						
59	392	59,063,238		59,063,238	0.06130	3,620,576
60						
61	Utility Total Depreciation	4,178,498,289	(186,865,917)	3,991,632,372	0.02844	118,830,107

Line No.	FERC Account (a)	Recorded Depreciable/Amort. Balance (Footnote 3) (b)	Adjustments (Footnote 1) (c)	Adjusted Depreciable/Amort. Balance (d)	PUC Approved Accrual Rate (e)	Annual Accrual (f)
61	Amortizable Plant					
62	316	26,291,658		26,291,658	0.05000	1,314,583
63	Tot - Steam	26,291,658	-	26,291,658	0.05000	1,314,583
64						
65	346	20,326,815		20,326,815	0.05000	1,016,341
66	Tot - Gas Turb	20,326,815	-	20,326,815	0.05000	1,016,341
67						
68	Tot - Prod	46,618,473	-	46,618,473	0.05000	2,330,924
69						
70	3911	30,764,654	(14,146)	30,750,508	0.20000	6,150,102
71	3912	3,172,052		3,172,052	0.10000	317,205
72	3913	16,599,312		16,599,312	0.06670	1,107,174
73	393	1,478,752		1,478,752	0.04000	59,150
74	394	39,001,211		39,001,211	0.04000	1,560,048
75	395	879,317		879,317	0.06670	58,650
76	396	4,479		4,479	0.05560	249
77	397	130,589,670	(240,250)	130,349,420	0.06670	8,694,306
78	398	8,483,472		8,483,472	0.06670	565,848
79	Tot - General	230,972,919	(254,396)	230,718,523	0.08015	18,512,733
80						
81						
82						
83	Utility Total Amortization	277,591,392	(254,396)	277,336,996	0.07509	\$ 20,843,656
84						
85	TOTAL RAM DEPRECIATION / AMORTIZATION				Line 61 + Line 83	\$ 139,673,763
86	LESS: Vehicle Depreciation (A/C 392 above)				Line 59	\$ (3,620,576)
87	LESS: ADIT Excess Amortization				Schedule D5	(12,709,045)
88	LESS: Depreciation & Amortization in Current Revenues				Footnote 2	\$ (120,665,585)
89						
90	RAM Adjustment for Depreciation & Amortization					\$ 2,678,556
91	RAM Adjustment for CIAC Amortization				Note 5	\$ -
92	Total RAM Adjustment for Depreciation & Amortization					\$ 2,678,556
93	Times: Factor for Revenue Taxes				Schedule C Line 5	1.0975
94						
95	RAM DEPRECIATION & AMORTIZATION					\$ 2,939,716

To Sch A1

Footnotes:

1	Amounts are recorded (in \$000s), except for the following adjustments (see HECO-WP-D2-001):		Plant in Service From D1	
	ERP EAM Hardware	HECO-WP-D2-001	\$ (14)	Linked from Sch D1 See Decision and Order No. 35768, Docket No. 2018-0075 filed October 16, 2018
	Koolau-Wailupe #1 Str 30 P9 Replace		(142)	
	MPIR - Schofield Generating Station		(144,744)	
	Joint Pole Capital Transfer Price		(24,666)	
	Tenant Improvement Allowance (see Footnote 4)		(14,132)	
	ARO Assets included in Depreciable Plant	GL# 10100001	(3,423)	
	Total		\$ (187,121)	
2	Depreciation & Amortization in Current Revenues*:		Depr/Amort Expense	
	Total Depreciation		\$ 139,686,000	
	LESS: Vehicle Depreciation (A/C 392)		(3,590,000)	
	LESS: Amortization of Excess ADIT		(7,121,415)	
	Total Depreciation in Current Revenues		\$ 128,974,585	
	ADD: CIAC Amortization	Note 5	(8,309,000)	
	Total Depreciation & Amortization in Current Revenues		120,665,585	To Line 88

*See Order No. 35335, in Docket No. 2016-0328, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, HECO T-25, Attachment 1, Page 1 and the Revised Attachment to the Parties Stipulated Settlement on Remaining Issues, filed March 8, 2018, HECO T-26, Attachment 2A, Page 1. Approved in Final Decision and Order No. 35545, filed June 22, 2018.

- Per Accounting records, does not include land amounting to \$40,449,426 as of December 31, 2018.
- Amount represents tenant improvement allowances paid by the lessors and excluded from the RAM calculation.
- Effective October 2018, the Company reclassified CIAC to Plant in Service or CWIP consistent with FERC guidelines. Amounts shown in this Schedule represent balances net of CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF CHANGE IN DEFERRED INCOME TAXES

Line No.	NARUC Account (a)	Reference (b)	Projected ADIT Change (c)
1	State Tax Depreciation	Schedule F1	20,239,341
2	Amortization of Excess Deferreds	Schedule D5	10,380,860
3	Subtotal		30,620,201
4	Effective Federal Tax Rate	HECO-WP-F-001	19.7368%
5	Federal Deferred Tax on State Tax Depreciation		6,043,461
6	Add back State Tax Depreciation	Line 1	(20,239,341)
7	Federal Tax Depreciation	Schedule F1	20,239,341
8	Federal/State Difference		-
9	Tax Rate on Federal Only Adjustment	HECO-WP-F-001	21%
10	Federal Deferred Tax Adjustment		-
11	Total Federal Deferred Taxes Before Proration		6,043,461
12	Proration Adjustment	HECO-WP-F1-003	(659,544)
13	Total Federal Deferred Taxes After Proration		5,383,917
STATE DEFERRED TAXES			
14	State Tax Depreciation	Line 1	20,239,341
15	Amortization of Excess Deferreds	Line 2	10,380,860
16	Subtotal		30,620,201
17	Effective State Tax Rate	HECO-WP-F-001	6.0150%
18	Total State Deferred Taxes		1,841,817
19	TOTAL FED AND STATE DEFERRED TAXES		7,225,733
			To Sch D1

NOTE 1: In accordance with the tariff, the change in ADIT in the RAM year is based on the temporary book/tax depreciation differences associated with the RAM year plant additions (major capital projects and baseline plant additions). It does not include any estimated ADIT related to the repairs deduction or CIAC on RAM year plant additions.

NOTE 2: The change in ADIT includes the tax effect of the amortization of the regulatory liability associated with the excess deferred taxes resulting from the tax rate change from the Tax Cuts and Jobs Act of 2017. This is consistent with the inclusion of the regulatory liability and the related amortization in rate base RAM.

NOTE 3: The amortization of excess deferreds was adjusted from Schedule D5 to properly reflect the ending balance of ADIT at 12/31/2019. The amortization of the Plant 282 excess deferred amortization begins on 6/1/2019; the 12/31/2019 balance therefore reflects 7/12ths of this component in the ending ADIT balance.

<u>Calculation of Excess Deferred Amortization</u>			
Plant 282 - protected	5,587,643	Schedule D5	
Proration Percentage (7 months/12 months)	58.33%		
			3,259,458
Plant 283 - unprotected			2,337,723
Nonplant 283 - unprotected			4,783,679
Amortization of Excess Deferreds, as Adjusted			10,380,860
			Schedule D1

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TAX DEPRECIATION**

Line No.	HECO-WP-F1-002							
	LIFE	PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	Computers/PV	5	6,092		6,092	2.54%	2.54%	
2	Communication	20	5,920		5,920	2.47%	2.47%	
3	Off/Furn/Tools	7	5,022		5,022	2.09%	2.09%	
4	Distribution	20	130,472		130,472	54.38%	54.38%	
5	Land	-	816		816	0.34%	0.34%	
6	Non-Steam Production	15	3,713		3,713	1.55%	1.55%	
7	Steam Production	20	22,905		22,905	9.55%	9.55%	
8	Structural	39	3,265		3,265	1.36%	1.36%	
9	Transmission	20	21,834		21,834	9.10%	9.10%	
10	Transmission	15	34,674		34,674	14.45%	14.45%	
11	Vehicles	-	5,209		5,209	2.17%	2.17%	
12	TOTAL		239,922	-	239,922	100.00%	0.00%	100.00%

From Sch D2

5 yr	2.54%	2.54%	
7 yr	2.09%	2.09%	
15 yr	16.00%	16.00%	
20 yr	75.50%	75.50%	
39 yr	1.36%	1.36%	
Land	0.34%	0.34%	
Vehicles	2.17%	2.17%	
Total	100.00%	0.00%	100.00%

	FED YR 1 DEPR RATE	FED YR 1 TAX DEPR	STATE YR 1 DEPR RATE	STATE YR 1 TAX DEPR
BASIS				

Vintage 2019 - Regular Depreciation

Basis subject to regular depreciation

5 yr	2.54%	2.54%	5 yr	5,211,519	20.00%	1,042,304	20.00%	1,042,304
7 yr	2.09%	2.09%	7 yr	4,296,167	14.29%	613,922	14.29%	613,922
15 yr	16.00%	16.00%	15 yr	32,838,900	5.00%	1,641,945	5.00%	1,641,945
20 yr	75.50%	75.50%	20 yr	154,952,011	3.75%	5,810,700	3.75%	5,810,700
39 yr	1.36%	1.36%	39 yr	2,793,107	1.177%	32,875	1.177%	32,875
	97.49%	0.00%	97.49%					

TOTAL ASSETS 97.49% 0.00% 97.49%

Net Depreciable Baseline Plant Adds 200,091,704 9,141,746 9,141,746

Major Capital Projects from Schedule F2 69,045,439 11,097,595 11,097,595
 Total Depreciable Plant Adds 269,137,143 20,239,341 20,239,341

Fed Tax Depreciation to Schedule F *St. Tax Depreciation to Schedule F*

Reconciliation from Baseline Plant Adds to Net Depreciable Plant Adds :

Baseline Capital Projects Plant Adds (rounded)	239,922,000	Schedule D2
Less: Repairs deduction HECO-WP-F1-001 pg 1	34,676,093	<<supported by Special Study each year.
Net plant add basis	205,245,907	
Less: Land and Vehicles (2.51% x 205,245,907)	5,154,203	
	<u>200,091,704</u>	

NOTE (1) The Tax Cut and Jobs Act removed bonus depreciation for public utility property.

NOTE (2) The numbers in columns b, c, d are rounded to the nearest thousand.

NOTE (3) Totals may not add exactly due to rounding.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
TAX DEPRECIATION ON MAJOR CAPITAL PROJECTS ADDITIONS

Line No.	Description	PUC Docket	Estimated In Service Date	Amount		
	(a)	(b)	(c)	(d)	(e)	
1	Assumed Value of 2019 Major Capital Projects Plant Items			\$ 69,045,439	Schedule D3	
2	Assumed Value of 2019 Major Capital Projects - CIAC nontaxable			\$ -	Schedule D3	
3	Assumed Value of 2019 Major Capital Projects - Total			<u>\$ 69,045,439</u>		
	Tax Classification of		FED	FED	STATE	STATE
	Major Capital Project Additions	Tax Basis	YR 1 DEPR RATE	YR 1 TAX DEPR	YR 1 DEPR RATE	YR 1 TAX DEPR
4	5 yr	52,128,000	20.00%	10,425,600	20.00%	10,425,600
6	7 yr	-	14.29%	-	14.29%	-
7	15 yr	3,007,232	5.00%	150,362	5.00%	150,362
8	20 yr	13,910,207	3.75%	521,633	3.75%	521,633
9	39 yr	-				
10	Land	-				
11	Vehicles	-				
	Total	<u>\$ 69,045,439</u>		<u>\$ 11,097,595</u>		<u>\$ 11,097,595</u>
		To Sch F1		To Sch F1		To Sch F1

* Adjustment only for non-taxable CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
CIAC SUMMARY

Line No.	Description	Reference	Unamortized CIAC	CIAC Amortization
	(a)	(b)	(c)	(d)

Schedule not applicable.

See HECO-WP-D1-001 for further discussion on the Company's treatment of CIAC within the Annual Decoupling filing.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
EARNINGS SHARING CALCULATIONS

All Amounts \$000 (Except %)

Line No.	Description	Reference	Ratemaking Basis Return on Equity		
			Operating Income	Rate Base	Rate of Return
	(a)	(b)	(c)	(d)	(e)
1	Reported Operating Income before ratemaking adjustment	HECO-WP-H-009 & HECO-WP-H-001	\$ 134,181	\$ 2,109,963	
1a	Settlement of prior Joint Pole Accounts Receivable	Note 3	697		
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	4,073		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	1,052		
2c	Amortization of investment income differential	HECO-WP-H-003	185		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(12,461)		
2e	Special Medical Needs Program discount (net of tax)	HECO-WP-H-005	102		
2f	Performance Incentive Mechanism (net of tax)	HECO-WP-H-006	360		
2g	Final Test Year Refund (net of tax)	HECO-WP-H-007	32		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 128,221	\$ 2,109,963	
4	<u>Ratemaking Capitalization</u>				
		Balances	Ratios	Cost Rate	Weighted Cost
5	Short-Term Debt (12 mo. Avg)	\$ 88,868	3.68%	2.54%	0.09%
6	Long-Term Debt (Simple Avg)	\$ 939,810	38.92%	5.03%	1.96%
7	Hybrid Securities (Simple Avg)	\$ 28,758	1.19%	7.16%	0.09%
8	Preferred Stock (Simple Avg)	\$ 21,192	0.88%	5.36%	0.05%
9	Common Equity (Simple Avg)	\$ 1,335,921	55.33%	9.50%	5.26%
10	Total Capitalization	HECO-WP-H-004	\$ 2,414,549	100.00%	7.45%
11	Line 3 Rate Base Amount			\$ 2,109,963	
12	Weighted Cost of Debt (Sum Lines 5-7)			2.14%	
13	Synchronized Interest Expense			\$ 45,153	
	Income Tax Factor (Note 1)			1.346801347	
13a	Synchronized Interest Expense, net of tax			\$ 33,526	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 94,695
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				1,055
18	Income Available for Common Stock				\$ 93,640
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				1,167,400
20	Return on Equity for Decoupling Earnings Sharing (Line 18/Line 19)				8.02%
21	<u>Earnings Sharing Revenue Credits:</u>	Basis Points			
22	Achieved ROE (basis points)	802			
23	Authorized Return (basis points)	950			
24	ROE for sharing (basis points)	-			
25	Sharing Grid per RAM Provision	First 100 bp	Next 200 bp	All over 300 bp	Ratepayer Total
26	Distribution of Excess ROE (basis points)	0	0	0	
27	Ratepayer Share of Excess Earnings	25%	50%	90%	
28	Ratepayer Earnings Share - Basis Points	-	-	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 173
30	Earnings Sharing Revenue Credits (thousands)				0

To Sch A Line 5

Footnotes:

- Composite Federal & State Income Tax Rate 25.75%
Income Tax Factor (1 / 1-tax rate) 1.346801347
- Ratemaking Equity Investment (line 19) \$ 1,167,400
Basis Point = 1/100 of a percent 0.01%
Earnings Required per Basis Point (thousands) \$ 116.74
Times: Income Tax Conversion Factor 1.346801347
Pretax Income Required per Basis Point (thousands) \$ 157
Times: Revenue Tax Conversion Factor 1.0975
Revenue Requirement per Basis Point (thousands) \$ 173
- Per Docket No. 2018-0075, Decision and Order No. 35768, the Commission approved the Asset Transfer, Pole Licensing and Amended Joint Pole agreements. The settlement recovery of prior joint pole accounts receivables previously written-off was recorded to interest income (and excluded from Operating Income) in 2018. Upon further consideration, the recovery should have been recorded to Uncollectible Accounts (904) and included in Operating Income in 2018. (Taxes on the Joint Pole interest income was already included in Operating Income as of December 31, 2018.) Accordingly, an upward adjustment of \$696,636 is being made to Operating Income in the earnings sharing mechanism calculation.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS

Line No.	Description (a)	Reference (b)	Amount \$000 (c)
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This Schedule has not been developed yet and will be developed only when/as needed.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RAM CAP

Line No.	Description (a)	Reference (b)	Amount \$000 (c)
1	Last Rate Order Target Annual Revenues	Schedule B1	\$ 599,974
2	2018 RAM Cap Increase excluding Exceptional & Other Matters (net of Revenue Tax)	Note 2	<u>12,599</u>
3	2018 Target Revenues Subject to Escalation	Line 1 + Line 2	612,573
4	2019 GDP Price Index	HECO-WP-C-002	<u>2.10%</u>
5	2019 RAM Cap Increase Excluding Exceptional & Other Matters		12,864
6	RAM Cap for 2018 RAM Revenue Adjustment	Line 2	<u>12,599</u>
7	RAM Cap for 2019 RAM Revenue Adjustment	Line 5 + Line 6	25,463
8	Revenue Tax Factor (1/(1-8.885%))		<u>1.0975</u>
9	RAM Cap for 2019 RAM Revenue Adjustment	Line 7 x Line 8	<u>\$ 27,946</u> To Sch A1

Note 1 Target Revenues:

See Decision and Order No. 32735, filed March 31, 2015, paragraph 107, page 94:

"The RAM Cap shall be based on the Target Revenues determined in accordance with the RBA and RAM tariffs as provided below ("Basis"), times the cumulative annually compounded increase(s) in GDPPI for intervening years, adjusted to include applicable revenue taxes."

The RAM basis for the calculation of the RAM Revenue Adjustment cap shall be the target revenues determined in accordance with the RBA tariff based on the results of the Company's most recent interim or final rate case decision.

Note 2 See Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, Schedule J for 2018 RAM Revenue Adjustment Cap of \$13,828 (\$12,599 net of revenue tax).

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
EXCEPTIONAL & OTHER MATTERS

<u>Line No.</u>	<u>Description</u> (a)	<u>Reference</u> (b)	<u>Amount \$000</u> (c)
1	None		-
2	2019 Revenue Adjustment for Exceptional & Other Matters		\$ - <u>To Sch A1</u>

Note 1 Exceptional and Other Matters:
See Order No. 32735, filed March 31, 2015, paragraph 107, page 94 - 95:
"The Basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap."

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
MAJOR PROJECT INTERIM RECOVERY

<u>Line No.</u>	<u>Description</u> (a)	<u>Reference</u> (b)	<u>Amount \$000</u> (c)
1	Schofield Generating Station	Schedule L1	\$ 18,051
2	Docket No. 2017-0213		
3	Revenue Tax Factor (1/(1-8.885%))		<u>1.0975</u>
4	Major Project Interim Recovery Total		<u>\$ 19,811</u> To Sch B1, line 15

Note: Per Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Recovery Mechanism, filed February 7, 2019, Transmittal No. 19-01 effective January 1, 2019. See Schedule L1.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY
MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2018 (c)	2019 Activity (d)	Ending Balance as of 12/31/19 (e)	Average Balance (f)=((c)+(e))/2	MPIR (g)
Return on Investment - Schofield Generating Station							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	141,570	-	141,570	141,570	
2	Accum Depreciation	HECO-WP-L-001	-	(4,586)	(4,586)	(2,293)	
3	Net Cost of Plant in Service		141,570	(4,586)	136,984	139,277	
4	Fuel Inventory - Avoided	Note 3	(1,534)	-	(1,534)	(1,534)	
5	M&S Inventory	Note 3	100	-	100	100	
6	Total Additions		(1,434)	-	(1,434)	(1,434)	
7	CIAC	Not Applicable	-	-	-	-	
8	ADIT	HECO-WP-L-002	(8,653)	(1,540)	(10,193)	(9,423)	
9	State ITC	HECO-WP-L-002	(4,124)	412	(3,712)	(3,918)	
10	Total Deductions		(12,777)	(1,128)	(13,905)	(13,341)	
11	Total Rate Base		\$ 127,359	\$ (5,713)	\$ 121,646	124,502	
12	Average Rate Base					\$ 124,502	
13	Rate of Return (grossed-up for income taxes, before revenue ta	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 11,790
15	Depreciation Expense (Note 1)	HECO-WP-L-001				4,586	
16	Operating & Maintenance Expense	Note 2				2,087	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				(412)	
18	Lease Rent Expense	Not Applicable				-	
19	Other Expense	Not Applicable				-	
20	Total Expenses						\$ 6,260
21	Total Major Project Interim Recovery						\$ 18,051
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						\$ 19,810.8

To Sch B & B1

<u>Reconciliation to Schedule B1 (Info Only)</u>			
	Jul - Sep 18	Oct - Dec 18	2019
Annualized Revenue for MPIR	\$ 6,600	\$ 8,561	\$ 19,811
Rev Tax Adj	\$ (586)	\$ (761)	\$ (1,760)
Prorated MPIR for Year 1 excl Rev Tax	\$ 6,014	\$ 7,800	\$ 18,051
Incremental	\$ 6,014	\$ 1,787	\$ 10,250
	Note 5	Note 6	

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update and approved in Order No. 35953, filed December 14, 2018.

Note 3: Decision and Order No. 35556 dated June 27, 2018 in Docket No. 2017-0213.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Note 5: MPIR Revenues effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213.

Note 6: MPIR Revenues effective October 1, 2018 filed December 21, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
2018 PERFORMANCE INCENTIVE MECHANISMS

	2018 Annual Total *	2018 Target **	Variance (c)=(a)-(b)	Deadband ** (d)	Maximum \$ ** (e)	(Penalty) / Reward Amount 1.0 * ((b - a) / d) * e + e)
	(a)	(b)	(c)=(a)-(b)	(d)	(e)	
<u>Service Quality:</u>						
Normalized T&D SAIFI						
Without Exclusion	1.253	1.112	0.141	0.089	\$ 2,244,112	\$ (1,306,645)
With Exclusion	1.238	1.112	0.126	0.089	\$ 2,244,112	\$ (929,827)
Normalized T&D SAIDI						
Without Exclusion	111.94	99.10	12.84	9.033	2,244,112	\$ (946,492)
With Exclusion	106.41	99.10	7.31	9.033	2,244,112	\$ -
Call Center Performance (Excludes Blocked Calls)						
	83.97%	79.66%	4.31%	3.00%	\$ 897,645	\$ 391,972
<u>Phase 1 Renewable Energy RFP PIM</u>						
First Allocation ***						\$ 591,854
					Total Without Exclusion	\$ (1,269,311)
					Total With Exclusion	\$ 53,998
						To Sch A

Notes:

Exclusion represents 25kV Proactive Work, filed in Transmittal No. 18-05, Hawaiian Electric's Letter Request for Exclusion of 25kV Splice Replacement Work from Performance Incentive Mechanism Provision's SAIDI and SAIFI 2018 Calculation, filed December 18, 2018.

* See HECO-WP-M-002

** See HECO-WP-M-001

*** See HECO-WP-M-005

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
ON-BILL FINANCING COST RECOVERY

Note 1				Cost Recovery (excluding Rev Tax)			Cost Recovery (including Rev Tax)		
Line	Company	Customer Count a	Allocation b = a/total a	Total Recovery c = \$2,330,408 allowed x b	2019 Recovery To Sch A	2020 Recovery	Total Recovery with Rev Tax	2019 Recovery with Rev Tax To Sch B1	2020 Recovery with Rev Tax
1	HE	305,456	66%	1,537,150	768,575	768,575	1,687,022	843,511	843,511
2	HL	85,758	19%	431,561	215,780	215,781	473,638	236,819	236,819
3	ME	71,875	16%	361,697	180,849	180,848	396,963	198,481	198,482
4	Total	463,089	100%	2,330,408	1,165,204	1,165,204	2,557,623	1,278,811	1,278,812

Note 1: Statistical Report as of December 31, 2018.

Note 2: See Decision and Order No. 36212, Docket No. 2017-0102, filed March 11, 2019, pages 18-19. The Commission allowed the Companies to recover Program implementation costs over a period of two years, commencing with the 2019 RBA Rate Adjustment which will, if there are no major issues with the standard RBA Review Transmittal process, become effective on June 1, 2019.

Hawaiian Electric Company, Inc.
Sales Forecast for June 2019 to May 2020
in GWh

	2019							2020					Total
	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	
R	126.7	141.7	151.2	146.2	143.0	131.9	130.4	132.1	118.6	120.1	116.7	121.7	1,580.3
G	24.2	25.6	26.5	25.3	26.0	23.9	24.1	22.6	22.8	23.9	23.7	24.6	293.2
J	148.0	159.0	160.8	157.3	158.4	145.6	139.3	139.4	140.8	141.7	144.9	152.0	1,787.2
P	233.6	250.5	261.0	246.4	249.4	230.6	225.1	219.6	214.0	223.5	225.2	232.1	2,811.0
F	<u>1.8</u>	<u>1.9</u>	<u>1.7</u>	<u>1.6</u>	<u>1.6</u>	<u>1.4</u>	<u>1.4</u>	<u>1.3</u>	<u>1.3</u>	<u>1.5</u>	<u>1.3</u>	<u>1.4</u>	<u>18.2</u>
Total	534.3	578.7	601.2	576.8	578.4	533.4	520.3	515.0	497.5	510.7	511.8	531.8	6,489.9

Source: Hawaiian Electric Company, Inc. February 2019 Sales Forecast Update.

Hawaiian Electric Company, Inc.
Adjustment For Prior Year RBA Accrual
Recovery of 12/31/16 RBA Balance

		2018					
		January	February	March	April	May	Total
Billed RBA Revenues	Note 1	11,581,297	10,784,945	5,161,437	3,718,306	3,653,460	34,899,445
Net Unbilled Revenues	Note 1	(834)	(3,556,154)	(1,491,331)	45,447	121,360	(4,881,511)
Total Billed + Unbilled		11,580,464	7,228,791	3,670,106	3,763,752	3,774,820	30,017,934
x % Share for RBA	Note 2 & 3	31.9352%	63.5519%	100.0327%	100.0327%	100.0327%	
RBA Revenues (Recovery of 12/31/16 RBA balance)		3,698,239	4,594,033	3,671,308	3,764,985	3,776,056	19,504,621
		← Schedule B2 →					
Less: Revenue Taxes	0.08885	(328,589)	(408,180)	(326,196)	(334,519)	(335,503)	(1,732,987)
RBA Revenues (Recovery of 12/31/16 RBA balance) net of Revenue Taxes		3,369,650	4,185,853	3,345,112	3,430,466	3,440,553	17,771,634
		← Schedule B →					

* Differences are due to rounding

Note 1: RBA rate adjustment revenues per the Billed reports and Unbilled reports include both RBA and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2: RBA Rate Adjustment Allocation for January 1, 2018 to February 15, 2018 is per Transmittal No. 17-02 (Decoupling) - RBA Rate Adjustment (filed March 31, 2017), Schedule A, Note (1). RBA Rate Adjustment Allocation for February 16, 2018 to May 31, 2018 is per Hawaiian Electric Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229, and Order No. 35220, Exhibit 7, filed on January 19, 2018, which was approved by Order No. 35280, issued on February 9, 2018. See Note 3 below for prorated % share for RBA for February 2018.

Note 3: Prorated % Share for RBA by day resulting from 2017 Test Year Interim Rates, effective February 16, 2018, per Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Hawaiian Electric Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229 and Order No. 35220, Exhibit 7, filed on January 19, 2018. As approved by the Commission in Order No. 35280, Approving Revised Schedules of Operations and Tariff Sheets, filed on February 9, 2018.

	RBA %	No of Days	Prorated RBA %
Feb 1-Feb 15	31.9352%	53.6%	17.1081%
Feb 16-Feb 28	100.0327%	46.4%	46.4438%
			<u>63.5519%</u>

Hawaiian Electric Company, Inc.
Adjustment For Prior Year RBA Accrual
Recovery of 12/31/17 RBA Balance

		2018							
		June	July	August	September	October	November	December	Total
Billed RBA Revenues	Note 1	4,701,823	5,771,562	6,185,543	6,034,935	6,400,115	5,842,574	5,503,361	40,439,912
Net Unbilled Revenues	Note 1	990,752	364,534	81,590	(85,985)	(137,876)	(175,257)	(57,177)	980,581
Total Billed + Unbilled		5,692,575	6,136,096	6,267,133	5,948,950	6,262,238	5,667,317	5,446,183	41,420,493
x % Share for RBA	Note 2	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	
RBA Revenues (Recovery of 12/31/17 RBA balance)		4,532,582	4,885,725	4,990,061	4,736,715	4,986,163	4,512,471	4,336,398	32,980,115
		← Schedule B2 →							
Less: Revenue Taxes	0.08885	(402,720)	(434,097)	(443,367)	(420,857)	(443,021)	(400,933)	(385,289)	(2,930,284)
RBA Revenues (Recovery of 12/31/17 RBA balance) net of Revenue Taxes		4,129,862	4,451,628	4,546,694	4,315,858	4,543,142	4,111,538	3,951,109	30,049,831
		← Schedule B →							

* Differences are due to rounding

Note 1: RBA rate adjustment revenues per the Billed reports and Unbilled reports include both RBA and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2: RBA Rate Adjustment Allocation for June 1, 2018 - May 31, 2019 is per Transmittal No. 18-01 (Decoupling) - RBA Rate Adjustment (Filed May, 29, 2018), Schedule A , Note (1).

Hawaiian Electric Company, Inc.
Bargaining Unit Wage Increase per Collective Bargaining Agreements

Wage Increases: (non-compounded)	1/1/2014	3.00%	(Note 1)
	1/1/2015	3.00%	(Note 1)
	1/1/2016	3.25%	(Note 1)
	1/1/2017	3.00%	(Note 1)
	1/1/2018	3.00%	(Note 1)
	1/1/2019	3.00%	(Note 2)
	1/1/2020	3.00%	(Note 2)
	1/1/2021	3.00%	(Note 2)

<u>Increase effective</u>			<u>Increase Amount</u>	<u>Wage Rate With Increase</u>	<u>Labor Cost Escalation Rate</u>	
			(a)	(b) or prev (b) + (a)	(c) (b) / prev (b) -1	
1.00	3.00%	1/1/2014	0.0300	1.0300		
	3.00%	1/1/2015	0.0300	1.0600	0.0291	2.91%
	3.25%	1/1/2016	0.0325	1.0925	0.0307	3.07%
	3.00%	1/1/2017	0.0300	1.1225	0.0275	2.75%
	3.00%	1/1/2018	0.0300	1.1525	0.0267	2.67%
1.00	3.00%	1/1/2019	0.0300	1.0300		
	3.00%	1/1/2020	0.0300	1.0600	0.0291	2.91%
	3.00%	1/1/2021	0.0300	1.0900	0.0283	2.83%

Note 1: Agreement ratified by the IBEW, Local 1260 on November 1, 2012, reflects a 3.00% increase effective 1/1/2014, 1/1/2015, 1/1/2017 and 1/1/2018 and a 3.25% increase effective 1/1/2016, based on 1/1/2013 rates.

Note 2: Agreement ratified by the IBEW, Local 1260 on July 31, 2018, reflects a 3.00% increase effective 1/1/2019, 1/1/2020 and 1/1/2021 based on 1/1/2018 rates. See also HECO-WP-C-003.

Blue Chip Economic Indicators®

Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead
Vol. 44, No. 2, February 10, 2019

HAWAIIAN ELECTRIC COMPANY, INC.

EXHIBIT A 3.00% 3.00% 3.00%

<u>JOB CODE</u>	<u>JOB TITLE</u>	<u>1/1/2019</u>	<u>1/1/2020</u>	<u>1/1/2021</u>	
CL829	CASHIER				
	1st 3 mos.	24.19	24.89	25.59	
	Next 3 mos.	25.31	26.05	26.79	
	Next 3 mos.	26.60	27.37	28.14	
	Next 6 mos.	27.91	28.72	29.53	
	Next 6 mos.	29.26	30.11	30.96	
	Thereafter	30.71	31.60	32.49	
CLC05	SR INFORMATION STORAGE EQUIPMENT OPERATOR				
CL18	SYSTEM OPERATION CLERK				
CL20	TEST AND SUBSTATION CLERK				
CL22	DESKTOP PUBLISHING OPERATOR				
CL104	POWER PLANT CLERK				
CL257	MOTOR FLEET CLERK				
CL328	METER CLERK				
CL21	PRINT PRODUCTION OPERATOR				
CL684	COMPUTER SYSTEMS OPERATOR TRAINEE				
	1st 3 mos.	24.71	25.43	26.15	
	Next 3 mos.	25.95	26.71	27.47	
	Next 3 mos.	27.20	27.99	28.78	
	Next 6 mos.	28.55	29.38	30.21	
	Next 6 mos.	29.99	30.86	31.73	
	Thereafter	31.40	32.31	33.22	
TL180	CONDENSER CLEANER				
	1st 6 mos.	27.20	27.99	28.78	
	Next 6 mos.	28.55	29.38	30.21	
	Next 6 mos.	29.99	30.86	31.73	
	Thereafter	31.40	32.31	33.22	
CLA49	PROJECT CLERK				
CLA81	STANDARDS CLERK				
CL12	JOINT POLE AIDE				
CL13	PROJECT CLERK				
CL15	FIELD SERVICE CLERK				
	1st 3 mos.	25.31	26.05	26.79	
	Next 3 mos.	26.60	27.37	28.14	
	Next 3 mos.	27.91	28.72	29.53	
	Next 6 mos.	29.26	30.11	30.96	
	Next 6 mos.	30.71	31.60	32.49	
	Thereafter	32.27	33.21	34.15	
T335	TRUCK DRIVER A	1/1/2018	32.31	33.25	34.19
CL406	METER READER				
	1st 3 mos.	23.99	24.71	25.43	26.15
	Next 3 mos.	25.19	25.95	26.71	27.47
	Next 6 mos.	27.72	28.55	29.38	30.21
	Next 6 mos.	29.12	29.99	30.86	31.73
	Next 6 mos.	30.49	31.40	32.31	33.22
	Thereafter	32.03	32.99	33.95	34.91
			x 1.03	x 1.0291	x 1.0283

CIAC Treatment
Resulting from FERC Adoption

Adoption of FERC USOA required a change in presentation change to Contributions in Aid of Construction (CIAC)

Prior to October 2018, and in establishing rates in previous test year rate cases, the Company's presentation of contributions in aid of construction ("CIAC") followed the guidelines of the National Associate of Regulatory Utility Commissioners Uniform System of Accounts (NARUC USOA). Under the NARUC reporting system, CIAC is reported under an exclusive account, account 271, which includes donations or contributions in cash, services or property from states, municipalities, or other governmental agencies, individuals and others for construction purposes. All CIAC was incorporated as a deduction in the calculation of rate base in part because the Companies' systems did not facilitate on-going reporting of CIAC related to plant in service separate from CIAC related to construction work in progress ("CWIP").

The Commission approved the Companies' request to change to Federal Energy Regulatory Commission Uniform System of Accounts (FERC USOA), beginning with the implementation of the Companies' new ERP/EAM, in Decision and Order No. 31757, issued December 19, 2013 in Docket No. 2013-0007.

Beginning in October 2018 with the transition to FERC, the net balance of CIAC in account 271 less the CIAC amortization to be recorded for October to December 2018, was credited against the account balances charged with the cost of construction, i.e., gross plant in service and CWIP, resulting in the account becoming zero (i.e. "0") at December 31, 2018.

Ratemaking treatment for CIAC

The Company's ratemaking treatment of contributions in aid of construction is summarized below:

- *CIAC associated with Plant in Service* – When a utility capital project is placed into service, the plant in service net of the associated CIAC is included as net cost of plant in service in rate base. The plant in service net of the CIAC is included as part of the basis for the depreciation accrual the year after it is placed into service (i.e. January 1 of the year after it is placed into service).
- *CIAC associated with CWIP* – For book purposes, CIAC that is received while projects are still under construction (i.e. in CWIP) will offset the costs incurred and is presented net in CWIP. The CWIP net of the associated CIAC is subject to the AFUDC accrual if there is a net CWIP balance. In the next rate case, the Company will request CIAC associated with CWIP be excluded from the rate base calculation since CWIP net of

CIAC earns AFUDC. CIAC associated with CWIP is however, included in rate base in this RAM calculation for consistency with the 2017 Test Year treatment. See further discussion of Company's requested treatment of CIAC associated with CWIP below.

- *Developer Advances* - Cash contributions received in advance of construction of a utility capital project that are temporarily not classified as CIAC because the funds received are in excess of the specific project expenditures. The balance of developer advances is presented as funds from non-investors, included in its own exclusive account, and deducted in the calculation of rate base. As project costs are incurred for a utility capital project, an equal portion of developer advances associated with the project will be reclassified as CIAC and credit the accounts charged with the cost of construction. Developer Advances were included as a part of CIAC as a reduction to rate base in the 2017 Test Year.

Treatment of CIAC within the 2019 Annual Decoupling Filing

For the 2019 Decoupling Filing, the Company treated CIAC consistently with prior filings resulting in no impact to rate base.

Schedule D1, Determination of Rate Base RAM Adjustment – Change in Rate Base

Plant in Service - There is no change in rate base for plant in service and CIAC associated with plant in service. Under NARUC, in rate base, plant in service was the gross cost of plant (net of accumulated depreciation), and CIAC was a separate reduction to rate base. Under FERC, the plant in service amounts are net of (i.e., already reduced by) CIAC, and presented net of accumulated depreciation in the calculation of rate base. There is no separate CIAC line item reducing rate base because it is already net in utility plant. Therefore, there is no net rate base impact. The difference between NARUC and FERC for plant in service is a matter of where the costs are classified in rate base, and not a matter of inclusion or exclusion of costs in rate base.

CIAC associated with CWIP - There is no change in rate base for CIAC associated with CWIP. Previously, presentation of CIAC aligned with NARUC and all CIAC, including amounts associated with projects in CWIP, were included as a reduction to rate base under account 271. The 2019 estimated balance continues the treatment of including the CIAC in CWIP to be consistent with the recorded balance at 2018 year-end because all 2019 estimated CIAC additions have been included at Schedule D2 and included as part of net cost of plant at Schedule D1. Although the treatment described above was used in the 2019 annual decoupling filing, see Company's requested treatment to exclude CIAC associated with CWIP from rate base in future filings in the discussion below.

Developer Advances - With the transition to FERC, CIAC is credited when received against the related project costs in CWIP. To the extent funds are not yet expended for a project in

CWIP, the CIAC will be classified as developer advances and deducted in the calculation of rate base at Schedule D1. The recorded balance at 2018 year-end is not adjusted for 2019 activity as it is incorporated in Schedule D2.

Schedule D2, Determination of Baseline Capital Projects Additions

Schedule D2 was revised to incorporate the baseline and major project CIAC (including Developer Advances) for 2014 to 2017 into the baseline average calculation of net plant in service, consistent with the presentation of rate base. The 2018 CIAC additions calculated at HECO-WP-D2-003 includes additions to CIAC from all sources, i.e. Plant, CWIP and Developer Advances, which were used in the 5-year baseline calculation. As a result, the estimated 2019 additions to CIAC in CWIP and Developer Advances balances at Schedule D1 for the Change in Rate Base are not required as they are already included in the net cost of plant line item.

Schedule E, Determination of Depreciation & Amortization RAM Adjustment

FERC Uniform System of Accounts Electric Plant Instructions, 2. Electric Plant To Be Recorded at Cost. D. states, “The electric plant accounts shall not include the cost or other value of electric plant contributed to the company.” Therefore, the Recorded Depreciable/ Amortizable Balances at December 31, 2018 in Schedule E represents plant in service net of CIAC which is used as the basis to estimate the 2019 annual accrual amount. In calculating the 2019 RAM Depreciation and Amortization, Depreciation and Amortization in Current Revenues also includes CIAC amortization approved in the 2017 Test Year.

Schedule F & F1, Determination of Change in Deferred Income Taxes & Tax Depreciation

The methodology for computing the deferred taxes related to RAM year tax depreciation was not changed within the 2019 annual decoupling filing. Gross plant additions are used as the basis for calculating tax depreciation. However, see the CIAC impact to ADIT section below for the Company’s preferred treatment considering the effects of netting CIAC against plant in service.

Schedule G-series, CIAC

Schedule G, G1 and G2 were removed from the Decoupling filings and instead incorporated into either Plant in Service, CIAC in CWIP or Developer Advances. The December 31, 2018 balances for CIAC associated with CWIP and Developer Advances were extracted from PowerPlan. Additionally, as noted above, the calculation of the 5-year baseline average of CIAC and amortization was incorporated within Schedule D2 and Schedule E, respectively.

The Company will continue to include CIAC associated with CWIP and Developer Advances as a reduction to rate base until the FERC presentation of rate base is approved in the Company’s next rate case.

Company's requested CIAC treatment

The Company requests to reflect the following changes to the treatment of CIAC within the annual decoupling filings.

CIAC associated with CWIP

In Mr. Franklin's T-12 direct testimony in Hawaii Electric Light's 2019 Test Year rate case, the Company proposes to remove CIAC associated with CWIP from the calculation of rate base due to the fact that CWIP net of associated CIAC earns AFUDC, therefore the CWIP and its associated CIAC should be excluded from rate base.

Excluding CWIP net of CIAC, to better align the source of funds with its use (i.e. the CIAC funds received were applied against the costs incurred for the project) and is therefore properly excluded from the calculation of rate base. In addition, and as mentioned previously, any material CIAC received in advance of construction expenditures will continue to be deductions in the calculation of rate base as Developer Advances.

CIAC impact to ADIT

ADIT associated with CIAC in CWIP should be divided between nontaxable and taxable CIAC. Nontaxable CIAC (primarily interconnection CIAC) is treated as a reduction in basis for both book and tax purposes. On the other hand, although taxable CIAC is also a reduction in basis for book purposes, for tax purposes, the receipt of taxable CIAC creates tax basis by way of the recognition of taxable income and reverses by way of tax depreciation.

Nontaxable CIAC does not create ADIT since there is no book tax difference. Consequently, the regulatory netting of nontaxable CIAC against the plant assets should not create any issue with respect to the ADIT beginning balance for the rate base RAM calculation

Taxable CIAC generates a Deferred Tax Asset (DTA) as it is received and recorded into CWIP under the new FERC accounting. Prior NARUC accounting treatment with account 271 created DTA as CIAC was booked to 271, which is equivalent to what is now booked to CWIP. The origination and timing of the DTA under the FERC method will be equivalent to the NARUC method. However, under the old method, the DTA was immediately recognized as part of rate base, consistent with the treatment of the account 271 inclusion. However, under the FERC method, the generation of the DTA must be inventoried and tracked to match up with the amount of CIAC in CWIP and the amounts closed to plant in service. This tracking is necessary to ensure that the amount of DTA related to CWIP is excluded from rate base. Once CWIP costs are closed to plant, the related DTA will be included in rate base and will begin reversal through tax depreciation taken on the CIAC tax basis.

FERC accounting imbeds the book treatment of CIAC within CWIP and the ultimate plant and related depreciation. The separation will disappear and the Company asserts that the ADIT

effects will be the same with respect to the beginning balance of ADIT for the annual decoupling filing except to the extent CIAC is still in CWIP. This issue will be addressed along with the rate base treatment of CIAC associated with CWIP as mentioned above.

FERC accounting nets CIAC against Plant in Service for purposes of computing baseline and major plant additions. For RAM year tax depreciation and the related ADIT calculated for the change in RAM year ADIT, adopting the net plant additions as the RAM year tax additions will be a change that will result in a smaller amount of tax depreciation and ADIT “change” since the Company previously has assumed the gross additions to be the RAM year tax depreciable base. The Company asserts this is reasonable for the following reasons:

- 1) Under the old method, to the extent nontaxable CIAC was included in the RAM year numbers (through major projects or baseline projects), tax depreciable basis was overstated since there is no tax basis for assets funded by nontaxable CIAC.
- 2) With respect to taxable CIAC, the funded assets do have depreciable tax basis and it is accounted for in the RAM year additions tax depreciation. However, the receipt of taxable CIAC generates taxable income and deferred tax assets that increase rate base. The effect of this DTA from taxable CIAC was never recognized in the RAM tariff, which resulted in an overstatement of RAM year ADIT change, as it related to the projected plant additions.

For purposes of the 2019 RAM calculation, ADIT has been calculated on gross plant additions, consistent with the 2017 Test Year treatment and prior decoupling filings, however the Company is requesting treatment of CIAC in deferred tax to follow FERC accounting.

Summary

In summary, Hawaiian Electric prepared the 2019 annual decoupling filings in accordance with the historical treatment of CIAC. Historically, due to system constraints, CIAC records were not maintained with matching of the separate components (plant in service, CWIP, developer advances). As a result, the entire amount of CIAC was treated as a reduction to rate base and the Return on Investment was understated. As stated in Mr. Franklin’s T-12 direct testimony in Hawaii Electric Light’s 2019 Test Year rate case, the Companies propose to exclude the CIAC associated with CWIP in its calculation of rate base in the rate base RAM filings. Should the Commission approve Hawaii Electric Light’s proposal, Hawaiian Electric will implement this change in the annual decoupling filing in the year following the Commission’s approval.

**Hawaiian Electric Company, Inc.
Revenue Decoupling - Rate Base RAM
2018 Major Projects and Other Plant Additions, Net of CIAC**

NET CALCULATION

Grand parent	Project #	Project	Plant Addition Date	[2] 2018 Plant Additions, Net of CIAC					Net PUC Approved (F)	Over/(Under) Net PUC Approved (E) - (F)	Functional Plant Category		
				[1] Net Plant Adds Thru 12/31/17 (A)	Total Project Cost (B)	CIAC & Adjs (C)	Net Project Cost (D) = (B) + (C)	Net Plant Adds Thru 12/31/18 (E) = (A) + (D)					
<u>2018 Major Projects</u>													
1	-	P0001370 DOT Airport DSG	2018 stragglng	3,336,179	(3,516)	(96,602)	(100,118)	3,236,061	3,400,139	[3a]	(164,078)	Production Other	
2	-	P0002264 Pukele 80MVA Tsf #1	2018 stragglng	3,846,733	-	-	-	3,846,733	3,846,733	[3a]	-	Transmission	
3	Y00038	(P0000783) Kakaako Makai-Iwilei 25kV DL (P0000672) Kakaako Makai-Kewalo 25kV DL (P0001579) Kakaako Makai DOT Queen-Cook PZ.000001	2018 stragglng 2018 stragglng 2018 stragglng	7,243,799 5,023,851 1,969,969	- - -	- - -	- - -	7,243,799 5,023,851 1,969,969					
				14,237,619				14,237,619	14,537,623	[3a]	(300,004)	Distribution	
4	Y00168	PZ.000003 (P0003205) ERP EAM Hardware	2018 stragglng	2,604,146	-	-	-	2,604,146	2,590,000	[3b]	14,146	Computers	To Sch DI
5		PE.005155 Joint Pole Capital Transfer Price	201812	-	24,665,897	-	24,665,897	24,665,897	24,665,897	[3c]	-	Distribution	
<u>Other</u>													
6	-	PE.000104 (P0003465) Koolau-Wailupe #1 Str 30 P9 Replace	2018 stragglng	2,684,387	13,203	-	13,203	2,697,590	2,555,619	[3d]	141,971	Transmission	To Sch DI
<u>Major Project Interim Recovery (MPIR) Projects</u>													
7	-	PZ.000016/ PZ001002 (P0001576) Schofield Generation Station	201806	-	144,743,542	-	144,743,542	144,743,542	-	[4]	144,743,542	Production Other	To Sch DI

[1] Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-D2-001, filed on May 29, 2018.

[2] Hawaiian Electric Companies' Exemption From and Modification of General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2018, in Docket No. 03-0257, filed on March 27, 2019. See HECO-WP-D2-002.

[3] Per the Final Decision & Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, filed on August 31, 2010, in Docket No. 2008-0274, on page 54, "for purposes of calculating the Rate Base for the RAM, the costs on Major Capital Projects shall be limited to those amounts most recently approved, e.g., when authorized in the commission's decision approving the HECO Companies' application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO companies' rate cases."

[3a] Net PUC Approved amount was derived from the Hawaiian Electric 2017 Test Year Rate Case, filed in Docket No. 2016-0328, in response to CA-IR-303 and CA-IR-304 which updated 2016 Plant Additions and CIAC for actuals through December 31, 2016 and revised forecast for 2017. See calculation below:

	DOT Airport DSG			Pukele 80MVA Tsf #1			Kakaako Makai		
	Gross	CIAC	Net	Gross	CIAC	Net	Gross	CIAC	Net
Gross/Net Plant Adds Thru 12/31/16) - column [1]	5,235,178	(1,993,000)	3,242,178	3,839,121	-	3,839,121	18,338,808	(2,825,023)	15,513,785
2017 Plant Addition (CA-IR-303, Att 2)	157,961	-	157,961	7,612	-	7,612	(76,162)	-	(76,162)
2017 CIAC Estimate (CA-IR-304, Att 2)	-	-	-	-	-	-	-	(900,000)	(900,000)
Derived PUC Approved	5,393,139	(1,993,000)	3,400,139	3,846,733	-	3,846,733	18,262,646	(3,725,023)	14,537,623

[3b] Per Decision and Order No. 33861, page 4, Docket No. 2014-0170, For Approval of an Enterprise Resource Planning and Enterprise Asset Management System Implementation Project and Related Accounting Treatment, filed August 11, 2016.

[3c] Per Decision and Order No. 35768, Docket No. 2018-0075, For Approval of the Transfer of Equity Ownership Interest in Certain Joint Poles, to Commit Funds in Excess of \$2,500,000, Accounting and Ratemaking Treatment, Amendments to Joint Pole Agreements Between the Applicants, Asset Transfer Agreement, and Pole Licensing Agreement, file October 16, 2018. The Commission approved the acquisition of Hawaiian Telcom's joint pole equity ownership shares, valued at \$47,970,092, of which \$24,665,897 was related to Hawaiian Electric.

[3d] In the 2017 Fourth Quarter Capital Projects Status Report filed on February 28, 2018, Hawaiian Electric identified that the project costs had unexpectedly exceeded \$2,500,000 and provided an explanation for the higher costs. Project cost is limited for rate base RAM recovery to the amount identified in Hawaiian Electric's response to CA-IR-303, Attachment 2, page 3 of 7), filed in Docket No. 2016-0328, Hawaiian Electric 2017 Test Year Rate Case.

[4] Project to be recovered through the MPIR mechanism and therefore the entire project will be removed from the RAM Revenue Adjustment Calculation. See Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Recovery Mechanism, filed February 7, 2019, Transmittal No. 19-01 effective January 1, 2019. MPIR Recovery calculated at the Schedule L series.

2018 General Order No. 7 (GO7) Report Summary Plant Additions

Projects	2018 Plant Addition (1)
Less than \$2.5M	189,284,505
Greater than \$2.5M	169,419,126
Total Plant Additions - Gross	358,703,631
	To Sch D2, line 1
Less: Major Project additions in 2018	
DOT Airport DSG	3,516
Koolau-Wailupe #1 Str 30 P9 Replace	(13,203)
Schofield Generation Station	(144,743,542)
Joint Pole Transfer Price	(24,665,897)
	(169,419,126)
Baseline Plant Additions - Gross	189,284,505

(1) Source: Hawaiian Electric Companies' Exemption From and Modification General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2018, in Docket No. 03-0257 filed on March 27, 2019.

Hawaiian Electric Company, Inc.
CIAC Reconciliation
As of December 31, 2018

Line No.	Description (a)	Reference (b)	CIAC, Including Developer Advances (c)	
1	12/31/17 Balance	5/29/18 Decoupling, Sch G1	(366,100,380)	
2	Exclude: Non-Utility CIAC		618,464	
3	Add: Developer Advances		(33,883,949)	
4	12/31/17 Balance - Utility CIAC		<u>(399,365,865)</u>	
5	9/30/18 Balance	GL #271	(378,238,665)	
6	Exclude: Non-Utility CIAC	Line 2	618,464	
7	Add: Developer Advances	GL #2520300	(34,163,852)	
8	9/30/18 Balance - Utility CIAC	Line 4 + Line 5	<u>(411,784,053)</u>	
9	CIAC Change Thru 9/30/18 - Utility	Line 6 - Line 3		(12,418,188)
10	Add Back: 2018 CIAC Amortization thru 9/30/18	5/29/18 Decoupling, Sch G3 (8,818,605 x 9/12)	8,818,605	<u>(6,613,954)</u>
11	CIAC Additions Thru 9/30/18			(19,032,141)
12	<u>Oct to Dec 2018 Activity</u>			
13	CIAC-Cash Tax	GL #60005200	(6,435,124)	
14	CIAC-Cash Non-Tax	GL #60005201	(831,921)	
15	CIAC-Settlement	GL #60050221	174,515	
16	CIAC-In-Kind	GL #60005206	<u>(3,443,756)</u>	
17				<u>(10,536,286)</u>
18	2018 CIAC Additions, included within Plant in Service, CWIP, Developer Advances			<u><u>(29,568,427)</u></u> To Sch D2

Purpose:

Starting October 1, 2018, the Company adopted FERC guidelines resulting in CIAC being netted with Plant via Plant Additions or CWIP. This workpaper calculates the 2018 CIAC additions by summing the CIAC activity from January 1 to September 30, 2018 (per Ellipse) with the CIAC activity from October 1 to December 31, 2018 (per SAP and Powerplan WBS) for inclusion in the Baseline Plant Additions calculation at Schedule D2. Beginning with calendar year 2019, Baseline Plant Additions will be shown net of CIAC.

Note 1:

See HECO-WP-D1-001 for documentation on the treatment of CIAC in the 2019 Decoupling Filing.

EXCERPT: Transmittal 18-01, Schedule G1, filed 5/29/18.

SCHEDULE G1
PAGE 1 OF 1

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
BASELINE CAPITAL PROJECTS CIAC ADDITIONS

Source of CIAC balance and amort.: December Monthly Reports filed (non-confidential basis) with the PUC dated:

Line No.	Description (a)		2/21/2014	2/26/2015	2/23/2016	2/24/2017	3/1/2018
			2013 (b)	2014 (c)	2015 (d)	2016 (e)	2017 (f)
1	CIAC Balance, January 1 (Dec Rpt. pg. 10)		(238,510,104)	(258,084,169)	(283,739,660)	(319,727,698)	(348,444,542)
2	Less: Non-Utility CIAC	NOTE (3)				618,464	618,464
3	Adjusted CIAC Balance, January 1		(238,510,104)	(258,084,169)	(283,739,660)	(319,109,234)	(347,826,078)
4	Less: CIAC Amortization (Dec Rpt. pg. 2)		5,652,912	6,147,559	6,771,148	7,597,437	8,309,481
5	CIAC Balance, December 31 (Dec Rpt. pg. 10)		258,084,169	283,739,660	319,727,698	348,444,542	366,100,380
6	Less: Non-Utility CIAC	NOTE (3)			(618,464)	(618,464)	(618,464)
7	Less: Adjusted CIAC Balance, December 31		258,084,169	283,739,660	319,109,234	347,826,078	365,481,916
8	Total Adjusted CIAC Additions	(Sum Line 3, 4 & 7)	25,226,977	31,803,050	42,140,722	36,314,281	25,965,319
9	Add Developer Advances:	NOTE (4)	-	-	-	-	33,883,949
19	Total Adjusted CIAC & Developer Advance Additions		25,226,977	31,803,050	42,140,722	36,314,281	59,849,268
20	<u>Less Major Projects:</u>	<u>Dkt No.</u>					
21		<u>Item No.</u>					
22	<u>2008 In-service:</u>						
23	CIP Generating Unit	05-0145					
24							
25	<u>2010 In-service:</u>						
26	K3 Biofuel Co-Firing	2009-0155					
27							
28	<u>2011 In-Service:</u>						
29	W8 Boiler Controls Upgrade	2007-0365					
30	EOTP Ph. 2 (Subs/Switch Stations)	2010-0062	(87,994)	(43,725)	(15,232)	(718)	Schedule D2
31	W7 Controls Upgrade	2009-0195					
32	W8 Main Transformer Replace						
33							
34	<u>2012 In-Service:</u>						
35	K1 Condenser Tube Replace	2010-0126					
36	BPT Tank 132 Improvements	2010-0286					
37	Mobile Radio Replacement	2010-0162					
38	Kapolei Substation	2011-0026					
39							
40	<u>2013 In-Service:</u>						
41	Pukele 80MVA Tsf #3	2011-0156					
42	Kakaako Makai-Iwilei 25kV DL	2009-0042					
43	Kalo Substation - Land - NOTE (2)	2008-0070					
44	North South Road 46kV Line	2008-0070					
45							
46	<u>2014 In-Service:</u>						
47	Kalo Substation	2008-0070					
48	Kalo Sub 46kV & 12kV Distr	2008-0070					
49	Kalo Telecomm	2008-0070					
50	Kalo Sub 12kV Work	2008-0070					
51	Kakaako Makai-Kewalo 25kV DL	2009-0042					
52	Kakaako Makai DOT Queen-Cook	2009-0042				(2,825,023)	Schedule D2
53	BPT Tank 133 Improvements	2010-0318					
54	Pukele 80MVA Tsf #2	2011-0156					
55	DOT Airport DSG	2008-0329					
56							
57	<u>2016 In-Service:</u>						
58	Pukele 80MVA Tsf #1	2011-0156					
59							
60	<u>2017 In-Service:</u>						
61	ERP EAM Hardware	2014-0170					
62							
63	Total Net CIAC & Developer Advance Additions		25,138,983	31,759,325	42,125,490	33,488,540	59,849,268
64	Last Five-Year Average						38,472,321
65							To Sch G

NOTE (1): The CIAC amounts of the major projects are reflected in the year that they were received. In previous Decoupling filings these amounts were from the respective year's GO7 plant addition annual reports which reports the CIAC in the year the project closed to plant. In the past, the total CIAC additions, which reflect actual contributions received in the year, may not have included the total major project CIAC from the GO7 report to the extent that the CIAC was received in advance, or in multiple payments over a span of more than one year. Source: UI Planner files: Actuals Scenario.

NOTE (2): CIAC received for this project was not reflected in the 2012 and 2013 Decoupling filings as previous filings reported the CIAC amounts of the major projects from the respective year's GO7 plant addition annual report which reports the CIAC in the year the project closed to plant. See GENERAL NOTE.

NOTE (3): Adjustment to remove non-utility project related CIAC from the general ledger balance. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it. See Schedule G3, Line 96. Adjusted CIAC Additions for 2016 was corrected to exclude the non-utility plant balance from the beginning balance.

NOTE (4): In 2017, the Company reclassified the portion of CIAC for projects where the cash balance received was in excess of total incurred costs since the project agreements include provisions which allow for instances that unapplied funds received in advance would be subject to refunds. The true-up provision allows for any excess funds not expended to be refunded back to the developer. Furthermore, between the timing of the cash receipt to the project completion date, the project could be terminated, which would then result in refund of the unapplied funds. See below for a reconciliation of the Customer Advance balance at December 31, 2017:

Customer Advance (#25200000)	4,239,163
Developer Advances (#25203000)	33,883,949
Customer Advances	38,123,112

SOURCE: HECO Monthly Financial Report - December 2017, page 10, filed March 1, 2018.

The unapplied developer funds received in advance (Developer Advances) are excluded from the CIAC balance subject to amortization until they are reclassified to CIAC as costs are incurred. Developer Advances are included in the calculation of the Last Five-Year Average because they represent funds received in advance and are expected to be reclassified to CIAC as costs are incurred in the current year. Developer advances were also included in the Unamortized CIAC balance (See "Average Rate Base" from HECO Decision and Order No. 35280, filed 2/9/2018 of Docket No. 2016-0328).

**Hawaiian Electric Company
2019 Plant Additions Net of CIAC - Major Projects Support**

Grand-parent	Project	Functional Category	Plant Addition Date	Net PUC Approved	Net Plant Adds thru 12/31/18	2019 Net Plant Additions	2019 CIAC Additions	2019 Net Project Costs	Estimated Net Plant Adds thru 12/31/19	Over/(Under) Net PUC Approved	2019 Net Plant Addition Qualifying for RB RAM (Note A)
				[1] <i>A</i>	[2] <i>C</i>	[3] <i>D</i>	[3] <i>E</i>	<i>F = D + E</i>	<i>G = C + F</i>	<i>H = A - G</i>	
	PE.000209 (P0003975): AES-CEIP #2 138kV OH Trans Line Relocation	Transmission >=69kV	2019/02	3,007,232 [1a]	-	4,091,987		4,091,987	4,091,987	1,084,755	3,007,232
	PG.000005/PZ.001001 (P0003966): West Loch Utility Scale PV	Production-Photovoltaic	2019/05	62,400,000 [1b]	-	52,128,000		52,128,000	52,128,000	(10,272,000)	52,128,000
	PZ.000015 (P0000974, P0003977): Ala Wai Canal 46kV Relocation	Transmission <69kV	2019/06	13,910,207 [1c]	-	20,300,268		20,300,268	20,300,268	6,390,061	13,910,207
Y00038	P0000672: Kakaako Makai-Kewalo 25kV DL		2014/04	7,243,799	7,243,799						
	P0000783: Kakaako Makai-Iwilei 25kV DL		2013/07	5,023,851	5,023,851						
	P0001579: Kakaako Makai DOT Queen-Cook		2014/04	1,969,969	1,969,969						
		Distribution		14,237,619 [1d]	14,237,619	-	(22,683)	(22,683)	14,214,936	(22,683)	(22,683)
69,022,756											
To Sch D3											

NOTE A: Amount qualifying for 2019 rate base RAM recovery is limited to the lower of the net plant addition (column D) or the net PUC approved amount (column A). In the case of straggling costs, the amount qualifying for 2019 rate base RAM recovery is limited to the lower of the 2019 net plant addition (column D) or the remaining unused balance of the net PUC approved amount.

[1] Per the Final Decision & Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, filed on August 31, 2010, in Docket No. 2008-0274, on page 54, "for purposes of calculating the Rate Base for the RAM, the costs on Major Capital Projects shall be limited to those amounts most recently approved, e.g., when authorized in the commission's decision approving the HECO Companies' application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO companies' rate cases."

[1a] Decision and Order No. 35312 in Docket No. 2016-0439, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the P0003975 - AES-CEIP 2 138 kV Overhead Transmission Line Relocation Project, filed March 2, 2018.

[1b] Decision and Order No. 34676 in Docket No. 2016-0342, For Approval of Waiver from the Framework for Competitive Bidding and to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0003966 - West Loch PV Project, filed June 30, 2017.

[1c] Decision and Order No. 34788 in Docket No. 2016-0416, For Approval to Commit Funds in Excess of \$2,500,000 for Item P0000974, Ala Wai Canal 46 kV Underground Line Construction and Item P0003977, Ala Wai Canal Easement Acquisition and Related Requests, filed September 1, 2017.

[1d] See HECO-WP-D2-001, Note [3a].

[2] Source: HECO-WP-D2-001.

[3] Source: UIPlanner Budget files. Forecast as of February 15, 2019.

HAWAIIAN ELECTRIC CO., INC.				
DEFERRED INCOME TAXES				
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)
		HECO	HECO	HECO
		FEDERAL	STATE	TOTAL
DR / (CR)		LIABILITY	LIABILITY	LIABILITY
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018
28311	Unearned Lease	-	-	-
28312	Accrued Vacation	(247,391.60)	(81,566.84)	(328,958.44)
28313	Uncollectible Acct	365,876.81	111,502.91	477,379.72
28314	Directors Def Comp	8,117.74	1,571.96	9,689.70
28317	Discounted Work Comp	313,824.26	95,894.48	409,718.74
28319	Cap to Construct (Cost of Removal)	71,429,406.70	21,769,003.09	93,198,409.79
28321	Pension	(15.02)	0.31	(14.71)
28323	Excess Benefit Plan	566,372.66	168,081.11	734,453.77
28326	Def Exec Comp (Def EICP<IP)	35,031.69	10,677.39	45,709.08
28327	Software (no APPRISE & e business	88,753.66	52,874.74	141,628.40
28328	G/L ACRS Retirements	(12,405,681.27)	(4,236,659.06)	(16,642,340.33)
28330	EICP	(358,728.30)	(125,497.81)	(484,226.11)
28331	CIAC	20,071,371.03	10,206,246.04	30,277,617.07
28332	Customer Advances	1,077,639.88	327,760.03	1,405,399.91
28333	Capitalized Interest	9,984,224.16	3,836,301.98	13,820,526.14
28335	Connection Fees	(9,611.91)	(8,444.14)	(18,056.05)
28336	Nondeductible Interest	19,016.26	5,795.04	24,811.30
28337	Supplemt Benefits - SERP	272,295.28	72,700.74	344,996.02
28340	LTIP	822,110.82	250,548.14	1,072,658.96
28341	Waipahu Baseyard Int	67,116.93	20,452.91	87,569.84
28347	Waiiau Water Well Pmts	79,910.90	24,369.66	104,280.56
28350	Outage Loss Adj Exp	-	(24,509.00)	(24,509.00)
28401	Gen/Auto (& Accidents)	248,241.27	75,654.04	323,895.31
28403	CWIP Debt Transition	(160,324.76)	(48,863.15)	(209,187.91)
28404	CWIP Equity Trans	(404,087.01)	(123,151.30)	(527,238.31)
28405	Iolani Ct Plaza Sale	17,071.33	(6,033.56)	11,037.77
28406	Kaonohi Sale	(22,651.01)	(6,942.61)	(29,593.62)
28408	Plant Transition	(3,997,395.48)	(1,218,288.67)	(5,215,684.15)
28409	CWIP Equity Net	(17,671,614.37)	(5,385,620.77)	(23,057,235.14)
28410	CWIP Equity Grossup	(10,862,867.25)	(3,310,577.99)	(14,173,445.23)
28411	CWIP Debt	(9,399,038.35)	(2,868,001.13)	(12,267,039.48)
28412	Gen/Auto Liability - Legal	0.21	(2,428.89)	(2,428.68)
28413	Post Retirement Ben	(875,563.84)	(246,873.67)	(1,122,437.51)
28414	Reg Liab Federal ITC	172,357.16	53,366.18	225,723.34
28418	IRP Costs	(25,223.69)	(8,107.96)	(33,331.65)
28419	Reg Liab Excess 283	115,881.47	35,956.40	151,837.87
28422	Miscellaneous	17,106.97	(16,969.99)	136.98
28427	Prepaid Expenses	(915,615.83)	(279,043.26)	(1,194,659.09)
28432	Coal Gasif Costs	-	(11,273.00)	(11,273.00)
28434	EEO Claims	452.80	138.01	590.81
28435	Rev Bond Differential	(106,539.65)	(32,468.74)	(139,008.39)
28436	TIP/Rewards Programs	119,814.53	36,774.90	156,589.43
28441	Sun Power	12,330.63	3,757.91	16,088.54
28512	Revenue Bond Cost Amort.	(678,674.71)	(206,833.19)	(885,507.90)
28514	Software (APPRISE only)	-	(22,551.00)	(22,551.00)
28516	Honolulu Harbor Reserve	879,610.69	268,072.02	1,147,682.71
28520	Deferred Comp - restricted stock	141,231.75	43,041.58	184,273.33
28522	Perry reserve	64,996.20	19,808.00	84,804.20
28526	Emissions Fees	331,750.98	101,105.19	432,856.17
28530	AES Hawaii PPA	26,904.63	8,199.90	35,104.53
28532	CIS Project	(48,966.54)	(14,316.02)	(63,282.56)
28538	Rate Case Costs	(287,342.77)	(87,571.54)	(374,914.31)
28542	QUIPS amortization	(140,608.50)	(42,852.44)	(183,460.94)
28544	OPEB Exec Life	2,641,514.13	805,101.19	3,446,615.32
28546	Percentage Repairs Allowance	(1,466,861.75)	(556,699.86)	(2,023,561.61)
28548	Cap interest (D&T)	(2,603,450.33)	(1,054,919.70)	(3,658,370.03)
28550	E-Business hardware	(19,730.68)	(8,206.93)	(27,937.61)
28552	OMS project costs	262,187.44	81,204.84	343,392.28
28558	Substation Land - Aiea	-	(2,073.65)	(2,073.65)
28560	Solar tax credit	630.40	192.12	822.52
28564	HR Suites project costs	(213,369.94)	(67,275.43)	(280,645.37)
28568	Solar Saver Program	43,008.71	13,107.14	56,115.85
28570	Pension Tracker	(18,456,906.96)	(5,624,946.08)	(24,081,853.04)
28572	OPEB Tracker	1,198,564.16	365,276.00	1,563,840.16
28580	Blue Earth reserve	(2,163.55)	(659.33)	(2,822.88)
28584	RO Water Pipeline	215,900.82	65,798.23	281,699.05
28590	Repairs Adjustment	(74,909,026.37)	(22,228,032.86)	(97,137,059.23)
28592	Stimulus Funds	200.17	60.96	261.13
28594	Budget System Replacement	(135,405.78)	(41,265.98)	(176,671.76)
28596	EOTP interest / amort	(2,972.01)	(906.02)	(3,878.03)
28598	CIP interest	(116,247.60)	(35,427.08)	(151,674.68)
28600	ERP project costs	(1,035,960.90)	(315,721.84)	(1,351,682.74)

HAWAIIAN ELECTRIC CO., INC.				
DEFERRED INCOME TAXES				
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)
		HECO	HECO	HECO
		FEDERAL	STATE	TOTAL
DR / (CR)		LIABILITY	LIABILITY	LIABILITY
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018
28602	Reg Liab Federal PV/EV	192,541.81	58,679.74	251,221.54
28604	IVR project costs	(174,366.73)	(53,140.93)	(227,507.66)
28608	Franchise Tax	1,013,344.05	308,828.44	1,322,172.49
28614	RBA revenues	(7,287,568.48)	(2,220,971.56)	(9,508,540.04)
28618	NOL - charitable	(6,347.36)	-	(6,347.36)
28620	G/L Lauula	8,240.41	(41.55)	8,198.86
28626	Reg Asset - 2017 Excess-other	(3,312,656.78)	(5,623,166.16)	(8,935,822.94)
28628	Reg Liab - 2017 Excess-other	7,289,541.76	6,835,162.29	14,124,704.06
28630	Reg Liab - TRA revenues	965,858.79	294,357.59	1,260,216.38
28632	PSC/PUC tax	5,781,313.48	1,761,927.88	7,543,241.36
28634	Waianae Solar	1,774,655.94	540,848.68	2,315,504.62
28636	HT joint pole unbilled	875,228.59	266,736.90	1,141,965.49
AOCINQ	AOCI - NQ Pension	624,198.92	190,228.31	814,427.23
AOCIOPEB	AOCI - OPEB Exec Life	(538,268.59)	(164,045.19)	(702,313.78)
48000	FIN 48 tax	368,936.00	661,176.00	1,030,112.00
48002	FIN 48 interest	41,253.93	12,572.63	53,826.56
50000	Rounding	(709.37)	364.13	(345.24)
	FED ACCOUNT 283, excluding state ITC	(38,254,016.15)	(6,551,668.15)	(44,805,684.30)
28310	State ITC	11,655,223.12	3,534,658.68	15,189,881.80
	TOTAL ACCOUNT 283	(26,598,793.02)	(3,017,009.47)	(29,615,802.50)
28210000	Accelerated Depreciation	(252,669,067.47)	(48,604,627.78)	(301,273,695.25)
28210100	Accel. Depr. - Excess	44,073,568.30	13,431,888.93	57,505,457.23
28210200	Accel. Depr. - Deficit	(169,370.14)	(51,202.87)	(220,573.02)
	TOTAL ACCOUNT 282	(208,764,869.31)	(35,223,941.72)	(243,988,811.04)
				To Sch D4
	TOTAL DEF INCOME TAX - UTILITY	(235,363,662.34)	(38,240,951.20)	(273,604,613.53)
28210300	Nonutility Depreciation	555,767.33	265,376.64	821,143.97
28301001	Nonutility - Other	1,029,315.35	316,263.16	1,345,578.51
28301002	RHI Tax Allocation	-	-	-
28301003	UBC Tax Allocation	-	-	-
50001	Rounding	(2.67)	-	(2.67)
	TOTAL DEF INCOME TAX - NONUTILITY	1,585,080.02	581,639.80	2,166,719.82
	TOTAL DEF INCOME TAX	(233,778,582.32)	(37,659,311.40)	(271,437,893.72)
	RATE BASE CALCULATION			
	TOTAL ACCOUNT 283	(26,598,793.02)	(3,017,009.47)	(29,615,802.50)
	Less:			
28312	Accrued Vacation	(247,391.60)	(81,566.84)	(328,958.44)
28313	Uncollectible Acct	365,876.81	111,502.91	477,379.72
28314	Directors Def Comp	8,117.74	1,571.96	9,689.70
28317	Discounted Work Comp	313,824.26	95,894.48	409,718.74
28323	Excess Benefit Plan	566,372.66	168,081.11	734,453.77
28326	Def Exec Comp (Def EICP<IP)	35,031.69	10,677.39	45,709.08
28330	EICP	(358,728.30)	(125,497.81)	(484,226.11)
28336	Nondeductible Interest	19,016.26	5,795.04	24,811.30
28337	Supplemt Benefits - SERP	272,295.28	72,700.74	344,996.02
28340	LTIP	822,110.82	250,548.14	1,072,658.96
28341	Waipahu Baseyard Int	67,116.93	20,452.91	87,569.84
28347	Waiau Water Well Pmts	79,910.90	24,369.66	104,280.56
28350	Outage Loss Adj Exp	-	(24,509.00)	(24,509.00)
28401	Genl/Auto (& Accidents)	248,241.27	75,654.04	323,895.31
28412	Genl/Auto Liability - Legal	0.21	(2,428.89)	(2,428.68)
28418	IRP Costs	(25,223.69)	(8,107.96)	(33,331.65)
28422	Miscellaneous	17,106.97	(16,969.99)	136.98
28434	EEO Claims	452.80	138.01	590.81
28436	TIP/Rewards Programs	119,814.53	36,774.90	156,589.43
28516	Honolulu Harbor Reserve	879,610.69	268,072.02	1,147,682.71
28520	Deferred Comp - restricted stock	141,231.75	43,041.58	184,273.33
28522	Perry reserve	64,996.20	19,808.00	84,804.20
28538	Rate Case Costs	(287,342.77)	(87,571.54)	(374,914.31)
28544	OPEB Exec Life	2,641,514.13	805,101.19	3,446,615.32
28550	E-Business hardware	(19,730.68)	(8,206.93)	(27,937.61)
28568	Solar Saver Program	43,008.71	13,107.14	56,115.85

HAWAIIAN ELECTRIC CO., INC.					
DEFERRED INCOME TAXES					
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)	
		HECO	HECO	HECO	
		FEDERAL	STATE	TOTAL	
DR / (CR)		LIABILITY	LIABILITY	LIABILITY	
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018	
28580	Blue Earth reserve	(2,163.55)	(659.33)	(2,822.88)	
28600	ERP project costs	(1,035,960.90)	(315,721.84)	(1,351,682.74)	
28608	Franchise Tax	1,013,344.05	308,828.44	1,322,172.49	
28614	RBA revenues	(7,287,568.48)	(2,220,971.56)	(9,508,540.04)	
28618	NOL - charitable	(6,347.36)	-	(6,347.36)	
28630	Reg Liab - TRA revenues	965,858.79	294,357.59	1,260,216.38	
28632	PSC/PUC tax	5,781,313.48	1,761,927.88	7,543,241.36	
28634	Waianae Solar	1,774,655.94	540,848.68	2,315,504.62	
AOCINQ	AOCI - NQ Pension	624,198.92	190,228.31	814,427.23	
AOCIOPEB	AOCI - OPEB Exec Life	(538,268.59)	(164,045.19)	(702,313.78)	
48000	FIN 48 tax	368,936.00	661,176.00	1,030,112.00	
48002	FIN 48 interest	41,253.93	12,572.63	53,826.56	
	Adjustment for EOTP, CIS and CIP	(114,827.94)	(34,994.66)	(149,822.60)	
	Total Exclusions	7,351,657.84	2,701,979.21	10,053,637.05	
	Total 283 Deferred Taxes for Rate Base	(33,950,450.87)	(5,718,988.68)	(39,669,439.55)	To Sch D4
	Total 282 Deferred Taxes for Rate Base	(208,764,869.31)	(35,223,941.72)	(243,988,811.04)	
	TOTAL DEF INCOME TAX - RATE BASE	(242,715,320.18)	(40,942,930.41)	(283,658,250.59)	To Sch D4

HAWAIIAN ELECTRIC CO., INC.
ADIT ON EXCESS DEPRECIATION
DECEMBER 31, 2018

	source	ERP/EAM HARDWARE	KOOLAU- WAILUPE #1	TOTAL
FEDERAL DEFERRED TAXES				
1	State Tax Depreciation			
2	Book Depreciation	7,356	14,620	21,976
3	Subtotal	(2,829)	(4,211)	(7,040)
		4,527	10,409	14,936
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%
5	Federal Deferred Tax on State Depreciation	893	2,054	2,948
6	Addback State Tax Depreciation	(4,527)	(10,409)	(14,936)
7	Federal Tax Depreciation	10,751	71,941	82,692
8	Book Depreciation	(2,829)	(4,211)	(7,040)
9	Federal State Difference	3,395	57,321	60,716
10	Tax Rate on Federal Only Adjustment	21%	21%	21%
11	Federal Deferred Tax Adjustment	713	12,037	12,750
12	Total Federal Deferred Taxes	1,606	14,091	15,698
				to Sch D4
STATE DEFERRED TAXES				
13	State Tax Depreciation			
14	Book Depreciation	7,356	14,620	21,976
15	Subtotal	(2,829)	(4,211)	(7,040)
		4,527	10,409	14,936
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	272	626	898
18	TOTAL DEFERRED TAXES	1,878	14,717	16,596
				to Sch D4
				to Sch D1

**HAWAIIAN ELECTRIC CO., INC.
EXCESS TAX DEPRECIATION
KOOLAU-WAILUPE #1**

Project No.	DIS	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct	Life Bonus	2017	2018
FEDERAL									
PE000104	v2017	Koolau-Wailupe #1	2,684,387	2,555,619	128,768	Trans	50	66,798	4,648
	v2018	Koolau-Wailupe #1	13,203		13,203	Trans	0		495
		Total	2,697,590	2,555,619	141,971			66,798	5,143
		Cumulative						66,798	71,941
To page 1									
HAWAII									
PE000104	v2017	Koolau-Wailupe #1	2,684,387	2,555,619	128,768	Trans	0	4,829	9,296
	v2018	Koolau-Wailupe #1	13,203	-	13,203	Trans	0		495
		Total	2,697,590	2,555,619	141,971			4,829	9,791
		Cumulative						4,829	14,620
To page 1									

HAWAIIAN ELECTRIC CO., INC.
 MPIR ADIT - SCHOFIELD GENERATING STATION
 DECEMBER 31, 2018

	source	Tax Depreciation (page 2 of 5)	AFUDC (page 3 of 5)	Tax Cap Interest (page 3 of 5)	State ITC (page 3 of 5)	Removal (page 5 of 5)	2018 Total
FEDERAL DEFERRED TAXES							
1	State Book/Tax Difference	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
2	Book Depreciation						
3	Subtotal	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,353,254)	(2,361,501)	1,514,862	832,222	(36,513)	(1,404,184)
6	Addback State Book/Tax Difference	6,856,503	11,964,962	(7,675,319)	(4,216,602)	185,002	7,114,546
7	Federal Book/Tax Difference	(6,856,502)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,545)
8	Book Depreciation						
9	Federal State Difference	1	-	-	-	-	1
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%
11	Federal Deferred Tax Adjustment	-	-	-	-	-	-
12	Total Federal Deferred Taxes	(1,353,254)	(2,361,501)	1,514,862	832,222	(36,513)	(1,404,184)
							To Sch D4
STATE DEFERRED TAXES							
13	State Book/Tax Difference	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
14	Book Depreciation	-	-	-	-	-	-
15	Subtotal	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	(412,421)	(719,697)	461,673	253,630	(11,128)	(427,943)
							To Sch D4
18	TOTAL DEFERRED TAXES	(1,765,675)	(3,081,198)	1,976,535	1,085,852	(47,641)	(1,832,127)
							To Sch D4

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018
FEDERAL									
P0001576	Schofield Generation Station	65,512,935	(5,393,539)	3,459,864	63,579,259	Oth Prod	15	0%	3,178,963
P0001576	Schofield Generation Station	65,512,935	(5,393,539)	3,459,864	63,579,259	Oth Prod	15	0%	3,178,963
P0001576	Schofield Generation Station	5,751,969	(522,427)	335,128	5,564,670	Trans	20	0%	208,675
P0001576	Schofield Generation Station	5,751,969	(522,427)	335,128	5,564,670	Trans	20	0%	208,675
P0001576	Schofield Generation Station	1,106,868	(66,514)	42,668	1,083,021	Comm	20	0%	40,613
P0001576	Schofield Generation Station	1,106,868	(66,514)	42,668	1,083,021	Comm	20	0%	40,613
	Total	<u>144,743,542</u>	<u>(11,964,962)</u>	<u>7,675,319</u>	<u>140,453,899</u>				<u>6,856,502</u>
	Cumulative								To page 1 of 5

HAWAII

P0001576	Schofield Generation Station	131,025,869	(10,787,079)	6,919,727	127,158,518	Oth Prod	15	0	6,357,926
P0001576	Schofield Generation Station	11,503,937	(1,044,854)	670,256	11,129,339	Trans	20	0	417,350
P0001576	Schofield Generation Station	2,213,736	(133,029)	85,336	2,166,043	Comm	20	0	81,227
	Total	<u>144,743,542</u>	<u>(11,964,962)</u>	<u>7,675,319</u>	<u>140,453,899</u>				<u>6,856,503</u>
	Cumulative								To page 1 of 5

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:	A	B	C	D	E=SUM(B:D)	F=A+E	
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	State ITC
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	35,513,663
Vehicles	2,062	117,109	187	563	117,859	119,921	
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	69,901,379
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	
Other	427,354	-	4,296	-	4,296	431,650	
	<u>131,025,869</u>	<u>8,549,966</u>	<u>2,213,736</u>	<u>2,953,971</u>	<u>13,717,673</u>	<u>144,743,542</u>	
Amount subject to bonus (A)	50%	50%	50%	50%	50%	50%	105,415,043
	<u>65,512,935</u>	<u>4,274,983</u>	<u>1,106,868</u>	<u>1,476,985</u>	<u>6,858,836</u>	<u>72,371,771</u>	4%
							<u>4,216,602</u>
			5,751,969				To page 1 of 5
Tie out of TCI:							
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	To page 1 of 5
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%	From page 4 of 5
TCI	<u>6,919,727</u>	<u>451,065</u>	<u>85,336</u>	<u>219,191</u>	<u>755,592</u>	<u>7,675,319</u>	To page 1 of 5
			670,256				

Source: Ellipse & SAP

(A) - At year end, no bonus depreciation was taken for Schofield Generation Station. See page 2 for tax depreciation calculation.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

To page 3 of 5

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

To page 1 of 5

SOURCE: Ellipse & SAP

Hawaiian Electric Company, Inc.
2018 Major Projects Excess Cost, Net of CIAC

[1]	[1]		[2]	[1]					[1]	[2]	[1]	[3]	[2]	To Sch D1	
Grandparent # or Project #	Project	Date In Service	Net Plant Adds Thru 12/31/17 (A)	Net Plant Adds Thru 12/31/18 (B)	Plant Acct	Docket No 2010-0053 Depr Rate (C)	2018 Depr (D) = (A) * (C)	2019 Depr (E) = (B) * (C)	Net PUC Approved (F)	2017 Net Cost in Excess of Docket (G)	2018 Net Cost in Excess of Docket (H) = (B) - (F)	Prior Years Depr Related to Excess (I)	2018 Depr Related to Excess (J) = (G) / (A) * (D)	Cumulative Depr Related to Excess (K) = (I) + (J)	2019 Depr Related to Excess (L) = (H) / (B) * (E)
PZ.000003/ (P0003205)	ERP EAM Hardware	2017/06	2,604,146	2,604,146	391.1	0.20000	520,829	520,829	2,590,000	14,146	14,146	-	2,829	2,829	2,829
PE.000104 (P0003465)	Koolau-Wailupe #1 Str 30 P9 Replace	2017/07	2,684,387	2,697,590	356	0.03270	87,779	88,211	2,555,619	128,768	141,971	-	4,211	4,211	4,642
PZ.000016/ PZ001002 (P0001576)	Schofield Generation Station - Note [4]	2018/06	-	142,147,612	343	0.03260	-	4,634,012							
			-	2,003,490	352	0.01600	-	32,056							
			-	352,190	353	0.01860	-	6,551							
			-	240,250	397	0.06670	-	16,025							
			-	144,743,542				4,688,643	-	-	144,743,542	-	-	-	4,688,643

[1] Source: HECO-WP-D2-001

[2] Source: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-E-001, filed on May 29, 2018.

[3] Source: Transmittal No. 18-01 (Decoupling) - RBA Rate Adjustment (Filed May 29, 2018), HECO-WP-E-001, column (L), "Cumulative Depr Related to Excess".

[4] The Schofield Generation Station project is recovered via the Major Project Interim Recovery (MPIR) mechanism at the Schedule L series. As such, the entire project related costs will be excluded from all Decoupling calculations.

Hawaiian Electric Company
 Calculation of Composite Effective Income Tax Rates
 Federal and State

Composite Federal and State Effective Income Tax Rate

	<u>Eff 1/1/2018</u>	<u>2017 & Prior</u>
Federal Effective Income Tax Rate	19.7368421%	32.8947368%
State Effective Income Tax Rate	6.0150376%	6.0150376%
	<u>25.7518797%</u>	<u>38.9097744%</u>

Calculation of Effective Rates

Assumptions:

ST = State Income Tax Expense

FT = Federal Income Tax Expense

Pre-Tax Income = \$1.00

State Statutory Income Tax Rate*

Federal Statutory Income Tax Rate**

	<u>Eff 1/1/2018</u>	<u>2017 & Prior</u>
State Statutory Income Tax Rate*	6.4%	6.4%
Federal Statutory Income Tax Rate**	21.0%	35.0%

Calculation of State Effective Income Tax Rate

State Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

ST = .064 x (1 - ST)

ST = .064 - .064(ST)

1.064(ST) = .064

ST = .060150376 or 6.0150376% of Pre-Tax Income

Calculation of Federal Effective Income Tax Rate

Federal Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

Effective 1/1/18

FT = .21 x (1 - ST)

FT = .21 x (1 - .060150376)

FT = .21 - .01263157896

FT = .197368421 or 19.7368421% of Pre-Tax Income

2017 & Prior

FT = .35 x (1 - ST)

FT = .35 x (1 - .060150376)

FT = .35 - .01263157896

FT = .328947368 or 32.8947368% of Pre-Tax Income

* Hawaii Revised Statutes §235.71 was amended for tax years beginning after 1986.

** The Tax Cuts and Jobs Act changed the Federal tax rate for tax years ending after December 31, 2017.

HAWAIIAN ELECTRIC COMPANY, INC.
TAX REPAIRS ADJUSTMENT
2018

			A	B	C = A x B	D = A - C
	<i>HECO-WP- F1-002</i>			<i>HECO-WP- F1-001, pg 2</i>		
	5 YR			Repairs	Repairs	Depreciable
	LIFE	AVERAGE	Plant Adds	Allocation	Deduction	Basis
Computers/PV	5	6,092				
Communication	20	5,920				
Off/Furn/Tools	7	5,022				
Distribution	20	130,472	130,472,000	19.67%	25,659,352	104,812,648
Land	-	816				
Non-Steam Production	15	3,713	3,713,000	0.04%	1,582	3,711,418
Steam Production	20	22,905	22,905,000	28.28%	6,477,859	16,427,141
Structural	39	3,265				
Transmission	20	21,834	21,834,000	4.49%	980,382	20,853,618
Transmission	15	34,674	34,674,000	4.49%	1,556,918	33,117,082
Vehicles	-	5,209				
TOTAL		<u>239,922</u>	<u>213,598,000</u>		<u>34,676,093</u>	<u>178,921,907</u>

To Sch F1

NOTE 1> This schedule computes the estimated amount of deductible tax repairs related to the baseline plant additions for the RAM year. The deductible tax repairs amounts are carried forward to Schedule F1 and serve to reduce the depreciable tax basis for the baseline plant additions. The repairs percentages (Column B) are calculated on HECO-WP-F1-001, page 2.

NOTE 2> The numbers (excluding %s) are rounded to the nearest thousand.

**HAWAIIAN ELECTRIC COMPANY, INC.
REPAIRS DEDUCTION**

		Distribution	Non Steam	Steam	Transmission
Repairs %:					
Total book basis repairs					
2014		40,010,784		8,698,003	1,620,540
2015		28,855,969		8,823,262	3,152,508
2016		19,906,067		6,512,311	2,697,168
2017		24,350,324	71,857	5,491,680	4,271,225
2018		23,503,387		4,894,363	1,396,139
		<u>136,626,531</u>	<u>71,857</u>	<u>34,419,619</u>	<u>13,137,580</u>
Total book basis adds					
2014	HECO-WP-F1-002	139,366,000	12,311,000	30,119,000	57,957,000
2015	HECO-WP-F1-002	150,513,000	5,613,000	25,823,000	48,871,000
2016	HECO-WP-F1-002	117,566,000	268,000	24,812,000	79,269,000
2017	HECO-WP-F1-002	147,966,000	1,658,000	22,867,000	73,183,000
2018	HECO-WP-F1-002	139,304,000	148,783,000	18,083,000	33,306,000
		<u>694,715,000</u>	<u>168,633,000</u>	<u>121,704,000</u>	<u>292,586,000</u>
AVERAGE %		19.666558%	0.042611%	28.281420%	4.490160%

NOTE 1> With the assistance of Price Waterhouse Coopers, the repairs deduction analysis was performed in 2010, 2012, 2015 and 2016 in connection with changing HECO's method of identifying deductible repairs for tax accounting purposes. The repairs percentage for each functional group represents the five year weighted average of the identified repairs costs.

NOTE 2> The numbers (excluding %s) are rounded to the nearest thousand.

HAWAIIAN ELECTRIC COMPANY, INC.
BASELINE PLANT ADDS

						LESS: MAJOR PROJECTS	TOTAL	AVERAGE	% AVERAGE	
LIFE	2014	2015	2016	2017	2018					
Computers/PV	5	6,681	8,980	5,219	7,587	4,596	(2,604)	30,459	6,092	2.54%
Communication	20	5,340	5,183	5,870	7,349	6,611	(754)	29,599	5,920	2.47%
Off/Furn/Tools	7	8,242	4,315	2,964	5,204	4,384		25,109	5,022	2.09%
Distribution	20	139,366	150,513	117,566	147,966	139,304	(42,353)	652,362	130,472	54.38%
Land	-	1,729	1,233	11	262	847		4,082	816	0.34%
Non-Steam Production	15	12,311	5,613	268	1,658	148,783	(150,069)	18,564	3,713	1.55%
Steam Production	20	30,119	25,823	24,812	22,867	18,083	(7,178)	114,526	22,905	9.55%
Structural	39	2,899	5,468	1,647	5,217	1,092		16,323	3,265	1.36%
Transmission	20	13,295	21,461	38,676	29,442	8,994	(2,698)	109,170	21,834	9.10%
Transmission > 69kv	15	44,662	27,410	40,593	43,741	24,312	(7,349)	173,369	34,674	14.45%
		57,957	48,871	79,269	73,183	33,306	(10,047)	282,539	56,508	23.55%
Vehicles	-	4,682	10,540	3,665	5,460	1,697		26,044	5,209	2.17%
TOTAL		269,326	266,539	241,291	276,753	358,703	(213,005)	1,199,607	239,921	100.00%

To WP-F1-001

HAWAIIAN ELECTRIC CO., INC.

PRORATION ADJUSTMENT FOR NORMALIZATION COMPLIANCE

FEDERAL ADIT DR/(CR)

ADIT account 282 --	Federal ADIT	January	February	March	April	May	June	July	August	September	October	November	December
Federal accelerated depreciation	DR/(CR)												
Beginning balance	Sch D4 (208,749,171)												
Federal Tax Depreciation	Sch F (20,239,341)												
Effective Federal Tax Rate	19.7368%												
Net ADIT accrued 2019	(3,994,598)												
Monthly Accrued evenly over 12 months	(332,883)												

WITHOUT PRORATION

	Beg of Yr	January	February	March	April	May	June	July	August	September	October	November	December	End of Yr
Federal 282 ADIT Balance	(208,749,171)													
Monthly Additions		(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(3,994,598)
Cumulative Balance	(208,749,171)	(209,082,054)	(209,414,937)	(209,747,821)	(210,080,704)	(210,413,587)	(210,746,470)	(211,079,353)	(211,412,237)	(211,745,120)	(212,078,003)	(212,410,886)	(212,743,769)	(212,743,769)

Simple Year Average - Without Proration (210,746,470)

WITH PRORATION

Days new rates in effect	6/1/2019	214												
Prorated additions		(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(287,773)	(239,551)	(191,330)	(144,664)	(96,443)	(49,777)	(1,556)	(2,675,510)
Cumulative ADIT balance with proration		(208,749,171)	(209,082,054)	(209,414,937)	(209,747,821)	(210,080,704)	(210,413,587)	(210,701,360)	(210,940,911)	(211,132,241)	(211,276,905)	(211,373,348)	(211,423,125)	(211,424,681)

Simple Year Average - With Proration (210,086,926)

Adjustment to rate base ADIT 659,544
To Schedule F

Days new rate in effect		335	307	276	246	215	185	154	123	93	62	32	1	
Days in the month		31	28	31	30	31	30	31	31	30	31	30	31	365

Note: Methodology based on IRS Private Letter Ruling 9313008

HAWAIIAN ELECTRIC COMPANY, INC.
AVERAGE RATE BASE AND RATE OF RETURN
(\$ Thousands)

RATE BASE	Month-End		REFERENCE
	Dec 2017	Dec 2018	
INVESTMENTS IN ASSETS SERVING CUSTOMERS			
NET COST OF PLANT IN SERVICE			
Total Utility Plant	3,330,923	3,523,249	Note 2
Adjustments:			
Construction Work in Progress	(245,995)	(550,571)	Note 2
Regulatory Asset - ARO	-	331	GL#18670151
Asset Retirement Obligation	(2,539)	(4,780)	GL#25301000
Regulatory Liability for Cost of Removal	(327,225)	(356,926)	GL#25400001
Plant - Tenant Allowance	(14,058)	(14,132)	GL#10100002
Acc Amort - Tenant Allowance	8,662	9,824	GL#11160000
Unbilled Pole Credits	-	(4,435)	within GL#25300000
	2,749,768	2,602,560	Note 1
FUEL INVENTORY	64,972	54,262	Note 2
MATERIALS & SUPPLIES INVENTORIES (excl Stores Expense)	26,517	27,953	GL#90154000, Note 2
UNAMORT NET ASC 740 REG ASSET	78,576	77,465	ADIT Tax Sch
PENSION TRACKING REG ASSET	115,531	96,993	GL#18676040
OPEB TRACKING REG ASSET	3,112	-	GL#18677040
PENION NON-SERVICE COST REG ASSET	-	883	GL#18676045
EOTP REG ASSET	89	20	GL#18670124/5/6
CIP CT-1 REG ASSET	1,352	795	GL#18670120/21/22
DEFERRED SYSTEM DEVELOPMENT COSTS			
OMS	746	445	GL#18607004
HR Suites-Phase 1	1,307	951	GL#18606004
HR Suites-Phase 2	512	384	GL#18606104
Budget System Replacement Project	885	739	GL#18607704
IVR	1,000	883	GL#18670400
CIS	9,046	7,827	Acctg Dept Amort Sch
	13,496	11,229	
RO WATER PIPELINE REG ASSET	4,842	4,725	GL#18670152
CONTRIB IN EXCESS OF NPPC	2,240	-	GL#18676030
TOTAL INVESTMENTS IN ASSETS	3,060,495	2,876,885	
FUNDS FROM NON-INVESTORS			
UNAMORTIZED CIAC	365,482	30,110	Note 5
CUSTOMER ADVANCES			
Customer Advances	4,239	6,392	GL#25200000
Developer Advances	33,884	21,345	Note 3
	38,123	27,737	
CUSTOMER DEPOSITS	11,113	10,409	GL#23501000
ACCUMULATED DEF INCOME TAXES	283,136	283,659	Schedule D4
EXCESS ACCUMULATED DEF INCOME TAXES	278,582	278,156	GL#25400023/24, Note 4
UNAMORTIZED ITC (GROSS)	57,594	58,897	GL#25520000/20004
UNAMORTIZED FEDERAL EV CREDIT	750	724	GL#25503000
UNAMORTIZED GAIN ON SALE	182	116	GL#25400101/02/09
PENSION TRACKING REG LIAB	-	3,478	GL#25400004
OPEB TRACKING REG LIAB	5,443	1,858	GL#25400002
TOTAL DEDUCTIONS	1,040,405	695,144	
WORKING CASH	7,068	11,027	HECO-WP-H-008
RATE BASE	2,027,158	2,192,768	
SIMPLE AVERAGE RATE BASE		2,109,963	To Schedule H

Footnotes:

- * Amounts may not add up due to rounding.
- Includes Property Held for Future Use balance of \$0 for 2018 and 2017.
 - See Hawaiian Electric Company Inc. Monthly Financial Report - December 2018, filed February 28, 2019.
Note that Materials & Supplies Inventory include an adjustment of (\$1,116) and (\$1,489) representing payment lags in 2017 and 2018, respectively.
 - The Company reclassified cash received from Developers, subject to refund, to Customer Advances. Amount has been isolated for greater transparency within the rate base calculation. See further discussion at Schedule G.
 - As a result of the 2017 Tax Reform Act, Regulatory Liability accounts were created to isolate the impact of the 2017 excess accumulated deferred taxes effective in actuals as of December 2017. These Regulatory Liabilities have been included as a reduction to Rate Base. Deferred tax asset related to excess accumulated deferred taxes is included in Unamortized Net ASC 740 Reg Asset.
 - For 2018, CIAC is netted with Plant In Service, CWIP and Developer Advances, resulting from the Company's transition to FERC treatment in October 2018. See further discussion of the Company's treatment of CIAC at HECO-WP-D1-001.

HAWAIIAN ELECTRIC COMPANY, INC.
Ratemaking Adjustments For Incentive Compensation And Other Non-Recoverable Expenses
2018

Line	Account/Order No.	Description	2018	Tax @ 25.75%	Net of Tax	Rounded (000s)
1	Executive Compensation and Incentive Compensation					
2	70025/26/#60003110	LTIP and EICP expense	(a) 3,310,738			
3	70027/ #60004000	Other incentive awards	828,135			
4	Provided by HEI	HEI charges for incentive compensation	(a) 692,751			
5	Non-Executive Incentive Wksht	Non-executive incentive programs	(a) 457,781			
6	70028/ #60003110	Manager award plan	(a) 195,785			
7			5,485,190	1,412,540	4,072,650	4,073
						To Sch H, Line 2A
8	Discretionary and Other Expenses Not Recoverable					
9	#60004009	Executive life insurance(COLI) expense (credit) - <i>not tax deduct</i>	(442,516)			
10	Provided by HEI	EEL Dues (allowed portion) - <i>not tax deduct</i>	47,722			
11	70014/ #60004034	OPEB (Executive life portion only)	440,216			
12	70016	HEIRS	7,902			
13	Provided by HEI	HEI charges for non-incentive comp (salaries/benefits - Executives (labor))	(a) 524,810			
14	Provided by HEI	HEI charges for outside services (plan admin, legal fees, audit fees) - Executives (non-labor)	74,279			
15	70014/24/ #60004035/36	Non-qualified pension expense	475,342			
16	#60018015	Payroll taxes related to incentive compensation	173,390			
17	70011/70012	Service awards program	63,045			
18	Various	Community service admin - AUW (labor)	(a) 90,346			
19	50100	Community service admin - AUW (non-labor)	99,926			
20			1,554,462	501,970	1,052,492	1,052
						To Sch H, Line 2B
21	Total Adjustment to Operating Income		<u>7,039,652</u>	<u>1,914,510</u>	<u>5,125,142</u>	
						To HECO-WP-H-008, Pg 1
		Labor	Σ(a) 5,272,211			To HECO-WP-H-008, Pg 1
		Non-labor	1,767,441			To HECO-WP-H-008, Pg 1
		Total adjustment to operating income	<u>7,039,652</u>			

HAWAIIAN ELECTRIC COMPANY, INC.
Income Tax On Items To Be Replaced By Synchronized Interest
2018

	<u>Source</u>	<u>YTD</u>	<u>Rounded (000s)</u>
Total Interest Charges	GL# RONE70	52,180,277	
Remove: RBA Interest Income	GL# 41900002	776,680	
Less: Int on Customer Deposits	GL# 60016050	(631,778)	
AFUDC-Debt	GL# RONE69	(4,018,998)	
Amort of Inv Inc Differential	within GL# 60001010	184,971	185 To Sch H, Line 2C
Equity in net income of trust	GL# 42107000	<u>(100,516)</u>	
		48,390,636	
	Tax rate	<u>25.75%</u>	
		<u><u>12,460,589</u></u>	(12,461) To Sch H, Line 2D

HAWAIIAN ELECTRIC COMPANY, INC.
Ratemaking Capitalization
2018

	Simple Average Balance*	Ratios	Cost Rate	Weighted Cost of Debt
Short-Term Debt	88,868	3.68%	2.54%	0.09%
Long-Term Debt	939,810	38.92%	5.03%	1.96%
Hybrid Securities	28,758	1.19%	7.16%	0.09%
Preferred Stock	21,192	0.88%	5.36%	0.05%
Common Equity	1,335,921	55.33%	9.50%	5.26%
	<u>2,414,549</u>	<u>100.00%</u>		<u>7.45%</u>

	NARUC/ GL Code	YTD Dec 2018	Rounded (000s)	Cost Rate
<u>Short-Term Debt:</u>				
Interest on Debt Assoc Co	60016060/61	2,108,154		
Less: Interest on QUIDS	QUIDS (see below)	(2,050,516)		
Int Exp-Commercial Paper	within 60016100	2,305,290		
Int Exp-SCF Loans		0		
Int Inc-Assoc Cos.	41908000	(176,391)		
Int Exp-Short Term	within 60016000	<u>69,531</u>		
		2,256,068	2,256	2.54%
<u>Long-Term Debt:</u>				
Amort of Debt Disc & Exp	60002100	1,641,364		
Less: Hybrid Sec Amort of Iss Exp	see a below	(109,414)		
Interest on Long-Term Debt	60016000	45,646,755		
Less: Int Exp-Short Term	see above	(69,531)		
Amort Inv Inc Differential	within 60001010	<u>184,970</u>		
		47,294,144	47,294	5.03%
<u>Hybrid Securities:</u>				
Interest on QUIDS	60016060	2,050,516		
Amort Exp-QUID1 Iss Exp	within 60002100	40,416		
Amort Exp-QUID2 Iss Exp	within 60002100	37,899		
Amort Exp-QUID3 Iss Exp	within 60002100	31,099		
Equity in Net Inc of Trust	42107000	<u>(100,516)</u>		
		2,059,414	2,059	7.16%
<u>Preferred Stock:</u>				
Amort of Pfd Stk Iss Exp	60002000	55,086		
Preferred Stock dividends	60016500	<u>1,079,907</u>		
		1,134,993	1,135	5.36%

* Short-Term Debt based on a 12 month average.

HAWAIIAN ELECTRIC COMPANY, INC.
Special Medical Needs Program Discount (net of tax)
2018
Amounts in (\$000s)

Special Medical Needs Program Discount	151
Revenue Taxes @ 8.885%	<u>(13)</u>
	138
Income Taxes @ 25.75%	<u>(35)</u>
Reduction to operating income	<u><u>102</u></u> To Sch H, Line 2e

Source: CIS Special Medical Needs (SMN) report

HAWAIIAN ELECTRIC COMPANY, INC.
Performance Incentive Mechanism
2018
Amounts in (\$000s)

Gross (Reward) / Penalty Amount	GL#25400030	532	
Revenue Taxes @ 8.885%		<u>(47)</u>	
		485	
Income Taxes @ 25.75%		<u>(125)</u>	
Reduction to operating income		<u><u>360</u></u>	To Sch H, Line 2f

Note:

Subsequent to the December 2018 financial close, Hawaiian Electric revised its PIMS Regulatory Liability of \$531,871 to PIMS Regulatory Asset of \$537,856 as shown at Schedule M. The recorded PIMS Regulatory Liability balance of \$531,871 as of 12/31/18 was used to determine the 2018 Earnings Sharing Calculations at Schedule H.

The Company trueed-up the Regulatory Liability balance with the February 2019 financial close.

HAWAIIAN ELECTRIC COMPANY, INC.
Final Test Year Refund
2018
Amounts in (\$000s)

2017 Test Year Rate Case Final D&O Refund	Note 1	48	
Revenue Taxes @ 8.885%		<u>(4)</u>	
		44	
Income Taxes @ 25.75%		<u>(11)</u>	
Reduction to operating income		<u><u>32</u></u>	To Sch H, Line 2g

Note 1:

2017 Final Test Year Rate Case Final D&O Refund calculation, filed in Docket No. 2016-0328 HECO Letter to the PUC, Exhibits 4 & 5, filed on July 23, 2018, and approved in Order No. 35661, filed August 30, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
WORKING CASH
2018

Line	Working Cash Items	2018	(Note 1)		Amount
			Net Collection		
	A	B	Lag Days		C
					D = B/365xC
1	Fuel	523,706	B1	19.1	27,405
2	Purchased Power	494,450	B2	-5.4	(7,315)
3	O&M Labor	137,959	B3	25.5	9,638
4	O&M Non-Labor	165,521	B4	8.6	3,900
5	Revenue Taxes	160,276	B5	-50.9	(22,351)
6	Income Taxes	35,031	B6	-2.6	(250)
7	Working Cash				<u>11,027</u> To HECO-WP-H-001
8	Fuel Oil	523,706	B1		GL #90501000, 90547000, 90547100
9	Purchased Power	494,450	B2		GL #90555000
10	O&M Labor				
11	O&M Labor	145,473			Acct. Dept. O&M report
12	Fuel O&M Labor	(2,242)			Acct. Dept. O&M report
13	O&M Labor Excl Fuel Labor	143,231			
14	Disallowed O&M	(5,272)			HECO WP-H-002
15	Total	137,959	B3		
16	O&M Non-Labor				
17	O&M Expense	1,333,535			PUC Monthly Report
18	Less: Fuel Oil & PP Expense	(1,018,156)			Lines 8 + 9
19	O&M Labor Excl Fuel Labor	(143,231)			(see O&M Labor Excl Fuel Labor above)
20	Disallowed O&M Non-Labor	(1,767)			HECO WP-H-002
21	Bad Debt Expense	(1,388)			GL #60010000
22	Pension Reg Asset/Liab Amort	(11,456)			HECO WP-H-008 pg. 2
23	OPEB Reg Asset/Liab Amort	376			
24	System Develop Amort	(2,267)			
25	Other Deferred Projects Amort	(742)			
26	Payroll Taxes	9,985			GL #60018000/001/015, 60019100, 60050001,
27	Interest on Customer Deposits	632			60050001/238/242/245/251, 70000010/20/30
28	Total	165,521	B4		GL #60016050
29	Revenue Taxes				
30	Franchise	44,708			GL #60017000
31	PSC	106,518			GL #60017002
32	PUC Fee	9,050			GL #60017001
33	Total	160,276	B5		
34	Current Income Taxes				
35	Income Tax	32,067			Dec. 2018 PUC Monthly Report
36	Inc Tax on Disallowed Items	1,915			HECO WP-H-002
37	Reversal of Tax Related to Interest Sync Replacement	12,461			Sch H, Line 2d
38	Tax Eff of AFUDC Equity	(3,189)			GL #60020060
39	Income Tax Adjustments	3,404			HEI worksheet
40	Tax Related to Int Synch	(11,627)			Sch H, Line 13 - 13a
41	Total	35,031	B6		

Note 1: See Final Decision and Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, filed on June 22, 2018 in Docket No. 2016-0328, Exhibit B, Page 2 of 2.

HAWAIIAN ELECTRIC COMPANY, INC.
O&M Non-Labor Amortization
2018

Pension Regulatory Asset Amortization

Standard Journal Entry No.			(TY17) - Note 1	Annual	Rounded
<i>PAA202</i>	<i>PAA219</i>	Total	O&M % Portion	2018	000s
Jan 2018	Feb-Dec 2018		57.43%		
(45,851)	19,994,484	19,948,633	11,456,500	11,456,500	11,456 To Page 1

OPEB Regulatory Asset Amortization

Standard Journal Entry No.			(TY17) - Note 1	Annual	Rounded
<i>PAA203</i>	<i>PAA220</i>	Total	O&M % Portion	2018	000s
Jan 2018	Feb-Dec 2018		57.43%		
(159,067)	(495,069)	(654,136)	(375,670)	(375,670)	(376) To Page 1

System Development Amortization

Standard Journal Entry No.						Annual	Rounded
<i>PAA109</i>	<i>PAA133</i>	<i>PAA143</i>	<i>PAA163</i>	<i>PAA195</i>	<i>PAA177</i>	2018	000s
<i>18607004</i>	<i>18606004</i>	<i>18606104</i>	<i>18607704</i>	<i>18670400</i>	<i>18605005</i>		
OMS	HR Suites Phase 1	HR Suites Phase 2	Budget Replace	IVR System Replace	CIS		
300,940	356,462	127,940	145,469	116,500	1,219,715	2,267,026	2,267 To Page 1

Other Deferred Projects Amortization

Standard Journal Entry No.							Annual	Rounded
<i>PAA166</i>	<i>PAA166</i>	<i>PAA166</i>	<i>PAA176</i>	<i>PAA176</i>	<i>PAA176</i>	<i>PAA132</i>	2018	000s
<i>18670124</i>	<i>18670125</i>	<i>18670126</i>	<i>18670120</i>	<i>18670121</i>	<i>18670122</i>	<i>18670152</i>		
EOTP	EOTP	EOTP AFUDC	CIP CT-1	CIP CT-1	CIP CT-1	RO		
Depreciation	AFUDC Debt	Equity	Depreciation	AFUDC Debt	AFUDC Equity	Pipeline		
18,219	15,342	35,441	146,605	123,526	286,584	116,436	742,153	742 To Page 1

NOTE:

1 See Parties' Stipulated Settlement Letter, filed November 15, 2017, in Docket No. 2016-0328, HECO T-16 Attachment 4, page 1. Approved in Final Decision and Order No. 35545, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
MONTHLY FINANCIAL REPORT
December 2018

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII
OPERATING INCOME BEFORE RATEMAKING ADJUSTMENTS TO BE USED FOR THE EARNINGS SHARING CALCULATION
(in thousands)

Page 2a

Operating income per Monthly Financial Report	138,084	*3	
Less: Interest on Customer Deposits	(632)		
Add: Adjustment to federal income tax to offset the DPAD benefit recognized at MECO *2	66		
Add: Gain on Sale Amortization	66	*4	
	<u>137,585</u>	*1	
Operating income before ratemaking adjustments & synchronized interest - earnings sharing calculation	<u>137,585</u>	*1	
Income Tax Adjustments	<u>(3,404)</u>		
Adjusted Operating income before ratemaking adjustments & synchronized interest - earnings sharing calculation	<u>134,181</u>		To Sch H

*1 Amounts may not add up due to rounding.

*2 An adjustment made to offset the benefit of the Domestic Production Activities Deduction (DPAD) recognized on a standalone basis at Maui Electric Company, Ltd. (MECO) and excluded the impact from the operating income before ratemaking adjustments & synchronized interest for Hawaiian Electric Company. This adjustment was made to eliminate the impact of the MECO's tax benefit from the Hawaiian Electric Company consolidated net income, and therefore should not have any impact on a standalone basis at Hawaiian Electric Company.

*3 Starting October 2018, Operating Income per the Monthly Financial Report includes income tax on AFUDC Equity.

*4 Included within Other Income and added back for ratemaking purposes.

Note:

Included to support Operating Income on Schedule H since PUC Page 2a was excluded from the December 2018 Monthly PUC Report submitted on February 27, 2019.

Hawaiian Electric Company, Inc.
Schofield Generating Station
Plant Addition
As of December 31, 2018

Utility Account	(Note 1) PUC Approved Accrual Rate	(Note 2) Balance at 12/31/18	Depreciation 2019	Allocation %	(Note 3) Subject to Cap	Depreciation 2019 (at Cap)
	a	b	c = a x b	d	e = d x Cap	f = a x e
343	0.03260	142,147,612	4,634,012	98.2%	139,030,987	4,532,410
352	0.01600	2,003,490	32,056	1.4%	1,959,563	31,353
353	0.01860	352,190	6,551	0.2%	344,468	6,407
397	0.06670	240,250	16,025	0.2%	234,983	15,673
		<u>144,743,542</u>	<u>4,688,643</u>	<u>100.0%</u>	<u>141,570,000</u>	<u>4,585,844</u>
					To Sch L1	To Sch L1

Source: SAP and Powerplan WBS.

Note 1:

Depreciation rates approved in Docket No. 2010-0053, Decision and Order, filed May 12, 2011.

Note 2:

See details at HECO-WP-D2-001.

Note 3:

Decision and Order No. 33178, p. 84-85, Docket No. 2014-0113, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0001576, Schofield Generating Station Project, filed 09/29/2015. The Commission approved a cap on the amount of the total costs that may be recovered through any cost recovery mechanism other than base rates at 90% of the \$167 million cap. The \$167 million cap shall further be adjusted downward due to a reduction in the foreign exchange rate.

In the Letter to Commission Re: Docket No. 2014-0113, Schofield Generating Station; Notification of Euro Exchange Rate and Adjusted Project Cap, filed 01/27/2016, the Company locked in the foreign exchange rate at \$1.0928/euro which adjusted the project cap down from \$167 million to \$157.3 million. Revised cap on the amount of total costs allowed to be recovered through any cost recovery mechanism other than base rates is \$141.57 million (\$157.3 million x 90%).

HAWAIIAN ELECTRIC CO., INC.
SCHOFIELD GENERATING STATION - NO BONUS
DECEMBER 31, 2019

		2019 Add		2018		2019					
FEDERAL DEFERRED TAXES		Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	Total	Book/Tax	State ITC	Amort	Total
source		(page 2 of 5)	(page 3 of 5)	(page 3 of 5)	(page 3 of 5)	(page 5 of 5)	(page 5 of 5)	Depr	Amort		
1	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)			(19,716,566)
2	Book Depreciation							4,585,844	(412,415)		4,173,428
3	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)		(15,543,137)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%		19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,323,584)	(2,309,724)	1,481,649	813,976	(36,513)	(1,374,197)	(1,612,123)	(81,398)		(3,067,718)
6	Addback State Book/Tax Difference	6,706,173	11,702,627	(7,507,036)	(4,124,152)	185,002	6,962,615	8,168,107	412,415		15,543,137
7	Federal Book/Tax Difference	(39,373,231)	(11,702,627)	7,507,036	4,124,152	(185,002)	(39,629,673)	(9,565,463)			(49,195,136)
8	Book Depreciation							4,585,844	(412,415)		4,173,428
9	Federal State Difference	(32,667,058)	-	-	-	-	(32,667,058)	3,188,488	-		(29,478,570)
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%	21%	21%		21%
11	Federal Deferred Tax Adjustment	(6,860,082)	-	-	-	-	(6,860,082)	669,582	-		(6,190,500)
12	Total Federal Deferred Taxes	(8,183,666)	(2,309,724)	1,481,649	813,976	(36,513)	(8,234,279)	(942,541)	(81,398)		(9,258,218)
STATE DEFERRED TAXES											
13	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)			(19,716,566)
14	Book Depreciation							4,585,844	(412,415)		4,173,428
15	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)		(15,543,137)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%		6.0150376%
17	Total State Deferred Taxes	(403,379)	(703,917)	451,551	248,069	(11,128)	(418,804)	(491,315)	(24,807)		(934,926)
18	TOTAL DEFERRED TAXES	(8,587,045)	(3,013,641)	1,933,200	1,062,045	(47,641)	(8,653,083)	(1,433,856)	(106,205)		(10,193,144)
<div style="display: flex; justify-content: space-between;"> To Sch LI To Sch LI </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> (1,540,061) To Sch LI </div>											

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018	2019	Net Book Value
FEDERAL											
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	50%	32,647,265	2,953,800	28,475,480
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	0%	3,109,263	5,907,600	55,059,682
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	50%	2,823,381	196,453	2,606,021
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	0%	204,100	392,906	5,028,849
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	50%	549,499	38,235	494,865
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	0%	39,723	76,469	966,407
Total		141,570,000	(11,702,627)	7,507,036	137,374,409				39,373,231	9,565,463	92,631,306
Cumulative									48,938,694		
To page 1 of 5											
HAWAII											
P0001576	Schofield Generation Station	128,153,091	(10,550,569)	6,768,010	124,370,532	Oth Prod	15	0	6,218,527	11,815,201	110,119,363
P0001576	Schofield Generation Station	11,251,710	(1,021,945)	655,561	10,885,325	Trans	20	0	408,200	785,812	10,057,698
P0001576	Schofield Generation Station	2,165,199	(130,112)	83,465	2,118,551	Comm	20	0	79,446	152,938	1,932,815
Total		141,570,000	(11,702,627)	7,507,036	137,374,409				6,706,173	12,753,951	122,109,876
Cumulative									19,460,124		
To page 1 of 5											

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:							(Note 1)	
	A	B	C	D	E=SUM(B:D)	F=A+E		
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	Allocation %	Subject to Cap
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	3.5%	4,942,763
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	24.5%	34,735,016
Vehicles	2,062	117,109	187	563	117,859	119,921	0.1%	117,292
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	11.6%	16,447,152
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	8.3%	11,702,627
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	48.3%	68,368,772
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	3.4%	4,834,193
Other	427,354	-	4,296	-	4,296	431,650	0.3%	422,186
	131,025,869	8,549,966	2,213,736	2,953,971	13,717,673	144,743,542	100.0%	141,570,000

BREAKDOWN SUBJECT TO (
	A1	B1	C1	D1	E1=SUM(B1:D1)	F1=A1+E1		
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	State ITC	
Labor	2,243,144	1,675,424	299,212	724,982	2,699,618	4,942,763		
Materials	32,210,236	1,490,363	533,090	501,328	2,524,781	34,735,016	34,735,016	
Vehicles	2,017	114,541	183	551	115,275	117,292		
Overheads	12,603,385	2,402,368	533,026	908,373	3,843,767	16,447,152		
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
Outside Services-Construction	67,631,285	601,267	57,799	78,421	737,487	68,368,772	68,368,772	
Outside Services-Other	2,494,471	1,390,800	607,576	341,347	2,339,722	4,834,193		
Other	417,984	-	4,202	-	4,202	422,186		
	128,153,091	8,362,506	2,165,199	2,889,204	13,416,909	141,570,000		(Note 1)
Amount subject to bonus	50%	50%	50%	50%	50%	50%	103,103,789	
	64,076,545	4,181,253	1,082,599	1,444,602	6,708,455	70,785,000	4%	
							4,124,152	To page 1 of 5
			5,625,855					
Tie out of TCI:								
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		To page 1 of 5
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%		From page 4 of 5
TCI	6,768,010	441,175	83,465	214,385	739,025	7,507,036		To page 1 of 5
			655,561					

Source: Ellipse & SAP

Note 1:
Allocated 12/31/18 Plant Addition subject to the cap of \$141.57M. See further discussion at HECO-WP-L1-001.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

To page 3 of 5

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

To page 1 of 5

SOURCE: Ellipse & SAP

**Schedule L exhibit,
with additional supporting workpapers**

Excerpt from Docket No. 2017-0213 - Schofield Generating Station Cost Recovery through the Major Project Interim Recovery Adjustment Mechanism Hawaiian Electric's Update of Target Revenues and Updated Responses to the Commission's Information Requests, filed July 18, 2018. Approved in Order No. 35647, issued August 15, 2018. Effective July 1, 2018. Pages 1 through 9.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7a)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,581,445	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)					(5,000)				
1b	Less: Customer Benefit Adjustment	Note (5)					(6,000)				
2	Less: Fuel Expense	Note (1), (5), (7), (7a)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Less: Purchased Power Expense	Note (1), (5), (7), (7a)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Less: Revenue Taxes on Line 1 to 1b (8.885% statutory rates)	Note (1), (5), (7), (7a)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (135,934)	\$ (135,934)	\$ (135,934)	\$ (135,934)	\$ (135,934)
5	Last Rate Order Target Annual Revenues	Sum Lines 1...4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (2)									
7	Less: Revenue Taxes on Line 12 at 8.885%										
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7									
9	Authorized RAM Revenues	Note (9)									
10	Less: Revenue Taxes on Line 12 at 8.885%										
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10									
12	Authorized MPR Revenues	Schedule L									
13	Less: Revenue Taxes on Line 12 at 8.885%										
14	Net MPR Adjustment	Lines 12 + 13									
15	EARNINGS SHARING REVENUE CREDITS	Note (2), (9)									
16	Less: Revenue Taxes on Line 15 at 8.885%										
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16									
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)									
19	Total Annual Target Revenues		\$ 604,302	\$ 604,302	\$ 604,302	\$ 604,302	\$ 637,077	\$ 599,960	\$ 612,574	\$ 618,587	\$ 618,587
20	June 1, 2017 Annualized Revenues w/ RAM Increase	Col (b), lines (5+8+17+18)									
21	February 16, 2018 Annualized Revenues w/ interim increase	Col (b), lines (5+8+17+18)									
22	April 13, 2018 Annualized Revenues w/ 2nd interim increase	Col (b), lines (5+8+17+18)									
23	June 1, 2018 Annualized Revenues w/ RAM Increase	Col (b), lines (5+8+17+18)									
24	June 1, 2018 Annualized Revenues w/ RAM Increase & MPR, eff 7/1/18	Col (b), lines (5+8+17+18)									
25	Distribution of Target Revenues by Month:										
26	January	Note (3)	8.10%	\$48,009,623	\$48,009,623	\$48,946,443	\$22,450,132	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296
27	February	7.26%	\$43,030,848	\$43,030,848	\$43,030,848	\$23,503,022	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
28	March	8.10%	\$48,009,623	\$48,009,623	\$48,009,623	\$20,335,492	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
29	April	7.98%	\$46,468,574	\$46,468,574	\$46,468,574	\$28,726,095	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
30	May	8.44%	\$50,024,842	\$50,024,842	\$50,024,842	\$50,386,658	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
31	June	8.07%	\$51,184,359	\$51,184,359	\$51,184,359	\$49,434,694	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
32	July	8.77%	\$52,997,265	\$52,997,265	\$52,997,265	\$49,434,694	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
33	August	9.04%	\$53,581,111	\$53,581,111	\$53,581,111	\$49,434,694	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
34	September	8.65%	\$51,447,350	\$51,447,350	\$51,447,350	\$49,434,694	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
35	October	8.78%	\$52,040,061	\$52,040,061	\$52,040,061	\$49,434,694	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
36	November	8.26%	\$48,957,962	\$48,957,962	\$48,957,962	\$49,434,694	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
37	December	8.26%	\$48,957,962	\$48,957,962	\$48,957,962	\$49,434,694	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
38	Total Distributed Target Revenues	100.00%	\$357,167,892	\$357,167,892	\$357,167,892	\$72,451,465	\$94,388,846	\$79,122,753	\$49,434,694	\$319,624,035	\$249,043,223

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 28, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for tax Act implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 28, 2018, establishing 2018 target revenue effective June 1, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY

MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2017 (c)	Recorded at In Service Date (June 2018) (d)	Ending Balance as of 6/30/18 (e)	Average Balance (f)	MPIR (f)
Return on Investment							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	-	141,275	141,275	70,638	
2	Accum Depreciation	Schedule TBD	-	-	-	-	
3	Net Cost of Plant in Service		-	141,275	141,275	70,638	
4	Fuel Inventory - Avoided	Note 3	-	(1,534)	(1,534)	(767)	
5	M&S Inventory	Note 3	-	100	100	50	
6	Total Additions		-	(1,434)	(1,434)	(717)	
7	CIAC	Schedule TBD, if needed	-	-	-	-	
8	ADIT	HECO-WP-L-002	-	(8,689)	(8,689)	(4,344)	
9	State ITC	HECO-WP-L-002	-	(4,147)	(4,147)	(2,074)	
10	Total Deductions		-	(12,836)	(12,836)	(6,418)	
11	Total Rate Base		\$ -	\$ 127,005	\$ 127,005	63,502	
12	Average Rate Base					\$ 63,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 6,014
15	Depreciation Expense (Note 1)	Schedule E				-	
16	Operating & Maintenance Expense	Note 2				-	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				-	
18	Lease Rent Expense	Schedule TBD, if needed				-	
19	Other Expense	Schedule TBD, if needed				-	
20	Total Expenses					\$ -	
21	Total Major Project Interim Recovery					\$ 6,014	
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	2019 Annualized Revenue for Major Project Interim Recovery						\$ 6,600.0
							To Sch B & B1

Reconciliation to Schedule B1 (Info Only)

Sum of Monthly Factors for Jul-Dec 2018	51.67%
Prorated MPIR for Year 1	\$ 3,410
Rev Tax Adj	\$ (303)
Prorated MPIR for Year 1 excl Rev Tax	\$ 3,107

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Per Order No. 35556, page 74, Docket No. 2017-0213, For Approval to Recover Costs for Schofield Generating Station through the Major Project Interim Recovery Adjustment Mechanism, filed on June 27, 2018. Total estimated annual O&M expense will be excluded from the MPIR calculation until an acceptable business case study has been reviewed and approved by the Commission.

Note 3: Difference in fuel inventory and difference in materials & supplies inventory derived from the "with Schofield" and "without Schofield" rate bases in the HECO 2017 test year rate cases. See Docket No. 2016-0328 HECO-3201 p. 3 and HECO-3203 p. 3.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Hawaiian Electric Company, Inc.
 MPIR Plant Additions
 Actuals Through June 30, 2018

Indicator Code	NI
Row Labels	Sum of amount
150: Labor Cost	4,542,416
155: Labor True-up	284,309
201: Matl-Issues/Purchases	33,529,637
205: Matl-Purchasing Card	63,740
301: Vehicles	112,180
404: Energy Delivery	1,758,310
405: Power Supply	10,752,643
406: Corp Admin Expense	929,503
421: Non-Productive Wages	610,417
422: Employee Benefits	1,348,674
423: Payroll Taxes	403,436
430: AFUDC-Debt	3,260,337
431: AFUDC-Equity	8,704,625
501: Outside Svcs-General	1,461,336
502: Outside Svcs-Legal	177,774
503: Outside Svcs-TempHire	2,916
505: Outside Svcs-Constr	70,093,402
506: Outside Svcs-Engr	1,596,895
508: Outside Svcs-Environ	1,213,832
520: Mainland Travel	90,358
522: Interisland Travel	1,706
570: Rents	9,300
521: Meals	13,202
900: Fin Stmt Items	314,048
Grand Total	141,274,996

SOURCE: UIPlanner Actual Data

HAWAIIAN ELECTRIC CO., INC.
 SCHOFIELD GENERATING STATION
 DECEMBER 31, 2018 (Based on Actuals Through June 30, 2018)

	source	Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	Total
FEDERAL DEFERRED TAXES							
1	State Book/Tax Difference	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
2							
3	Subtotal	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,325,136)	(2,361,501)	1,514,515	818,578	(36,513)	(1,390,057)
6	Addback State Book/Tax Difference	6,714,039	11,964,962	(7,673,560)	(4,147,471)	185,002	7,042,972
7	Federal Book/Tax Difference	(39,452,276)	(11,964,962)	7,673,560	4,147,471	(185,002)	(39,781,209)
8							
9	Federal State Difference	(32,738,237)	-	-	-	-	(32,738,237)
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%
11	Federal Deferred Tax Adjustment	(6,875,030)	-	-	-	-	(6,875,030)
12	Total Federal Deferred Taxes	(8,200,166)	(2,361,501)	1,514,515	818,578	(36,513)	(8,265,087)
STATE DEFERRED TAXES							
13	State Book/Tax Difference	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
14							
15	Subtotal	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	(403,852)	(719,697)	461,568	249,472	(11,128)	(423,637)
18	TOTAL DEFERRED TAXES	(8,604,018)	(3,081,198)	1,976,083	1,068,050	(47,641)	(8,688,724)

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFFIELD GENERATION STATION
 (Based on Actuals Through June 30, 2018)

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct Life	(Note 1) Bonus	2018	Net Book Value
FEDERAL									
P0001576	Schoffield Generation Station	63,995,593	(5,393,539)	3,459,071	62,061,124	Oth Prod 15	50%	32,582,090	31,413,503
P0001576	Schoffield Generation Station	63,995,593	(5,393,539)	3,459,071	62,061,124	Oth Prod 15	0%	3,103,056	60,892,537
P0001576	Schoffield Generation Station	5,661,768	(180,733)	335,052	5,816,087	Trans 20	50%	3,017,095	2,644,673
P0001576	Schoffield Generation Station	5,661,768	(180,733)	335,052	5,816,087	Trans 20	0%	218,103	5,443,665
P0001576	Schoffield Generation Station	980,137	(66,514)	42,658	956,281	Comm 20	50%	496,071	484,066
P0001576	Schoffield Generation Station	980,137	(66,514)	42,658	956,281	Comm 20	0%	35,861	944,276
	Total	141,274,996	(11,281,574)	7,673,560	137,666,982			39,452,276	101,822,720
HAWAII									
P0001576	Schoffield Generation Station	127,991,185	(10,787,079)	6,918,141	124,122,248	Oth Prod 15	0	6,206,112	121,785,073
P0001576	Schoffield Generation Station	11,323,536	(361,466)	670,103	11,632,173	Trans 20	0	436,206	10,887,330
P0001576	Schoffield Generation Station	1,960,274	(133,029)	85,316	1,912,561	Comm 20	0	71,721	1,888,553
	Total	141,274,996	(11,281,574)	7,673,560	137,666,982			6,714,039	134,560,957

Note 1:
 The Tax Technical Corrections Act of 2018 made changes to the phase down rules of §168(k) as it existed just prior to the enactment of the 2017 Tax Reform Act. These changes indicated that 50% bonus depreciation (under the old law) would apply to longer production period property that was pursuant to a written binding contract entered into prior to September 28, 2017 but placed into service in 2018. Based on this statutory revision, the current best assessment is that one-half of the Schoffield project components should meet the written binding contract requirements and will be grandfathered under the old law, which allowed 50% bonus depreciation on public utility property. The Company continues to monitor the tax developments for further guidance.

SOURCE: PUC-HECO-IR-7 (Update of CA-IR-19)

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through June 2018

Row	Expense Element	A		B		C		D		E = SUM(B:D)		F = A + E
		Oth Prod Generating Station and Switchyard	Trans 46kV Line	Trans Wahaiwa Substation	Comm Telecom	Trans Wahaiwa Substation	Interconnection Total	Interconnection Total	Total Project			
1	150: Labor Cost	2,036,413	1,505,621	698,537	301,845	2,506,003	4,542,416					
2	155: Labor True-up	99,413	149,735	37,744	(2,583)	184,896	284,309					
3	201: Maint-Issues/Purchases	31,024,176	1,466,766	494,978	543,716	2,505,461	33,529,637					33,529,637
4	205: Maint-Purchasing Card	5,329	39,500	17,588	1,323	58,411	63,740					63,740
5	301: Vehicles	1,213	110,407	560	-	110,967	112,180					
6	404: Energy Delivery	52,075	1,108,794	359,388	238,053	1,706,235	1,758,310					
7	405: Power Supply	10,442,252	190,953	83,082	36,356	310,392	10,752,643					
8	406: Corp Admin Expense	414,446	310,795	141,180	63,083	515,057	929,503					
9	421: Non-Productive Wages	265,486	210,398	43,543	90,990	344,931	610,417					
10	422: Employee Benefits	627,481	441,079	185,141	94,973	721,193	1,348,674					
11	423: Payroll Taxes	181,698	133,734	62,654	25,350	221,738	403,436					
12	430: AFUDC-Debt	2,940,954	190,052	97,899	36,432	319,383	3,260,337					
13	431: AFUDC-Equity	7,846,125	513,108	248,795	96,597	838,500	8,704,625					
14	501: Outside Svcs-General	453,275	775,828	62,767	169,466	1,008,061	1,461,336					
15	502: Outside Svcs-Legal	136,675	41,099	-	-	41,099	177,774					
16	503: Outside Svcs-TempHire	2,916	-	-	-	-	2,916					
17	505: Outside Svcs-Constr	69,339,679	614,746	79,883	59,095	753,723	70,093,402					70,093,402
18	506: Outside Svcs-Engr	483,431	580,122	284,614	248,729	1,113,464	1,596,895					
19	508: Outside Svcs-Environ	1,213,832	-	-	-	-	1,213,832					
20	520: Mainland Travel	86,254	-	-	4,104	4,104	90,358					
21	522: Interisland Travel	1,706	-	-	-	-	1,706					
22	570: Rents	9,300	-	-	-	-	9,300					
23	521: Meals	13,010	-	-	192	192	13,202					
24	900: Fin Stmt Items	314,048	-	-	-	-	314,048					
25	Grand Total	127,991,185	8,382,735	2,940,801	1,960,274	13,283,810	141,274,996					103,686,779
	Bonus Depr	50%	50%	50%	50%	50%	4%					
	To Tax Depr	63,995,593	4,191,368	1,470,400	980,137	1,470,400	4,147,471					

Note 1: Project was placed into service on June 7, 2018.

Note 2: To arrive at direct costs per categories listed in PUC-HECO-IR-7 Attachment 2:

26	Grand Total per Row 25	127,991,185	8,382,735	2,940,801	1,960,274	13,283,810	141,274,996
27	Less: Overheads (rows 6, 7, 8, 9, 10, 11)	11,983,438	2,395,752	922,436	501,358	3,819,546	15,802,984
28	Less: AFUDC (rows 12, 13)	10,787,079	703,160	341,694	133,029	1,177,883	11,964,962
29	Total Direct Costs by Major Area	105,220,669	5,283,823	1,676,671	1,325,887	8,286,381	113,507,050

Note 3: Agrees to 'Total Generating Station' per PUC-HECO-IR-7 Attachment 2 row 5

Note 4: Agrees to 'Total Interconnection' per PUC-HECO-IR-7 Attachment 2 row 10 (minor difference in total for 46kV, Telecom, and Wahaiwa Sub due to Project Management costs being allocated in Attachment 1 vs. not allocated in Attachment 2).

Note 5: Agrees to 'Subtotal Direct Costs' per PUC-HECO-IR-7 Attachment 2 row 11.

Tie out of ICI:							
AFUDC	10,787,079	703,160	341,694	133,029	341,694	1,177,883	11,964,962
ratio - 5 year average	64.13%	64.13%	64.13%	64.13%	64.13%	64.13%	64.13%
TCI	6,918,141	450,962	219,141	85,316	755,419	7,673,560	7,673,560

**Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio**

	2013	2014	2015	2016	2017	5 Yr Ave
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,036,221	22,038,913
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608366	0.641336

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through June 30, 2018

Indicator Code	NR
Row Labels	Sum of amount
150: Labor Cost	83,369
155: Labor True-up	7,161
205: Matl-Purchasing Card	46
404: Energy Delivery	38,302
406: Corp Admin Expense	15,495
421: Non-Productive Wages	10,390
422: Employee Benefits	22,600
423: Payroll Taxes	7,639
Grand Total	185,002

SOURCE: UIPlanner Actual Data

Exhibit C

Updated Schedule L

Excerpt from Docket No. 2017-0213 - Schofield Generating Station MPIR Adjustment Mechanism Cost Recovery Request Hawaiian Electric's Business Case Analysis Supporting Net O&M Project Costs and Update of Target Revenues, filed September 6, 2018. Approved in Order No. 35953, issued December 14, 2018. Effective October 1, 2018. Pages 10 through 13.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY
MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2017 (c)	Recorded at In Service Date (June 2018) (d)	Ending Balance as of 6/30/18 (e)	Average Balance	MPIR (f)
Return on Investment							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	-	141,275	141,275	70,638	
2	Accum Depreciation	Schedule TBD	-	-	-	-	
3	Net Cost of Plant in Service		-	141,275	141,275	70,638	
4	Fuel Inventory - Avoided	Note 3	-	(1,534)	(1,534)	(767)	
5	M&S Inventory	Note 3	-	100	100	50	
6	Total Additions		-	(1,434)	(1,434)	(717)	
7	CIAC	Schedule TBD, if needed	-	-	-	-	
8	ADIT	HECO-WP-L-002	-	(8,689)	(8,689)	(4,344)	
9	State ITC	HECO-WP-L-002	-	(4,147)	(4,147)	(2,074)	
10	Total Deductions		-	(12,836)	(12,836)	(6,418)	
11	Total Rate Base		\$ -	\$ 127,005	\$ 127,005	63,502	
12	Average Rate Base					\$ 63,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 6,014
15	Depreciation Expense (Note 1)	Schedule E				-	
16	Operating & Maintenance Expense	Note 2				1,787	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				-	
18	Lease Rent Expense	Schedule TBD, if needed				-	
19	Other Expense	Schedule TBD, if needed				-	
20	Total Expenses						\$ 1,787
21	Total Major Project Interim Recovery						\$ 7,801
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						\$ 8,561.2

To Sch B & B1

Reconciliation to Schedule B1 (Info Only)	
Sum of Monthly Factors for Jul-Dec 2018	51.67%
Prorated MPIR for Year 1	\$ 4,424
Rev Tax Adj	\$ (393)
Prorated MPIR for Year 1 excl Rev Tax	\$ 4,031

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update.

Note 3: Difference in fuel inventory and difference in materials & supplies inventory derived from the "with Schofield" and "without Schofield" rate bases in the HECO 2017 test year rate cases. See Docket No. 2016-0328 HECO-3201 p. 3 and HECO-3203 p. 3.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Exhibit D

Updated Schedule B1

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES**

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7a)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (5,000)	\$ -	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (6,000)	\$ -	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (1), (5), (7), (7a)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (1), (5), (7), (7a)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rates)		\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (139,534)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)
5	Last Rate Order Target Annual Revenues	Sum Lines 1..4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (2)	\$ -	\$ -	\$ 101,131	\$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ (8,986)	\$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ -	\$ -	\$ 92,146	\$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Authorized MPR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,561
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (761)
14	Net MPR Adjustment	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,801
15	Less: EARNINGS SHARING REVENUE CREDITS	Note (2), (9)	\$ -	\$ -	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ -
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ -
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$ -	\$ -	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ -
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Total Annual Target Revenues		\$ -	\$ -	\$ 604,302	\$ 604,302	\$ 637,077	\$ 599,960	\$ 612,574	\$ 620,374	\$ 620,374
20	June 1, 2017 Annualized Revenues w/RAM Increase	Col (g), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	February 16, 2018 Annualized Revenues w/Interim Increase	Col (i), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April 13, 2018 Annualized Revenues w/2nd Interim Increase	Col (j), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	June 1, 2018 Annualized Revenues w/RAM Increase	Col (k), lines (5+9+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	June 1, 2018 Annualized Revenues w/RAM Increase & MPR - eff 7/1/18	Col (l), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Distribution of Target Revenues by Month:	Note (3)									
26	January	8.10%	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$22,450,132	\$51,603,222	\$28,726,095	\$53,972,558	\$50,808,650
27	February	7.26%	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$47,086,404
28	March	8.10%	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
29	April	7.98%	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$49,505,864
30	May	8.44%	\$51,184,359	\$51,184,359	\$51,184,359	\$51,184,359	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$52,111,435
31	June	8.07%	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
32	July	8.77%	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
33	August	9.04%	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
34	September	8.68%	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
35	October	8.78%	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
36	November	8.26%	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
37	December	8.28%	\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
38	Total Distributed Target Revenues	100.000%	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313
39			\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510	\$20,335,492	\$50,250,313	\$49,505,864	\$55,461,456	\$50,250,313

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 29, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335).
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.

\$35,971
0.46429
-\$603
-\$2,143
0.60000

\$000s
\$000s
\$000s

ATTACHMENT 1

Schedule B1, Schedule L and Supporting Workpapers

HAWAIIAN ELECTRIC COMPANY, INC.

Excerpt from Transmittal No. 19-01 - Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Mechanism, filed February 7, 2019 and effective January 1, 2019.
Pages 14 through 22.

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES**

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)	Docket No. 2016-0328 Amounts (n)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7e)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (1), (5), (7), (7e)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (1), (5), (7), (7e)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rates)	Note (1), (5), (7), (7e)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)
5	Last Rate Order Target Annual Revenues	Sum Lines 1..4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (2)	\$ -	\$ -	\$ 101,131	\$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 6 at 8.885%		\$ -	\$ -	\$ (8,986)	\$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ -	\$ -	\$ 92,146	\$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Less: Revenue Taxes on Line 9 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Authorized MPIR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Net MPIR Adjustment	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Less: EARNINGS SHARING REVENUE CREDITS	Note (2), (9)	\$ -	\$ -	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$ -	\$ -	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Total Annual Target Revenues		\$ 604,302	\$ 604,302	\$ 604,302	\$ 604,302	\$ 637,077	\$ 599,980	\$ 612,574	\$ 618,587	\$ 620,374	\$ 630,624
20	June 1, 2017 Annualized Revenues w/ RAM Increase	Col (g), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	February 16, 2018 Annualized Revenues w/ Interim Increase	Col (i), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April 13, 2018 Annualized Revenues w/ 2nd Interim Increase	Col (j), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	June 1, 2018 Annualized Revenues w/ RAM Increase	Col (k), lines (5+9+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 7/1/18	Col (l), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 10/1/18	Col (m), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 1/1/19	Col (n), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 1/1/19	Col (m), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	Distribution of Target Revenues by Month:											
29	January	Note (3)	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623
30	February	8.10%	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848
31	March	8.10%	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623
32	April	7.84%	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574
33	May	8.44%	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842
34	June	8.47%	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656
35	July	8.77%	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790
36	August	9.04%	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111
37	September	8.68%	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350
38	October	8.78%	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061
39	November	8.26%	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962
40	December	8.26%	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962
41	Total Distributed Target Revenues	100.00%	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 29, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb. 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335).
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.
- MPIR Revenues effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018, in Docket No. 2017-0213.
- MPIR Revenues effective October 1, 2018 approved in Order No. 35953, issued December 14, 2018, in Docket No. 2017-0213.
- MPIR Revenues effective January 1, 2019 filed in Transmittal 19-01 on February 7, 2019.

\$000s
\$35,971
0.46429
\$000s
-3603
-82,143
0.60000

Note (10b)
2019
\$51,648,125
\$47,864,379
\$51,080,563
\$50,323,814
\$52,972,435

Note (10a)
2018
\$218,726,095
\$50,396,658
\$49,434,694
\$54,841,062
\$51,242,893
\$51,366,968
\$157,450,923
\$253,889,316

Note (10)
2018
\$637,077
\$599,980
\$612,574
\$618,587
\$620,374

Note (6)
2018
\$604,302
\$637,077
\$599,980
\$612,574
\$618,587
\$620,374

Note (8)
2018
\$599,980
\$612,574
\$618,587
\$620,374

Note (9)
2018
\$612,574
\$618,587
\$620,374

Note (10)
2018
\$618,587
\$620,374

Note (10b)
2019
\$51,648,125
\$47,864,379
\$51,080,563
\$50,323,814
\$52,972,435

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY
MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2018 (c)	2019 Activity (d)	Ending Balance as of 12/31/19 (e)	Average Balance (f) = ((c)+(e))/2	MPIR (g)
Return on Investment - Schofield Generating Station							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	141,570	-	141,570	141,570	
2	Accum Depreciation	HECO-WP-L-001	-	(4,586)	(4,586)	(2,293)	
3	Net Cost of Plant in Service		141,570	(4,586)	136,984	139,277	
4	Fuel Inventory - Avoided	Note 3	(1,534)	-	(1,534)	(1,534)	
5	M&S Inventory	Note 3	100	-	100	100	
6	Total Additions		(1,434)	-	(1,434)	(1,434)	
7	CIAC	Not Applicable	-	-	-	-	
8	ADIT	HECO-WP-L-002	(8,653)	(1,540)	(10,193)	(9,423)	
9	State ITC	HECO-WP-L-002	(4,124)	412	(3,712)	(3,918)	
10	Total Deductions		(12,777)	(1,128)	(13,905)	(13,341)	
11	Total Rate Base		\$ 127,359	\$ (5,713)	\$ 121,646	124,502	
12	Average Rate Base					\$ 124,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 11,790
15	Depreciation Expense (Note 1)	HECO-WP-L-001				4,586	
16	Operating & Maintenance Expense	Note 2				2,087	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				(412)	
18	Lease Rent Expense	Not Applicable				-	
19	Other Expense	Not Applicable				-	
20	Total Expenses						\$ 6,260
21	Total Major Project Interim Recovery						\$ 18,051
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						\$ 19,810.8

To Sch B & B1

	Reconciliation to Schedule B1 (Info Only)		
	Jul - Sep 2018	Oct - Dec 2018	2019
Annualized Revenue for MPIR	\$ 6,600	\$ 8,561	\$ 19,811
Rev Tax Adj	\$ (586)	\$ (761)	\$ (1,760)
Prorated MPIR for Year 1 excl Rev Tax	\$ 6,014	\$ 7,800	\$ 18,051
Incremental	\$ 6,014	\$ 1,787	\$ 10,250
	Note 5	Note 6	

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update and approved in Order No. 35953, filed December 14, 2018.

Note 3: Decision and Order No. 35556 dated June 27, 2018 in Docket No. 2017-0213.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Note 5: MPIR Revenues effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213.

Note 6: MPIR Revenues effective October 1, 2018 filed December 21, 2018 in Docket No. 2017-0213.

Schofield Generating Station
Plant Addition
As of December 31, 2018

Utility Account	(Note 1)	Balance at 12/31/18	Depreciation 2019	Allocation %	(Note 2)	Depreciation 2019 (at Cap)
	PUC Approved Accrual Rate				Subject to Cap	
	a	b	c = a x b	d	e = d x Cap	f = a x e
343	0.03260	142,147,612	4,634,012	98.2%	139,030,987	4,532,410
352	0.01600	2,003,490	32,056	1.4%	1,959,563	31,353
353	0.01860	352,190	6,551	0.2%	344,468	6,407
397	0.06670	240,250	16,025	0.2%	234,983	15,673
		<u>144,743,542</u>	<u>4,688,643</u>	<u>100.0%</u>	<u>141,570,000</u>	<u>4,585,844</u>

Source: SAP and Powerplan WBS.

Note 1:

Depreciation rates approved in Docket No. 2010-0053, Decision and Order, filed May 12, 2011.

Note 2:

Decision and Order No. 33178, p. 84-85, Docket No. 2014-0113, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0001576, Schofield Generating Station Project, filed 09/29/2015. The Commission approved a cap on the amount of the total costs that may be recovered through any cost recovery mechanism other than base rates at 90% of the \$167 million cap. The \$167 million cap shall further be adjusted downward due to a reduction in the foreign exchange rate.

In the Letter to Commission Re: Docket No. 2014-0113, Schofield Generating Station; Notification of Euro Exchange Rate and Adjusted Project Cap, filed 01/27/2016, the Company locked in the foreign exchange rate at \$1.0928/euro which adjusted the project cap down from \$167 million to \$157.3 million. Revised cap on the amount of total costs allowed to be recovered through any cost recovery mechanism other than base rates is \$141.57 million (\$157.3 million x 90%).

HAWAIIAN ELECTRIC CO., INC.
 SCHOFIELD GENERATING STATION - WITH BONUS
 DECEMBER 31, 2019

	source	2018		2019		2019 Add					
		Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	Total	Depr	State ITC	Amort	Total
FEDERAL DEFERRED TAXES											
1	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)	(412,415)	(19,716,566)	
2	Book Depreciation							4,585,844	(412,415)	4,173,428	
3	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)	(15,543,137)	
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	
5	Federal Def Tax on State Book/Tax Diff	(1,323,584)	(2,309,724)	1,481,649	813,976	(36,513)	(1,374,197)	(1,612,123)	(81,398)	(3,067,718)	
6	Addback State Book/Tax Difference	Line 3	6,706,173	11,702,627	(7,507,036)	4,124,152	185,002	6,962,615	412,415	15,543,137	
7	Federal Book/Tax Difference	Line 2	(39,373,231)	(11,702,627)	7,507,036	4,124,152	(185,002)	(39,629,673)	(412,415)	(49,195,136)	
8	Book Depreciation	Line 6 + 7 + 8						4,585,844	(412,415)	4,173,428	
9	Federal State Difference		(32,667,058)	-	-	-	(32,667,058)	3,188,488	-	(29,478,570)	
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%	21%	21%	21%	
11	Federal Deferred Tax Adjustment	Line 9 * Line 10	(6,860,082)	-	-	-	(6,860,082)	669,582	-	(6,190,500)	
12	Total Federal Deferred Taxes	Line 5 + Line 11	(8,183,666)	(2,309,724)	1,481,649	813,976	(36,513)	(8,234,279)	(81,398)	(9,258,218)	
STATE DEFERRED TAXES											
13	State Book/Tax Difference	Line 1	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	-	(19,716,566)	
14	Book Depreciation	Line 2						4,585,844	(412,415)	4,173,428	
15	Subtotal	Line 1 + Line 2	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(412,415)	(15,543,137)	
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	
17	Total State Deferred Taxes	Line 15 * Line 16	(403,379)	(703,917)	451,551	248,069	(111,128)	(418,804)	(24,807)	(934,926)	
18	TOTAL DEFERRED TAXES	Line 12 + Line 17	(8,587,045)	(3,013,641)	1,933,200	1,062,045	(47,641)	(8,653,083)	(106,205)	(10,193,144)	

**HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION**

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018	2019	Net Book Value	
FEDERAL												
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	50%	32,647,265	2,953,800	28,475,480	
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	0%	3,109,263	5,907,600	55,059,682	
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	50%	2,823,381	196,453	2,606,021	
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	0%	204,100	392,906	5,028,849	
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	50%	549,499	38,235	494,865	
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	0%	39,723	76,469	966,407	
	Total	<u>141,570,000</u>	<u>(11,702,627)</u>	<u>7,507,036</u>	<u>137,374,409</u>				<u>39,373,231</u>	<u>9,565,463</u>	<u>92,631,306</u>	
	Cumulative								48,938,694			
HAWAII												
P0001576	Schofield Generation Station	128,153,091	(10,550,569)	6,768,010	124,370,532	Oth Prod	15	0	6,218,527	11,815,201	110,119,363	
P0001576	Schofield Generation Station	11,251,710	(1,021,945)	655,561	10,885,325	Trans	20	0	408,200	785,812	10,057,698	
P0001576	Schofield Generation Station	2,165,199	(130,112)	83,465	2,118,551	Comm	20	0	79,446	152,938	1,932,815	
	Total	<u>141,570,000</u>	<u>(11,702,627)</u>	<u>7,507,036</u>	<u>137,374,409</u>				<u>6,706,173</u>	<u>12,753,951</u>	<u>122,109,876</u>	
	Cumulative								19,460,124			

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:							(Note 1)	
Expense Element	A	B	C	D	E=SUM(B:D)	F=A+E	Allocation %	Subject to Cap
	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project		
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	3.5%	4,942,763
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	24.5%	34,735,016
Vehicles	2,062	117,109	187	563	117,859	119,921	0.1%	117,292
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	11.6%	16,447,152
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	8.3%	11,702,627
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	48.3%	68,368,772
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	3.4%	4,834,193
Other	427,354	-	4,296	-	4,296	431,650	0.3%	422,186
	<u>131,025,869</u>	<u>8,549,966</u>	<u>2,213,736</u>	<u>2,953,971</u>	<u>13,717,673</u>	<u>144,743,542</u>	<u>100.0%</u>	<u>141,570,000</u>

BREAKDOWN SUBJECT TO CAP:							(Note 1)	
Expense Element	A1	B1	C1	D1	E1=SUM(B1:D1)	F1=A1+E1	State ITC	
	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project		
Labor	2,243,144	1,675,424	299,212	724,982	2,699,618	4,942,763		
Materials	32,210,236	1,490,363	533,090	501,328	2,524,781	34,735,016	34,735,016	
Vehicles	2,017	114,541	183	551	115,275	117,292		
Overheads	12,603,385	2,402,368	533,026	908,373	3,843,767	16,447,152		
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
Outside Services-Construction	67,631,285	601,267	57,799	78,421	737,487	68,368,772	68,368,772	
Outside Services-Other	2,494,471	1,390,800	607,576	341,347	2,339,722	4,834,193		
Other	417,984	-	4,202	-	4,202	422,186		
	<u>128,153,091</u>	<u>8,362,506</u>	<u>2,165,199</u>	<u>2,889,204</u>	<u>13,416,909</u>	<u>141,570,000</u>		
Amount subject to bonus	50%	50%	50%	50%	50%	50%		103,103,789
	<u>64,076,545</u>	<u>4,181,253</u>	<u>1,082,599</u>	<u>1,444,602</u>	<u>6,708,455</u>	<u>70,785,000</u>		<u>4%</u>
								<u>4,124,152</u>
								5,625,855
Tie out of TCI:								
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%		
TCI	<u>6,768,010</u>	<u>441,175</u>	<u>83,465</u>	<u>214,385</u>	<u>739,025</u>	<u>7,507,036</u>		
								655,561

Source: Ellipse & SAP

Note 1:

Allocated 12/31/18 Plant Addition subject to the cap of \$141.57M. See further discussion at HECO-WP-L-001.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

SOURCE: Ellipse & SAP

HAWAIIAN ELECTRIC COMPANY, INC.
2018 WEIGHTED AVERAGE PIM TARGET, DEADBAND, INCENTIVE CALCULATIONS

	Period	# of Days	Max Penalty	2018 Target	Deadband	Range for No Penalty		2018 Annual Total	Delta vs Target	(Penalty) / Reward
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i) = (h) - (d)	(j)
SAIFI	1/1/18-2/15/18	46	2,039,094	1.116	0.090	1.026	1.206	1.238	0.122	
	2/16/18-4/12/18	56	2,260,799	1.116	0.090	1.026	1.206	1.238	0.122	
	4/13/18-8/31/18	141	2,276,417	1.116	0.090	1.026	1.206	1.238	0.122	
	9/1/18-12/31/18	122	2,276,417	1.103	0.088	1.015	1.191	1.238	0.135	
	Annual (Weighted Avg)	365	2,244,112	1.112	0.089	1.022	1.201	1.238	0.126	(929,827)
										To Sch M
SAIDI	1/1/18-2/15/18	46	2,039,094	99.030	9.070	89.960	108.100	106.410	7.380	
	2/16/18-4/12/18	56	2,260,799	99.030	9.070	89.960	108.100	106.410	7.380	
	4/13/18-8/31/18	141	2,276,417	99.030	9.070	89.960	108.100	106.410	7.380	
	9/1/18-12/31/18	122	2,276,417	99.230	8.960	90.270	108.190	106.410	7.180	
	Annual (Weighted Avg)	365	2,244,112	99.097	9.033	90.064	108.130	106.410	7.313	-
										To Sch M
Call Center	1/1/18-2/15/18	46	815,638	79.07%	3.00%	76.07%	82.07%	83.97%		
	2/16/18-4/12/18	56	904,320	79.46%	3.00%	76.46%	82.46%	83.97%		
	4/13/18-8/31/18	141	910,567	79.56%	3.00%	76.56%	82.56%	83.97%		
	9/1/18-12/31/18	122	910,567	80.10%	3.00%	77.10%	83.10%	83.97%		
	Annual Totals	365	897,645	79.66%	3.00%	76.66%	82.66%	83.97%	4.31%	391,972
										To Sch M

Reference: See Hawaiian Electric Company Proposed PIM Tariff Revisions, filed on July 23, 2018 in Docket No. 2016-0328. The PIM Tariff Revisions were approved by the Commission in Order No. 35661, filed on August 30, 2018.

Note 1 SAIDI and SAIFI Annual Totals exclude 25 kV Proactive Work (See HECO-WP-M-002):

	SAIDI	SAIFI	
Occurrences / Minutes	111.94	1.253	With 25kV Proactive Work
Less: Exclusion for 25kV work	-5.52	-0.015	
Annual Totals	106.41	1.238	Without 25kV Proactive Work

HAWAIIAN ELECTRIC COMPANY, INC.
2018 SAIDI and SAIFI Calculations
With and Without 25 kV Scheduled Work Outages

HECO-WP-M-001
HECO-WP-M-001

HECO-WP-M-001
HECO-WP-M-001

Without 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	28,350.82	38,535.98	36,195.83	48,912.83	47,852.78	45,741.20	26,594.23	52,088.65	70,669.87	38,183.60	46,352.93	61,396.90	540,875.63
Customer Interruptions	19,170	25,947	26,983	49,443	27,712	34,644	21,028	29,939	46,557	24,863	21,382	49,779	377,447
SAIDI (Minutes)	5.58	7.58	7.12	9.62	9.41	9.00	5.23	10.25	13.90	7.51	9.12	12.08	106.41
SAIFI (Occurrences)	0.063	0.085	0.088	0.162	0.091	0.114	0.069	0.098	0.153	0.082	0.070	0.163	1.238

With 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	28,350.82	38,535.98	36,195.83	48,912.83	47,852.78	45,741.20	54,673.72	52,088.65	70,669.87	38,183.60	46,352.93	61,396.90	568,955.12
Customer Interruptions	19,170	25,947	26,983	49,443	27,712	34,644	25,686	29,939	46,557	24,863	21,382	49,779	382,105
SAIDI (Minutes)	5.58	7.58	7.12	9.62	9.41	9.00	10.76	10.25	13.90	7.51	9.12	12.08	111.94
SAIFI (Occurrences)	0.063	0.085	0.088	0.162	0.091	0.114	0.084	0.098	0.153	0.082	0.070	0.163	1.253

Difference Between With and Without 25 kV Scheduled Work Outages (See Note Below)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	-	-	-	-	-	-	(28,079)	-	-	-	-	-	(28,079)
Customer Interruptions	-	-	-	-	-	-	(4,658)	-	-	-	-	-	(4,658)
SAIDI (Minutes)	-	-	-	-	-	-	5.52	-	-	-	-	-	5.52
SAIFI (Occurrences)	-	-	-	-	-	-	0.015	-	-	-	-	-	0.015

Note:

25 kV Schedule Work Outage Events
(see HECO-WP-M-003 for more details)

Date of exclusion event	Customer Interruptions	Customer Minutes Interrupted
7/5/2018	(329)	(138,838)
7/16/2018	(881)	(317,160)
7/17/2018	(1,003)	(399,020)
7/18/2018	(1,004)	(341,342)
7/19/2018	(585)	(192,357)
7/23/2018	(418)	(150,062)
7/24/2018	(418)	(138,610)
7/25/2018	(20)	(7,380)
Total	(4,658)	(1,684,769)

(28,079) Hours Interrupted

Total Customer Minutes Interrupted without 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Total Customer Minutes Interrupted without 25 kV Scheduled Work Outages	1,701,049	2,312,159	2,171,750	2,934,770	2,871,167	2,744,472	1,595,654	3,125,319	4,240,192	2,291,016	2,781,176	3,683,814	32,452,538
Total Customer Minutes Interrupted with 25 kV Scheduled Work Outages													
Total Customer Minutes Interrupted with 25 kV Scheduled Work Outages	1,701,049	2,312,159	2,171,750	2,934,770	2,871,167	2,744,472	3,280,423	3,125,319	4,240,192	2,291,016	2,781,176	3,683,814	34,137,307
Difference	-	-	-	-	-	-	(1,684,769)	-	-	-	-	-	(1,684,769)

**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
BREAKER CB-7754		06:02 07/06/2018	7 HR 2 MIN		821 BETHEL ST V-8196, 821 BETHEL ST V-6645 CUST: 3		
IWILEI 138KV 4 SUB IWILEI 13 25KV CKT CB-7759 SECTIONALIZER CB7754	23:00			D-2	1020 MAUNAKEA ST V-7566, 60 NIMITZ N. HWY V-6646, 60 NIMITZ N. HWY V-6646B, 801 NUUANU AVE V-6936, 12 Pier V-10308, 15 Pier V-10309	1671	SECTIONALIZER ABC PHASE #CB7754 WAS OPENED IN IWILEI SUBSTATION DUE TO A SCHEDULED OUTAGE BETWEEN H/C NEAR SW V10309 AND H/C NEAR SW V10308 TO REPAIR A DEFECTIVE UNDERGROUND CABLE. SCHEDULED OUTAGE TO REPAIR FAULTED IWILEI 13 CKT RO#125230 REQ#2054. E#259743 PTM: AHMOOK SANG, BRAD SIGN: MACEY, JENNIFER
BREAKER CB7754		06:02 07/06/2018	7 HR 2 MIN		1020 MAUNAKEA ST V-7566, 60 NIMITZ N. HWY V-6646B, 801 NUUANU AVE V-6936, 12 Pier V-10308, 15 Pier V-10309 CUST: 326		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Rearranged outage.
 Class E: Affecting no cust.; parallel lines

Type 1: COMPANY: Confined within HECO system
 Type 2: EQUIP: Failure of HECO equipment
 Type 3: PUBILC: Caused by public/equip. not HECO Related
 Type 4: EXTERNAL: Act of nature [Storm; Flood; Etc.]

**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
IWILEI 138KV 3 SUB IWILEI 9 25KV CKT CB-7754 BREAKER 7754	22:00			D-1	SECTIONS OF BETHEL ST	1748	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON IWILEI 9 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE 25KV CABLE SPLICES E#260398. RELATED TO E#260399 IR#1749 REQ#2150. PTM: AHMOOK SANG, NATE; CHING, THOMAS SIGN: MIYAKE, LANCE
BREAKER CB7754		04:00 07/17/2018	6 HR 0 MIN		FROM CB7754 IWILEI SUBSTATION TO ALL TERMINATIONS CUST: 174		
IWILEI 138KV 4 SUB IWILEI 13 25KV CKT CB-7759 BREAKER 7759	22:00			D-1	KING, MAUNAKEA ST, NUUANU AVE, SECTIONS OF NIMITZ HWY	1749	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON IWILEI 13 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE 25KV CABLE SPLICES E#260399. RELATED TO E#260398 IR#1748 REQ#2149. PTM: DELACRUZ, KEALI; PITT, ANTHONY; WON, BRONSON; KAPOI, KALEI SIGN: MIYAKE, LANCE
BREAKER CB7759		04:00 07/17/2018	6 HR 0 MIN		FROM CB7759 IWILEI SUB TO ALL TERMINATIONS CUST: 707		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
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HE No. 171 REV 4/99

**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:04			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1757	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 5 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260487 REQ#2168. RELATED TO IR#1758 REQ#2169, IR#1759 REQ#2170, IR#1760 REQ#2171. PTM: AHMOOK SANG, NATE SIGN: MIYAKE, LANCE
BREAKER CB7706		04:39 07/18/2018	6 HR 35 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:04			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1758	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260501 REQ#2169. RELATED TO IR#1757 REQ#2168, IR#1759 REQ#2170, IR#1760 REQ#2171. PTM: DELACRUZ, KEALII SIGN: MIYAKE, LANCE
BREAKER CB7707		04:39 07/18/2018	6 HR 35 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:04			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1759	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 9 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260499 REQ#2170. RELATED TO IR#1757 REQ#2168, IR#1758 REQ#2169, IR#1760 REQ#2171. PTM: MOUNTHONGDY, PAT SIGN: MIYAKE, LANCE
BREAKER CB8329		04:39 07/18/2018	6 HR 35 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Prearranged outage.
 Class E: Affecting no cust.; parallel lines

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 Type 4: EXTERNAL: Act of nature [Storm; Flood; Etc.]

**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:04			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1760	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260500 REQ#2171. RELATED TO IR#1757 REQ#2168, IR#1758 REQ#2169, IR#1759 REQ#2170. PTM: ROSALES, RAY SIGN: MIYAKE, LANCE
BREAKER CB8330		04:44 07/18/2018	6 HR 40 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:08			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1766	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 5 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260590 REQ#2179. RELATED TO IR#1767 REQ#2180, IR#1768 REQ#2181, IR#1769 REQ#2182. PTM: AHMOOK SANG, NATE SIGN: MIYAKE, LANCE
BREAKER CB7706		03:48 07/19/2018	5 HR 40 MIN		FROM CB7706 KEWALO SUB TO ALL TERMINATIONS CUST: 336		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:08			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1768	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 9 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260589 REQ#2181. RELATED TO IR#1766 REQ#2179, IR#1767 REQ#2180, IR#1769 REQ#2182. PTM: KAPOI, KALEI SIGN: MIYAKE, LANCE
BREAKER CB8329		03:48 07/19/2018	5 HR 40 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:09			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1767	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260601 REQ#2180. RELATED TO IR#1766 REQ#2179, IR#1768 REQ#2181, IR#1769 REQ#2182. PTM: DELACRUZ, KEALI SIGN: MIYAKE, LANCE
BREAKER CB7707		03:48 07/19/2018	5 HR 39 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Prearranged outage.
 Class E: Affecting no cust.; parallel lines

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:09			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1769	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260601 REQ#2182. RELATED TO IR#1766 REQ#2179, IR#1767 REQ#2180, IR#1768 REQ#2181. PTM: MOUNTHONGDY, PAT SIGN: MIYAKE, LANCE
BREAKER CB8330		03:49 07/19/2018	5 HR 40 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		

Class A: Large areas; important Cust.; Transmission lines.
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 Class C: Small group of cust.; transformers; lines.
 Class D: Prearranged outage.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:00			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1773	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260678 REQ#2197. RELATED TO IR#1774 REQ#2196. PTM: PITT, ANTHONY SIGN: MIYAKE, LANCE
BREAKER CB8330		03:29 07/20/2018	5 HR 29 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:00			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1774	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#?? REQ#2196. RELATED TO IR#1773 REQ#2197. PTM: ROSALES, RAY SIGN: MIYAKE, LANCE
BREAKER CB7707		03:23 07/20/2018	5 HR 23 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Rearranged outage.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:03			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1805	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KEWALO SUBSTATION TO ALL TERMINATIONS TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED 25KV SPLICES E#260897 REQ#2205. RELATED TO IR#1806 REQ#2206. PTM: PITT, ANTHONY; AHMOOK SANG, NATE; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB7706		04:02 07/24/2018	5 HR 59 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:03			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1806	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KAMOKU SUBSTATION TO ALL TERMINATIONS TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED 25KV SPLICES E#260897 REQ#2206. RELATED TO IR#1805 REQ#2205. PTM: PITT, ANTHONY; AHMOOK SANG, NATE; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB-8329		04:02 07/24/2018	5 HR 59 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		

Class A: Large areas; important Cust.; Transmission lines.
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Ran 02/06/2019 14:16.02
 Date: July 23, 2018 (Monday)
 HE. No. 171 REV 4/99

**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329							
BREAKER CB-8329		03:34 07/25/2018	5 HR 30 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:05			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1821	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KEWALO SUBSTATION TO ALL TERMINATIONS. UG REPLACED SPLICES ON REQ#2207 E#261016. RELATED TO IR#1822 REQ#2208. PTM: MAKAIU, DAROL; KATADA, RANDY; RABE, JENSEN; OKAGAWA, JON; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB-7706		03:37 07/25/2018	5 HR 32 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		

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 Class D: Prearranged outage.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 7 25KV CKT CB-7708 BREAKER 7708	22:01			D-1	FROM CB7708 KEWALO SUBSTATION TO ALL TERMINATIONS	1830	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 7 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED SPLICES E#261078 PTM: KAPOI, KALEI; YAMANE, ROSS SIGN: MANZOKU, KEITH
SWITCH SW V10397		04:10 07/26/2018	6 HR 9 MIN		FROM CB7708 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 20		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
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HAWAIIAN ELECTRIC COMPANY, INC.
Call Center Performance (Service Level) Results
2018

Call Center Performance (Service Level)
Excludes Blocked Calls

Month	Total Calls Accepted *	Calls Answered Within 30 Seconds	Service Level	Weighted Total	Weighted Service Level
Jan-18	27,380	24,550	89.66%	8.37%	7.51%
Feb-18	22,944	20,577	89.68%	7.02%	6.29%
Mar-18	23,827	21,393	89.79%	7.29%	6.54%
Apr-18	26,277	23,095	87.89%	8.04%	7.06%
May-18	27,042	24,152	89.31%	8.27%	7.39%
Jun-18	27,941	22,446	80.33%	8.55%	6.86%
Jul-18	30,579	23,648	77.33%	9.35%	7.23%
Aug-18	31,082	23,749	76.41%	9.51%	7.26%
Sep-18	27,644	22,345	80.83%	8.45%	6.83%
Oct-18	30,957	25,586	82.65%	9.47%	7.82%
Nov-18	26,496	21,556	81.36%	8.10%	6.59%
Dec-18	24,817	21,460	86.47%	7.59%	6.56%

Total **83.97%**

To HECO-WP-M-001

* All customer calls handled by a Customer Service Representative (including abandoned calls)

Source: Generated from Genesys Interactive Insights system.

HAWAIIAN ELECTRIC COMPANY, INC.
Phase I Renewable Energy RFP Performance Incentive Mechanism
2018

Line	Awarded Projects	Reference	BAFO Levelized Price (\$/MWh) a	Net Energy Potential (MWh) b	PIM Calculation c = (x or y-a)*b	PIM Calculation (20% utility share) d = c * 20%
1	Ho'ohana Solar 1 (O-2) (with battery storage)	Docket No. 2018-0431 D&O No. 36236	99.78 Note 3	114,481	\$ 1,742,401	\$ 348,480
2	Mililani Solar I (O-17) (with battery storage)	Docket No. 2018-0434 D&O No. 36232	88.16	93,121	\$ 2,499,368	\$ 499,874
3	Waiawa Solar (O-20) (with battery storage)	Docket No. 2018-0435 D&O No. 36231	95.93	87,927	\$ 1,676,768	\$ 335,354
4	Total Final Variable Requests for Proposals				\$ 5,918,536	\$ 1,183,707
5	50% Year 1				Note 2	<u>\$ 591,854</u> <i>To Sch M</i>

Note 1

PIM Benchmark	¢/kWh	\$/MWh
Energy Only	9.5	95.00 x
Paired with Storage	11.5	115.00 y

Note 1 Per Order No. 35405, Docket No. 2017-0352, filed April 6, 2018, PIM benchmarks per pages 11 and 12.

Language from Order 35405:

The Companies share would be 20% of the estimated first-year savings compared to the applicable benchmark up to a cap of \$3,500,000.

The estimated first-year savings will be calculated by multiplying the forecasted first-year energy production (in kWh) of the project by the difference between the applicable benchmark price and the equivalent price (in cents per kWh).

The equivalent PPA price will be established by the levelized cost of the project computed by the Companies during the evaluation and selection process in the Phase I procurement effort.

Similarly, the forecasted first-year energy production will be determined by using the energy production estimated in the evaluation and selection process.

Per Order No. 35664, Docket No. 2017-0352, filed September 6, 2018:

The Commission ruled on the treatment of the Additional PPAs proposed in the Companies' June 20, 2018 Letter indicating that the additional PIM for these PPAs will function in a similar manner to the original PIM. The Companies shall receive a performance incentive equivalent to 20% of the estimated first-year savings compared to the applicable benchmark, up to a cap of \$3,000,000, for the Additional PPAs filed with the commission by December 31, 2018. For any Additional PPAs submitted after December 31, 2018, until March 31, 2019, the Companies' share of the savings pursuant to the PIM will be reduced in accordance with the proposal in the Companies' June 20, 2018 Letter.

Note 2 Per Decision and Order No. 35405, Docket No. 2017-0352, filed April 6, 2018, Timing of Incentive Award, p 14

First Allocation: The first allocation of the PIM will be shortly after the approval of the PPAs. At that time, the commission will allocate the first 50% of the total PIM to the Companies, based on the equivalent PPA prices and the forecasted first-year energy production. The commission intends that the applicable performance incentive would be awarded to the Companies through their respective Revenue Balancing Account Provision tariffs.

Second Allocation: Following the first year of commercial operations for each project, the Companies shall submit a report of the actual energy utilized for each of the PPAs approved by the Commission. The Commission will provide the Companies with a portion, or all, of the remaining 50% of the PIM, dependent upon the actual amount of energy output utilized.

Note 3: Ho'ohana Solar's Levelized Price (\$99.78/MWh) includes the unit price of \$0.098858/kWh and the \$0.00092/kWh.

CIAC Treatment
Resulting from FERC Adoption

Adoption of FERC USOA required a change in presentation change to Contributions in Aid of Construction (CIAC)

Prior to October 2018, and in establishing rates in previous test year rate cases, the Company's presentation of contributions in aid of construction ("CIAC") followed the guidelines of the National Associate of Regulatory Utility Commissioners Uniform System of Accounts (NARUC USOA). Under the NARUC reporting system, CIAC is reported under an exclusive account, account 271, which includes donations or contributions in cash, services or property from states, municipalities, or other governmental agencies, individuals and others for construction purposes. All CIAC was incorporated as a deduction in the calculation of rate base in part because the Companies' systems did not facilitate on-going reporting of CIAC related to plant in service separate from CIAC related to construction work in progress ("CWIP").

The Commission approved the Companies' request to change to Federal Energy Regulatory Commission Uniform System of Accounts (FERC USOA), beginning with the implementation of the Companies' new ERP/EAM, in Decision and Order No. 31757, issued December 19, 2013 in Docket No. 2013-0007.

Beginning in October 2018 with the transition to FERC, the net balance of CIAC in account 271 less the CIAC amortization to be recorded for October to December 2018, was credited against the account balances charged with the cost of construction, i.e., gross plant in service and CWIP, resulting in the account becoming zero (i.e. "0") at December 31, 2018.

Ratemaking treatment for CIAC

The Company's ratemaking treatment of contributions in aid of construction is summarized below:

- *CIAC associated with Plant in Service* – When a utility capital project is placed into service, the plant in service net of the associated CIAC is included as net cost of plant in service in rate base. The plant in service net of the CIAC is included as part of the basis for the depreciation accrual the year after it is placed into service (i.e. January 1 of the year after it is placed into service).
- *CIAC associated with CWIP* – For book purposes, CIAC that is received while projects are still under construction (i.e. in CWIP) will offset the costs incurred and is presented net in CWIP. The CWIP net of the associated CIAC is subject to the AFUDC accrual if there is a net CWIP balance. In the next rate case, the Company will request CIAC associated with CWIP be excluded from the rate base calculation since CWIP net of

CIAC earns AFUDC. CIAC associated with CWIP is however, included in rate base in this RAM calculation for consistency with the 2017 Test Year treatment. See further discussion of Company's requested treatment of CIAC associated with CWIP below.

- *Developer Advances* - Cash contributions received in advance of construction of a utility capital project that are temporarily not classified as CIAC because the funds received are in excess of the specific project expenditures. The balance of developer advances is presented as funds from non-investors, included in its own exclusive account, and deducted in the calculation of rate base. As project costs are incurred for a utility capital project, an equal portion of developer advances associated with the project will be reclassified as CIAC and credit the accounts charged with the cost of construction. Developer Advances were included as a part of CIAC as a reduction to rate base in the 2017 Test Year.

Treatment of CIAC within the 2019 Annual Decoupling Filing

For the 2019 Decoupling Filing, the Company treated CIAC consistently with prior filings resulting in no impact to rate base.

Schedule D1, Determination of Rate Base RAM Adjustment – Change in Rate Base

Plant in Service - There is no change in rate base for plant in service and CIAC associated with plant in service. Under NARUC, in rate base, plant in service was the gross cost of plant (net of accumulated depreciation), and CIAC was a separate reduction to rate base. Under FERC, the plant in service amounts are net of (i.e., already reduced by) CIAC, and presented net of accumulated depreciation in the calculation of rate base. There is no separate CIAC line item reducing rate base because it is already net in utility plant. Therefore, there is no net rate base impact. The difference between NARUC and FERC for plant in service is a matter of where the costs are classified in rate base, and not a matter of inclusion or exclusion of costs in rate base.

CIAC associated with CWIP - There is no change in rate base for CIAC associated with CWIP. Previously, presentation of CIAC aligned with NARUC and all CIAC, including amounts associated with projects in CWIP, were included as a reduction to rate base under account 271. The 2019 estimated balance continues the treatment of including the CIAC in CWIP to be consistent with the recorded balance at 2018 year-end because all 2019 estimated CIAC additions have been included at Schedule D2 and included as part of net cost of plant at Schedule D1. Although the treatment described above was used in the 2019 annual decoupling filing, see Company's requested treatment to exclude CIAC associated with CWIP from rate base in future filings in the discussion below.

Developer Advances - With the transition to FERC, CIAC is credited when received against the related project costs in CWIP. To the extent funds are not yet expended for a project in

CWIP, the CIAC will be classified as developer advances and deducted in the calculation of rate base at Schedule D1. The recorded balance at 2018 year-end is not adjusted for 2019 activity as it is incorporated in Schedule D2.

Schedule D2, Determination of Baseline Capital Projects Additions

Schedule D2 was revised to incorporate the baseline and major project CIAC (including Developer Advances) for 2014 to 2017 into the baseline average calculation of net plant in service, consistent with the presentation of rate base. The 2018 CIAC additions calculated at HECO-WP-D2-003 includes additions to CIAC from all sources, i.e. Plant, CWIP and Developer Advances, which were used in the 5-year baseline calculation. As a result, the estimated 2019 additions to CIAC in CWIP and Developer Advances balances at Schedule D1 for the Change in Rate Base are not required as they are already included in the net cost of plant line item.

Schedule E, Determination of Depreciation & Amortization RAM Adjustment

FERC Uniform System of Accounts Electric Plant Instructions, 2. Electric Plant To Be Recorded at Cost. D. states, "The electric plant accounts shall not include the cost or other value of electric plant contributed to the company." Therefore, the Recorded Depreciable/Amortizable Balances at December 31, 2018 in Schedule E represents plant in service net of CIAC which is used as the basis to estimate the 2019 annual accrual amount. In calculating the 2019 RAM Depreciation and Amortization, Depreciation and Amortization in Current Revenues also includes CIAC amortization approved in the 2017 Test Year.

Schedule F & F1, Determination of Change in Deferred Income Taxes & Tax Depreciation

The methodology for computing the deferred taxes related to RAM year tax depreciation was not changed within the 2019 annual decoupling filing. Gross plant additions are used as the basis for calculating tax depreciation. However, see the CIAC impact to ADIT section below for the Company's preferred treatment considering the effects of netting CIAC against plant in service.

Schedule G-series, CIAC

Schedule G, G1 and G2 were removed from the Decoupling filings and instead incorporated into either Plant in Service, CIAC in CWIP or Developer Advances. The December 31, 2018 balances for CIAC associated with CWIP and Developer Advances were extracted from PowerPlan. Additionally, as noted above, the calculation of the 5-year baseline average of CIAC and amortization was incorporated within Schedule D2 and Schedule E, respectively.

The Company will continue to include CIAC associated with CWIP and Developer Advances as a reduction to rate base until the FERC presentation of rate base is approved in the Company's next rate case.

Company's requested CIAC treatment

The Company requests to reflect the following changes to the treatment of CIAC within the annual decoupling filings.

CIAC associated with CWIP

In Mr. Franklin's T-12 direct testimony in Hawaii Electric Light's 2019 Test Year rate case, the Company proposes to remove CIAC associated with CWIP from the calculation of rate base due to the fact that CWIP net of associated CIAC earns AFUDC, therefore the CWIP and its associated CIAC should be excluded from rate base.

Excluding CWIP net of CIAC, to better align the source of funds with its use (i.e. the CIAC funds received were applied against the costs incurred for the project) and is therefore properly excluded from the calculation of rate base. In addition, and as mentioned previously, any material CIAC received in advance of construction expenditures will continue to be deductions in the calculation of rate base as Developer Advances.

CIAC impact to ADIT

ADIT associated with CIAC in CWIP should be divided between nontaxable and taxable CIAC. Nontaxable CIAC (primarily interconnection CIAC) is treated as a reduction in basis for both book and tax purposes. On the other hand, although taxable CIAC is also a reduction in basis for book purposes, for tax purposes, the receipt of taxable CIAC creates tax basis by way of the recognition of taxable income and reverses by way of tax depreciation.

Nontaxable CIAC does not create ADIT since there is no book tax difference. Consequently, the regulatory netting of nontaxable CIAC against the plant assets should not create any issue with respect to the ADIT beginning balance for the rate base RAM calculation

Taxable CIAC generates a Deferred Tax Asset (DTA) as it is received and recorded into CWIP under the new FERC accounting. Prior NARUC accounting treatment with account 271 created DTA as CIAC was booked to 271, which is equivalent to what is now booked to CWIP. The origination and timing of the DTA under the FERC method will be equivalent to the NARUC method. However, under the old method, the DTA was immediately recognized as part of rate base, consistent with the treatment of the account 271 inclusion. However, under the FERC method, the generation of the DTA must be inventoried and tracked to match up with the amount of CIAC in CWIP and the amounts closed to plant in service. This tracking is necessary to ensure that the amount of DTA related to CWIP is excluded from rate base. Once CWIP costs are closed to plant, the related DTA will be included in rate base and will begin reversal through tax depreciation taken on the CIAC tax basis.

FERC accounting imbeds the book treatment of CIAC within CWIP and the ultimate plant and related depreciation. The separation will disappear and the Company asserts that the ADIT

effects will be the same with respect to the beginning balance of ADIT for the annual decoupling filing except to the extent CIAC is still in CWIP. This issue will be addressed along with the rate base treatment of CIAC associated with CWIP as mentioned above.

FERC accounting nets CIAC against Plant in Service for purposes of computing baseline and major plant additions. For RAM year tax depreciation and the related ADIT calculated for the change in RAM year ADIT, adopting the net plant additions as the RAM year tax additions will be a change that will result in a smaller amount of tax depreciation and ADIT “change” since the Company previously has assumed the gross additions to be the RAM year tax depreciable base. The Company asserts this is reasonable for the following reasons:

- 1) Under the old method, to the extent nontaxable CIAC was included in the RAM year numbers (through major projects or baseline projects), tax depreciable basis was overstated since there is no tax basis for assets funded by nontaxable CIAC.
- 2) With respect to taxable CIAC, the funded assets do have depreciable tax basis and it is accounted for in the RAM year additions tax depreciation. However, the receipt of taxable CIAC generates taxable income and deferred tax assets that increase rate base. The effect of this DTA from taxable CIAC was never recognized in the RAM tariff, which resulted in an overstatement of RAM year ADIT change, as it related to the projected plant additions.

For purposes of the 2019 RAM calculation, ADIT has been calculated on gross plant additions, consistent with the 2017 Test Year treatment and prior decoupling filings, however the Company is requesting treatment of CIAC in deferred tax to follow FERC accounting.

Summary

In summary, Hawaiian Electric prepared the 2019 annual decoupling filings in accordance with the historical treatment of CIAC. Historically, due to system constraints, CIAC records were not maintained with matching of the separate components (plant in service, CWIP, developer advances). As a result, the entire amount of CIAC was treated as a reduction to rate base and the Return on Investment was understated. As stated in Mr. Franklin’s T-12 direct testimony in Hawaii Electric Light’s 2019 Test Year rate case, the Companies propose to exclude the CIAC associated with CWIP in its calculation of rate base in the rate base RAM filings. Should the Commission approve Hawaii Electric Light’s proposal, Hawaiian Electric will implement this change in the annual decoupling filing in the year following the Commission’s approval.

HAWAIIAN ELECTRIC

SCENARIO 2

**WEST LOCH PV EXCLUDED FROM RAM
REVENUE ADJUSTMENT**

**25kV EXCLUDED FROM 2018 SAIDI AND
SAIFI PIM CALCULATIONS**

HAWAIIAN ELECTRIC
ATTACHMENT 1

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
92	"RBA"	September 1, 2018	Revenue Balancing Account Provision
92A	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92A.1	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92B	"RBA"	February 16, 2018	Revenue Balancing Account Provision
92C	"RBA"	January 1, 2018	Revenue Balancing Account Provision
92D	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92E	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92F	"RBA"	June 1, 2019	Revenue Balancing Account Provision
93	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93A	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93B	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93C	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93D	"RAM"	June 1, 2017	Rate Adjustment Mechanism Provision
93E	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93F	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93G	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93H	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93I	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
94	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause
94A	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause
94B	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause

HAWAIIAN ELECTRIC COMPANY, INC.

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
95	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95A	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95B	EV-F	December 12, 2017	Commercial Public Electric Vehicle Charging Facility Service Pilot
96	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
96A	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
97	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97A	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
97B	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97C	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
98	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98A	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98B	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98C	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98D	"PIM"	June 1, 2019	Performance Incentive Mechanism Provision
98E	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
99	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99A	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99B	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99C	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service

HAWAIIAN ELECTRIC COMPANY, INC.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Supplement To:

- Schedule R - Residential Service
- Schedule G - General Service - Non-Demand
- Schedule J - General Service - Demand
- Schedule DS - Large Power Directly Served Service
- Schedule P - Large Power Service
- Schedule F - Public Street Lighting, Highway
Lighting and Park and Playground
Floodlighting
- Schedule U - Time-of-Use Service
- 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 Commercial Time-of-Use Service
- Schedule SS - Standby Service
- Schedule TOU EV- Residential Time-of-Use Service with
Electric Vehicle Pilot
- Schedule EV-F - Commercial Public Electric Vehicle
Charging Facility Service Pilot
- Schedule TOU-RI- Residential Interim Time-of-Use Service

All terms and provisions of the above listed rate schedules applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism ("RAM") Provision, and any revenue adjustment provided in accordance with the Performance Incentive Mechanism Provision, over the subsequent June 1st through May 31st period. Tracking of target revenue and recorded adjusted revenue commenced on the effective date of the tariff that implemented the Final Decision and Order in Hawaiian Electric's 2009 test year rate case, Docket No. 2008-0083, consistent with the Final Decision and Order in the Decoupling case, Docket No. 2008-0274.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018.

Transmittal Letter Dated July 23, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company's most recent test year general rate case, excluding revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause; excluding revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism; and excluding amounts for applicable revenue taxes;

Plus: Any effective RAM Revenue Adjustment calculated under the RAM provision for years subsequent to the most recent rate case test year for which the Commission has issued a Decision & Order; and any Performance Incentive Adjustment provided for in accordance with the Performance Incentive Mechanism Provision; and

Less: Any applicable Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits calculated under the RAM provision.

Adjusted by: Other adjustments, as applicable, in accordance with Commission's Order authorizing such adjustment. Other adjustments, if any, are shown in the table *Target Revenue Currently in Effect*, provided in section H.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment, Performance Incentive Adjustment, recorded adjusted revenues or other RBA accounting determinations (collectively "target revenue determinations") for any previous period and for revisions to RAM Revenue Adjustments or Performance Incentive Adjustments as a result of subsequent Commission orders that change the basis of previously calculated RAM Revenue Adjustments and/or Performance Incentive Adjustments. For any corrections of errors in previously calculated target revenue determinations, the target revenue shall be adjusted as of the date that the correct determinations would have been reflected in target revenue. For changes in the RAM Revenue Adjustment and/or Performance Incentive Adjustments as a result of subsequently issued Commission orders, the target revenue shall be adjusted as of the effective date of changes that are implemented pursuant to the subsequently issued Commission order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

The Commission and the Consumer Advocate will be notified of the target revenue revisions or corrections prior to implementation by the Company. There is no presumption that the target revenue changes are ultimately warranted or correct. In the annual RBA review transmittal ("RBA Review Transmittal") filed on or before March 31 of each year, the utility will have the burden to demonstrate that the interim changes for the previous calendar year are warranted and correctly applied. The Consumer Advocate will provide comments regarding the changes with its Statement of Position. The RBA balance and RBA Rate Adjustment for the following year will reflect any appropriate modifications to the change made by the utility in the prior year if necessary.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.19%
February	7.59%
March	8.10%
April	7.98%
May	8.40%
June	8.07%
July	8.70%
August	8.94%
September	8.65%
October	8.84%
November	8.26%
December	8.28%
Total	<u>100.00%</u>

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2017 test year rate case and shall be updated in any subsequent test year rate case.

C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be the short term debt rate as established in deriving the consolidated cost of capital in the Company's last full rate case. The Interest Rate prior to March 1, 2014 shall be 6 percent.

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

In its annual RBA Review Transmittal, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations.

HAWAIIAN ELECTRIC COMPANY, INC.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, any Performance Incentive Adjustment provided in accordance with the Performance Incentive Mechanism Provision and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

On or before March 31 of each year, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, an RBA Review Transmittal supporting the implementation of the RBA Provision, including RBA reconciliation, implementation of applicable components of the RAM Provision and Performance Incentive Mechanism Provision, determination and adjustments of target revenues, determination of the RBA Rate Adjustment; and documenting any errors, corrections and adjustments to Target Revenues in the preceding calendar year and prior to the transmittal date.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA and target revenue determinations shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, as part of the annual RBA Review Transmittal filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

All Rate Schedules 0.9580 ¢/kWh

F. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual RBA Review Transmittal filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

G: COMMISSION'S AUTHORITY

The Commission may modify or suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

H: TARGET REVENUE CURRENTLY IN EFFECT

Hawaiian Electric Company, Inc.
 Annual Target Revenue (\$000s)

	<u>Description</u>	<u>Amount</u>
1	Electric Sales Revenue (Unadjusted)	\$1,531,852
2	Tax Act Implementation Lag	(\$2,143)
3	Electric Sales Revenue (Adjusted)	<u>\$1,529,709</u>
	Less:	
4	Fuel Expense	(\$327,609)
5	Purchase Power Expense	(\$466,211)
6	Revenue Tax on Electric Sales Revenue	(\$135,915)
7	Last Rate Order Target Revenues	<u>\$599,974</u>
8	Authorized RAM Revenues	\$20,351
9	Revenue Tax	(\$1,808)
10	Net RAM Adjustment	<u>\$18,543</u>
11	Authorized MPIR Revenues	\$19,811
12	Revenue Tax	(\$1,760)
13	Net MPIR Adjustment	<u>\$18,051</u>
14	Earnings Sharing Revenue Credits	\$0
15	Revenue Tax	<u>\$0</u>
16	Net Earnings Sharing Revenue Credits	\$0
17	Performance Incentive Mechansim (PIM)	\$54
18	Revenue Tax	(\$5)
19	Net PIM Reward (Penalty)	<u>\$49</u>
20	2017 Test Year Final D&O Refund	(\$48)
21	Revenue Tax	<u>\$4</u>
22	Net 2017 Test Year Final D&O Refund	(\$44)
23	On-Bill Financing Pgm Implementation Costs	\$844
24	Revenue Tax	(\$75)
25	Net On-Bill Financing Adjustment	<u>\$769</u>
26	Effective Target Revenue	\$637,342

Notes:

Totals may not add, due to rounding.

Lines 1,4,5: Final Decision and Order No. 35545, issued June 22, 2018 in Docket No. 2016-0328. Exhibit A.

Line 2: Hawaiian Electric March 2018 Settlement Tariff Sheets, Attachment 1, Line 2. Filed March 16, 2018 in Docket No. 2016-0328.

Lines 6,9,12,15,18,21,24: Revenue Tax based on 8.885% statutory rates.

Lines 8,11,14,17,20,23,26: Transmittal Nos. 19-01, 19-02, 19-03 Consolidated (Decoupling) Schedule B1 (Scenario 2A), filed May 28, 2019.

Change in Effective Target Revenue for MPIR is effective January 1, 2019.
 See Order 35556, filed June 27, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

I: HISTORICAL REFERENCE

Category	Effective Period	Effective Target Revenue (\$000)	Change in Target Revenue (\$000)	Source
Annual Decoupling Filing	6/1/2017 thru 2/15/2018	\$604,302	N/A (1/1/2018 Baseline)	Schedule B1 filed in Transmittal No. 17-02 on 3/31/2017.
2017 Test Year Rate Case (Interim)	2/16/2018 thru 4/12/2018	\$637,077	\$32,775	Schedule B1 filed in Docket No. 2016-0328 on 1/19/2018.
2017 Test Year Rate Case (Interim)	4/13/2018 thru 5/31/2018	\$599,960	(37,117)	Schedule B1 filed in Docket No. 2016-0328 on 3/16/2018.
Annual Decoupling Filing	6/1/2018 thru 6/30/2018	\$612,574	\$12,614	Schedule B1 filed in Transmittal No. 18-01 on 3/29/2018.
MPIR (Schofield)	7/1/2018 thru 9/30/2018	\$618,587	\$6,013	Schedule B1 filed in Docket No. 2017-0213 on 7/18/2018.
MPIR (Schofield)	10/1/2018 thru 12/31/2018	\$620,374	\$1,787	Schedule B1 filed in Docket No. 2017-0213 on 12/21/2018.
MPIR (Schofield)	1/1/2019 thru 5/31/2019	\$630,624	\$10,250	Schedule B1 filed in Transmittal No. 19-01 on 2/7/2019.
Annual Decoupling Filing	6/1/2019 (current)	\$637,342	\$6,718	Schedule B1 (Scenario 2A) filed in Transmittal No. 19-01 on 5/28/2019.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

PERFORMANCE INCENTIVE MECHANISM PROVISION

Introduction

This Performance Incentive Mechanism ("PIM") Provision provides for the determination of a PIM Financial Incentive for each approved PIM for each Evaluation Period, based on Measured Performance compared to an established Performance Target for each PIM, as specified below.

The sum of the PIM Financial Incentives determined for all PIMs for the Evaluation Period will be the Performance Incentive Adjustment, which will be applied as an adjustment to the effective Target Revenue and will be recovered from or credited to customers through the RBA Rate Adjustment, as defined by and in accordance with the terms of the Revenue Balancing Account ("RBA") Provision.

Annual PIM Provision Transmittal

On or before March 31 of the year following an Evaluation Period, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, a transmittal documenting the Measured Performance and calculation of the PIM Financial Incentives and Performance Incentive Adjustment for the Evaluation Period. Complete, indexed schedules, workpapers and electronic files supporting the transmittal shall be provided with the transmittal. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, other rate case parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

The review of the annual PIM Provision transmittal will be conducted concurrent with and in conjunction with the annual RBA Review Transmittal. The Performance Incentive Adjustment will be determined annually based on the PIM Provision transmittal and, after review and subject to explicit approval by the Commission, will become effective on June 1 of the year following the Evaluation Period, concurrent and in conjunction with determination of Target Revenues and the RBA Rate Adjustment in accordance with the RBA Provision. Any approved Performance Incentive Adjustment will be applied as monthly adjustments to Target Revenues for the twelve month period commencing June 1 of the year following the Evaluation Period in accordance with the Monthly Allocation Factors identified in the RBA Provision.

The Performance Targets, Deadbands and the amount of Maximum Financial Incentives used to determine the PIM Financial Incentive

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

levels for each of the PIMs shall be re-determined upon issuance of an interim or final order in a general rate case for each Company and shall remain constant in interim periods, unless otherwise amended, as necessary, by order of the Commission.

In the event that Performance Targets, Deadbands or the amounts of Maximum Financial Incentives are updated or amended by order of the Commission during the Evaluation Period, the Performance Targets, Deadbands and the amounts of Maximum Financial Incentives used in determining the amount of PIM Financial Incentives shall be a pro-rated weighted average based on the number of days of the Evaluation Period each parameter was effective.

Any revenue adjustments approved in accordance with this PIM Provision shall be excluded from the determination of Earnings Sharing Credits provided for in the Rate Adjustment Mechanism Provision ("RAM Provision").

The Performance Incentive Adjustment, and any prior year Performance Incentive Adjustment, shall be recalculated for errors in prior calculations and for subsequent Commission orders that change the basis for prior calculations. The effect of such changes shall be implemented as described in the RBA Provision, except that, the Performance Target, Deadband and Maximum Financial Incentive amounts determined in this PIM Provision shall not be recalculated based on errors in the calculation of these parameters and shall remain as specified unless and until changed by order of the Commission.

Evaluation Period

The Evaluation Period is defined as the annual twelve month calendar year period ending December 31, over which Measured Performance is determined and compared to the established Performance Target for each PIM described below. The first Evaluation Period shall begin January 1, 2018.

PIM Financial Incentive Calculation

For each PIM below, a Performance Target is specified, developed based on historical performance data. A Deadband is specified for each Performance Target in order to provide a satisfactory range of performance within which no reward or penalty amount is assessed.

A Maximum Financial Incentive amount is specified for each PIM with separate identification of a Maximum Reward Amount and a Maximum Penalty Amount.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Measured Performance for the Evaluation Period is compared to the Performance Target for each PIM. If the difference between Measured Performance and the Performance Target is less than or equal to the Deadband amount, no reward or penalty is awarded and the amount of the PIM Financial Incentive is zero. If the difference between Measured Performance and the Performance Target exceeds the Deadband amount, a reward or penalty ratio is calculated where the difference between Measured Performance and the Performance Target, less the Deadband amount, is the numerator and the Deadband amount is the denominator. This ratio is multiplied by either the Maximum Reward Amount or Maximum Penalty Amount, as applicable, to determine the PIM Financial Incentive for each PIM. The magnitude of the PIM Financial Incentive for each PIM shall not exceed 100% of the magnitude of the applicable Maximum Reward Amount or Maximum Penalty Amount established for each PIM.

Reliability Performance Incentive Mechanisms

There are two reliability PIMs: 1) System Average Interruption Frequency Index ("SAIFI"); and 2) System Average Interruption Duration Index ("SAIDI"). SAIFI is a measure of the average frequency of outages, defined as the annual total number of customer interruptions divided by the total number of customers served. SAIDI is a measure of the average duration of outage, defined as the sum of all customer interruption durations (in minutes) divided by the total number of customers served. The SAIFI and SAIDI Measured Performance and Performance Targets are determined using the IEEE Standard 1366 methodology.

For the Reliability Performance Incentive Mechanisms, the 2008-2017 record of historical performance data was used to establish the Performance Target and the Deadband. The Deadband was calculated as ± 1 standard deviation of the historical performance data. Accordingly, 100% of the penalty is achieved when Measured Performance is equal to or greater than 2 standard deviations from the Performance Target.

SAIFI:

Performance Target: 1.103 interruptions per customer during the one-year Evaluation Period

Deadband: ± 0.088 interruptions (1 Standard Deviation)

HAWAIIAN ELECTRIC COMPANY, INC

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Range for no penalty: 1.015 interruptions to 1.191 interruptions per customer (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 1.191 interruptions per customer

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

SAIDI:

Target: 99.23 minutes per outage

Deadband: \pm 8.96 minutes (1 Standard Deviation)

Range for no penalty: 90.27 minutes to 108.19 minutes per outage (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 108.19 minutes per outage

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Call Center Performance Incentive Mechanism

The Call Center Performance PIM measures the performance of the utility call center in terms of the percentage of calls answered within thirty (30) seconds. The calculation of the call center performance shall exclude blocked calls from the denominator.

The Performance Target for the Call Center Performance Incentive Mechanism was calculated based on the average of quarterly data from Quarter 3 of 2016 to Quarter 2 of 2018.

HAWAIIAN ELECTRIC COMPANY, INC

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Call Center Performance:

Performance Target: 80.10% of calls answered within 30 seconds

Deadband: +/- 3.00% of calls answered within 30 seconds

Range for no reward or penalty: 77.10 % of calls answered to 83.10% of calls answered.

Rewards apply for greater than 83.10 % of calls answered
Penalties apply for less than 77.10 % of calls answered

Maximum Reward Amount: \$910,567.

Maximum Penalty Amount: \$910,567.

The magnitude of the Maximum Reward Amount and Maximum Penalty Amount were determined to be equal to 0.08% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Additional PIMs:

The Commission may order the establishment of one or more PIMs, and the targets, deadbands, rewards, penalties, and allocations for that PIM, as applicable, shall be implemented as specified in the Commission's order that approved the applicable PIM, and the applicable PIM Financial Incentive shall be included in the Performance Incentive Adjustment.

Commission's Authority

The Commission may suspend any or all parts of this PIM Provision. Such suspension shall remain in place until removed by Commission order.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Historical Reference

The following table summarizes the prior PIMs in effect, as these values may be applicable during certain portions of the Evaluation Period.

PIM:	Effective Period:	Performance Target:	Deadband:	Maximum Reward:	Maximum Penalty:
SAIFI	1/1/2018 thru 2/15/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,039,094
SAIFI	2/16/2018 thru 4/12/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,260,799
SAIFI	4/13/2018 thru 8/31/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,276,417
SAIDI	1/1/2018 thru 2/15/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,039,094
SAIDI	2/16/2018 thru 4/12/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,260,799
SAIDI	4/13/2018 thru 8/31/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,276,417
Call Center	1/1/2018 thru 2/15/2018	79.07% of calls answered within 30 sec.	+/- 3.00%	\$815,638	\$815,638
Call Center	2/16/2018 thru 4/12/2018	79.46% of calls answered within 30 sec.	+/- 3.00%	\$904,320	\$904,320
Call Center	4/13/2018 thru 8/31/2018	79.56% of calls answered within 30 sec.	+/- 3.00%	\$910,567	\$910,567

HAWAIIAN ELECTRIC COMPANY, INC

HAWAIIAN ELECTRIC
ATTACHMENT 1A

Superseding Revised Sheet No. 50E
Effective May 1, 2019

REVISED SHEET NO. 50E
Effective June 1, 2019

Deleted: February 1, 2019

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
92	"RBA"	September 1, 2018	Revenue Balancing Account Provision
92A	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
<u>92A.1</u>	<u>"RBA"</u>	<u>June 1, 2019</u>	<u>Revenue Balancing Account Provision</u>
92B	"RBA"	February 16, 2018	Revenue Balancing Account Provision
92C	"RBA"	January 1, 2018	Revenue Balancing Account Provision
92D	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
92E	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
<u>92F</u>	<u>"RBA"</u>	<u>June 1, 2019</u>	<u>Revenue Balancing Account Provision</u>
93	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93A	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93B	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93C	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93D	"RAM"	June 1, 2017	Rate Adjustment Mechanism Provision
93E	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93F	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93G	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93H	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93I	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
94	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause
94A	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause
94B	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

Deleted: February 22, 2019

Superseding SHEET NO. 50F
Effective January 1, 2019

REVISED SHEET NO. 50F
Effective June 1, 2019

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
95	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95A	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95B	EV-F	December 12, 2017	Commercial Public Electric Vehicle Charging Facility Service Pilot
96	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
96A	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
97	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97A	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
97B	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97C	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
98	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98A	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98B	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98C	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98D	"PIM"	<u>June 1, 2019</u>	Performance Incentive Mechanism Provision
98E	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
99	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99A	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99B	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99C	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

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Superseding REVISED SHEET NO. 92
Effective January 1, 2018

REVISED SHEET NO. 92
Effective September 1, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Supplement To:

Schedule R - Residential Service
Schedule G - General Service - Non-Demand
Schedule J - General Service - Demand
Schedule DS - Large Power Directly Served Service
Schedule P - Large Power Service
Schedule F - Public Street Lighting, Highway
Lighting and Park and Playground
Floodlighting
Schedule U - Time-of-Use Service
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 Commercial Time-of-Use Service
Schedule SS - Standby Service
Schedule TOU EV- Residential Time-of-Use Service with
Electric Vehicle Pilot
Schedule EV-F - Commercial Public Electric Vehicle
Charging Facility Service Pilot
Schedule TOU-RI- Residential Interim Time-of-Use Service

All terms and provisions of the above listed rate schedules applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism ("RAM") Provision, and any revenue adjustment provided in accordance with the Performance Incentive Mechanism Provision, over the subsequent June 1st through May 31st period. Tracking of target revenue and recorded adjusted revenue commenced on the effective date of the tariff that implemented the Final Decision and Order in Hawaiian Electric's 2009 test year rate case, Docket No. 2008-0083, consistent with the Final Decision and Order in the Decoupling case, Docket No. 2008-0274.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018.

Transmittal Letter Dated July 23, 2018

Superseding REVISED SHEET NO. 92A
Effective January 1, 2018.

REVISED SHEET NO. 92A
Effective June 1, 2019.

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company's most recent test year general rate case, excluding revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause; excluding revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism; and excluding amounts for applicable revenue taxes;

Plus: Any effective RAM Revenue Adjustment calculated under the RAM provision for years subsequent to the most recent rate case test year for which the Commission has issued a Decision & Order; and any Performance Incentive Adjustment provided for in accordance with the Performance Incentive Mechanism Provision; and

Less: Any applicable Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits calculated under the RAM provision.

Adjusted by: Other adjustments, as applicable, in accordance with Commission's Order authorizing such adjustment. Other adjustments, if any, are shown in the table Target Revenue Currently in Effect, provided in section H.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment, Performance Incentive Adjustment, recorded adjusted revenues or other RBA accounting determinations (collectively "target revenue determinations") for any previous period and for revisions to RAM Revenue Adjustments or Performance Incentive Adjustments as a result of subsequent Commission orders that change the basis of previously calculated RAM Revenue Adjustments and/or Performance Incentive Adjustments. For any corrections of errors in previously calculated target revenue determinations, the target revenue shall be adjusted as of the date that the correct determinations would have been reflected in target revenue. For changes in the RAM Revenue Adjustment and/or Performance Incentive Adjustments as a result of subsequently issued Commission orders, the target revenue shall be adjusted as of the effective date of changes that are implemented pursuant to the subsequently issued Commission order.

Deleted: Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

SHEET NO. 92A.1
Effective June 1, 2019

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

The Commission and the Consumer Advocate will be notified of the target revenue revisions or corrections prior to implementation by the Company. There is no presumption that the target revenue changes are ultimately warranted or correct. In the annual RBA review transmittal ("RBA Review Transmittal") filed on or before March 31 of each year, the utility will have the burden to demonstrate that the interim changes for the previous calendar year are warranted and correctly applied. The Consumer Advocate will provide comments regarding the changes with its Statement of Position. The RBA balance and RBA Rate Adjustment for the following year will reflect any appropriate modifications to the change made by the utility in the prior year if necessary.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

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Superseding REVISED SHEET NO. 92B
Effective June 1, 2017

REVISED SHEET NO. 92B
Effective February 16, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.19%
February	7.59%
March	8.10%
April	7.98%
May	8.40%
June	8.07%
July	8.70%
August	8.94%
September	8.65%
October	8.84%
November	8.26%
December	8.28%
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2017 test year rate case and shall be updated in any subsequent test year rate case.

C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be the short term debt rate as established in deriving the consolidated cost of capital in the Company's last full rate case. The Interest Rate prior to March 1, 2014 shall be 6 percent.

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

In its annual RBA Review Transmittal, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Order No. 35280, issued February 9, 2018.
Transmittal Letter Dated February 12, 2018.

Superseding REVISED SHEET NO. 92C
Effective June 1, 2017

REVISED SHEET NO. 92C
Effective January 1, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, any Performance Incentive Adjustment provided in accordance with the Performance Incentive Mechanism Provision and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

On or before March 31 of each year, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, an RBA Review Transmittal supporting the implementation of the RBA Provision, including RBA reconciliation, implementation of applicable components of the RAM Provision and Performance Incentive Mechanism Provision, determination and adjustments of target revenues, determination of the RBA Rate Adjustment; and documenting any errors, corrections and adjustments to Target Revenues in the preceding calendar year and prior to the transmittal date.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA and target revenue determinations shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, as part of the annual RBA Review Transmittal filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

Superseding REVISED SHEET NO. 92D
Effective June 1, 2018

REVISED SHEET NO. 92D
Effective June 1, 2019

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

All Rate Schedules 0.9580 ¢/kWh

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F. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual RBA Review Transmittal filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

G: COMMISSION'S AUTHORITY

The Commission may modify or suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

Superseding REVISED SHEET NO. 92E
Effective January 1, 2019

REVISED SHEET NO. 92E
Effective June 1, 2019

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

H: TARGET REVENUE, CURRENTLY IN EFFECT

Hawaiian Electric Company, Inc.
Annual Target Revenue (\$000s)

Description	Amount
1 Electric Sales Revenue (Unadjusted)	\$1,531,852
2 Tax Act Implementation Lag	(\$2,143)
3 Electric Sales Revenue (Adjusted)	\$1,529,709
Less:	
4 Fuel Expense	(\$327,609)
5 Purchase Power Expense	(\$466,211)
6 Revenue Tax on Electric Sales Revenue	(\$135,915)
7 Last Rate Order Target Revenues	\$599,974
8 Authorized RAM Revenues	\$20,351
9 Revenue Tax	(\$1,808)
10 Net RAM Adjustment	\$18,543
11 Authorized MPIR Revenues	\$19,811
12 Revenue Tax	(\$1,760)
13 Net MPIR Adjustment	\$18,051
14 Earnings Sharing Revenue Credits	\$0
15 Revenue Tax	\$0
16 Net Earnings Sharing Revenue Credits	\$0
17 Performance Incentive Mechansim (PIM)	\$54
18 Revenue Tax	(\$5)
19 Net PIM Reward (Penalty)	\$49
20 2017 Test Year Final D&O Refund	(\$48)
21 Revenue Tax	\$4
22 Net 2017 Test Year Final D&O Refund	(\$44)
23 On-Bill Financing Pgm Implementation Costs	\$844
24 Revenue Tax	(\$75)
25 Net On-Bill Financing Adjustment	\$769
26 Effective Target Revenue	\$637,342

Notes:

Totals may not add, due to rounding.

Lines 1,4,5: Final Decision and Order No. 35545, issued June 22, 2018 in Docket No. 2016-0328. Exhibit A.

Line 2: Hawaiian Electric March 2018 Settlement Tariff Sheets, Attachment 1, Line 2. Filed March 16, 2018 in Docket No. 2016-0328.

Lines 6,9,12,15,18,21,24: Revenue Tax based on 8.885% statutory rates.

Lines 8,11,14,17,20,23,26 Transmittal Nos. 19-01, 19-02, 19-03 Consolidated (Decoupling) Schedule B1 (Scenario 2A), filed May 28, 2019.

Change in Effective Target Revenue for MPIR is effective January 1, 2019. See Order 35556, filed June 27, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

I: HISTORICAL REFERENCE

<u>Category</u>	<u>Effective Period</u>	<u>Effective Target Revenue (\$000)</u>	<u>Change in Target Revenue (\$000)</u>	<u>Source</u>
Annual Decoupling Filing	6/1/2017 thru 2/15/2018	\$604,302	N/A (1/1/2018 Baseline)	Schedule B1 filed in Transmittal No. 17-02 on 3/31/2017.
2017 Test Year Rate Case (Interim)	2/16/2018 thru 4/12/2018	\$637,077	\$32,775	Schedule B1 filed in Docket No. 2016-0328 on 1/19/2018.
2017 Test Year Rate Case (Interim)	4/13/2018 thru 5/31/2018	\$599,960	(37,117)	Schedule B1 filed in Docket No. 2016-0328 on 3/16/2018.
Annual Decoupling Filing	6/1/2018 thru 6/30/2018	\$612,574	\$12,614	Schedule B1 filed in Transmittal No. 18-01 on 3/29/2018.
MPIR (Schofield)	7/1/2018 thru 9/30/2018	\$618,587	\$6,013	Schedule B1 filed in Docket No. 2017-0213 on 7/18/2018.
MPIR (Schofield)	10/1/2018 thru 12/31/2018	\$620,374	\$1,787	Schedule B1 filed in Docket No. 2017-0213 on 12/21/2018.
MPIR (Schofield)	1/1/2019 thru 5/31/2019	\$630,624	\$10,250	Schedule B1 filed in Transmittal No. 19-01 on 2/7/2019.
Annual Decoupling Filing	6/1/2019 (current)	\$637,342	\$6,718	Schedule B1 (Scenario 2A) filed in Transmittal No. 19-01 on 5/28/2019.

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

PERFORMANCE INCENTIVE MECHANISM PROVISION

Introduction

This Performance Incentive Mechanism ("PIM") Provision provides for the determination of a PIM Financial Incentive for each approved PIM for each Evaluation Period, based on Measured Performance compared to an established Performance Target for each PIM, as specified below.

The sum of the PIM Financial Incentives determined for all PIMs for the Evaluation Period will be the Performance Incentive Adjustment, which will be applied as an adjustment to the effective Target Revenue and will be recovered from or credited to customers through the RBA Rate Adjustment, as defined by and in accordance with the terms of the Revenue Balancing Account ("RBA") Provision.

Annual PIM Provision Transmittal

On or before March 31 of the year following an Evaluation Period, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, a transmittal documenting the Measured Performance and calculation of the PIM Financial Incentives and Performance Incentive Adjustment for the Evaluation Period. Complete, indexed schedules, workpapers and electronic files supporting the transmittal shall be provided with the transmittal. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, other rate case parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

The review of the annual PIM Provision transmittal will be conducted concurrent with and in conjunction with the annual RBA Review Transmittal. The Performance Incentive Adjustment will be determined annually based on the PIM Provision transmittal and, after review and subject to explicit approval by the Commission, will become effective on June 1 of the year following the Evaluation Period, concurrent and in conjunction with determination of Target Revenues and the RBA Rate Adjustment in accordance with the RBA Provision. Any approved Performance Incentive Adjustment will be applied as monthly adjustments to Target Revenues for the twelve month period commencing June 1 of the year following the Evaluation Period in accordance with the Monthly Allocation Factors identified in the RBA Provision.

The Performance Targets, Deadbands and the amount of Maximum Financial Incentives used to determine the PIM Financial Incentive

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

levels for each of the PIMs shall be re-determined upon issuance of an interim or final order in a general rate case for each Company and shall remain constant in interim periods, unless otherwise amended, as necessary, by order of the Commission.

In the event that Performance Targets, Deadbands or the amounts of Maximum Financial Incentives are updated or amended by order of the Commission during the Evaluation Period, the Performance Targets, Deadbands and the amounts of Maximum Financial Incentives used in determining the amount of PIM Financial Incentives shall be a pro-rated weighted average based on the number of days of the Evaluation Period each parameter was effective.

Any revenue adjustments approved in accordance with this PIM Provision shall be excluded from the determination of Earnings Sharing Credits provided for in the Rate Adjustment Mechanism Provision ("RAM Provision").

The Performance Incentive Adjustment, and any prior year Performance Incentive Adjustment, shall be recalculated for errors in prior calculations and for subsequent Commission orders that change the basis for prior calculations. The effect of such changes shall be implemented as described in the RBA Provision, except that, the Performance Target, Deadband and Maximum Financial Incentive amounts determined in this PIM Provision shall not be recalculated based on errors in the calculation of these parameters and shall remain as specified unless and until changed by order of the Commission.

Evaluation Period

The Evaluation Period is defined as the annual twelve month calendar year period ending December 31, over which Measured Performance is determined and compared to the established Performance Target for each PIM described below. The first Evaluation Period shall begin January 1, 2018.

PIM Financial Incentive Calculation

For each PIM below, a Performance Target is specified, developed based on historical performance data. A Deadband is specified for each Performance Target in order to provide a satisfactory range of performance within which no reward or penalty amount is assessed.

A Maximum Financial Incentive amount is specified for each PIM with separate identification of a Maximum Reward Amount and a Maximum Penalty Amount.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017. Transmittal Letter dated January 11, 2018.

Superseding Sheet no. 98B
Effective January 1, 2018

REVISED SHEET NO. 98B
Effective September 1, 2018

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Measured Performance for the Evaluation Period is compared to the Performance Target for each PIM. If the difference between Measured Performance and the Performance Target is less than or equal to the Deadband amount, no reward or penalty is awarded and the amount of the PIM Financial Incentive is zero. If the difference between Measured Performance and the Performance Target exceeds the Deadband amount, a reward or penalty ratio is calculated where the difference between Measured Performance and the Performance Target, less the Deadband amount, is the numerator and the Deadband amount is the denominator. This ratio is multiplied by either the Maximum Reward Amount or Maximum Penalty Amount, as applicable, to determine the PIM Financial Incentive for each PIM. The magnitude of the PIM Financial Incentive for each PIM shall not exceed 100% of the magnitude of the applicable Maximum Reward Amount or Maximum Penalty Amount established for each PIM.

Reliability Performance Incentive Mechanisms

There are two reliability PIMs: 1) System Average Interruption Frequency Index ("SAIFI"); and 2) System Average Interruption Duration Index ("SAIDI"). SAIFI is a measure of the average frequency of outages, defined as the annual total number of customer interruptions divided by the total number of customers served. SAIDI is a measure of the average duration of outage, defined as the sum of all customer interruption durations (in minutes) divided by the total number of customers served. The SAIFI and SAIDI Measured Performance and Performance Targets are determined using the IEEE Standard 1366 methodology.

For the Reliability Performance Incentive Mechanisms, the 2008-2017 record of historical performance data was used to establish the Performance Target and the Deadband. The Deadband was calculated as ± 1 standard deviation of the historical performance data. Accordingly, 100% of the penalty is achieved when Measured Performance is equal to or greater than 2 standard deviations from the Performance Target.

SAIFI:

Performance Target: 1.103 interruptions per customer during the one-year Evaluation Period

Deadband: ± 0.088 interruptions (1 Standard Deviation)

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Superseding Sheet No. 98C
Effective January 1, 2018

REVISED SHEET NO. 98C
Effective September 1, 2018

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Range for no penalty: 1.015 interruptions to 1.191
interruptions per customer (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 1.191 interruptions per customer

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

SAIDI:

Target: 99.23 minutes per outage

Deadband: \pm 8.96 minutes (1 Standard Deviation)

Range for no penalty: 90.27 minutes to 108.19 minutes per outage (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 108.19 minutes per outage

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Call Center Performance Incentive Mechanism

The Call Center Performance PIM measures the performance of the utility call center in terms of the percentage of calls answered within thirty (30) seconds. The calculation of the call center performance shall exclude blocked calls from the denominator.

The Performance Target for the Call Center Performance Incentive Mechanism was calculated based on the average of quarterly data from Quarter 3 of 2016 to Quarter 2 of 2018.

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Superseding Sheet No. 98D
Effective September 1, 2018

REVISED SHEET NO. 98D
Effective June 1, 2019

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PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Call Center Performance:

Performance Target: 80.10% of calls answered within 30 seconds

Deadband: +/- 3.00% of calls answered within 30 seconds

Range for no reward or penalty: 77.10 % of calls answered to 83.10% of calls answered.

Rewards apply for greater than 83.10 % of calls answered
Penalties apply for less than 77.10 % of calls answered

Maximum Reward Amount: \$910,567.
Maximum Penalty Amount: \$910,567.

The magnitude of the Maximum Reward Amount and Maximum Penalty Amount were determined to be equal to 0.08% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Additional PIMs:

The Commission may order the establishment of one or more PIMs, and the targets, deadbands, rewards, penalties, and allocations for that PIM, as applicable, shall be implemented as specified in the Commission's order that approved the applicable PIM, and the applicable PIM Financial Incentive shall be included in the Performance Incentive Adjustment.

Commission's Authority

The Commission may suspend any or all parts of this PIM Provision. Such suspension shall remain in place until removed by Commission order.

Deleted: Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.¶

HAWAIIAN ELECTRIC COMPANY, INC

Transmittal Letter dated May 28, 2019.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Historical Reference

The following table summarizes the prior PIMs in effect, as these values may be applicable during certain portions of the Evaluation Period.

PIM:	Effective Period:	Performance Target:	Deadband:	Maximum Reward:	Maximum Penalty:
SAIFI	1/1/2018 thru 2/15/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,039,094
SAIFI	2/16/2018 thru 4/12/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,260,799
SAIFI	4/13/2018 thru 8/31/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,276,417
SAIDI	1/1/2018 thru 2/15/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,039,094
SAIDI	2/16/2018 thru 4/12/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,260,799
SAIDI	4/13/2018 thru 8/31/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,276,417
Call Center	1/1/2018 thru 2/15/2018	79.07% of calls answered within 30 sec.	+/- 3.00%	\$815,638	\$815,638
Call Center	2/16/2018 thru 4/12/2018	79.46% of calls answered within 30 sec.	+/- 3.00%	\$904,320	\$904,320
Call Center	4/13/2018 thru 8/31/2018	79.56% of calls answered within 30 sec.	+/- 3.00%	\$910,567	\$910,567

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Attachment 2A – List of Schedules and Workpapers

Schedule A (REVISED)	HECO-WP-A-001
Schedule A1 (REVISED)	HECO-WP-B-001
Schedule B (REVISED)	HECO-WP-C-001
Schedule B1 (REVISED)	HECO-WP-C-002
Schedule B2	HECO-WP-C-003
Schedule C	HECO-WP-D1-001
Schedule C1	HECO-WP-D2-001
Schedule C2	HECO-WP-D2-002
Schedule D (REVISED)	HECO-WP-D2-003
Schedule D1 (REVISED)	HECO-WP-D2-004
Schedule D2	HECO-WP-D3-001
Schedule D3	HECO-WP-D4-001
Schedule D4	HECO-WP-D4-002
Schedule D5 (REVISED)	HECO-WP-D4-003
Schedule E (REVISED)	HECO-WP-E-001
Schedule F (REVISED)	HECO-WP-F-001
Schedule F1	HECO-WP-F1-001
Schedule F2	HECO-WP-F1-002
Schedule G	HECO-WP-F1-003
Schedule H (REVISED)	HECO-WP-H-001
Schedule I	HECO-WP-H-002
Schedule J	HECO-WP-H-003
Schedule K	HECO-WP-H-004
Schedule L	HECO-WP-H-005
Schedule L1	HECO-WP-H-006
Schedule M	HECO-WP-H-007
Schedule N	HECO-WP-H-008
	HECO-WP-H-009
	HECO-WP-L1-001
	HECO-WP-L1-002
	HECO-WP-L1-003
	HECO-WP-M-001
	HECO-WP-M-002
	HECO-WP-M-003
	HECO-WP-M-004
	HECO-WP-M-005

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF 2019 REVENUE BALANCING ACCOUNT RATE ADJUSTMENT
SCENARIO 2 - WEST LOCH PV EXCLUDED FROM RAM REVENUE ADJUSTMENT /
25 KV EXCLUDED FROM 2018 SAIDI AND SAIFI PIM CALCULATIONS

Line No.	Description (a)	Reference (b)	Amount (c)	6/1/2019 Rate Amount (d)		
RECONCILIATION OF RBA BALANCE:						
1	RBA Prior calendar year-end balance	Schedule B	\$ 37,331,443			
1a	OBF Program Implementation Cost Recovery - Year 1 of 2	Schedule N	\$ 768,575			
			\$ 38,100,018			
2	Revenue Tax Factor	Schedule C	1.0975			
3	Revenue for RBA Balance			\$ 41,814,770		
RATE ADJUSTMENT MECHANISM "RAM" AMOUNT:						
4	Total RAM Revenue Adjustment Allowed (Note 2)	Schedule A1		\$ 20,351,049		
5	<u>EARNINGS SHARING REVENUE CREDITS - 2019 ROE:</u>	Schedule H		\$ -		
6	<u>PERFORMANCE INCENTIVE MECHANISM REWARD (PENALTY)</u>	Schedule M		\$ 53,998		
7	<u>2017 TEST YEAR RATE CASE FINAL D&O REFUND</u>	Note (3)		\$ (48,000)		
8	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS</u>	Schedule I		\$ -		
9	TOTAL RBA REVENUE ADJUSTMENT	Sum Col. (d)		\$ 62,171,817		
10	GWH SALES VOLUME ESTIMATE JUNE 2019 - MAY 2020	HECO-WP-A-001		6,489,900		
11	RBA RATE ADJUSTMENT - cents per kWh	Note (1)		0.9580	6/1/2018 1.0350	Incremental (0.0770)
12	MONTHLY BILL IMPACT @ 600 KWH			\$ 5.75	\$ 6.21	\$ (0.46)
	MONTHLY BILL IMPACT @ 500 KWH			\$ 4.79	\$ 5.18	\$ (0.39)
Note (1): 2019 RBA Rate Adjustment Breakdown						
			Col. (d)	Rate Adjustment cents per kWh	Percentage Share	
	RBA Balance		\$ 41,814,770	0.64430530	67.2568%	
	RAM Amount		\$ 20,351,049	0.31358032	32.7336%	
	Earnings Sharing Revenue Credits		\$ -	0.00000000	0.0000%	
	Performance Incentive Mechanism Reward (Penalty)		\$ 53,998	0.00083204	0.0869%	
	2017 Test Year Rate Case Final D&O Refund		\$ (48,000)	-0.00073961	-0.0772%	
	Major or Baseline Capital Projects Credits		\$ -	0.00000000	0.0000%	
			\$ 62,171,817	0.95797804	100.0000%	

Note (2): Total RAM Revenue Adjustment Allowed is the sum of the RAM Cap + Exceptional and Other Projects. See Order No. 32735, filed March 31, 2015, paragraph 107, page 94, which states that the Total RAM Revenue Adjustment is to be comprised of the RAM Cap plus recovery of Exceptional And Other Matters.

Note (3): Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Hawaiian Electric Proposed PIM Tariff Revisions and Refund Calculation, Exhibit 4, filed July 23, 2018, and approved by the Commission in Order No. 35661, filed August 30, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TOTAL RAM REVENUE ADJUSTMENT ALLOWED

Line No.	Description (a)	Reference (b)	Amount (c)
RAM REVENUE ADJUSTMENT DETERMINED ACCORDING TO EXISTING TARIFFS AND PROCEDURES			
1	O&M RAM	Schedule C	\$ 8,622,195
2	Rate Base RAM - Return on Investment	Schedule D	\$ 8,789,138
3	Depreciation & Amortization RAM Expense	Schedule E	\$ 2,939,716
4	Total RAM Revenue Adjustment		\$ 20,351,049
RAM REVENUE ADJUSTMENT CAP			
5	RAM Cap for 2019 RAM Revenue Adjustment	Schedule J	\$ 27,945,687
6	Plus: Exceptional and Other Matters	Schedule K	\$ -
7	2019 Cap - Total RAM Revenue Adjustment (Note 2)		\$ 27,945,687
8	Total RAM Revenue Adjustment Allowed (Note 1)	Lesser of Line 4 or Line 7	\$ 20,351,049

To Sch A

Note 1 RAM Revenue Adjustment Allowed:

See Order No. 32735, filed March 31, 2015, paragraph 106, page 94:

"The RAM Revenue Adjustment to be applied to determine effective Target Revenues will be the lesser of (a) the RAM Revenue Adjustment determined according to existing tariffs and procedures or (b) a RAM Revenue Adjustment Cap ("RAM Cap) to be calculated as specified."

Note 2 Total RAM Cap:

See Order No. 32735, filed March 31, 2015, paragraph 110, page 96:

"The RAM Cap will apply to the entire RAM Revenue Adjustment including the O&M RAM, Rate Base RAM (including Major Capital Projects and Baseline Projects), and the Depreciation and Amortization RAM."

Note 3 See Decision and Order No. 35768, Docket No. 2018-0075 filed October 16, 2018. Commission approved the Asset Transfer, Pole Licensing and Amended Joint Pole Agreements and the accounting and ratemaking treatment described in Exhibit E of the Application. The negotiated settlement over a ten year period for attachment fees, inclusive of revenue taxes, is \$2,371,930 per year.

For ratemaking purposes, attachment and ancillary revenues received from Hawaiian Telcom and other third party attachers for use of the poles are reflected in other operating revenue and will offset any depreciation costs of transferred poles and related equipment, and the authorized return to the Companies shareholders.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
SUMMARY OF ACCUMULATED REVENUE BALANCING ACCOUNT

Line No.	Month	Beginning Balance	Target Revenues	Recorded Adjusted Revenue	Variance to RBA	Adjustment for prior year RBA accrual	Tax-effected Balance Subject to Interest	Interest at 1.75%/year	Ending Balance
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Monthly RBA Balance and Activity (Monthly PUC Rpt)									
		\$ 18,013,624							
1	2017 December	\$ 46,306,327	\$ 49,915,326	\$ 43,730,598	\$ 6,184,728	\$ (3,302,057)	29,169,047	\$ 42,538	\$ 49,231,536
2									
3	2018 January	\$ 49,231,536	\$ 48,948,443	\$ 43,871,232	\$ 5,077,211	\$ (3,369,650)	\$ 37,188,347	\$ 54,233	\$ 50,993,330
4	February	\$ 50,993,330	\$ 45,953,154	\$ 40,430,219	\$ 5,522,935	\$ (4,185,853)	\$ 38,358,939	\$ 55,940	\$ 52,386,352
5	March	\$ 52,386,352	\$ 51,603,222	\$ 46,365,780	\$ 5,237,442	\$ (3,345,112)	\$ 39,599,394	\$ 57,749	\$ 54,336,431
6	April	\$ 54,336,431	\$ 49,061,587	\$ 45,638,864	\$ 3,422,723	\$ (3,430,466)	\$ 40,341,925	\$ 58,832	\$ 54,387,520
7	May	\$ 54,387,520	\$ 50,396,658	\$ 43,802,261	\$ 6,594,397	\$ (3,440,553)	\$ 41,553,464	\$ 60,599	\$ 57,601,782
8	June	\$ 57,601,782	\$ 49,434,694	\$ 46,747,403	\$ 2,687,291	\$ (4,129,862)	\$ 42,233,769	\$ 61,591	\$ 56,220,802
9	July	\$ 56,220,802	\$ 53,817,091	\$ 50,144,604	\$ 3,672,487	\$ (4,451,628)	\$ 41,454,689	\$ 60,455	\$ 55,502,116
10	August	\$ 55,502,116	\$ 55,301,701	\$ 50,148,289	\$ 5,153,412	\$ (4,546,694)	\$ 41,435,565	\$ 60,427	\$ 56,169,261
11	September	\$ 56,169,261	\$ 53,507,798	\$ 54,077,963	\$ (570,165)	\$ (4,315,858)	\$ 39,891,740	\$ 58,175	\$ 51,341,413
12	October	\$ 51,341,413	\$ 54,683,113	\$ 56,214,832	\$ (1,531,719)	\$ (4,543,142)	\$ 35,865,707	\$ 52,304	\$ 45,318,856
13	November	\$ 45,318,856	\$ 51,095,307	\$ 51,711,892	\$ (616,585)	\$ (4,111,538)	\$ 31,893,935	\$ 46,512	\$ 40,637,245
14	Oct/Nov True-Up		\$ 305,574		\$ 305,574			\$ 453	\$ 40,943,272
15	December	\$ 40,943,272	\$ 51,366,986	\$ 51,070,061	\$ 296,925	\$ (3,951,109)	\$ 29,043,764	\$ 42,355	\$ 37,331,443
16			\$ 615,475,328	\$ 580,223,400	\$ 35,251,928	\$ (47,821,465)		\$ 669,625	
17									
18									
19	2019 January	\$ -	\$ 51,648,125	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	February	\$ -	\$ 47,864,379	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	March	\$ -	\$ 51,080,563	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April	\$ -	\$ 50,323,814	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	May	\$ -	\$ 52,972,435	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	OBF Recovery	\$ 1,537,150							\$ -
24a	June	\$ -	\$ 51,433,485	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	July	\$ -	\$ 55,448,738	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	August	\$ -	\$ 56,978,359	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	September	\$ -	\$ 55,130,068	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	October	\$ -	\$ 56,341,017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	November	\$ -	\$ 52,644,434	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	December	\$ -	\$ 52,771,903	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
31									

Sources of Data: Sch. B1 Sch B2 Cols (c)-(d) Note (1) Col ((b)+(e)+(f))/2/(k) Cols (b)+(e)+(f)+(h)
Note (3)

Composite Federal & State Income Tax Rate 25.75% (j)
Income Tax Factor (1 / 1-tax rate) 1.346801347 (k)

Note (1):
Amounts represent recovery of prior years' RBA balance through the RBA rate adjustment effective June 1, 2017 for the period June 2017 through May 2018 and June 1, 2018 for the period June 2018 through May 2019.

Note (2):
In May 2018, the Company identified an inadvertent transposition error in the DSM adjustment (\$67,965) used to derive Recorded Adjusted Revenues. May 2018 Recorded Adjusted Revenues includes a true-up of -\$135,930 (-\$123,853 net of revenue taxes) to properly state the RBA Balance as of May 2018. The May 2018 balance includes an adjustment of -\$181 related to interest resulting from this correction.

Note (3):
In December 2018, the Company recorded a RBA Target true-up adjustment resulting from the Schofield Generating Station MPIR Order No. 35953, issued 12/14/18 in Docket No. 2017-0213, effective October 1, 2018. The RBA balance includes an adjustment of \$306,027 related to the incremental Target Revenues (\$305,574) and related interest (\$453) to properly state the RBA balance as of December 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (c)	Docket No. 2016-0328 Amounts (d)	Docket No. 2016-0328 Amounts (e)	Docket No. 2016-0328 Amounts (f)	Docket No. 2016-0328 Amounts (g)	Docket No. 2016-0328 Amounts (h)	
1	<u>Last Rate Case Annual Electric Revenue at Approved Rate I</u>	Note (3), (5), (5a)	\$000s \$ 1,765,954	\$ 1,581,445	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	
1a	Less: Holdback of Interim Revenues	Note (3)	\$000s \$ -	\$ (5,000)	\$ -	\$ -	\$ -	\$ -	
1b	Less: Customer Benefit Adjustment	Note (3)	\$000s \$ -	\$ (6,000)	\$ -	\$ -	\$ -	\$ -	
2	Less: Fuel Expense	Note (3), (5), (5a)	\$000s \$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	
3	Purchased Power Expense	Note (3), (5), (5a)	\$000s \$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rate)		\$000s \$ (156,905)	\$ (139,534)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)	
5	Last Rate Order Target Annual Revenues	Sum Lines 1...4	\$000s \$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974	
6	Authorized RAM Revenues	Note (1a)	\$000s \$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -	
7	Less: Revenue Taxes on Line 6 at 8.885%		\$000s \$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -	
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$000s \$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -	
9	Authorized RAM Revenues	Note (7)	\$000s \$ -	\$ -	\$ -	\$ 13,828	\$ 13,828	\$ 13,828	
10	Less: Revenue Taxes on Line 9 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ (1,229)	\$ (1,229)	\$ (1,229)	
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$000s \$ -	\$ -	\$ -	\$ 12,599	\$ 12,599	\$ 12,599	
12	Authorized RAM Revenues	Sch A, Line 4	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
13	Less: Revenue Taxes on Line 12 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
14	Net RAM Adjustment - Test Year +2	Lines 12 + 13	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
15	Authorized MPIR Revenues	Schedule L	\$000s \$ -	\$ -	\$ -	\$ -	\$ 6,600	\$ 8,561	
16	Less: Revenue Taxes on Line 15 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ (586)	\$ (761)	
17	Net MPIR Adjustment	Lines 15 + 16	\$000s \$ -	\$ -	\$ -	\$ -	\$ 6,014	\$ 7,800	
18	Less: <u>EARNINGS SHARING REVENUE CREDITS</u>	Note (1a)	\$000s \$ (16)	\$ (16)	\$ (16)	\$ -	\$ -	\$ -	
19	Less: Revenue Taxes on Line 18 at 8.885%		\$000s \$ 1	\$ 1	\$ 1	\$ -	\$ -	\$ -	
20	Net Earnings Sharing Revenue Credits	Lines 18 + 19	\$000s \$ (14)	\$ (14)	\$ (14)	\$ -	\$ -	\$ -	
21	Less: <u>PERFORMANCE INCENTIVE MECHANISM</u>	Sch A, Line 6	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
22	Less: Revenue Taxes on Line 24 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
23	Net Performance Incentive Mechanism	Lines 21 + 2	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
24	Less: <u>2017 TEST YEAR FINAL D&O REFUND</u>	Sch A, Line 8	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
25	Less: Revenue Taxes on Line 27 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
26	Net 2017 Test Year Final D&O Refund	Lines 24 + 25	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
27	Add: <u>OBF PROGRAM IMPLEMENTATION COSTS</u>	Sch A, Line 1a * 1.0975	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
28	Less: Revenue Taxes on Line 21 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
29	Net OBF Program Implementation Costs	Lines 27 + 28	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
30	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:</u>	Note (1a)	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
31	Total Annual Target Revenues								
32	June 1, 2017 Annualized Revenues w/RAM Increase	Col (c), lines (5+8+20+30)	\$000s \$ 604,302						
33	February 16, 2018 Annualized Revenues w/Interim Increase	Col (d), lines (5+8+20+30)	\$000s \$ -	\$ 637,077					
34	April 13, 2018 Annualized Revenues w/2nd Interim Increase	Col (e), lines (5+11+20+30)	\$000s \$ -		\$ 599,960				
35	June 1, 2018 Annualized Revenues w/RAM Increase	Col (f), lines (5+11+20+30)	\$000s \$ -			\$ 612,574			
36	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 7/1/18	Col (g), lines (5+11+17+20+30)	\$000s \$ -				\$ 618,587		
37	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 10/1/18	Col (h), lines (5+11+17+20+30)	\$000s \$ -					\$ 620,374	
38	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 1/1/19	Col (i), lines (5+11+17+20+30)	\$000s \$ -						
39	June 1, 2019 Annualized Revenues w/RAM Increase & MPIR accrued 1/1/19	Col (j), lines (5+14+17 +20+23+26+29+30)	\$000s \$ -						
40	<u>Distribution of Target Revenues by Month:</u>	Note (1)	Note (2)	Note (4) 2018	Note (4), (6) 2018	Note (6) 2018	2018	Note (8) 2018	Note (8a) 2018
41	January	8.10%	8.19%	\$48,948,443					
42	February	7.26%	7.59%	\$23,503,022	\$22,450,132				
43	March	8.10%	8.10%		\$51,603,222				
44	April	7.84%	7.98%		\$20,335,492	\$28,726,095			
45	May	8.44%	8.40%			\$50,396,658			
46	June	8.47%	8.07%				\$49,434,694		
47	July	8.77%	8.70%					\$53,817,090	
48	August	9.04%	8.94%					\$55,301,700	
49	September	8.68%	8.65%					\$53,507,797	
50	October	8.78%	8.84%						\$54,841,062
51	November	8.26%	8.26%						\$51,242,893
52	December	8.26%	8.28%						\$51,366,968
53	Total Distributed Target Revenues	100.00%	100.00%	\$72,451,465	\$94,388,846	\$79,122,753	\$49,434,694	\$162,626,587	\$157,450,923

Footnotes:

- 1 RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- 1a Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- 2 RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- 3 Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328: \$35,971 \$000s
- 4 For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days: 0.46429
- 5 Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328: -\$603 \$000s
- 5a Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335): -\$2,143 \$000s
- 6 For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days: 0.60000
- 7 Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.
- 8 MPIR Revenue accrual starting effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213. Excerpt filed at HECO-WP-L1-003.
- 8a MPIR Revenue accrual starting October 1, 2018 approved in Order No. 35953, issued December 14, 2018 in Docket No. 2017-0213. Excerpt filed at HECO-WP-L1-003.
- 8b MPIR Revenue accrual starting January 1, 2019 filed in Transmittal 19-01, filed February 7, 2019. Excerpt filed at HECO-WP-L1-003.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description (a)	Reference (b)		Docket No.	Docket No.	Docket No.
				2016-0328 Amounts (i)	2016-0328 Amounts (j)	2016-0328 Amounts (k)
1	<u>Last Rate Case Annual Electric Revenue at Approved Rate I</u>	Note (3), (5), (5a)	\$000s	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (3)	\$000s	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (3)	\$000s	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (3), (5), (5a)	\$000s	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (3), (5), (5a)	\$000s	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rate)		\$000s	\$ (135,915)	\$ (135,915)	\$ (135,915)
5	Last Rate Order Target Annual Revenues	Sum Lines 1..4	\$000s	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (1a)	\$000s	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 6 at 8.885%		\$000s	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$000s	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (7)	\$000s	\$ 13,828	\$ -	\$ -
10	Less: Revenue Taxes on Line 9 at 8.885%		\$000s	\$ (1,229)	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$000s	\$ 12,599	\$ -	\$ -
12	Authorized RAM Revenues	Sch A, Line 4	\$000s	\$ -	\$ 20,351	\$ 20,351
13	Less: Revenue Taxes on Line 12 at 8.885%		\$000s	\$ -	\$ (1,808)	\$ (1,808)
14	Net RAM Adjustment - Test Year +2	Lines 12 + 13	\$000s	\$ -	\$ 18,543	\$ 18,543
15	Authorized MPIR Revenues	Schedule L	\$000s	\$ 19,811	\$ 19,811	\$ 19,811
16	Less: Revenue Taxes on Line 15 at 8.885%		\$000s	\$ (1,760)	\$ (1,760)	\$ (1,760)
17	Net MPIR Adjustment	Lines 15 + 16	\$000s	\$ 18,051	\$ 18,051	\$ 18,051
18	Less: <u>EARNINGS SHARING REVENUE CREDITS</u>	Note (1a)	\$000s	\$ -	\$ -	\$ -
19	Less: Revenue Taxes on Line 18 at 8.885%		\$000s	\$ -	\$ -	\$ -
20	Net Earnings Sharing Revenue Credits	Lines 18 + 19	\$000s	\$ -	\$ -	\$ -
21	Less: <u>PERFORMANCE INCENTIVE MECHANISM</u>	Sch A, Line 6	\$000s	\$ -	\$ 54	\$ 54
22	Less: Revenue Taxes on Line 24 at 8.885%		\$000s	\$ -	\$ (5)	\$ (5)
23	Net Performance Incentive Mechanism	Lines 21 + 2	\$000s	\$ -	\$ 49	\$ 49
24	Less: <u>2017 TEST YEAR FINAL D&O REFUND</u>	Sch A, Line 8	\$000s	\$ -	\$ (48)	\$ (48)
25	Less: Revenue Taxes on Line 27 at 8.885%		\$000s	\$ -	\$ 4	\$ 4
26	Net 2017 Test Year Final D&O Refund	Lines 24 + 25	\$000s	\$ -	\$ (44)	\$ (44)
27	Add: <u>OBF PROGRAM IMPLEMENTATION COSTS</u>	Sch A, Line 1a * 1.0975	\$000s	\$ -	\$ 844	\$ 844
28	Less: Revenue Taxes on Line 21 at 8.885%		\$000s	\$ -	\$ (75)	\$ (75)
29	Net OBF Program Implementation Costs	Lines 27 + 28	\$000s	\$ -	\$ 769	\$ 769
30	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:</u>	Note (1a)	\$000s	\$ -	\$ -	\$ -
31	Total Annual Target Revenues					
32	June 1, 2017 Annualized Revenues w/RAM Increase	Col (c), lines (5+8+20+30)	\$000s			
33	February 16, 2018 Annualized Revenues w/Interim Increase	Col (d), lines (5+8+20+30)	\$000s			
34	April 13, 2018 Annualized Revenues w/2nd Interim Increase	Col (e), lines (5+11+20+30)	\$000s			
35	June 1, 2018 Annualized Revenues w/RAM Increase	Col (f), lines (5+11+20+30)	\$000s			
36	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 7/1/18	Col (g), lines (5+11+17+20+30)	\$000s			
37	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 10/1/18	Col (h), lines (5+11+17+20+30)	\$000s			
38	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 1/1/19	Col (i), lines (5+11+17+20+30)	\$000s	\$ 630,624		
39	June 1, 2019 Annualized Revenues w/RAM Increase & MPIR accrued 1/1/19	Col (j), lines (5+14+17 +20+23+26+29+30)	\$000s		\$ 637,342	\$ 637,342
40	<u>Distribution of Target Revenues by Month:</u>	Note (1)	Note (2)	Note (8b) 2019	Note (8b) 2019	Note (8b) 2020
41	January	8.10%	8.19%	\$51,648,125		\$52,198,295
42	February	7.26%	7.59%	\$47,864,379		\$48,374,244
43	March	8.10%	8.10%	\$51,080,563		\$51,624,688
44	April	7.84%	7.98%	\$50,323,814		\$50,859,877
45	May	8.44%	8.40%	\$52,972,435		\$53,536,713
46	June	8.47%	8.07%		\$51,433,485	
47	July	8.77%	8.70%		\$55,448,738	
48	August	9.04%	8.94%		\$56,978,359	
49	September	8.68%	8.65%		\$55,130,068	
50	October	8.78%	8.84%		\$56,341,017	
51	November	8.26%	8.26%		\$52,644,434	
52	December	8.26%	8.28%		\$52,771,903	
53	Total Distributed Target Revenues	100.00%	100.00%	\$253,889,316	\$380,748,004	\$256,593,817

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF O&M RAM ADJUSTMENT
(\$ in Thousands)

Line No.	Decryption	Reference	Docket No. 2016-0328 Approved	Footnote 4 Previously Approved RAM	O&M Subject to Escalation Col (c) + (d) (e)	Net Inflation Indices Footnote 2 (f)	2019 O&M RAM Adjustment Col (e) * (f) (g)	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	Base BU Labor Expenses	Schedule C1	\$ 47,048		\$ 47,048	4.19%	\$ 1,973	
2	Base Non-Labor Expense	Schedule C2	\$ 134,734		\$ 134,734	4.24%	\$ 5,718	
3	Payroll Taxes	Footnote 1	\$ 3,943		\$ 3,943	4.19%	\$ 165	
4	Subtotal Expense Increase - RAM Adjustment before revenue taxes							\$ 7,856
5	Revenue Tax Factor (Footnote 3)							1.0975
6	O&M RAM (SubTotal Expenses x Rev Tax Factor)							\$ 8,622
								To Sch A1

Footnotes:

1: Payroll Taxes per Stipulated Settlement Letter, filed March 5, 2018 in Docket No. 2016-0328, Exhibit 2C, page 6, approved in Order No. 35545, filed June 22, 2018.	\$	9,342
Less: Portion of payroll taxes related to non-BU labor ^A (57.79% * 9,342)	\$	(5,399)
Payroll Taxes related to Bargaining Unit labor	\$	3,943

^A See Schedule C1 for calculation of percentage related to non-BU labor.

2: Escalation Rates

Labor:	2018	2019	
Bargaining Unit Wage Increase	2.67%	3.00%	(See HECO-WP-C-001)
Less: Labor Productivity Offset	0.76%	0.76%	Approved in Final D&O in Docket No. 2008-0274, page 51, filed on August 31, 2010
Labor Cost Escalation Rate	1.91%	2.24%	

Calculation of 2018 Compounded Labor Cost Escalation

2018 Labor Cost Escalation	1.0191	A (2018 labor escalation plus 1)
2019 Labor Cost Escalation	1.0224	B (2019 labor escalation plus 1)
2018-2019 Compounded Labor Cost Escalation	1.0419	C = A * B
2018-2019 Compounded Labor Cost %	0.0419	D = C - 1

Non-Labor:

GDP Price Index	2018	2019	
	2.10%	2.10%	(See HECO-WP-C-002)

Calculation of 2018 Compounded Non-Labor Cost Escalation

2018 Non-Labor Cost Escalation	1.0210	A (2018 non-labor escalation plus 1)
2019 Non-Labor Cost Escalation	1.0210	B (2019 non-labor escalation plus 1)
2018-2019 Compounded Non-Labor Cost Escalation	1.0424	C = A * B
2018-2019 Compounded Non-Labor Cost %	0.0424	D = C - 1

3: Computation of Revenue Tax Factor

Public Service Tax Rate	0.05885	
PUC Fees Rate	0.00500	
Franchise Tax Rate	0.02500	
Total Revenue Tax Rate	0.08885	Revenue Tax Factor = 1 / (1 - Total Revenue Tax Rate) 1.0975

4: Column d "Previously Approved RAM" is not used as the labor and non-labor escalation is accomplished through the use of a compounded escalation rate in column f, as shown in footnote 2.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKSHEET
RATE ADJUSTMENT MECHANISM SUMMARY OF
OPERATIONS AND MAINTENANCE LABOR AND NON-LABOR EXPENSE
BY BLOCK OF ACCOUNTS
Interim D&O - Docket No. 2016-0328
(\$ in Thousands)

DESCRIPTION	Footnote 1		Footnote 2		(e) TOTAL
	(a) BU LABOR	(b) NON-BU LABOR	(c)=(a)+(b) TOTAL LABOR	(d) NON-LABOR	
Production	21,744	13,212	34,956	44,350	79,306
Transmission	2,420	2,933	5,353	10,454	15,807
Distribution	12,086	7,321	19,407	27,418	46,825
Customer Accounts	8,258	3,618	11,876	8,478	20,354
Allowance for Uncoll Accounts	-	-	-	732	732
Customer Service	134	5,582	5,716	9,936	15,652
Administrative & General	2,406	31,769	34,175	85,583	119,758
Customer Benefit Adjustment (Footnote 3)	-	-	-	(10,023)	(10,023)
Operation and Maintenance	47,048	64,435	111,483	176,928	288,411
	To Sch C			To Sch C2	X
Percentage of Total O&M Labor	42.20%	57.79%	100%		

* amounts may not add due to rounding

Footnotes:

1 SOURCE: 2017 test year breakdown of BU and non-BU labor obtained from UI Planner Budget files.

2 O&M breakdown below includes fuel and purchase power expenses consistent with the presentation in the Results of Operations.

	Footnote 2a			Footnote 2b	
	LABOR	NON-LABOR	TOTAL	ADJUST- MENT	STIPULATED SETTLEMENT
FUEL	-	327,609	327,609		327,609
PURCHASE POWER	-	466,211	466,211		466,211
PRODUCTION	34,956	44,350	79,306		79,306
TRANSMISSION	5,354	10,454	15,808		15,808
DISTRIBUTION	19,407	27,418	46,825		46,825
CUSTOMER ACCOUNTS	11,876	8,478	20,354		20,354
UNCOLLECTIBLE ACCOUNTS	-	732	732		732
CUSTOMER SERVICE	5,715	9,936	15,651		15,651
ADMIN & GENERAL	34,265	85,945	120,210	(452)	119,758
CUSTOMER BENEFIT ADJUSTMENTS	-	-	-	(10,023)	(10,023)
TOTAL	111,573	981,133	1,092,706	(10,475)	1,082,231
TOTAL O&M EXPENSE (Excl Fuel & Purch Po	111,573	187,313	298,886	(10,475)	288,411

2a See Order No. 35280, For Approval of General Rate Case and Revised Schedules/Rules, filed on February 9, 2018, in which the Commission approved the revised schedules or operations and tariff sheets filed January 19, 2018, Exhibit A, Page 1 of 4.
See Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229 and Order No. 35220, filed January 19, 2018, Exhibit 2, Attachment 1, Page 1 for Labor/Non-Labor breakdown.

2b See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 1 of 13.

3 Customer Benefit Adjustments identified in the Results of Operations have been included as a reduction to O&M non-labor subject to escalation. See Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, Appendix A, page 1 of 4, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK

Non-Labor Exclusion
Adjustment for O&M RAM
(\$ thousands)

<u>Line No.</u>	<u>Decription</u> (a)	<u>Amount</u> (b)	<u>Reference</u> (c)
1	Pension Expense	73,940	Note 1
2			
3			
4	OPEB Expense	(470)	Note 1
5			
6			
7	Total before amounts transferred	73,470	
8			
9	O&M %	57.43%	See Parties' Stipulated Settlement Letter, filed November 15, 2017, in Docket No. 2016-0328, HECO T-16 Attachment 4, page 1
10	(1- transfer rate of 42.57%)		
11			
12			
13	Adjustment to Non-Labor O&M Expense		
14	for O&M RAM base	42,194	
15			
16			
17	Non-Labor O&M Expense per Interim D&O	176,928	Schedule C1
18			
19			
20	Non-Labor O&M Expense Base for		
21	O&M RAM base	<u>134,734</u>	Schedule C

Note 1: See Parties' Stipulated Settlement Letter, filed November 15, 2017 in Docket No. 2016-0328, Exhibit 1, page 63 for the summary of the pension and OPEB cost the Parties agreed to. In Parties' Stipulated Settlement Letter on Remaining Issues, filed March 5, 2018 in Docket No. 2016-0328, Exhibit 1, page 4, amortization of the excess pension contribution from the test year was reduced to zero. Approved in Final Decision and Order No. 35545, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RATE BASE RAM ADJUSTMENT - RETURN ON INVESTMENT

Line No.	Description	AMOUNTS IN THOUSANDS	PERCENT OF TOTAL	COST RATE	POST TAX WEIGHTED EARNINGS REQMTS	INCOME TAX FACTOR (Note 1)	PRETAX WEIGHTED EARNINGS REQMTS
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	<u>PUC APPROVED CAPITAL STRUCTURE & COSTS (Note 2):</u>						
2	Short-Term Debt	\$ 27,770	1.18%	1.75%	0.02%	1.000000	0.02%
3	Long-Term Debt	928,748	39.59%	5.03%	1.99%	1.000000	1.99%
4	Hybrid Securities	28,651	1.22%	7.19%	0.09%	1.000000	0.09%
5	Preferred Stock	21,137	0.90%	5.37%	0.05%	1.346835	0.07%
6	Common Equity	1,339,335	57.10%	9.50%	5.42%	1.346835	7.31%
7	Total Capitalization	<u>\$ 2,345,641</u>	<u>100.00%</u>		<u>7.57%</u>		<u>9.47%</u>
8	RAM CHANGE IN RATE BASE \$000 (From Schedule D1)						\$ 84,565
9	PRETAX RATE OF RETURN (Line 7, Col g)						9.47%
10	PRETAX RETURN REQUIREMENT						\$ 8,008.3
11	REVENUE TAX FACTOR (1/(1-8.885%))						1.0975
12	RATE BASE RAM - RETURN ON INVESTMENT \$000						\$ 8,789.1

To Sch A1

Footnotes:

1 Composite Federal & State Income Tax Rate 25.75% See HECO-WP-F-001
 Income Tax Factor (1 / 1-tax rate) 1.346835

2 See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 2 of 13. Approved in Final Decision and Order No. 35545 filed June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RATE BASE RAM ADJUSTMENT - CHANGE IN RATE BASE
\$ in thousands

Line No.	Description (a)	HECO 2017 Test Year Rate Base (Note 2)		HECO 2019 RAM Rate Base			
		Beg. Balance 12/31/2017 (b)	Budgeted Balance 12/31/2017 (c)	Adjusted Recorded at 12/31/2018 (d) (Note 1)	RAM Projected Amounts (e) See Detail Below	Estimated at 12/31/2019 (f)	
1	Net Cost of Plant in Service, Net of CIAC	\$ 2,595,452	\$ 2,770,695	\$ 2,437,105	\$ 77,804	\$ 2,514,909	(Note 3)
2	Property Held for Future Use	-	-	-	-	-	
3	Fuel Inventory	46,200	46,200				
4	Materials & Supplies Inventories	28,427	28,427				
5	Unamort Net ASC 740 Reg Asset	70,144	74,887				
6	Unamort EOTP Reg Asset	444	89				
7	CIP CT-1 Reg Asset	2,306	1,352				
8	Unamort Sys Dev Costs	15,932	13,496				
9	RO Pipeline Reg Asset	4,958	4,842				
10	Pension Tracking	97,620	113,828				
11	Contrib in Excess of NPPC	6,470	6,470				
12	Total Additions	\$ 2,867,953	\$ 3,060,286	\$ 2,718,151	\$ 77,804	\$ 2,795,955	
13	Unamortized CIAC/CIAC in CWIP	\$ (347,826)	\$ (395,134)	\$ (30,110)	\$ -	\$ (30,110)	(Note 3)
13a	Developer Advances	-	-	\$ (21,345)	\$ -	\$ (21,345)	(Note 3)
14	Customer Advances	(3,581)	(3,925)				(Note 3)
15	Customer Deposits	(12,101)	(12,005)				
16	Accumulated Def Income Taxes	(520,643)	(333,360)	(282,714)	(4,881)	(287,594)	(Note 4)
17	ADIT Excess Reg Liability	-	(203,950)	(277,406)	10,381	(267,025)	(Note 4), Sch D5
18	Unamortized State ITC (Gross)	(56,323)	(54,903)				
19	Unamortized Gain on Sale	(248)	(182)				
20	Pension Reg Liability	-	-				
21	OPEB Reg Liability	(2,817)	(2,331)				
22	Total Deductions	\$ (943,539)	\$ (1,005,790)	\$ (685,783)	\$ 5,500	\$ (680,283)	
23	Working Cash	3,904	3,904	3,904	Not Updated	3,904	
24	Rate Base at Proposed Rates	\$ 1,928,318	\$ 2,058,400	\$ 2,036,272		\$ 2,119,576	
25	Average Rate Base		\$ 1,993,359			\$ 2,077,924	
26	Change in Rate Base					\$ 84,565	
						To Schedule D	
27	<u>Column (e) Projected Changes to Rate Base:</u>		Reference	Amount \$000			
28	Plant - Baseline Capital Project Additions, Net of CIAC		Schedule D2	200,583			
29	Major Project Additions, Net of CIAC		Schedule D3	16,895			
30	Accumulated Depreciation/Amortization Change		Schedule E	(139,674)			
31	Net Plant		Sum: Lines 28-30	77,804			
32	ADIT - Baseline and Major Capital Projects		Schedule F	(4,881)			
33	ADIT - Joint Pole Capital Transfer Price		Note 6	-			
34	ADIT Excluding Joint Pole		Sum: Line 32-33	(4,881)			
35	Excess ADIT Reg Liability Amortization (Plant 282 excess def amort beginning 6/1/2019)		Schedule D5	10,381			

Footnotes:

1 Amounts are recorded, except for the following adjustments:

	Plant in Service	Acc. Depr.	Schedule D4 ADIT
[A] Unadjusted Balance	\$ 4,496,539	\$ (1,565,762)	\$ (283,658)
Add:			
[A] RWIP		41,901	
[A] Asset Retirement Obligation		(4,780)	
[A] Reg Liab-Cost of Removal (net salvage)		(356,926)	
Tenant Improvement Allowance (Sch E)	(14,132)	9,824	
<u>Major Project Adjustments:</u>	HECO-WP-D2-001	HECO-WP-E-001	HECO-WP-D4-002
ERP EAM Hardware	(14)	3	2
Koolau-Wailupe #1 Str 30 P9 Replace	(142)	4	14
Total Adjustments	\$ (156)	\$ 7	\$ 16
<u>Major Project Interim Recovery Adjustments:</u>	HECO-WP-D2-001	HECO-WP-E-001	HECO-WP-D4-003
Schofield Generation Station	(144,744)	-	1,832
Total Adjustments	\$ (144,744)	\$ -	\$ 1,832
<u>Joint Pole Capital Transfer Price</u>	Note 6	\$ (24,666)	\$ (904)
Adjusted Balance	\$ 4,312,841	\$ (1,875,736)	\$ (282,714)

2 See Final Decision and Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, filed on June 22, 2018, Exhibit B, Page 1 of 2. Revised for presentation purposes only to properly reflect the Unamortized Net ASC 740 Reg Asset, ADIT, and ADIT Excess Reg Liability balances. No change to Total Average Rate Base.

3 Per PowerPlan extract. Effective October 2018, the Company reclassified CIAC to Plant in Service or CWIP consistent with FERC guidelines. In 2018, CIAC has been netted with either Plant in Service or CWIP and Developer Advances (Cash CIAC received from developers, subject to refund) which has been included as a reduction to rate base. See further discussion of the Company's treatment of CIAC at HECO-WP-D1-001.

4 As a result of the 2017 Tax Reform Act, Regulatory Liability accounts were created and recorded as of December 31, 2017 to isolate the 2017 excess accumulated deferred taxes resulting from the lower federal tax rate. The bifurcated Regulatory Liabilities are included as a reduction to Rate Base. See further discussion at Schedule F.

5 HECO 2017 Test Year Rate Base includes CIS deferred costs in Unamortized System Development Costs. See detail in November 15, 2017, Stipulated Settlement Letter, HECO T-17, Attachment 1, Page 2.

6 See Decision and Order No. 35768, Docket No. 2018-0075 filed October 16, 2018. Commission approved the Asset Transfer, Pole Licensing and Amended Joint Pole Agreements and the accounting and ratemaking treatment described in Exhibit E of the Application. The change in ADIT represents the tax effect of the book - tax difference on depreciation for the Joint Pole assets.

[A] SOURCE: Hawaiian Electric Company, Inc. Monthly Financial Report - December 2018, filed February 28, 2019.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF BASELINE CAPITAL PROJECTS ADDITIONS, NET OF CIAC

Source: Docket No. 03-0257 General Order No. 7 Plant Additions Annual Reports filed with the PUC dated:

Line No.	Description (a)		3/27/2015	3/29/2016	3/30/2017	3/27/2018	NOTE (1)
			2014	2015	2016	2017	2018
			(c)	(d)	(e)	(f)	(f)
1	Total Plant Additions		269,326,250	266,537,660	241,294,569	276,754,129	358,703,631
2	Less: Non-Utility Plant Additions	NOTE (2)	-	(63)	(3,954)	-	-
3	Adjusted Total Plant Additions		269,326,250	266,537,597	241,290,615	276,754,129	358,703,631
4							
5	<u>Less Major Projects: (+\$2.5 Million)</u>	<u>Dkt No.</u>	<u>Item No.</u>				
6	W8 Boiler Controls Upgrade	2007-0365	P7650000	18,503	(70)		
7	EOTP Ph. 2 (Subs/Switch Stations)	2010-0062	Y48500	(7,357)	(55,681)	(682)	
8	W7 Controls Upgrade	2009-0195	P7590000	(8,237)	(35)		
9							
10	<u>2012 In-Service:</u>						
11	Kapolei Substation	2011-0026	Y00127	(6,459)			
12							
13	<u>2013 In-Service:</u>						
14	Pukele 80MVA Tsf #3	2011-0156	P0001494	(28,327)	15,611		
15	Kakaako Makai-Iwilei 25kV DL	2009-0042	Y00038	(485,650)	(496,818)	400,000	
16	North South Road 46kV Line	2008-0070	Y00119		(3,488)		
17							
18	<u>2014 In-Service:</u>						
19	Kalo Substation	2008-0070	Y00119	(6,548,755)	(925)		
20	Kalo Sub 46kV & 12kV Distr	2008-0070	Y00119	(1,218,895)			
21	Kalo Telecomm	2008-0070	Y00119	(171,237)			
22	Kalo Sub 12kV Work	2008-0070	Y00119	(25,906)			
23	Kakaako Makai-Kewalo 25kV DL	2009-0042	Y00038	(4,958,840)	(464,900)	(111)	400,000
24	Kakaako Makai DOT Queen-Cook	2009-0042	Y00038	(1,961,600)	(418,816)	(2,890,742)	476,166
25	BPT Tank 133 Improvements	2010-0318	P000090	(6,095,787)	(1,092,308)		
26	Pukele 80MVA Tsf #2	2011-0156	P0001492	(3,449,859)	(40,084)		
27	DOT Airport DSG	2008-0329	P0001370	(4,965,396)	(97,130)	(172,652)	(94,001) 3,516
28							
29	<u>2016 In-Service:</u>						
30	Pukele 80MVA Tsf #1	2011-0156	P0002264			(3,839,121)	(7,612)
31							
32	<u>2017 In-Service:</u>						
33	ERP EAM Hardware	2014-0170	PE.000003 (Y00168)				(2,604,146)
34	Koolau-Wailupe #1 Str 30 P9 Replace		PE.000104 (P0003465)				(2,684,387) (13,203)
35							
36	<u>2018 In-Service:</u>						
37	MPIR-Schofield Generating Station	2017-0213	PZ.000016/ PZ.001002 (P0001576)				(144,743,542)
38	Joint Pole Capital Transfer Price	2018-0075	PE.005155				(24,665,897)
39	Total Net Plant Additions (excluding major projects)		239,412,448	263,882,953	234,387,307	272,640,149	189,284,505
40							
41	Last Five-Year Average - Plant Additions						239,921,472
42							
43	Less: CIAC, including Developer Advances	NOTE (3)	(31,803,050)	(42,140,722)	(36,314,281)	(59,849,268)	(29,568,427)
44							
45	EOTP Ph. 2 (Subs/Switch Stations)-CIAC	2010-0062	Y48500	43,725	15,232	718	
46	Kakaako Makai DOT Queen-Cook-CIAC	2009-0042	Y00038			2,825,023	
47	DOT Airport DSG-CIAC	2008-0329	P0001370				96,602
48	Total CIAC Additions (excluding major projects)		(31,759,325)	(42,125,490)	(33,488,540)	(59,849,268)	(29,471,825)
49							
50	Total Net Plant Additions, Net of CIAC (excluding major projects)		207,653,123	221,757,463	200,898,767	212,790,881	159,812,680
51							
52	Last Five-Year Average - Plant Additions, Net of CIAC						200,582,583

To Sch D1

NOTE (1): Amounts per HECO-WP-D2-002 and the Hawaiian Electric Companies' *Exemption From and Modification of General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2017*, in Docket No. 03-0257, filed on March 27, 2019.

NOTE (2): Source: UI Planner Budget files: Actuals Scenario. Adjustment to remove non-utility plant additions from utility plant. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it.

NOTE (3): See HECO-WP-D2-001 for line 47 - 2018 Major Project CIAC additions, HECO-WP-D2-003 for 2018 CIAC Additions, HECO-WP-D2-004 for 2014 to 2017 CIAC Additions and WP-D1-001 for treatment of CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF MAJOR CAPITAL PROJECT ADDITIONS, NET OF CIAC

Line No.	Description (a)	PUC Docket Reference (b)	Estimated In Service Date (c)	Plant Addition Amount (d)	CIAC Amount (e)
1	AES-CEIP #2 138kV OH Trans Line Relocation	Docket No. 2016-0439 (Decision & Order dated 03/02/2018)	Feb-19	3,007,232	
2					UI Planner Budget files
3	Ala Wai Canal-46kV Relocation	Docket No. 2016-0416 (Decision & Order dated 09/01/2017)	Jun-19	13,910,207	
4					UI Planner Budget files
5	Kakaako Makai	Docket No. 2009-0042 (Decision & Order dated 06/12/2009)	Apr-14		(22,683)
6				UI Planner Budget files	
7	Total Major Capital Projects Qualifying for 2019 RAM, Net of CIAC			<u>\$ 16,917,439</u>	<u>\$ (22,683)</u>
8				To Sch D1	<u>\$ 16,894,756</u>

Source: HECO-WP-D3-001

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF ADJUSTED RECORDED DEFERRED INCOME TAXES

Line No.	NARUC Account (a)	Reference (b)	DR/(CR) Federal ADIT (c)	DR/(CR) State ADIT (d)	DR/(CR) Total ADIT (e)	
1	Recorded Deferred Income Tax Balances December 31, 2018 Recorded Balances					
2	Depreciation Related Account 282	HECO-WP-D4-001	(208,764,869)	(35,223,942)	(243,988,811)	
3	Other Deferred Income Taxes	HECO-WP-D4-001	(33,950,451)	(5,718,989)	(39,669,440)	
4	Total Recorded Deferred Income Taxes		<u>(242,715,320)</u>	<u>(40,942,931)</u>	<u>(283,658,251)</u>	To Sch D1 To HECO-WP-H-001
5	<u>Adjustments to Recorded Balances:</u>					
6	ADIT on Major Project excess depreciation	HECO-WP-D4-002	15,698	898	16,596	
7	ADIT on Major Project Interim Recovery	HECO-WP-D4-003	1,404,184	427,943	1,832,127	To Sch D1
8	Total Adjustments to Recorded ADIT Balances		<u>1,419,882</u>	<u>428,841</u>	<u>1,848,723</u>	To Sch D1
9	Adjusted Recorded ADIT Balances -12/31/18		<u>(241,295,438)</u>	<u>(40,514,090)</u>	<u>\$ (281,809,528)</u>	To Sch D1
10	282 ADIT adjusted for ADIT on Major Project excess depreciation	Line 2 + Line 6	(208,749,171)			To HECO-WP-F1-003

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF ADJUSTED RECORDED EXCESS ADIT REGULATORY LIABILITY

Line	NARUC Account (a)	Reference (b)	DR/(CR) Balance at 12/31/17 (c)	DR/(CR) Adjustments	DR/(CR) Amortization (d)	DR/(CR) Balance at 12/31/18 (e) = (c) + (d)	Life (f)	Amortization (g)	Est Bal at 12/31/19 (h) = (e) + (g)
1	Plant 282 - protected		(215,702,497)	(7,803,210)		(223,505,707)	40	5,587,643	(220,246,249)
2	Plant 283 - unprotected		(35,065,867)		1,668,881	(33,396,986)	15	2,337,723	(31,059,263)
3	Nonplant 283 - unprotected		(23,918,454)		3,415,029	(20,503,425)	5	4,783,679	(15,719,746)
	Total Excess ADIT								
4	Regulatory Liability		<u>(274,686,818)</u>	<u>(7,803,210)</u>	<u>5,083,910</u>	<u>(277,406,118)</u>		<u>12,709,045</u>	<u>(267,025,258)</u>
			Note 1			To Sch D1		To Sch E	To Sch D1 Note 3

Reconciliation of 12/31/18 Balance:

Regulatory Liability in GL	GL#25400023/24	(278,155,753)
Regulatory Asset in GL	GL#18673900	34,112,667
2018 Amortization		<u>587,116</u>
		<u>34,699,783</u>
		(243,455,970)
Add: FAS 109	Note 1	<u>(33,950,008)</u>
Total Excess ADIT		<u>(277,405,978)</u>
Total Excess ADIT	Line 4	<u>(277,406,118)</u>
Remaining Difference		140

Note 1: The 12/31/17 balances represent the amortization base presented in Docket 2016-0328 Hawaiian Electric's 2017 Test Year Rate Case Revised Attachment to the Parties' Stipulated Settlement on Remaining Issues, Attachment 2A, filed March 8, 2018. However, this amortization base inadvertently excluded reclassifications recorded at December 31, 2017 between the 2017 unprotected plant 283 excess net regulatory liability and the portion of ASC 740 regulatory assets/liabilities offsetting the related excess deferred income taxes.

Note 2: Amortization began 4/14/2018.

Note 3: Line 1: Plant 282-protected excess deferred balance calculated as follows: [col (e)/col (f)] * (7 months/12 months) + col (e). Amortization begins on 6/1/2019.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF DEPRECIATION & AMORTIZATION RAM ADJUSTMENT

Line No.	FERC Account (a)	Recorded Depreciable/Amort. Balance (Footnote 3) (b)	Adjustments (Footnote 1) (c)	Adjusted Depreciable/Amort. Balance (d)	PUC Approved Accrual Rate (e)	Annual Accrual (f)
1	Depreciable Plant					
2	311	107,116,270		107,116,270	0.01600	1,713,860
3	312	407,080,257	(3,423,000)	403,657,257	0.02030	8,194,242
4	314	194,394,996		194,394,996	0.01540	2,993,683
5	315	83,448,693		83,448,693	0.02430	2,027,803
6	Tot - Steam	792,040,216	(3,423,000)	788,617,216	0.01885	14,929,589
7						
8	341	38,255,922		38,255,922	0.00770	294,571
9	342	17,647,714		17,647,714	0.02580	455,311
10	343	212,348,035	(142,147,612)	70,200,423	0.03260	2,288,534
11	344	32,411,015		32,411,015	0.01010	327,351
12	345	34,684,516		34,684,516	0.02510	870,581
13	Tot - Gas Turb	335,347,202	(142,147,612)	193,199,590	0.01263	4,236,348
14						
15	Tot - Prod	1,127,387,418	(145,570,612)	981,816,806		19,165,937
16						
17	3501	3,033,447		3,033,447	-	-
18	352	41,371,948	(2,003,490)	39,368,458	0.01600	629,895
19	353	316,099,319	(352,190)	315,747,129	0.01860	5,872,897
20	354	15,336,208		15,336,208	0.01480	226,976
21	355	377,095,780		377,095,780	0.03240	12,217,903
22	356	184,909,083	(141,971)	184,767,112	0.03270	6,041,885
23	357	60,113,518		60,113,518	0.01590	955,805
24	358	66,198,742		66,198,742	0.01730	1,145,238
25	359	3,235,054		3,235,054	0.01490	48,202
26	Tot - Transm	1,067,393,099	(2,497,651)	1,064,895,448	0.02543	27,138,801
27						
28	3601	2,599,051		2,599,051	0.02340	60,818
29	361	26,265,151		26,265,151	0.01080	283,664
30	362	273,453,197		273,453,197	0.02020	5,523,755
31	363	2,957,666		2,957,666	0.03740	110,617
32	364	245,168,525	(24,665,897)	220,502,628	0.03390	7,475,039
33	365	105,897,935		105,897,935	0.04190	4,437,123
34	366	270,101,616		270,101,616	0.02190	5,915,225
35	367	405,492,451		405,492,451	0.04980	20,193,524
36	368	220,837,260		220,837,260	0.05200	11,483,538
37	369.1	59,534,914		59,534,914	0.05250	3,125,583
38	369.2	174,898,002		174,898,002	0.04070	7,118,349
39	370	40,383,030		40,383,030	0.02660	1,074,189
40	Tot - Distr	1,827,588,798	(24,665,897)	1,802,922,901	0.03655	66,801,423
41						
42	Tot - T & D	2,894,981,897	(27,163,548)	2,867,818,349		93,940,224
43						
44	390	67,940,630		67,940,630	0.02450	1,664,545
45	Tot - General	67,940,630	-	67,940,630	0.02450	1,664,545
46						
47	Sub-Total	4,090,309,945	(172,734,160)	3,917,575,785		114,770,706
48						
49	3902 (King)	8,011,075		8,011,075	0.03010	241,114
50	3902 (CPP)	2,115,809		2,115,809	0.00417	8,814
51	3902 (Waterhouse)	1,517,450		1,517,450	0.00000	-
52	3902 (Hon Cl)	523,097		523,097	0.07824	40,929
53	3902 (ASB)	1,463,127		1,463,127	0.06133	89,738
54	3902 (Shinco)	939,475		939,475	0.00000	-
55	3902 (PPP)	372,940		372,940	0.11111	41,438
	3902 (Pauahi)	50,376		50,376	0.33333	16,792
56	3902 (Tenant Allowance)	14,131,757	(14,131,757)	-	-	-
57	Tot- LH Impr	29,125,106	(14,131,757)	14,993,349		438,824
58						
59	392	59,063,238		59,063,238	0.06130	3,620,576
60						
61	Utility Total Depreciation	4,178,498,289	(186,865,917)	3,991,632,372	0.02844	118,830,107

Line No.	FERC Account (a)	Recorded Depreciable/Amort. Balance (Footnote 3) (b)	Adjustments (Footnote 1) (c)	Adjusted Depreciable/Amort. Balance (d)	PUC Approved Accrual Rate (e)	Annual Accrual (f)
61	Amortizable Plant					
62	316	26,291,658		26,291,658	0.05000	1,314,583
63	Tot - Steam	26,291,658	-	26,291,658	0.05000	1,314,583
64						
65	346	20,326,815		20,326,815	0.05000	1,016,341
66	Tot - Gas Turb	20,326,815	-	20,326,815	0.05000	1,016,341
67						
68	Tot - Prod	46,618,473	-	46,618,473	0.05000	2,330,924
69						
70	3911	30,764,654	(14,146)	30,750,508	0.20000	6,150,102
71	3912	3,172,052		3,172,052	0.10000	317,205
72	3913	16,599,312		16,599,312	0.06670	1,107,174
73	393	1,478,752		1,478,752	0.04000	59,150
74	394	39,001,211		39,001,211	0.04000	1,560,048
75	395	879,317		879,317	0.06670	58,650
76	396	4,479		4,479	0.05560	249
77	397	130,589,670	(240,250)	130,349,420	0.06670	8,694,306
78	398	8,483,472		8,483,472	0.06670	565,848
79	Tot - General	230,972,919	(254,396)	230,718,523	0.08015	18,512,733
80						
81						
82						
83	Utility Total Amortization	277,591,392	(254,396)	277,336,996	0.07509	\$ 20,843,656
84						
85	TOTAL RAM DEPRECIATION / AMORTIZATION				Line 61 + Line 83	\$ 139,673,763
86	LESS: Vehicle Depreciation (A/C 392 above)				Line 59	\$ (3,620,576)
87	LESS: ADIT Excess Amortization				Schedule D5	(12,709,045)
88	LESS: Depreciation & Amortization in Current Revenues				Footnote 2	\$ (120,665,585)
89						
90	RAM Adjustment for Depreciation & Amortization					\$ 2,678,556
91	RAM Adjustment for CIAC Amortization				Note 5	\$ -
92	Total RAM Adjustment for Depreciation & Amortization					\$ 2,678,556
93	Times: Factor for Revenue Taxes				Schedule C Line 5	1.0975
94						
95	RAM DEPRECIATION & AMORTIZATION					\$ 2,939,716

To Sch A1

Footnotes:

1	Amounts are recorded (in \$000s), except for the following adjustments (see HECO-WP-D2-001):		Plant in Service From D1	
	ERP EAM Hardware	HECO-WP-D2-001	\$ (14)	Linked from Sch D1
	Koolau-Wailupe #1 Str 30 P9 Replace		(142)	
	MPIR - Schofield Generating Station		(144,744)	
	Joint Pole Capital Transfer Price	HECO-WP-D1-002	(24,666)	See Decision and Order No. 35768, Docket No. 2018-0075 filed October 16, 2018
	Tenant Improvement Allowance (see Footnote 4)		(14,132)	
	ARO Assets included in Depreciable Plant	GL# 10100001	(3,423)	
	Total		\$ (187,121)	
2	<u>Depreciation & Amortization in Current Revenues*:</u>		<u>Depr/Amort Expense</u>	
	Total Depreciation		\$ 139,686,000	
	LESS: Vehicle Depreciation (A/C 392)		(3,590,000)	
	LESS: Amortization of Excess ADIT		(7,121,415)	
	Total Depreciation in Current Revenues		\$ 128,974,585	
	ADD: CIAC Amortization	Note 5	(8,309,000)	
	Total Depreciation & Amortization in Current Revenues		120,665,585	To Line 88

*See Order No. 35335, in Docket No. 2016-0328, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, HECO T-25, Attachment 1, Page 1 and the Revised Attachment to the Parties Stipulated Settlement on Remaining Issues, filed March 8, 2018, HECO T-26, Attachment 2A, Page 1. Approved in Final Decision and Order No. 35545, filed June 22, 2018.

- Per Accounting records, does not include land amounting to \$40,449,426 as of December 31, 2018.
- Amount represents tenant improvement allowances paid by the lessors and excluded from the RAM calculation.
- Effective October 2018, the Company reclassified CIAC to Plant in Service or CWIP consistent with FERC guidelines. Amounts shown in this Schedule represent balances net of CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF CHANGE IN DEFERRED INCOME TAXES

Line No.	NARUC Account (a)	Reference (b)	Projected ADIT Change (c)
1	State Tax Depreciation	Schedule F1	9,813,741
2	Amortization of Excess Deferrals (Note 3)	Schedule D5	10,380,860
3	Subtotal		<u>20,194,601</u>
4	Effective Federal Tax Rate	HECO-WP-F-001	19.7368%
5	Federal Deferred Tax on State Tax Depreciation		<u>3,985,777</u>
6	Add back State Tax Depreciation	Line 1	(9,813,741)
7	Federal Tax Depreciation	Schedule F1	<u>9,813,741</u>
8	Federal/State Difference		-
9	Tax Rate on Federal Only Adjustment	HECO-WP-F-001	21%
10	Federal Deferred Tax Adjustment		-
11	Total Federal Deferred Taxes Before Proration		<u>3,985,777</u>
12	Proration Adjustment	HECO-WP-F1-003	<u>(319,803)</u>
13	Total Federal Deferred Taxes After Proration		<u><u>3,665,974</u></u>
STATE DEFERRED TAXES			
14	State Tax Depreciation	Line 1	9,813,741
15	Amortization of Excess Deferrals (Note 3)	Line 2	10,380,860
16	Subtotal		<u>20,194,601</u>
17	Effective State Tax Rate	HECO-WP-F-001	6.0150%
18	Total State Deferred Taxes		<u>1,214,713</u>
19	TOTAL FED AND STATE DEFERRED TAXES		<u><u>4,880,686</u></u> To Sch D1

NOTE 1: In accordance with the tariff, the change in ADIT in the RAM year is based on the temporary book/tax depreciation differences associated with the RAM year plant additions (major capital projects and baseline plant additions). It does not include any estimated ADIT related to the repairs deduction or CIAC on RAM year plant additions.

NOTE 2: The change in ADIT includes the tax effect of the amortization of the regulatory liability associated with the excess deferred taxes resulting from the tax rate change from the Tax Cuts and Jobs Act of 2017. This is consistent with the inclusion of the regulatory liability and the related amortization in rate base RAM.

NOTE 3: The amortization of excess deferrals was adjusted from Schedule D5 to properly reflect the ending balance of ADIT at 12/31/2019. The amortization of the Plant 282 excess deferred amortization begins on 6/1/2019; the 12/31/2019 balance therefore reflects 7/12ths of this component in the ending ADIT balance.

<u>Calculation of Excess Deferred Amortization</u>			
Plant 282 - protected	5,587,643	Schedule D5	
Proration Percentage (7 months/12 months)	<u>58.33%</u>		
			3,259,458
Plant 283 - unprotected			2,337,723
Nonplant 283 - unprotected			4,783,679
Amortization of Excess Deferrals, as Adjusted			<u>10,380,860</u>
			Schedule D1

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TAX DEPRECIATION**

Line No.	HECO-WP-F1-002							
	LIFE	PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	Computers/PV	5	6,092	6,092	2.54%		2.54%	
2	Communication	20	5,920	5,920	2.47%		2.47%	
3	Off/Furn/Tools	7	5,022	5,022	2.09%		2.09%	
4	Distribution	20	130,472	130,472	54.38%		54.38%	
5	Land	-	816	816	0.34%		0.34%	
6	Non-Steam Production	15	3,713	3,713	1.55%		1.55%	
7	Steam Production	20	22,905	22,905	9.55%		9.55%	
8	Structural	39	3,265	3,265	1.36%		1.36%	
9	Transmission	20	21,834	21,834	9.10%		9.10%	
10	Transmission	15	34,674	34,674	14.45%		14.45%	
11	Vehicles	-	5,209	5,209	2.17%		2.17%	
12	TOTAL		239,922	-	239,922	100.00%	0.00%	100.00%

From Sch D2

5 yr	2.54%	2.54%	
7 yr	2.09%	2.09%	
15 yr	16.00%	16.00%	
20 yr	75.50%	75.50%	
39 yr	1.36%	1.36%	
Land	0.34%	0.34%	
Vehicles	2.17%	2.17%	
Total	100.00%	0.00%	100.00%

BASIS	FED YR 1 DEPR RATE	FED YR 1 TAX DEPR	STATE YR 1 DEPR RATE	STATE YR 1 TAX DEPR
-------	--------------------	-------------------	----------------------	---------------------

Vintage 2019 - Regular Depreciation

Basis subject to regular depreciation

(Total less amounts subject to 40% bonus)

5 yr	2.54%	2.54%	
7 yr	2.09%	2.09%	
15 yr	16.00%	16.00%	
20 yr	75.50%	75.50%	
39 yr	1.36%	1.36%	
	97.49%	0.00%	97.49%

5 yr	5,211,519	20.00%	1,042,304	20.00%	1,042,304
7 yr	4,296,167	14.29%	613,922	14.29%	613,922
15 yr	32,838,900	5.00%	1,641,945	5.00%	1,641,945
20 yr	154,952,011	3.75%	5,810,700	3.75%	5,810,700
39 yr	2,793,107	1.177%	32,875	1.177%	32,875

TOTAL ASSETS

97.49%	0.00%	97.49%
--------	-------	--------

Net Depreciable Baseline Plant Adds

200,091,704

9,141,746

9,141,746

Major Capital Projects from Schedule F2

16,917,439

671,995

671,995

Total Depreciable Plant Adds

217,009,143

9,813,741

9,813,741

Fed Tax Depreciation to Schedule F

St. Tax Depreciation to Schedule F

Reconciliation from Baseline Plant Adds to Net Depreciable Plant Adds :

Baseline Capital Projects Plant Adds (rounded)	239,922,000
Less: Repairs deduction HECO-WP-F1-001 pg 1	34,676,093
Net plant add basis	205,245,907
Less: Land and Vehicles (2.46% x 209,209,559)	5,154,203
	200,091,704

Schedule D2

<<supported by Special Study each year.

NOTE (1) The Tax Cut and Jobs Act removed bonus depreciation for public utility property.

NOTE (2) The numbers in columns b, c, d are rounded to the nearest thousand.

NOTE (3) Totals may not add exactly due to rounding.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
TAX DEPRECIATION ON MAJOR CAPITAL PROJECTS ADDITIONS

Line No.	Description	PUC Docket	Estimated In Service Date	Amount		
	(a)	(b)	(c)	(d)	(e)	
1	Assumed Value of 2019 Major Capital Projects Plant Items			\$ 16,917,439	Schedule D3	
2	Assumed Value of 2019 Major Capital Projects - CIAC nontaxable			\$ -	Schedule D3	
3	Assumed Value of 2019 Major Capital Projects - Total			<u>\$ 16,917,439</u>		
	Tax Classification of		FED	FED	STATE	STATE
	Major Capital Project Additions	Tax Basis	YR 1 DEPR RATE	YR 1 TAX DEPR	YR 1 DEPR RATE	YR 1 TAX DEPR
5	5 yr	-	20.00%	-	20.00%	-
6	7 yr	-	14.29%	-	14.29%	-
7	15 yr	3,007,232	5.00%	150,362	5.00%	150,362
8	20 yr	13,910,207	3.75%	521,633	3.75%	521,633
9	39 yr	-				
10	Land	-				
11	Vehicles	-				
	Total	<u>\$ 16,917,439</u>		<u>\$ 671,995</u>		<u>\$ 671,995</u>
		To Sch F1		To Sch F1		To Sch F1

* Adjustment only for non-taxable CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
CIAC SUMMARY

Line No.	Description	Reference	Unamortized CIAC	CIAC Amortization
	(a)	(b)	(c)	(d)

Schedule not applicable.

See HECO-WP-D1-001 for further discussion on the Company's treatment of CIAC within the Annual Decoupling filing.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
EARNINGS SHARING CALCULATIONS

All Amounts \$000 (Except %)

Line No.	Description	Reference	Rate-making Basis Return on Equity		
			Operating Income	Rate Base	Rate of Return
	(a)	(b)	(c)	(d)	(e)
1	Reported Operating Income before ratemaking adjustment	HECO-WP-H-009 & HECO-WP-H-001	\$ 134,181	\$ 2,109,963	
1a	Settlement of prior Joint Pole Accounts Receivable	Note 3	697		
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	4,073		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	1,052		
2c	Amortization of investment income differential	HECO-WP-H-003	185		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(12,461)		
2e	Special Medical Needs Program discount (net of tax)	HECO-WP-H-005	102		
2f	Performance Incentive Mechanism (net of tax)	HECO-WP-H-006	360		
2g	Final Test Year Refund (net of tax)	HECO-WP-H-007	32		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 128,221	\$ 2,109,963	
4	<u>Ratemaking Capitalization</u>				
		Balances	Ratios	Cost Rate	Weighted Cost
5	Short-Term Debt (12 mo. Avg)	\$ 88,868	3.68%	2.54%	0.09%
6	Long-Term Debt (Simple Avg)	\$ 939,810	38.92%	5.03%	1.96%
7	Hybrid Securities (Simple Avg)	\$ 28,758	1.19%	7.16%	0.09%
8	Preferred Stock (Simple Avg)	\$ 21,192	0.88%	5.36%	0.05%
9	Common Equity (Simple Avg)	\$ 1,335,921	55.33%	9.50%	5.26%
10	Total Capitalization	HECO-WP-H-004	\$ 2,414,549	100.00%	7.45%
11	Line 3 Rate Base Amount			\$ 2,109,963	
12	Weighted Cost of Debt (Sum Lines 5-7)			2.14%	
13	Synchronized Interest Expense			\$ 45,153	
	Income Tax Factor (Note 1)			1.346801347	
13a	Synchronized Interest Expense, net of tax			\$ 33,526	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 94,695
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				1,055
18	Income Available for Common Stock				\$ 93,640
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				1,167,400
20	Return on Equity for Decoupling Earnings Sharing (Line 18/Line 19)				8.02%
21	<u>Earnings Sharing Revenue Credits:</u>	Basis Points			
22	Achieved ROE (basis points)	802			
23	Authorized Return (basis points)	950			
24	ROE for sharing (basis points)	-			
25	Sharing Grid per RAM Provision	First 100 bp	Next 200 bp	All over 300 bp	Ratepayer Total
26	Distribution of Excess ROE (basis points)	0	0	0	
27	Ratepayer Share of Excess Earnings	25%	50%	90%	
28	Ratepayer Earnings Share - Basis Points	-	-	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 173
30	Earnings Sharing Revenue Credits (thousands)				0
					To Sch A Line 5

Footnotes:

1	Composite Federal & State Income Tax Rate	25.75%
	Income Tax Factor (1 / 1-tax rate)	1.346801347
2	Ratemaking Equity Investment (line 19)	\$ 1,167,400
	Basis Point = 1/100 of a percent	0.01%
	Earnings Required per Basis Point (thousands)	\$ 116.74
	Times: Income Tax Conversion Factor	1.346801347
	Pretax Income Required per Basis Point (thousands)	\$ 157
	Times: Revenue Tax Conversion Factor	1.0975
	Revenue Requirement per Basis Point (thousands)	\$ 173

3 Per Docket No. 2018-0075, Decision and Order No. 35768, the Commission approved the Asset Transfer, Pole Licensing and Amended Joint Pole agreements. The settlement recovery of prior joint pole accounts receivables previously written-off was recorded to interest income (and excluded from Operating Income) in 2018. Upon further consideration, the recovery should have been recorded to Uncollectible Accounts (904) and included in Operating Income in 2018. (Taxes on the Joint Pole interest income was already included in Operating Income as of December 31, 2018.) Accordingly, an upward adjustment of \$696,636 is being made to Operating Income in the earnings sharing mechanism calculation.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS

Line No.	Description (a)	Reference (b)	Amount \$000 (c)
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This Schedule has not been developed yet and will be developed only when/as needed.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RAM CAP

Line No.	Description (a)	Reference (b)	Amount \$000 (c)
1	Last Rate Order Target Annual Revenues	Schedule B1	599,974
2	2018 RAM Cap Increase excluding Exceptional & Other Matters (net of Revenue Tax)	Note 2	12,599
3	2018 Target Revenues Subject to Escalation	Line 1 + Line 2	612,573
4	2019 GDP Price Index	HECO-WP-C-002	2.10%
5	2019 RAM Cap Increase Excluding Exceptional & Other Matters		12,864
6	RAM Cap for 2018 RAM Revenue Adjustment	Line 2	12,599
7	RAM Cap for 2019 RAM Revenue Adjustment	Line 5 + Line 6	25,463
8	Revenue Tax Factor (1/(1-8.885%))		1.0975
9	RAM Cap for 2019 RAM Revenue Adjustment	Line 7 x Line 8	27,946
			<u>To Sch A1</u>

Note 1 Target Revenues:

See Decision and Order No. 32735, filed March 31, 2015, paragraph 107, page 94:

"The RAM Cap shall be based on the Target Revenues determined in accordance with the RBA and RAM tariffs as provided below ("Basis"), times the cumulative annually compounded increase(s) in GDPPI for intervening years, adjusted to include applicable revenue taxes."

The RAM basis for the calculation of the RAM Revenue Adjustment cap shall be the target revenues determined in accordance with the RBA tariff based on the results of the Company's most recent interim or final rate case decision.

Note 2 See Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, Schedule J for 2018 RAM Revenue Adjustment Cap of \$13,828 (\$12,599 net of revenue tax).

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
EXCEPTIONAL & OTHER MATTERS

<u>Line No.</u>	<u>Description</u> (a)	<u>Reference</u> (b)	<u>Amount \$000</u> (c)
1	None		-
2	2019 Revenue Adjustment for Exceptional & Other Matters		\$ -
			<u>To Sch A1</u>

Note 1 Exceptional and Other Matters:
See Order No. 32735, filed March 31, 2015, paragraph 107, page 94 - 95:
"The Basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap."

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
MAJOR PROJECT INTERIM RECOVERY

<u>Line No.</u>	<u>Description</u>	<u>Reference</u>	<u>Amount \$000</u>
	(a)	(b)	(c)
1	Schofield Generating Station	Schedule L1	\$ 18,051
2	Docket No. 2017-0213		
3	Revenue Tax Factor (1/(1-8.885%))		<u>1.0975</u>
4	Major Project Interim Recovery Total		<u>\$ 19,811</u>
			To Sch B1, line 15

Note: Per Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Recovery Mechanism, filed February 7, 2019, Transmittal No. 19-01 effective January 1, 2019. See Schedule L1.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY

MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2018 (c)	2019 Activity (d)	Ending Balance as of 12/31/19 (e)	Average Balance (f)=((c)+(e))/2	MPIR (g)
Return on Investment - Schofield Generating Station							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	141,570	-	141,570	141,570	
2	Accum Depreciation	HECO-WP-L-001	-	(4,586)	(4,586)	(2,293)	
3	Net Cost of Plant in Service		141,570	(4,586)	136,984	139,277	
4	Fuel Inventory - Avoided	Note 3	(1,534)	-	(1,534)	(1,534)	
5	M&S Inventory	Note 3	100	-	100	100	
6	Total Additions		(1,434)	-	(1,434)	(1,434)	
7	CIAC	Not Applicable	-	-	-	-	
8	ADIT	HECO-WP-L-002	(8,653)	(1,540)	(10,193)	(9,423)	
9	State ITC	HECO-WP-L-002	(4,124)	412	(3,712)	(3,918)	
10	Total Deductions		(12,777)	(1,128)	(13,905)	(13,341)	
11	Total Rate Base		\$ 127,359	\$ (5,713)	\$ 121,646	124,502	
12	Average Rate Base					\$ 124,502	
13	Rate of Return (grossed-up for income taxes, before revenue ta	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 11,790
15	Depreciation Expense (Note 1)	HECO-WP-L-001				4,586	
16	Operating & Maintenance Expense	Note 2				2,087	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				(412)	
18	Lease Rent Expense	Not Applicable				-	
19	Other Expense	Not Applicable				-	
20	Total Expenses						\$ 6,260
21	Total Major Project Interim Recovery						\$ 18,051
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						<u>\$ 19,810.8</u>

To Sch B & B1

Reconciliation to Schedule B1 (Info Only)

	Jul - Sep 18	Oct - Dec 18	2019
Annualized Revenue for MPIR	\$ 6,600	\$ 8,561	\$ 19,811
Rev Tax Adj	\$ (586)	\$ (761)	\$ (1,760)
Prorated MPIR for Year 1 excl Rev Tax	\$ 6,014	\$ 7,800	\$ 18,051
Incremental	\$ 6,014	\$ 1,787	\$ 10,250
	Note 5	Note 6	

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update and approved in Order No. 35953, filed December 14, 2018.

Note 3: Decision and Order No. 35556 dated June 27, 2018 in Docket No. 2017-0213.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Note 5: MPIR Revenues effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213.

Note 6: MPIR Revenues effective October 1, 2018 filed December 21, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
2018 SERVICE QUALITY PIMS

	2018 Annual Total *	2018 Target **	Variance (c)=(a)-(b)	Deadband ** (d)	Maximum \$ ** (e)	(Penalty) / Reward Amount 1.0 * (((b - a) / d) * e + e)
	(a)	(b)	(c)=(a)-(b)	(d)	(e)	
Service Quality:						
Normalized T&D SAIFI						
Without Exclusion	1.253	1.112	0.141	0.089	\$ 2,244,112	\$ (1,306,645)
With Exclusion	1.238	1.112	0.126	0.089	\$ 2,244,112	\$ (929,827)
Normalized T&D SAIDI						
Without Exclusion	111.94	99.10	12.84	9.033	2,244,112	\$ (946,492)
With Exclusion	106.41	99.10	7.31	9.033	2,244,112	\$ -
Call Center Performance (Excludes Blocked Calls)						
	83.97%	79.66%	4.31%	3.00%	\$ 897,645	\$ 391,972
Phase 1 Renewable Energy RFP PIM						
First Allocation ***						\$ 591,854
Total Without Exclusion						\$ (1,269,311)
Total With Exclusion						\$ 53,998
To Sch A						

Notes:

Exclusion represents 25kV Proactive Work, filed in Transmittal No. 18-05, Hawaiian Electric's Letter Request for Exclusion of 25kV Splice Replacement Work from Performance Incentive Mechanism Provision's SAIDI and SAIFI 2018 Calculation, filed December 18, 2018.

* See HECO-WP-M-002

** See HECO-WP-M-001

*** See HECO-WP-M-005

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
ON-BILL FINANCING COST RECOVERY

Line	Company	Note 1		Cost Recovery (excluding Rev Tax)			Cost Recovery (including Rev Tax)		
		Customer Count	Allocation	Total Recovery	2019 Recovery	2020 Recovery	Total Recovery with Rev Tax	2019 Recovery with Rev Tax	2020 Recovery with Rev Tax
		a	b = a/total a	c = \$2,330,408 allowed x b			d = c * 1.0975		
1	HE	305,456	66%	1,537,150 To Sch B	768,575 To Sch A	768,575	1,687,022	843,511 To Sch B1	843,511
2	HL	85,758	19%	431,561	215,780	215,781	473,638	236,819	236,819
3	ME	71,875	16%	361,697	180,849	180,848	396,963	198,481	198,482
4	Total	<u>463,089</u>	<u>100%</u>	<u>2,330,408</u>	<u>1,165,204</u>	<u>1,165,204</u>	<u>2,557,623</u>	<u>1,278,811</u>	<u>1,278,812</u>

Note 1: Statistical Report as of December 31, 2018.

Note 2: See Decision and Order No. 36212, Docket No. 2017-0102, filed March 11, 2019, pages 18-19. The Commission allowed the Companies to recover Program implementation costs over a period of two years, commencing with the 2019 RBA Rate Adjustment which will, if there are no major issues with the standard RBA Review Transmittal process, become effective on June 1, 2019.

Hawaiian Electric Company, Inc.
Sales Forecast for June 2019 to May 2020
in GWh

	2019							2020					Total
	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	
R	126.7	141.7	151.2	146.2	143.0	131.9	130.4	132.1	118.6	120.1	116.7	121.7	1,580.3
G	24.2	25.6	26.5	25.3	26.0	23.9	24.1	22.6	22.8	23.9	23.7	24.6	293.2
J	148.0	159.0	160.8	157.3	158.4	145.6	139.3	139.4	140.8	141.7	144.9	152.0	1,787.2
P	233.6	250.5	261.0	246.4	249.4	230.6	225.1	219.6	214.0	223.5	225.2	232.1	2,811.0
F	<u>1.8</u>	<u>1.9</u>	<u>1.7</u>	<u>1.6</u>	<u>1.6</u>	<u>1.4</u>	<u>1.4</u>	<u>1.3</u>	<u>1.3</u>	<u>1.5</u>	<u>1.3</u>	<u>1.4</u>	<u>18.2</u>
Total	534.3	578.7	601.2	576.8	578.4	533.4	520.3	515.0	497.5	510.7	511.8	531.8	6,489.9

Source: Hawaiian Electric Company, Inc. February 2019 Sales Forecast Update.

Hawaiian Electric Company, Inc.
Adjustment For Prior Year RBA Accrual
Recovery of 12/31/16 RBA Balance

		2018					
		January	February	March	April	May	Total
Billed RBA Revenues	Note 1	11,581,297	10,784,945	5,161,437	3,718,306	3,653,460	34,899,445
Net Unbilled Revenues	Note 1	(834)	(3,556,154)	(1,491,331)	45,447	121,360	(4,881,511)
Total Billed + Unbilled		11,580,464	7,228,791	3,670,106	3,763,752	3,774,820	30,017,934
x % Share for RBA	Note 2 & 3	31.9352%	63.5519%	100.0327%	100.0327%	100.0327%	
RBA Revenues (Recovery of 12/31/16 RBA balance)		3,698,239	4,594,033	3,671,308	3,764,985	3,776,056	19,504,621
		← Schedule B2 →					
Less: Revenue Taxes	0.08885	(328,589)	(408,180)	(326,196)	(334,519)	(335,503)	(1,732,987)
RBA Revenues (Recovery of 12/31/16 RBA balance) net of Revenue Taxes		3,369,650	4,185,853	3,345,112	3,430,466	3,440,553	17,771,634
		← Schedule B →					

* Differences are due to rounding

Note 1: RBA rate adjustment revenues per the Billed reports and Unbilled reports include both RBA and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2: RBA Rate Adjustment Allocation for January 1, 2018 to February 15, 2018 is per Transmittal No. 17-02 (Decoupling) - RBA Rate Adjustment (filed March 31, 2017), Schedule A, Note (1). RBA Rate Adjustment Allocation for February 16, 2018 to May 31, 2018 is per Hawaiian Electric Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229, and Order No. 35220, Exhibit 7, filed on January 19, 2018, which was approved by Order No. 35280, issued on February 9, 2018. See Note 3 below for prorated % share for RBA for February 2018.

Note 3: Prorated % Share for RBA by day resulting from 2017 Test Year Interim Rates, effective February 16, 2018, per Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Hawaiian Electric Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229 and Order No. 35220, Exhibit 7, filed on January 19, 2018. As approved by the Commission in Order No. 35280, Approving Revised Schedules of Operations and Tariff Sheets, filed on February 9, 2018.

	RBA %	No of Days	Prorated RBA %
Feb 1-Feb 15	31.9352%	53.6%	17.1081%
Feb 16-Feb 28	100.0327%	46.4%	46.4438%
			63.5519%

Hawaiian Electric Company, Inc.
Adjustment For Prior Year RBA Accrual
Recovery of 12/31/17 RBA Balance

		2018							
		June	July	August	September	October	November	December	Total
Billed RBA Revenues	Note 1	4,701,823	5,771,562	6,185,543	6,034,935	6,400,115	5,842,574	5,503,361	40,439,912
Net Unbilled Revenues	Note 1	990,752	364,534	81,590	(85,985)	(137,876)	(175,257)	(57,177)	980,581
Total Billed + Unbilled		5,692,575	6,136,096	6,267,133	5,948,950	6,262,238	5,667,317	5,446,183	41,420,493
x % Share for RBA	Note 2	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	
RBA Revenues (Recovery of 12/31/17 RBA balance)		4,532,582	4,885,725	4,990,061	4,736,715	4,986,163	4,512,471	4,336,398	32,980,115
		← Schedule B2 →							
Less: Revenue Taxes	0.08885	(402,720)	(434,097)	(443,367)	(420,857)	(443,021)	(400,933)	(385,289)	(2,930,284)
RBA Revenues (Recovery of 12/31/17 RBA balance) net of Revenue Taxes		4,129,862	4,451,628	4,546,694	4,315,858	4,543,142	4,111,538	3,951,109	30,049,831
		← Schedule B →							

* Differences are due to rounding

Note 1: RBA rate adjustment revenues per the Billed reports and Unbilled reports include both RBA and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2: RBA Rate Adjustment Allocation for June 1, 2018 - May 31, 2019 is per Transmittal No. 18-01 (Decoupling) - RBA Rate Adjustment (Filed May, 29, 2018), Schedule A , Note (1).

Hawaiian Electric Company, Inc.
Bargaining Unit Wage Increase per Collective Bargaining Agreements

Wage Increases: (non-compounded)	1/1/2014	3.00%	(Note 1)
	1/1/2015	3.00%	(Note 1)
	1/1/2016	3.25%	(Note 1)
	1/1/2017	3.00%	(Note 1)
	1/1/2018	3.00%	(Note 1)
	1/1/2019	3.00%	(Note 2)
	1/1/2020	3.00%	(Note 2)
	1/1/2021	3.00%	(Note 2)

<u>Increase effective</u>			<u>Increase Amount</u>	<u>Wage Rate With Increase</u>	<u>Labor Cost Escalation Rate</u>	
			(a)	(b) or prev (b) + (a)	(c) (b) / prev (b) -1	
1.00	3.00%	1/1/2014	0.0300	1.0300		
	3.00%	1/1/2015	0.0300	1.0600	0.0291	2.91%
	3.25%	1/1/2016	0.0325	1.0925	0.0307	3.07%
	3.00%	1/1/2017	0.0300	1.1225	0.0275	2.75%
	3.00%	1/1/2018	0.0300	1.1525	0.0267	2.67%
1.00	3.00%	1/1/2019	0.0300	1.0300		
	3.00%	1/1/2020	0.0300	1.0600	0.0291	2.91%
	3.00%	1/1/2021	0.0300	1.0900	0.0283	2.83%

Note 1: Agreement ratified by the IBEW, Local 1260 on November 1, 2012, reflects a 3.00% increase effective 1/1/2014, 1/1/2015, 1/1/2017 and 1/1/2018 and a 3.25% increase effective 1/1/2016, based on 1/1/2013 rates.

Note 2: Agreement ratified by the IBEW, Local 1260 on July 31, 2018, reflects a 3.00% increase effective 1/1/2019, 1/1/2020 and 1/1/2021 based on 1/1/2018 rates. See also HECO-WP-C-003.

Blue Chip Economic Indicators®

Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead
Vol. 44, No. 2, February 10, 2019

2019 Real GDP Forecast Drops to 2.5%

FEBRUARY 2019 Forecast For 2019 SOURCE:	Percent Change 2019 From 2018 (Full Year-Over-Prior Year)									Average For 2019			Total Units-2019		2019	
	1 Real GDP (Chained (2012\$))	2 GDP Price Index	3 Nominal GDP (Cur.\$)	4 Consumer Price Index	5 Indust. Prod. (Total)	6 Dis. Pers. Income (2012\$)	7 Personal Cons. Exp. (2012\$)	8 Non-Res. Fix. Inv. (2012\$)	9 Corp. Profits (Cur.\$)	10 Treas. Bills 3-mo.	11 Treas. Notes 10-Year	12 Unempl. Rate (Civ.)	13 Housing Starts (Mil.)	14 Auto&Light Truck Sales (Mil.)	15 Net Exports (2012\$)	
Action Economics	2.9 H	2.0	5.0	1.9	3.5	2.8	3.1 H	4.9	7.5	2.7	3.0	3.7	1.28	17.1	-967.9	
Amherst Pierpont Securities	2.9 H	2.4	5.4 H	2.5 H	3.5	2.8	3.1 H	4.8	7.5	2.6	3.2	3.6	1.29	16.9	-960.0	
MUFG Union Bank	2.9 H	2.4	5.3	1.8	3.2	na	2.9	3.8	5.5	2.4	3.0	3.7	1.29	17.2 H	-960.0	
Barclays, US*	2.8	1.9	4.8	1.4	2.8	na	2.9	5.1	na	2.4	na	3.7	na	na	-1024.5	
RDQ Economics	2.8	2.0	4.9	2.1	3.7 H	2.5	2.9	5.6	8.5 H	2.7	3.1	3.5	1.30	17.2 H	-1021.6	
SOM Economics, Inc.	2.8	2.0	4.8	2.0	3.1	2.5	2.5	4.2	5.0	2.6	2.9	3.6	1.25	16.8	-938.0	
U.S. Chamber of Commerce	2.8	2.1	4.9	2.1	3.2	2.6	2.9	5.2	4.5	2.6	2.9	3.9	1.30	na	-932.7	
Credit Suisse	2.7	2.0	4.7	1.8	na	na	2.9	3.0	na	na	na	3.7	na	na	-966.2	
Moody's Analytics, US	2.7	2.3	5.1	2.1	2.9	2.2	2.8	5.3	6.1	2.6	3.1	3.6	1.38 H	17.0	-1080.7 L	
NatWest Markets	2.7	2.0	4.8	1.8	2.4	2.5	3.0	5.8 H	5.0	2.7	2.8	3.5	1.20	16.5	-980.0	
PNC Financial Services Group	2.7	1.7	4.4	1.8	2.9	1.3 L	2.7	4.6	na	2.5	2.9	3.6	1.30	17.0	-1013.0	
RBC Capital Markets	2.7	2.1	4.8	1.7	na	na	2.9	5.2	na	na	3.1	3.6	1.28	17.0	-980.0	
The Conference Board, US*	2.7	na	4.8	2.1	na	2.5	2.8	4.4	6.2	2.5	2.8	3.7	1.24	17.2 H	-1020.3	
Comerica**	2.6	2.0	4.6	1.9	3.5	2.9	2.6	4.1	na	2.5	2.9	3.7	1.24	16.6	-942.4	
Georgia State University*	2.6	2.4	5.0	2.0	2.6	2.5	2.8	5.1	4.4	2.5	3.2	4.1	1.24	16.3	-1021.3	
High Frequency Economics	2.6	2.0	4.7	1.9	2.8	2.9	3.0	3.3	1.7	2.4	2.9	3.8	1.22	16.9	-953.1	
Naroff Economic Advisors*	2.6	2.1	4.8	2.0	2.6	2.3	2.6	2.9	4.3	2.8	3.2	3.7	1.30	16.7	-977.0	
Point72 Asset Management*	2.6	1.9	4.5	1.9	3.1	2.3	2.8	5.4	6.2	2.5	2.8	3.7	1.20	16.7	-1058.8	
Regions Financial Corporation	2.6	2.5 H	5.1	1.7	2.9	2.3	3.0	4.4	4.5	2.6	2.8	3.7	1.25	16.9	-954.4	
Turning Points (Micrometrics)	2.6	2.4	5.0	2.1	2.6	2.4	2.7	4.5	2.8	2.8	3.4 H	3.8	1.18 L	16.7	-985.0	
ACT Research	2.5	2.0	4.5	1.9	2.8	3.0	2.7	5.0	na	2.4	2.8	3.7	1.31	16.6	-1012.7	
Bank of America-Merrill Lynch, US**	2.5	2.0	4.6	1.6	2.7	na	2.6	3.4	na	2.4	2.8	3.7	1.29	16.6	-969.1	
Eaton Corporation	2.5	2.3	4.8	2.0	2.5	2.7	2.6	4.1	na	2.6	3.0	3.7	1.30	16.8	-1006.2	
Econoclast	2.5	2.0	4.5	2.0	2.8	2.2	2.8	3.5	5.2	2.4	2.8	3.8	1.25	16.3	-989.0	
Fannie Mae	2.5	2.3	4.8	2.0	2.5	2.4	2.6	3.9	1.5	2.5	2.7	3.7	1.26	16.7	-1020.9	
FedEx Corporation, US	2.5	2.1	4.5	1.9	2.7	2.5	2.6	4.6	3.9	2.6	3.0	3.6	1.27	16.8	-1008.0	
Ford Motor Company*	2.5	2.1	4.5	2.2	2.6	2.5	2.5	3.9	na	na	2.7	3.7	1.27	na	-1003.0	
General Motors Corporation, US	2.5	2.1	4.6	2.0	2.8	2.6	2.7	3.8	1.8	2.6	2.9	3.6	1.28	na	-857.3	
Inforum - Univ. of Maryland	2.5	2.1	4.7	2.0	2.7	2.4	2.6	4.3	4.5	2.7	3.0	3.7	1.27	16.7	-980.4	
Moody's Capital Markets, US*	2.5	1.9	4.5	1.6	3.5	2.6	2.8	3.8	4.3	2.4	2.8	3.6	1.28	16.9	-967.7	
National Assn. of Home Builders	2.5	2.3	4.5	2.0	1.7 L	2.6	2.6	4.0	na	2.7	3.0	3.6	1.27	16.8	-1020.0	
UCLA Business Forecasting Proj.*	2.5	2.2	4.7	2.2	2.5	2.5	2.6	4.3	4.0	2.5	3.0	3.6	1.31	16.6	-1035.0	
Wells Fargo, US	2.5	1.9	4.4	2.1	3.0	2.9	2.9	3.8	4.4	2.6	3.0	3.7	1.30	16.7	-1010.7	
AIG	2.4	2.3	4.7	2.0	2.5	2.7	2.5	3.8	4.8	2.4	2.8	3.5	1.27	16.7	-1009.2	
BMO Capital Markets*	2.4	2.1	4.5	2.0	3.3	2.1	2.7	3.3	5.9	2.5	2.8	3.6	1.24	16.4	-1009.0	
Daiwa Capital Markets America	2.4	2.0	4.5	1.9	2.5	2.2	2.9	3.6	5.0	2.4	2.8	3.8	1.19	16.7	-1012.0	
Goldman Sachs & Co.**	2.4	2.0	4.3	1.8	1.7 L	3.4 H	2.8	3.3	na	2.7	2.9	3.7	1.27	na	-975.5	
Macroeconomic Advisers by IHS Markit**	2.4	2.1	4.5	2.0	2.7	2.5	2.6	3.6	1.5	2.6	2.9	3.6	1.28	16.8	-1021.1	
MacroFin Analytics & Rutgers Bus School	2.4	2.2	4.6	2.0	3.1	2.3	2.5	3.8	4.7	2.6	2.9	3.9	1.26	16.8	-943.8	
Nomura Securities, US	2.4	2.3	4.7	1.7	2.7	2.1	2.9	2.7	na	na	2.7	3.4 L	1.25	16.9	-1044.3	
Northern Trust Company*	2.4	1.8	4.2	2.0	2.7	2.2	2.7	3.1	4.1	2.7	3.2	3.6	1.28	16.6	-989.9	
Oxford Economics, US	2.4	1.7	4.2	1.7	2.9	2.4	2.8	3.3	-2.4 L	2.5	2.8	3.7	1.29	17.0	-996.9	
Societe Generale	2.4	1.9	4.3	1.6	na	2.5	2.8	4.1	3.2	2.6	2.8	3.6	1.23	16.7	-1011.4	
UBS	2.4	2.0	4.5	1.5	2.4	3.2	2.4	3.0	na	2.5	na	3.7	1.33	na	-1010.9	
Economist Intelligence Unit, UK	2.3	1.8	4.1	2.2	2.6	2.0	2.3	3.0	na	2.6	2.7	4.1	1.26	16.2	-915.0	
Grant Thornton/Diane Swonk	2.3	2.1	4.4	1.9	2.6	2.5	2.6	3.4	1.2	2.4	2.8	3.7	1.24	16.6	-1010.4	
JP MorganChase, US	2.3	1.8	4.1	1.4	2.0	2.7	2.9	3.4	3.5	na	3.1	3.7	1.28	17.0	-1058.0	
MacroPolicy Perspectives	2.3	1.7	4.0	1.3 L	na	na	2.9	3.6	2.0	2.6	2.8	3.8	1.22	16.7	-1051.0	
Morgan Stanley, US**	2.3	2.0	4.3	1.8	3.4	2.6	2.5	2.6	na	2.9 H	2.5	3.5	1.28	na	-988.4	
S&P Global, US*	2.3	2.1	4.4	2.2	2.5	1.8	2.6	3.5	0.7	2.7	3.0	3.6	1.30	16.8	-1006.3	
Swiss Re	2.2	1.6 L	3.8 L	1.9	2.4	2.8	2.7	3.2	4.5	2.5	3.0	3.9	1.27	16.9	-1019.1	
BNP Paribas North America	2.1	na	na	1.4	2.4	2.6	2.5	3.0	na	2.8	3.4 H	3.6	na	na	-1008.0	
ACIMA Private Wealth, US	1.7 L	2.1	3.8 L	1.8	2.0	1.5	1.5 L	1.6 L	na	2.1 L	2.3 L	4.2 H	1.20	15.7 L	-832.5 H	
2019 Consensus: February Avg.	2.5	2.1	4.6	1.9	2.8	2.5	2.7	3.9	4.1	2.6	2.9	3.7	1.27	16.7	-991.1	
Top 10 Avg.	2.8	2.4	5.1	2.2	3.4	2.9	3.0	5.3	6.4	2.8	3.2	3.9	1.31	17.1	-922.9	
Bottom 10 Avg.	2.2	1.8	4.1	1.5	2.2	2.0	2.4	2.8	1.4	2.4	2.7	3.5	1.21	16.4	-1041.6	
January Avg.	2.6	2.1	4.7	1.9	2.7	2.5	2.7	4.1	4.6	2.6	3.0	3.6	1.27	16.8	-989.7	
Historical data	2015	2.9	1.0	4.0	0.1	-1.0	4.1	3.7	1.8	-2.9	0.1	2.1	5.3	1.11	17.4	-724.9
	2016	1.6	1.1	2.7	1.3	-1.9	1.7	2.7	0.5	-1.1	0.3	1.8	4.9	1.17	17.5	-786.2
	2017	2.2	1.9	4.2	2.1	1.6	2.6	2.5	5.3	3.2	0.9	2.3	4.4	1.20	17.1	-858.7
	2018	2.9 f	2.2 f	5.2 f	2.4	4.1	2.8 f	2.7 f	6.8 f	7.8 f	2.0	2.9	3.9	1.26 f	17.2	-908.4 f
<i>f=Dec 2018 Consensus Forecasts</i>																
Number of Forecasts Changed From a Month Ago:																
Down	18	17	26	18	10	8	14	19	12	25	26	6	9	13	14	
Same	28	24	14	17	13	26	31	20	16	16	15	23	30	23	21	
Up	3	6	8	14	22	11	4	9	3	2	2	20	6	1	13	
February Median	2.5	2.0	4.6	1.9	2.7	2.5	2.7	3.8	4.5	2.6	2.9	3.7	1.27	16.8	-1006.2	
February Diffusion Index	35 %	38 %	31 %	46 %	63 %	53 %	40 %	40 %	35 %	23 %	22 %	64 %	47 %	34 %	49 %	

*Former winner of annual Lawrence R. Klein Award for Blue Chip Forecast Accuracy. **Denotes two-time winner.

HAWAIIAN ELECTRIC COMPANY, INC.

EXHIBIT A 3.00% 3.00% 3.00%

<u>JOB CODE</u>	<u>JOB TITLE</u>	<u>1/1/2019</u>	<u>1/1/2020</u>	<u>1/1/2021</u>	
CL829	CASHIER				
	1st 3 mos.	24.19	24.89	25.59	
	Next 3 mos.	25.31	26.05	26.79	
	Next 3 mos.	26.60	27.37	28.14	
	Next 6 mos.	27.91	28.72	29.53	
	Next 6 mos.	29.26	30.11	30.96	
	Thereafter	30.71	31.60	32.49	
CLC05	SR INFORMATION STORAGE EQUIPMENT OPERATOR				
CL18	SYSTEM OPERATION CLERK				
CL20	TEST AND SUBSTATION CLERK				
CL22	DESKTOP PUBLISHING OPERATOR				
CL104	POWER PLANT CLERK				
CL257	MOTOR FLEET CLERK				
CL328	METER CLERK				
CL21	PRINT PRODUCTION OPERATOR				
CL684	COMPUTER SYSTEMS OPERATOR TRAINEE				
	1st 3 mos.	24.71	25.43	26.15	
	Next 3 mos.	25.95	26.71	27.47	
	Next 3 mos.	27.20	27.99	28.78	
	Next 6 mos.	28.55	29.38	30.21	
	Next 6 mos.	29.99	30.86	31.73	
	Thereafter	31.40	32.31	33.22	
TL180	CONDENSER CLEANER				
	1st 6 mos.	27.20	27.99	28.78	
	Next 6 mos.	28.55	29.38	30.21	
	Next 6 mos.	29.99	30.86	31.73	
	Thereafter	31.40	32.31	33.22	
CLA49	PROJECT CLERK				
CLA81	STANDARDS CLERK				
CL12	JOINT POLE AIDE				
CL13	PROJECT CLERK				
CL15	FIELD SERVICE CLERK				
	1st 3 mos.	25.31	26.05	26.79	
	Next 3 mos.	26.60	27.37	28.14	
	Next 3 mos.	27.91	28.72	29.53	
	Next 6 mos.	29.26	30.11	30.96	
	Next 6 mos.	30.71	31.60	32.49	
	Thereafter	32.27	33.21	34.15	
T335	TRUCK DRIVER A	1/1/2018	32.31	33.25	34.19
CL406	METER READER				
	1st 3 mos.	23.99	24.71	25.43	26.15
	Next 3 mos.	25.19	25.95	26.71	27.47
	Next 6 mos.	27.72	28.55	29.38	30.21
	Next 6 mos.	29.12	29.99	30.86	31.73
	Next 6 mos.	30.49	31.40	32.31	33.22
	Thereafter	32.03	32.99	33.95	34.91
			x 1.03	x 1.0291	x 1.0283

CIAC Treatment
Resulting from FERC Adoption

Adoption of FERC USOA required a change in presentation change to Contributions in Aid of Construction (CIAC)

Prior to October 2018, and in establishing rates in previous test year rate cases, the Company's presentation of contributions in aid of construction ("CIAC") followed the guidelines of the National Associate of Regulatory Utility Commissioners Uniform System of Accounts (NARUC USOA). Under the NARUC reporting system, CIAC is reported under an exclusive account, account 271, which includes donations or contributions in cash, services or property from states, municipalities, or other governmental agencies, individuals and others for construction purposes. All CIAC was incorporated as a deduction in the calculation of rate base in part because the Companies' systems did not facilitate on-going reporting of CIAC related to plant in service separate from CIAC related to construction work in progress ("CWIP").

The Commission approved the Companies' request to change to Federal Energy Regulatory Commission Uniform System of Accounts (FERC USOA), beginning with the implementation of the Companies' new ERP/EAM, in Decision and Order No. 31757, issued December 19, 2013 in Docket No. 2013-0007.

Beginning in October 2018 with the transition to FERC, the net balance of CIAC in account 271 less the CIAC amortization to be recorded for October to December 2018, was credited against the account balances charged with the cost of construction, i.e., gross plant in service and CWIP, resulting in the account becoming zero (i.e. "0") at December 31, 2018.

Ratemaking treatment for CIAC

The Company's ratemaking treatment of contributions in aid of construction is summarized below:

- *CIAC associated with Plant in Service* – When a utility capital project is placed into service, the plant in service net of the associated CIAC is included as net cost of plant in service in rate base. The plant in service net of the CIAC is included as part of the basis for the depreciation accrual the year after it is placed into service (i.e. January 1 of the year after it is placed into service).
- *CIAC associated with CWIP* – For book purposes, CIAC that is received while projects are still under construction (i.e. in CWIP) will offset the costs incurred and is presented net in CWIP. The CWIP net of the associated CIAC is subject to the AFUDC accrual if there is a net CWIP balance. In the next rate case, the Company will request CIAC associated with CWIP be excluded from the rate base calculation since CWIP net of

CIAC earns AFUDC. CIAC associated with CWIP is however, included in rate base in this RAM calculation for consistency with the 2017 Test Year treatment. See further discussion of Company's requested treatment of CIAC associated with CWIP below.

- *Developer Advances* - Cash contributions received in advance of construction of a utility capital project that are temporarily not classified as CIAC because the funds received are in excess of the specific project expenditures. The balance of developer advances is presented as funds from non-investors, included in its own exclusive account, and deducted in the calculation of rate base. As project costs are incurred for a utility capital project, an equal portion of developer advances associated with the project will be reclassified as CIAC and credit the accounts charged with the cost of construction. Developer Advances were included as a part of CIAC as a reduction to rate base in the 2017 Test Year.

Treatment of CIAC within the 2019 Annual Decoupling Filing

For the 2019 Decoupling Filing, the Company treated CIAC consistently with prior filings resulting in no impact to rate base.

Schedule D1, Determination of Rate Base RAM Adjustment – Change in Rate Base

Plant in Service - There is no change in rate base for plant in service and CIAC associated with plant in service. Under NARUC, in rate base, plant in service was the gross cost of plant (net of accumulated depreciation), and CIAC was a separate reduction to rate base. Under FERC, the plant in service amounts are net of (i.e., already reduced by) CIAC, and presented net of accumulated depreciation in the calculation of rate base. There is no separate CIAC line item reducing rate base because it is already net in utility plant. Therefore, there is no net rate base impact. The difference between NARUC and FERC for plant in service is a matter of where the costs are classified in rate base, and not a matter of inclusion or exclusion of costs in rate base.

CIAC associated with CWIP - There is no change in rate base for CIAC associated with CWIP. Previously, presentation of CIAC aligned with NARUC and all CIAC, including amounts associated with projects in CWIP, were included as a reduction to rate base under account 271. The 2019 estimated balance continues the treatment of including the CIAC in CWIP to be consistent with the recorded balance at 2018 year-end because all 2019 estimated CIAC additions have been included at Schedule D2 and included as part of net cost of plant at Schedule D1. Although the treatment described above was used in the 2019 annual decoupling filing, see Company's requested treatment to exclude CIAC associated with CWIP from rate base in future filings in the discussion below.

Developer Advances - With the transition to FERC, CIAC is credited when received against the related project costs in CWIP. To the extent funds are not yet expended for a project in

CWIP, the CIAC will be classified as developer advances and deducted in the calculation of rate base at Schedule D1. The recorded balance at 2018 year-end is not adjusted for 2019 activity as it is incorporated in Schedule D2.

Schedule D2, Determination of Baseline Capital Projects Additions

Schedule D2 was revised to incorporate the baseline and major project CIAC (including Developer Advances) for 2014 to 2017 into the baseline average calculation of net plant in service, consistent with the presentation of rate base. The 2018 CIAC additions calculated at HECO-WP-D2-003 includes additions to CIAC from all sources, i.e. Plant, CWIP and Developer Advances, which were used in the 5-year baseline calculation. As a result, the estimated 2019 additions to CIAC in CWIP and Developer Advances balances at Schedule D1 for the Change in Rate Base are not required as they are already included in the net cost of plant line item.

Schedule E, Determination of Depreciation & Amortization RAM Adjustment

FERC Uniform System of Accounts Electric Plant Instructions, 2. Electric Plant To Be Recorded at Cost. D. states, “The electric plant accounts shall not include the cost or other value of electric plant contributed to the company.” Therefore, the Recorded Depreciable/Amortizable Balances at December 31, 2018 in Schedule E represents plant in service net of CIAC which is used as the basis to estimate the 2019 annual accrual amount. In calculating the 2019 RAM Depreciation and Amortization, Depreciation and Amortization in Current Revenues also includes CIAC amortization approved in the 2017 Test Year.

Schedule F & F1, Determination of Change in Deferred Income Taxes & Tax Depreciation

The methodology for computing the deferred taxes related to RAM year tax depreciation was not changed within the 2019 annual decoupling filing. Gross plant additions are used as the basis for calculating tax depreciation. However, see the CIAC impact to ADIT section below for the Company’s preferred treatment considering the effects of netting CIAC against plant in service.

Schedule G-series, CIAC

Schedule G, G1 and G2 were removed from the Decoupling filings and instead incorporated into either Plant in Service, CIAC in CWIP or Developer Advances. The December 31, 2018 balances for CIAC associated with CWIP and Developer Advances were extracted from PowerPlan. Additionally, as noted above, the calculation of the 5-year baseline average of CIAC and amortization was incorporated within Schedule D2 and Schedule E, respectively.

The Company will continue to include CIAC associated with CWIP and Developer Advances as a reduction to rate base until the FERC presentation of rate base is approved in the Company’s next rate case.

Company's requested CIAC treatment

The Company requests to reflect the following changes to the treatment of CIAC within the annual decoupling filings.

CIAC associated with CWIP

In Mr. Franklin's T-12 direct testimony in Hawaii Electric Light's 2019 Test Year rate case, the Company proposes to remove CIAC associated with CWIP from the calculation of rate base due to the fact that CWIP net of associated CIAC earns AFUDC, therefore the CWIP and its associated CIAC should be excluded from rate base.

Excluding CWIP net of CIAC, to better align the source of funds with its use (i.e. the CIAC funds received were applied against the costs incurred for the project) and is therefore properly excluded from the calculation of rate base. In addition, and as mentioned previously, any material CIAC received in advance of construction expenditures will continue to be deductions in the calculation of rate base as Developer Advances.

CIAC impact to ADIT

ADIT associated with CIAC in CWIP should be divided between nontaxable and taxable CIAC. Nontaxable CIAC (primarily interconnection CIAC) is treated as a reduction in basis for both book and tax purposes. On the other hand, although taxable CIAC is also a reduction in basis for book purposes, for tax purposes, the receipt of taxable CIAC creates tax basis by way of the recognition of taxable income and reverses by way of tax depreciation.

Nontaxable CIAC does not create ADIT since there is no book tax difference. Consequently, the regulatory netting of nontaxable CIAC against the plant assets should not create any issue with respect to the ADIT beginning balance for the rate base RAM calculation

Taxable CIAC generates a Deferred Tax Asset (DTA) as it is received and recorded into CWIP under the new FERC accounting. Prior NARUC accounting treatment with account 271 created DTA as CIAC was booked to 271, which is equivalent to what is now booked to CWIP. The origination and timing of the DTA under the FERC method will be equivalent to the NARUC method. However, under the old method, the DTA was immediately recognized as part of rate base, consistent with the treatment of the account 271 inclusion. However, under the FERC method, the generation of the DTA must be inventoried and tracked to match up with the amount of CIAC in CWIP and the amounts closed to plant in service. This tracking is necessary to ensure that the amount of DTA related to CWIP is excluded from rate base. Once CWIP costs are closed to plant, the related DTA will be included in rate base and will begin reversal through tax depreciation taken on the CIAC tax basis.

FERC accounting imbeds the book treatment of CIAC within CWIP and the ultimate plant and related depreciation. The separation will disappear and the Company asserts that the ADIT

effects will be the same with respect to the beginning balance of ADIT for the annual decoupling filing except to the extent CIAC is still in CWIP. This issue will be addressed along with the rate base treatment of CIAC associated with CWIP as mentioned above.

FERC accounting nets CIAC against Plant in Service for purposes of computing baseline and major plant additions. For RAM year tax depreciation and the related ADIT calculated for the change in RAM year ADIT, adopting the net plant additions as the RAM year tax additions will be a change that will result in a smaller amount of tax depreciation and ADIT “change” since the Company previously has assumed the gross additions to be the RAM year tax depreciable base. The Company asserts this is reasonable for the following reasons:

- 1) Under the old method, to the extent nontaxable CIAC was included in the RAM year numbers (through major projects or baseline projects), tax depreciable basis was overstated since there is no tax basis for assets funded by nontaxable CIAC.
- 2) With respect to taxable CIAC, the funded assets do have depreciable tax basis and it is accounted for in the RAM year additions tax depreciation. However, the receipt of taxable CIAC generates taxable income and deferred tax assets that increase rate base. The effect of this DTA from taxable CIAC was never recognized in the RAM tariff, which resulted in an overstatement of RAM year ADIT change, as it related to the projected plant additions.

For purposes of the 2019 RAM calculation, ADIT has been calculated on gross plant additions, consistent with the 2017 Test Year treatment and prior decoupling filings, however the Company is requesting treatment of CIAC in deferred tax to follow FERC accounting.

Summary

In summary, Hawaiian Electric prepared the 2019 annual decoupling filings in accordance with the historical treatment of CIAC. Historically, due to system constraints, CIAC records were not maintained with matching of the separate components (plant in service, CWIP, developer advances). As a result, the entire amount of CIAC was treated as a reduction to rate base and the Return on Investment was understated. As stated in Mr. Franklin’s T-12 direct testimony in Hawaii Electric Light’s 2019 Test Year rate case, the Companies propose to exclude the CIAC associated with CWIP in its calculation of rate base in the rate base RAM filings. Should the Commission approve Hawaii Electric Light’s proposal, Hawaiian Electric will implement this change in the annual decoupling filing in the year following the Commission’s approval.

**Hawaiian Electric Company, Inc.
Revenue Decoupling - Rate Base RAM
2018 Major Projects and Other Plant Additions, Net of CIAC**

NET CALCULATION

Grand parent	Project #	Project	Plant Addition Date	[2] 2018 Plant Additions, Net of CIAC					Net PUC Approved (F)	Over/(Under) Net PUC Approved (E) - (F)	Functional Plant Category	
				[1] Net Plant Adds Thru 12/31/17 (A)	Total Project Cost (B)	CIAC & Adjs (C)	Net Project Cost (D) = (B) + (C)	Net Plant Adds Thru 12/31/18 (E) = (A) + (D)				
<u>2018 Major Projects</u>												
1	-	P0001370 DOT Airport DSG	2018 stragglng	3,336,179	(3,516)	(96,602)	(100,118)	3,236,061	3,400,139	[3a]	(164,078)	Production Other
2	-	P0002264 Pukele 80MVA Tsf #1	2018 stragglng	3,846,733	-	-	-	3,846,733	3,846,733	[3a]	-	Transmission
3	Y00038	(P0000783) Kakaako Makai-Iwilei 25kV DL (P0000672) Kakaako Makai-Kewalo 25kV DL (P0001579) Kakaako Makai DOT Queen-Cook PZ.000001	2018 stragglng 2018 stragglng 2018 stragglng	7,243,799 5,023,851 1,969,969	- - -	- - -	- - -	7,243,799 5,023,851 1,969,969				
		PZ.000003		14,237,619				14,237,619	14,537,623	[3a]	(300,004)	Distribution
4	Y00168	(P0003205) ERP EAM Hardware	2018 stragglng	2,604,146	-	-	-	2,604,146	2,590,000	[3b]	14,146	Computers <i>To Sch DI</i>
5		PE.005155 Joint Pole Capital Transfer Price	201812	-	24,665,897	-	24,665,897	24,665,897	24,665,897	[3c]	-	Distribution
<u>Other</u>												
6	-	PE.000104 (P0003465) Koolau-Wailupe #1 Str 30 P9 Replace	2018 stragglng	2,684,387	13,203	-	13,203	2,697,590	2,555,619	[3d]	141,971	Transmission <i>To Sch DI</i>
<u>Major Project Interim Recovery (MPIR) Projects</u>												
7	-	PZ.000016/ PZ001002 (P0001576) Schofield Generation Station	201806	-	144,743,542	-	144,743,542	144,743,542	-	[4]	144,743,542	Production Other <i>To Sch DI</i>

[1] Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-D2-001, filed on May 29, 2018.

[2] Hawaiian Electric Companies' Exemption From and Modification of General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2018, in Docket No. 03-0257, filed on March 27, 2019. See HECO-WP-D2-002.

[3] Per the Final Decision & Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, filed on August 31, 2010, in Docket No. 2008-0274, on page 54, "for purposes of calculating the Rate Base for the RAM, the costs on Major Capital Projects shall be limited to those amounts most recently approved, e.g., when authorized in the commission's decision approving the HECO Companies' application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO companies' rate cases."

[3a] Net PUC Approved amount was derived from the Hawaiian Electric 2017 Test Year Rate Case, filed in Docket No. 2016-0328, in response to CA-IR-303 and CA-IR-304 which updated 2016 Plant Additions and CIAC for actuals through December 31, 2016 and revised forecast for 2017. See calculation below:

	DOT Airport DSG			Pukele 80MVA Tsf #1			Kakaako Makai		
	Gross	CIAC	Net	Gross	CIAC	Net	Gross	CIAC	Net
Gross/Net Plant Adds Thru 12/31/16) - column [1]	5,235,178	(1,993,000)	3,242,178	3,839,121	-	3,839,121	18,338,808	(2,825,023)	15,513,785
2017 Plant Addition (CA-IR-303, Att 2)	157,961	-	157,961	7,612	-	7,612	(76,162)	-	(76,162)
2017 CIAC Estimate (CA-IR-304, Att 2)	-	-	-	-	-	-	-	(900,000)	(900,000)
Derived PUC Approved	5,393,139	(1,993,000)	3,400,139	3,846,733	-	3,846,733	18,262,646	(3,725,023)	14,537,623

[3b] Per Decision and Order No. 33861, page 4, Docket No. 2014-0170, For Approval of an Enterprise Resource Planning and Enterprise Asset Management System Implementation Project and Related Accounting Treatment, filed August 11, 2016.

[3c] Per Decision and Order No. 35768, Docket No. 2018-0075, For Approval of the Transfer of Equity Ownership Interest in Certain Joint Poles, to Commit Funds in Excess of \$2,500,000, Accounting and Ratemaking Treatment, Amendments to Joint Pole Agreements Between the Applicants, Asset Transfer Agreement, and Pole Licensing Agreement, file October 16, 2018. The Commission approved the acquisition of Hawaiian Telcom's joint pole equity ownership shares, valued at \$47,970,092, of which \$24,665,897 was related to Hawaiian Electric.

[3d] In the 2017 Fourth Quarter Capital Projects Status Report filed on February 28, 2018, Hawaiian Electric identified that the project costs had unexpectedly exceeded \$2,500,000 and provided an explanation for the higher costs. Project cost is limited for rate base RAM recovery to the amount identified in Hawaiian Electric's response to CA-IR-303, Attachment 2, page 3 of 7), filed in Docket No. 2016-0328, Hawaiian Electric 2017 Test Year Rate Case.

[4] Project to be recovered through the MPIR mechanism and therefore the entire project will be removed from the RAM Revenue Adjustment Calculation. See Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Recovery Mechanism, filed February 7, 2019, Transmittal No. 19-01 effective January 1, 2019. MPIR Recovery calculated at the Schedule L series.

2018 General Order No. 7 (GO7) Report Summary Plant Additions

Projects	2018 Plant Addition (1)
Less than \$2.5M	189,284,505
Greater than \$2.5M	169,419,126
Total Plant Additions - Gross	358,703,631
	To Sch D2, line 1
Less: Major Project additions in 2018	
DOT Airport DSG	3,516
Koolau-Wailupe #1 Str 30 P9 Replace	(13,203)
Schofield Generation Station	(144,743,542)
Joint Pole Transfer Price	(24,665,897)
	(169,419,126)
Baseline Plant Additions - Gross	189,284,505

(1) Source: Hawaiian Electric Companies' Exemption From and Modification General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2018, in Docket No. 03-0257 filed on March 27, 2019.

Hawaiian Electric Company, Inc.
CIAC Reconciliation
As of December 31, 2018

Line No.	Description (a)	Reference (b)	CIAC, Including Developer Advances (c)	
1	12/31/17 Balance	5/29/18 Decoupling, Sch G1	(366,100,380)	
2	Exclude: Non-Utility CIAC		618,464	
3	Add: Developer Advances		(33,883,949)	
4	12/31/17 Balance - Utility CIAC		<u>(399,365,865)</u>	
5	9/30/18 Balance	GL #271	(378,238,665)	
6	Exclude: Non-Utility CIAC	Line 2	618,464	
7	Add: Developer Advances	GL #2520300	(34,163,852)	
8	9/30/18 Balance - Utility CIAC	Line 4 + Line 5	<u>(411,784,053)</u>	
9	CIAC Change Thru 9/30/18 - Utility	Line 6 - Line 3		(12,418,188)
10	Add Back: 2018 CIAC Amortization thru 9/30/18	5/29/18 Decoupling, Sch G3 (8,818,605 x 9/12)	8,818,605	<u>(6,613,954)</u>
11	CIAC Additions Thru 9/30/18			(19,032,141)
12	<u>Oct to Dec 2018 Activity</u>			
13	CIAC-Cash Tax	GL #60005200	(6,435,124)	
14	CIAC-Cash Non-Tax	GL #60005201	(831,921)	
15	CIAC-Settlement	GL #60050221	174,515	
16	CIAC-In-Kind	GL #60005206	<u>(3,443,756)</u>	
17				<u>(10,536,286)</u>
18	2018 CIAC Additions, included within Plant in Service, CWIP, Developer Advances			<u><u>(29,568,427)</u></u> To Sch D2

Purpose:

Starting October 1, 2018, the Company adopted FERC guidelines resulting in CIAC being netted with Plant via Plant Additions or CWIP. This workpaper calculates the 2018 CIAC additions by summing the CIAC activity from January 1 to September 30, 2018 (per Ellipse) with the CIAC activity from October 1 to December 31, 2018 (per SAP and Powerplan WBS) for inclusion in the Baseline Plant Additions calculation at Schedule D2. Beginning with calendar year 2019, Baseline Plant Additions will be shown net of CIAC.

Note 1:

See HECO-WP-D1-001 for documentation on the treatment of CIAC in the 2019 Decoupling Filing.

EXCERPT: Transmittal 18-01, Schedule G1, filed 5/29/18.

SCHEDULE G1
PAGE 1 OF 1

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
BASELINE CAPITAL PROJECTS CIAC ADDITIONS

Source of CIAC balance and amort.: December Monthly Reports filed (non-confidential basis) with the PUC dated:

Line No.	Description (a)		2/21/2014	2/26/2015	2/23/2016	2/24/2017	3/1/2018
			2013 (b)	2014 (c)	2015 (d)	2016 (e)	2017 (f)
1	CIAC Balance, January 1 (Dec Rpt. pg. 10)		(238,510,104)	(258,084,169)	(283,739,660)	(319,727,698)	(348,444,542)
2	Less: Non-Utility CIAC	NOTE (3)				618,464	618,464
3	Adjusted CIAC Balance, January 1		(238,510,104)	(258,084,169)	(283,739,660)	(319,109,234)	(347,826,078)
4	Less: CIAC Amortization (Dec Rpt. pg. 2)		5,652,912	6,147,559	6,771,148	7,597,437	8,309,481
5	CIAC Balance, December 31 (Dec Rpt. pg. 10)		258,084,169	283,739,660	319,727,698	348,444,542	366,100,380
6	Less: Non-Utility CIAC	NOTE (3)			(618,464)	(618,464)	(618,464)
7	Less: Adjusted CIAC Balance, December 31		258,084,169	283,739,660	319,109,234	347,826,078	365,481,916
8	Total Adjusted CIAC Additions	(Sum Line 3, 4 & 7)	25,226,977	31,803,050	42,140,722	36,314,281	25,965,319
9	Add Developer Advances:	NOTE (4)	-	-	-	-	33,883,949
19	Total Adjusted CIAC & Developer Advance Additions		25,226,977	31,803,050	42,140,722	36,314,281	59,849,268
20	<u>Less Major Projects:</u>	<u>Dkt No.</u>					
21		<u>Item No.</u>					
22	<u>2008 In-service:</u>						
23	CIP Generating Unit	05-0145					
24							
25	<u>2010 In-service:</u>						
26	K3 Biofuel Co-Firing	2009-0155					
27							
28	<u>2011 In-Service:</u>						
29	W8 Boiler Controls Upgrade	2007-0365					
30	EOTP Ph. 2 (Subs/Switch Stations)	2010-0062	(87,994)	(43,725)	(15,232)	(718)	Schedule D2
31	W7 Controls Upgrade	2009-0195					
32	W8 Main Transformer Replace						
33							
34	<u>2012 In-Service:</u>						
35	K1 Condenser Tube Replace	2010-0126					
36	BPT Tank 132 Improvements	2010-0286					
37	Mobile Radio Replacement	2010-0162					
38	Kapolei Substation	2011-0026					
39							
40	<u>2013 In-Service:</u>						
41	Pukele 80MVA Tsf #3	2011-0156					
42	Kakaako Makai-Iwilei 25kV DL	2009-0042					
43	Kalo Substation - Land - NOTE (2)	2008-0070					
44	North South Road 46kV Line	2008-0070					
45							
46	<u>2014 In-Service:</u>						
47	Kalo Substation	2008-0070					
48	Kalo Sub 46kV & 12kV Distr	2008-0070					
49	Kalo Telecomm	2008-0070					
50	Kalo Sub 12kV Work	2008-0070					
51	Kakaako Makai-Kewalo 25kV DL	2009-0042					
52	Kakaako Makai DOT Queen-Cook	2009-0042				(2,825,023)	Schedule D2
53	BPT Tank 133 Improvements	2010-0318					
54	Pukele 80MVA Tsf #2	2011-0156					
55	DOT Airport DSG	2008-0329					
56							
57	<u>2016 In-Service:</u>						
58	Pukele 80MVA Tsf #1	2011-0156					
59							
60	<u>2017 In-Service:</u>						
61	ERP EAM Hardware	2014-0170					
62							
63	Total Net CIAC & Developer Advance Additions		25,138,983	31,759,325	42,125,490	33,488,540	59,849,268
64	Last Five-Year Average						38,472,321
65							To Sch G

NOTE (1): The CIAC amounts of the major projects are reflected in the year that they were received. In previous Decoupling filings these amounts were from the respective year's GO7 plant addition annual reports which reports the CIAC in the year the project closed to plant. In the past, the total CIAC additions, which reflect actual contributions received in the year, may not have included the total major project CIAC from the GO7 report to the extent that the CIAC was received in advance, or in multiple payments over a span of more than one year. Source: UI Planner files: Actuals Scenario.

NOTE (2): CIAC received for this project was not reflected in the 2012 and 2013 Decoupling filings as previous filings reported the CIAC amounts of the major projects from the respective year's GO7 plant addition annual report which reports the CIAC in the year the project closed to plant. See GENERAL NOTE.

NOTE (3): Adjustment to remove non-utility project related CIAC from the general ledger balance. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it. See Schedule G3, Line 96. Adjusted CIAC Additions for 2016 was corrected to exclude the non-utility plant balance from the beginning balance.

NOTE (4): In 2017, the Company reclassified the portion of CIAC for projects where the cash balance received was in excess of total incurred costs since the project agreements include provisions which allow for instances that unapplied funds received in advance would be subject to refunds. The true-up provision allows for any excess funds not expended to be refunded back to the developer. Furthermore, between the timing of the cash receipt to the project completion date, the project could be terminated, which would then result in refund of the unapplied funds. See below for a reconciliation of the Customer Advance balance at December 31, 2017:

Customer Advance (#25200000)	4,239,163
Developer Advances (#25203000)	33,883,949
Customer Advances	38,123,112

SOURCE: HECO Monthly Financial Report - December 2017, page 10, filed March 1, 2018.

The unapplied developer funds received in advance (Developer Advances) are excluded from the CIAC balance subject to amortization until they are reclassified to CIAC as costs are incurred. Developer Advances are included in the calculation of the Last Five-Year Average because they represent funds received in advance and are expected to be reclassified to CIAC as costs are incurred in the current year. Developer advances were also included in the Unamortized CIAC balance (See "Average Rate Base" from HECO Decision and Order No 35280, filed 2/9/2018 of Docket No. 2016-0328).

**Hawaiian Electric Company
2019 Plant Additions Net of CIAC - Major Projects Support**

Grand-parent	Project	Functional Category	Plant Addition Date	Net PUC Approved	Net Plant Adds thru 12/31/18	2019 Net Plant Additions	2019 CIAC Additions	2019 Net Project Costs	Estimated Net Plant Adds thru 12/31/19	Over/(Under) Net PUC Approved	2019 Net Plant Addition Qualifying for RB RAM (Note A)
				[1] <i>A</i>	[2] <i>C</i>	[3] <i>D</i>	[3] <i>E</i>	<i>F = D + E</i>	<i>G = C + F</i>	<i>H = A - G</i>	
	PE.000209 (P0003975): AES-CEIP #2 138kV OH Trans Line Relocation	Transmission >=69kV	2019/02	3,007,232 [1a]	-	4,091,987		4,091,987	4,091,987	1,084,755	3,007,232
	PG.000005/PZ.001001 (P0003966): West Loch Utility Scale PV	Production-Photovoltaic	2019/05	62,400,000 [1b]	-	52,128,000		52,128,000	52,128,000	(10,272,000)	52,128,000
	PZ.000015 (P0000974, P0003977): Ala Wai Canal 46kV Relocation	Transmission <69kV	2019/06	13,910,207 [1c]	-	20,300,268		20,300,268	20,300,268	6,390,061	13,910,207
Y00038	P0000672: Kakaako Makai-Kewalo 25kV DL		2014/04	7,243,799	7,243,799						
	P0000783: Kakaako Makai-Iwilei 25kV DL		2013/07	5,023,851	5,023,851						
	P0001579: Kakaako Makai DOT Queen-Cook		2014/04	1,969,969	1,969,969						
		Distribution		14,237,619 [1d]	14,237,619	-	(22,683)	(22,683)	14,214,936	(22,683)	(22,683)
69,022,756											
To Sch D3											

NOTE A: Amount qualifying for 2019 rate base RAM recovery is limited to the lower of the net plant addition (column D) or the net PUC approved amount (column A). In the case of straggling costs, the amount qualifying for 2019 rate base RAM recovery is limited to the lower of the 2019 net plant addition (column D) or the remaining unused balance of the net PUC approved amount.

[1] Per the Final Decision & Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, filed on August 31, 2010, in Docket No. 2008-0274, on page 54, "for purposes of calculating the Rate Base for the RAM, the costs on Major Capital Projects shall be limited to those amounts most recently approved, e.g., when authorized in the commission's decision approving the HECO Companies' application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO companies' rate cases."

[1a] Decision and Order No. 35312 in Docket No. 2016-0439, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the P0003975 - AES-CEIP 2 138 kV Overhead Transmission Line Relocation Project, filed March 2, 2018.

[1b] Decision and Order No. 34676 in Docket No. 2016-0342, For Approval of Waiver from the Framework for Competitive Bidding and to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0003966 - West Loch PV Project, filed June 30, 2017.

[1c] Decision and Order No. 34788 in Docket No. 2016-0416, For Approval to Commit Funds in Excess of \$2,500,000 for Item P0000974, Ala Wai Canal 46 kV Underground Line Construction and Item P0003977, Ala Wai Canal Easement Acquisition and Related Requests, filed September 1, 2017.

[1d] See HECO-WP-D2-001, Note [3a].

[2] Source: HECO-WP-D2-001.

[3] Source: UIPlanner Budget files. Forecast as of February 15, 2019.

HAWAIIAN ELECTRIC CO., INC.				
DEFERRED INCOME TAXES				
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)
		HECO	HECO	HECO
		FEDERAL	STATE	TOTAL
DR / (CR)		LIABILITY	LIABILITY	LIABILITY
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018
28311	Unearned Lease	-	-	-
28312	Accrued Vacation	(247,391.60)	(81,566.84)	(328,958.44)
28313	Uncollectible Acct	365,876.81	111,502.91	477,379.72
28314	Directors Def Comp	8,117.74	1,571.96	9,689.70
28317	Discounted Work Comp	313,824.26	95,894.48	409,718.74
28319	Cap to Construct (Cost of Removal)	71,429,406.70	21,769,003.09	93,198,409.79
28321	Pension	(15.02)	0.31	(14.71)
28323	Excess Benefit Plan	566,372.66	168,081.11	734,453.77
28326	Def Exec Comp (Def EICP<IP)	35,031.69	10,677.39	45,709.08
28327	Software (no APPRISE & e business	88,753.66	52,874.74	141,628.40
28328	G/L ACRS Retirements	(12,405,681.27)	(4,236,659.06)	(16,642,340.33)
28330	EICP	(358,728.30)	(125,497.81)	(484,226.11)
28331	CIAC	20,071,371.03	10,206,246.04	30,277,617.07
28332	Customer Advances	1,077,639.88	327,760.03	1,405,399.91
28333	Capitalized Interest	9,984,224.16	3,836,301.98	13,820,526.14
28335	Connection Fees	(9,611.91)	(8,444.14)	(18,056.05)
28336	Nondeductible Interest	19,016.26	5,795.04	24,811.30
28337	Supplemt Benefits - SERP	272,295.28	72,700.74	344,996.02
28340	LTIP	822,110.82	250,548.14	1,072,658.96
28341	Waipahu Baseyard Int	67,116.93	20,452.91	87,569.84
28347	Waiiau Water Well Pmts	79,910.90	24,369.66	104,280.56
28350	Outage Loss Adj Exp	-	(24,509.00)	(24,509.00)
28401	Gen/Auto (& Accidents)	248,241.27	75,654.04	323,895.31
28403	CWIP Debt Transition	(160,324.76)	(48,863.15)	(209,187.91)
28404	CWIP Equity Trans	(404,087.01)	(123,151.30)	(527,238.31)
28405	Iolani Ct Plaza Sale	17,071.33	(6,033.56)	11,037.77
28406	Kaonohi Sale	(22,651.01)	(6,942.61)	(29,593.62)
28408	Plant Transition	(3,997,395.48)	(1,218,288.67)	(5,215,684.15)
28409	CWIP Equity Net	(17,671,614.37)	(5,385,620.77)	(23,057,235.14)
28410	CWIP Equity Grossup	(10,862,867.25)	(3,310,577.99)	(14,173,445.23)
28411	CWIP Debt	(9,399,038.35)	(2,868,001.13)	(12,267,039.48)
28412	Gen/Auto Liability - Legal	0.21	(2,428.89)	(2,428.68)
28413	Post Retirement Ben	(875,563.84)	(246,873.67)	(1,122,437.51)
28414	Reg Liab Federal ITC	172,357.16	53,366.18	225,723.34
28418	IRP Costs	(25,223.69)	(8,107.96)	(33,331.65)
28419	Reg Liab Excess 283	115,881.47	35,956.40	151,837.87
28422	Miscellaneous	17,106.97	(16,969.99)	136.98
28427	Prepaid Expenses	(915,615.83)	(279,043.26)	(1,194,659.09)
28432	Coal Gasif Costs	-	(11,273.00)	(11,273.00)
28434	EEO Claims	452.80	138.01	590.81
28435	Rev Bond Differential	(106,539.65)	(32,468.74)	(139,008.39)
28436	TIP/Rewards Programs	119,814.53	36,774.90	156,589.43
28441	Sun Power	12,330.63	3,757.91	16,088.54
28512	Revenue Bond Cost Amort.	(678,674.71)	(206,833.19)	(885,507.90)
28514	Software (APPRISE only)	-	(22,551.00)	(22,551.00)
28516	Honolulu Harbor Reserve	879,610.69	268,072.02	1,147,682.71
28520	Deferred Comp - restricted stock	141,231.75	43,041.58	184,273.33
28522	Perry reserve	64,996.20	19,808.00	84,804.20
28526	Emissions Fees	331,750.98	101,105.19	432,856.17
28530	AES Hawaii PPA	26,904.63	8,199.90	35,104.53
28532	CIS Project	(48,966.54)	(14,316.02)	(63,282.56)
28538	Rate Case Costs	(287,342.77)	(87,571.54)	(374,914.31)
28542	QUIPS amortization	(140,608.50)	(42,852.44)	(183,460.94)
28544	OPEB Exec Life	2,641,514.13	805,101.19	3,446,615.32
28546	Percentage Repairs Allowance	(1,466,861.75)	(556,699.86)	(2,023,561.61)
28548	Cap interest (D&T)	(2,603,450.33)	(1,054,919.70)	(3,658,370.03)
28550	E-Business hardware	(19,730.68)	(8,206.93)	(27,937.61)
28552	OMS project costs	262,187.44	81,204.84	343,392.28
28558	Substation Land - Aiea	-	(2,073.65)	(2,073.65)
28560	Solar tax credit	630.40	192.12	822.52
28564	HR Suites project costs	(213,369.94)	(67,275.43)	(280,645.37)
28568	Solar Saver Program	43,008.71	13,107.14	56,115.85
28570	Pension Tracker	(18,456,906.96)	(5,624,946.08)	(24,081,853.04)
28572	OPEB Tracker	1,198,564.16	365,276.00	1,563,840.16
28580	Blue Earth reserve	(2,163.55)	(659.33)	(2,822.88)
28584	RO Water Pipeline	215,900.82	65,798.23	281,699.05
28590	Repairs Adjustment	(74,909,026.37)	(22,228,032.86)	(97,137,059.23)
28592	Stimulus Funds	200.17	60.96	261.13
28594	Budget System Replacement	(135,405.78)	(41,265.98)	(176,671.76)
28596	EOTP interest / amort	(2,972.01)	(906.02)	(3,878.03)
28598	CIP interest	(116,247.60)	(35,427.08)	(151,674.68)
28600	ERP project costs	(1,035,960.90)	(315,721.84)	(1,351,682.74)

HAWAIIAN ELECTRIC CO., INC.				
DEFERRED INCOME TAXES				
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)
		HECO	HECO	HECO
		FEDERAL	STATE	TOTAL
DR / (CR)		LIABILITY	LIABILITY	LIABILITY
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018
28602	Reg Liab Federal PV/EV	192,541.81	58,679.74	251,221.54
28604	IVR project costs	(174,366.73)	(53,140.93)	(227,507.66)
28608	Franchise Tax	1,013,344.05	308,828.44	1,322,172.49
28614	RBA revenues	(7,287,568.48)	(2,220,971.56)	(9,508,540.04)
28618	NOL - charitable	(6,347.36)	-	(6,347.36)
28620	G/L Lauula	8,240.41	(41.55)	8,198.86
28626	Reg Asset - 2017 Excess-other	(3,312,656.78)	(5,623,166.16)	(8,935,822.94)
28628	Reg Liab - 2017 Excess-other	7,289,541.76	6,835,162.29	14,124,704.06
28630	Reg Liab - TRA revenues	965,858.79	294,357.59	1,260,216.38
28632	PSC/PUC tax	5,781,313.48	1,761,927.88	7,543,241.36
28634	Waianae Solar	1,774,655.94	540,848.68	2,315,504.62
28636	HT joint pole unbilled	875,228.59	266,736.90	1,141,965.49
AOCINQ	AOCI - NQ Pension	624,198.92	190,228.31	814,427.23
AOCIOPEB	AOCI - OPEB Exec Life	(538,268.59)	(164,045.19)	(702,313.78)
48000	FIN 48 tax	368,936.00	661,176.00	1,030,112.00
48002	FIN 48 interest	41,253.93	12,572.63	53,826.56
50000	Rounding	(709.37)	364.13	(345.24)
	FED ACCOUNT 283, excluding state ITC	(38,254,016.15)	(6,551,668.15)	(44,805,684.30)
28310	State ITC	11,655,223.12	3,534,658.68	15,189,881.80
	TOTAL ACCOUNT 283	(26,598,793.02)	(3,017,009.47)	(29,615,802.50)
28210000	Accelerated Depreciation	(252,669,067.47)	(48,604,627.78)	(301,273,695.25)
28210100	Accel. Depr. - Excess	44,073,568.30	13,431,888.93	57,505,457.23
28210200	Accel. Depr. - Deficit	(169,370.14)	(51,202.87)	(220,573.02)
	TOTAL ACCOUNT 282	(208,764,869.31)	(35,223,941.72)	(243,988,811.04)
				To Sch D4
	TOTAL DEF INCOME TAX - UTILITY	(235,363,662.34)	(38,240,951.20)	(273,604,613.53)
28210300	Nonutility Depreciation	555,767.33	265,376.64	821,143.97
28301001	Nonutility - Other	1,029,315.35	316,263.16	1,345,578.51
28301002	RHI Tax Allocation	-	-	-
28301003	UBC Tax Allocation	-	-	-
50001	Rounding	(2.67)	-	(2.67)
	TOTAL DEF INCOME TAX - NONUTILITY	1,585,080.02	581,639.80	2,166,719.82
	TOTAL DEF INCOME TAX	(233,778,582.32)	(37,659,311.40)	(271,437,893.72)
	RATE BASE CALCULATION			
	TOTAL ACCOUNT 283	(26,598,793.02)	(3,017,009.47)	(29,615,802.50)
	Less:			
28312	Accrued Vacation	(247,391.60)	(81,566.84)	(328,958.44)
28313	Uncollectible Acct	365,876.81	111,502.91	477,379.72
28314	Directors Def Comp	8,117.74	1,571.96	9,689.70
28317	Discounted Work Comp	313,824.26	95,894.48	409,718.74
28323	Excess Benefit Plan	566,372.66	168,081.11	734,453.77
28326	Def Exec Comp (Def EICP<IP)	35,031.69	10,677.39	45,709.08
28330	EICP	(358,728.30)	(125,497.81)	(484,226.11)
28336	Nondeductible Interest	19,016.26	5,795.04	24,811.30
28337	Supplemt Benefits - SERP	272,295.28	72,700.74	344,996.02
28340	LTIP	822,110.82	250,548.14	1,072,658.96
28341	Waipahu Baseyard Int	67,116.93	20,452.91	87,569.84
28347	Waiau Water Well Pmts	79,910.90	24,369.66	104,280.56
28350	Outage Loss Adj Exp	-	(24,509.00)	(24,509.00)
28401	Genl/Auto (& Accidents)	248,241.27	75,654.04	323,895.31
28412	Genl/Auto Liability - Legal	0.21	(2,428.89)	(2,428.68)
28418	IRP Costs	(25,223.69)	(8,107.96)	(33,331.65)
28422	Miscellaneous	17,106.97	(16,969.99)	136.98
28434	EEO Claims	452.80	138.01	590.81
28436	TIP/Rewards Programs	119,814.53	36,774.90	156,589.43
28516	Honolulu Harbor Reserve	879,610.69	268,072.02	1,147,682.71
28520	Deferred Comp - restricted stock	141,231.75	43,041.58	184,273.33
28522	Perry reserve	64,996.20	19,808.00	84,804.20
28538	Rate Case Costs	(287,342.77)	(87,571.54)	(374,914.31)
28544	OPEB Exec Life	2,641,514.13	805,101.19	3,446,615.32
28550	E-Business hardware	(19,730.68)	(8,206.93)	(27,937.61)
28568	Solar Saver Program	43,008.71	13,107.14	56,115.85

HAWAIIAN ELECTRIC CO., INC.					
DEFERRED INCOME TAXES					
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)	
		HECO	HECO	HECO	
		FEDERAL	STATE	TOTAL	
DR / (CR)		LIABILITY	LIABILITY	LIABILITY	
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018	
28580	Blue Earth reserve	(2,163.55)	(659.33)	(2,822.88)	
28600	ERP project costs	(1,035,960.90)	(315,721.84)	(1,351,682.74)	
28608	Franchise Tax	1,013,344.05	308,828.44	1,322,172.49	
28614	RBA revenues	(7,287,568.48)	(2,220,971.56)	(9,508,540.04)	
28618	NOL - charitable	(6,347.36)	-	(6,347.36)	
28630	Reg Liab - TRA revenues	965,858.79	294,357.59	1,260,216.38	
28632	PSC/PUC tax	5,781,313.48	1,761,927.88	7,543,241.36	
28634	Waianae Solar	1,774,655.94	540,848.68	2,315,504.62	
AOCINQ	AOCI - NQ Pension	624,198.92	190,228.31	814,427.23	
AOCIOPEB	AOCI - OPEB Exec Life	(538,268.59)	(164,045.19)	(702,313.78)	
48000	FIN 48 tax	368,936.00	661,176.00	1,030,112.00	
48002	FIN 48 interest	41,253.93	12,572.63	53,826.56	
	Adjustment for EOTP, CIS and CIP	(114,827.94)	(34,994.66)	(149,822.60)	
	Total Exclusions	7,351,657.84	2,701,979.21	10,053,637.05	
	Total 283 Deferred Taxes for Rate Base	(33,950,450.87)	(5,718,988.68)	(39,669,439.55)	To Sch D4
	Total 282 Deferred Taxes for Rate Base	(208,764,869.31)	(35,223,941.72)	(243,988,811.04)	
	TOTAL DEF INCOME TAX - RATE BASE	(242,715,320.18)	(40,942,930.41)	(283,658,250.59)	To Sch D4

HAWAIIAN ELECTRIC CO., INC.
ADIT ON EXCESS DEPRECIATION
DECEMBER 31, 2018

	source	ERP/EAM HARDWARE	KOOLAU- WAILUPE #1	TOTAL
FEDERAL DEFERRED TAXES				
1	State Tax Depreciation			
2	Book Depreciation	7,356	14,620	21,976
3	Subtotal	(2,829)	(4,211)	(7,040)
		4,527	10,409	14,936
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%
5	Federal Deferred Tax on State Depreciation	893	2,054	2,948
6	Addback State Tax Depreciation	(4,527)	(10,409)	(14,936)
7	Federal Tax Depreciation	10,751	71,941	82,692
8	Book Depreciation	(2,829)	(4,211)	(7,040)
9	Federal State Difference	3,395	57,321	60,716
10	Tax Rate on Federal Only Adjustment	21%	21%	21%
11	Federal Deferred Tax Adjustment	713	12,037	12,750
12	Total Federal Deferred Taxes	1,606	14,091	15,698
				to Sch D4
STATE DEFERRED TAXES				
13	State Tax Depreciation			
14	Book Depreciation	7,356	14,620	21,976
15	Subtotal	(2,829)	(4,211)	(7,040)
		4,527	10,409	14,936
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	272	626	898
				to Sch D4
18	TOTAL DEFERRED TAXES	1,878	14,717	16,596
		to Sch D1	to Sch D1	to Sch D4

**HAWAIIAN ELECTRIC CO., INC.
EXCESS TAX DEPRECIATION
KOOLAU-WAILUPE #1**

Project No.	DIS	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct	Life Bonus	2017	2018
FEDERAL									
PE000104	v2017	Koolau-Wailupe #1	2,684,387	2,555,619	128,768	Trans	20	66,798	4,648
	v2018	Koolau-Wailupe #1	13,203		13,203	Trans	20		495
		Total	2,697,590	2,555,619	141,971			66,798	5,143
		Cumulative						66,798	71,941
To page 1									
HAWAII									
PE000104	v2017	Koolau-Wailupe #1	2,684,387	2,555,619	128,768	Trans	20	4,829	9,296
	v2018	Koolau-Wailupe #1	13,203	-	13,203	Trans	20		495
		Total	2,697,590	2,555,619	141,971			4,829	9,791
		Cumulative						4,829	14,620
To page 1									

HAWAIIAN ELECTRIC CO., INC.
 MPIR ADIT - SCHOFIELD GENERATING STATION
 DECEMBER 31, 2018

	source	Tax Depreciation (page 2 of 5)	AFUDC (page 3 of 5)	Tax Cap Interest (page 3 of 5)	State ITC (page 3 of 5)	Removal (page 5 of 5)	2018 Total
FEDERAL DEFERRED TAXES							
1	State Book/Tax Difference	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
2	Book Depreciation						
3	Subtotal	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,353,254)	(2,361,501)	1,514,862	832,222	(36,513)	(1,404,184)
6	Addback State Book/Tax Difference	6,856,503	11,964,962	(7,675,319)	(4,216,602)	185,002	7,114,546
7	Federal Book/Tax Difference	(6,856,502)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,545)
8	Book Depreciation						
9	Federal State Difference	1	-	-	-	-	1
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%
11	Federal Deferred Tax Adjustment	-	-	-	-	-	-
12	Total Federal Deferred Taxes	(1,353,254)	(2,361,501)	1,514,862	832,222	(36,513)	(1,404,184)
							To Sch D4
STATE DEFERRED TAXES							
13	State Book/Tax Difference	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
14	Book Depreciation	-	-	-	-	-	-
15	Subtotal	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	(412,421)	(719,697)	461,673	253,630	(11,128)	(427,943)
							To Sch D4
18	TOTAL DEFERRED TAXES	(1,765,675)	(3,081,198)	1,976,535	1,085,852	(47,641)	(1,832,127)
							To Sch D4

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018
FEDERAL									
P0001576	Schofield Generation Station	65,512,935	(5,393,539)	3,459,864	63,579,259	Oth Prod	15	0%	3,178,963
P0001576	Schofield Generation Station	65,512,935	(5,393,539)	3,459,864	63,579,259	Oth Prod	15	0%	3,178,963
P0001576	Schofield Generation Station	5,751,969	(522,427)	335,128	5,564,670	Trans	20	0%	208,675
P0001576	Schofield Generation Station	5,751,969	(522,427)	335,128	5,564,670	Trans	20	0%	208,675
P0001576	Schofield Generation Station	1,106,868	(66,514)	42,668	1,083,021	Comm	20	0%	40,613
P0001576	Schofield Generation Station	1,106,868	(66,514)	42,668	1,083,021	Comm	20	0%	40,613
	Total	<u>144,743,542</u>	<u>(11,964,962)</u>	<u>7,675,319</u>	<u>140,453,899</u>				<u>6,856,502</u>
	Cumulative								To page 1 of 5

HAWAII

P0001576	Schofield Generation Station	131,025,869	(10,787,079)	6,919,727	127,158,518	Oth Prod	15	0	6,357,926
P0001576	Schofield Generation Station	11,503,937	(1,044,854)	670,256	11,129,339	Trans	20	0	417,350
P0001576	Schofield Generation Station	2,213,736	(133,029)	85,336	2,166,043	Comm	20	0	81,227
	Total	<u>144,743,542</u>	<u>(11,964,962)</u>	<u>7,675,319</u>	<u>140,453,899</u>				<u>6,856,503</u>
	Cumulative								To page 1 of 5

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:	A	B	C	D	E=SUM(B:D)	F=A+E	
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	State ITC
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	35,513,663
Vehicles	2,062	117,109	187	563	117,859	119,921	
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	69,901,379
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	
Other	427,354	-	4,296	-	4,296	431,650	
	<u>131,025,869</u>	<u>8,549,966</u>	<u>2,213,736</u>	<u>2,953,971</u>	<u>13,717,673</u>	<u>144,743,542</u>	
Amount subject to bonus (A)	50%	50%	50%	50%	50%	50%	105,415,043
	<u>65,512,935</u>	<u>4,274,983</u>	<u>1,106,868</u>	<u>1,476,985</u>	<u>6,858,836</u>	<u>72,371,771</u>	4%
							<u>4,216,602</u>
							To page 1 of 5
			5,751,969				
Tie out of TCI:							
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	To page 1 of 5
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%	From page 4 of 5
TCI	<u>6,919,727</u>	<u>451,065</u>	<u>85,336</u>	<u>219,191</u>	<u>755,592</u>	<u>7,675,319</u>	To page 1 of 5
							670,256

Source: Ellipse & SAP

(A) - At year end, no bonus depreciation was taken for Schofield Generation Station. See page 2 for tax depreciation calculation.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

To page 3 of 5

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

To page 1 of 5

SOURCE: Ellipse & SAP

Hawaiian Electric Company, Inc.
2018 Major Projects Excess Cost, Net of CIAC

[1]	[1]		[2]	[1]					[1]	[2]	[1]	[3]	[2]	To Sch D1	
Grandparent # or Project #	Project	Date In Service	Net Plant Adds Thru 12/31/17 (A)	Net Plant Adds Thru 12/31/18 (B)	Plant Acct	Docket No 2010-0053 Depr Rate (C)	2018 Depr (D) = (A) * (C)	2019 Depr (E) = (B) * (C)	Net PUC Approved (F)	2017 Net Cost in Excess of Docket (G)	2018 Net Cost in Excess of Docket (H) = (B) - (F)	Prior Years Depr Related to Excess (I)	2018 Depr Related to Excess (J) = (G) / (A) * (D)	Cumulative Depr Related to Excess (K) = (I) + (J)	2019 Depr Related to Excess (L) = (H) / (B) * (E)
PZ.000003/ (P0003205)	ERP EAM Hardware	2017/06	2,604,146	2,604,146	391.1	0.20000	520,829	520,829	2,590,000	14,146	14,146	-	2,829	2,829	2,829
PE.000104 (P0003465)	Koolau-Wailupe #1 Str 30 P9 Replace	2017/07	2,684,387	2,697,590	356	0.03270	87,779	88,211	2,555,619	128,768	141,971	-	4,211	4,211	4,642
PZ.000016/ PZ001002 (P0001576)	Schofield Generation Station - Note [4]	2018/06	-	142,147,612	343	0.03260	-	4,634,012							
			-	2,003,490	352	0.01600	-	32,056							
			-	352,190	353	0.01860	-	6,551							
			-	240,250	397	0.06670	-	16,025							
			-	144,743,542				4,688,643	-	-	144,743,542	-	-	-	4,688,643

[1] Source: HECO-WP-D2-001

[2] Source: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-E-001, filed on May 29, 2018.

[3] Source: Transmittal No. 18-01 (Decoupling) - RBA Rate Adjustment (Filed May 29, 2018), HECO-WP-E-001, column (L), "Cumulative Depr Related to Excess".

[4] The Schofield Generation Station project is recovered via the Major Project Interim Recovery (MPIR) mechanism at the Schedule L series. As such, the entire project related costs will be excluded from all Decoupling calculations.

Hawaiian Electric Company
 Calculation of Composite Effective Income Tax Rates
 Federal and State

Composite Federal and State Effective Income Tax Rate

	<u>Eff 1/1/2018</u>	<u>2017 & Prior</u>
Federal Effective Income Tax Rate	19.7368421%	32.8947368%
State Effective Income Tax Rate	6.0150376%	6.0150376%
	<u>25.7518797%</u>	<u>38.9097744%</u>

Calculation of Effective Rates

Assumptions:

ST = State Income Tax Expense

FT = Federal Income Tax Expense

Pre-Tax Income = \$1.00

	<u>Eff 1/1/2018</u>	<u>2017 & Prior</u>
State Statutory Income Tax Rate*	6.4%	6.4%
Federal Statutory Income Tax Rate**	21.0%	35.0%

Calculation of State Effective Income Tax Rate

State Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

ST = .064 x (1 - ST)

ST = .064 - .064(ST)

1.064(ST) = .064

ST = .060150376 or 6.0150376% of Pre-Tax Income

Calculation of Federal Effective Income Tax Rate

Federal Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

Effective 1/1/18

FT = .21 x (1 - ST)

FT = .21 x (1 - .060150376)

FT = .21 - .01263157896

FT = .197368421 or 19.7368421% of Pre-Tax Income

2017 & Prior

FT = .35 x (1 - ST)

FT = .35 x (1 - .060150376)

FT = .35 - .01263157896

FT = .328947368 or 32.8947368% of Pre-Tax Income

* Hawaii Revised Statutes §235.71 was amended for tax years beginning after 1986.

** The Tax Cuts and Jobs Act changed the Federal tax rate for tax years ending after December 31, 2017.

HAWAIIAN ELECTRIC COMPANY, INC.
TAX REPAIRS ADJUSTMENT
2018

			A	B	C = A x B	D = A - C
	<i>HECO-WP- F1-002</i>			<i>HECO-WP- F1-001, pg 2</i>		
	5 YR			Repairs	Repairs	Depreciable
	LIFE	AVERAGE	Plant Adds	Allocation	Deduction	Basis
Computers/PV	5	6,092				
Communication	20	5,920				
Off/Furn/Tools	7	5,022				
Distribution	20	130,472	130,472,000	19.67%	25,659,352	104,812,648
Land	-	816				
Non-Steam Production	15	3,713	3,713,000	0.04%	1,582	3,711,418
Steam Production	20	22,905	22,905,000	28.28%	6,477,859	16,427,141
Structural	39	3,265				
Transmission	20	21,834	21,834,000	4.49%	980,382	20,853,618
Transmission	15	34,674	34,674,000	4.49%	1,556,918	33,117,082
Vehicles	-	5,209				
TOTAL		<u>239,922</u>	<u>213,598,000</u>		<u>34,676,093</u>	<u>178,921,907</u>

To Sch F1

NOTE 1> This schedule computes the estimated amount of deductible tax repairs related to the baseline plant additions for the RAM year. The deductible tax repairs amounts are carried forward to Schedule F1 and serve to reduce the depreciable tax basis for the baseline plant additions. The repairs percentages (Column B) are calculated on HECO-WP-F1-001, page 2.

NOTE 2> The numbers (excluding %s) are rounded to the nearest thousand.

**HAWAIIAN ELECTRIC COMPANY, INC.
REPAIRS DEDUCTION**

		Distribution	Non Steam	Steam	Transmission
Repairs %:					
Total book basis repairs					
2014		40,010,784		8,698,003	1,620,540
2015		28,855,969		8,823,262	3,152,508
2016		19,906,067		6,512,311	2,697,168
2017		24,350,324	71,857	5,491,680	4,271,225
2018		23,503,387		4,894,363	1,396,139
		<u>136,626,531</u>	<u>71,857</u>	<u>34,419,619</u>	<u>13,137,580</u>
Total book basis adds					
2014	HECO-WP-F1-002	139,366,000	12,311,000	30,119,000	57,957,000
2015	HECO-WP-F1-002	150,513,000	5,613,000	25,823,000	48,871,000
2016	HECO-WP-F1-002	117,566,000	268,000	24,812,000	79,269,000
2017	HECO-WP-F1-002	147,966,000	1,658,000	22,867,000	73,183,000
2018	HECO-WP-F1-002	139,304,000	148,783,000	18,083,000	33,306,000
		<u>694,715,000</u>	<u>168,633,000</u>	<u>121,704,000</u>	<u>292,586,000</u>
AVERAGE %		19.666558%	0.042611%	28.281420%	4.490160%

NOTE 1> With the assistance of Price Waterhouse Coopers, the repairs deduction analysis was performed in 2010, 2012, 2015 and 2016 in connection with changing HECO's method of identifying deductible repairs for tax accounting purposes. The repairs percentage for each functional group represents the five year weighted average of the identified repairs costs.

NOTE 2> The numbers (excluding %s) are rounded to the nearest thousand.

HAWAIIAN ELECTRIC COMPANY, INC.
BASELINE PLANT ADDS

						LESS: MAJOR PROJECTS	TOTAL	AVERAGE	% AVERAGE	
LIFE	2014	2015	2016	2017	2018					
Computers/PV	5	6,681	8,980	5,219	7,587	4,596	(2,604)	30,459	6,092	2.54%
Communication	20	5,340	5,183	5,870	7,349	6,611	(754)	29,599	5,920	2.47%
Off/Furn/Tools	7	8,242	4,315	2,964	5,204	4,384		25,109	5,022	2.09%
Distribution	20	139,366	150,513	117,566	147,966	139,304	(42,353)	652,362	130,472	54.38%
Land	-	1,729	1,233	11	262	847		4,082	816	0.34%
Non-Steam Production	15	12,311	5,613	268	1,658	148,783	(150,069)	18,564	3,713	1.55%
Steam Production	20	30,119	25,823	24,812	22,867	18,083	(7,178)	114,526	22,905	9.55%
Structural	39	2,899	5,468	1,647	5,217	1,092		16,323	3,265	1.36%
Transmission	20	13,295	21,461	38,676	29,442	8,994	(2,698)	109,170	21,834	9.10%
Transmission > 69kv	15	44,662	27,410	40,593	43,741	24,312	(7,349)	173,369	34,674	14.45%
		57,957	48,871	79,269	73,183	33,306	(10,047)	282,539	56,508	23.55%
Vehicles	-	4,682	10,540	3,665	5,460	1,697		26,044	5,209	2.17%
TOTAL		269,326	266,539	241,291	276,753	358,703	(213,005)	1,199,607	239,921	100.00%

To WP-F1-001

HAWAIIAN ELECTRIC CO., INC.

PRORATION ADJUSTMENT FOR NORMALIZATION COMPLIANCE

FEDERAL ADIT DR/(CR)

ADIT account 282 --	Federal ADIT	January	February	March	April	May	June	July	August	September	October	November	December
Federal accelerated depreciation	DR/(CR)												
Beginning balance	Sch D4 (208,749,171)												
Federal Tax Depreciation	Sch F (20,239,341)												
Effective Federal Tax Rate	19.7368%												
Net ADIT accrued 2019	(3,994,598)												
Monthly Accrued evenly over 12 months	(332,883)												

WITHOUT PRORATION

	Beg of Yr	January	February	March	April	May	June	July	August	September	October	November	December	End of Yr
Federal 282 ADIT Balance	(208,749,171)													
Monthly Additions		(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(3,994,598)
Cumulative Balance	(208,749,171)	(209,082,054)	(209,414,937)	(209,747,821)	(210,080,704)	(210,413,587)	(210,746,470)	(211,079,353)	(211,412,237)	(211,745,120)	(212,078,003)	(212,410,886)	(212,743,769)	(212,743,769)

Simple Year Average - Without Proration (210,746,470)

WITH PRORATION

Days new rates in effect	6/1/2019	214												
Prorated additions		(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(287,773)	(239,551)	(191,330)	(144,664)	(96,443)	(49,777)	(1,556)	(2,675,510)
Cumulative ADIT balance with proration	(208,749,171)	(209,082,054)	(209,414,937)	(209,747,821)	(210,080,704)	(210,413,587)	(210,701,360)	(210,940,911)	(211,132,241)	(211,276,905)	(211,373,348)	(211,423,125)	(211,424,681)	(211,424,681)

Simple Year Average - With Proration (210,086,926)

Adjustment to rate base ADIT 659,544
To Schedule F

Days new rate in effect		335	307	276	246	215	185	154	123	93	62	32	1	
Days in the month		31	28	31	30	31	30	31	31	30	31	30	31	365

Note: Methodology based on IRS Private Letter Ruling 9313008

HAWAIIAN ELECTRIC COMPANY, INC.
AVERAGE RATE BASE AND RATE OF RETURN
(\$ Thousands)

RATE BASE	Month-End		REFERENCE
	Dec 2017	Dec 2018	
INVESTMENTS IN ASSETS SERVING CUSTOMERS			
NET COST OF PLANT IN SERVICE			
Total Utility Plant	3,330,923	3,523,249	Note 2
Adjustments:			
Construction Work in Progress	(245,995)	(550,571)	Note 2
Regulatory Asset - ARO	-	331	GL#18670151
Asset Retirement Obligation	(2,539)	(4,780)	GL#25301000
Regulatory Liability for Cost of Removal	(327,225)	(356,926)	GL#25400001
Plant - Tenant Allowance	(14,058)	(14,132)	GL#10100002
Acc Amort - Tenant Allowance	8,662	9,824	GL#11160000
Unbilled Pole Credits	-	(4,435)	within GL#25300000
	2,749,768	2,602,560	Note 1
FUEL INVENTORY	64,972	54,262	Note 2
MATERIALS & SUPPLIES INVENTORIES (excl Stores Expense)	26,517	27,953	GL#90154000, Note 2
UNAMORT NET ASC 740 REG ASSET	78,576	77,465	ADIT Tax Sch
PENSION TRACKING REG ASSET	115,531	96,993	GL#18676040
OPEB TRACKING REG ASSET	3,112	-	GL#18677040
PENION NON-SERVICE COST REG ASSET	-	883	GL#18676045
EOTP REG ASSET	89	20	GL#18670124/5/6
CIP CT-1 REG ASSET	1,352	795	GL#18670120/21/22
DEFERRED SYSTEM DEVELOPMENT COSTS			
OMS	746	445	GL#18607004
HR Suites-Phase 1	1,307	951	GL#18606004
HR Suites-Phase 2	512	384	GL#18606104
Budget System Replacement Project	885	739	GL#18607704
IVR	1,000	883	GL#18670400
CIS	9,046	7,827	Acctg Dept Amort Sch
	13,496	11,229	
RO WATER PIPELINE REG ASSET	4,842	4,725	GL#18670152
CONTRIB IN EXCESS OF NPPC	2,240	-	GL#18676030
TOTAL INVESTMENTS IN ASSETS	3,060,495	2,876,885	
FUNDS FROM NON-INVESTORS			
UNAMORTIZED CIAC	365,482	30,110	Note 5
CUSTOMER ADVANCES			
Customer Advances	4,239	6,392	GL#25200000
Developer Advances	33,884	21,345	Note 3
	38,123	27,737	
CUSTOMER DEPOSITS	11,113	10,409	GL#23501000
ACCUMULATED DEF INCOME TAXES	283,136	283,659	Schedule D4
EXCESS ACCUMULATED DEF INCOME TAXES	278,582	278,156	GL#25400023/24, Note 4
UNAMORTIZED ITC (GROSS)	57,594	58,897	GL#25520000/20004
UNAMORTIZED FEDERAL EV CREDIT	750	724	GL#25503000
UNAMORTIZED GAIN ON SALE	182	116	GL#25400101/02/09
PENSION TRACKING REG LIAB	-	3,478	GL#25400004
OPEB TRACKING REG LIAB	5,443	1,858	GL#25400002
TOTAL DEDUCTIONS	1,040,405	695,144	
WORKING CASH	7,068	11,027	HECO-WP-H-008
RATE BASE	2,027,158	2,192,768	
SIMPLE AVERAGE RATE BASE		2,109,963	To Schedule H

Footnotes:

- * Amounts may not add up due to rounding.
- 1 Includes Property Held for Future Use balance of \$0 for 2018 and 2017.
- 2 See Hawaiian Electric Company Inc. Monthly Financial Report - December 2018, filed February 28, 2019.
Note that Materials & Supplies Inventory include an adjustment of (\$1,116) and (\$1,489) representing payment lags in 2017 and 2018, respectively.
- 3 The Company reclassified cash received from Developers, subject to refund, to Customer Advances. Amount has been isolated for greater transparency within the rate base calculation. See further discussion at Schedule G.
- 4 As a result of the 2017 Tax Reform Act, Regulatory Liability accounts were created to isolate the impact of the 2017 excess accumulated deferred taxes effective in actuals as of December 2017. These Regulatory Liabilities have been included as a reduction to Rate Base. Deferred tax asset related to excess accumulated deferred taxes is included in Unamortized Net ASC 740 Reg Asset.
- 5 For 2018, CIAC is netted with Plant In Service, CWIP and Developer Advances, resulting from the Company's transition to FERC treatment in October 2018. See further discussion of the Company's treatment of CIAC at HECO-WP-D1-001.

HAWAIIAN ELECTRIC COMPANY, INC.
Ratemaking Adjustments For Incentive Compensation And Other Non-Recoverable Expenses
2018

Line	Account/Order No.	Description	2018	Tax @ 25.75%	Net of Tax	Rounded (000s)
1	Executive Compensation and Incentive Compensation					
2	70025/26/#60003110	LTIP and EICP expense	(a) 3,310,738			
3	70027/ #60004000	Other incentive awards	828,135			
4	Provided by HEI	HEI charges for incentive compensation	(a) 692,751			
5	Non-Executive Incentive Wksht	Non-executive incentive programs	(a) 457,781			
6	70028/ #60003110	Manager award plan	(a) 195,785			
7			5,485,190	1,412,540	4,072,650	4,073
						To Sch H, Line 2A
8	Discretionary and Other Expenses Not Recoverable					
9	#60004009	Executive life insurance(COLI) expense (credit) - <i>not tax deduct</i>	(442,516)			
10	Provided by HEI	EEL Dues (allowed portion) - <i>not tax deduct</i>	47,722			
11	70014/ #60004034	OPEB (Executive life portion only)	440,216			
12	70016	HEIRS	7,902			
13	Provided by HEI	HEI charges for non-incentive comp (salaries/benefits - Executives (labor)	(a) 524,810			
14	Provided by HEI	HEI charges for outside services (plan admin, legal fees, audit fees) - Executives (non-labor)	74,279			
15	70014/24/ #60004035/36	Non-qualified pension expense	475,342			
16	#60018015	Payroll taxes related to incentive compensation	173,390			
17	70011/70012	Service awards program	63,045			
18	Variou	Community service admin - AUW (labor)	(a) 90,346			
19	50100	Community service admin - AUW (non-labor)	99,926			
20			1,554,462	501,970	1,052,492	1,052
						To Sch H, Line 2B
21	Total Adjustment to Operating Income		<u>7,039,652</u>	<u>1,914,510</u>	<u>5,125,142</u>	
						To HECO-WP-H-008, Pg 1
		Labor	Σ(a) 5,272,211			To HECO-WP-H-008, Pg 1
		Non-labor	1,767,441			To HECO-WP-H-008, Pg 1
		Total adjustment to operating income	<u>7,039,652</u>			

HAWAIIAN ELECTRIC COMPANY, INC.
Income Tax On Items To Be Replaced By Synchronized Interest
2018

	<u>Source</u>	<u>YTD</u>	<u>Rounded (000s)</u>
Total Interest Charges	GL# RONE70	52,180,277	
Remove: RBA Interest Income	GL# 41900002	776,680	
Less: Int on Customer Deposits	GL# 60016050	(631,778)	
AFUDC-Debt	GL# RONE69	(4,018,998)	
Amort of Inv Inc Differential	within GL# 60001010	184,971	185 To Sch H, Line 2C
Equity in net income of trust	GL# 42107000	<u>(100,516)</u>	
		48,390,636	
	Tax rate	<u>25.75%</u>	
		<u><u>12,460,589</u></u>	(12,461) To Sch H, Line 2D

HAWAIIAN ELECTRIC COMPANY, INC.
Ratemaking Capitalization
2018

	Simple Average Balance*	Ratios	Cost Rate	Weighted Cost of Debt
Short-Term Debt	88,868	3.68%	2.54%	0.09%
Long-Term Debt	939,810	38.92%	5.03%	1.96%
Hybrid Securities	28,758	1.19%	7.16%	0.09%
Preferred Stock	21,192	0.88%	5.36%	0.05%
Common Equity	1,335,921	55.33%	9.50%	5.26%
	<u>2,414,549</u>	<u>100.00%</u>		<u>7.45%</u>

	NARUC/ GL Code	YTD Dec 2018	Rounded (000s)	Cost Rate
<u>Short-Term Debt:</u>				
Interest on Debt Assoc Co	60016060/61	2,108,154		
Less: Interest on QUIDS	QUIDS (see below)	(2,050,516)		
Int Exp-Commercial Paper	within 60016100	2,305,290		
Int Exp-SCF Loans		0		
Int Inc-Assoc Cos.	41908000	(176,391)		
Int Exp-Short Term	within 60016000	<u>69,531</u>		
		2,256,068	2,256	2.54%
<u>Long-Term Debt:</u>				
Amort of Debt Disc & Exp	60002100	1,641,364		
Less: Hybrid Sec Amort of Iss Exp	see a below	(109,414)		
Interest on Long-Term Debt	60016000	45,646,755		
Less: Int Exp-Short Term	see above	(69,531)		
Amort Inv Inc Differential	within 60001010	<u>184,970</u>		
		47,294,144	47,294	5.03%
<u>Hybrid Securities:</u>				
Interest on QUIDS	60016060	2,050,516		
Amort Exp-QUID1 Iss Exp	within 60002100	40,416		
Amort Exp-QUID2 Iss Exp	within 60002100	37,899		
Amort Exp-QUID3 Iss Exp	within 60002100	31,099		
Equity in Net Inc of Trust	42107000	<u>(100,516)</u>		
		2,059,414	2,059	7.16%
<u>Preferred Stock:</u>				
Amort of Pfd Stk Iss Exp	60002000	55,086		
Preferred Stock dividends	60016500	<u>1,079,907</u>		
		1,134,993	1,135	5.36%

* Short-Term Debt based on a 12 month average.

HAWAIIAN ELECTRIC COMPANY, INC.
Special Medical Needs Program Discount (net of tax)
2018
Amounts in (\$000s)

Special Medical Needs Program Discount	151
Revenue Taxes @ 8.885%	<u>(13)</u>
	138
Income Taxes @ 25.75%	<u>(35)</u>
Reduction to operating income	<u><u>102</u></u> To Sch H, Line 2e

Source: CIS Special Medical Needs (SMN) report

HAWAIIAN ELECTRIC COMPANY, INC.
Performance Incentive Mechanism
2018
Amounts in (\$000s)

Gross (Reward) / Penalty Amount	GL#25400030	532	
Revenue Taxes @ 8.885%		<u>(47)</u>	
		485	
Income Taxes @ 25.75%		<u>(125)</u>	
Reduction to operating income		<u>360</u>	To Sch H, Line 2f

Note:

Subsequent to the December 2018 financial close, Hawaiian Electric revised its PIMS Regulatory Liability of \$531,871 to PIMS Regulatory Asset of \$537,856 as shown at Schedule M. The recorded PIMS Regulatory Liability balance of \$531,871 as of 12/31/18 was used to determine the 2018 Earnings Sharing Calculations at Schedule H.

The Company true-up the Regulatory Liability balance with the February 2019 financial close.

HAWAIIAN ELECTRIC COMPANY, INC.
Final Test Year Refund
2018
Amounts in (\$000s)

2017 Test Year Rate Case Final D&O Refund	Note 1	48	
Revenue Taxes @ 8.885%		<u>(4)</u>	
		44	
Income Taxes @ 25.75%		<u>(11)</u>	
Reduction to operating income		<u><u>32</u></u>	To Sch H, Line 2g

Note 1:

2017 Final Test Year Rate Case Final D&O Refund calculation, filed in Docket No. 2016-0328 HECO Letter to the PUC, Exhibits 4 & 5, filed on July 23, 2018, and approved in Order No. 35661, filed August 30, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
WORKING CASH
2018

Line	Working Cash Items A	2018 B	(Note 1)		Amount D = B/365xC
			Net Collection	Lag Days	
			C		
1	Fuel	523,706	B1	19.1	27,405
2	Purchased Power	494,450	B2	-5.4	(7,315)
3	O&M Labor	137,959	B3	25.5	9,638
4	O&M Non-Labor	165,521	B4	8.6	3,900
5	Revenue Taxes	160,276	B5	-50.9	(22,351)
6	Income Taxes	35,031	B6	-2.6	(250)
7	Working Cash				<u>11,027</u> To HECO-WP-H-001
8	Fuel Oil	B1 523,706			GL #90501000, 90547000, 90547100
9	Purchased Power	B2 494,450			GL #90555000
10	O&M Labor				
11	O&M Labor	145,473			Acct. Dept. O&M report
12	Fuel O&M Labor	(2,242)			Acct. Dept. O&M report
13	O&M Labor Excl Fuel Labor	143,231			
14	Disallowed O&M	(5,272)			HECO WP-H-002
15	Total	B3 137,959			
16	O&M Non-Labor				
17	O&M Expense	1,333,535			PUC Monthly Report
18	Less: Fuel Oil & PP Expense	(1,018,156)			Lines 8 + 9
19	O&M Labor Excl Fuel Labor	(143,231)			(see O&M Labor Excl Fuel Labor above)
20	Disallowed O&M Non-Labor	(1,767)			HECO WP-H-002
21	Bad Debt Expense	(1,388)			GL #60010000
22	Pension Reg Asset/Liab Amort	(11,456)			HECO WP-H-008 pg. 2
23	OPEB Reg Asset/Liab Amort	376			
24	System Develop Amort	(2,267)			
25	Other Deferred Projects Amort	(742)			
26	Payroll Taxes	9,985			GL #60018000/001/015, 60019100, 60050001,
27	Interest on Customer Deposits	632			60050001/238/242/245/251, 70000010/20/30
28	Total	B4 165,521			GL #60016050
29	Revenue Taxes				
30	Franchise	44,708			GL #60017000
31	PSC	106,518			GL #60017002
32	PUC Fee	9,050			GL #60017001
33	Total	B5 160,276			
34	Current Income Taxes				
35	Income Tax	32,067			Dec. 2018 PUC Monthly Report
36	Inc Tax on Disallowed Items	1,915			HECO WP-H-002
37	Reversal of Tax Related to Interest Sync Replacement	12,461			Sch H, Line 2d
38	Tax Eff of AFUDC Equity	(3,189)			GL #60020060
39	Income Tax Adjustments	3,404			HEI worksheet
40	Tax Related to Int Synch	(11,627)			Sch H, Line 13 - 13a
41	Total	B6 35,031			

Note 1: See Final Decision and Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, filed on June 22, 2018 in Docket No. 2016-0328, Exhibit B, Page 2 of 2.

HAWAIIAN ELECTRIC COMPANY, INC.
O&M Non-Labor Amortization
2018

Pension Regulatory Asset Amortization

Standard Journal Entry No.			(TY17) - Note 1	Annual	Rounded
<i>PAA202</i>	<i>PAA219</i>	Total	O&M % Portion	2018	000s
Jan 2018	Feb-Dec 2018		57.43%		
(45,851)	19,994,484	19,948,633	11,456,500	11,456,500	11,456 To Page 1

OPEB Regulatory Asset Amortization

Standard Journal Entry No.			(TY17) - Note 1	Annual	Rounded
<i>PAA203</i>	<i>PAA220</i>	Total	O&M % Portion	2018	000s
Jan 2018	Feb-Dec 2018		57.43%		
(159,067)	(495,069)	(654,136)	(375,670)	(375,670)	(376) To Page 1

System Development Amortization

Standard Journal Entry No.						Annual	Rounded
<i>PAA109</i>	<i>PAA133</i>	<i>PAA143</i>	<i>PAA163</i>	<i>PAA195</i>	<i>PAA177</i>	2018	000s
<i>18607004</i>	<i>18606004</i>	<i>18606104</i>	<i>18607704</i>	<i>18670400</i>	<i>18605005</i>		
OMS	HR Suites Phase 1	HR Suites Phase 2	Budget Replace	IVR System Replace	CIS		
300,940	356,462	127,940	145,469	116,500	1,219,715	2,267,026	2,267 To Page 1

Other Deferred Projects Amortization

Standard Journal Entry No.							Annual	Rounded
<i>PAA166</i>	<i>PAA166</i>	<i>PAA166</i>	<i>PAA176</i>	<i>PAA176</i>	<i>PAA176</i>	<i>PAA132</i>	2018	000s
<i>18670124</i>	<i>18670125</i>	<i>18670126</i>	<i>18670120</i>	<i>18670121</i>	<i>18670122</i>	<i>18670152</i>		
EOTP	EOTP	EOTP AFUDC	CIP CT-1	CIP CT-1	CIP CT-1	RO		
Depreciation	AFUDC Debt	Equity	Depreciation	AFUDC Debt	AFUDC Equity	Pipeline		
18,219	15,342	35,441	146,605	123,526	286,584	116,436	742,153	742 To Page 1

NOTE:

1 See Parties' Stipulated Settlement Letter, filed November 15, 2017, in Docket No. 2016-0328, HECO T-16 Attachment 4, page 1. Approved in Final Decision and Order No. 35545, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
MONTHLY FINANCIAL REPORT
December 2018

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII
OPERATING INCOME BEFORE RATEMAKING ADJUSTMENTS TO BE USED FOR THE EARNINGS SHARING CALCULATION
(in thousands)

Page 2a

Operating income per Monthly Financial Report	138,084	*3	
Less: Interest on Customer Deposits	(632)		
Add: Adjustment to federal income tax to offset the DPAD benefit recognized at MECO *2	66		
Add: Gain on Sale Amortization	66	*4	
Operating income before ratemaking adjustments & synchronized interest - earnings sharing calculation	137,585	*1	
Income Tax Adjustments	(3,404)		
Adjusted Operating income before ratemaking adjustments & synchronized interest - earnings sharing calculation	134,181		To Sch H

*1 Amounts may not add up due to rounding.

*2 An adjustment made to offset the benefit of the Domestic Production Activities Deduction (DPAD) recognized on a standalone basis at Maui Electric Company, Ltd. (MECO) and excluded the impact from the operating income before ratemaking adjustments & synchronized interest for Hawaiian Electric Company. This adjustment was made to eliminate the impact of the MECO's tax benefit from the Hawaiian Electric Company consolidated net income, and therefore should not have any impact on a standalone basis at Hawaiian Electric Company.

*3 Starting October 2018, Operating Income per the Monthly Financial Report includes income tax on AFUDC Equity.

*4 Included within Other Income and added back for ratemaking purposes.

Note:

Included to support Operating Income on Schedule H since PUC Page 2a was excluded from the December 2018 Monthly PUC Report submitted on February 27, 2019.

Hawaiian Electric Company, Inc.
Schofield Generating Station
Plant Addition
As of December 31, 2018

Utility Account	(Note 1) PUC Approved Accrual Rate	(Note 2) Balance at 12/31/18	Depreciation 2019	Allocation %	(Note 3) Subject to Cap	Depreciation 2019 (at Cap)
	a	b	c = a x b	d	e = d x Cap	f = a x e
343	0.03260	142,147,612	4,634,012	98.2%	139,030,987	4,532,410
352	0.01600	2,003,490	32,056	1.4%	1,959,563	31,353
353	0.01860	352,190	6,551	0.2%	344,468	6,407
397	0.06670	240,250	16,025	0.2%	234,983	15,673
		<u>144,743,542</u>	<u>4,688,643</u>	<u>100.0%</u>	<u>141,570,000</u>	<u>4,585,844</u>
					To Sch L1	To Sch L1

Source: SAP and Powerplan WBS.

Note 1:

Depreciation rates approved in Docket No. 2010-0053, Decision and Order, filed May 12, 2011.

Note 2:

See details at HECO-WP-D2-001.

Note 3:

Decision and Order No. 33178, p. 84-85, Docket No. 2014-0113, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0001576, Schofield Generating Station Project, filed 09/29/2015. The Commission approved a cap on the amount of the total costs that may be recovered through any cost recovery mechanism other than base rates at 90% of the \$167 million cap. The \$167 million cap shall further be adjusted downward due to a reduction in the foreign exchange rate.

In the Letter to Commission Re: Docket No. 2014-0113, Schofield Generating Station; Notification of Euro Exchange Rate and Adjusted Project Cap, filed 01/27/2016, the Company locked in the foreign exchange rate at \$1.0928/euro which adjusted the project cap down from \$167 million to \$157.3 million. Revised cap on the amount of total costs allowed to be recovered through any cost recovery mechanism other than base rates is \$141.57 million (\$157.3 million x 90%).

HAWAIIAN ELECTRIC CO., INC.
SCHOFIELD GENERATING STATION - NO BONUS
DECEMBER 31, 2019

		source					2019 Add			
	<u>FEDERAL DEFERRED TAXES</u>	Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	2018 Total	Book/Tax Depr	State ITC Amort	2019 Total
		(page 2 of 5)	(page 3 of 5)	(page 3 of 5)	(page 3 of 5)	(page 5 of 5)				
1	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)	(412,415)	(19,716,566)
2	Book Depreciation							4,585,844	(412,415)	4,173,428
3	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)	(15,543,137)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,323,584)	(2,309,724)	1,481,649	813,976	(36,513)	(1,374,197)	(1,612,123)	(81,398)	(3,067,718)
6	Addback State Book/Tax Difference	6,706,173	11,702,627	(7,507,036)	(4,124,152)	185,002	6,962,615	8,168,107	412,415	15,543,137
7	Federal Book/Tax Difference	(39,373,231)	(11,702,627)	7,507,036	4,124,152	(185,002)	(39,629,673)	(9,565,463)	(412,415)	(49,195,136)
8	Book Depreciation							4,585,844	(412,415)	4,173,428
9	Federal State Difference	(32,667,058)	-	-	-	-	(32,667,058)	3,188,488	-	(29,478,570)
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%	21%	21%	21%
11	Federal Deferred Tax Adjustment	(6,860,082)	-	-	-	-	(6,860,082)	669,582	-	(6,190,500)
12	Total Federal Deferred Taxes	(8,183,666)	(2,309,724)	1,481,649	813,976	(36,513)	(8,234,279)	(942,541)	(81,398)	(9,258,218)
	<u>STATE DEFERRED TAXES</u>									
13	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)	-	(19,716,566)
14	Book Depreciation							4,585,844	(412,415)	4,173,428
15	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)	(15,543,137)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	(403,379)	(703,917)	451,551	248,069	(11,128)	(418,804)	(491,315)	(24,807)	(934,926)
18	<u>TOTAL DEFERRED TAXES</u>	(8,587,045)	(3,013,641)	1,933,200	1,062,045	(47,641)	(8,653,083)	(1,433,856)	(106,205)	(10,193,144)
							To Sch L1		To Sch L1	To Sch L1
							(1,540,061)		To Sch L1	

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018	2019	Net Book Value
FEDERAL											
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	50%	32,647,265	2,953,800	28,475,480
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	0%	3,109,263	5,907,600	55,059,682
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	50%	2,823,381	196,453	2,606,021
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	0%	204,100	392,906	5,028,849
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	50%	549,499	38,235	494,865
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	0%	39,723	76,469	966,407
Total		141,570,000	(11,702,627)	7,507,036	137,374,409				39,373,231	9,565,463	92,631,306
Cumulative									48,938,694		
To page 1 of 5											
HAWAII											
P0001576	Schofield Generation Station	128,153,091	(10,550,569)	6,768,010	124,370,532	Oth Prod	15	0	6,218,527	11,815,201	110,119,363
P0001576	Schofield Generation Station	11,251,710	(1,021,945)	655,561	10,885,325	Trans	20	0	408,200	785,812	10,057,698
P0001576	Schofield Generation Station	2,165,199	(130,112)	83,465	2,118,551	Comm	20	0	79,446	152,938	1,932,815
Total		141,570,000	(11,702,627)	7,507,036	137,374,409				6,706,173	12,753,951	122,109,876
Cumulative									19,460,124		
To page 1 of 5											

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:							(Note 1)	
	A	B	C	D	E=SUM(B:D)	F=A+E		
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	Allocation %	Subject to Cap
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	3.5%	4,942,763
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	24.5%	34,735,016
Vehicles	2,062	117,109	187	563	117,859	119,921	0.1%	117,292
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	11.6%	16,447,152
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	8.3%	11,702,627
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	48.3%	68,368,772
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	3.4%	4,834,193
Other	427,354	-	4,296	-	4,296	431,650	0.3%	422,186
	131,025,869	8,549,966	2,213,736	2,953,971	13,717,673	144,743,542	100.0%	141,570,000

BREAKDOWN SUBJECT TO (
	A1	B1	C1	D1	E1=SUM(B1:D1)	F1=A1+E1		
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	State ITC	
Labor	2,243,144	1,675,424	299,212	724,982	2,699,618	4,942,763		
Materials	32,210,236	1,490,363	533,090	501,328	2,524,781	34,735,016	34,735,016	
Vehicles	2,017	114,541	183	551	115,275	117,292		
Overheads	12,603,385	2,402,368	533,026	908,373	3,843,767	16,447,152		
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
Outside Services-Construction	67,631,285	601,267	57,799	78,421	737,487	68,368,772	68,368,772	
Outside Services-Other	2,494,471	1,390,800	607,576	341,347	2,339,722	4,834,193		
Other	417,984	-	4,202	-	4,202	422,186		
	128,153,091	8,362,506	2,165,199	2,889,204	13,416,909	141,570,000		(Note 1)
Amount subject to bonus	50%	50%	50%	50%	50%	50%	103,103,789	
	64,076,545	4,181,253	1,082,599	1,444,602	6,708,455	70,785,000	4%	
			5,625,855				4,124,152	To page 1 of 5
Tie out of TCI:								
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		To page 1 of 5
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%		From page 4 of 5
TCI	6,768,010	441,175	83,465	214,385	739,025	7,507,036		To page 1 of 5
			655,561					

Source: Ellipse & SAP

Note 1:
Allocated 12/31/18 Plant Addition subject to the cap of \$141.57M. See further discussion at HECO-WP-L1-001.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

To page 3 of 5

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

To page 1 of 5

SOURCE: Ellipse & SAP

**Schedule L exhibit,
with additional supporting workpapers**

Excerpt from Docket No. 2017-0213 - Schofield Generating Station Cost Recovery through the Major Project Interim Recovery Adjustment Mechanism Hawaiian Electric's Update of Target Revenues and Updated Responses to the Commission's Information Requests, filed July 18, 2018. Approved in Order No. 35647, issued August 15, 2018. Effective July 1, 2018. Pages 1 through 9.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7a)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,581,445	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (5,000)	\$ -	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (6,000)	\$ -	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (1), (5), (7), (7a)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (1), (5), (7), (7a)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rates)	Note (1), (5), (7), (7a)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (135,934)	\$ (135,934)	\$ (135,934)	\$ (135,934)	\$ (135,934)
5	Last Rate Order Target Annual Revenues	Sum Lines 1...4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Authorized MPR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Net MPR Adjustment	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Less: EARNINGS SHARING REVENUE CREDITS	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Total Annual Target Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	June 1, 2017 Annualized Revenues w/RAM Increase	Col (d), lines (5+8+17+18)	\$ 604,302	\$ 604,302	\$ 604,302	\$ 604,302	\$ 637,077	\$ 599,960	\$ 599,960	\$ 599,960	\$ 599,960
21	February 16, 2018 Annualized Revenues w/interim increase	Col (i), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April 13, 2018 Annualized Revenues w/2nd interim increase	Col (j), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	June 1, 2018 Annualized Revenues w/RAM Increase	Col (k), lines (5+9+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	June 1, 2018 Annualized Revenues w/RAM Increase & MPR, eff 7/1/18	Col (l), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Distribution of Target Revenues by Month:										
26	January	Note (3)	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,946,443	\$ 46,450,132	\$ 46,450,132	\$ 46,450,132	\$ 46,450,132	\$ 46,450,132
27	February	8.10%	\$ 43,030,848	\$ 43,030,848	\$ 43,030,848	\$ 43,503,022	\$ 41,603,222	\$ 41,603,222	\$ 41,603,222	\$ 41,603,222	\$ 41,603,222
28	March	7.59%	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,468,574	\$ 46,335,492	\$ 46,335,492	\$ 46,335,492	\$ 46,335,492	\$ 46,335,492
29	April	7.84%	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842	\$ 51,184,359	\$ 49,434,694	\$ 49,434,694	\$ 49,434,694	\$ 49,434,694	\$ 49,434,694
30	May	8.44%	\$ 51,980,700	\$ 51,980,700	\$ 51,980,700	\$ 52,997,265	\$ 50,386,658	\$ 50,386,658	\$ 50,386,658	\$ 50,386,658	\$ 50,386,658
31	June	8.07%	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111	\$ 54,628,879	\$ 51,961,091	\$ 51,961,091	\$ 51,961,091	\$ 51,961,091	\$ 51,961,091
32	July	9.04%	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350	\$ 52,453,393	\$ 50,007,798	\$ 50,007,798	\$ 50,007,798	\$ 50,007,798	\$ 50,007,798
33	August	8.67%	\$ 32,040,061	\$ 32,040,061	\$ 32,040,061	\$ 33,057,695	\$ 31,095,307	\$ 31,095,307	\$ 31,095,307	\$ 31,095,307	\$ 31,095,307
34	September	8.68%	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962	\$ 49,915,326	\$ 47,129,025	\$ 47,129,025	\$ 47,129,025	\$ 47,129,025	\$ 47,129,025
35	October	8.78%	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 364,152,243	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846
36	November	8.26%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
37	December	8.26%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
38	Total Distributed Target Revenues	100.00%	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 364,152,243	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846
39	Total Distributed Target Revenues	100.00%	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 364,152,243	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846	\$ 348,886,846

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 28, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335).
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 28, 2018, establishing 2018 target revenue effective June 1, 2018.

\$35,971
0.46429
-\$603
-\$2,143
0.60000

\$000s
\$000s
\$000s

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY**

**MPIR PROJECT
\$ in thousands**

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2017 (c)	Recorded at In Service Date (June 2018) (d)	Ending Balance as of 6/30/18 (e)	Average Balance (f)	MPIR (f)
Return on Investment							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	-	141,275	141,275	70,638	
2	Accum Depreciation	Schedule TBD	-	-	-	-	
3	Net Cost of Plant in Service		-	141,275	141,275	70,638	
4	Fuel Inventory - Avoided	Note 3	-	(1,534)	(1,534)	(767)	
5	M&S Inventory	Note 3	-	100	100	50	
6	Total Additions		-	(1,434)	(1,434)	(717)	
7	CIAC	Schedule TBD, if needed	-	-	-	-	
8	ADIT	HECO-WP-L-002	-	(8,689)	(8,689)	(4,344)	
9	State ITC	HECO-WP-L-002	-	(4,147)	(4,147)	(2,074)	
10	Total Deductions		-	(12,836)	(12,836)	(6,418)	
11	Total Rate Base		\$ -	\$ 127,005	\$ 127,005	63,502	
12	Average Rate Base					\$ 63,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 6,014
15	Depreciation Expense (Note 1)	Schedule E				-	
16	Operating & Maintenance Expense	Note 2				-	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				-	
18	Lease Rent Expense	Schedule TBD, if needed				-	
19	Other Expense	Schedule TBD, if needed				-	
20	Total Expenses					\$ -	
21	Total Major Project Interim Recovery						\$ 6,014
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	2019 Annualized Revenue for Major Project Interim Recovery						\$ 6,600.0

To Sch B & B1

Reconciliation to Schedule B1 (Info Only)

Sum of Monthly Factors for Jul-Dec 2018	51.67%
Prorated MPIR for Year 1	\$ 3,410
Rev Tax Adj	\$ (303)
Prorated MPIR for Year 1 excl Rev Tax	\$ 3,107

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Per Order No. 35556, page 74, Docket No. 2017-0213, For Approval to Recover Costs for Schofield Generating Station through the Major Project Interim Recovery Adjustment Mechanism, filed on June 27, 2018. Total estimated annual O&M expense will be excluded from the MPIR calculation until an acceptable business case study has been reviewed and approved by the Commission.

Note 3: Difference in fuel inventory and difference in materials & supplies inventory derived from the "with Schofield" and "without Schofield" rate bases in the HECO 2017 test year rate cases. See Docket No. 2016-0328 HECO-3201 p. 3 and HECO-3203 p. 3.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Hawaiian Electric Company, Inc.
 MPIR Plant Additions
 Actuals Through June 30, 2018

Indicator Code	NI
Row Labels	Sum of amount
150: Labor Cost	4,542,416
155: Labor True-up	284,309
201: Matl-Issues/Purchases	33,529,637
205: Matl-Purchasing Card	63,740
301: Vehicles	112,180
404: Energy Delivery	1,758,310
405: Power Supply	10,752,643
406: Corp Admin Expense	929,503
421: Non-Productive Wages	610,417
422: Employee Benefits	1,348,674
423: Payroll Taxes	403,436
430: AFUDC-Debt	3,260,337
431: AFUDC-Equity	8,704,625
501: Outside Svcs-General	1,461,336
502: Outside Svcs-Legal	177,774
503: Outside Svcs-TempHire	2,916
505: Outside Svcs-Constr	70,093,402
506: Outside Svcs-Engr	1,596,895
508: Outside Svcs-Environ	1,213,832
520: Mainland Travel	90,358
522: Interisland Travel	1,706
570: Rents	9,300
521: Meals	13,202
900: Fin Stmt Items	314,048
Grand Total	141,274,996

SOURCE: UIPlanner Actual Data

HAWAIIAN ELECTRIC CO., INC.
 SCHOFIELD GENERATING STATION
 DECEMBER 31, 2018 (Based on Actuals Through June 30, 2018)

	source	Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	Total
FEDERAL DEFERRED TAXES							
1	State Book/Tax Difference	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
2							
3	Subtotal	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,325,136)	(2,361,501)	1,514,515	818,578	(36,513)	(1,390,057)
6	Addback State Book/Tax Difference	6,714,039	11,964,962	(7,673,560)	(4,147,471)	185,002	7,042,972
7	Federal Book/Tax Difference	(39,452,276)	(11,964,962)	7,673,560	4,147,471	(185,002)	(39,781,209)
8							
9	Federal State Difference	(32,738,237)	-	-	-	-	(32,738,237)
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%
11	Federal Deferred Tax Adjustment	(6,875,030)	-	-	-	-	(6,875,030)
12	Total Federal Deferred Taxes	(8,200,166)	(2,361,501)	1,514,515	818,578	(36,513)	(8,265,087)
STATE DEFERRED TAXES							
13	State Book/Tax Difference	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
14							
15	Subtotal	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	(403,852)	(719,697)	461,568	249,472	(11,128)	(423,637)
18	TOTAL DEFERRED TAXES	(8,604,018)	(3,081,198)	1,976,083	1,068,050	(47,641)	(8,688,724)

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFFIELD GENERATION STATION
 (Based on Actuals Through June 30, 2018)

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct Life	(Note 1) Bonus	2018	Net Book Value
FEDERAL									
P0001576	Schoffield Generation Station	63,995,593	(5,393,539)	3,459,071	62,061,124	Oth Prod 15	50%	32,582,090	31,413,503
P0001576	Schoffield Generation Station	63,995,593	(5,393,539)	3,459,071	62,061,124	Oth Prod 15	0%	3,103,056	60,892,537
P0001576	Schoffield Generation Station	5,661,768	(180,733)	335,052	5,816,087	Trans 20	50%	3,017,095	2,644,673
P0001576	Schoffield Generation Station	5,661,768	(180,733)	335,052	5,816,087	Trans 20	0%	218,103	5,443,665
P0001576	Schoffield Generation Station	980,137	(66,514)	42,658	956,281	Comm 20	50%	496,071	484,066
P0001576	Schoffield Generation Station	980,137	(66,514)	42,658	956,281	Comm 20	0%	35,861	944,276
	Total	141,274,996	(11,281,574)	7,673,560	137,666,982			39,452,276	101,822,720
HAWAII									
P0001576	Schoffield Generation Station	127,991,185	(10,787,079)	6,918,141	124,122,248	Oth Prod 15	0	6,206,112	121,785,073
P0001576	Schoffield Generation Station	11,323,536	(361,466)	670,103	11,632,173	Trans 20	0	436,206	10,887,330
P0001576	Schoffield Generation Station	1,960,274	(133,029)	85,316	1,912,561	Comm 20	0	71,721	1,888,553
	Total	141,274,996	(11,281,574)	7,673,560	137,666,982			6,714,039	134,560,957

Note 1:

The Tax Technical Corrections Act of 2018 made changes to the phase down rules of §168(k) as it existed just prior to the enactment of the 2017 Tax Reform Act. These changes indicated that 50% bonus depreciation (under the old law) would apply to longer production period property that was pursuant to a written binding contract entered into prior to September 28, 2017 but placed into service in 2018. Based on this statutory revision, the current best assessment is that one-half of the Schoffield project components should meet the written binding contract requirements and will be grandfathered under the old law, which allowed 50% bonus depreciation on public utility property. The Company continues to monitor the tax developments for further guidance.

SOURCE: PUC-HECO-IR-7 (Update of CA-IR-19)

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through June 2018

Row	Expense Element	A		B		C		D		E = SUM(B:D)		F = A + E
		Oth Prod Generating Station and Switchyard	Trans 46kV Line	Trans Wahaiwa Substation	Comm Telecom	Trans Wahaiwa Substation	Interconnection Total	Interconnection Total	Total Project			
1	150: Labor Cost	2,036,413	1,505,621	698,537	301,845	2,506,003	4,542,416					
2	155: Labor True-up	99,413	149,735	37,744	(2,583)	184,896	284,309					
3	201: Maint-Issues/Purchases	31,024,176	1,466,766	494,978	543,716	2,505,461	33,529,637					33,529,637
4	205: Maint-Purchasing Card	5,329	39,500	17,588	1,323	58,411	63,740					63,740
5	301: Vehicles	1,213	110,407	560	-	110,967	112,180					
6	404: Energy Delivery	52,075	1,108,794	359,388	238,053	1,706,235	1,758,310					
7	405: Power Supply	10,442,252	190,953	83,082	36,356	310,392	10,752,643					
8	406: Corp Admin Expense	414,446	310,795	141,180	63,083	515,057	929,503					
9	421: Non-Productive Wages	265,486	210,398	43,543	90,990	344,931	610,417					
10	422: Employee Benefits	627,481	441,079	185,141	94,973	721,193	1,348,674					
11	423: Payroll Taxes	181,698	133,734	62,654	25,350	221,738	403,436					
12	430: AFUDC-Debt	2,940,954	190,052	97,899	36,432	319,383	3,260,337					
13	431: AFUDC-Equity	7,846,125	513,108	248,795	96,597	838,500	8,704,625					
14	501: Outside Svcs-General	453,275	775,828	62,767	169,466	1,008,061	1,461,336					
15	502: Outside Svcs-Legal	136,675	41,099	-	-	41,099	177,774					
16	503: Outside Svcs-TempHire	2,916	-	-	-	-	2,916					
17	505: Outside Svcs-Constr	69,339,679	614,746	79,883	59,095	753,723	70,093,402					70,093,402
18	506: Outside Svcs-Engr	483,431	580,122	284,614	248,729	1,113,464	1,596,895					
19	508: Outside Svcs-Environ	1,213,832	-	-	-	-	1,213,832					
20	520: Mainland Travel	86,254	-	-	4,104	4,104	90,358					
21	522: Interisland Travel	1,706	-	-	-	-	1,706					
22	570: Rents	9,300	-	-	-	-	9,300					
23	521: Meals	13,010	-	-	192	192	13,202					
24	900: Fin Stmt Items	314,048	-	-	-	-	314,048					
25	Grand Total	127,991,185	8,382,735	2,940,801	1,960,274	13,283,810	141,274,996					103,686,779
	Bonus Depr	50%	50%	50%	50%	50%	4%					
	To Tax Depr	63,995,593	4,191,368	1,470,400	980,137	1,470,400	4,147,471					

Note 1: Project was placed into service on June 7, 2018.

Note 2: To arrive at direct costs per categories listed in PUC-HECO-IR-7 Attachment 2:

26	Grand Total per Row 25	127,991,185	8,382,735	2,940,801	1,960,274	13,283,810	141,274,996
27	Less: Overheads (rows 6, 7, 8, 9, 10, 11)	11,983,438	2,395,752	922,436	501,358	3,819,546	15,802,984
28	Less: AFUDC (rows 12, 13)	10,787,079	703,160	341,694	133,029	1,177,883	11,964,962
29	Total Direct Costs by Major Area	105,220,669	5,283,823	1,676,671	1,325,887	8,286,381	113,507,050

Note 3: Agrees to 'Total Generating Station' per PUC-HECO-IR-7 Attachment 2 row 5

Note 4: Agrees to 'Total Interconnection' per PUC-HECO-IR-7 Attachment 2 row 10 (minor difference in total for 46kV, Telecom, and Wahaiwa Sub due to Project Management costs being allocated in Attachment 1 vs. not allocated in Attachment 2).

Note 5: Agrees to 'Subtotal Direct Costs' per PUC-HECO-IR-7 Attachment 2 row 11.

Tie out of ICI:							
AFUDC	10,787,079	703,160	341,694	133,029	341,694	1,177,883	11,964,962
ratio - 5 year average	64.13%	64.13%	64.13%	64.13%	64.13%	64.13%	64.13%
TCI	6,918,141	450,962	219,141	85,316	755,419	7,673,560	7,673,560

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	2013	2014	2015	2016	2017	5 Yr Ave
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,036,221	22,038,913
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608366	0.641336

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through June 30, 2018

Indicator Code	NR
Row Labels	Sum of amount
150: Labor Cost	83,369
155: Labor True-up	7,161
205: Matl-Purchasing Card	46
404: Energy Delivery	38,302
406: Corp Admin Expense	15,495
421: Non-Productive Wages	10,390
422: Employee Benefits	22,600
423: Payroll Taxes	7,639
Grand Total	185,002

SOURCE: UIPlanner Actual Data

Exhibit C

Updated Schedule L

Excerpt from Docket No. 2017-0213 - Schofield Generating Station MPIR Adjustment Mechanism Cost Recovery Request Hawaiian Electric's Business Case Analysis Supporting Net O&M Project Costs and Update of Target Revenues, filed September 6, 2018. Approved in Order No. 35953, issued December 14, 2018. Effective October 1, 2018. Pages 10 through 13.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY
MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2017 (c)	Recorded at In Service Date (June 2018) (d)	Ending Balance as of 6/30/18 (e)	Average Balance	MPIR (f)
Return on Investment							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	-	141,275	141,275	70,638	
2	Accum Depreciation	Schedule TBD	-	-	-	-	
3	Net Cost of Plant in Service		-	141,275	141,275	70,638	
4	Fuel Inventory - Avoided	Note 3	-	(1,534)	(1,534)	(767)	
5	M&S Inventory	Note 3	-	100	100	50	
6	Total Additions		-	(1,434)	(1,434)	(717)	
7	CIAC	Schedule TBD, if needed	-	-	-	-	
8	ADIT	HECO-WP-L-002	-	(8,689)	(8,689)	(4,344)	
9	State ITC	HECO-WP-L-002	-	(4,147)	(4,147)	(2,074)	
10	Total Deductions		-	(12,836)	(12,836)	(6,418)	
11	Total Rate Base		\$ -	\$ 127,005	\$ 127,005	63,502	
12	Average Rate Base					\$ 63,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 6,014
15	Depreciation Expense (Note 1)	Schedule E				-	
16	Operating & Maintenance Expense	Note 2				1,787	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				-	
18	Lease Rent Expense	Schedule TBD, if needed				-	
19	Other Expense	Schedule TBD, if needed				-	
20	Total Expenses						\$ 1,787
21	Total Major Project Interim Recovery						\$ 7,801
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						\$ 8,561.2

To Sch B & B1

Reconciliation to Schedule B1 (Info Only)	
Sum of Monthly Factors for Jul-Dec 2018	51.67%
Prorated MPIR for Year 1	\$ 4,424
Rev Tax Adj	\$ (393)
Prorated MPIR for Year 1 excl Rev Tax	\$ 4,031

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update.

Note 3: Difference in fuel inventory and difference in materials & supplies inventory derived from the "with Schofield" and "without Schofield" rate bases in the HECO 2017 test year rate cases. See Docket No. 2016-0328 HECO-3201 p. 3 and HECO-3203 p. 3.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Exhibit D

Updated Schedule B1

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES**

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7a)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (5,000)	\$ -	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (6,000)	\$ -	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (1), (5), (7), (7a)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (1), (5), (7), (7a)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rates)		\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (139,534)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)
5	Last Rate Order Target Annual Revenues	Sum Lines 1..4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (2)	\$ -	\$ -	\$ 101,131	\$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ (8,986)	\$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ -	\$ -	\$ 92,146	\$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Authorized MPR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,561
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (761)
14	Net MPR Adjustment	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,801
15	Less: EARNINGS SHARING REVENUE CREDITS	Note (2), (9)	\$ -	\$ -	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ -
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ -
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$ -	\$ -	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ -
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Total Annual Target Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	June 1, 2017 Annualized Revenues w/ RAM Increase	Col (g), lines (5+8+17+18)	\$ 604,302	\$ 604,302	\$ 604,302	\$ 604,302	\$ 637,077	\$ 599,960	\$ 612,574	\$ 620,374	\$ 620,374
21	February 16, 2018 Annualized Revenues w/ Interim Increase	Col (i), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April 13, 2018 Annualized Revenues w/ 2nd Interim Increase	Col (j), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	June 1, 2018 Annualized Revenues w/ RAM Increase	Col (k), lines (5+9+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	June 1, 2018 Annualized Revenues w/ RAM Increase & MPR - eff 7/1/18	Col (l), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Distribution of Target Revenues by Month:	Note (3)									
26	January	8.10%	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$22,450,132	\$51,603,222	\$28,726,095	\$53,972,558	\$50,808,650
27	February	7.26%	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$20,335,492	\$50,250,313	\$49,505,864	\$47,086,404	\$47,086,404
28	March	8.10%	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$50,396,658	\$51,603,222	\$50,250,313	\$50,250,313	\$50,250,313
29	April	7.98%	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$53,972,558	\$53,972,558	\$53,972,558	\$53,972,558	\$53,972,558
30	May	8.44%	\$51,184,359	\$51,184,359	\$51,184,359	\$51,184,359	\$55,461,456	\$55,461,456	\$55,461,456	\$55,461,456	\$55,461,456
31	June	8.07%	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,662,371	\$53,662,371	\$53,662,371	\$53,662,371	\$53,662,371
32	July	8.77%	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$54,841,062	\$54,841,062	\$54,841,062	\$54,841,062	\$54,841,062
33	August	8.70%	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$51,242,912	\$51,242,912	\$51,242,912	\$51,242,912	\$51,242,912
34	September	8.68%	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$320,547,365	\$320,547,365	\$320,547,365	\$320,547,365	\$320,547,365
35	October	8.78%	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$79,122,753	\$79,122,753	\$79,122,753	\$79,122,753	\$79,122,753
36	November	8.26%	\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510	\$49,434,694	\$49,434,694	\$49,434,694	\$49,434,694	\$49,434,694
37	December	8.28%	\$364,152,243	\$364,152,243	\$364,152,243	\$364,152,243	\$94,388,846	\$94,388,846	\$94,388,846	\$94,388,846	\$94,388,846
38	Total Distributed Target Revenues	100.000%	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$79,122,753	\$79,122,753	\$79,122,753	\$79,122,753	\$79,122,753

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 29, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335).
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.

\$35,971
0.46429
-\$603
-\$2,143
0.60000

ATTACHMENT 1

Schedule B1, Schedule L and Supporting Workpapers

HAWAIIAN ELECTRIC COMPANY, INC.

Excerpt from Transmittal No. 19-01 - Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Mechanism, filed February 7, 2019 and effective January 1, 2019.
Pages 14 through 22.

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES**

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)	Docket No. 2016-0328 Amounts (n)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7e)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (1), (5), (7), (7e)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (1), (5), (7), (7e)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rates)	Note (1), (5), (7), (7e)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (139,534)	\$ (139,534)	\$ (139,534)	\$ (139,534)	\$ (139,534)	\$ (139,534)
5	Last Rate Order Target Annual Revenues	Sum Lines 1..4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 637,091	\$ 637,091	\$ 637,091	\$ 637,091	\$ 637,091	\$ 637,091
6	Authorized RAM Revenues	Note (2)	\$ -	\$ -	\$ 101,131	\$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 6 at 8.885%		\$ -	\$ -	\$ (8,986)	\$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ -	\$ -	\$ 92,146	\$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Less: Revenue Taxes on Line 9 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Authorized MPIR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Net MPIR Adjustment	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Less: EARNINGS SHARING REVENUE CREDITS	Note (2), (9)	\$ -	\$ -	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$ -	\$ -	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Total Annual Target Revenues		\$ 604,302	\$ 604,302	\$ 604,302	\$ 604,302	\$ 637,077	\$ 637,077	\$ 612,574	\$ 618,587	\$ 620,374	\$ 630,624
20	June 1, 2017 Annualized Revenues w/ RAM Increase	Col (g), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	February 16, 2018 Annualized Revenues w/ Interim Increase	Col (i), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April 13, 2018 Annualized Revenues w/ 2nd Interim Increase	Col (j), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	June 1, 2018 Annualized Revenues w/ RAM Increase	Col (k), lines (5+9+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 7/1/18	Col (l), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 10/1/18	Col (m), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 1/1/19	Col (n), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	Distribution of Target Revenues by Month:											
28	January	Note (3)	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623
29	February	8.10%	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848
30	March	7.26%	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623
31	April	8.10%	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574
32	May	7.84%	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842
33	June	8.44%	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656
34	July	8.47%	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790
35	August	8.77%	\$52,997,265	\$52,997,265	\$52,997,265	\$52,997,265	\$52,997,265	\$52,997,265	\$52,997,265	\$52,997,265	\$52,997,265	\$52,997,265
36	September	9.04%	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111
37	October	8.68%	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350
38	November	8.78%	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061
39	December	8.26%	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962
40	Total Distributed Target Revenues	100.00%	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892
41	Total Distributed Target Revenues	100.00%	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 29, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb. 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335).
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.
- MPIR Revenues effective July 1, 2018 approved in Order No. 35847, issued August 15, 2018, in Docket No. 2017-0213.
- MPIR Revenues effective October 1, 2018 approved in Order No. 35953, issued December 14, 2018, in Docket No. 2017-0213.
- MPIR Revenues effective January 1, 2019 filed in Transmittal 19-01 on February 7, 2019.

\$35,971
0.46429
-\$603
-\$2,143
0.60000

\$000s
\$000s
\$000s

\$51,648,125
\$47,864,379
\$51,080,563
\$50,323,814
\$52,972,435

\$53,817,090
\$55,301,700
\$53,507,797
\$54,841,062
\$51,242,893
\$51,366,968
\$157,450,923
\$253,889,316

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY
MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2018 (c)	2019 Activity (d)	Ending Balance as of 12/31/19 (e)	Average Balance (f) = ((c)+(e))/2	MPIR (g)
Return on Investment - Schofield Generating Station							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	141,570	-	141,570	141,570	
2	Accum Depreciation	HECO-WP-L-001	-	(4,586)	(4,586)	(2,293)	
3	Net Cost of Plant in Service		141,570	(4,586)	136,984	139,277	
4	Fuel Inventory - Avoided	Note 3	(1,534)	-	(1,534)	(1,534)	
5	M&S Inventory	Note 3	100	-	100	100	
6	Total Additions		(1,434)	-	(1,434)	(1,434)	
7	CIAC	Not Applicable	-	-	-	-	
8	ADIT	HECO-WP-L-002	(8,653)	(1,540)	(10,193)	(9,423)	
9	State ITC	HECO-WP-L-002	(4,124)	412	(3,712)	(3,918)	
10	Total Deductions		(12,777)	(1,128)	(13,905)	(13,341)	
11	Total Rate Base		\$ 127,359	\$ (5,713)	\$ 121,646	124,502	
12	Average Rate Base					\$ 124,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 11,790
15	Depreciation Expense (Note 1)	HECO-WP-L-001				4,586	
16	Operating & Maintenance Expense	Note 2				2,087	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				(412)	
18	Lease Rent Expense	Not Applicable				-	
19	Other Expense	Not Applicable				-	
20	Total Expenses						\$ 6,260
21	Total Major Project Interim Recovery						\$ 18,051
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						\$ 19,810.8

To Sch B & B1

	Reconciliation to Schedule B1 (Info Only)		
	Jul - Sep 2018	Oct - Dec 2018	2019
Annualized Revenue for MPIR	\$ 6,600	\$ 8,561	\$ 19,811
Rev Tax Adj	\$ (586)	\$ (761)	\$ (1,760)
Prorated MPIR for Year 1 excl Rev Tax	\$ 6,014	\$ 7,800	\$ 18,051
Incremental	\$ 6,014	\$ 1,787	\$ 10,250
	Note 5	Note 6	

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update and approved in Order No. 35953, filed December 14, 2018.

Note 3: Decision and Order No. 35556 dated June 27, 2018 in Docket No. 2017-0213.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Note 5: MPIR Revenues effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213.

Note 6: MPIR Revenues effective October 1, 2018 filed December 21, 2018 in Docket No. 2017-0213.

Schofield Generating Station
Plant Addition
As of December 31, 2018

Utility Account	(Note 1)	Balance at 12/31/18	Depreciation 2019	Allocation %	(Note 2)	Depreciation 2019 (at Cap)
	PUC Approved Accrual Rate				Subject to Cap	
	a	b	c = a x b	d	e = d x Cap	f = a x e
343	0.03260	142,147,612	4,634,012	98.2%	139,030,987	4,532,410
352	0.01600	2,003,490	32,056	1.4%	1,959,563	31,353
353	0.01860	352,190	6,551	0.2%	344,468	6,407
397	0.06670	240,250	16,025	0.2%	234,983	15,673
		<u>144,743,542</u>	<u>4,688,643</u>	<u>100.0%</u>	<u>141,570,000</u>	<u>4,585,844</u>

Source: SAP and Powerplan WBS.

Note 1:

Depreciation rates approved in Docket No. 2010-0053, Decision and Order, filed May 12, 2011.

Note 2:

Decision and Order No. 33178, p. 84-85, Docket No. 2014-0113, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0001576, Schofield Generating Station Project, filed 09/29/2015. The Commission approved a cap on the amount of the total costs that may be recovered through any cost recovery mechanism other than base rates at 90% of the \$167 million cap. The \$167 million cap shall further be adjusted downward due to a reduction in the foreign exchange rate.

In the Letter to Commission Re: Docket No. 2014-0113, Schofield Generating Station; Notification of Euro Exchange Rate and Adjusted Project Cap, filed 01/27/2016, the Company locked in the foreign exchange rate at \$1.0928/euro which adjusted the project cap down from \$167 million to \$157.3 million. Revised cap on the amount of total costs allowed to be recovered through any cost recovery mechanism other than base rates is \$141.57 million (\$157.3 million x 90%).

HAWAIIAN ELECTRIC CO., INC.
 SCHOFIELD GENERATING STATION - WITH BONUS
 DECEMBER 31, 2019

	source	2018		2019		2019 Add					
		Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	Total	Depr	State ITC	Amort	Total
FEDERAL DEFERRED TAXES											
1	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)	(412,415)	(19,716,566)	
2	Book Depreciation							4,585,844	(412,415)	4,173,428	
3	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)	(15,543,137)	
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	
5	Federal Def Tax on State Book/Tax Diff	(1,323,584)	(2,309,724)	1,481,649	813,976	(36,513)	(1,374,197)	(1,612,123)	(81,398)	(3,067,718)	
6	Addback State Book/Tax Difference	6,706,173	11,702,627	(7,507,036)	(4,124,152)	185,002	6,962,615	8,168,107	412,415	15,543,137	
7	Federal Book/Tax Difference	(39,373,231)	(11,702,627)	7,507,036	4,124,152	(185,002)	(39,629,673)	(9,565,463)	(412,415)	(49,195,136)	
8	Book Depreciation							4,585,844	(412,415)	4,173,428	
9	Federal State Difference	(32,667,058)	-	-	-	-	(32,667,058)	3,188,488	-	(29,478,570)	
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%	21%	21%	21%	
11	Federal Deferred Tax Adjustment	(6,860,082)	-	-	-	-	(6,860,082)	669,582	-	(6,190,500)	
12	Total Federal Deferred Taxes	(8,183,666)	(2,309,724)	1,481,649	813,976	(36,513)	(8,234,279)	(942,541)	(81,398)	(9,258,218)	
STATE DEFERRED TAXES											
13	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)	-	(19,716,566)	
14	Book Depreciation							4,585,844	(412,415)	4,173,428	
15	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)	(15,543,137)	
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	
17	Total State Deferred Taxes	(403,379)	(703,917)	451,551	248,069	(111,128)	(418,804)	(491,315)	(24,807)	(934,926)	
18	TOTAL DEFERRED TAXES	(8,587,045)	(3,013,641)	1,933,200	1,062,045	(47,641)	(8,653,083)	(1,433,856)	(106,205)	(10,193,144)	

**HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION**

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018	2019	Net Book Value	
FEDERAL												
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	50%	32,647,265	2,953,800	28,475,480	
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	0%	3,109,263	5,907,600	55,059,682	
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	50%	2,823,381	196,453	2,606,021	
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	0%	204,100	392,906	5,028,849	
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	50%	549,499	38,235	494,865	
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	0%	39,723	76,469	966,407	
	Total	<u>141,570,000</u>	<u>(11,702,627)</u>	<u>7,507,036</u>	<u>137,374,409</u>				<u>39,373,231</u>	<u>9,565,463</u>	<u>92,631,306</u>	
	Cumulative								48,938,694			
HAWAII												
P0001576	Schofield Generation Station	128,153,091	(10,550,569)	6,768,010	124,370,532	Oth Prod	15	0	6,218,527	11,815,201	110,119,363	
P0001576	Schofield Generation Station	11,251,710	(1,021,945)	655,561	10,885,325	Trans	20	0	408,200	785,812	10,057,698	
P0001576	Schofield Generation Station	2,165,199	(130,112)	83,465	2,118,551	Comm	20	0	79,446	152,938	1,932,815	
	Total	<u>141,570,000</u>	<u>(11,702,627)</u>	<u>7,507,036</u>	<u>137,374,409</u>				<u>6,706,173</u>	<u>12,753,951</u>	<u>122,109,876</u>	
	Cumulative								19,460,124			

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:							(Note 1)	
Expense Element	A	B	C	D	E=SUM(B:D)	F=A+E	Allocation %	Subject to Cap
	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project		
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	3.5%	4,942,763
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	24.5%	34,735,016
Vehicles	2,062	117,109	187	563	117,859	119,921	0.1%	117,292
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	11.6%	16,447,152
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	8.3%	11,702,627
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	48.3%	68,368,772
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	3.4%	4,834,193
Other	427,354	-	4,296	-	4,296	431,650	0.3%	422,186
	<u>131,025,869</u>	<u>8,549,966</u>	<u>2,213,736</u>	<u>2,953,971</u>	<u>13,717,673</u>	<u>144,743,542</u>	<u>100.0%</u>	<u>141,570,000</u>

BREAKDOWN SUBJECT TO CAP:							(Note 1)	
Expense Element	A1	B1	C1	D1	E1=SUM(B1:D1)	F1=A1+E1	State ITC	
	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project		
Labor	2,243,144	1,675,424	299,212	724,982	2,699,618	4,942,763		
Materials	32,210,236	1,490,363	533,090	501,328	2,524,781	34,735,016	34,735,016	
Vehicles	2,017	114,541	183	551	115,275	117,292		
Overheads	12,603,385	2,402,368	533,026	908,373	3,843,767	16,447,152		
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
Outside Services-Construction	67,631,285	601,267	57,799	78,421	737,487	68,368,772	68,368,772	
Outside Services-Other	2,494,471	1,390,800	607,576	341,347	2,339,722	4,834,193		
Other	417,984	-	4,202	-	4,202	422,186		
	<u>128,153,091</u>	<u>8,362,506</u>	<u>2,165,199</u>	<u>2,889,204</u>	<u>13,416,909</u>	<u>141,570,000</u>		
Amount subject to bonus	50%	50%	50%	50%	50%	50%		103,103,789
	<u>64,076,545</u>	<u>4,181,253</u>	<u>1,082,599</u>	<u>1,444,602</u>	<u>6,708,455</u>	<u>70,785,000</u>		<u>4%</u>
								<u>4,124,152</u>
								5,625,855
Tie out of TCI:								
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%		
TCI	<u>6,768,010</u>	<u>441,175</u>	<u>83,465</u>	<u>214,385</u>	<u>739,025</u>	<u>7,507,036</u>		
								655,561

Source: Ellipse & SAP

Note 1:

Allocated 12/31/18 Plant Addition subject to the cap of \$141.57M. See further discussion at HECO-WP-L-001.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

SOURCE: Ellipse & SAP

HAWAIIAN ELECTRIC COMPANY, INC.
2018 WEIGHTED AVERAGE PIM TARGET, DEADBAND, INCENTIVE CALCULATIONS

	Period	# of Days	Max Penalty	2018 Target	Deadband	Range for No Penalty		2018 Annual Total	Delta vs Target	(Penalty) / Reward
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i) = (h) - (d)	(j)
SAIFI	1/1/18-2/15/18	46	2,039,094	1.116	0.090	1.026	1.206	1.238	0.122	
	2/16/18-4/12/18	56	2,260,799	1.116	0.090	1.026	1.206	1.238	0.122	
	4/13/18-8/31/18	141	2,276,417	1.116	0.090	1.026	1.206	1.238	0.122	
	9/1/18-12/31/18	122	2,276,417	1.103	0.088	1.015	1.191	1.238	0.135	
	Annual (Weighted Avg)	365	2,244,112	1.112	0.089	1.022	1.201	1.238	0.126	(929,827)
										To Sch M
SAIDI	1/1/18-2/15/18	46	2,039,094	99.030	9.070	89.960	108.100	106.410	7.380	
	2/16/18-4/12/18	56	2,260,799	99.030	9.070	89.960	108.100	106.410	7.380	
	4/13/18-8/31/18	141	2,276,417	99.030	9.070	89.960	108.100	106.410	7.380	
	9/1/18-12/31/18	122	2,276,417	99.230	8.960	90.270	108.190	106.410	7.180	
	Annual (Weighted Avg)	365	2,244,112	99.097	9.033	90.064	108.130	106.410	7.313	-
										To Sch M
Call Center	1/1/18-2/15/18	46	815,638	79.07%	3.00%	76.07%	82.07%	83.97%		
	2/16/18-4/12/18	56	904,320	79.46%	3.00%	76.46%	82.46%	83.97%		
	4/13/18-8/31/18	141	910,567	79.56%	3.00%	76.56%	82.56%	83.97%		
	9/1/18-12/31/18	122	910,567	80.10%	3.00%	77.10%	83.10%	83.97%		
	Annual Totals	365	897,645	79.66%	3.00%	76.66%	82.66%	83.97%	4.31%	391,972
										To Sch M

Reference: See Hawaiian Electric Company Proposed PIM Tariff Revisions, filed on July 23, 2018 in Docket No. 2016-0328. The PIM Tariff Revisions were approved by the Commission in Order No. 35661, filed on August 30, 2018.

Note 1 SAIDI and SAIFI Annual Totals exclude 25 kV Proactive Work (See HECO-WP-M-002):

	SAIDI	SAIFI	
Occurrences / Minutes	111.94	1.253	With 25kV Proactive Work
Less: Exclusion for 25kV work	-5.52	-0.015	
Annual Totals	106.41	1.238	Without 25kV Proactive Work

HAWAIIAN ELECTRIC COMPANY, INC.
2018 SAIDI and SAIFI Calculations
With and Without 25 kV Scheduled Work Outages

HECO-WP-M-001
HECO-WP-M-001

HECO-WP-M-001
HECO-WP-M-001

Without 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	28,350.82	38,535.98	36,195.83	48,912.83	47,852.78	45,741.20	26,594.23	52,088.65	70,669.87	38,183.60	46,352.93	61,396.90	540,875.63
Customer Interruptions	19,170	25,947	26,983	49,443	27,712	34,644	21,028	29,939	46,557	24,863	21,382	49,779	377,447
SAIDI (Minutes)	5.58	7.58	7.12	9.62	9.41	9.00	5.23	10.25	13.90	7.51	9.12	12.08	106.41
SAIFI (Occurrences)	0.063	0.085	0.088	0.162	0.091	0.114	0.069	0.098	0.153	0.082	0.070	0.163	1.238

With 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	28,350.82	38,535.98	36,195.83	48,912.83	47,852.78	45,741.20	54,673.72	52,088.65	70,669.87	38,183.60	46,352.93	61,396.90	568,955.12
Customer Interruptions	19,170	25,947	26,983	49,443	27,712	34,644	25,686	29,939	46,557	24,863	21,382	49,779	382,105
SAIDI (Minutes)	5.58	7.58	7.12	9.62	9.41	9.00	10.76	10.25	13.90	7.51	9.12	12.08	111.94
SAIFI (Occurrences)	0.063	0.085	0.088	0.162	0.091	0.114	0.084	0.098	0.153	0.082	0.070	0.163	1.253

Difference Between With and Without 25 kV Scheduled Work Outages (See Note Below)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	-	-	-	-	-	-	(28,079)	-	-	-	-	-	(28,079)
Customer Interruptions	-	-	-	-	-	-	(4,658)	-	-	-	-	-	(4,658)
SAIDI (Minutes)	-	-	-	-	-	-	5.52	-	-	-	-	-	5.52
SAIFI (Occurrences)	-	-	-	-	-	-	0.015	-	-	-	-	-	0.015

Note:

25 kV Schedule Work Outage Events
(see HECO-WP-M-003 for more details)

Date of exclusion event	Customer Interruptions	Customer Minutes Interrupted
7/5/2018	(329)	(138,838)
7/16/2018	(881)	(317,160)
7/17/2018	(1,003)	(399,020)
7/18/2018	(1,004)	(341,342)
7/19/2018	(585)	(192,357)
7/23/2018	(418)	(150,062)
7/24/2018	(418)	(138,610)
7/25/2018	(20)	(7,380)
Total	(4,658)	(1,684,769)

(28,079) Hours Interrupted

Total Customer Minutes Interrupted without 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Total Customer Minutes Interrupted without 25 kV Scheduled Work Outages	1,701,049	2,312,159	2,171,750	2,934,770	2,871,167	2,744,472	1,595,654	3,125,319	4,240,192	2,291,016	2,781,176	3,683,814	32,452,538
Total Customer Minutes Interrupted with 25 kV Scheduled Work Outages													
Total Customer Minutes Interrupted with 25 kV Scheduled Work Outages	1,701,049	2,312,159	2,171,750	2,934,770	2,871,167	2,744,472	3,280,423	3,125,319	4,240,192	2,291,016	2,781,176	3,683,814	34,137,307
Difference	-	-	-	-	-	-	(1,684,769)	-	-	-	-	-	(1,684,769)

**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
IWILEI 138KV 3 SUB IWILEI 9 25KV CKT CB-7754 BREAKER 7754	23:00			D-2	821 BETHEL ST V-8196, 821 BETHEL ST V-6645	1664	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN H/C NEAR V10308 PIER 12 AND H/C NEAR V10309 PIER 15 TO REPAIR A DEFECTIVE UNDERGROUND CABLE. IWILEI 13 CKT WAS ABNORMAL DUE TO HOT CAPS ON RO#125230 REQ#2054. E#259743. RELATED TO IR#1671. PTM: DELACRUZ, KEALI; ROSALES, RAY; PITT, ANTHONY; AHMOOK SANG, BRAD; PARK, JAMES; AHMOOK SANG, NATE; MOUNTHONGDY, PAT SIGN: OSHIRO, KELLY
BREAKER CB-7754		06:02 07/06/2018	7 HR 2 MIN		821 BETHEL ST V-8196, 821 BETHEL ST V-6645 CUST: 3		
IWILEI 138KV 4 SUB IWILEI 13 25KV CKT CB-7759 SECTIONALIZER CB7754	23:00			D-2	1020 MAUNAKEA ST V-7566, 60 NIMITZ N. HWY V-6646, 60 NIMITZ N. HWY V-6646B, 801 NUUANU AVE V-6936, 12 Pier V-10308, 15 Pier V-10309	1671	SECTIONALIZER ABC PHASE #CB7754 WAS OPENED IN IWILEI SUBSTATION DUE TO A SCHEDULED OUTAGE BETWEEN H/C NEAR SW V10309 AND H/C NEAR SW V10308 TO REPAIR A DEFECTIVE UNDERGROUND CABLE. SCHEDULED OUTAGE TO REPAIR FAULTED IWILEI 13 CKT RO#125230 REQ#2054. E#259743 PTM: AHMOOK SANG, BRAD SIGN: MACEY, JENNIFER
BREAKER CB7754		06:02 07/06/2018	7 HR 2 MIN		1020 MAUNAKEA ST V-7566, 60 NIMITZ N. HWY V-6646B, 801 NUUANU AVE V-6936, 12 Pier V-10308, 15 Pier V-10309 CUST: 326		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Prearranged outage.
 Class E: Affecting no cust.; parallel lines

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
IWILEI 138KV 3 SUB IWILEI 9 25KV CKT CB-7754 BREAKER 7754	22:00			D-1	SECTIONS OF BETHEL ST	1748	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON IWILEI 9 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE 25KV CABLE SPLICES E#260398. RELATED TO E#260399 IR#1749 REQ#2150. PTM: AHMOOK SANG, NATE; CHING, THOMAS SIGN: MIYAKE, LANCE
BREAKER CB7754		04:00 07/17/2018	6 HR 0 MIN		FROM CB7754 IWILEI SUBSTATION TO ALL TERMINATIONS CUST: 174		
IWILEI 138KV 4 SUB IWILEI 13 25KV CKT CB-7759 BREAKER 7759	22:00			D-1	KING, MAUNAKEA ST, NUUANU AVE, SECTIONS OF NIMITZ HWY	1749	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON IWILEI 13 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE 25KV CABLE SPLICES E#260399. RELATED TO E#260398 IR#1748 REQ#2149. PTM: DELACRUZ, KEALI; PITT, ANTHONY; WON, BRONSON; KAPOI, KALEI SIGN: MIYAKE, LANCE
BREAKER CB7759		04:00 07/17/2018	6 HR 0 MIN		FROM CB7759 IWILEI SUB TO ALL TERMINATIONS CUST: 707		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Rearranged outage.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:04			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1757	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 5 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260487 REQ#2168. RELATED TO IR#1758 REQ#2169, IR#1759 REQ#2170, IR#1760 REQ#2171. PTM: AHMOOK SANG, NATE SIGN: MIYAKE, LANCE
BREAKER CB7706		04:39 07/18/2018	6 HR 35 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:04			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1758	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260501 REQ#2169. RELATED TO IR#1757 REQ#2168, IR#1759 REQ#2170, IR#1760 REQ#2171. PTM: DELACRUZ, KEALII SIGN: MIYAKE, LANCE
BREAKER CB7707		04:39 07/18/2018	6 HR 35 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:04			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1759	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 9 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260499 REQ#2170. RELATED TO IR#1757 REQ#2168, IR#1758 REQ#2169, IR#1760 REQ#2171. PTM: MOUNTHONGDY, PAT SIGN: MIYAKE, LANCE
BREAKER CB8329		04:39 07/18/2018	6 HR 35 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Rearranged outage.
 Class E: Affecting no cust.; parallel lines

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:04			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1760	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260500 REQ#2171. RELATED TO IR#1757 REQ#2168, IR#1758 REQ#2169, IR#1759 REQ#2170. PTM: ROSALES, RAY SIGN: MIYAKE, LANCE
BREAKER CB8330		04:44 07/18/2018	6 HR 40 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		

Class A: Large areas; important Cust.; Transmission lines.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:08			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1766	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 5 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260590 REQ#2179. RELATED TO IR#1767 REQ#2180, IR#1768 REQ#2181, IR#1769 REQ#2182. PTM: AHMOOK SANG, NATE SIGN: MIYAKE, LANCE
BREAKER CB7706		03:48 07/19/2018	5 HR 40 MIN		FROM CB7706 KEWALO SUB TO ALL TERMINATIONS CUST: 336		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:08			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1768	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 9 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260589 REQ#2181. RELATED TO IR#1766 REQ#2179, IR#1767 REQ#2180, IR#1769 REQ#2182. PTM: KAPOI, KALEI SIGN: MIYAKE, LANCE
BREAKER CB8329		03:48 07/19/2018	5 HR 40 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:09			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1767	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260601 REQ#2180. RELATED TO IR#1766 REQ#2179, IR#1768 REQ#2181, IR#1769 REQ#2182. PTM: DELACRUZ, KEALI SIGN: MIYAKE, LANCE
BREAKER CB7707		03:48 07/19/2018	5 HR 39 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:09			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1769	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260601 REQ#2182. RELATED TO IR#1766 REQ#2179, IR#1767 REQ#2180, IR#1768 REQ#2181. PTM: MOUNTHONGDY, PAT SIGN: MIYAKE, LANCE
BREAKER CB8330		03:49 07/19/2018	5 HR 40 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		

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 Class B: Large group of cust.; junctions; circuits; tsfs.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:00			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1773	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260678 REQ#2197. RELATED TO IR#1774 REQ#2196. PTM: PITT, ANTHONY SIGN: MIYAKE, LANCE
BREAKER CB8330		03:29 07/20/2018	5 HR 29 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:00			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1774	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#?? REQ#2196. RELATED TO IR#1773 REQ#2197. PTM: ROSALES, RAY SIGN: MIYAKE, LANCE
BREAKER CB7707		03:23 07/20/2018	5 HR 23 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:03			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1805	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KEWALO SUBSTATION TO ALL TERMINATIONS TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED 25KV SPLICES E#260897 REQ#2205. RELATED TO IR#1806 REQ#2206. PTM: PITT, ANTHONY; AHMOOK SANG, NATE; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB7706		04:02 07/24/2018	5 HR 59 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:03			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1806	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KAMOKU SUBSTATION TO ALL TERMINATIONS TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED 25KV SPLICES E#260897 REQ#2206. RELATED TO IR#1805 REQ#2205. PTM: PITT, ANTHONY; AHMOOK SANG, NATE; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB-8329		04:02 07/24/2018	5 HR 59 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:04			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1822	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KAMOKU SUBSTATION TO ALL TERMINATIONS. UG REPLACED SPLICES REQ#2208 E#261016. RELATED TO IR#1821 REQ#2207. PTM: MAKAIU, DAROL; KATADA, RANDY; RABE, JENSEN; KAPOI, KALEI; OKAGAWA, JON; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB-8329		03:34 07/25/2018	5 HR 30 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:05			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1821	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KEWALO SUBSTATION TO ALL TERMINATIONS. UG REPLACED SPLICES ON REQ#2207 E#261016. RELATED TO IR#1822 REQ#2208. PTM: MAKAIU, DAROL; KATADA, RANDY; RABE, JENSEN; OKAGAWA, JON; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB-7706		03:37 07/25/2018	5 HR 32 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 7 25KV CKT CB-7708 BREAKER 7708	22:01			D-1	FROM CB7708 KEWALO SUBSTATION TO ALL TERMINATIONS	1830	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 7 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED SPLICES E#261078 PTM: KAPOI, KALEI; YAMANE, ROSS SIGN: MANZOKU, KEITH
SWITCH SW V10397		04:10 07/26/2018	6 HR 9 MIN		FROM CB7708 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 20		

Class A: Large areas; important Cust.; Transmission lines.
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HAWAIIAN ELECTRIC COMPANY, INC.
Call Center Performance (Service Level) Results
2018

Call Center Performance (Service Level)
Excludes Blocked Calls

Month	Total Calls Accepted *	Calls Answered Within 30 Seconds	Service Level	Weighted Total	Weighted Service Level
Jan-18	27,380	24,550	89.66%	8.37%	7.51%
Feb-18	22,944	20,577	89.68%	7.02%	6.29%
Mar-18	23,827	21,393	89.79%	7.29%	6.54%
Apr-18	26,277	23,095	87.89%	8.04%	7.06%
May-18	27,042	24,152	89.31%	8.27%	7.39%
Jun-18	27,941	22,446	80.33%	8.55%	6.86%
Jul-18	30,579	23,648	77.33%	9.35%	7.23%
Aug-18	31,082	23,749	76.41%	9.51%	7.26%
Sep-18	27,644	22,345	80.83%	8.45%	6.83%
Oct-18	30,957	25,586	82.65%	9.47%	7.82%
Nov-18	26,496	21,556	81.36%	8.10%	6.59%
Dec-18	24,817	21,460	86.47%	7.59%	6.56%

Total **83.97%**

To HECO-WP-M-001

* All customer calls handled by a Customer Service Representative (including abandoned calls)

Source: Generated from Genesys Interactive Insights system.

HAWAIIAN ELECTRIC COMPANY, INC.
Phase I Renewable Energy RFP Performance Incentive Mechanism
2018

Line	Awarded Projects	Reference	BAFO Levelized Price (\$/MWh) a	Net Energy Potential (MWh) b	PIM Calculation c = (x or y-a)*b	PIM Calculation (20% utility share) d = c * 20%
1	Ho'ohana Solar 1 (O-2) (with battery storage)	Docket No. 2018-0431 D&O No. 36236	99.78 Note 3	114,481	\$ 1,742,401	\$ 348,480
2	Mililani Solar I (O-17) (with battery storage)	Docket No. 2018-0434 D&O No. 36232	88.16	93,121	\$ 2,499,368	\$ 499,874
3	Waiawa Solar (O-20) (with battery storage)	Docket No. 2018-0435 D&O No. 36231	95.93	87,927	\$ 1,676,768	\$ 335,354
4	Total Final Variable Requests for Proposals				\$ 5,918,536	\$ 1,183,707
5	50% Year 1				Note 2	<u>\$ 591,854</u> <i>To Sch M</i>

Note 1		
PIM Benchmark	¢/kWh	\$/MWh
Energy Only	9.5	95.00 x
Paired with Storage	11.5	115.00 y

Note 1 Per Order No. 35405, Docket No. 2017-0352, filed April 6, 2018, PIM benchmarks per pages 11 and 12.

Language from Order 35405:

The Companies share would be 20% of the estimated first-year savings compared to the applicable benchmark up to a cap of \$3,500,000.

The estimated first-year savings will be calculated by multiplying the forecasted first-year energy production (in kWh) of the project by the difference between the applicable benchmark price and the equivalent price (in cents per kWh).

The equivalent PPA price will be established by the levelized cost of the project computed by the Companies during the evaluation and selection process in the Phase I procurement effort.

Similarly, the forecasted first-year energy production will be determined by using the energy production estimated in the evaluation and selection process.

Per Order No. 35664, Docket No. 2017-0352, filed September 6, 2018:

The Commission ruled on the treatment of the Additional PPAs proposed in the Companies' June 20, 2018 Letter indicating that the additional PIM for these PPAs will function in a similar manner to the original PIM. The Companies shall receive a performance incentive equivalent to 20% of the estimated first-year savings compared to the applicable benchmark, up to a cap of \$3,000,000, for the Additional PPAs filed with the commission by December 31, 2018. For any Additional PPAs submitted after December 31, 2018, until March 31, 2019, the Companies' share of the savings pursuant to the PIM will be reduced in accordance with the proposal in the Companies' June 20, 2018 Letter.

Note 2 Per Decision and Order No. 35405, Docket No. 2017-0352, filed April 6, 2018, Timing of Incentive Award, p 14

First Allocation: The first allocation of the PIM will be shortly after the approval of the PPAs. At that time, the commission will allocate the first 50% of the total PIM to the Companies, based on the equivalent PPA prices and the forecasted first-year energy production. The commission intends that the applicable performance incentive would be awarded to the Companies through their respective Revenue Balancing Account Provision tariffs.

Second Allocation: Following the first year of commercial operations for each project, the Companies shall submit a report of the actual energy utilized for each of the PPAs approved by the Commission. The Commission will provide the Companies with a portion, or all, of the remaining 50% of the PIM, dependent upon the actual amount of energy output utilized.

Note 3: Ho'ohana Solar's Levelized Price (\$99.78/MWh) includes the unit price of \$0.098858/kWh and the \$0.00092/kWh.

CIAC Treatment
Resulting from FERC Adoption

Adoption of FERC USOA required a change in presentation change to Contributions in Aid of Construction (CIAC)

Prior to October 2018, and in establishing rates in previous test year rate cases, the Company's presentation of contributions in aid of construction ("CIAC") followed the guidelines of the National Associate of Regulatory Utility Commissioners Uniform System of Accounts (NARUC USOA). Under the NARUC reporting system, CIAC is reported under an exclusive account, account 271, which includes donations or contributions in cash, services or property from states, municipalities, or other governmental agencies, individuals and others for construction purposes. All CIAC was incorporated as a deduction in the calculation of rate base in part because the Companies' systems did not facilitate on-going reporting of CIAC related to plant in service separate from CIAC related to construction work in progress ("CWIP").

The Commission approved the Companies' request to change to Federal Energy Regulatory Commission Uniform System of Accounts (FERC USOA), beginning with the implementation of the Companies' new ERP/EAM, in Decision and Order No. 31757, issued December 19, 2013 in Docket No. 2013-0007.

Beginning in October 2018 with the transition to FERC, the net balance of CIAC in account 271 less the CIAC amortization to be recorded for October to December 2018, was credited against the account balances charged with the cost of construction, i.e., gross plant in service and CWIP, resulting in the account becoming zero (i.e. "0") at December 31, 2018.

Ratemaking treatment for CIAC

The Company's ratemaking treatment of contributions in aid of construction is summarized below:

- *CIAC associated with Plant in Service* – When a utility capital project is placed into service, the plant in service net of the associated CIAC is included as net cost of plant in service in rate base. The plant in service net of the CIAC is included as part of the basis for the depreciation accrual the year after it is placed into service (i.e. January 1 of the year after it is placed into service).
- *CIAC associated with CWIP* – For book purposes, CIAC that is received while projects are still under construction (i.e. in CWIP) will offset the costs incurred and is presented net in CWIP. The CWIP net of the associated CIAC is subject to the AFUDC accrual if there is a net CWIP balance. In the next rate case, the Company will request CIAC associated with CWIP be excluded from the rate base calculation since CWIP net of

CIAC earns AFUDC. CIAC associated with CWIP is however, included in rate base in this RAM calculation for consistency with the 2017 Test Year treatment. See further discussion of Company's requested treatment of CIAC associated with CWIP below.

- *Developer Advances* - Cash contributions received in advance of construction of a utility capital project that are temporarily not classified as CIAC because the funds received are in excess of the specific project expenditures. The balance of developer advances is presented as funds from non-investors, included in its own exclusive account, and deducted in the calculation of rate base. As project costs are incurred for a utility capital project, an equal portion of developer advances associated with the project will be reclassified as CIAC and credit the accounts charged with the cost of construction. Developer Advances were included as a part of CIAC as a reduction to rate base in the 2017 Test Year.

Treatment of CIAC within the 2019 Annual Decoupling Filing

For the 2019 Decoupling Filing, the Company treated CIAC consistently with prior filings resulting in no impact to rate base.

Schedule D1, Determination of Rate Base RAM Adjustment – Change in Rate Base

Plant in Service - There is no change in rate base for plant in service and CIAC associated with plant in service. Under NARUC, in rate base, plant in service was the gross cost of plant (net of accumulated depreciation), and CIAC was a separate reduction to rate base. Under FERC, the plant in service amounts are net of (i.e., already reduced by) CIAC, and presented net of accumulated depreciation in the calculation of rate base. There is no separate CIAC line item reducing rate base because it is already net in utility plant. Therefore, there is no net rate base impact. The difference between NARUC and FERC for plant in service is a matter of where the costs are classified in rate base, and not a matter of inclusion or exclusion of costs in rate base.

CIAC associated with CWIP - There is no change in rate base for CIAC associated with CWIP. Previously, presentation of CIAC aligned with NARUC and all CIAC, including amounts associated with projects in CWIP, were included as a reduction to rate base under account 271. The 2019 estimated balance continues the treatment of including the CIAC in CWIP to be consistent with the recorded balance at 2018 year-end because all 2019 estimated CIAC additions have been included at Schedule D2 and included as part of net cost of plant at Schedule D1. Although the treatment described above was used in the 2019 annual decoupling filing, see Company's requested treatment to exclude CIAC associated with CWIP from rate base in future filings in the discussion below.

Developer Advances - With the transition to FERC, CIAC is credited when received against the related project costs in CWIP. To the extent funds are not yet expended for a project in

CWIP, the CIAC will be classified as developer advances and deducted in the calculation of rate base at Schedule D1. The recorded balance at 2018 year-end is not adjusted for 2019 activity as it is incorporated in Schedule D2.

Schedule D2, Determination of Baseline Capital Projects Additions

Schedule D2 was revised to incorporate the baseline and major project CIAC (including Developer Advances) for 2014 to 2017 into the baseline average calculation of net plant in service, consistent with the presentation of rate base. The 2018 CIAC additions calculated at HECO-WP-D2-003 includes additions to CIAC from all sources, i.e. Plant, CWIP and Developer Advances, which were used in the 5-year baseline calculation. As a result, the estimated 2019 additions to CIAC in CWIP and Developer Advances balances at Schedule D1 for the Change in Rate Base are not required as they are already included in the net cost of plant line item.

Schedule E, Determination of Depreciation & Amortization RAM Adjustment

FERC Uniform System of Accounts Electric Plant Instructions, 2. Electric Plant To Be Recorded at Cost. D. states, "The electric plant accounts shall not include the cost or other value of electric plant contributed to the company." Therefore, the Recorded Depreciable/Amortizable Balances at December 31, 2018 in Schedule E represents plant in service net of CIAC which is used as the basis to estimate the 2019 annual accrual amount. In calculating the 2019 RAM Depreciation and Amortization, Depreciation and Amortization in Current Revenues also includes CIAC amortization approved in the 2017 Test Year.

Schedule F & F1, Determination of Change in Deferred Income Taxes & Tax Depreciation

The methodology for computing the deferred taxes related to RAM year tax depreciation was not changed within the 2019 annual decoupling filing. Gross plant additions are used as the basis for calculating tax depreciation. However, see the CIAC impact to ADIT section below for the Company's preferred treatment considering the effects of netting CIAC against plant in service.

Schedule G-series, CIAC

Schedule G, G1 and G2 were removed from the Decoupling filings and instead incorporated into either Plant in Service, CIAC in CWIP or Developer Advances. The December 31, 2018 balances for CIAC associated with CWIP and Developer Advances were extracted from PowerPlan. Additionally, as noted above, the calculation of the 5-year baseline average of CIAC and amortization was incorporated within Schedule D2 and Schedule E, respectively.

The Company will continue to include CIAC associated with CWIP and Developer Advances as a reduction to rate base until the FERC presentation of rate base is approved in the Company's next rate case.

Company's requested CIAC treatment

The Company requests to reflect the following changes to the treatment of CIAC within the annual decoupling filings.

CIAC associated with CWIP

In Mr. Franklin's T-12 direct testimony in Hawaii Electric Light's 2019 Test Year rate case, the Company proposes to remove CIAC associated with CWIP from the calculation of rate base due to the fact that CWIP net of associated CIAC earns AFUDC, therefore the CWIP and its associated CIAC should be excluded from rate base.

Excluding CWIP net of CIAC, to better align the source of funds with its use (i.e. the CIAC funds received were applied against the costs incurred for the project) and is therefore properly excluded from the calculation of rate base. In addition, and as mentioned previously, any material CIAC received in advance of construction expenditures will continue to be deductions in the calculation of rate base as Developer Advances.

CIAC impact to ADIT

ADIT associated with CIAC in CWIP should be divided between nontaxable and taxable CIAC. Nontaxable CIAC (primarily interconnection CIAC) is treated as a reduction in basis for both book and tax purposes. On the other hand, although taxable CIAC is also a reduction in basis for book purposes, for tax purposes, the receipt of taxable CIAC creates tax basis by way of the recognition of taxable income and reverses by way of tax depreciation.

Nontaxable CIAC does not create ADIT since there is no book tax difference. Consequently, the regulatory netting of nontaxable CIAC against the plant assets should not create any issue with respect to the ADIT beginning balance for the rate base RAM calculation

Taxable CIAC generates a Deferred Tax Asset (DTA) as it is received and recorded into CWIP under the new FERC accounting. Prior NARUC accounting treatment with account 271 created DTA as CIAC was booked to 271, which is equivalent to what is now booked to CWIP. The origination and timing of the DTA under the FERC method will be equivalent to the NARUC method. However, under the old method, the DTA was immediately recognized as part of rate base, consistent with the treatment of the account 271 inclusion. However, under the FERC method, the generation of the DTA must be inventoried and tracked to match up with the amount of CIAC in CWIP and the amounts closed to plant in service. This tracking is necessary to ensure that the amount of DTA related to CWIP is excluded from rate base. Once CWIP costs are closed to plant, the related DTA will be included in rate base and will begin reversal through tax depreciation taken on the CIAC tax basis.

FERC accounting imbeds the book treatment of CIAC within CWIP and the ultimate plant and related depreciation. The separation will disappear and the Company asserts that the ADIT

effects will be the same with respect to the beginning balance of ADIT for the annual decoupling filing except to the extent CIAC is still in CWIP. This issue will be addressed along with the rate base treatment of CIAC associated with CWIP as mentioned above.

FERC accounting nets CIAC against Plant in Service for purposes of computing baseline and major plant additions. For RAM year tax depreciation and the related ADIT calculated for the change in RAM year ADIT, adopting the net plant additions as the RAM year tax additions will be a change that will result in a smaller amount of tax depreciation and ADIT “change” since the Company previously has assumed the gross additions to be the RAM year tax depreciable base. The Company asserts this is reasonable for the following reasons:

- 1) Under the old method, to the extent nontaxable CIAC was included in the RAM year numbers (through major projects or baseline projects), tax depreciable basis was overstated since there is no tax basis for assets funded by nontaxable CIAC.
- 2) With respect to taxable CIAC, the funded assets do have depreciable tax basis and it is accounted for in the RAM year additions tax depreciation. However, the receipt of taxable CIAC generates taxable income and deferred tax assets that increase rate base. The effect of this DTA from taxable CIAC was never recognized in the RAM tariff, which resulted in an overstatement of RAM year ADIT change, as it related to the projected plant additions.

For purposes of the 2019 RAM calculation, ADIT has been calculated on gross plant additions, consistent with the 2017 Test Year treatment and prior decoupling filings, however the Company is requesting treatment of CIAC in deferred tax to follow FERC accounting.

Summary

In summary, Hawaiian Electric prepared the 2019 annual decoupling filings in accordance with the historical treatment of CIAC. Historically, due to system constraints, CIAC records were not maintained with matching of the separate components (plant in service, CWIP, developer advances). As a result, the entire amount of CIAC was treated as a reduction to rate base and the Return on Investment was understated. As stated in Mr. Franklin’s T-12 direct testimony in Hawaii Electric Light’s 2019 Test Year rate case, the Companies propose to exclude the CIAC associated with CWIP in its calculation of rate base in the rate base RAM filings. Should the Commission approve Hawaii Electric Light’s proposal, Hawaiian Electric will implement this change in the annual decoupling filing in the year following the Commission’s approval.

HAWAIIAN ELECTRIC

SCENARIO 3

WEST LOCH PV INCLUDED IN RAM
REVENUE ADJUSTMENT

25kV INCLUDED IN 2018 SAIDI AND SAIFI
PIM CALCULATIONS

HAWAIIAN ELECTRIC
ATTACHMENT 1

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
92	"RBA"	September 1, 2018	Revenue Balancing Account Provision
92A	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92A.1	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92B	"RBA"	February 16, 2018	Revenue Balancing Account Provision
92C	"RBA"	January 1, 2018	Revenue Balancing Account Provision
92D	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92E	"RBA"	June 1, 2019	Revenue Balancing Account Provision
92F	"RBA"	June 1, 2019	Revenue Balancing Account Provision
93	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93A	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93B	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93C	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93D	"RAM"	June 1, 2017	Rate Adjustment Mechanism Provision
93E	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93F	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93G	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93H	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93I	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
94	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause
94A	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause
94B	"PPAC"	May 1, 2019	Purchased Power Adjustment Clause

HAWAIIAN ELECTRIC COMPANY, INC.

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
95	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95A	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95B	EV-F	December 12, 2017	Commercial Public Electric Vehicle Charging Facility Service Pilot
96	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
96A	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
97	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97A	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
97B	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97C	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
98	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98A	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98B	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98C	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98D	"PIM"	June 1, 2019	Performance Incentive Mechanism Provision
98E	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
99	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99A	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99B	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99C	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service

HAWAIIAN ELECTRIC COMPANY, INC.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Supplement To:

- Schedule R - Residential Service
- Schedule G - General Service - Non-Demand
- Schedule J - General Service - Demand
- Schedule DS - Large Power Directly Served Service
- Schedule P - Large Power Service
- Schedule F - Public Street Lighting, Highway
Lighting and Park and Playground
Floodlighting
- Schedule U - Time-of-Use Service
- 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 Commercial Time-of-Use Service
- Schedule SS - Standby Service
- Schedule TOU EV- Residential Time-of-Use Service with
Electric Vehicle Pilot
- Schedule EV-F - Commercial Public Electric Vehicle
Charging Facility Service Pilot
- Schedule TOU-RI- Residential Interim Time-of-Use Service

All terms and provisions of the above listed rate schedules applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism ("RAM") Provision, and any revenue adjustment provided in accordance with the Performance Incentive Mechanism Provision, over the subsequent June 1st through May 31st period. Tracking of target revenue and recorded adjusted revenue commenced on the effective date of the tariff that implemented the Final Decision and Order in Hawaiian Electric's 2009 test year rate case, Docket No. 2008-0083, consistent with the Final Decision and Order in the Decoupling case, Docket No. 2008-0274.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018.

Transmittal Letter Dated July 23, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company's most recent test year general rate case, excluding revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause; excluding revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism; and excluding amounts for applicable revenue taxes;

Plus: Any effective RAM Revenue Adjustment calculated under the RAM provision for years subsequent to the most recent rate case test year for which the Commission has issued a Decision & Order; and any Performance Incentive Adjustment provided for in accordance with the Performance Incentive Mechanism Provision; and

Less: Any applicable Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits calculated under the RAM provision.

Adjusted by: Other adjustments, as applicable, in accordance with Commission's Order authorizing such adjustment. Other adjustments, if any, are shown in the table *Target Revenue Currently in Effect*, provided in section H.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment, Performance Incentive Adjustment, recorded adjusted revenues or other RBA accounting determinations (collectively "target revenue determinations") for any previous period and for revisions to RAM Revenue Adjustments or Performance Incentive Adjustments as a result of subsequent Commission orders that change the basis of previously calculated RAM Revenue Adjustments and/or Performance Incentive Adjustments. For any corrections of errors in previously calculated target revenue determinations, the target revenue shall be adjusted as of the date that the correct determinations would have been reflected in target revenue. For changes in the RAM Revenue Adjustment and/or Performance Incentive Adjustments as a result of subsequently issued Commission orders, the target revenue shall be adjusted as of the effective date of changes that are implemented pursuant to the subsequently issued Commission order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

The Commission and the Consumer Advocate will be notified of the target revenue revisions or corrections prior to implementation by the Company. There is no presumption that the target revenue changes are ultimately warranted or correct. In the annual RBA review transmittal ("RBA Review Transmittal") filed on or before March 31 of each year, the utility will have the burden to demonstrate that the interim changes for the previous calendar year are warranted and correctly applied. The Consumer Advocate will provide comments regarding the changes with its Statement of Position. The RBA balance and RBA Rate Adjustment for the following year will reflect any appropriate modifications to the change made by the utility in the prior year if necessary.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.19%
February	7.59%
March	8.10%
April	7.98%
May	8.40%
June	8.07%
July	8.70%
August	8.94%
September	8.65%
October	8.84%
November	8.26%
December	8.28%
Total	<u>100.00%</u>

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2017 test year rate case and shall be updated in any subsequent test year rate case.

C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be the short term debt rate as established in deriving the consolidated cost of capital in the Company's last full rate case. The Interest Rate prior to March 1, 2014 shall be 6 percent.

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

In its annual RBA Review Transmittal, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations.

HAWAIIAN ELECTRIC COMPANY, INC.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, any Performance Incentive Adjustment provided in accordance with the Performance Incentive Mechanism Provision and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

On or before March 31 of each year, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, an RBA Review Transmittal supporting the implementation of the RBA Provision, including RBA reconciliation, implementation of applicable components of the RAM Provision and Performance Incentive Mechanism Provision, determination and adjustments of target revenues, determination of the RBA Rate Adjustment; and documenting any errors, corrections and adjustments to Target Revenues in the preceding calendar year and prior to the transmittal date.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA and target revenue determinations shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, as part of the annual RBA Review Transmittal filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

All Rate Schedules 0.9775 ¢/kWh

F. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual RBA Review Transmittal filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

G: COMMISSION'S AUTHORITY

The Commission may modify or suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

H: TARGET REVENUE CURRENTLY IN EFFECT

Hawaiian Electric Company, Inc.
Annual Target Revenue (\$000s)

	<u>Description</u>	<u>Amount</u>
1	Electric Sales Revenue (Unadjusted)	\$1,531,852
2	Tax Act Implementation Lag	<u>(\$2,143)</u>
3	Electric Sales Revenue (Adjusted)	\$1,529,709
	Less:	
4	Fuel Expense	(\$327,609)
5	Purchase Power Expense	(\$466,211)
6	Revenue Tax on Electric Sales Revenue	<u>(\$135,915)</u>
7	Last Rate Order Target Revenues	\$599,974
8	Authorized RAM Revenues	\$22,938
9	Revenue Tax	<u>(\$2,038)</u>
10	Net RAM Adjustment	\$20,900
11	Authorized MPIR Revenues	\$19,811
12	Revenue Tax	<u>(\$1,760)</u>
13	Net MPIR Adjustment	\$18,051
14	Earnings Sharing Revenue Credits	\$0
15	Revenue Tax	<u>\$0</u>
16	Net Earnings Sharing Revenue Credits	\$0
17	Performance Incentive Mechansim (PIM)	(\$1,269)
18	Revenue Tax	<u>\$113</u>
19	Net PIM Reward (Penalty)	(\$1,157)
20	2017 Test Year Final D&O Refund	(\$48)
21	Revenue Tax	<u>\$4</u>
22	Net 2017 Test Year Final D&O Refund	(\$44)
23	On-Bill Financing Pgm Implementation Costs	\$844
24	Revenue Tax	<u>(\$75)</u>
25	Net On-Bill Financing Adjustment	\$769
26	Effective Target Revenue	\$638,493

Notes:

Totals may not add, due to rounding.

Lines 1,4,5: Final Decision and Order No. 35545, issued June 22, 2018 in Docket No. 2016-0328. Exhibit A.

Line 2: Hawaiian Electric March 2018 Settlement Tariff Sheets, Attachment 1, Line 2. Filed March 16, 2018 in Docket No. 2016-0328.

Lines 6,9,12,15,18,21,24: Revenue Tax based on 8.885% statutory rates.

Lines 8,11,14,17,20,23,26 Transmittal Nos. 19-01, 19-02, 19-03 Consolidated (Decoupling) Schedule B1 (Scenario 2B), filed May 28, 2019.

Change in Effective Target Revenue for MPIR is effective January 1, 2019. See Order 35556, filed June 27, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

I: HISTORICAL REFERENCE

Category	Effective Period	Effective Target Revenue (\$000)	Change in Target Revenue (\$000)	Source
Annual Decoupling Filing	6/1/2017 thru 2/15/2018	\$604,302	N/A (1/1/2018 Baseline)	Schedule B1 filed in Transmittal No. 17-02 on 3/31/2017.
2017 Test Year Rate Case (Interim)	2/16/2018 thru 4/12/2018	\$637,077	\$32,775	Schedule B1 filed in Docket No. 2016-0328 on 1/19/2018.
2017 Test Year Rate Case (Interim)	4/13/2018 thru 5/31/2018	\$599,960	(37,117)	Schedule B1 filed in Docket No. 2016-0328 on 3/16/2018.
Annual Decoupling Filing	6/1/2018 thru 6/30/2018	\$612,574	\$12,614	Schedule B1 filed in Transmittal No. 18-01 on 3/29/2018.
MPIR (Schofield)	7/1/2018 thru 9/30/2018	\$618,587	\$6,013	Schedule B1 filed in Docket No. 2017-0213 on 7/18/2018.
MPIR (Schofield)	10/1/2018 thru 12/31/2018	\$620,374	\$1,787	Schedule B1 filed in Docket No. 2017-0213 on 12/21/2018.
MPIR (Schofield)	1/1/2019 thru 5/31/2019	\$630,624	\$10,250	Schedule B1 filed in Transmittal No. 19-01 on 2/7/2019.
Annual Decoupling Filing	6/1/2019 (current)	\$638,493	\$7,869	Schedule B1 (Scenario 2B) filed in Transmittal No. 19-01 on 5/28/2019.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

PERFORMANCE INCENTIVE MECHANISM PROVISION

Introduction

This Performance Incentive Mechanism ("PIM") Provision provides for the determination of a PIM Financial Incentive for each approved PIM for each Evaluation Period, based on Measured Performance compared to an established Performance Target for each PIM, as specified below.

The sum of the PIM Financial Incentives determined for all PIMs for the Evaluation Period will be the Performance Incentive Adjustment, which will be applied as an adjustment to the effective Target Revenue and will be recovered from or credited to customers through the RBA Rate Adjustment, as defined by and in accordance with the terms of the Revenue Balancing Account ("RBA") Provision.

Annual PIM Provision Transmittal

On or before March 31 of the year following an Evaluation Period, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, a transmittal documenting the Measured Performance and calculation of the PIM Financial Incentives and Performance Incentive Adjustment for the Evaluation Period. Complete, indexed schedules, workpapers and electronic files supporting the transmittal shall be provided with the transmittal. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, other rate case parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

The review of the annual PIM Provision transmittal will be conducted concurrent with and in conjunction with the annual RBA Review Transmittal. The Performance Incentive Adjustment will be determined annually based on the PIM Provision transmittal and, after review and subject to explicit approval by the Commission, will become effective on June 1 of the year following the Evaluation Period, concurrent and in conjunction with determination of Target Revenues and the RBA Rate Adjustment in accordance with the RBA Provision. Any approved Performance Incentive Adjustment will be applied as monthly adjustments to Target Revenues for the twelve month period commencing June 1 of the year following the Evaluation Period in accordance with the Monthly Allocation Factors identified in the RBA Provision.

The Performance Targets, Deadbands and the amount of Maximum Financial Incentives used to determine the PIM Financial Incentive

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

levels for each of the PIMs shall be re-determined upon issuance of an interim or final order in a general rate case for each Company and shall remain constant in interim periods, unless otherwise amended, as necessary, by order of the Commission.

In the event that Performance Targets, Deadbands or the amounts of Maximum Financial Incentives are updated or amended by order of the Commission during the Evaluation Period, the Performance Targets, Deadbands and the amounts of Maximum Financial Incentives used in determining the amount of PIM Financial Incentives shall be a pro-rated weighted average based on the number of days of the Evaluation Period each parameter was effective.

Any revenue adjustments approved in accordance with this PIM Provision shall be excluded from the determination of Earnings Sharing Credits provided for in the Rate Adjustment Mechanism Provision ("RAM Provision").

The Performance Incentive Adjustment, and any prior year Performance Incentive Adjustment, shall be recalculated for errors in prior calculations and for subsequent Commission orders that change the basis for prior calculations. The effect of such changes shall be implemented as described in the RBA Provision, except that, the Performance Target, Deadband and Maximum Financial Incentive amounts determined in this PIM Provision shall not be recalculated based on errors in the calculation of these parameters and shall remain as specified unless and until changed by order of the Commission.

Evaluation Period

The Evaluation Period is defined as the annual twelve month calendar year period ending December 31, over which Measured Performance is determined and compared to the established Performance Target for each PIM described below. The first Evaluation Period shall begin January 1, 2018.

PIM Financial Incentive Calculation

For each PIM below, a Performance Target is specified, developed based on historical performance data. A Deadband is specified for each Performance Target in order to provide a satisfactory range of performance within which no reward or penalty amount is assessed.

A Maximum Financial Incentive amount is specified for each PIM with separate identification of a Maximum Reward Amount and a Maximum Penalty Amount.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Measured Performance for the Evaluation Period is compared to the Performance Target for each PIM. If the difference between Measured Performance and the Performance Target is less than or equal to the Deadband amount, no reward or penalty is awarded and the amount of the PIM Financial Incentive is zero. If the difference between Measured Performance and the Performance Target exceeds the Deadband amount, a reward or penalty ratio is calculated where the difference between Measured Performance and the Performance Target, less the Deadband amount, is the numerator and the Deadband amount is the denominator. This ratio is multiplied by either the Maximum Reward Amount or Maximum Penalty Amount, as applicable, to determine the PIM Financial Incentive for each PIM. The magnitude of the PIM Financial Incentive for each PIM shall not exceed 100% of the magnitude of the applicable Maximum Reward Amount or Maximum Penalty Amount established for each PIM.

Reliability Performance Incentive Mechanisms

There are two reliability PIMs: 1) System Average Interruption Frequency Index ("SAIFI"); and 2) System Average Interruption Duration Index ("SAIDI"). SAIFI is a measure of the average frequency of outages, defined as the annual total number of customer interruptions divided by the total number of customers served. SAIDI is a measure of the average duration of outage, defined as the sum of all customer interruption durations (in minutes) divided by the total number of customers served. The SAIFI and SAIDI Measured Performance and Performance Targets are determined using the IEEE Standard 1366 methodology.

For the Reliability Performance Incentive Mechanisms, the 2008-2017 record of historical performance data was used to establish the Performance Target and the Deadband. The Deadband was calculated as ± 1 standard deviation of the historical performance data. Accordingly, 100% of the penalty is achieved when Measured Performance is equal to or greater than 2 standard deviations from the Performance Target.

SAIFI:

Performance Target: 1.103 interruptions per customer during the one-year Evaluation Period

Deadband: ± 0.088 interruptions (1 Standard Deviation)

HAWAIIAN ELECTRIC COMPANY, INC

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Range for no penalty: 1.015 interruptions to 1.191 interruptions per customer (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 1.191 interruptions per customer

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

SAIDI:

Target: 99.23 minutes per outage

Deadband: \pm 8.96 minutes (1 Standard Deviation)

Range for no penalty: 90.27 minutes to 108.19 minutes per outage (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 108.19 minutes per outage

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Call Center Performance Incentive Mechanism

The Call Center Performance PIM measures the performance of the utility call center in terms of the percentage of calls answered within thirty (30) seconds. The calculation of the call center performance shall exclude blocked calls from the denominator.

The Performance Target for the Call Center Performance Incentive Mechanism was calculated based on the average of quarterly data from Quarter 3 of 2016 to Quarter 2 of 2018.

HAWAIIAN ELECTRIC COMPANY, INC

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Call Center Performance:

Performance Target: 80.10% of calls answered within 30 seconds

Deadband: +/- 3.00% of calls answered within 30 seconds

Range for no reward or penalty: 77.10 % of calls answered to 83.10% of calls answered.

Rewards apply for greater than 83.10 % of calls answered
Penalties apply for less than 77.10 % of calls answered

Maximum Reward Amount: \$910,567.

Maximum Penalty Amount: \$910,567.

The magnitude of the Maximum Reward Amount and Maximum Penalty Amount were determined to be equal to 0.08% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Additional PIMs:

The Commission may order the establishment of one or more PIMs, and the targets, deadbands, rewards, penalties, and allocations for that PIM, as applicable, shall be implemented as specified in the Commission's order that approved the applicable PIM, and the applicable PIM Financial Incentive shall be included in the Performance Incentive Adjustment.

Commission's Authority

The Commission may suspend any or all parts of this PIM Provision. Such suspension shall remain in place until removed by Commission order.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Historical Reference

The following table summarizes the prior PIMs in effect, as these values may be applicable during certain portions of the Evaluation Period.

PIM:	Effective Period:	Performance Target:	Deadband:	Maximum Reward:	Maximum Penalty:
SAIFI	1/1/2018 thru 2/15/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,039,094
SAIFI	2/16/2018 thru 4/12/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,260,799
SAIFI	4/13/2018 thru 8/31/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,276,417
SAIDI	1/1/2018 thru 2/15/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,039,094
SAIDI	2/16/2018 thru 4/12/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,260,799
SAIDI	4/13/2018 thru 8/31/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,276,417
Call Center	1/1/2018 thru 2/15/2018	79.07% of calls answered within 30 sec.	+/- 3.00%	\$815,638	\$815,638
Call Center	2/16/2018 thru 4/12/2018	79.46% of calls answered within 30 sec.	+/- 3.00%	\$904,320	\$904,320
Call Center	4/13/2018 thru 8/31/2018	79.56% of calls answered within 30 sec.	+/- 3.00%	\$910,567	\$910,567

HAWAIIAN ELECTRIC COMPANY, INC

HAWAIIAN ELECTRIC
ATTACHMENT 1A

Superseding Revised Sheet No. 50E
Effective May 1, 2019

REVISED SHEET NO. 50E
Effective June 1, 2019

Deleted: February 1, 2019

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
92	"RBA"	September 1, 2018	Revenue Balancing Account Provision
92A	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
<u>92A.1</u>	<u>"RBA"</u>	<u>June 1, 2019</u>	<u>Revenue Balancing Account Provision</u>
92B	"RBA"	February 16, 2018	Revenue Balancing Account Provision
92C	"RBA"	January 1, 2018	Revenue Balancing Account Provision
92D	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
92E	"RBA"	<u>June 1, 2019</u>	Revenue Balancing Account Provision
<u>92F</u>	<u>"RBA"</u>	<u>June 1, 2019</u>	<u>Revenue Balancing Account Provision</u>
93	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93A	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93B	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93C	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93D	"RAM"	June 1, 2017	Rate Adjustment Mechanism Provision
93E	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93F	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93G	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93H	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
93I	"RAM"	June 1, 2018	Rate Adjustment Mechanism Provision
94	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause
94A	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause
94B	"PPAC"	<u>May 1, 2019</u>	Purchased Power Adjustment Clause

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

Deleted: February 22, 2019

Superseding SHEET NO. 50F
Effective January 1, 2019

REVISED SHEET NO. 50F
Effective June 1, 2019

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
95	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95A	EV-F	January 1, 2019	Commercial Public Electric Vehicle Charging Facility Service Pilot
95B	EV-F	December 12, 2017	Commercial Public Electric Vehicle Charging Facility Service Pilot
96	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
96A	EV-U	December 12, 2017	Commercial Public Electric Vehicle Charging Service Pilot
97	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97A	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
97B	TOU-RI	October 18, 2018	Residential Interim Time-of-Use Service
97C	TOU-RI	January 1, 2019	Residential Interim Time-of-Use Service
98	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98A	"PIM"	January 1, 2018	Performance Incentive Mechanism Provision
98B	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98C	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
98D	"PIM"	<u>June 1, 2019</u>	Performance Incentive Mechanism Provision
98E	"PIM"	September 1, 2018	Performance Incentive Mechanism Provision
99	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99A	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99B	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service
99C	TOU-P	January 1, 2019	Large Commercial Time-Of-Use Service

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

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Superseding REVISED SHEET NO. 92
Effective January 1, 2018

REVISED SHEET NO. 92
Effective September 1, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Supplement To:

Schedule R - Residential Service
Schedule G - General Service - Non-Demand
Schedule J - General Service - Demand
Schedule DS - Large Power Directly Served Service
Schedule P - Large Power Service
Schedule F - Public Street Lighting, Highway
Lighting and Park and Playground
Floodlighting
Schedule U - Time-of-Use Service
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 Commercial Time-of-Use Service
Schedule SS - Standby Service
Schedule TOU EV- Residential Time-of-Use Service with
Electric Vehicle Pilot
Schedule EV-F - Commercial Public Electric Vehicle
Charging Facility Service Pilot
Schedule TOU-RI- Residential Interim Time-of-Use Service

All terms and provisions of the above listed rate schedules applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism ("RAM") Provision, and any revenue adjustment provided in accordance with the Performance Incentive Mechanism Provision, over the subsequent June 1st through May 31st period. Tracking of target revenue and recorded adjusted revenue commenced on the effective date of the tariff that implemented the Final Decision and Order in Hawaiian Electric's 2009 test year rate case, Docket No. 2008-0083, consistent with the Final Decision and Order in the Decoupling case, Docket No. 2008-0274.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018.

Transmittal Letter Dated July 23, 2018

Superseding REVISED SHEET NO. 92A
Effective ~~January 1, 2018~~

REVISED SHEET NO. 92A
Effective ~~June 1, 2019~~

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company's most recent test year general rate case, excluding revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause; excluding revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism; and excluding amounts for applicable revenue taxes;

Plus: Any effective RAM Revenue Adjustment calculated under the RAM provision for years subsequent to the most recent rate case test year for which the Commission has issued a Decision & Order; and any Performance Incentive Adjustment provided for in accordance with the Performance Incentive Mechanism Provision; and

Less: Any applicable Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits calculated under the RAM provision.

Adjusted by: Other adjustments, as applicable, in accordance with Commission's Order authorizing such adjustment. Other adjustments, if any, are shown in the table Target Revenue Currently in Effect, provided in section H.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment, Performance Incentive Adjustment, recorded adjusted revenues or other RBA accounting determinations (collectively "target revenue determinations") for any previous period and for revisions to RAM Revenue Adjustments or Performance Incentive Adjustments as a result of subsequent Commission orders that change the basis of previously calculated RAM Revenue Adjustments and/or Performance Incentive Adjustments. For any corrections of errors in previously calculated target revenue determinations, the target revenue shall be adjusted as of the date that the correct determinations would have been reflected in target revenue. For changes in the RAM Revenue Adjustment and/or Performance Incentive Adjustments as a result of subsequently issued Commission orders, the target revenue shall be adjusted as of the effective date of changes that are implemented pursuant to the subsequently issued Commission order.

~~Deleted: Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.~~

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HAWAIIAN ELECTRIC COMPANY, INC.

~~Transmittal Letter dated May 28, 2019.~~

SHEET NO. 92A.1
Effective June 1, 2019

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

The Commission and the Consumer Advocate will be notified of the target revenue revisions or corrections prior to implementation by the Company. There is no presumption that the target revenue changes are ultimately warranted or correct. In the annual RBA review transmittal ("RBA Review Transmittal") filed on or before March 31 of each year, the utility will have the burden to demonstrate that the interim changes for the previous calendar year are warranted and correctly applied. The Consumer Advocate will provide comments regarding the changes with its Statement of Position. The RBA balance and RBA Rate Adjustment for the following year will reflect any appropriate modifications to the change made by the utility in the prior year if necessary.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 28, 2019.

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Superseding REVISED SHEET NO. 92B
Effective June 1, 2017

REVISED SHEET NO. 92B
Effective February 16, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.19%
February	7.59%
March	8.10%
April	7.98%
May	8.40%
June	8.07%
July	8.70%
August	8.94%
September	8.65%
October	8.84%
November	8.26%
December	8.28%
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2017 test year rate case and shall be updated in any subsequent test year rate case.

C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be the short term debt rate as established in deriving the consolidated cost of capital in the Company's last full rate case. The Interest Rate prior to March 1, 2014 shall be 6 percent.

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

In its annual RBA Review Transmittal, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2016-0328; Order No. 35280, issued February 9, 2018.
Transmittal Letter Dated February 12, 2018.

Superseding REVISED SHEET NO. 92C
Effective June 1, 2017

REVISED SHEET NO. 92C
Effective January 1, 2018

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, any Performance Incentive Adjustment provided in accordance with the Performance Incentive Mechanism Provision and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

On or before March 31 of each year, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, an RBA Review Transmittal supporting the implementation of the RBA Provision, including RBA reconciliation, implementation of applicable components of the RAM Provision and Performance Incentive Mechanism Provision, determination and adjustments of target revenues, determination of the RBA Rate Adjustment; and documenting any errors, corrections and adjustments to Target Revenues in the preceding calendar year and prior to the transmittal date.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA and target revenue determinations shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, as part of the annual RBA Review Transmittal filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

Superseding REVISED SHEET NO. 92D
Effective June 1, 2018

REVISED SHEET NO. 92D
Effective June 1, 2019

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

All Rate Schedules 0.9775 ¢/kWh

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F. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual RBA Review Transmittal filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

G: COMMISSION'S AUTHORITY

The Commission may modify or suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

Superseding REVISED SHEET NO. 92E
Effective January 1, 2019

REVISED SHEET NO. 92E
Effective June 1, 2019

REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

H: TARGET REVENUE, CURRENTLY IN EFFECT

Hawaiian Electric Company, Inc.
Annual Target Revenue (\$000s)

Description	Amount
1 Electric Sales Revenue (Unadjusted)	\$1,531,852
2 Tax Act Implementation Lag	(\$2,143)
3 Electric Sales Revenue (Adjusted)	\$1,529,709
Less:	
4 Fuel Expense	(\$327,609)
5 Purchase Power Expense	(\$466,211)
6 Revenue Tax on Electric Sales Revenue	(\$135,915)
7 Last Rate Order Target Revenues	\$599,974
8 Authorized RAM Revenues	\$22,938
9 Revenue Tax	(\$2,038)
10 Net RAM Adjustment	\$20,900
11 Authorized MPIR Revenues	\$19,811
12 Revenue Tax	(\$1,760)
13 Net MPIR Adjustment	\$18,051
14 Earnings Sharing Revenue Credits	\$0
15 Revenue Tax	\$0
16 Net Earnings Sharing Revenue Credits	\$0
17 Performance Incentive Mechansim (PIM)	(\$1,269)
18 Revenue Tax	\$113
19 Net PIM Reward (Penalty)	(\$1,157)
20 2017 Test Year Final D&O Refund	(\$48)
21 Revenue Tax	\$4
22 Net 2017 Test Year Final D&O Refund	(\$44)
23 On-Bill Financing Pgm Implementation Costs	\$844
24 Revenue Tax	(\$75)
25 Net On-Bill Financing Adjustment	\$769
26 Effective Target Revenue	\$638,493

Notes:

Totals may not add, due to rounding.

Lines 1,4,5: Final Decision and Order No. 35545, issued June 22, 2018 in Docket No. 2016-0328. Exhibit A.

Line 2: Hawaiian Electric March 2018 Settlement Tariff Sheets, Attachment 1, Line 2. Filed March 16, 2018 in Docket No. 2016-0328.

Lines 6,9,12,15,18,21,24: Revenue Tax based on 8.885% statutory rates.

Lines 8,11,14,17,20,23,26 Transmittal Nos. 19-01, 19-02, 19-03 Consolidated (Decoupling) Schedule B1 (Scenario 2B), filed May 28, 2019.

Change in Effective Target Revenue for MPIR is effective January 1, 2019. See Order 35556, filed June 27, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

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REVENUE BALANCING ACCOUNT ("RBA") PROVISION (continued)

I: HISTORICAL REFERENCE

<u>Category</u>	<u>Effective Period</u>	<u>Effective Target Revenue (\$000)</u>	<u>Change in Target Revenue (\$000)</u>	<u>Source</u>
Annual Decoupling Filing	6/1/2017 thru 2/15/2018	\$604,302	N/A (1/1/2018 Baseline)	Schedule B1 filed in Transmittal No. 17-02 on 3/31/2017.
2017 Test Year Rate Case (Interim)	2/16/2018 thru 4/12/2018	\$637,077	\$32,775	Schedule B1 filed in Docket No. 2016-0328 on 1/19/2018.
2017 Test Year Rate Case (Interim)	4/13/2018 thru 5/31/2018	\$599,960	(37,117)	Schedule B1 filed in Docket No. 2016-0328 on 3/16/2018.
Annual Decoupling Filing	6/1/2018 thru 6/30/2018	\$612,574	\$12,614	Schedule B1 filed in Transmittal No. 18-01 on 3/29/2018.
MPIR (Schofield)	7/1/2018 thru 9/30/2018	\$618,587	\$6,013	Schedule B1 filed in Docket No. 2017-0213 on 7/18/2018.
MPIR (Schofield)	10/1/2018 thru 12/31/2018	\$620,374	\$1,787	Schedule B1 filed in Docket No. 2017-0213 on 12/21/2018.
MPIR (Schofield)	1/1/2019 thru 5/31/2019	\$630,624	\$10,250	Schedule B1 filed in Transmittal No. 19-01 on 2/7/2019.
Annual Decoupling Filing	6/1/2019 (current)	\$638,493	\$7,869	Schedule B1 (Scenario 2B) filed in Transmittal No. 19-01 on 5/28/2019.

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HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter Dated May 28, 2019.

PERFORMANCE INCENTIVE MECHANISM PROVISION

Introduction

This Performance Incentive Mechanism ("PIM") Provision provides for the determination of a PIM Financial Incentive for each approved PIM for each Evaluation Period, based on Measured Performance compared to an established Performance Target for each PIM, as specified below.

The sum of the PIM Financial Incentives determined for all PIMs for the Evaluation Period will be the Performance Incentive Adjustment, which will be applied as an adjustment to the effective Target Revenue and will be recovered from or credited to customers through the RBA Rate Adjustment, as defined by and in accordance with the terms of the Revenue Balancing Account ("RBA") Provision.

Annual PIM Provision Transmittal

On or before March 31 of the year following an Evaluation Period, the Company shall file with the Commission, the Consumer Advocate, and each party to the Company's most recent rate case proceeding, a transmittal documenting the Measured Performance and calculation of the PIM Financial Incentives and Performance Incentive Adjustment for the Evaluation Period. Complete, indexed schedules, workpapers and electronic files supporting the transmittal shall be provided with the transmittal. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, other rate case parties, and other interested persons that may propose any adjustments necessary to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

The review of the annual PIM Provision transmittal will be conducted concurrent with and in conjunction with the annual RBA Review Transmittal. The Performance Incentive Adjustment will be determined annually based on the PIM Provision transmittal and, after review and subject to explicit approval by the Commission, will become effective on June 1 of the year following the Evaluation Period, concurrent and in conjunction with determination of Target Revenues and the RBA Rate Adjustment in accordance with the RBA Provision. Any approved Performance Incentive Adjustment will be applied as monthly adjustments to Target Revenues for the twelve month period commencing June 1 of the year following the Evaluation Period in accordance with the Monthly Allocation Factors identified in the RBA Provision.

The Performance Targets, Deadbands and the amount of Maximum Financial Incentives used to determine the PIM Financial Incentive

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications,
Proposed Revisions To RBA Tariffs, Filed December 29, 2017.
Transmittal Letter dated January 11, 2018.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

levels for each of the PIMs shall be re-determined upon issuance of an interim or final order in a general rate case for each Company and shall remain constant in interim periods, unless otherwise amended, as necessary, by order of the Commission.

In the event that Performance Targets, Deadbands or the amounts of Maximum Financial Incentives are updated or amended by order of the Commission during the Evaluation Period, the Performance Targets, Deadbands and the amounts of Maximum Financial Incentives used in determining the amount of PIM Financial Incentives shall be a pro-rated weighted average based on the number of days of the Evaluation Period each parameter was effective.

Any revenue adjustments approved in accordance with this PIM Provision shall be excluded from the determination of Earnings Sharing Credits provided for in the Rate Adjustment Mechanism Provision ("RAM Provision").

The Performance Incentive Adjustment, and any prior year Performance Incentive Adjustment, shall be recalculated for errors in prior calculations and for subsequent Commission orders that change the basis for prior calculations. The effect of such changes shall be implemented as described in the RBA Provision, except that, the Performance Target, Deadband and Maximum Financial Incentive amounts determined in this PIM Provision shall not be recalculated based on errors in the calculation of these parameters and shall remain as specified unless and until changed by order of the Commission.

Evaluation Period

The Evaluation Period is defined as the annual twelve month calendar year period ending December 31, over which Measured Performance is determined and compared to the established Performance Target for each PIM described below. The first Evaluation Period shall begin January 1, 2018.

PIM Financial Incentive Calculation

For each PIM below, a Performance Target is specified, developed based on historical performance data. A Deadband is specified for each Performance Target in order to provide a satisfactory range of performance within which no reward or penalty amount is assessed.

A Maximum Financial Incentive amount is specified for each PIM with separate identification of a Maximum Reward Amount and a Maximum Penalty Amount.

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 35165; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 29, 2017. Transmittal Letter dated January 11, 2018.

Superseding Sheet no. 98B
Effective January 1, 2018

REVISED SHEET NO. 98B
Effective September 1, 2018

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Measured Performance for the Evaluation Period is compared to the Performance Target for each PIM. If the difference between Measured Performance and the Performance Target is less than or equal to the Deadband amount, no reward or penalty is awarded and the amount of the PIM Financial Incentive is zero. If the difference between Measured Performance and the Performance Target exceeds the Deadband amount, a reward or penalty ratio is calculated where the difference between Measured Performance and the Performance Target, less the Deadband amount, is the numerator and the Deadband amount is the denominator. This ratio is multiplied by either the Maximum Reward Amount or Maximum Penalty Amount, as applicable, to determine the PIM Financial Incentive for each PIM. The magnitude of the PIM Financial Incentive for each PIM shall not exceed 100% of the magnitude of the applicable Maximum Reward Amount or Maximum Penalty Amount established for each PIM.

Reliability Performance Incentive Mechanisms

There are two reliability PIMs: 1) System Average Interruption Frequency Index ("SAIFI"); and 2) System Average Interruption Duration Index ("SAIDI"). SAIFI is a measure of the average frequency of outages, defined as the annual total number of customer interruptions divided by the total number of customers served. SAIDI is a measure of the average duration of outage, defined as the sum of all customer interruption durations (in minutes) divided by the total number of customers served. The SAIFI and SAIDI Measured Performance and Performance Targets are determined using the IEEE Standard 1366 methodology.

For the Reliability Performance Incentive Mechanisms, the 2008-2017 record of historical performance data was used to establish the Performance Target and the Deadband. The Deadband was calculated as ± 1 standard deviation of the historical performance data. Accordingly, 100% of the penalty is achieved when Measured Performance is equal to or greater than 2 standard deviations from the Performance Target.

SAIFI:

Performance Target: 1.103 interruptions per customer during the one-year Evaluation Period

Deadband: ± 0.088 interruptions (1 Standard Deviation)

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Superseding Sheet No. 98C
Effective January 1, 2018

REVISED SHEET NO. 98C
Effective September 1, 2018

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Range for no penalty: 1.015 interruptions to 1.191
interruptions per customer (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 1.191 interruptions per customer

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

SAIDI:

Target: 99.23 minutes per outage

Deadband: \pm 8.96 minutes (1 Standard Deviation)

Range for no penalty: 90.27 minutes to 108.19 minutes per outage (\pm 1 Standard Deviation from Target)

Rewards: Not Applicable
Penalties for greater than 108.19 minutes per outage

Maximum Reward Amount: Not Applicable
Maximum Penalty Amount: \$2,276,417.

The Maximum Penalty Amount was determined to be equal to 0.20% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Call Center Performance Incentive Mechanism

The Call Center Performance PIM measures the performance of the utility call center in terms of the percentage of calls answered within thirty (30) seconds. The calculation of the call center performance shall exclude blocked calls from the denominator.

The Performance Target for the Call Center Performance Incentive Mechanism was calculated based on the average of quarterly data from Quarter 3 of 2016 to Quarter 2 of 2018.

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Superseding Sheet No. 98D
Effective September 1, 2018

REVISED SHEET NO. 98D
Effective June 1, 2019

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PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Call Center Performance:

Performance Target: 80.10% of calls answered within 30 seconds

Deadband: +/- 3.00% of calls answered within 30 seconds

Range for no reward or penalty: 77.10 % of calls answered to 83.10% of calls answered.

Rewards apply for greater than 83.10 % of calls answered
Penalties apply for less than 77.10 % of calls answered

Maximum Reward Amount: \$910,567.
Maximum Penalty Amount: \$910,567.

The magnitude of the Maximum Reward Amount and Maximum Penalty Amount were determined to be equal to 0.08% of Common Equity Share of Approved Average Test Year Rate Base determined in the most recent interim or final order in a general rate case for each Company.

Additional PIMs:

The Commission may order the establishment of one or more PIMs, and the targets, deadbands, rewards, penalties, and allocations for that PIM, as applicable, shall be implemented as specified in the Commission's order that approved the applicable PIM, and the applicable PIM Financial Incentive shall be included in the Performance Incentive Adjustment.

Commission's Authority

The Commission may suspend any or all parts of this PIM Provision. Such suspension shall remain in place until removed by Commission order.

Deleted: Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.¶

HAWAIIAN ELECTRIC COMPANY, INC

Transmittal Letter dated May 28, 2019.

PERFORMANCE INCENTIVE MECHANISM PROVISION (continued)

Historical Reference

The following table summarizes the prior PIMs in effect, as these values may be applicable during certain portions of the Evaluation Period.

PIM:	Effective Period:	Performance Target:	Deadband:	Maximum Reward:	Maximum Penalty:
SAIFI	1/1/2018 thru 2/15/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,039,094
SAIFI	2/16/2018 thru 4/12/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,260,799
SAIFI	4/13/2018 thru 8/31/2018	1.116 interruptions per customer	+/- 0.090	N/A	\$2,276,417
SAIDI	1/1/2018 thru 2/15/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,039,094
SAIDI	2/16/2018 thru 4/12/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,260,799
SAIDI	4/13/2018 thru 8/31/2018	99.03 minutes Per outage	+/- 9.07	N/A	\$2,276,417
Call Center	1/1/2018 thru 2/15/2018	79.07% of calls answered within 30 sec.	+/- 3.00%	\$815,638	\$815,638
Call Center	2/16/2018 thru 4/12/2018	79.46% of calls answered within 30 sec.	+/- 3.00%	\$904,320	\$904,320
Call Center	4/13/2018 thru 8/31/2018	79.56% of calls answered within 30 sec.	+/- 3.00%	\$910,567	\$910,567

HAWAIIAN ELECTRIC COMPANY, INC

Docket No. 2016-0328; Final Decision And Order No. 35545, Filed on June 22, 2018. Transmittal Letter Dated July 23, 2018.

Attachment 2B – List of Schedules and Workpapers

Schedule A (REVISED)	HECO-WP-A-001
Schedule A1 (REVISED)	HECO-WP-B-001
Schedule B (REVISED)	HECO-WP-C-001
Schedule B1 (REVISED)	HECO-WP-C-002
Schedule B2	HECO-WP-C-003
Schedule C	HECO-WP-D1-001
Schedule C1	HECO-WP-D2-001
Schedule C2	HECO-WP-D2-002
Schedule D (REVISED)	HECO-WP-D2-003
Schedule D1 (REVISED)	HECO-WP-D2-004
Schedule D2	HECO-WP-D3-001
Schedule D3	HECO-WP-D4-001
Schedule D4	HECO-WP-D4-002
Schedule D5 (REVISED)	HECO-WP-D4-003
Schedule E (REVISED)	HECO-WP-E-001
Schedule F (REVISED)	HECO-WP-F-001
Schedule F1	HECO-WP-F1-001
Schedule F2	HECO-WP-F1-002
Schedule G	HECO-WP-F1-003
Schedule H (REVISED)	HECO-WP-H-001
Schedule I	HECO-WP-H-002
Schedule J	HECO-WP-H-003
Schedule K	HECO-WP-H-004
Schedule L	HECO-WP-H-005
Schedule L1	HECO-WP-H-006 (REVISED)
Schedule M (REVISED)	HECO-WP-H-007
Schedule N	HECO-WP-H-008
	HECO-WP-H-009
	HECO-WP-L1-001
	HECO-WP-L1-002
	HECO-WP-L1-003
	HECO-WP-M-001 (REVISED)
	HECO-WP-M-002
	HECO-WP-M-003
	HECO-WP-M-004
	HECO-WP-M-005

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF 2019 REVENUE BALANCING ACCOUNT RATE ADJUSTMENT
SCENARIO 3 - WEST LOCH PV INCLUDED IN RAM REVENUE ADJUSTMENT /
25 KV INCLUDED IN 2018 SAIDI AND SAIFI PIM CALCULATIONS

Line No.	Description (a)	Reference (b)	Amount (c)	6/1/2019 Rate Amount (d)
RECONCILIATION OF RBA BALANCE:				
1	RBA Prior calendar year-end balance	Schedule B	\$ 37,331,443	
1a	OBF Program Implementation Cost Recovery - Year 1 of 2	Schedule N	\$ 768,575	
			\$ 38,100,018	
2	Revenue Tax Factor	Schedule C	1.0975	
3	Revenue for RBA Balance			\$ 41,814,770
RATE ADJUSTMENT MECHANISM "RAM" AMOUNT:				
4	Total RAM Revenue Adjustment Allowed (Note 2)	Schedule A1		\$ 22,938,101
5	<u>EARNINGS SHARING REVENUE CREDITS - 2019 ROE:</u>	Schedule H		\$ -
6	<u>PERFORMANCE INCENTIVE MECHANISM REWARD (PENALTY)</u>	Schedule M		\$ (1,269,311)
7	<u>2017 TEST YEAR RATE CASE FINAL D&O REFUND</u>	Note (3)		\$ (48,000)
8	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS</u>	Schedule I		\$ -
9	TOTAL RBA REVENUE ADJUSTMENT	Sum Col. (d)		\$ 63,435,560
10	GWH SALES VOLUME ESTIMATE JUNE 2019 - MAY 2020	HECO-WP-A-001		6,489.900
11	RBA RATE ADJUSTMENT - cents per kWh	Note (1)		<u>0.9775</u> <u>6/1/2018 1.0350</u> <u>Incremental (0.0575)</u>
12	MONTHLY BILL IMPACT @ 600 KWH			<u>\$ 5.86</u> <u>\$ 6.21</u> <u>\$ (0.35)</u>
	MONTHLY BILL IMPACT @ 500 KWH			<u>\$ 4.89</u> <u>\$ 5.18</u> <u>\$ (0.29)</u>

Note (1): 2019 RBA Rate Adjustment Breakdown

	Col. (d)	Rate Adjustment cents per kWh	Percentage Share
RBA Balance	\$ 41,814,770	0.64430530	65.9169%
RAM Amount	\$ 22,938,101	0.35344306	36.1597%
Earnings Sharing Revenue Credits	\$ -	0.00000000	0.0000%
Performance Incentive Mechanism Reward (Penalty)	\$ (1,269,311)	-0.01955825	-2.0009%
2017 Test Year Rate Case Final D&O Refund	\$ (48,000)	-0.00073961	-0.0757%
Major or Baseline Capital Projects Credits	\$ -	0.00000000	0.0000%
	\$ 63,435,560	0.97745049	100.0000%

Note (2): Total RAM Revenue Adjustment Allowed is the sum of the RAM Cap + Exceptional and Other Projects. See Order No. 32735, filed March 31, 2015, paragraph 107, page 94, which states that the Total RAM Revenue Adjustment is to be comprised of the RAM Cap plus recovery of Exceptional And Other Matters.

Note (3): Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Hawaiian Electric Proposed PIM Tariff Revisions and Refund Calculation, Exhibit 4, filed July 23, 2018, and approved by the Commission in Order No. 35661, filed August 30, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TOTAL RAM REVENUE ADJUSTMENT ALLOWED

Line No.	Description (a)	Reference (b)	Amount (c)
RAM REVENUE ADJUSTMENT DETERMINED ACCORDING TO EXISTING TARIFFS AND PROCEDURES			
1	O&M RAM	Schedule C	\$ 8,622,195
2	Rate Base RAM - Return on Investment	Schedule D	\$ 11,376,190
3	Depreciation & Amortization RAM Expense	Schedule E	\$ 2,939,716
4	Total RAM Revenue Adjustment		\$ 22,938,101
RAM REVENUE ADJUSTMENT CAP			
5	RAM Cap for 2019 RAM Revenue Adjustment	Schedule J	\$ 27,945,687
6	Plus: Exceptional and Other Matters	Schedule K	\$ -
7	2019 Cap - Total RAM Revenue Adjustment (Note 2)		\$ 27,945,687
8	Total RAM Revenue Adjustment Allowed (Note 1)	Lesser of Line 4 or Line 7	\$ 22,938,101

To Sch A

Note 1 RAM Revenue Adjustment Allowed:
 See Order No. 32735, filed March 31, 2015, paragraph 106, page 94:
 "The RAM Revenue Adjustment to be applied to determine effective Target Revenues will be the lesser of (a) the RAM Revenue Adjustment determined according to existing tariffs and procedures or (b) a RAM Revenue Adjustment Cap ("RAM Cap) to be calculated as specified."

Note 2 Total RAM Cap:
 See Order No. 32735, filed March 31, 2015, paragraph 110, page 96:
 "The RAM Cap will apply to the entire RAM Revenue Adjustment including the O&M RAM, Rate Base RAM (including Major Capital Projects and Baseline Projects), and the Depreciation and Amortization RAM."

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
SUMMARY OF ACCUMULATED REVENUE BALANCING ACCOUNT

Line No.	Month	Beginning Balance	Target Revenues	Recorded Adjusted Revenue	Variance to RBA	Adjustment for prior year RBA accrual	Tax-effected Balance Subject to Interest	Interest at 1.75%/year	Ending Balance
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Monthly RBA Balance and Activity (Monthly PUC Rpt)									
		\$ 18,013,624							
1	2017 December	\$ 46,306,327	\$ 49,915,326	\$ 43,730,598	\$ 6,184,728	\$ (3,302,057)	29,169,047	\$ 42,538	\$ 49,231,536
2									
3	2018 January	\$ 49,231,536	\$ 48,948,443	\$ 43,871,232	\$ 5,077,211	\$ (3,369,650)	\$ 37,188,347	\$ 54,233	\$ 50,993,330
4	February	\$ 50,993,330	\$ 45,953,154	\$ 40,430,219	\$ 5,522,935	\$ (4,185,853)	\$ 38,358,939	\$ 55,940	\$ 52,386,352
5	March	\$ 52,386,352	\$ 51,603,222	\$ 46,365,780	\$ 5,237,442	\$ (3,345,112)	\$ 39,599,394	\$ 57,749	\$ 54,336,431
6	April	\$ 54,336,431	\$ 49,061,587	\$ 45,638,864	\$ 3,422,723	\$ (3,430,466)	\$ 40,341,925	\$ 58,832	\$ 54,387,520
7	May	\$ 54,387,520	\$ 50,396,658	\$ 43,802,261	\$ 6,594,397	\$ (3,440,553)	\$ 41,553,464	\$ 60,599	\$ 57,601,782
8	June	\$ 57,601,782	\$ 49,434,694	\$ 46,747,403	\$ 2,687,291	\$ (4,129,862)	\$ 42,233,769	\$ 61,591	\$ 56,220,802
9	July	\$ 56,220,802	\$ 53,817,091	\$ 50,144,604	\$ 3,672,487	\$ (4,451,628)	\$ 41,454,689	\$ 60,455	\$ 55,502,116
10	August	\$ 55,502,116	\$ 55,301,701	\$ 50,148,289	\$ 5,153,412	\$ (4,546,694)	\$ 41,435,565	\$ 60,427	\$ 56,169,261
11	September	\$ 56,169,261	\$ 53,507,798	\$ 54,077,963	\$ (570,165)	\$ (4,315,858)	\$ 39,891,740	\$ 58,175	\$ 51,341,413
12	October	\$ 51,341,413	\$ 54,683,113	\$ 56,214,832	\$ (1,531,719)	\$ (4,543,142)	\$ 35,865,707	\$ 52,304	\$ 45,318,856
13	November	\$ 45,318,856	\$ 51,095,307	\$ 51,711,892	\$ (616,585)	\$ (4,111,538)	\$ 31,893,935	\$ 46,512	\$ 40,637,245
14	Oct/Nov True-Up		\$ 305,574		\$ 305,574			\$ 453	\$ 40,943,272
15	December	\$ 40,943,272	\$ 51,366,986	\$ 51,070,061	\$ 296,925	\$ (3,951,109)	\$ 29,043,764	\$ 42,355	\$ 37,331,443
16			\$ 615,475,328	\$ 580,223,400	\$ 35,251,928	\$ (47,821,465)		\$ 669,625	
17									
18									
19	2019 January	\$ -	\$ 51,648,125	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	February	\$ -	\$ 47,864,379	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	March	\$ -	\$ 51,080,563	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April	\$ -	\$ 50,323,814	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	May	\$ -	\$ 52,972,435	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	OBF Recovery	\$ 1,537,150							\$ -
24a	June	\$ -	\$ 51,526,408	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	July	\$ -	\$ 55,548,915	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	August	\$ -	\$ 57,081,299	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	September	\$ -	\$ 55,229,669	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	October	\$ -	\$ 56,442,806	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	November	\$ -	\$ 52,739,545	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	December	\$ -	\$ 52,867,244	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
31									

Sources of Data: Sch. B1 Sch B2 Cols (c)-(d) Note (1) Col ((b)+(e)+(f))/2/(k) Cols (b)+(e)+(f)+(h)
Note (3)

Composite Federal & State Income Tax Rate 25.75% (j)
Income Tax Factor (1 / 1-tax rate) 1.346801347 (k)

Note (1):

Amounts represent recovery of prior years' RBA balance through the RBA rate adjustment effective June 1, 2017 for the period June 2017 through May 2018 and June 1, 2018 for the period June 2018 through May 2019.

Note (2):

In May 2018, the Company identified an inadvertent transposition error in the DSM adjustment (\$67,965) used to derive Recorded Adjusted Revenues. May 2018 Recorded Adjusted Revenues includes a true-up of -\$135,930 (-\$123,853 net of revenue taxes) to properly state the RBA Balance as of May 2018. The May 2018 balance includes an adjustment of -\$181 related to interest resulting from this correction.

Note (3):

In December 2018, the Company recorded a RBA Target true-up adjustment resulting from the Schofield Generating Station MPIR Order No. 35953, issued 12/14/18 in Docket No. 2017-0213, effective October 1, 2018. The RBA balance includes an adjustment of \$306,027 related to the incremental Target Revenues (\$305,574) and related interest (\$453) to properly state the RBA balance as of December 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description	Reference	Docket No. 2010-0080 Amounts	Docket No. 2016-0328 Amounts	Docket No. 2016-0328 Amounts	Docket No. 2016-0328 Amounts	Docket No. 2016-0328 Amounts	Docket No. 2016-0328 Amounts	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
1	Last Rate Case Annual Electric Revenue at Approved Rate I	Note (3), (5), (5a)	\$000s \$ 1,765,954	\$ 1,581,445	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	
1a	Less: Holdback of Interim Revenues	Note (3)	\$000s \$ -	\$ (5,000)	\$ -	\$ -	\$ -	\$ -	
1b	Less: Customer Benefit Adjustment	Note (3)	\$000s \$ -	\$ (6,000)	\$ -	\$ -	\$ -	\$ -	
2	Less: Fuel Expense	Note (3), (5), (5a)	\$000s \$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	
3	Purchased Power Expense	Note (3), (5), (5a)	\$000s \$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rate)		\$000s \$ (156,905)	\$ (139,534)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)	
5	Last Rate Order Target Annual Revenues	Sum Lines 1...4	\$000s \$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974	
6	Authorized RAM Revenues	Note (1a)	\$000s \$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -	
7	Less: Revenue Taxes on Line 6 at 8.885%		\$000s \$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -	
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$000s \$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -	
9	Authorized RAM Revenues	Note (7)	\$000s \$ -	\$ -	\$ -	\$ 13,828	\$ 13,828	\$ 13,828	
10	Less: Revenue Taxes on Line 9 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ (1,229)	\$ (1,229)	\$ (1,229)	
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$000s \$ -	\$ -	\$ -	\$ 12,599	\$ 12,599	\$ 12,599	
12	Authorized RAM Revenues	Sch A, Line 4	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
13	Less: Revenue Taxes on Line 12 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
14	Net RAM Adjustment - Test Year +2	Lines 12 + 13	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
15	Authorized MPIR Revenues	Schedule L	\$000s \$ -	\$ -	\$ -	\$ -	\$ 6,600	\$ 8,561	
16	Less: Revenue Taxes on Line 15 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ (586)	\$ (761)	
17	Net MPIR Adjustment	Lines 15 + 16	\$000s \$ -	\$ -	\$ -	\$ -	\$ 6,014	\$ 7,800	
18	Less: <u>EARNINGS SHARING REVENUE CREDITS</u>	Note (1a)	\$000s \$ (16)	\$ (16)	\$ (16)	\$ -	\$ -	\$ -	
19	Less: Revenue Taxes on Line 18 at 8.885%		\$000s \$ 1	\$ 1	\$ 1	\$ -	\$ -	\$ -	
20	Net Earnings Sharing Revenue Credits	Lines 18 + 19	\$000s \$ (14)	\$ (14)	\$ (14)	\$ -	\$ -	\$ -	
21	Less: <u>PERFORMANCE INCENTIVE MECHANISM</u>	Sch A, Line 6	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
22	Less: Revenue Taxes on Line 24 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
23	Net Performance Incentive Mechanism	Lines 21 + 2	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
24	Less: <u>2017 TEST YEAR FINAL D&O REFUND</u>	Sch A, Line 8	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
25	Less: Revenue Taxes on Line 27 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
26	Net 2017 Test Year Final D&O Refund	Lines 24 + 25	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
27	Add: <u>OBF PROGRAM IMPLEMENTATION COSTS</u>	Sch A, Line 1a * 1.0975	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
28	Less: Revenue Taxes on Line 21 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
29	Net OBF Program Implementation Costs	Lines 27 + 28	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
30	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:</u>	Note (1a)	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
31	Total Annual Target Revenues								
32	June 1, 2017 Annualized Revenues w/RAM Increase	Col (c), lines (5+8+20+30)	\$000s \$ 604,302						
33	February 16, 2018 Annualized Revenues w/Interim Increase	Col (d), lines (5+8+20+30)	\$000s \$ -	\$ 637,077					
34	April 13, 2018 Annualized Revenues w/2nd Interim Increase	Col (e), lines (5+11+20+30)	\$000s \$ -	\$ -	\$ 599,960				
35	June 1, 2018 Annualized Revenues w/RAM Increase	Col (f), lines (5+11+20+30)	\$000s \$ -	\$ -	\$ -	\$ 612,574			
36	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 7/1/18	Col (g), lines (5+11+17+20+30)	\$000s \$ -	\$ -	\$ -	\$ -	\$ 618,587		
37	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 10/1/18	Col (h), lines (5+11+17+20+30)	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ 620,374	
38	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 1/1/19	Col (i), lines (5+11+17+20+30)	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
39	June 1, 2019 Annualized Revenues w/RAM Increase & MPIR accrued 1/1/19	Col (j), lines (5+14+17 +20+23+26+29+30)	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
40	<u>Distribution of Target Revenues by Month:</u>	Note (1)	Note (2)	Note (4) 2018	Note (4), (6) 2018	Note (6) 2018	2018	Note (8) 2018	Note (8a) 2018
41	January	8.10%	8.19%	\$48,948,443	\$22,450,132				
42	February	7.26%	7.59%	\$23,503,022	\$51,603,222				
43	March	8.10%	8.10%		\$20,335,492	\$28,726,095			
44	April	7.84%	7.98%			\$50,396,658			
45	May	8.44%	8.40%				\$49,434,694		
46	June	8.47%	8.07%					\$53,817,090	
47	July	8.77%	8.70%					\$55,301,700	
48	August	9.04%	8.94%					\$53,507,797	
49	September	8.68%	8.65%						\$54,841,062
50	October	8.78%	8.84%						\$51,242,893
51	November	8.26%	8.26%						\$51,366,968
52	December	8.26%	8.28%						\$17,450,923
53	Total Distributed Target Revenues	100.00%	100.00%	\$72,451,465	\$94,388,846	\$79,122,753	\$49,434,694	\$162,626,587	\$17,450,923

Footnotes:

- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328: \$35,971 \$000s
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days: 0.46429
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328: -\$603 \$000s
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335): -\$2,143 \$000s
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days: 0.60000
- Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.
- MPIR Revenue accrual starting effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213. Excerpt filed at HECO-WP-L1-003.
- MPIR Revenue accrual starting October 1, 2018 approved in Order No. 35953, issued December 14, 2018 in Docket No. 2017-0213. Excerpt filed at HECO-WP-L1-003.
- MPIR Revenue accrual starting January 1, 2019 filed in Transmittal 19-01, filed February 7, 2019. Excerpt filed at HECO-WP-L1-003.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description	Reference		Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)
	(a)	(b)				
1	Last Rate Case Annual Electric Revenue at Approved Rate I	Note (3), (5), (5a)	\$000s	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (3)	\$000s	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (3)	\$000s	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (3), (5), (5a)	\$000s	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (3), (5), (5a)	\$000s	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rate)		\$000s	\$ (135,915)	\$ (135,915)	\$ (135,915)
5	Last Rate Order Target Annual Revenues	Sum Lines 1...4	\$000s	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (1a)	\$000s	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 6 at 8.885%		\$000s	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$000s	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (7)	\$000s	\$ 13,828	\$ -	\$ -
10	Less: Revenue Taxes on Line 9 at 8.885%		\$000s	\$ (1,229)	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$000s	\$ 12,599	\$ -	\$ -
12	Authorized RAM Revenues	Sch A, Line 4	\$000s	\$ -	\$ 22,938	\$ 22,938
13	Less: Revenue Taxes on Line 12 at 8.885%		\$000s	\$ -	\$ (2,038)	\$ (2,038)
14	Net RAM Adjustment - Test Year +2	Lines 12 + 13	\$000s	\$ -	\$ 20,900	\$ 20,900
15	Authorized MPIR Revenues	Schedule L	\$000s	\$ 19,811	\$ 19,811	\$ 19,811
16	Less: Revenue Taxes on Line 15 at 8.885%		\$000s	\$ (1,760)	\$ (1,760)	\$ (1,760)
17	Net MPIR Adjustment	Lines 15 + 16	\$000s	\$ 18,051	\$ 18,051	\$ 18,051
18	Less: EARNINGS SHARING REVENUE CREDITS	Note (1a)	\$000s	\$ -	\$ -	\$ -
19	Less: Revenue Taxes on Line 18 at 8.885%		\$000s	\$ -	\$ -	\$ -
20	Net Earnings Sharing Revenue Credits	Lines 18 + 19	\$000s	\$ -	\$ -	\$ -
21	Less: PERFORMANCE INCENTIVE MECHANISM	Sch A, Line 6	\$000s	\$ -	\$ (1,269)	\$ (1,269)
22	Less: Revenue Taxes on Line 24 at 8.885%		\$000s	\$ -	\$ 113	\$ 113
23	Net Performance Incentive Mechanism	Lines 21 + 2	\$000s	\$ -	\$ (1,157)	\$ (1,157)
24	Less: 2017 TEST YEAR FINAL D&O REFUND	Sch A, Line 8	\$000s	\$ -	\$ (48)	\$ (48)
25	Less: Revenue Taxes on Line 27 at 8.885%		\$000s	\$ -	\$ 4	\$ 4
26	Net 2017 Test Year Final D&O Refund	Lines 24 + 25	\$000s	\$ -	\$ (44)	\$ (44)
27	Add: OBF PROGRAM IMPLEMENTATION COSTS	Sch A, Line 1a * 1.0975	\$000s	\$ -	\$ 844	\$ 844
28	Less: Revenue Taxes on Line 21 at 8.885%		\$000s	\$ -	\$ (75)	\$ (75)
29	Net OBF Program Implementation Costs	Lines 27 + 28	\$000s	\$ -	\$ 769	\$ 769
30	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (1a)	\$000s	\$ -	\$ -	\$ -
31	Total Annual Target Revenues					
32	June 1, 2017 Annualized Revenues w/RAM Increase	Col (c), lines (5+8+20+30)	\$000s			
33	February 16, 2018 Annualized Revenues w/Interim Increase	Col (d), lines (5+8+20+30)	\$000s			
34	April 13, 2018 Annualized Revenues w/2nd Interim Increase	Col (e), lines (5+11+20+30)	\$000s			
35	June 1, 2018 Annualized Revenues w/RAM Increase	Col (f), lines (5+11+20+30)	\$000s			
36	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 7/1/18	Col (g), lines (5+11+17+20+30)	\$000s			
37	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 10/1/18	Col (h), lines (5+11+17+20+30)	\$000s			
38	June 1, 2018 Annualized Revenues w/RAM Increase & MPIR accrued 1/1/19	Col (i), lines (5+11+17+20+30)	\$000s	\$ 630,624		
39	June 1, 2019 Annualized Revenues w/RAM Increase & MPIR accrued 1/1/19	Col (j), lines (5+14+17 +20+23+26+29+30)	\$000s		\$ 638,493	\$ 638,493
40	Distribution of Target Revenues by Month:	Note (1)	Note (2)	Note (8b)	Note (8b)	Note (8b)
41	January	8.10%	8.19%	\$51,648,125	2019	\$52,292,600
42	February	7.26%	7.59%	\$47,864,379		\$48,461,640
43	March	8.10%	8.10%	\$51,080,563		\$51,717,956
44	April	7.84%	7.98%	\$50,323,814		\$50,951,764
45	May	8.44%	8.40%	\$52,972,435		\$53,633,436
46	June	8.47%	8.07%		\$51,526,408	
47	July	8.77%	8.70%		\$55,548,915	
48	August	9.04%	8.94%		\$57,081,299	
49	September	8.68%	8.65%		\$55,229,669	
50	October	8.78%	8.84%		\$56,442,806	
51	November	8.26%	8.26%		\$52,739,545	
52	December	8.26%	8.28%		\$52,867,244	
53	Total Distributed Target Revenues	100.00%	100.00%	\$253,889,316	\$381,435,886	\$257,057,396

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF O&M RAM ADJUSTMENT
(\$ in Thousands)

Line No.	Decryption	Reference	Docket No. 2016-0328 Approved	Footnote 4 Previously Approved RAM	O&M Subject to Escalation Col (c) + (d) (e)	Net Inflation Indices Footnote 2 (f)	2019 O&M RAM Adjustment Col (e) * (f) (g)	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	Base BU Labor Expenses	Schedule C1	\$ 47,048		\$ 47,048	4.19%	\$ 1,973	
2	Base Non-Labor Expense	Schedule C2	\$ 134,734		\$ 134,734	4.24%	\$ 5,718	
3	Payroll Taxes	Footnote 1	\$ 3,943		\$ 3,943	4.19%	\$ 165	
4	Subtotal Expense Increase - RAM Adjustment before revenue taxes							\$ 7,856
5	Revenue Tax Factor (Footnote 3)							1.0975
6	O&M RAM (SubTotal Expenses x Rev Tax Factor)							\$ 8,622
								To Sch A1

Footnotes:

1: Payroll Taxes per Stipulated Settlement Letter, filed March 5, 2018 in Docket No. 2016-0328, Exhibit 2C, page 6, approved in Order No. 35545, filed June 22, 2018.	\$	9,342
Less: Portion of payroll taxes related to non-BU labor ^A (57.79% * 9,342)	\$	(5,399)
Payroll Taxes related to Bargaining Unit labor	\$	3,943

^A See Schedule C1 for calculation of percentage related to non-BU labor.

2: Escalation Rates

Labor:	2018	2019	
Bargaining Unit Wage Increase	2.67%	3.00%	(See HECO-WP-C-001)
Less: Labor Productivity Offset	0.76%	0.76%	Approved in Final D&O in Docket No. 2008- 0274, page 51, filed on August 31, 2010
Labor Cost Escalation Rate	1.91%	2.24%	

Calculation of 2018 Compounded Labor Cost Escalation

2018 Labor Cost Escalation	1.0191	A (2018 labor escalation plus 1)
2019 Labor Cost Escalation	1.0224	B (2019 labor escalation plus 1)
2018-2019 Compounded Labor Cost Escalation	1.0419	C = A * B
2018-2019 Compounded Labor Cost %	0.0419	D = C - 1

Non-Labor:

	2018	2019	
GDP Price Index	2.10%	2.10%	(See HECO-WP-C-002)

Calculation of 2018 Compounded Non-Labor Cost Escalation

2018 Non-Labor Cost Escalation	1.0210	A (2018 non-labor escalation plus 1)
2019 Non-Labor Cost Escalation	1.0210	B (2019 non-labor escalation plus 1)
2018-2019 Compounded Non-Labor Cost Escalation	1.0424	C = A * B
2018-2019 Compounded Non-Labor Cost %	0.0424	D = C - 1

3: Computation of Revenue Tax Factor

Public Service Tax Rate	0.05885	
PUC Fees Rate	0.00500	Revenue Tax Factor
Franchise Tax Rate	0.02500	= 1 / (1 - Total Revenue Tax Rate)
Total Revenue Tax Rate	0.08885	1.0975

4: Column d "Previously Approved RAM" is not used as the labor and non-labor escalation is accomplished through the use of a compounded escalation rate in column f, as shown in footnote 2.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKSHEET
RATE ADJUSTMENT MECHANISM SUMMARY OF
OPERATIONS AND MAINTENANCE LABOR AND NON-LABOR EXPENSE
BY BLOCK OF ACCOUNTS
Interim D&O - Docket No. 2016-0328
(\$ in Thousands)

DESCRIPTION	Footnote 1		Footnote 2		
	(a)	(b)	(c)=(a)+(b) TOTAL	(d)	(e)
	BU LABOR	NON-BU LABOR	LABOR	NON-LABOR	TOTAL
Production	21,744	13,212	34,956	44,350	79,306
Transmission	2,420	2,933	5,353	10,454	15,807
Distribution	12,086	7,321	19,407	27,418	46,825
Customer Accounts	8,258	3,618	11,876	8,478	20,354
Allowance for Uncoll Accounts	-	-	-	732	732
Customer Service	134	5,582	5,716	9,936	15,652
Administrative & General	2,406	31,769	34,175	85,583	119,758
Customer Benefit Adjustment (Footnote 3)	-	-	-	(10,023)	(10,023)
Operation and Maintenance	47,048	64,435	111,483	176,928	288,411
	To Sch C			To Sch C2	X
Percentage of Total O&M Labor	42.20%	57.79%	100%		

* amounts may not add due to rounding

Footnotes:

1 SOURCE: 2017 test year breakdown of BU and non-BU labor obtained from UI Planner Budget files.

2 O&M breakdown below includes fuel and purchase power expenses consistent with the presentation in the Results of Operations.

	Footnote 2a			Footnote 2b	
	LABOR	NON-LABOR	TOTAL	ADJUST- MENT	STIPULATED SETTLEMENT
FUEL	-	327,609	327,609		327,609
PURCHASE POWER	-	466,211	466,211		466,211
PRODUCTION	34,956	44,350	79,306		79,306
TRANSMISSION	5,354	10,454	15,808		15,808
DISTRIBUTION	19,407	27,418	46,825		46,825
CUSTOMER ACCOUNTS	11,876	8,478	20,354		20,354
UNCOLLECTIBLE ACCOUNTS	-	732	732		732
CUSTOMER SERVICE	5,715	9,936	15,651		15,651
ADMIN & GENERAL	34,265	85,945	120,210	(452)	119,758
CUSTOMER BENEFIT ADJUSTMENTS	-	-	-	(10,023)	(10,023)
TOTAL	111,573	981,133	1,092,706	(10,475)	1,082,231
TOTAL O&M EXPENSE (Excl Fuel & Purch Po	111,573	187,313	298,886	(10,475)	288,411

X

2a See Order No. 35280, For Approval of General Rate Case and Revised Schedules/Rules, filed on February 9, 2018, in which the Commission approved the revised schedules or operations and tariff sheets filed January 19, 2018, Exhibit A, Page 1 of 4.

See Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229 and Order No. 35220, filed January 19, 2018, Exhibit 2, Attachment 1, Page 1 for Labor/Non-Labor breakdown.

2b See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 1 of 13.

3 Customer Benefit Adjustments identified in the Results of Operations have been included as a reduction to O&M non-labor subject to escalation. See Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, Appendix A, page 1 of 4, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK

Non-Labor Exclusion
Adjustment for O&M RAM
(\$ thousands)

<u>Line No.</u>	<u>Decription</u> (a)	<u>Amount</u> (b)	<u>Reference</u> (c)
1	Pension Expense	73,940	Note 1
2			
3			
4	OPEB Expense	(470)	Note 1
5			
6			
7	Total before amounts transferred	73,470	
8			
9	O&M %	57.43%	See Parties' Stipulated Settlement Letter, filed November 15, 2017, in Docket No. 2016-0328, HECO T-16 Attachment 4, page 1
10	(1- transfer rate of 42.57%)		
11			
12			
13	Adjustment to Non-Labor O&M Expense		
14	for O&M RAM base	42,194	
15			
16			
17	Non-Labor O&M Expense per Interim D&O	176,928	Schedule C1
18			
19			
20	Non-Labor O&M Expense Base for		
21	O&M RAM base	<u>134,734</u>	Schedule C

Note 1: See Parties' Stipulated Settlement Letter, filed November 15, 2017 in Docket No. 2016-0328, Exhibit 1, page 63 for the summary of the pension and OPEB cost the Parties agreed to. In Parties' Stipulated Settlement Letter on Remaining Issues, filed March 5, 2018 in Docket No. 2016-0328, Exhibit 1, page 4, amortization of the excess pension contribution from the test year was reduced to zero. Approved in Final Decision and Order No. 35545, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RATE BASE RAM ADJUSTMENT - RETURN ON INVESTMENT

Line No.	Description	AMOUNTS IN THOUSANDS	PERCENT OF TOTAL	COST RATE	POST TAX WEIGHTED EARNINGS REQMTS	INCOME TAX FACTOR (Note 1)	PRETAX WEIGHTED EARNINGS REQMTS
	(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	<u>PUC APPROVED CAPITAL STRUCTURE & COSTS (Note 2):</u>						
2	Short-Term Debt	\$ 27,770	1.18%	1.75%	0.02%	1.000000	0.02%
3	Long-Term Debt	928,748	39.59%	5.03%	1.99%	1.000000	1.99%
4	Hybrid Securities	28,651	1.22%	7.19%	0.09%	1.000000	0.09%
5	Preferred Stock	21,137	0.90%	5.37%	0.05%	1.346835	0.07%
6	Common Equity	1,339,335	57.10%	9.50%	5.42%	1.346835	7.31%
7	Total Capitalization	<u>\$ 2,345,641</u>	<u>100.00%</u>		<u>7.57%</u>		<u>9.47%</u>
8	RAM CHANGE IN RATE BASE \$000 (From Schedule D1)						\$ 109,457
9	PRETAX RATE OF RETURN (Line 7, Col g)						9.47%
10	PRETAX RETURN REQUIREMENT						\$ 10,365.5
11	REVENUE TAX FACTOR (1/(1-8.885%))						1.0975
12	RATE BASE RAM - RETURN ON INVESTMENT \$000						\$ 11,376.2

To Sch A1

Footnotes:

1 Composite Federal & State Income Tax Rate 25.75% See HECO-WP-F-001
 Income Tax Factor (1 / 1-tax rate) 1.346835

2 See Order No. 35335, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, Exhibit 2C, Page 2 of 13. Approved in Final Decision and Order No. 35545 filed June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RATE BASE RAM ADJUSTMENT - CHANGE IN RATE BASE
\$ in thousands

Line No.	Description (a)	HECO 2017 Test Year Rate Base (Note 2)		HECO 2019 RAM Rate Base			
		Beg. Balance 12/31/2017 (b)	Budgeted Balance 12/31/2017 (c)	Adjusted Recorded at 12/31/2018 (d) (Note 1)	RAM Projected Amounts (e) See Detail Below	Estimated at 12/31/2019 (f)	
1	Net Cost of Plant in Service, Net of CIAC	\$ 2,595,452	\$ 2,770,695	\$ 2,437,105	\$ 129,932	\$ 2,567,037	(Note 3)
2	Property Held for Future Use	-	-	-	-	-	
3	Fuel Inventory	46,200	46,200				
4	Materials & Supplies Inventories	28,427	28,427				
5	Unamort Net ASC 740 Reg Asset	70,144	74,887				
6	Unamort EOTP Reg Asset	444	89				
7	CIP CT-1 Reg Asset	2,306	1,352				
8	Unamort Sys Dev Costs	15,932	13,496				
9	RO Pipeline Reg Asset	4,958	4,842				
10	Pension Tracking	97,620	113,828				
11	Contrib in Excess of NPPC	6,470	6,470				
12	Total Additions	\$ 2,867,953	\$ 3,060,286	\$ 2,718,151	\$ 129,932	\$ 2,848,083	
13	Unamortized CIAC/CWIP in CWIP	\$ (347,826)	\$ (395,134)	\$ (30,110)	\$ -	\$ (30,110)	(Note 3)
13a	Developer Advances	-	-	\$ (21,345)	\$ -	\$ (21,345)	(Note 3)
14	Customer Advances	(3,581)	(3,925)				(Note 3)
15	Customer Deposits	(12,101)	(12,005)				
16	Accumulated Def Income Taxes	(520,643)	(333,360)	(282,714)	(7,226)	(289,939)	(Note 4)
17	ADIT Excess Reg Liability	-	(203,950)	(277,406)	10,381	(267,025)	(Note 4), Sch D5
18	Unamortized State ITC (Gross)	(56,323)	(54,903)				
19	Unamortized Gain on Sale	(248)	(182)				
20	Pension Reg Liability	-	-				
21	OPEB Reg Liability	(2,817)	(2,331)				
22	Total Deductions	\$ (943,539)	\$ (1,005,790)	\$ (685,783)	\$ 3,155	\$ (682,628)	
23	Working Cash	3,904	3,904	3,904	Not Updated	3,904	
24	Rate Base at Proposed Rates	\$ 1,928,318	\$ 2,058,400	\$ 2,036,272		\$ 2,169,359	
25	Average Rate Base		\$ 1,993,359			\$ 2,102,816	
26	Change in Rate Base					\$ 109,457	
							To Schedule D
27	<u>Column (e) Projected Changes to Rate Base:</u>		Reference	Amount \$000			
28	Plant - Baseline Capital Project Additions, Net of CIAC		Schedule D2	200,583			
29	Major Project Additions, Net of CIAC		Schedule D3	69,023			
30	Accumulated Depreciation/Amortization Change		Schedule E	(139,674)			
31	Net Plant		Sum: Lines 28-30	129,932			
32	ADIT - Baseline and Major Capital Projects		Schedule F	(7,226)			
33	ADIT - Joint Pole Capital Transfer Price		Note 6	-			
34	ADIT Excluding Joint Pole		Sum: Line 32-33	(7,226)			
35	Excess ADIT Reg Liability Amortization (Plant 282 excess def amort beginning 6/1/2019)		Schedule D5	10,381			

Footnotes:

1	Amounts are recorded, except for the following adjustments:	Schedule D4 ADIT		
		Plant in Service	Acc. Depr.	
[A]	Unadjusted Balance	\$ 4,496,539	\$ (1,565,762)	\$ (283,658)
	Add:			
[A]	RWIP		41,901	
[A]	Asset Retirement Obligation		(4,780)	
[A]	Reg Liab-Cost of Removal (net salvage)		(356,926)	
	Tenant Improvement Allowance (Sch E)	(14,132)	9,824	
	<u>Major Project Adjustments:</u>	HECO-WP-D2-001	HECO-WP-E-001	HECO-WP-D4-002
	ERP EAM Hardware	(14)	3	2
	Koolau-Wailupe #1 Str 30 P9 Replace	(142)	4	14
	Total Adjustments	\$ (156)	\$ 7	\$ 16
				Schedule D4
	<u>Major Project Interim Recovery Adjustments:</u>	HECO-WP-D2-001	HECO-WP-E-001	HECO-WP-D4-003
	Schofield Generation Station	(144,744)	-	1,832
	Total Adjustments	\$ (144,744)	\$ -	\$ 1,832
	<u>Joint Pole Capital Transfer Price</u>	Note 6		
		\$ (24,666)	\$ -	\$ (904)
	Adjusted Balance	\$ 4,312,841	\$ (1,875,736)	\$ (282,714)

2 See Final Decision and Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, filed on June 22, 2018, Exhibit B, Page 1 of 2. Revised for presentation purposes only to properly reflect the Unamortized Net ASC 740 Reg Asset, ADIT, and ADIT Excess Reg Liability balances. No change to Total Average Rate Base.

3 Per PowerPlan extract. Effective October 2018, the Company reclassified CIAC to Plant in Service or CWIP consistent with FERC guidelines. In 2018, CIAC has been netted with either Plant in Service or CWIP and Developer Advances (Cash CIAC received from developers, subject to refund) which has been included as a reduction to rate base. See further discussion of the Company's treatment of CIAC at HECO-WP-D1-001.

4 As a result of the 2017 Tax Reform Act, Regulatory Liability accounts were created and recorded as of December 31, 2017 to isolate the 2017 excess accumulated deferred taxes resulting from the lower federal tax rate. The bifurcated Regulatory Liabilities are included as a reduction to Rate Base. See further discussion at Schedule F.

5 HECO 2017 Test Year Rate Base includes CIS deferred costs in Unamortized System Development Costs. See detail in November 15, 2017, Stipulated Settlement Letter, HECO T-17, Attachment 1, Page 2.

6 See Decision and Order No. 35768, Docket No. 2018-0075 filed October 16, 2018. Commission approved the Asset Transfer, Pole Licensing and Amended Joint Pole Agreements and the accounting and ratemaking treatment described in Exhibit E of the Application. The change in ADIT represents the tax effect of the book - tax difference on depreciation for the Joint Pole assets.

[A] SOURCE: Hawaiian Electric Company, Inc. Monthly Financial Report - December 2018, filed February 28, 2019.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF BASELINE CAPITAL PROJECTS ADDITIONS, NET OF CIAC

Source: Docket No. 03-0257 General Order No. 7 Plant Additions Annual Reports filed with the PUC dated:

Line No.	Description (a)		3/27/2015	3/29/2016	3/30/2017	3/27/2018	NOTE (1)
			2014	2015	2016	2017	2018
			(c)	(d)	(e)	(f)	(f)
1	Total Plant Additions		269,326,250	266,537,660	241,294,569	276,754,129	358,703,631
2	Less: Non-Utility Plant Additions	NOTE (2)	-	(63)	(3,954)	-	-
3	Adjusted Total Plant Additions		269,326,250	266,537,597	241,290,615	276,754,129	358,703,631
4							
5	<u>Less Major Projects: (+\$2.5 Million)</u>	<u>Dkt No.</u> <u>Item No.</u>					
6	W8 Boiler Controls Upgrade	2007-0365 P7650000	18,503	(70)			
7	EOTP Ph. 2 (Subs/Switch Stations)	2010-0062 Y48500	(7,357)	(55,681)	(682)		
8	W7 Controls Upgrade	2009-0195 P7590000	(8,237)	(35)			
9							
10	<u>2012 In-Service:</u>						
11	Kapolei Substation	2011-0026 Y00127	(6,459)				
12							
13	<u>2013 In-Service:</u>						
14	Pukele 80MVA Tsf #3	2011-0156 P0001494	(28,327)	15,611			
15	Kakaako Makai-Iwilei 25kV DL	2009-0042 Y00038	(485,650)	(496,818)		400,000	
16	North South Road 46kV Line	2008-0070 Y00119		(3,488)			
17							
18	<u>2014 In-Service:</u>						
19	Kaloii Substation	2008-0070 Y00119	(6,548,755)	(925)			
20	Kaloii Sub 46kV & 12kV Distr	2008-0070 Y00119	(1,218,895)				
21	Kaloii Telecomm	2008-0070 Y00119	(171,237)				
22	Kaloii Sub 12kV Work	2008-0070 Y00119	(25,906)				
23	Kakaako Makai-Kewalo 25kV DL	2009-0042 Y00038	(4,958,840)	(464,900)	(111)	400,000	
24	Kakaako Makai DOT Queen-Cook	2009-0042 Y00038	(1,961,600)	(418,816)	(2,890,742)	476,166	
25	BPT Tank 133 Improvements	2010-0318 P0000900	(6,095,787)	(1,092,308)			
26	Pukele 80MVA Tsf #2	2011-0156 P0001492	(3,449,859)	(40,084)			
27	DOT Airport DSG	2008-0329 P0001370	(4,965,396)	(97,130)	(172,652)	(94,001)	3,516
28							
29	<u>2016 In-Service:</u>						
30	Pukele 80MVA Tsf #1	2011-0156 P0002264			(3,839,121)	(7,612)	
31							
32	<u>2017 In-Service:</u>						
33	ERP EAM Hardware	2014-0170 PE.000003 (Y00168)				(2,604,146)	
34	Koolau-Wailupe #1 Str 30 P9 Replace	PE.000104 (P0003465)				(2,684,387)	(13,203)
35							
36	<u>2018 In-Service:</u>						
37	MPIR-Schofield Generating Station	2017-0213 PZ.000016/ PZ.001002 (P0001576)					(144,743,542)
38	Joint Pole Capital Transfer Price	2018-0075 PE.005155					(24,665,897)
39	Total Net Plant Additions (excluding major projects)		239,412,448	263,882,953	234,387,307	272,640,149	189,284,505
40							
41	Last Five-Year Average - Plant Additions					<i>To Sch F1</i>	239,921,472
42							
43	Less: CIAC, including Developer Advances	NOTE (3)	(31,803,050)	(42,140,722)	(36,314,281)	(59,849,268)	(29,568,427)
44							
45	EOTP Ph. 2 (Subs/Switch Stations)-CIAC	2010-0062 Y48500	43,725	15,232	718		
46	Kakaako Makai DOT Queen-Cook-CIAC	2009-0042 Y00038			2,825,023		
47	DOT Airport DSG-CIAC	2008-0329 P0001370					96,602
48	Total CIAC Additions (excluding major projects)		(31,759,325)	(42,125,490)	(33,488,540)	(59,849,268)	(29,471,825)
49							
50	Total Net Plant Additions, Net of CIAC (excluding major projects)		207,653,123	221,757,463	200,898,767	212,790,881	159,812,680
51							
52	Last Five-Year Average - Plant Additions, Net of CIAC					<i>To Sch D1</i>	200,582,583

NOTE (1): Amounts per HECO-WP-D2-002 and the Hawaiian Electric Companies' *Exemption From and Modification of General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2017*, in Docket No. 03-0257, filed on March 27, 2019.

NOTE (2): Source: UI Planner Budget files: Actuals Scenario. Adjustment to remove non-utility plant additions from utility plant. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it.

NOTE (3): See HECO-WP-D2-001 for line 47 - 2018 Major Project CIAC additions, HECO-WP-D2-003 for 2018 CIAC Additions, HECO-WP-D2-004 for 2014 to 2017 CIAC Additions and WP-D1-001 for treatment of CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF MAJOR CAPITAL PROJECT ADDITIONS, NET OF CIAC

Line No.	Description (a)	PUC Docket Reference (b)	Estimated In Service Date (c)	Plant Addition Amount (d)	CIAC Amount (e)
1 2	AES-CEIP #2 138kV OH Trans Line Relocation	Docket No. 2016-0439 (Decision & Order dated 03/02/2018) UI Planner Budget files	Feb-19	3,007,232	
3 4	West Loch Utility Scale PV	Docket No. 2016-0342 (Decision & Order dated 06/30/2017) UI Planner Budget files	Jun-19	52,128,000	
5 6	Ala Wai Canal-46kV Relocation	Docket No. 2016-0416 (Decision & Order dated 09/01/2017) UI Planner Budget files	Jun-19	13,910,207	
7 8	Kakaako Makai	Docket No. 2009-0042 (Decision & Order dated 06/12/2009) UI Planner Budget files	Apr-14		(22,683)
9	Total Major Capital Projects Qualifying for 2019 RAM, Net of CIAC			<u>\$ 69,045,439</u>	<u>\$ (22,683)</u>
10				<i>To Sch D1 & F2</i>	<u>\$ 69,022,756</u>

Source: HECO-WP-D3-001

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF ADJUSTED RECORDED DEFERRED INCOME TAXES

Line No.	NARUC Account (a)	Reference (b)	DR/(CR) Federal ADIT (c)	DR/(CR) State ADIT (d)	DR/(CR) Total ADIT (e)	
1	Recorded Deferred Income Tax Balances December 31, 2018 Recorded Balances					
2	Depreciation Related Account 282	HECO-WP-D4-001	(208,764,869)	(35,223,942)	(243,988,811)	
3	Other Deferred Income Taxes	HECO-WP-D4-001	(33,950,451)	(5,718,989)	(39,669,440)	
4	Total Recorded Deferred Income Taxes		<u>(242,715,320)</u>	<u>(40,942,931)</u>	<u>(283,658,251)</u>	To Sch D1 To HECO-WP-H-001
5	<u>Adjustments to Recorded Balances:</u>					
6	ADIT on Major Project excess depreciation	HECO-WP-D4-002	15,698	898	16,596	
7	ADIT on Major Project Interim Recovery	HECO-WP-D4-003	1,404,184	427,943	1,832,127	To Sch D1
8	Total Adjustments to Recorded ADIT Balances		<u>1,419,882</u>	<u>428,841</u>	<u>1,848,723</u>	To Sch D1
9	Adjusted Recorded ADIT Balances -12/31/18		<u>(241,295,438)</u>	<u>(40,514,090)</u>	<u>\$ (281,809,528)</u>	To Sch D1
10	282 ADIT adjusted for ADIT on Major Project excess depreciation	Line 2 + Line 6	(208,749,171)			To HECO-WP-F1-003

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF ADJUSTED RECORDED EXCESS ADIT REGULATORY LIABILITY

Line	NARUC Account (a)	Reference (b)	DR/(CR) Balance at 12/31/17 (c)	DR/(CR) Adjustments	DR/(CR) Amortization (d)	DR/(CR) Balance at 12/31/18 (e) = (c) + (d)	Life (f)	Amortization (g)	Est Bal at 12/31/19 (h) = (e) + (g)
1	Plant 282 - protected		(215,702,497)	(7,803,210)		(223,505,707)	40	5,587,643	(220,246,249)
2	Plant 283 - unprotected		(35,065,867)		1,668,881	(33,396,986)	15	2,337,723	(31,059,263)
3	Nonplant 283 - unprotected		(23,918,454)		3,415,029	(20,503,425)	5	4,783,679	(15,719,746)
	Total Excess ADIT								
4	Regulatory Liability		<u>(274,686,818)</u>	<u>(7,803,210)</u>	<u>5,083,910</u>	<u>(277,406,118)</u>		<u>12,709,045</u>	<u>(267,025,258)</u>
			Note 1			To Sch D1		To Sch E	To Sch D1 Note 3

Reconciliation of 12/31/18 Balance:

Regulatory Liability in GL	GL#25400023/24	(278,155,753)
Regulatory Asset in GL	GL#18673900	34,112,667
2018 Amortization		<u>587,116</u>
		<u>34,699,783</u>
		(243,455,970)
Add: FAS 109	Note 1	<u>(33,950,008)</u>
Total Excess ADIT		<u>(277,405,978)</u>
Total Excess ADIT	Line 4	<u>(277,406,118)</u>
Remaining Difference		140

Note 1: The 12/31/17 balances represent the amortization base presented in Docket 2016-0328 Hawaiian Electric's 2017 Test Year Rate Case Revised Attachment to the Parties' Stipulated Settlement on Remaining Issues, Attachment 2A, filed March 8, 2018. However, this amortization base inadvertently excluded reclassifications recorded at December 31, 2017 between the 2017 unprotected plant 283 excess net regulatory liability and the portion of ASC 740 regulatory assets/liabilities offsetting the related excess deferred income taxes.

Note 2: Amortization began 4/14/2018.

Note 3: Line 1: Plant 282-protected excess deferred balance calculated as follows: [col (e)/col (f)] * (7 months/12 months) + col (e). Amortization begins on 6/1/2019.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF DEPRECIATION & AMORTIZATION RAMP ADJUSTMENT

Line No.	FERC Account	Recorded Depreciable/Amort. Balance (Footnote 3)	Adjustments (Footnote 1)	Adjusted Depreciable/Amort. Balance	PUC Approved Accrual Rate	Annual Accrual
	(a)	(b)	(c)	(d)	(e)	(f)
1	Depreciable Plant					
2	311	107,116,270		107,116,270	0.01600	1,713,860
3	312	407,080,257	(3,423,000)	403,657,257	0.02030	8,194,242
4	314	194,394,996		194,394,996	0.01540	2,993,683
5	315	83,448,693		83,448,693	0.02430	2,027,803
6	Tot - Steam	792,040,216	(3,423,000)	788,617,216	0.01885	14,929,589
7						
8	341	38,255,922		38,255,922	0.00770	294,571
9	342	17,647,714		17,647,714	0.02580	455,311
10	343	212,348,035	(142,147,612)	70,200,423	0.03260	2,288,534
11	344	32,411,015		32,411,015	0.01010	327,351
12	345	34,684,516		34,684,516	0.02510	870,581
13	Tot - Gas Turb	335,347,202	(142,147,612)	193,199,590	0.01263	4,236,348
14						
15	Tot - Prod	1,127,387,418	(145,570,612)	981,816,806		19,165,937
16						
17	3501	3,033,447		3,033,447	-	-
18	352	41,371,948	(2,003,490)	39,368,458	0.01600	629,895
19	353	316,099,319	(352,190)	315,747,129	0.01860	5,872,897
20	354	15,336,208		15,336,208	0.01480	226,976
21	355	377,095,780		377,095,780	0.03240	12,217,903
22	356	184,909,083	(141,971)	184,767,112	0.03270	6,041,885
23	357	60,113,518		60,113,518	0.01590	955,805
24	358	66,198,742		66,198,742	0.01730	1,145,238
25	359	3,235,054		3,235,054	0.01490	48,202
26	Tot - Transm	1,067,393,099	(2,497,651)	1,064,895,448	0.02543	27,138,801
27						
28	3601	2,599,051		2,599,051	0.02340	60,818
29	361	26,265,151		26,265,151	0.01080	283,664
30	362	273,453,197		273,453,197	0.02020	5,523,755
31	363	2,957,666		2,957,666	0.03740	110,617
32	364	245,168,525	(24,665,897)	220,502,628	0.03390	7,475,039
33	365	105,897,935		105,897,935	0.04190	4,437,123
34	366	270,101,616		270,101,616	0.02190	5,915,225
35	367	405,492,451		405,492,451	0.04980	20,193,524
36	368	220,837,260		220,837,260	0.05200	11,483,538
37	369.1	59,534,914		59,534,914	0.05250	3,125,583
38	369.2	174,898,002		174,898,002	0.04070	7,118,349
39	370	40,383,030		40,383,030	0.02660	1,074,189
40	Tot - Distr	1,827,588,798	(24,665,897)	1,802,922,901	0.03655	66,801,423
41						
42	Tot - T & D	2,894,981,897	(27,163,548)	2,867,818,349		93,940,224
43						
44	390	67,940,630		67,940,630	0.02450	1,664,545
45	Tot - General	67,940,630	-	67,940,630	0.02450	1,664,545
46						
47	Sub-Total	4,090,309,945	(172,734,160)	3,917,575,785		114,770,706
48						
49	3902 (King)	8,011,075		8,011,075	0.03010	241,114
50	3902 (CPP)	2,115,809		2,115,809	0.00417	8,814
51	3902 (Waterhouse)	1,517,450		1,517,450	0.00000	-
52	3902 (Hon CI)	523,097		523,097	0.07824	40,929
53	3902 (ASB)	1,463,127		1,463,127	0.06133	89,738
54	3902 (Shinco)	939,475		939,475	0.00000	-
55	3902 (PPP)	372,940		372,940	0.11111	41,438
	3902 (Pauahi)	50,376		50,376	0.33333	16,792
56	3902 (Tenant Allowance)	14,131,757	(14,131,757)	-	-	-
57	Tot - LH Impr	29,125,106	(14,131,757)	14,993,349		438,824
58						
59	392	59,063,238		59,063,238	0.06130	3,620,576
60						
61	Utility Total Depreciation	4,178,498,289	(186,865,917)	3,991,632,372	0.02844	118,830,107

Line No.	FERC Account	Recorded Depreciable/Amort. Balance (Footnote 3)	Adjustments (Footnote 1)	Adjusted Depreciable/Amort. Balance	PUC Approved Accrual Rate	Annual Accrual
	(a)	(b)	(c)	(d)	(e)	(f)
61	Amortizable Plant					
62	316	26,291,658		26,291,658	0.05000	1,314,583
63	Tot - Steam	26,291,658	-	26,291,658	0.05000	1,314,583
64						
65	346	20,326,815		20,326,815	0.05000	1,016,341
66	Tot - Gas Turb	20,326,815	-	20,326,815	0.05000	1,016,341
67						
68	Tot - Prod	46,618,473	-	46,618,473	0.05000	2,330,924
69						
70	3911	30,764,654	(14,146)	30,750,508	0.20000	6,150,102
71	3912	3,172,052		3,172,052	0.10000	317,205
72	3913	16,599,312		16,599,312	0.06670	1,107,174
73	393	1,478,752		1,478,752	0.04000	59,150
74	394	39,001,211		39,001,211	0.04000	1,560,048
75	395	879,317		879,317	0.06670	58,650
76	396	4,479		4,479	0.05560	249
77	397	130,589,670	(240,250)	130,349,420	0.06670	8,694,306
78	398	8,483,472		8,483,472	0.06670	565,848
79	Tot - General	230,972,919	(254,396)	230,718,523	0.08015	18,512,733
80						
81						
82						
83	Utility Total Amortization	277,591,392	(254,396)	277,336,996	0.07509	\$ 20,843,656
84						
85	TOTAL RAM DEPRECIATION / AMORTIZATION				Line 61 + Line 83	\$ 139,673,763
86	LESS: Vehicle Depreciation (A/C 392 above)				Line 59	\$ (3,620,576)
87	LESS: ADIT Excess Amortization				Schedule D5	(12,709,045)
88	LESS: Depreciation & Amortization in Current Revenues				Footnote 2	\$ (120,665,585)
89						
90	RAM Adjustment for Depreciation & Amortization					\$ 2,678,556
91	RAM Adjustment for CIAC Amortization				Note 5	\$ -
92	Total RAM Adjustment for Depreciation & Amortization					\$ 2,678,556
93	Times: Factor for Revenue Taxes				Schedule C Line 5	1.0975
94						
95	RAM DEPRECIATION & AMORTIZATION					\$ 2,939,716

To Sch A1

Footnotes:

1	Amounts are recorded (in \$000s), except for the following adjustments (see HECO-WP-D2-001):	Plant in Service From D1	
	ERP EAM Hardware	HECO-WP-D2-001	\$ (14)
	Koolau-Wailupe #1 Str 30 P9 Replace		(142)
	MPIR - Schofield Generating Station		(144,744)
	Joint Pole Capital Transfer Price		(24,666)
	Tenant Improvement Allowance (see Footnote 4)		(14,132)
	ARO Assets included in Depreciable Plant	GL# 10100001	(3,423)
	Total		\$ (187,121)
2	<u>Depreciation & Amortization in Current Revenues*:</u>	<u>Depr/Amort Expense</u>	
	Total Depreciation	\$ 139,686,000	
	LESS: Vehicle Depreciation (A/C 392)	(3,590,000)	
	LESS: Amortization of Excess ADIT	(7,121,415)	
	Total Depreciation in Current Revenues	\$ 128,974,585	
	ADD: CIAC Amortization	Note 5	(8,309,000)
	Total Depreciation & Amortization in Current Revenues		120,665,585

Linked from Sch D1

See Decision and Order No. 35768, Docket No. 2018-0075 filed October 16, 2018

To Line 88

*See Order No. 35335, in Docket No. 2016-0328, For Approval of General Rate Case and Revised Schedules/Rules, filed on March 9, 2018, in which the Commission accepted the Parties' Stipulated Settlement on Remaining Issues filed March 5, 2018, HECO T-25, Attachment 1, Page 1 and the Revised Attachment to the Parties Stipulated Settlement on Remaining Issues, filed March 8, 2018, HECO T-26, Attachment 2A, Page 1. Approved in Final Decision and Order No. 35545, filed June 22, 2018.

3 Per Accounting records, does not include land amounting to \$40,449,426 as of December 31, 2018.

4 Amount represents tenant improvement allowances paid by the lessors and excluded from the RAM calculation.

5 Effective October 2018, the Company reclassified CIAC to Plant in Service or CWIP consistent with FERC guidelines. Amounts shown in this Schedule represent balances net of CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF CHANGE IN DEFERRED INCOME TAXES

Line No.	NARUC Account (a)	Reference (b)	Projected ADIT Change (c)
1	State Tax Depreciation	Schedule F1	20,239,341
2	Amortization of Excess Deferrals	Schedule D5	10,380,860
3	Subtotal		30,620,201
4	Effective Federal Tax Rate	HECO-WP-F-001	19.7368%
5	Federal Deferred Tax on State Tax Depreciation		6,043,461
6	Add back State Tax Depreciation	Line 1	(20,239,341)
7	Federal Tax Depreciation	Schedule F1	20,239,341
8	Federal/State Difference		-
9	Tax Rate on Federal Only Adjustment	HECO-WP-F-001	21%
10	Federal Deferred Tax Adjustment		-
11	Total Federal Deferred Taxes Before Proration		6,043,461
12	Proration Adjustment	HECO-WP-F1-003	(659,544)
13	Total Federal Deferred Taxes After Proration		5,383,917
STATE DEFERRED TAXES			
14	State Tax Depreciation	Line 1	20,239,341
15	Amortization of Excess Deferrals	Line 2	10,380,860
16	Subtotal		30,620,201
17	Effective State Tax Rate	HECO-WP-F-001	6.0150%
18	Total State Deferred Taxes		1,841,817
19	TOTAL FED AND STATE DEFERRED TAXES		7,225,733
			To Sch D1

NOTE 1: In accordance with the tariff, the change in ADIT in the RAM year is based on the temporary book/tax depreciation differences associated with the RAM year plant additions (major capital projects and baseline plant additions). It does not include any estimated ADIT related to the repairs deduction or CIAC on RAM year plant additions.

NOTE 2: The change in ADIT includes the tax effect of the amortization of the regulatory liability associated with the excess deferred taxes resulting from the tax rate change from the Tax Cuts and Jobs Act of 2017. This is consistent with the inclusion of the regulatory liability and the related amortization in rate base RAM.

NOTE 3: The amortization of excess deferrals was adjusted from Schedule D5 to properly reflect the ending balance of ADIT at 12/31/2019. The amortization of the Plant 282 excess deferred amortization begins on 6/1/2019; the 12/31/2019 balance therefore reflects 7/12ths of this component in the ending ADIT balance.

<u>Calculation of Excess Deferred Amortization</u>			
Plant 282 - protected	5,587,643	Schedule D5	
Proration Percentage (7 months/12 months)	58.33%		
			3,259,458
Plant 283 - unprotected			2,337,723
Nonplant 283 - unprotected			4,783,679
Amortization of Excess Deferrals, as Adjusted			10,380,860
			Schedule D1

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TAX DEPRECIATION

Line No.	<u>HECO-WP-F1-002</u>							
	LIFE	PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL	
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	
1	Computers/PV	5	6,092		6,092	2.54%	2.54%	
2	Communication	20	5,920		5,920	2.47%	2.47%	
3	Off/Furn/Tools	7	5,022		5,022	2.09%	2.09%	
4	Distribution	20	130,472		130,472	54.38%	54.38%	
5	Land	-	816		816	0.34%	0.34%	
6	Non-Steam Production	15	3,713		3,713	1.55%	1.55%	
7	Steam Production	20	22,905		22,905	9.55%	9.55%	
8	Structural	39	3,265		3,265	1.36%	1.36%	
9	Transmission	20	21,834		21,834	9.10%	9.10%	
10	Transmission	15	34,674		34,674	14.45%	14.45%	
11	Vehicles	-	5,209		5,209	2.17%	2.17%	
12	TOTAL		<u>239,922</u>	<u>-</u>	<u>239,922</u>	<u>100.00%</u>	<u>0.00%</u>	<u>100.00%</u>

From Sch D2

5 yr	2.54%	2.54%	
7 yr	2.09%	2.09%	
15 yr	16.00%	16.00%	
20 yr	75.50%	75.50%	
39 yr	1.36%	1.36%	
Land	0.34%	0.34%	
Vehicles	2.17%	2.17%	
Total	<u>100.00%</u>	<u>0.00%</u>	<u>100.00%</u>

	FED YR 1 DEPR RATE	FED YR 1 TAX DEPR	STATE YR 1 DEPR RATE	STATE YR 1 TAX DEPR
BASIS				

Vintage 2019 - Regular Depreciation

Basis subject to regular depreciation

5 yr	2.54%	2.54%	5 yr	5,211,519	20.00%	1,042,304	20.00%	1,042,304
7 yr	2.09%	2.09%	7 yr	4,296,167	14.29%	613,922	14.29%	613,922
15 yr	16.00%	16.00%	15 yr	32,838,900	5.00%	1,641,945	5.00%	1,641,945
20 yr	75.50%	75.50%	20 yr	154,952,011	3.75%	5,810,700	3.75%	5,810,700
39 yr	1.36%	1.36%	39 yr	2,793,107	1.177%	32,875	1.177%	32,875
	<u>97.49%</u>	<u>0.00%</u>						

TOTAL ASSETS 97.49% 0.00% 97.49%

Net Depreciable Baseline Plant Adds 200,091,704 9,141,746 9,141,746

Major Capital Projects from Schedule F2 69,045,439 11,097,595 11,097,595
Total Depreciable Plant Adds 269,137,143 20,239,341 20,239,341

Fed Tax Depreciation to Schedule F *St. Tax Depreciation to Schedule F*

Reconciliation from Baseline Plant Adds to Net Depreciable Plant Adds :

Baseline Capital Projects Plant Adds (rounded)	239,922,000	Schedule D2
Less: Repairs deduction HECO-WP-F1-001 pg 1	<u>34,676,093</u>	<<supported by Special Study each year.
Net plant add basis	205,245,907	
Less: Land and Vehicles (2.51% x 205,245,907)	<u>5,154,203</u>	
	<u>200,091,704</u>	

NOTE (1) The Tax Cut and Jobs Act removed bonus depreciation for public utility property.

NOTE (2) The numbers in columns b, c, d are rounded to the nearest thousand.

NOTE (3) Totals may not add exactly due to rounding.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
TAX DEPRECIATION ON MAJOR CAPITAL PROJECTS ADDITIONS

Line No.	Description	PUC Docket	Estimated In Service Date	Amount		
	(a)	(b)	(c)	(d)	(e)	
1	Assumed Value of 2019 Major Capital Projects Plant Items			\$ 69,045,439	Schedule D3	
2	Assumed Value of 2019 Major Capital Projects - CIAC nontaxable			\$ -	Schedule D3	
3	Assumed Value of 2019 Major Capital Projects - Total			<u>\$ 69,045,439</u>		
	Tax Classification of		FED	FED	STATE	
	Major Capital Project Additions	Tax Basis	YR 1 DEPR RATE	YR 1 TAX DEPR	YR 1 DEPR RATE	STATE YR 1 TAX DEPR
4	5 yr	52,128,000	20.00%	10,425,600	20.00%	10,425,600
5	7 yr	-	14.29%	-	14.29%	-
6	15 yr	3,007,232	5.00%	150,362	5.00%	150,362
7	20 yr	13,910,207	3.75%	521,633	3.75%	521,633
8	39 yr	-				
9	Land	-				
10	Vehicles	-				
11	Total	<u>\$ 69,045,439</u>		<u>\$ 11,097,595</u>		<u>\$ 11,097,595</u>
		To Sch F1		To Sch F1		To Sch F1

* Adjustment only for non-taxable CIAC.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
CIAC SUMMARY

Line No.	Description	Reference	Unamortized CIAC	CIAC Amortization
	(a)	(b)	(c)	(d)

Schedule not applicable.

See HECO-WP-D1-001 for further discussion on the Company's treatment of CIAC within the Annual Decoupling filing.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
EARNINGS SHARING CALCULATIONS

All Amounts \$000 (Except %)

Line No.	Description	Reference	Ratemaking Basis Return on Equity		
			Operating Income	Rate Base	Rate of Return
	(a)	(b)	(c)	(d)	(e)
1	Reported Operating Income before ratemaking adjustment	HECO-WP-H-009 & HECO-WP-H-001	\$ 134,181	\$ 2,109,963	
1a	Settlement of prior Joint Pole Accounts Receivable	Note 3	697		
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	4,073		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	1,052		
2c	Amortization of investment income differential	HECO-WP-H-003	185		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(12,461)		
2e	Special Medical Needs Program discount (net of tax)	HECO-WP-H-005	102		
2f	Performance Incentive Mechanism (net of tax)	HECO-WP-H-006	360		
2g	Final Test Year Refund (net of tax)	HECO-WP-H-007	32		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 128,221	\$ 2,109,963	
4	<u>Ratemaking Capitalization</u>				
		Balances	Ratios	Cost Rate	Weighted Cost
5	Short-Term Debt (12 mo. Avg)	\$ 88,868	3.68%	2.54%	0.09%
6	Long-Term Debt (Simple Avg)	\$ 939,810	38.92%	5.03%	1.96%
7	Hybrid Securities (Simple Avg)	\$ 28,758	1.19%	7.16%	0.09%
8	Preferred Stock (Simple Avg)	\$ 21,192	0.88%	5.36%	0.05%
9	Common Equity (Simple Avg)	\$ 1,335,921	55.33%	9.50%	5.26%
10	Total Capitalization	HECO-WP-H-004	\$ 2,414,549	100.00%	7.45%
11	Line 3 Rate Base Amount			\$ 2,109,963	
12	Weighted Cost of Debt (Sum Lines 5-7)			2.14%	
13	Synchronized Interest Expense			\$ 45,153	
	Income Tax Factor (Note 1)			1.346801347	
13a	Synchronized Interest Expense, net of tax			\$ 33,526	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 94,695
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				1,055
18	Income Available for Common Stock				\$ 93,640
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				1,167,400
20	Return on Equity for Decoupling Earnings Sharing (Line 18/Line 19)				8.02%
21	<u>Earnings Sharing Revenue Credits:</u>	Basis Points			
22	Achieved ROE (basis points)	802			
23	Authorized Return (basis points)	950			
24	ROE for sharing (basis points)	-			
25	Sharing Grid per RAM Provision	First 100 bp	Next 200 bp	All over 300 bp	Ratepayer Total
26	Distribution of Excess ROE (basis points)	0	0	0	
27	Ratepayer Share of Excess Earnings	25%	50%	90%	
28	Ratepayer Earnings Share - Basis Points	-	-	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 173
30	Earnings Sharing Revenue Credits (thousands)				0

To Sch A Line 5

Footnotes:

- 1 Composite Federal & State Income Tax Rate 25.75%
Income Tax Factor (1 / 1-tax rate) 1.346801347
- 2 Ratemaking Equity Investment (line 19) \$ 1,167,400
Basis Point = 1/100 of a percent 0.01%
Earnings Required per Basis Point (thousands) \$ 116.74
Times: Income Tax Conversion Factor 1.346801347
Pretax Income Required per Basis Point (thousands) \$ 157
Times: Revenue Tax Conversion Factor 1.0975
Revenue Requirement per Basis Point (thousands) \$ 173
- 3 Per Docket No. 2018-0075, Decision and Order No. 35768, the Commission approved the Asset Transfer, Pole Licensing and Amended Joint Pole agreements. The settlement recovery of prior joint pole accounts receivables previously written-off was recorded to interest income (and excluded from Operating Income) in 2018. Upon further consideration, the recovery should have been recorded to Uncollectible Accounts (904) and included in Operating Income in 2018. (Taxes on the Joint Pole interest income was already included in Operating Income as of December 31, 2018.) Accordingly, an upward adjustment of \$696,636 is being made to Operating Income in the earnings sharing mechanism calculation.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS

Line No.	Description (a)	Reference (b)	Amount \$000 (c)
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This Schedule has not been developed yet and will be developed only when/as needed.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF RAM CAP

Line No.	Description (a)	Reference (b)	Amount \$000 (c)
1	Last Rate Order Target Annual Revenues	Schedule B1	\$ 599,974
2	2018 RAM Cap Increase excluding Exceptional & Other Matters (net of Revenue Tax)	Note 2	<u>12,599</u>
3	2018 Target Revenues Subject to Escalation	Line 1 + Line 2	612,573
4	2019 GDP Price Index	HECO-WP-C-002	<u>2.10%</u>
5	2019 RAM Cap Increase Excluding Exceptional & Other Matters		12,864
6	RAM Cap for 2018 RAM Revenue Adjustment	Line 2	<u>12,599</u>
7	RAM Cap for 2019 RAM Revenue Adjustment	Line 5 + Line 6	25,463
8	Revenue Tax Factor (1/(1-8.885%))		<u>1.0975</u>
9	RAM Cap for 2019 RAM Revenue Adjustment	Line 7 x Line 8	<u>\$ 27,946</u> To Sch A1

Note 1 Target Revenues:

See Decision and Order No. 32735, filed March 31, 2015, paragraph 107, page 94:

"The RAM Cap shall be based on the Target Revenues determined in accordance with the RBA and RAM tariffs as provided below ("Basis"), times the cumulative annually compounded increase(s) in GDPPI for intervening years, adjusted to include applicable revenue taxes."

The RAM basis for the calculation of the RAM Revenue Adjustment cap shall be the target revenues determined in accordance with the RBA tariff based on the results of the Company's most recent interim or final rate case decision.

Note 2 See Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, Schedule J for 2018 RAM Revenue Adjustment Cap of \$13,828 (\$12,599 net of revenue tax).

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
EXCEPTIONAL & OTHER MATTERS

<u>Line No.</u>	<u>Description</u> (a)	<u>Reference</u> (b)	<u>Amount \$000</u> (c)
1	None		-
2	2019 Revenue Adjustment for Exceptional & Other Matters		\$ - <u>To Sch A1</u>

Note 1 Exceptional and Other Matters:
See Order No. 32735, filed March 31, 2015, paragraph 107, page 94 - 95:
"The Basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap."

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
MAJOR PROJECT INTERIM RECOVERY

<u>Line No.</u>	<u>Description</u>	<u>Reference</u>	<u>Amount \$000</u>
	(a)	(b)	(c)
1	Schofield Generating Station	Schedule L1	\$ 18,051
2	Docket No. 2017-0213		
3	Revenue Tax Factor (1/(1-8.885%))		<u>1.0975</u>
4	Major Project Interim Recovery Total		<u>\$ 19,811</u>
			To Sch B1, line 15

Note: Per Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Recovery Mechanism, filed February 7, 2019, Transmittal No. 19-01 effective January 1, 2019. See Schedule L1.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY
MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2018 (c)	2019 Activity (d)	Ending Balance as of 12/31/19 (e)	Average Balance (f)=((c)+(e))/2	MPIR (g)
Return on Investment - Schofield Generating Station							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	141,570	-	141,570	141,570	
2	Accum Depreciation	HECO-WP-L-001	-	(4,586)	(4,586)	(2,293)	
3	Net Cost of Plant in Service		141,570	(4,586)	136,984	139,277	
4	Fuel Inventory - Avoided	Note 3	(1,534)	-	(1,534)	(1,534)	
5	M&S Inventory	Note 3	100	-	100	100	
6	Total Additions		(1,434)	-	(1,434)	(1,434)	
7	CIAC	Not Applicable	-	-	-	-	
8	ADIT	HECO-WP-L-002	(8,653)	(1,540)	(10,193)	(9,423)	
9	State ITC	HECO-WP-L-002	(4,124)	412	(3,712)	(3,918)	
10	Total Deductions		(12,777)	(1,128)	(13,905)	(13,341)	
11	Total Rate Base		\$ 127,359	\$ (5,713)	\$ 121,646	124,502	
12	Average Rate Base					\$ 124,502	
13	Rate of Return (grossed-up for income taxes, before revenue ta	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 11,790
15	Depreciation Expense (Note 1)	HECO-WP-L-001				4,586	
16	Operating & Maintenance Expense	Note 2				2,087	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				(412)	
18	Lease Rent Expense	Not Applicable				-	
19	Other Expense	Not Applicable				-	
20	Total Expenses						\$ 6,260
21	Total Major Project Interim Recovery						\$ 18,051
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						\$ 19,810.8

To Sch B & B1

	Reconciliation to Schedule B1 (Info Only)		
	Jul - Sep 18	Oct - Dec 18	2019
Annualized Revenue for MPIR	\$ 6,600	\$ 8,561	\$ 19,811
Rev Tax Adj	\$ (586)	\$ (761)	\$ (1,760)
Prorated MPIR for Year 1 excl Rev Tax	\$ 6,014	\$ 7,800	\$ 18,051
Incremental	\$ 6,014	\$ 1,787	\$ 10,250
	Note 5	Note 6	

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update and approved in Order No. 35953, filed December 14, 2018.

Note 3: Decision and Order No. 35556 dated June 27, 2018 in Docket No. 2017-0213.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Note 5: MPIR Revenues effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213.

Note 6: MPIR Revenues effective October 1, 2018 filed December 21, 2018 in Docket No. 2017-0213.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
2018 PERFORMANCE INCENTIVE MECHANISMS

	2018 Annual Total *	2018 Target **	Variance (c)=(a)-(b)	Deadband ** (d)	Maximum \$ ** (e)	(Penalty) / Reward Amount 1.0 * (((b - a) / d) * e + e)
<u>Service Quality:</u>						
Normalized T&D SAIFI						
Without Exclusion	1.253	1.112	0.141	0.089	\$ 2,244,112	\$ (1,306,645)
With Exclusion	1.238	1.112	0.126	0.089	\$ 2,244,112	\$ (929,827)
Normalized T&D SAIDI						
Without Exclusion	111.94	99.10	12.84	9.033	2,244,112	\$ (946,492)
With Exclusion	106.41	99.10	7.31	9.033	2,244,112	\$ -
Call Center Performance (Excludes Blocked Calls)						
	83.97%	79.66%	4.31%	3.00%	\$ 897,645	\$ 391,972
<u>Phase 1 Renewable Energy RFP PIM</u>						
First Allocation ***						\$ 591,854
					Total Without Exclusion	\$ (1,269,311)
						To Sch A
					Total With Exclusion	\$ 53,998

Notes:

Exclusion represents 25kV Proactive Work, filed in Transmittal No. 18-05, Hawaiian Electric's Letter Request for Exclusion of 25kV Splice Replacement Work from Performance Incentive Mechanism Provision's SAIDI and SAIFI 2018 Calculation, filed December 18, 2018.

Recalculated 2019 PIMS to include 25kV Proactive Work.

* See HECO-WP-M-002

** See HECO-WP-M-001 (revised 05-21-19)

*** See HECO-WP-M-005

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
ON-BILL FINANCING COST RECOVERY

Note 1				Cost Recovery (excluding Rev Tax)			Cost Recovery (including Rev Tax)		
Line	Company	Customer Count a	Allocation b = a/total a	Total Recovery c = \$2,330,408 allowed x b	2019 Recovery To Sch A	2020 Recovery	Total Recovery with Rev Tax	2019 Recovery with Rev Tax To Sch B1	2020 Recovery with Rev Tax
1	HE	305,456	66%	1,537,150	768,575	768,575	1,687,022	843,511	843,511
2	HL	85,758	19%	431,561	215,780	215,781	473,638	236,819	236,819
3	ME	71,875	16%	361,697	180,849	180,848	396,963	198,481	198,482
4	Total	463,089	100%	2,330,408	1,165,204	1,165,204	2,557,623	1,278,811	1,278,812

Note 1: Statistical Report as of December 31, 2018.

Note 2: See Decision and Order No. 36212, Docket No. 2017-0102, filed March 11, 2019, pages 18-19. The Commission allowed the Companies to recover Program implementation costs over a period of two years, commencing with the 2019 RBA Rate Adjustment which will, if there are no major issues with the standard RBA Review Transmittal process, become effective on June 1, 2019.

Hawaiian Electric Company, Inc.
Sales Forecast for June 2019 to May 2020
in GWh

	2019							2020					Total
	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	
R	126.7	141.7	151.2	146.2	143.0	131.9	130.4	132.1	118.6	120.1	116.7	121.7	1,580.3
G	24.2	25.6	26.5	25.3	26.0	23.9	24.1	22.6	22.8	23.9	23.7	24.6	293.2
J	148.0	159.0	160.8	157.3	158.4	145.6	139.3	139.4	140.8	141.7	144.9	152.0	1,787.2
P	233.6	250.5	261.0	246.4	249.4	230.6	225.1	219.6	214.0	223.5	225.2	232.1	2,811.0
F	<u>1.8</u>	<u>1.9</u>	<u>1.7</u>	<u>1.6</u>	<u>1.6</u>	<u>1.4</u>	<u>1.4</u>	<u>1.3</u>	<u>1.3</u>	<u>1.5</u>	<u>1.3</u>	<u>1.4</u>	<u>18.2</u>
Total	534.3	578.7	601.2	576.8	578.4	533.4	520.3	515.0	497.5	510.7	511.8	531.8	6,489.9

Source: Hawaiian Electric Company, Inc. February 2019 Sales Forecast Update.

Hawaiian Electric Company, Inc.
Adjustment For Prior Year RBA Accrual
Recovery of 12/31/16 RBA Balance

		2018					
		January	February	March	April	May	Total
Billed RBA Revenues	Note 1	11,581,297	10,784,945	5,161,437	3,718,306	3,653,460	34,899,445
Net Unbilled Revenues	Note 1	(834)	(3,556,154)	(1,491,331)	45,447	121,360	(4,881,511)
Total Billed + Unbilled		11,580,464	7,228,791	3,670,106	3,763,752	3,774,820	30,017,934
x % Share for RBA	Note 2 & 3	31.9352%	63.5519%	100.0327%	100.0327%	100.0327%	
RBA Revenues (Recovery of 12/31/16 RBA balance)		3,698,239	4,594,033	3,671,308	3,764,985	3,776,056	19,504,621
		← Schedule B2 →					
Less: Revenue Taxes	0.08885	(328,589)	(408,180)	(326,196)	(334,519)	(335,503)	(1,732,987)
RBA Revenues (Recovery of 12/31/16 RBA balance) net of Revenue Taxes		3,369,650	4,185,853	3,345,112	3,430,466	3,440,553	17,771,634
		← Schedule B →					

* Differences are due to rounding

Note 1: RBA rate adjustment revenues per the Billed reports and Unbilled reports include both RBA and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2: RBA Rate Adjustment Allocation for January 1, 2018 to February 15, 2018 is per Transmittal No. 17-02 (Decoupling) - RBA Rate Adjustment (filed March 31, 2017), Schedule A, Note (1). RBA Rate Adjustment Allocation for February 16, 2018 to May 31, 2018 is per Hawaiian Electric Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229, and Order No. 35220, Exhibit 7, filed on January 19, 2018, which was approved by Order No. 35280, issued on February 9, 2018. See Note 3 below for prorated % share for RBA for February 2018.

Note 3: Prorated % Share for RBA by day resulting from 2017 Test Year Interim Rates, effective February 16, 2018, per Docket No. 2016-0328 - Hawaiian Electric 2017 Test Year Rate Case Hawaiian Electric Revised Schedules Resulting from Interim Decision and Order No. 35100 as modified by Order No. 35229 and Order No. 35220, Exhibit 7, filed on January 19, 2018. As approved by the Commission in Order No. 35280, Approving Revised Schedules of Operations and Tariff Sheets, filed on February 9, 2018.

	RBA %	No of Days	Prorated RBA %
Feb 1-Feb 15	31.9352%	53.6%	17.1081%
Feb 16-Feb 28	100.0327%	46.4%	46.4438%
			<u>63.5519%</u>

Hawaiian Electric Company, Inc.
Adjustment For Prior Year RBA Accrual
Recovery of 12/31/17 RBA Balance

		2018							
		June	July	August	September	October	November	December	Total
Billed RBA Revenues	Note 1	4,701,823	5,771,562	6,185,543	6,034,935	6,400,115	5,842,574	5,503,361	40,439,912
Net Unbilled Revenues	Note 1	990,752	364,534	81,590	(85,985)	(137,876)	(175,257)	(57,177)	980,581
Total Billed + Unbilled		5,692,575	6,136,096	6,267,133	5,948,950	6,262,238	5,667,317	5,446,183	41,420,493
x % Share for RBA	Note 2	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	79.6227%	
RBA Revenues (Recovery of 12/31/17 RBA balance)		4,532,582	4,885,725	4,990,061	4,736,715	4,986,163	4,512,471	4,336,398	32,980,115
		← Schedule B2 →							
Less: Revenue Taxes	0.08885	(402,720)	(434,097)	(443,367)	(420,857)	(443,021)	(400,933)	(385,289)	(2,930,284)
RBA Revenues (Recovery of 12/31/17 RBA balance) net of Revenue Taxes		4,129,862	4,451,628	4,546,694	4,315,858	4,543,142	4,111,538	3,951,109	30,049,831
		← Schedule B →							

* Differences are due to rounding

Note 1: RBA rate adjustment revenues per the Billed reports and Unbilled reports include both RBA and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2: RBA Rate Adjustment Allocation for June 1, 2018 - May 31, 2019 is per Transmittal No. 18-01 (Decoupling) - RBA Rate Adjustment (Filed May, 29, 2018), Schedule A , Note (1).

Hawaiian Electric Company, Inc.
Bargaining Unit Wage Increase per Collective Bargaining Agreements

Wage Increases: (non-compounded)	1/1/2014	3.00%	(Note 1)
	1/1/2015	3.00%	(Note 1)
	1/1/2016	3.25%	(Note 1)
	1/1/2017	3.00%	(Note 1)
	1/1/2018	3.00%	(Note 1)
	1/1/2019	3.00%	(Note 2)
	1/1/2020	3.00%	(Note 2)
	1/1/2021	3.00%	(Note 2)

<u>Increase effective</u>			<u>Increase Amount</u>	<u>Wage Rate With Increase</u>	<u>Labor Cost Escalation Rate</u>	
			(a)	(b) or prev (b) + (a)	(c) (b) / prev (b) -1	
1.00	3.00%	1/1/2014	0.0300	1.0300		
	3.00%	1/1/2015	0.0300	1.0600	0.0291	2.91%
	3.25%	1/1/2016	0.0325	1.0925	0.0307	3.07%
	3.00%	1/1/2017	0.0300	1.1225	0.0275	2.75%
	3.00%	1/1/2018	0.0300	1.1525	0.0267	2.67%
1.00	3.00%	1/1/2019	0.0300	1.0300		
	3.00%	1/1/2020	0.0300	1.0600	0.0291	2.91%
	3.00%	1/1/2021	0.0300	1.0900	0.0283	2.83%

Note 1: Agreement ratified by the IBEW, Local 1260 on November 1, 2012, reflects a 3.00% increase effective 1/1/2014, 1/1/2015, 1/1/2017 and 1/1/2018 and a 3.25% increase effective 1/1/2016, based on 1/1/2013 rates.

Note 2: Agreement ratified by the IBEW, Local 1260 on July 31, 2018, reflects a 3.00% increase effective 1/1/2019, 1/1/2020 and 1/1/2021 based on 1/1/2018 rates. See also HECO-WP-C-003.

Blue Chip Economic Indicators®

Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead
Vol. 44, No. 2, February 10, 2019

2019 Real GDP Forecast Drops to 2.5%

FEBRUARY 2019 Forecast For 2019 SOURCE:	Percent Change 2019 From 2018 (Full Year-Over-Prior Year)									Average For 2019			Total Units-2019		2019	
	1 Real GDP (Chained (2012\$))	2 GDP Price Index	3 Nominal GDP (Cur.\$)	4 Consumer Price Index	5 Indust. Prod. (Total)	6 Dis. Pers. Income (2012\$)	7 Personal Cons. Exp. (2012\$)	8 Non-Res. Fix. Inv. (2012\$)	9 Corp. Profits (Cur.\$)	10 Treas. Bills 3-mo.	11 Treas. Notes 10-Year	12 Unempl. Rate (Civ.)	13 Housing Starts (Mil.)	14 Auto&Light Truck Sales (Mil.)	15 Net Exports (2012\$)	
Action Economics	2.9 H	2.0	5.0	1.9	3.5	2.8	3.1 H	4.9	7.5	2.7	3.0	3.7	1.28	17.1	-967.9	
Amherst Pierpont Securities	2.9 H	2.4	5.4 H	2.5 H	3.5	2.8	3.1 H	4.8	7.5	2.6	3.2	3.6	1.29	16.9	-960.0	
MUFG Union Bank	2.9 H	2.4	5.3	1.8	3.2	na	2.9	3.8	5.5	2.4	3.0	3.7	1.29	17.2 H	-960.0	
Barclays, US*	2.8	1.9	4.8	1.4	2.8	na	2.9	5.1	na	2.4	na	3.7	na	na	-1024.5	
RDQ Economics	2.8	2.0	4.9	2.1	3.7 H	2.5	2.9	5.6	8.5 H	2.7	3.1	3.5	1.30	17.2 H	-1021.6	
SOM Economics, Inc.	2.8	2.0	4.8	2.0	3.1	2.5	2.5	4.2	5.0	2.6	2.9	3.6	1.25	16.8	-938.0	
U.S. Chamber of Commerce	2.8	2.1	4.9	2.1	3.2	2.6	2.9	5.2	4.5	2.6	2.9	3.9	1.30	na	-932.7	
Credit Suisse	2.7	2.0	4.7	1.8	na	na	2.9	3.0	na	na	na	3.7	na	na	-966.2	
Moody's Analytics, US	2.7	2.3	5.1	2.1	2.9	2.2	2.8	5.3	6.1	2.6	3.1	3.6	1.38 H	17.0	-1080.7 L	
NatWest Markets	2.7	2.0	4.8	1.8	2.4	2.5	3.0	5.8 H	5.0	2.7	2.8	3.5	1.20	16.5	-980.0	
PNC Financial Services Group	2.7	1.7	4.4	1.8	2.9	1.3 L	2.7	4.6	na	2.5	2.9	3.6	1.30	17.0	-1013.0	
RBC Capital Markets	2.7	2.1	4.8	1.7	na	na	2.9	5.2	na	na	3.1	3.6	1.28	17.0	-980.0	
The Conference Board, US*	2.7	na	4.8	2.1	na	2.5	2.8	4.4	6.2	2.5	2.8	3.7	1.24	17.2 H	-1020.3	
Comerica**	2.6	2.0	4.6	1.9	3.5	2.9	2.6	4.1	na	2.5	2.9	3.7	1.24	16.6	-942.4	
Georgia State University*	2.6	2.4	5.0	2.0	2.6	2.5	2.8	5.1	4.4	2.5	3.2	4.1	1.24	16.3	-1021.3	
High Frequency Economics	2.6	2.0	4.7	1.9	2.8	2.9	3.0	3.3	1.7	2.4	2.9	3.8	1.22	16.9	-953.1	
Naroff Economic Advisors*	2.6	2.1	4.8	2.0	2.6	2.3	2.6	2.9	4.3	2.8	3.2	3.7	1.30	16.7	-977.0	
Point72 Asset Management*	2.6	1.9	4.5	1.9	3.1	2.3	2.8	5.4	6.2	2.5	2.8	3.7	1.20	16.7	-1058.8	
Regions Financial Corporation	2.6	2.5 H	5.1	1.7	2.9	2.3	3.0	4.4	4.5	2.6	2.8	3.7	1.25	16.9	-954.4	
Turning Points (Micrometrics)	2.6	2.4	5.0	2.1	2.6	2.4	2.7	4.5	2.8	2.8	3.4 H	3.8	1.18 L	16.7	-985.0	
ACT Research	2.5	2.0	4.5	1.9	2.8	3.0	2.7	5.0	na	2.4	2.8	3.7	1.31	16.6	-1012.7	
Bank of America-Merrill Lynch, US**	2.5	2.0	4.6	1.6	2.7	na	2.6	3.4	na	2.4	2.8	3.7	1.29	16.6	-969.1	
Eaton Corporation	2.5	2.3	4.8	2.0	2.5	2.7	2.6	4.1	na	2.6	3.0	3.7	1.30	16.8	-1006.2	
Econoclast	2.5	2.0	4.5	2.0	2.8	2.2	2.8	3.5	5.2	2.4	2.8	3.8	1.25	16.3	-989.0	
Fannie Mae	2.5	2.3	4.8	2.0	2.5	2.4	2.6	3.9	1.5	2.5	2.7	3.7	1.26	16.7	-1020.9	
FedEx Corporation, US	2.5	2.1	4.5	1.9	2.7	2.5	2.6	4.6	3.9	2.6	3.0	3.6	1.27	16.8	-1008.0	
Ford Motor Company*	2.5	2.1	4.5	2.2	2.6	2.5	2.5	3.9	na	na	2.7	3.7	1.27	na	-1003.0	
General Motors Corporation, US	2.5	2.1	4.6	2.0	2.8	2.6	2.7	3.8	1.8	2.6	2.9	3.6	1.28	na	-857.3	
Inforum - Univ. of Maryland	2.5	2.1	4.7	2.0	2.7	2.4	2.6	4.3	4.5	2.7	3.0	3.7	1.27	16.7	-980.4	
Moody's Capital Markets, US*	2.5	1.9	4.5	1.6	3.5	2.6	2.8	3.8	4.3	2.4	2.8	3.6	1.28	16.9	-967.7	
National Assn. of Home Builders	2.5	2.3	4.5	2.0	1.7 L	2.6	2.6	4.0	na	2.7	3.0	3.6	1.27	16.8	-1020.0	
UCLA Business Forecasting Proj.*	2.5	2.2	4.7	2.2	2.5	2.5	2.6	4.3	4.0	2.5	3.0	3.6	1.31	16.6	-1035.0	
Wells Fargo, US	2.5	1.9	4.4	2.1	3.0	2.9	2.9	3.8	4.4	2.6	3.0	3.7	1.30	16.7	-1010.7	
AIG	2.4	2.3	4.7	2.0	2.5	2.7	2.5	3.8	4.8	2.4	2.8	3.5	1.27	16.7	-1009.2	
BMO Capital Markets*	2.4	2.1	4.5	2.0	3.3	2.1	2.7	3.3	5.9	2.5	2.8	3.6	1.24	16.4	-1009.0	
Daiwa Capital Markets America	2.4	2.0	4.5	1.9	2.5	2.2	2.9	3.6	5.0	2.4	2.8	3.8	1.19	16.7	-1012.0	
Goldman Sachs & Co.**	2.4	2.0	4.3	1.8	1.7 L	3.4 H	2.8	3.3	na	2.7	2.9	3.7	1.27	na	-975.5	
Macroeconomic Advisers by IHS Markit**	2.4	2.1	4.5	2.0	2.7	2.5	2.6	3.6	1.5	2.6	2.9	3.6	1.28	16.8	-1021.1	
MacroFin Analytics & Rutgers Bus School	2.4	2.2	4.6	2.0	3.1	2.3	2.5	3.8	4.7	2.6	2.9	3.9	1.26	16.8	-943.8	
Nomura Securities, US	2.4	2.3	4.7	1.7	2.7	2.1	2.9	2.7	na	na	2.7	3.4 L	1.25	16.9	-1044.3	
Northern Trust Company*	2.4	1.8	4.2	2.0	2.7	2.2	2.7	3.1	4.1	2.7	3.2	3.6	1.28	16.6	-989.9	
Oxford Economics, US	2.4	1.7	4.2	1.7	2.9	2.4	2.8	3.3	-2.4 L	2.5	2.8	3.7	1.29	17.0	-996.9	
Societe Generale	2.4	1.9	4.3	1.6	na	2.5	2.8	4.1	3.2	2.6	2.8	3.6	1.23	16.7	-1011.4	
UBS	2.4	2.0	4.5	1.5	2.4	3.2	2.4	3.0	na	2.5	na	3.7	1.33	na	-1010.9	
Economist Intelligence Unit, UK	2.3	1.8	4.1	2.2	2.6	2.0	2.3	3.0	na	2.6	2.7	4.1	1.26	16.2	-915.0	
Grant Thornton/Diane Swonk	2.3	2.1	4.4	1.9	2.6	2.5	2.6	3.4	1.2	2.4	2.8	3.7	1.24	16.6	-1010.4	
JP MorganChase, US	2.3	1.8	4.1	1.4	2.0	2.7	2.9	3.4	3.5	na	3.1	3.7	1.28	17.0	-1058.0	
MacroPolicy Perspectives	2.3	1.7	4.0	1.3 L	na	na	2.9	3.6	2.0	2.6	2.8	3.8	1.22	16.7	-1051.0	
Morgan Stanley, US**	2.3	2.0	4.3	1.8	3.4	2.6	2.5	2.6	na	2.9 H	2.5	3.5	1.28	na	-988.4	
S&P Global, US*	2.3	2.1	4.4	2.2	2.5	1.8	2.6	3.5	0.7	2.7	3.0	3.6	1.30	16.8	-1006.3	
Swiss Re	2.2	1.6 L	3.8 L	1.9	2.4	2.8	2.7	3.2	4.5	2.5	3.0	3.9	1.27	16.9	-1019.1	
BNP Paribas North America	2.1	na	na	1.4	2.4	2.6	2.5	3.0	na	2.8	3.4 H	3.6	na	na	-1008.0	
ACIMA Private Wealth, US	1.7 L	2.1	3.8 L	1.8	2.0	1.5	1.5 L	1.6 L	na	2.1 L	2.3 L	4.2 H	1.20	15.7 L	-832.5 H	
2019 Consensus: February Avg.	2.5	2.1	4.6	1.9	2.8	2.5	2.7	3.9	4.1	2.6	2.9	3.7	1.27	16.7	-991.1	
Top 10 Avg.	2.8	2.4	5.1	2.2	3.4	2.9	3.0	5.3	6.4	2.8	3.2	3.9	1.31	17.1	-922.9	
Bottom 10 Avg.	2.2	1.8	4.1	1.5	2.2	2.0	2.4	2.8	1.4	2.4	2.7	3.5	1.21	16.4	-1041.6	
January Avg.	2.6	2.1	4.7	1.9	2.7	2.5	2.7	4.1	4.6	2.6	3.0	3.6	1.27	16.8	-989.7	
Historical data	2015	2.9	1.0	4.0	0.1	-1.0	4.1	3.7	1.8	-2.9	0.1	2.1	5.3	1.11	17.4	-724.9
	2016	1.6	1.1	2.7	1.3	-1.9	1.7	2.7	0.5	-1.1	0.3	1.8	4.9	1.17	17.5	-786.2
	2017	2.2	1.9	4.2	2.1	1.6	2.6	2.5	5.3	3.2	0.9	2.3	4.4	1.20	17.1	-858.7
	2018	2.9 f	2.2 f	5.2 f	2.4	4.1	2.8 f	2.7 f	6.8 f	7.8 f	2.0	2.9	3.9	1.26 f	17.2	-908.4 f
<i>f=Dec 2018 Consensus Forecasts</i>																
Number of Forecasts Changed From a Month Ago:																
Down	18	17	26	18	10	8	14	19	12	25	26	6	9	13	14	
Same	28	24	14	17	13	26	31	20	16	16	15	23	30	23	21	
Up	3	6	8	14	22	11	4	9	3	2	2	20	6	1	13	
February Median	2.5	2.0	4.6	1.9	2.7	2.5	2.7	3.8	4.5	2.6	2.9	3.7	1.27	16.8	-1006.2	
February Diffusion Index	35 %	38 %	31 %	46 %	63 %	53 %	40 %	40 %	35 %	23 %	22 %	64 %	47 %	34 %	49 %	

*Former winner of annual Lawrence R. Klein Award for Blue Chip Forecast Accuracy. **Denotes two-time winner.

HAWAIIAN ELECTRIC COMPANY, INC.

EXHIBIT A 3.00% 3.00% 3.00%

<u>JOB CODE</u>	<u>JOB TITLE</u>	<u>1/1/2019</u>	<u>1/1/2020</u>	<u>1/1/2021</u>	
CL829	CASHIER				
	1st 3 mos.	24.19	24.89	25.59	
	Next 3 mos.	25.31	26.05	26.79	
	Next 3 mos.	26.60	27.37	28.14	
	Next 6 mos.	27.91	28.72	29.53	
	Next 6 mos.	29.26	30.11	30.96	
	Thereafter	30.71	31.60	32.49	
CLC05	SR INFORMATION STORAGE EQUIPMENT OPERATOR				
CL18	SYSTEM OPERATION CLERK				
CL20	TEST AND SUBSTATION CLERK				
CL22	DESKTOP PUBLISHING OPERATOR				
CL104	POWER PLANT CLERK				
CL257	MOTOR FLEET CLERK				
CL328	METER CLERK				
CL21	PRINT PRODUCTION OPERATOR				
CL684	COMPUTER SYSTEMS OPERATOR TRAINEE				
	1st 3 mos.	24.71	25.43	26.15	
	Next 3 mos.	25.95	26.71	27.47	
	Next 3 mos.	27.20	27.99	28.78	
	Next 6 mos.	28.55	29.38	30.21	
	Next 6 mos.	29.99	30.86	31.73	
	Thereafter	31.40	32.31	33.22	
TL180	CONDENSER CLEANER				
	1st 6 mos.	27.20	27.99	28.78	
	Next 6 mos.	28.55	29.38	30.21	
	Next 6 mos.	29.99	30.86	31.73	
	Thereafter	31.40	32.31	33.22	
CLA49	PROJECT CLERK				
CLA81	STANDARDS CLERK				
CL12	JOINT POLE AIDE				
CL13	PROJECT CLERK				
CL15	FIELD SERVICE CLERK				
	1st 3 mos.	25.31	26.05	26.79	
	Next 3 mos.	26.60	27.37	28.14	
	Next 3 mos.	27.91	28.72	29.53	
	Next 6 mos.	29.26	30.11	30.96	
	Next 6 mos.	30.71	31.60	32.49	
	Thereafter	32.27	33.21	34.15	
T335	TRUCK DRIVER A	1/1/2018	32.31	33.25	34.19
CL406	METER READER				
	1st 3 mos.	23.99	24.71	25.43	26.15
	Next 3 mos.	25.19	25.95	26.71	27.47
	Next 6 mos.	27.72	28.55	29.38	30.21
	Next 6 mos.	29.12	29.99	30.86	31.73
	Next 6 mos.	30.49	31.40	32.31	33.22
	Thereafter	32.03	32.99	33.95	34.91
			x 1.03	x 1.0291	x 1.0283

CIAC Treatment
Resulting from FERC Adoption

Adoption of FERC USOA required a change in presentation change to Contributions in Aid of Construction (CIAC)

Prior to October 2018, and in establishing rates in previous test year rate cases, the Company's presentation of contributions in aid of construction ("CIAC") followed the guidelines of the National Associate of Regulatory Utility Commissioners Uniform System of Accounts (NARUC USOA). Under the NARUC reporting system, CIAC is reported under an exclusive account, account 271, which includes donations or contributions in cash, services or property from states, municipalities, or other governmental agencies, individuals and others for construction purposes. All CIAC was incorporated as a deduction in the calculation of rate base in part because the Companies' systems did not facilitate on-going reporting of CIAC related to plant in service separate from CIAC related to construction work in progress ("CWIP").

The Commission approved the Companies' request to change to Federal Energy Regulatory Commission Uniform System of Accounts (FERC USOA), beginning with the implementation of the Companies' new ERP/EAM, in Decision and Order No. 31757, issued December 19, 2013 in Docket No. 2013-0007.

Beginning in October 2018 with the transition to FERC, the net balance of CIAC in account 271 less the CIAC amortization to be recorded for October to December 2018, was credited against the account balances charged with the cost of construction, i.e., gross plant in service and CWIP, resulting in the account becoming zero (i.e. "0") at December 31, 2018.

Ratemaking treatment for CIAC

The Company's ratemaking treatment of contributions in aid of construction is summarized below:

- *CIAC associated with Plant in Service* – When a utility capital project is placed into service, the plant in service net of the associated CIAC is included as net cost of plant in service in rate base. The plant in service net of the CIAC is included as part of the basis for the depreciation accrual the year after it is placed into service (i.e. January 1 of the year after it is placed into service).
- *CIAC associated with CWIP* – For book purposes, CIAC that is received while projects are still under construction (i.e. in CWIP) will offset the costs incurred and is presented net in CWIP. The CWIP net of the associated CIAC is subject to the AFUDC accrual if there is a net CWIP balance. In the next rate case, the Company will request CIAC associated with CWIP be excluded from the rate base calculation since CWIP net of

CIAC earns AFUDC. CIAC associated with CWIP is however, included in rate base in this RAM calculation for consistency with the 2017 Test Year treatment. See further discussion of Company's requested treatment of CIAC associated with CWIP below.

- *Developer Advances* - Cash contributions received in advance of construction of a utility capital project that are temporarily not classified as CIAC because the funds received are in excess of the specific project expenditures. The balance of developer advances is presented as funds from non-investors, included in its own exclusive account, and deducted in the calculation of rate base. As project costs are incurred for a utility capital project, an equal portion of developer advances associated with the project will be reclassified as CIAC and credit the accounts charged with the cost of construction. Developer Advances were included as a part of CIAC as a reduction to rate base in the 2017 Test Year.

Treatment of CIAC within the 2019 Annual Decoupling Filing

For the 2019 Decoupling Filing, the Company treated CIAC consistently with prior filings resulting in no impact to rate base.

Schedule D1, Determination of Rate Base RAM Adjustment – Change in Rate Base

Plant in Service - There is no change in rate base for plant in service and CIAC associated with plant in service. Under NARUC, in rate base, plant in service was the gross cost of plant (net of accumulated depreciation), and CIAC was a separate reduction to rate base. Under FERC, the plant in service amounts are net of (i.e., already reduced by) CIAC, and presented net of accumulated depreciation in the calculation of rate base. There is no separate CIAC line item reducing rate base because it is already net in utility plant. Therefore, there is no net rate base impact. The difference between NARUC and FERC for plant in service is a matter of where the costs are classified in rate base, and not a matter of inclusion or exclusion of costs in rate base.

CIAC associated with CWIP - There is no change in rate base for CIAC associated with CWIP. Previously, presentation of CIAC aligned with NARUC and all CIAC, including amounts associated with projects in CWIP, were included as a reduction to rate base under account 271. The 2019 estimated balance continues the treatment of including the CIAC in CWIP to be consistent with the recorded balance at 2018 year-end because all 2019 estimated CIAC additions have been included at Schedule D2 and included as part of net cost of plant at Schedule D1. Although the treatment described above was used in the 2019 annual decoupling filing, see Company's requested treatment to exclude CIAC associated with CWIP from rate base in future filings in the discussion below.

Developer Advances - With the transition to FERC, CIAC is credited when received against the related project costs in CWIP. To the extent funds are not yet expended for a project in

CWIP, the CIAC will be classified as developer advances and deducted in the calculation of rate base at Schedule D1. The recorded balance at 2018 year-end is not adjusted for 2019 activity as it is incorporated in Schedule D2.

Schedule D2, Determination of Baseline Capital Projects Additions

Schedule D2 was revised to incorporate the baseline and major project CIAC (including Developer Advances) for 2014 to 2017 into the baseline average calculation of net plant in service, consistent with the presentation of rate base. The 2018 CIAC additions calculated at HECO-WP-D2-003 includes additions to CIAC from all sources, i.e. Plant, CWIP and Developer Advances, which were used in the 5-year baseline calculation. As a result, the estimated 2019 additions to CIAC in CWIP and Developer Advances balances at Schedule D1 for the Change in Rate Base are not required as they are already included in the net cost of plant line item.

Schedule E, Determination of Depreciation & Amortization RAM Adjustment

FERC Uniform System of Accounts Electric Plant Instructions, 2. Electric Plant To Be Recorded at Cost. D. states, “The electric plant accounts shall not include the cost or other value of electric plant contributed to the company.” Therefore, the Recorded Depreciable/Amortizable Balances at December 31, 2018 in Schedule E represents plant in service net of CIAC which is used as the basis to estimate the 2019 annual accrual amount. In calculating the 2019 RAM Depreciation and Amortization, Depreciation and Amortization in Current Revenues also includes CIAC amortization approved in the 2017 Test Year.

Schedule F & F1, Determination of Change in Deferred Income Taxes & Tax Depreciation

The methodology for computing the deferred taxes related to RAM year tax depreciation was not changed within the 2019 annual decoupling filing. Gross plant additions are used as the basis for calculating tax depreciation. However, see the CIAC impact to ADIT section below for the Company’s preferred treatment considering the effects of netting CIAC against plant in service.

Schedule G-series, CIAC

Schedule G, G1 and G2 were removed from the Decoupling filings and instead incorporated into either Plant in Service, CIAC in CWIP or Developer Advances. The December 31, 2018 balances for CIAC associated with CWIP and Developer Advances were extracted from PowerPlan. Additionally, as noted above, the calculation of the 5-year baseline average of CIAC and amortization was incorporated within Schedule D2 and Schedule E, respectively.

The Company will continue to include CIAC associated with CWIP and Developer Advances as a reduction to rate base until the FERC presentation of rate base is approved in the Company’s next rate case.

Company's requested CIAC treatment

The Company requests to reflect the following changes to the treatment of CIAC within the annual decoupling filings.

CIAC associated with CWIP

In Mr. Franklin's T-12 direct testimony in Hawaii Electric Light's 2019 Test Year rate case, the Company proposes to remove CIAC associated with CWIP from the calculation of rate base due to the fact that CWIP net of associated CIAC earns AFUDC, therefore the CWIP and its associated CIAC should be excluded from rate base.

Excluding CWIP net of CIAC, to better align the source of funds with its use (i.e. the CIAC funds received were applied against the costs incurred for the project) and is therefore properly excluded from the calculation of rate base. In addition, and as mentioned previously, any material CIAC received in advance of construction expenditures will continue to be deductions in the calculation of rate base as Developer Advances.

CIAC impact to ADIT

ADIT associated with CIAC in CWIP should be divided between nontaxable and taxable CIAC. Nontaxable CIAC (primarily interconnection CIAC) is treated as a reduction in basis for both book and tax purposes. On the other hand, although taxable CIAC is also a reduction in basis for book purposes, for tax purposes, the receipt of taxable CIAC creates tax basis by way of the recognition of taxable income and reverses by way of tax depreciation.

Nontaxable CIAC does not create ADIT since there is no book tax difference. Consequently, the regulatory netting of nontaxable CIAC against the plant assets should not create any issue with respect to the ADIT beginning balance for the rate base RAM calculation

Taxable CIAC generates a Deferred Tax Asset (DTA) as it is received and recorded into CWIP under the new FERC accounting. Prior NARUC accounting treatment with account 271 created DTA as CIAC was booked to 271, which is equivalent to what is now booked to CWIP. The origination and timing of the DTA under the FERC method will be equivalent to the NARUC method. However, under the old method, the DTA was immediately recognized as part of rate base, consistent with the treatment of the account 271 inclusion. However, under the FERC method, the generation of the DTA must be inventoried and tracked to match up with the amount of CIAC in CWIP and the amounts closed to plant in service. This tracking is necessary to ensure that the amount of DTA related to CWIP is excluded from rate base. Once CWIP costs are closed to plant, the related DTA will be included in rate base and will begin reversal through tax depreciation taken on the CIAC tax basis.

FERC accounting imbeds the book treatment of CIAC within CWIP and the ultimate plant and related depreciation. The separation will disappear and the Company asserts that the ADIT

effects will be the same with respect to the beginning balance of ADIT for the annual decoupling filing except to the extent CIAC is still in CWIP. This issue will be addressed along with the rate base treatment of CIAC associated with CWIP as mentioned above.

FERC accounting nets CIAC against Plant in Service for purposes of computing baseline and major plant additions. For RAM year tax depreciation and the related ADIT calculated for the change in RAM year ADIT, adopting the net plant additions as the RAM year tax additions will be a change that will result in a smaller amount of tax depreciation and ADIT “change” since the Company previously has assumed the gross additions to be the RAM year tax depreciable base. The Company asserts this is reasonable for the following reasons:

- 1) Under the old method, to the extent nontaxable CIAC was included in the RAM year numbers (through major projects or baseline projects), tax depreciable basis was overstated since there is no tax basis for assets funded by nontaxable CIAC.
- 2) With respect to taxable CIAC, the funded assets do have depreciable tax basis and it is accounted for in the RAM year additions tax depreciation. However, the receipt of taxable CIAC generates taxable income and deferred tax assets that increase rate base. The effect of this DTA from taxable CIAC was never recognized in the RAM tariff, which resulted in an overstatement of RAM year ADIT change, as it related to the projected plant additions.

For purposes of the 2019 RAM calculation, ADIT has been calculated on gross plant additions, consistent with the 2017 Test Year treatment and prior decoupling filings, however the Company is requesting treatment of CIAC in deferred tax to follow FERC accounting.

Summary

In summary, Hawaiian Electric prepared the 2019 annual decoupling filings in accordance with the historical treatment of CIAC. Historically, due to system constraints, CIAC records were not maintained with matching of the separate components (plant in service, CWIP, developer advances). As a result, the entire amount of CIAC was treated as a reduction to rate base and the Return on Investment was understated. As stated in Mr. Franklin’s T-12 direct testimony in Hawaii Electric Light’s 2019 Test Year rate case, the Companies propose to exclude the CIAC associated with CWIP in its calculation of rate base in the rate base RAM filings. Should the Commission approve Hawaii Electric Light’s proposal, Hawaiian Electric will implement this change in the annual decoupling filing in the year following the Commission’s approval.

Hawaiian Electric Company, Inc.
Revenue Decoupling - Rate Base RAM
2018 Major Projects and Other Plant Additions, Net of CIAC

NET CALCULATION

Grand parent	Project #	Project	Plant Addition Date	[2] 2018 Plant Additions, Net of CIAC					Net PUC Approved (F)	Over/(Under) Net PUC Approved (E) - (F)	Functional Plant Category	
				[1] Net Plant Adds Thru 12/31/17 (A)	Total Project Cost (B)	CIAC & Adjs (C)	Net Project Cost (D) = (B) + (C)	Net Plant Adds Thru 12/31/18 (E) = (A) + (D)				
<u>2018 Major Projects</u>												
1	-	P0001370 DOT Airport DSG	2018 stragglng	3,336,179	(3,516)	(96,602)	(100,118)	3,236,061	3,400,139	[3a]	(164,078)	Production Other
2	-	P0002264 Pukele 80MVA Tsf #1	2018 stragglng	3,846,733	-	-	-	3,846,733	3,846,733	[3a]	-	Transmission
3	Y00038	(P0000783) Kakaako Makai-Iwilei 25kV DL (P0000672) Kakaako Makai-Kewalo 25kV DL (P0001579) Kakaako Makai DOT Queen-Cook PZ.000001	2018 stragglng 2018 stragglng 2018 stragglng	7,243,799 5,023,851 1,969,969	- - -	- - -	- - -	7,243,799 5,023,851 1,969,969				
		PZ.000003		14,237,619				14,237,619	14,537,623	[3a]	(300,004)	Distribution
4	Y00168	(P0003205) ERP EAM Hardware	2018 stragglng	2,604,146	-	-	-	2,604,146	2,590,000	[3b]	14,146	Computers <i>To Sch DI</i>
5		PE.005155 Joint Pole Capital Transfer Price	201812	-	24,665,897	-	24,665,897	24,665,897	24,665,897	[3c]	-	Distribution
<u>Other</u>												
6	-	PE.000104 (P0003465) Koolau-Wailupe #1 Str 30 P9 Replace	2018 stragglng	2,684,387	13,203	-	13,203	2,697,590	2,555,619	[3d]	141,971	Transmission <i>To Sch DI</i>
<u>Major Project Interim Recovery (MPIR) Projects</u>												
7	-	PZ.000016/ PZ001002 (P0001576) Schofield Generation Station	201806	-	144,743,542	-	144,743,542	144,743,542	-	[4]	144,743,542	Production Other <i>To Sch DI</i>

[1] Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-D2-001, filed on May 29, 2018.

[2] Hawaiian Electric Companies' Exemption From and Modification of General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2018, in Docket No. 03-0257, filed on March 27, 2019. See HECO-WP-D2-002.

[3] Per the Final Decision & Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, filed on August 31, 2010, in Docket No. 2008-0274, on page 54, "for purposes of calculating the Rate Base for the RAM, the costs on Major Capital Projects shall be limited to those amounts most recently approved, e.g., when authorized in the commission's decision approving the HECO Companies' application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO companies' rate cases."

[3a] Net PUC Approved amount was derived from the Hawaiian Electric 2017 Test Year Rate Case, filed in Docket No. 2016-0328, in response to CA-IR-303 and CA-IR-304 which updated 2016 Plant Additions and CIAC for actuals through December 31, 2016 and revised forecast for 2017. See calculation below:

	DOT Airport DSG			Pukele 80MVA Tsf #1			Kakaako Makai		
	Gross	CIAC	Net	Gross	CIAC	Net	Gross	CIAC	Net
Gross/Net Plant Adds Thru 12/31/16) - column [1]	5,235,178	(1,993,000)	3,242,178	3,839,121	-	3,839,121	18,338,808	(2,825,023)	15,513,785
2017 Plant Addition (CA-IR-303, Att 2)	157,961	-	157,961	7,612	-	7,612	(76,162)	-	(76,162)
2017 CIAC Estimate (CA-IR-304, Att 2)	-	-	-	-	-	-	-	(900,000)	(900,000)
Derived PUC Approved	5,393,139	(1,993,000)	3,400,139	3,846,733	-	3,846,733	18,262,646	(3,725,023)	14,537,623

[3b] Per Decision and Order No. 33861, page 4, Docket No. 2014-0170, For Approval of an Enterprise Resource Planning and Enterprise Asset Management System Implementation Project and Related Accounting Treatment, filed August 11, 2016.

[3c] Per Decision and Order No. 35768, Docket No. 2018-0075, For Approval of the Transfer of Equity Ownership Interest in Certain Joint Poles, to Commit Funds in Excess of \$2,500,000, Accounting and Ratemaking Treatment, Amendments to Joint Pole Agreements Between the Applicants, Asset Transfer Agreement, and Pole Licensing Agreement, file October 16, 2018. The Commission approved the acquisition of Hawaiian Telcom's joint pole equity ownership shares, valued at \$47,970,092, of which \$24,665,897 was related to Hawaiian Electric.

[3d] In the 2017 Fourth Quarter Capital Projects Status Report filed on February 28, 2018, Hawaiian Electric identified that the project costs had unexpectedly exceeded \$2,500,000 and provided an explanation for the higher costs. Project cost is limited for rate base RAM recovery to the amount identified in Hawaiian Electric's response to CA-IR-303, Attachment 2, page 3 of 7), filed in Docket No. 2016-0328, Hawaiian Electric 2017 Test Year Rate Case.

[4] Project to be recovered through the MPIR mechanism and therefore the entire project will be removed from the RAM Revenue Adjustment Calculation. See Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Recovery Mechanism, filed February 7, 2019, Transmittal No. 19-01 effective January 1, 2019. MPIR Recovery calculated at the Schedule L series.

2018 General Order No. 7 (GO7) Report Summary Plant Additions

Projects	2018 Plant Addition (1)
Less than \$2.5M	189,284,505
Greater than \$2.5M	169,419,126
Total Plant Additions - Gross	358,703,631
	To Sch D2, line 1
Less: Major Project additions in 2018	
DOT Airport DSG	3,516
Koolau-Wailupe #1 Str 30 P9 Replace	(13,203)
Schofield Generation Station	(144,743,542)
Joint Pole Transfer Price	(24,665,897)
	(169,419,126)
Baseline Plant Additions - Gross	189,284,505

(1) Source: Hawaiian Electric Companies' Exemption From and Modification General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2018, in Docket No. 03-0257 filed on March 27, 2019.

Hawaiian Electric Company, Inc.
CIAC Reconciliation
As of December 31, 2018

Line No.	Description (a)	Reference (b)	CIAC, Including Developer Advances (c)	
1	12/31/17 Balance	5/29/18 Decoupling, Sch G1	(366,100,380)	
2	Exclude: Non-Utility CIAC		618,464	
3	Add: Developer Advances		<u>(33,883,949)</u>	
4	12/31/17 Balance - Utility CIAC		(399,365,865)	
5	9/30/18 Balance	GL #271	(378,238,665)	
6	Exclude: Non-Utility CIAC	Line 2	618,464	
7	Add: Developer Advances	GL #2520300	<u>(34,163,852)</u>	
8	9/30/18 Balance - Utility CIAC	Line 4 + Line 5	(411,784,053)	
9	CIAC Change Thru 9/30/18 - Utility	Line 6 - Line 3		(12,418,188)
10	Add Back: 2018 CIAC Amortization thru 9/30/18	5/29/18 Decoupling, Sch G3 (8,818,605 x 9/12)	8,818,605	<u>(6,613,954)</u>
11	CIAC Additions Thru 9/30/18			(19,032,141)
12	<u>Oct to Dec 2018 Activity</u>			
13	CIAC-Cash Tax	GL #60005200	(6,435,124)	
14	CIAC-Cash Non-Tax	GL #60005201	(831,921)	
15	CIAC-Settlement	GL #60050221	174,515	
16	CIAC-In-Kind	GL #60005206	<u>(3,443,756)</u>	
17				<u>(10,536,286)</u>
18	2018 CIAC Additions, included within Plant in Service, CWIP, Developer Advances			<u>(29,568,427)</u> To Sch D2

Purpose:

Starting October 1, 2018, the Company adopted FERC guidelines resulting in CIAC being netted with Plant via Plant Additions or CWIP. This workpaper calculates the 2018 CIAC additions by summing the CIAC activity from January 1 to September 30, 2018 (per Ellipse) with the CIAC activity from October 1 to December 31, 2018 (per SAP and Powerplan WBS) for inclusion in the Baseline Plant Additions calculation at Schedule D2. Beginning with calendar year 2019, Baseline Plant Additions will be shown net of CIAC.

Note 1:

See HECO-WP-D1-001 for documentation on the treatment of CIAC in the 2019 Decoupling Filing.

EXCERPT: Transmittal 18-01, Schedule G1, filed 5/29/18.

SCHEDULE G1
PAGE 1 OF 1

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
BASELINE CAPITAL PROJECTS CIAC ADDITIONS

Source of CIAC balance and amort.: December Monthly Reports filed (non-confidential basis) with the PUC dated:

Line No.	Description (a)		2/21/2014	2/26/2015	2/23/2016	2/24/2017	3/1/2018
			2013 (b)	2014 (c)	2015 (d)	2016 (e)	2017 (f)
1	CIAC Balance, January 1 (Dec Rpt. pg. 10)		(238,510,104)	(258,084,169)	(283,739,660)	(319,727,698)	(348,444,542)
2	Less: Non-Utility CIAC	NOTE (3)				618,464	618,464
3	Adjusted CIAC Balance, January 1		(238,510,104)	(258,084,169)	(283,739,660)	(319,109,234)	(347,826,078)
4	Less: CIAC Amortization (Dec Rpt. pg. 2)		5,652,912	6,147,559	6,771,148	7,597,437	8,309,481
5	CIAC Balance, December 31 (Dec Rpt. pg. 10)		258,084,169	283,739,660	319,727,698	348,444,542	366,100,380
6	Less: Non-Utility CIAC	NOTE (3)			(618,464)	(618,464)	(618,464)
7	Less: Adjusted CIAC Balance, December 31		258,084,169	283,739,660	319,109,234	347,826,078	365,481,916
8	Total Adjusted CIAC Additions	(Sum Line 3, 4 & 7)	25,226,977	31,803,050	42,140,722	36,314,281	25,965,319
9	Add Developer Advances:	NOTE (4)	-	-	-	-	33,883,949
19	Total Adjusted CIAC & Developer Advance Additions		25,226,977	31,803,050	42,140,722	36,314,281	59,849,268
20	<u>Less Major Projects:</u>	<u>Dkt No.</u>					
21		<u>Item No.</u>					
22	<u>2008 In-service:</u>						
23	CIP Generating Unit	05-0145					
24							
25	<u>2010 In-service:</u>						
26	K3 Biofuel Co-Firing	2009-0155					
27							
28	<u>2011 In-Service:</u>						
29	W8 Boiler Controls Upgrade	2007-0365					
30	EOTP Ph. 2 (Subs/Switch Stations)	2010-0062	(87,994)	(43,725)	(15,232)	(718)	Schedule D2
31	W7 Controls Upgrade	2009-0195					
32	W8 Main Transformer Replace						
33							
34	<u>2012 In-Service:</u>						
35	K1 Condenser Tube Replace	2010-0126					
36	BPT Tank 132 Improvements	2010-0286					
37	Mobile Radio Replacement	2010-0162					
38	Kapolei Substation	2011-0026					
39							
40	<u>2013 In-Service:</u>						
41	Pukele 80MVA Tsf #3	2011-0156					
42	Kakaako Makai-Iwilei 25kV DL	2009-0042					
43	Kalo Substation - Land - NOTE (2)	2008-0070					
44	North South Road 46kV Line	2008-0070					
45							
46	<u>2014 In-Service:</u>						
47	Kalo Substation	2008-0070					
48	Kalo Sub 46kV & 12kV Distr	2008-0070					
49	Kalo Telecomm	2008-0070					
50	Kalo Sub 12kV Work	2008-0070					
51	Kakaako Makai-Kewalo 25kV DL	2009-0042					
52	Kakaako Makai DOT Queen-Cook	2009-0042				(2,825,023)	Schedule D2
53	BPT Tank 133 Improvements	2010-0318					
54	Pukele 80MVA Tsf #2	2011-0156					
55	DOT Airport DSG	2008-0329					
56							
57	<u>2016 In-Service:</u>						
58	Pukele 80MVA Tsf #1	2011-0156					
59							
60	<u>2017 In-Service:</u>						
61	ERP EAM Hardware	2014-0170					
62							
63	Total Net CIAC & Developer Advance Additions		25,138,983	31,759,325	42,125,490	33,488,540	59,849,268
64	Last Five-Year Average						38,472,321
65							To Sch G

NOTE (1): The CIAC amounts of the major projects are reflected in the year that they were received. In previous Decoupling filings these amounts were from the respective year's GO7 plant addition annual reports which reports the CIAC in the year the project closed to plant. In the past, the total CIAC additions, which reflect actual contributions received in the year, may not have included the total major project CIAC from the GO7 report to the extent that the CIAC was received in advance, or in multiple payments over a span of more than one year. Source: UI Planner files: Actuals Scenario.

NOTE (2): CIAC received for this project was not reflected in the 2012 and 2013 Decoupling filings as previous filings reported the CIAC amounts of the major projects from the respective year's GO7 plant addition annual report which reports the CIAC in the year the project closed to plant. See GENERAL NOTE.

NOTE (3): Adjustment to remove non-utility project related CIAC from the general ledger balance. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it. See Schedule G3, Line 96. Adjusted CIAC Additions for 2016 was corrected to exclude the non-utility plant balance from the beginning balance.

NOTE (4): In 2017, the Company reclassified the portion of CIAC for projects where the cash balance received was in excess of total incurred costs since the project agreements include provisions which allow for instances that unapplied funds received in advance would be subject to refunds. The true-up provision allows for any excess funds not expended to be refunded back to the developer. Furthermore, between the timing of the cash receipt to the project completion date, the project could be terminated, which would then result in refund of the unapplied funds. See below for a reconciliation of the Customer Advance balance at December 31, 2017:

Customer Advance (#25200000)	4,239,163
Developer Advances (#25203000)	33,883,949
Customer Advances	38,123,112

SOURCE: HECO Monthly Financial Report - December 2017, page 10, filed March 1, 2018.

The unapplied developer funds received in advance (Developer Advances) are excluded from the CIAC balance subject to amortization until they are reclassified to CIAC as costs are incurred. Developer Advances are included in the calculation of the Last Five-Year Average because they represent funds received in advance and are expected to be reclassified to CIAC as costs are incurred in the current year. Developer advances were also included in the Unamortized CIAC balance (See "Average Rate Base" from HECO Decision and Order No. 35280, filed 2/9/2018 of Docket No. 2016-0328).

**Hawaiian Electric Company
2019 Plant Additions Net of CIAC - Major Projects Support**

Grand-parent	Project	Functional Category	Plant Addition Date	Net PUC Approved	Net Plant Adds thru 12/31/18	2019 Net Plant Additions	2019 CIAC Additions	2019 Net Project Costs	Estimated Net Plant Adds thru 12/31/19	Over/ (Under) Net PUC Approved	2019 Net Plant Addition Qualifying for RB RAM (Note A)
				[1] <i>A</i>	[2] <i>C</i>	[3] <i>D</i>	[3] <i>E</i>	<i>F = D + E</i>	<i>G = C + F</i>	<i>H = A - G</i>	
	PE.000209 (P0003975): AES-CEIP #2 138kV OH Trans Line Relocation	Transmission >=69kV	2019/02	3,007,232 [1a]	-	4,091,987		4,091,987	4,091,987	1,084,755	3,007,232
	PG.000005/PZ.001001 (P0003966): West Loch Utility Scale PV	Production-Photovoltaic	2019/05	62,400,000 [1b]	-	52,128,000		52,128,000	52,128,000	(10,272,000)	52,128,000
	PZ.000015 (P0000974, P0003977): Ala Wai Canal 46kV Relocation	Transmission <69kV	2019/06	13,910,207 [1c]	-	20,300,268		20,300,268	20,300,268	6,390,061	13,910,207
Y00038	P0000672: Kakaako Makai-Kewalo 25kV DL		2014/04	7,243,799	7,243,799						
	P0000783: Kakaako Makai-Iwilei 25kV DL		2013/07	5,023,851	5,023,851						
	P0001579: Kakaako Makai DOT Queen-Cook		2014/04	1,969,969	1,969,969						
		Distribution		14,237,619 [1d]	14,237,619	-	(22,683)	(22,683)	14,214,936	(22,683)	(22,683)
69,022,756											
To Sch D3											

NOTE A: Amount qualifying for 2019 rate base RAM recovery is limited to the lower of the net plant addition (column D) or the net PUC approved amount (column A). In the case of straggling costs, the amount qualifying for 2019 rate base RAM recovery is limited to the lower of the 2019 net plant addition (column D) or the remaining unused balance of the net PUC approved amount.

[1] Per the Final Decision & Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, filed on August 31, 2010, in Docket No. 2008-0274, on page 54, "for purposes of calculating the Rate Base for the RAM, the costs on Major Capital Projects shall be limited to those amounts most recently approved, e.g., when authorized in the commission's decision approving the HECO Companies' application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO companies' rate cases."

[1a] Decision and Order No. 35312 in Docket No. 2016-0439, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the P0003975 - AES-CEIP 2 138 kV Overhead Transmission Line Relocation Project, filed March 2, 2018.

[1b] Decision and Order No. 34676 in Docket No. 2016-0342, For Approval of Waiver from the Framework for Competitive Bidding and to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0003966 - West Loch PV Project, filed June 30, 2017.

[1c] Decision and Order No. 34788 in Docket No. 2016-0416, For Approval to Commit Funds in Excess of \$2,500,000 for Item P0000974, Ala Wai Canal 46 kV Underground Line Construction and Item P0003977, Ala Wai Canal Easement Acquisition and Related Requests, filed September 1, 2017.

[1d] See HECO-WP-D2-001, Note [3a].

[2] Source: HECO-WP-D2-001.

[3] Source: UIPlanner Budget files. Forecast as of February 15, 2019.

HAWAIIAN ELECTRIC CO., INC.				
DEFERRED INCOME TAXES				
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)
		HECO	HECO	HECO
		FEDERAL	STATE	TOTAL
DR / (CR)		LIABILITY	LIABILITY	LIABILITY
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018
28311	Unearned Lease	-	-	-
28312	Accrued Vacation	(247,391.60)	(81,566.84)	(328,958.44)
28313	Uncollectible Acct	365,876.81	111,502.91	477,379.72
28314	Directors Def Comp	8,117.74	1,571.96	9,689.70
28317	Discounted Work Comp	313,824.26	95,894.48	409,718.74
28319	Cap to Construct (Cost of Removal)	71,429,406.70	21,769,003.09	93,198,409.79
28321	Pension	(15.02)	0.31	(14.71)
28323	Excess Benefit Plan	566,372.66	168,081.11	734,453.77
28326	Def Exec Comp (Def EICP<IP)	35,031.69	10,677.39	45,709.08
28327	Software (no APPRISE & e business	88,753.66	52,874.74	141,628.40
28328	G/L ACRS Retirements	(12,405,681.27)	(4,236,659.06)	(16,642,340.33)
28330	EICP	(358,728.30)	(125,497.81)	(484,226.11)
28331	CIAC	20,071,371.03	10,206,246.04	30,277,617.07
28332	Customer Advances	1,077,639.88	327,760.03	1,405,399.91
28333	Capitalized Interest	9,984,224.16	3,836,301.98	13,820,526.14
28335	Connection Fees	(9,611.91)	(8,444.14)	(18,056.05)
28336	Nondeductible Interest	19,016.26	5,795.04	24,811.30
28337	Supplemt Benefits - SERP	272,295.28	72,700.74	344,996.02
28340	LTIP	822,110.82	250,548.14	1,072,658.96
28341	Waipahu Baseyard Int	67,116.93	20,452.91	87,569.84
28347	Waiiau Water Well Pmts	79,910.90	24,369.66	104,280.56
28350	Outage Loss Adj Exp	-	(24,509.00)	(24,509.00)
28401	Gen/Auto (& Accidents)	248,241.27	75,654.04	323,895.31
28403	CWIP Debt Transition	(160,324.76)	(48,863.15)	(209,187.91)
28404	CWIP Equity Trans	(404,087.01)	(123,151.30)	(527,238.31)
28405	Iolani Ct Plaza Sale	17,071.33	(6,033.56)	11,037.77
28406	Kaonohi Sale	(22,651.01)	(6,942.61)	(29,593.62)
28408	Plant Transition	(3,997,395.48)	(1,218,288.67)	(5,215,684.15)
28409	CWIP Equity Net	(17,671,614.37)	(5,385,620.77)	(23,057,235.14)
28410	CWIP Equity Grossup	(10,862,867.25)	(3,310,577.99)	(14,173,445.23)
28411	CWIP Debt	(9,399,038.35)	(2,868,001.13)	(12,267,039.48)
28412	Gen/Auto Liability - Legal	0.21	(2,428.89)	(2,428.68)
28413	Post Retirement Ben	(875,563.84)	(246,873.67)	(1,122,437.51)
28414	Reg Liab Federal ITC	172,357.16	53,366.18	225,723.34
28418	IRP Costs	(25,223.69)	(8,107.96)	(33,331.65)
28419	Reg Liab Excess 283	115,881.47	35,956.40	151,837.87
28422	Miscellaneous	17,106.97	(16,969.99)	136.98
28427	Prepaid Expenses	(915,615.83)	(279,043.26)	(1,194,659.09)
28432	Coal Gasif Costs	-	(11,273.00)	(11,273.00)
28434	EEO Claims	452.80	138.01	590.81
28435	Rev Bond Differential	(106,539.65)	(32,468.74)	(139,008.39)
28436	TIP/Rewards Programs	119,814.53	36,774.90	156,589.43
28441	Sun Power	12,330.63	3,757.91	16,088.54
28512	Revenue Bond Cost Amort.	(678,674.71)	(206,833.19)	(885,507.90)
28514	Software (APPRISE only)	-	(22,551.00)	(22,551.00)
28516	Honolulu Harbor Reserve	879,610.69	268,072.02	1,147,682.71
28520	Deferred Comp - restricted stock	141,231.75	43,041.58	184,273.33
28522	Perry reserve	64,996.20	19,808.00	84,804.20
28526	Emissions Fees	331,750.98	101,105.19	432,856.17
28530	AES Hawaii PPA	26,904.63	8,199.90	35,104.53
28532	CIS Project	(48,966.54)	(14,316.02)	(63,282.56)
28538	Rate Case Costs	(287,342.77)	(87,571.54)	(374,914.31)
28542	QUIPS amortization	(140,608.50)	(42,852.44)	(183,460.94)
28544	OPEB Exec Life	2,641,514.13	805,101.19	3,446,615.32
28546	Percentage Repairs Allowance	(1,466,861.75)	(556,699.86)	(2,023,561.61)
28548	Cap interest (D&T)	(2,603,450.33)	(1,054,919.70)	(3,658,370.03)
28550	E-Business hardware	(19,730.68)	(8,206.93)	(27,937.61)
28552	OMS project costs	262,187.44	81,204.84	343,392.28
28558	Substation Land - Aiea	-	(2,073.65)	(2,073.65)
28560	Solar tax credit	630.40	192.12	822.52
28564	HR Suites project costs	(213,369.94)	(67,275.43)	(280,645.37)
28568	Solar Saver Program	43,008.71	13,107.14	56,115.85
28570	Pension Tracker	(18,456,906.96)	(5,624,946.08)	(24,081,853.04)
28572	OPEB Tracker	1,198,564.16	365,276.00	1,563,840.16
28580	Blue Earth reserve	(2,163.55)	(659.33)	(2,822.88)
28584	RO Water Pipeline	215,900.82	65,798.23	281,699.05
28590	Repairs Adjustment	(74,909,026.37)	(22,228,032.86)	(97,137,059.23)
28592	Stimulus Funds	200.17	60.96	261.13
28594	Budget System Replacement	(135,405.78)	(41,265.98)	(176,671.76)
28596	EOTP interest / amort	(2,972.01)	(906.02)	(3,878.03)
28598	CIP interest	(116,247.60)	(35,427.08)	(151,674.68)
28600	ERP project costs	(1,035,960.90)	(315,721.84)	(1,351,682.74)

HAWAIIAN ELECTRIC CO., INC.				
DEFERRED INCOME TAXES				
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)
		HECO	HECO	HECO
		FEDERAL	STATE	TOTAL
DR / (CR)		LIABILITY	LIABILITY	LIABILITY
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018
28602	Reg Liab Federal PV/EV	192,541.81	58,679.74	251,221.54
28604	IVR project costs	(174,366.73)	(53,140.93)	(227,507.66)
28608	Franchise Tax	1,013,344.05	308,828.44	1,322,172.49
28614	RBA revenues	(7,287,568.48)	(2,220,971.56)	(9,508,540.04)
28618	NOL - charitable	(6,347.36)	-	(6,347.36)
28620	G/L Lauula	8,240.41	(41.55)	8,198.86
28626	Reg Asset - 2017 Excess-other	(3,312,656.78)	(5,623,166.16)	(8,935,822.94)
28628	Reg Liab - 2017 Excess-other	7,289,541.76	6,835,162.29	14,124,704.06
28630	Reg Liab - TRA revenues	965,858.79	294,357.59	1,260,216.38
28632	PSC/PUC tax	5,781,313.48	1,761,927.88	7,543,241.36
28634	Waianae Solar	1,774,655.94	540,848.68	2,315,504.62
28636	HT joint pole unbilled	875,228.59	266,736.90	1,141,965.49
AOCINQ	AOCI - NQ Pension	624,198.92	190,228.31	814,427.23
AOCIOPEB	AOCI - OPEB Exec Life	(538,268.59)	(164,045.19)	(702,313.78)
48000	FIN 48 tax	368,936.00	661,176.00	1,030,112.00
48002	FIN 48 interest	41,253.93	12,572.63	53,826.56
50000	Rounding	(709.37)	364.13	(345.24)
	FED ACCOUNT 283, excluding state ITC	(38,254,016.15)	(6,551,668.15)	(44,805,684.30)
28310	State ITC	11,655,223.12	3,534,658.68	15,189,881.80
	TOTAL ACCOUNT 283	(26,598,793.02)	(3,017,009.47)	(29,615,802.50)
28210000	Accelerated Depreciation	(252,669,067.47)	(48,604,627.78)	(301,273,695.25)
28210100	Accel. Depr. - Excess	44,073,568.30	13,431,888.93	57,505,457.23
28210200	Accel. Depr. - Deficit	(169,370.14)	(51,202.87)	(220,573.02)
	TOTAL ACCOUNT 282	(208,764,869.31)	(35,223,941.72)	(243,988,811.04)
				To Sch D4
	TOTAL DEF INCOME TAX - UTILITY	(235,363,662.34)	(38,240,951.20)	(273,604,613.53)
28210300	Nonutility Depreciation	555,767.33	265,376.64	821,143.97
28301001	Nonutility - Other	1,029,315.35	316,263.16	1,345,578.51
28301002	RHI Tax Allocation	-	-	-
28301003	UBC Tax Allocation	-	-	-
50001	Rounding	(2.67)	-	(2.67)
	TOTAL DEF INCOME TAX - NONUTILITY	1,585,080.02	581,639.80	2,166,719.82
	TOTAL DEF INCOME TAX	(233,778,582.32)	(37,659,311.40)	(271,437,893.72)
	RATE BASE CALCULATION			
	TOTAL ACCOUNT 283	(26,598,793.02)	(3,017,009.47)	(29,615,802.50)
	Less:			
28312	Accrued Vacation	(247,391.60)	(81,566.84)	(328,958.44)
28313	Uncollectible Acct	365,876.81	111,502.91	477,379.72
28314	Directors Def Comp	8,117.74	1,571.96	9,689.70
28317	Discounted Work Comp	313,824.26	95,894.48	409,718.74
28323	Excess Benefit Plan	566,372.66	168,081.11	734,453.77
28326	Def Exec Comp (Def EICP<IP)	35,031.69	10,677.39	45,709.08
28330	EICP	(358,728.30)	(125,497.81)	(484,226.11)
28336	Nondeductible Interest	19,016.26	5,795.04	24,811.30
28337	Supplemt Benefits - SERP	272,295.28	72,700.74	344,996.02
28340	LTIP	822,110.82	250,548.14	1,072,658.96
28341	Waipahu Baseyard Int	67,116.93	20,452.91	87,569.84
28347	Waiau Water Well Pmts	79,910.90	24,369.66	104,280.56
28350	Outage Loss Adj Exp	-	(24,509.00)	(24,509.00)
28401	Genl/Auto (& Accidents)	248,241.27	75,654.04	323,895.31
28412	Genl/Auto Liability - Legal	0.21	(2,428.89)	(2,428.68)
28418	IRP Costs	(25,223.69)	(8,107.96)	(33,331.65)
28422	Miscellaneous	17,106.97	(16,969.99)	136.98
28434	EEO Claims	452.80	138.01	590.81
28436	TIP/Rewards Programs	119,814.53	36,774.90	156,589.43
28516	Honolulu Harbor Reserve	879,610.69	268,072.02	1,147,682.71
28520	Deferred Comp - restricted stock	141,231.75	43,041.58	184,273.33
28522	Perry reserve	64,996.20	19,808.00	84,804.20
28538	Rate Case Costs	(287,342.77)	(87,571.54)	(374,914.31)
28544	OPEB Exec Life	2,641,514.13	805,101.19	3,446,615.32
28550	E-Business hardware	(19,730.68)	(8,206.93)	(27,937.61)
28568	Solar Saver Program	43,008.71	13,107.14	56,115.85

HAWAIIAN ELECTRIC CO., INC.					
DEFERRED INCOME TAXES					
FEDERAL		DR / (CR)	DR / (CR)	DR / (CR)	
		HECO	HECO	HECO	
		FEDERAL	STATE	TOTAL	
DR / (CR)		LIABILITY	LIABILITY	LIABILITY	
LIAB	DESCRIPTION	12/31/2018	12/31/2018	12/31/2018	
28580	Blue Earth reserve	(2,163.55)	(659.33)	(2,822.88)	
28600	ERP project costs	(1,035,960.90)	(315,721.84)	(1,351,682.74)	
28608	Franchise Tax	1,013,344.05	308,828.44	1,322,172.49	
28614	RBA revenues	(7,287,568.48)	(2,220,971.56)	(9,508,540.04)	
28618	NOL - charitable	(6,347.36)	-	(6,347.36)	
28630	Reg Liab - TRA revenues	965,858.79	294,357.59	1,260,216.38	
28632	PSC/PUC tax	5,781,313.48	1,761,927.88	7,543,241.36	
28634	Waianae Solar	1,774,655.94	540,848.68	2,315,504.62	
AOCINQ	AOCI - NQ Pension	624,198.92	190,228.31	814,427.23	
AOCIOPEB	AOCI - OPEB Exec Life	(538,268.59)	(164,045.19)	(702,313.78)	
48000	FIN 48 tax	368,936.00	661,176.00	1,030,112.00	
48002	FIN 48 interest	41,253.93	12,572.63	53,826.56	
	Adjustment for EOTP, CIS and CIP	(114,827.94)	(34,994.66)	(149,822.60)	
	Total Exclusions	7,351,657.84	2,701,979.21	10,053,637.05	
	Total 283 Deferred Taxes for Rate Base	(33,950,450.87)	(5,718,988.68)	(39,669,439.55)	To Sch D4
	Total 282 Deferred Taxes for Rate Base	(208,764,869.31)	(35,223,941.72)	(243,988,811.04)	
	TOTAL DEF INCOME TAX - RATE BASE	(242,715,320.18)	(40,942,930.41)	(283,658,250.59)	To Sch D4

HAWAIIAN ELECTRIC CO., INC.
ADIT ON EXCESS DEPRECIATION
DECEMBER 31, 2018

	source	ERP/EAM HARDWARE	KOOLAU- WAILUPE #1	TOTAL
FEDERAL DEFERRED TAXES				
1	State Tax Depreciation			
2	Book Depreciation	7,356	14,620	21,976
3	Subtotal	(2,829)	(4,211)	(7,040)
		4,527	10,409	14,936
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%
5	Federal Deferred Tax on State Depreciation	893	2,054	2,948
6	Addback State Tax Depreciation	(4,527)	(10,409)	(14,936)
7	Federal Tax Depreciation	10,751	71,941	82,692
8	Book Depreciation	(2,829)	(4,211)	(7,040)
9	Federal State Difference	3,395	57,321	60,716
10	Tax Rate on Federal Only Adjustment	21%	21%	21%
11	Federal Deferred Tax Adjustment	713	12,037	12,750
12	Total Federal Deferred Taxes	1,606	14,091	15,698
				to Sch D4
STATE DEFERRED TAXES				
13	State Tax Depreciation			
14	Book Depreciation	7,356	14,620	21,976
15	Subtotal	(2,829)	(4,211)	(7,040)
		4,527	10,409	14,936
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	272	626	898
18	TOTAL DEFERRED TAXES	1,878	14,717	16,596
				to Sch D4
				to Sch D1

**HAWAIIAN ELECTRIC CO., INC.
EXCESS TAX DEPRECIATION
KOOLAU-WAILUPE #1**

Project No.	DIS	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct	Life Bonus	2017	2018
FEDERAL									
PE000104	v2017	Koolau-Wailupe #1	2,684,387	2,555,619	128,768	Trans	20	66,798	4,648
	v2018	Koolau-Wailupe #1	13,203		13,203	Trans	20		495
		Total	2,697,590	2,555,619	141,971			66,798	5,143
		Cumulative						66,798	71,941
To page 1									
HAWAII									
PE000104	v2017	Koolau-Wailupe #1	2,684,387	2,555,619	128,768	Trans	20	4,829	9,296
	v2018	Koolau-Wailupe #1	13,203	-	13,203	Trans	20		495
		Total	2,697,590	2,555,619	141,971			4,829	9,791
		Cumulative						4,829	14,620
To page 1									

HAWAIIAN ELECTRIC CO., INC.
 MPIR ADIT - SCHOFIELD GENERATING STATION
 DECEMBER 31, 2018

	source	Tax Depreciation (page 2 of 5)	AFUDC (page 3 of 5)	Tax Cap Interest (page 3 of 5)	State ITC (page 3 of 5)	Removal (page 5 of 5)	2018 Total
FEDERAL DEFERRED TAXES							
1	State Book/Tax Difference	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
2	Book Depreciation						
3	Subtotal	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,353,254)	(2,361,501)	1,514,862	832,222	(36,513)	(1,404,184)
6	Addback State Book/Tax Difference	6,856,503	11,964,962	(7,675,319)	(4,216,602)	185,002	7,114,546
7	Federal Book/Tax Difference	(6,856,502)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,545)
8	Book Depreciation						
9	Federal State Difference	1	-	-	-	-	1
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%
11	Federal Deferred Tax Adjustment	-	-	-	-	-	-
12	Total Federal Deferred Taxes	(1,353,254)	(2,361,501)	1,514,862	832,222	(36,513)	(1,404,184)
							To Sch D4
STATE DEFERRED TAXES							
13	State Book/Tax Difference	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
14	Book Depreciation	-	-	-	-	-	-
15	Subtotal	(6,856,503)	(11,964,962)	7,675,319	4,216,602	(185,002)	(7,114,546)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	(412,421)	(719,697)	461,673	253,630	(11,128)	(427,943)
							To Sch D4
18	TOTAL DEFERRED TAXES	(1,765,675)	(3,081,198)	1,976,535	1,085,852	(47,641)	(1,832,127)
							To Sch D4

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018
FEDERAL									
P0001576	Schofield Generation Station	65,512,935	(5,393,539)	3,459,864	63,579,259	Oth Prod	15	0%	3,178,963
P0001576	Schofield Generation Station	65,512,935	(5,393,539)	3,459,864	63,579,259	Oth Prod	15	0%	3,178,963
P0001576	Schofield Generation Station	5,751,969	(522,427)	335,128	5,564,670	Trans	20	0%	208,675
P0001576	Schofield Generation Station	5,751,969	(522,427)	335,128	5,564,670	Trans	20	0%	208,675
P0001576	Schofield Generation Station	1,106,868	(66,514)	42,668	1,083,021	Comm	20	0%	40,613
P0001576	Schofield Generation Station	1,106,868	(66,514)	42,668	1,083,021	Comm	20	0%	40,613
Total		<u>144,743,542</u>	<u>(11,964,962)</u>	<u>7,675,319</u>	<u>140,453,899</u>				<u>6,856,502</u>
Cumulative									To page 1 of 5

HAWAII

P0001576	Schofield Generation Station	131,025,869	(10,787,079)	6,919,727	127,158,518	Oth Prod	15	0	6,357,926
P0001576	Schofield Generation Station	11,503,937	(1,044,854)	670,256	11,129,339	Trans	20	0	417,350
P0001576	Schofield Generation Station	2,213,736	(133,029)	85,336	2,166,043	Comm	20	0	81,227
Total		<u>144,743,542</u>	<u>(11,964,962)</u>	<u>7,675,319</u>	<u>140,453,899</u>				<u>6,856,503</u>
Cumulative									To page 1 of 5

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:	A	B	C	D	E=SUM(B:D)	F=A+E	
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	State ITC
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	35,513,663
Vehicles	2,062	117,109	187	563	117,859	119,921	
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	69,901,379
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	
Other	427,354	-	4,296	-	4,296	431,650	
	<u>131,025,869</u>	<u>8,549,966</u>	<u>2,213,736</u>	<u>2,953,971</u>	<u>13,717,673</u>	<u>144,743,542</u>	
Amount subject to bonus (A)	50%	50%	50%	50%	50%	50%	105,415,043
	<u>65,512,935</u>	<u>4,274,983</u>	<u>1,106,868</u>	<u>1,476,985</u>	<u>6,858,836</u>	<u>72,371,771</u>	4%
							<u>4,216,602</u>
							To page 1 of 5
			5,751,969				
Tie out of TCI:							
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	To page 1 of 5
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%	From page 4 of 5
TCI	<u>6,919,727</u>	<u>451,065</u>	<u>85,336</u>	<u>219,191</u>	<u>755,592</u>	<u>7,675,319</u>	To page 1 of 5
							670,256

Source: Ellipse & SAP

(A) - At year end, no bonus depreciation was taken for Schofield Generation Station. See page 2 for tax depreciation calculation.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

To page 3 of 5

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

To page 1 of 5

SOURCE: Ellipse & SAP

Hawaiian Electric Company, Inc.
2018 Major Projects Excess Cost, Net of CIAC

[1]	[1]		[2]	[1]					[1]	[2]	[1]	[3]	[2]	To Sch D1	
Grandparent # or Project #	Project	Date In Service	Net Plant Adds Thru 12/31/17 (A)	Net Plant Adds Thru 12/31/18 (B)	Plant Acct	Docket No 2010-0053 Depr Rate (C)	2018 Depr (D) = (A) * (C)	2019 Depr (E) = (B) * (C)	Net PUC Approved (F)	2017 Net Cost in Excess of Docket (G)	2018 Net Cost in Excess of Docket (H) = (B) - (F)	Prior Years Depr Related to Excess (I)	2018 Depr Related to Excess (J) = (G) / (A) * (D)	Cumulative Depr Related to Excess (K) = (I) + (J)	2019 Depr Related to Excess (L) = (H) / (B) * (E)
PZ.000003/ (P0003205)	ERP EAM Hardware	2017/06	2,604,146	2,604,146	391.1	0.20000	520,829	520,829	2,590,000	14,146	14,146	-	2,829	2,829	2,829
PE.000104 (P0003465)	Koolau-Wailupe #1 Str 30 P9 Replace	2017/07	2,684,387	2,697,590	356	0.03270	87,779	88,211	2,555,619	128,768	141,971	-	4,211	4,211	4,642
PZ.000016/ PZ001002 (P0001576)	Schofield Generation Station - Note [4]	2018/06	-	142,147,612	343	0.03260	-	4,634,012							
			-	2,003,490	352	0.01600	-	32,056							
			-	352,190	353	0.01860	-	6,551							
			-	240,250	397	0.06670	-	16,025							
			-	144,743,542				4,688,643	-	-	144,743,542	-	-	-	4,688,643

[1] Source: HECO-WP-D2-001

[2] Source: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-E-001, filed on May 29, 2018.

[3] Source: Transmittal No. 18-01 (Decoupling) - RBA Rate Adjustment (Filed May 29, 2018), HECO-WP-E-001, column (L), "Cumulative Depr Related to Excess".

[4] The Schofield Generation Station project is recovered via the Major Project Interim Recovery (MPIR) mechanism at the Schedule L series. As such, the entire project related costs will be excluded from all Decoupling calculations.

Hawaiian Electric Company
 Calculation of Composite Effective Income Tax Rates
 Federal and State

Composite Federal and State Effective Income Tax Rate

	<u>Eff 1/1/2018</u>	<u>2017 & Prior</u>
Federal Effective Income Tax Rate	19.7368421%	32.8947368%
State Effective Income Tax Rate	6.0150376%	6.0150376%
	<u>25.7518797%</u>	<u>38.9097744%</u>

Calculation of Effective Rates

Assumptions:

ST = State Income Tax Expense

FT = Federal Income Tax Expense

Pre-Tax Income = \$1.00

	<u>Eff 1/1/2018</u>	<u>2017 & Prior</u>
State Statutory Income Tax Rate*	6.4%	6.4%
Federal Statutory Income Tax Rate**	21.0%	35.0%

Calculation of State Effective Income Tax Rate

State Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

ST = .064 x (1 - ST)

ST = .064 - .064(ST)

1.064(ST) = .064

ST = .060150376 or 6.0150376% of Pre-Tax Income

Calculation of Federal Effective Income Tax Rate

Federal Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

Effective 1/1/18

FT = .21 x (1 - ST)

FT = .21 x (1 - .060150376)

FT = .21 - .01263157896

FT = .197368421 or 19.7368421% of Pre-Tax Income

2017 & Prior

FT = .35 x (1 - ST)

FT = .35 x (1 - .060150376)

FT = .35 - .01263157896

FT = .328947368 or 32.8947368% of Pre-Tax Income

* Hawaii Revised Statutes §235.71 was amended for tax years beginning after 1986.

** The Tax Cuts and Jobs Act changed the Federal tax rate for tax years ending after December 31, 2017.

HAWAIIAN ELECTRIC COMPANY, INC.
TAX REPAIRS ADJUSTMENT
2018

			A	B	C = A x B	D = A - C
	<i>HECO-WP- F1-002</i>			<i>HECO-WP- F1-001, pg 2</i>		
	5 YR			Repairs	Repairs	Depreciable
	AVERAGE		Plant Adds	Allocation	Deduction	Basis
	LIFE					
Computers/PV	5	6,092				
Communication	20	5,920				
Off/Furn/Tools	7	5,022				
Distribution	20	130,472	130,472,000	19.67%	25,659,352	104,812,648
Land	-	816				
Non-Steam Production	15	3,713	3,713,000	0.04%	1,582	3,711,418
Steam Production	20	22,905	22,905,000	28.28%	6,477,859	16,427,141
Structural	39	3,265				
Transmission	20	21,834	21,834,000	4.49%	980,382	20,853,618
Transmission	15	34,674	34,674,000	4.49%	1,556,918	33,117,082
Vehicles	-	5,209				
TOTAL		<u>239,922</u>	<u>213,598,000</u>		<u>34,676,093</u>	<u>178,921,907</u>
					To Sch F1	

NOTE 1> This schedule computes the estimated amount of deductible tax repairs related to the baseline plant additions for the RAM year. The deductible tax repairs amounts are carried forward to Schedule F1 and serve to reduce the depreciable tax basis for the baseline plant additions. The repairs percentages (Column B) are calculated on HECO-WP-F1-001, page 2.

NOTE 2> The numbers (excluding %s) are rounded to the nearest thousand.

**HAWAIIAN ELECTRIC COMPANY, INC.
REPAIRS DEDUCTION**

		Distribution	Non Steam	Steam	Transmission
Repairs %:					
Total book basis repairs					
2014		40,010,784		8,698,003	1,620,540
2015		28,855,969		8,823,262	3,152,508
2016		19,906,067		6,512,311	2,697,168
2017		24,350,324	71,857	5,491,680	4,271,225
2018		23,503,387		4,894,363	1,396,139
		<u>136,626,531</u>	<u>71,857</u>	<u>34,419,619</u>	<u>13,137,580</u>
Total book basis adds					
2014	HECO-WP-F1-002	139,366,000	12,311,000	30,119,000	57,957,000
2015	HECO-WP-F1-002	150,513,000	5,613,000	25,823,000	48,871,000
2016	HECO-WP-F1-002	117,566,000	268,000	24,812,000	79,269,000
2017	HECO-WP-F1-002	147,966,000	1,658,000	22,867,000	73,183,000
2018	HECO-WP-F1-002	139,304,000	148,783,000	18,083,000	33,306,000
		<u>694,715,000</u>	<u>168,633,000</u>	<u>121,704,000</u>	<u>292,586,000</u>
AVERAGE %		19.666558%	0.042611%	28.281420%	4.490160%

NOTE 1> With the assistance of Price Waterhouse Coopers, the repairs deduction analysis was performed in 2010, 2012, 2015 and 2016 in connection with changing HECO's method of identifying deductible repairs for tax accounting purposes. The repairs percentage for each functional group represents the five year weighted average of the identified repairs costs.

NOTE 2> The numbers (excluding %s) are rounded to the nearest thousand.

HAWAIIAN ELECTRIC COMPANY, INC.
BASELINE PLANT ADDS

						LESS: MAJOR PROJECTS	TOTAL	AVERAGE	% AVERAGE	
LIFE	2014	2015	2016	2017	2018					
Computers/PV	5	6,681	8,980	5,219	7,587	4,596	(2,604)	30,459	6,092	2.54%
Communication	20	5,340	5,183	5,870	7,349	6,611	(754)	29,599	5,920	2.47%
Off/Furn/Tools	7	8,242	4,315	2,964	5,204	4,384		25,109	5,022	2.09%
Distribution	20	139,366	150,513	117,566	147,966	139,304	(42,353)	652,362	130,472	54.38%
Land	-	1,729	1,233	11	262	847		4,082	816	0.34%
Non-Steam Production	15	12,311	5,613	268	1,658	148,783	(150,069)	18,564	3,713	1.55%
Steam Production	20	30,119	25,823	24,812	22,867	18,083	(7,178)	114,526	22,905	9.55%
Structural	39	2,899	5,468	1,647	5,217	1,092		16,323	3,265	1.36%
Transmission	20	13,295	21,461	38,676	29,442	8,994	(2,698)	109,170	21,834	9.10%
Transmission > 69kv	15	44,662	27,410	40,593	43,741	24,312	(7,349)	173,369	34,674	14.45%
		57,957	48,871	79,269	73,183	33,306	(10,047)	282,539	56,508	23.55%
Vehicles	-	4,682	10,540	3,665	5,460	1,697		26,044	5,209	2.17%
TOTAL		269,326	266,539	241,291	276,753	358,703	(213,005)	1,199,607	239,921	100.00%

To WP-F1-001

HAWAIIAN ELECTRIC CO., INC.

PRORATION ADJUSTMENT FOR NORMALIZATION COMPLIANCE

FEDERAL ADIT DR/(CR)

ADIT account 282 --	Federal ADIT	January	February	March	April	May	June	July	August	September	October	November	December
Federal accelerated depreciation	DR/(CR)												
Beginning balance	Sch D4 (208,749,171)												
Federal Tax Depreciation	Sch F (20,239,341)												
Effective Federal Tax Rate	19.7368%												
Net ADIT accrued 2019	(3,994,598)												
Monthly Accrued evenly over 12 months	(332,883)												

WITHOUT PRORATION

	Beg of Yr	January	February	March	April	May	June	July	August	September	October	November	December	End of Yr
Federal 282 ADIT Balance	(208,749,171)													
Monthly Additions		(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(3,994,598)
Cumulative Balance	(208,749,171)	(209,082,054)	(209,414,937)	(209,747,821)	(210,080,704)	(210,413,587)	(210,746,470)	(211,079,353)	(211,412,237)	(211,745,120)	(212,078,003)	(212,410,886)	(212,743,769)	(212,743,769)

Simple Year Average - Without Proration (210,746,470)

WITH PRORATION

Days new rates in effect	6/1/2019	214												
Prorated additions		(332,883)	(332,883)	(332,883)	(332,883)	(332,883)	(287,773)	(239,551)	(191,330)	(144,664)	(96,443)	(49,777)	(1,556)	(2,675,510)
Cumulative ADIT balance with proration	(208,749,171)	(209,082,054)	(209,414,937)	(209,747,821)	(210,080,704)	(210,413,587)	(210,701,360)	(210,940,911)	(211,132,241)	(211,276,905)	(211,373,348)	(211,423,125)	(211,424,681)	(211,424,681)

Simple Year Average - With Proration (210,086,926)

Adjustment to rate base ADIT 659,544
To Schedule F

Days new rate in effect		335	307	276	246	215	185	154	123	93	62	32	1	
Days in the month		31	28	31	30	31	30	31	31	30	31	30	31	365

Note: Methodology based on IRS Private Letter Ruling 9313008

HAWAIIAN ELECTRIC COMPANY, INC.
AVERAGE RATE BASE AND RATE OF RETURN
(\$ Thousands)

RATE BASE	Month-End		REFERENCE
	Dec 2017	Dec 2018	
INVESTMENTS IN ASSETS SERVING CUSTOMERS			
NET COST OF PLANT IN SERVICE			
Total Utility Plant	3,330,923	3,523,249	Note 2
Adjustments:			
Construction Work in Progress	(245,995)	(550,571)	Note 2
Regulatory Asset - ARO	-	331	GL#18670151
Asset Retirement Obligation	(2,539)	(4,780)	GL#25301000
Regulatory Liability for Cost of Removal	(327,225)	(356,926)	GL#25400001
Plant - Tenant Allowance	(14,058)	(14,132)	GL#10100002
Acc Amort - Tenant Allowance	8,662	9,824	GL#11160000
Unbilled Pole Credits	-	(4,435)	within GL#25300000
	2,749,768	2,602,560	Note 1
FUEL INVENTORY	64,972	54,262	Note 2
MATERIALS & SUPPLIES INVENTORIES (excl Stores Expense)	26,517	27,953	GL#90154000, Note 2
UNAMORT NET ASC 740 REG ASSET	78,576	77,465	ADIT Tax Sch
PENSION TRACKING REG ASSET	115,531	96,993	GL#18676040
OPEB TRACKING REG ASSET	3,112	-	GL#18677040
PENION NON-SERVICE COST REG ASSET	-	883	GL#18676045
EOTP REG ASSET	89	20	GL#18670124/5/6
CIP CT-1 REG ASSET	1,352	795	GL#18670120/21/22
DEFERRED SYSTEM DEVELOPMENT COSTS			
OMS	746	445	GL#18607004
HR Suites-Phase 1	1,307	951	GL#18606004
HR Suites-Phase 2	512	384	GL#18606104
Budget System Replacement Project	885	739	GL#18607704
IVR	1,000	883	GL#18670400
CIS	9,046	7,827	Acctg Dept Amort Sch
	13,496	11,229	
RO WATER PIPELINE REG ASSET	4,842	4,725	GL#18670152
CONTRIB IN EXCESS OF NPPC	2,240	-	GL#18676030
TOTAL INVESTMENTS IN ASSETS	3,060,495	2,876,885	
FUNDS FROM NON-INVESTORS			
UNAMORTIZED CIAC	365,482	30,110	Note 5
CUSTOMER ADVANCES			
Customer Advances	4,239	6,392	GL#25200000
Developer Advances	33,884	21,345	Note 3
	38,123	27,737	
CUSTOMER DEPOSITS	11,113	10,409	GL#23501000
ACCUMULATED DEF INCOME TAXES	283,136	283,659	Schedule D4
EXCESS ACCUMULATED DEF INCOME TAXES	278,582	278,156	GL#25400023/24, Note 4
UNAMORTIZED ITC (GROSS)	57,594	58,897	GL#25520000/20004
UNAMORTIZED FEDERAL EV CREDIT	750	724	GL#25503000
UNAMORTIZED GAIN ON SALE	182	116	GL#25400101/02/09
PENSION TRACKING REG LIAB	-	3,478	GL#25400004
OPEB TRACKING REG LIAB	5,443	1,858	GL#25400002
TOTAL DEDUCTIONS	1,040,405	695,144	
WORKING CASH	7,068	11,027	HECO-WP-H-008
RATE BASE	2,027,158	2,192,768	
SIMPLE AVERAGE RATE BASE		2,109,963	To Schedule H

Footnotes:

- * Amounts may not add up due to rounding.
- 1 Includes Property Held for Future Use balance of \$0 for 2018 and 2017.
- 2 See Hawaiian Electric Company Inc. Monthly Financial Report - December 2018, filed February 28, 2019.
Note that Materials & Supplies Inventory include an adjustment of (\$1,116) and (\$1,489) representing payment lags in 2017 and 2018, respectively.
- 3 The Company reclassified cash received from Developers, subject to refund, to Customer Advances. Amount has been isolated for greater transparency within the rate base calculation. See further discussion at Schedule G.
- 4 As a result of the 2017 Tax Reform Act, Regulatory Liability accounts were created to isolate the impact of the 2017 excess accumulated deferred taxes effective in actuals as of December 2017. These Regulatory Liabilities have been included as a reduction to Rate Base. Deferred tax asset related to excess accumulated deferred taxes is included in Unamortized Net ASC 740 Reg Asset.
- 5 For 2018, CIAC is netted with Plant In Service, CWIP and Developer Advances, resulting from the Company's transition to FERC treatment in October 2018. See further discussion of the Company's treatment of CIAC at HECO-WP-D1-001.

HAWAIIAN ELECTRIC COMPANY, INC.
Ratemaking Adjustments For Incentive Compensation And Other Non-Recoverable Expenses
2018

Line	Account/Order No.	Description	2018	Tax @ 25.75%	Net of Tax	Rounded (000s)
1	Executive Compensation and Incentive Compensation					
2	70025/26/#60003110	LTIP and EICP expense	(a) 3,310,738			
3	70027/ #60004000	Other incentive awards	828,135			
4	Provided by HEI	HEI charges for incentive compensation	(a) 692,751			
5	Non-Executive Incentive Wksht	Non-executive incentive programs	(a) 457,781			
6	70028/ #60003110	Manager award plan	(a) 195,785			
7			5,485,190	1,412,540	4,072,650	4,073
						To Sch H, Line 2A
8	Discretionary and Other Expenses Not Recoverable					
9	#60004009	Executive life insurance(COLI) expense (credit) - <i>not tax deduct</i>	(442,516)			
10	Provided by HEI	EEL Dues (allowed portion) - <i>not tax deduct</i>	47,722			
11	70014/ #60004034	OPEB (Executive life portion only)	440,216			
12	70016	HEIRS	7,902			
13	Provided by HEI	HEI charges for non-incentive comp (salaries/benefits - Executives (labor))	(a) 524,810			
14	Provided by HEI	HEI charges for outside services (plan admin, legal fees, audit fees) - Executives (non-labor)	74,279			
15	70014/24/ #60004035/36	Non-qualified pension expense	475,342			
16	#60018015	Payroll taxes related to incentive compensation	173,390			
17	70011/70012	Service awards program	63,045			
18	Variou	Community service admin - AUW (labor)	(a) 90,346			
19	50100	Community service admin - AUW (non-labor)	99,926			
20			1,554,462	501,970	1,052,492	1,052
						To Sch H, Line 2B
21	Total Adjustment to Operating Income		<u>7,039,652</u>	<u>1,914,510</u>	<u>5,125,142</u>	
						To HECO-WP-H-008, Pg 1
		Labor	Σ(a) 5,272,211			To HECO-WP-H-008, Pg 1
		Non-labor	1,767,441			To HECO-WP-H-008, Pg 1
		Total adjustment to operating income	<u>7,039,652</u>			

HAWAIIAN ELECTRIC COMPANY, INC.
Income Tax On Items To Be Replaced By Synchronized Interest
2018

	<u>Source</u>	<u>YTD</u>	<u>Rounded (000s)</u>
Total Interest Charges	GL# RONE70	52,180,277	
Remove: RBA Interest Income	GL# 41900002	776,680	
Less: Int on Customer Deposits	GL# 60016050	(631,778)	
AFUDC-Debt	GL# RONE69	(4,018,998)	
Amort of Inv Inc Differential	within GL# 60001010	184,971	185 To Sch H, Line 2C
Equity in net income of trust	GL# 42107000	<u>(100,516)</u>	
		48,390,636	
	Tax rate	<u>25.75%</u>	
		<u><u>12,460,589</u></u>	(12,461) To Sch H, Line 2D

HAWAIIAN ELECTRIC COMPANY, INC.
Ratemaking Capitalization
2018

	Simple Average Balance*	Ratios	Cost Rate	Weighted Cost of Debt
Short-Term Debt	88,868	3.68%	2.54%	0.09%
Long-Term Debt	939,810	38.92%	5.03%	1.96%
Hybrid Securities	28,758	1.19%	7.16%	0.09%
Preferred Stock	21,192	0.88%	5.36%	0.05%
Common Equity	1,335,921	55.33%	9.50%	5.26%
	<u>2,414,549</u>	<u>100.00%</u>		<u>7.45%</u>

	NARUC/ GL Code	YTD Dec 2018	Rounded (000s)	Cost Rate
<u>Short-Term Debt:</u>				
Interest on Debt Assoc Co	60016060/61	2,108,154		
Less: Interest on QUIDS	QUIDS (see below)	(2,050,516)		
Int Exp-Commercial Paper	within 60016100	2,305,290		
Int Exp-SCF Loans		0		
Int Inc-Assoc Cos.	41908000	(176,391)		
Int Exp-Short Term	within 60016000	<u>69,531</u>		
		2,256,068	2,256	2.54%
<u>Long-Term Debt:</u>				
Amort of Debt Disc & Exp	60002100	1,641,364		
Less: Hybrid Sec Amort of Iss Exp	see a below	(109,414)		
Interest on Long-Term Debt	60016000	45,646,755		
Less: Int Exp-Short Term	see above	(69,531)		
Amort Inv Inc Differential	within 60001010	<u>184,970</u>		
		47,294,144	47,294	5.03%
<u>Hybrid Securities:</u>				
Interest on QUIDS	60016060	2,050,516		
Amort Exp-QUID1 Iss Exp	within 60002100	40,416		
Amort Exp-QUID2 Iss Exp	within 60002100	37,899		
Amort Exp-QUID3 Iss Exp	within 60002100	31,099		
Equity in Net Inc of Trust	42107000	<u>(100,516)</u>		
		2,059,414	2,059	7.16%
<u>Preferred Stock:</u>				
Amort of Pfd Stk Iss Exp	60002000	55,086		
Preferred Stock dividends	60016500	<u>1,079,907</u>		
		1,134,993	1,135	5.36%

* Short-Term Debt based on a 12 month average.

HAWAIIAN ELECTRIC COMPANY, INC.
Special Medical Needs Program Discount (net of tax)
2018
Amounts in (\$000s)

Special Medical Needs Program Discount	151
Revenue Taxes @ 8.885%	<u>(13)</u>
	138
Income Taxes @ 25.75%	<u>(35)</u>
Reduction to operating income	<u><u>102</u></u> To Sch H, Line 2e

Source: CIS Special Medical Needs (SMN) report

HAWAIIAN ELECTRIC COMPANY, INC.
Performance Incentive Mechanism
2018
Amounts in (\$000s)

Gross (Reward) / Penalty Amount	GL#25400030	532	
Revenue Taxes @ 8.885%		<u>(47)</u>	
		485	
Income Taxes @ 25.75%		<u>(125)</u>	
Reduction to operating income		<u>360</u>	To Sch H, Line 2f

Note:

Subsequent to the December 2018 financial close, Hawaiian Electric revised its PIMS Regulatory Liability of \$531,871 to \$1,269,311 as shown at Schedule M (revised 05-20-19). The recorded PIMS Regulatory Liability balance of \$531,871 as of 12/31/18 was used to determine the 2018 Earnings Sharing Calculations at Schedule H.

The Company made adjustments to PIMS Regulatory Asset and Liability balances with the February and March 2019 financial closes.

HAWAIIAN ELECTRIC COMPANY, INC.
Final Test Year Refund
2018
Amounts in (\$000s)

2017 Test Year Rate Case Final D&O Refund	Note 1	48	
Revenue Taxes @ 8.885%		<u>(4)</u>	
		44	
Income Taxes @ 25.75%		<u>(11)</u>	
Reduction to operating income		<u><u>32</u></u>	To Sch H, Line 2g

Note 1:

2017 Final Test Year Rate Case Final D&O Refund calculation, filed in Docket No. 2016-0328 HECO Letter to the PUC, Exhibits 4 & 5, filed on July 23, 2018, and approved in Order No. 35661, filed August 30, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
WORKING CASH
2018

Line	Working Cash Items	2018	(Note 1)		Amount
			Net Collection		
	A	B	Lag Days		C
					D = B/365xC
1	Fuel	523,706	B1	19.1	27,405
2	Purchased Power	494,450	B2	-5.4	(7,315)
3	O&M Labor	137,959	B3	25.5	9,638
4	O&M Non-Labor	165,521	B4	8.6	3,900
5	Revenue Taxes	160,276	B5	-50.9	(22,351)
6	Income Taxes	35,031	B6	-2.6	(250)
7	Working Cash				<u>11,027</u> To HECO-WP-H-001
8	Fuel Oil	523,706	B1		GL #90501000, 90547000, 90547100
9	Purchased Power	494,450	B2		GL #90555000
10	O&M Labor				
11	O&M Labor	145,473			Acct. Dept. O&M report
12	Fuel O&M Labor	(2,242)			Acct. Dept. O&M report
13	O&M Labor Excl Fuel Labor	143,231			
14	Disallowed O&M	(5,272)			HECO WP-H-002
15	Total	137,959	B3		
16	O&M Non-Labor				
17	O&M Expense	1,333,535			PUC Monthly Report
18	Less: Fuel Oil & PP Expense	(1,018,156)			Lines 8 + 9
19	O&M Labor Excl Fuel Labor	(143,231)			(see O&M Labor Excl Fuel Labor above)
20	Disallowed O&M Non-Labor	(1,767)			HECO WP-H-002
21	Bad Debt Expense	(1,388)			GL #60010000
22	Pension Reg Asset/Liab Amort	(11,456)			HECO WP-H-008 pg. 2
23	OPEB Reg Asset/Liab Amort	376			
24	System Develop Amort	(2,267)			
25	Other Deferred Projects Amort	(742)			
26	Payroll Taxes	9,985			GL #60018000/001/015, 60019100, 60050001,
27	Interest on Customer Deposits	632			60050001/238/242/245/251, 70000010/20/30
28	Total	165,521	B4		GL #60016050
29	Revenue Taxes				
30	Franchise	44,708			GL #60017000
31	PSC	106,518			GL #60017002
32	PUC Fee	9,050			GL #60017001
33	Total	160,276	B5		
34	Current Income Taxes				
35	Income Tax	32,067			Dec. 2018 PUC Monthly Report
36	Inc Tax on Disallowed Items	1,915			HECO WP-H-002
37	Reversal of Tax Related to Interest Sync Replacement	12,461			Sch H, Line 2d
38	Tax Eff of AFUDC Equity	(3,189)			GL #60020060
39	Income Tax Adjustments	3,404			HEI worksheet
40	Tax Related to Int Synch	(11,627)			Sch H, Line 13 - 13a
41	Total	35,031	B6		

Note 1: See Final Decision and Order No. 35545, For Approval of General Rate Case and Revised Schedules/Rules, filed on June 22, 2018 in Docket No. 2016-0328, Exhibit B, Page 2 of 2.

HAWAIIAN ELECTRIC COMPANY, INC.
O&M Non-Labor Amortization
2018

Pension Regulatory Asset Amortization

Standard Journal Entry No.			(TY17) - Note 1	Annual	Rounded
<i>PAA202</i>	<i>PAA219</i>	Total	O&M % Portion	2018	000s
Jan 2018	Feb-Dec 2018		57.43%		
(45,851)	19,994,484	19,948,633	11,456,500	11,456,500	11,456 To Page 1

OPEB Regulatory Asset Amortization

Standard Journal Entry No.			(TY17) - Note 1	Annual	Rounded
<i>PAA203</i>	<i>PAA220</i>	Total	O&M % Portion	2018	000s
Jan 2018	Feb-Dec 2018		57.43%		
(159,067)	(495,069)	(654,136)	(375,670)	(375,670)	(376) To Page 1

System Development Amortization

Standard Journal Entry No.						Annual	Rounded
<i>PAA109</i>	<i>PAA133</i>	<i>PAA143</i>	<i>PAA163</i>	<i>PAA195</i>	<i>PAA177</i>	2018	000s
<i>18607004</i>	<i>18606004</i>	<i>18606104</i>	<i>18607704</i>	<i>18670400</i>	<i>18605005</i>		
OMS	HR Suites Phase 1	HR Suites Phase 2	Budget Replace	IVR System Replace	CIS		
300,940	356,462	127,940	145,469	116,500	1,219,715	2,267,026	2,267 To Page 1

Other Deferred Projects Amortization

Standard Journal Entry No.							Annual	Rounded
<i>PAA166</i>	<i>PAA166</i>	<i>PAA166</i>	<i>PAA176</i>	<i>PAA176</i>	<i>PAA176</i>	<i>PAA132</i>	2018	000s
<i>18670124</i>	<i>18670125</i>	<i>18670126</i>	<i>18670120</i>	<i>18670121</i>	<i>18670122</i>	<i>18670152</i>		
EOTP	EOTP	EOTP AFUDC	CIP CT-1	CIP CT-1	CIP CT-1	RO		
Depreciation	AFUDC Debt	Equity	Depreciation	AFUDC Debt	AFUDC Equity	Pipeline		
18,219	15,342	35,441	146,605	123,526	286,584	116,436	742,153	742 To Page 1

NOTE:

1 See Parties' Stipulated Settlement Letter, filed November 15, 2017, in Docket No. 2016-0328, HECO T-16 Attachment 4, page 1. Approved in Final Decision and Order No. 35545, filed on June 22, 2018.

HAWAIIAN ELECTRIC COMPANY, INC.
MONTHLY FINANCIAL REPORT
December 2018

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII
OPERATING INCOME BEFORE RATEMAKING ADJUSTMENTS TO BE USED FOR THE EARNINGS SHARING CALCULATION
(in thousands)

Page 2a

Operating income per Monthly Financial Report	138,084	*3	
Less: Interest on Customer Deposits	(632)		
Add: Adjustment to federal income tax to offset the DPAD benefit recognized at MECO *2	66		
Add: Gain on Sale Amortization	66	*4	
Operating income before ratemaking adjustments & synchronized interest - earnings sharing calculation	137,585	*1	
Income Tax Adjustments	(3,404)		
Adjusted Operating income before ratemaking adjustments & synchronized interest - earnings sharing calculation	134,181		To Sch H

*1 Amounts may not add up due to rounding.

*2 An adjustment made to offset the benefit of the Domestic Production Activities Deduction (DPAD) recognized on a standalone basis at Maui Electric Company, Ltd. (MECO) and excluded the impact from the operating income before ratemaking adjustments & synchronized interest for Hawaiian Electric Company. This adjustment was made to eliminate the impact of the MECO's tax benefit from the Hawaiian Electric Company consolidated net income, and therefore should not have any impact on a standalone basis at Hawaiian Electric Company.

*3 Starting October 2018, Operating Income per the Monthly Financial Report includes income tax on AFUDC Equity.

*4 Included within Other Income and added back for ratemaking purposes.

Note:

Included to support Operating Income on Schedule H since PUC Page 2a was excluded from the December 2018 Monthly PUC Report submitted on February 27, 2019.

Hawaiian Electric Company, Inc.
Schofield Generating Station
Plant Addition
As of December 31, 2018

Utility Account	(Note 1) PUC Approved Accrual Rate	(Note 2) Balance at 12/31/18	Depreciation 2019	Allocation %	(Note 3) Subject to Cap	Depreciation 2019 (at Cap)
	a	b	c = a x b	d	e = d x Cap	f = a x e
343	0.03260	142,147,612	4,634,012	98.2%	139,030,987	4,532,410
352	0.01600	2,003,490	32,056	1.4%	1,959,563	31,353
353	0.01860	352,190	6,551	0.2%	344,468	6,407
397	0.06670	240,250	16,025	0.2%	234,983	15,673
		<u>144,743,542</u>	<u>4,688,643</u>	<u>100.0%</u>	<u>141,570,000</u>	<u>4,585,844</u>
					To Sch L1	To Sch L1

Source: SAP and Powerplan WBS.

Note 1:

Depreciation rates approved in Docket No. 2010-0053, Decision and Order, filed May 12, 2011.

Note 2:

See details at HECO-WP-D2-001.

Note 3:

Decision and Order No. 33178, p. 84-85, Docket No. 2014-0113, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0001576, Schofield Generating Station Project, filed 09/29/2015. The Commission approved a cap on the amount of the total costs that may be recovered through any cost recovery mechanism other than base rates at 90% of the \$167 million cap. The \$167 million cap shall further be adjusted downward due to a reduction in the foreign exchange rate.

In the Letter to Commission Re: Docket No. 2014-0113, Schofield Generating Station; Notification of Euro Exchange Rate and Adjusted Project Cap, filed 01/27/2016, the Company locked in the foreign exchange rate at \$1.0928/euro which adjusted the project cap down from \$167 million to \$157.3 million. Revised cap on the amount of total costs allowed to be recovered through any cost recovery mechanism other than base rates is \$141.57 million (\$157.3 million x 90%).

HAWAIIAN ELECTRIC CO., INC.
SCHOFIELD GENERATING STATION - NO BONUS
DECEMBER 31, 2019

		2019 Add		2018		2019						
FEDERAL DEFERRED TAXES		Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	Total	Book/Tax	Depr	State ITC	Amort	Total
source		(page 2 of 5)	(page 3 of 5)	(page 3 of 5)	(page 3 of 5)	(page 5 of 5)	(page 5 of 5)					
1	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)		(412,415)		(19,716,566)
2	Book Depreciation							4,585,844		(412,415)		4,173,428
3	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)		(412,415)		(15,543,137)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%		19.7368%		19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,323,584)	(2,309,724)	1,481,649	813,976	(36,513)	(1,374,197)	(1,612,123)		(81,398)		(3,067,718)
6	Addback State Book/Tax Difference	6,706,173	11,702,627	(7,507,036)	(4,124,152)	185,002	6,962,615	8,168,107		412,415		15,543,137
7	Federal Book/Tax Difference	(39,373,231)	(11,702,627)	7,507,036	4,124,152	(185,002)	(39,629,673)	(9,565,463)		(412,415)		(49,195,136)
8	Book Depreciation							4,585,844		(412,415)		4,173,428
9	Federal State Difference	(32,667,058)	-	-	-	-	(32,667,058)	3,188,488		-		(29,478,570)
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%	21%		21%		21%
11	Federal Deferred Tax Adjustment	(6,860,082)	-	-	-	-	(6,860,082)	669,582		-		(6,190,500)
12	Total Federal Deferred Taxes	(8,183,666)	(2,309,724)	1,481,649	813,976	(36,513)	(8,234,279)	(942,541)		(81,398)		(9,258,218)
STATE DEFERRED TAXES												
13	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)		-		(19,716,566)
14	Book Depreciation							4,585,844		(412,415)		4,173,428
15	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)		(412,415)		(15,543,137)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%		6.0150376%		6.0150376%
17	Total State Deferred Taxes	(403,379)	(703,917)	451,551	248,069	(11,128)	(418,804)	(491,315)		(24,807)		(934,926)
18	TOTAL DEFERRED TAXES	(8,587,045)	(3,013,641)	1,933,200	1,062,045	(47,641)	(8,653,083)	(1,433,856)		(106,205)		(10,193,144)
												To Sch LI
												To Sch LI
												(1,540,061)
												To Sch LI

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018	2019	Net Book Value
FEDERAL											
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	50%	32,647,265	2,953,800	28,475,480
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	0%	3,109,263	5,907,600	55,059,682
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	50%	2,823,381	196,453	2,606,021
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	0%	204,100	392,906	5,028,849
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	50%	549,499	38,235	494,865
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	0%	39,723	76,469	966,407
Total		141,570,000	(11,702,627)	7,507,036	137,374,409				39,373,231	9,565,463	92,631,306
Cumulative									48,938,694		
To page 1 of 5											
HAWAII											
P0001576	Schofield Generation Station	128,153,091	(10,550,569)	6,768,010	124,370,532	Oth Prod	15	0	6,218,527	11,815,201	110,119,363
P0001576	Schofield Generation Station	11,251,710	(1,021,945)	655,561	10,885,325	Trans	20	0	408,200	785,812	10,057,698
P0001576	Schofield Generation Station	2,165,199	(130,112)	83,465	2,118,551	Comm	20	0	79,446	152,938	1,932,815
Total		141,570,000	(11,702,627)	7,507,036	137,374,409				6,706,173	12,753,951	122,109,876
Cumulative									19,460,124		
To page 1 of 5											

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:							(Note 1)	
	A	B	C	D	E=SUM(B:D)	F=A+E		
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	Allocation %	Subject to Cap
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	3.5%	4,942,763
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	24.5%	34,735,016
Vehicles	2,062	117,109	187	563	117,859	119,921	0.1%	117,292
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	11.6%	16,447,152
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	8.3%	11,702,627
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	48.3%	68,368,772
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	3.4%	4,834,193
Other	427,354	-	4,296	-	4,296	431,650	0.3%	422,186
	131,025,869	8,549,966	2,213,736	2,953,971	13,717,673	144,743,542	100.0%	141,570,000

BREAKDOWN SUBJECT TO (
	A1	B1	C1	D1	E1=SUM(B1:D1)	F1=A1+E1		
Expense Element	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project	State ITC	
Labor	2,243,144	1,675,424	299,212	724,982	2,699,618	4,942,763		
Materials	32,210,236	1,490,363	533,090	501,328	2,524,781	34,735,016	34,735,016	
Vehicles	2,017	114,541	183	551	115,275	117,292		
Overheads	12,603,385	2,402,368	533,026	908,373	3,843,767	16,447,152		
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
Outside Services-Construction	67,631,285	601,267	57,799	78,421	737,487	68,368,772	68,368,772	
Outside Services-Other	2,494,471	1,390,800	607,576	341,347	2,339,722	4,834,193		
Other	417,984	-	4,202	-	4,202	422,186		
	128,153,091	8,362,506	2,165,199	2,889,204	13,416,909	141,570,000		(Note 1)
Amount subject to bonus	50%	50%	50%	50%	50%	50%	103,103,789	
	64,076,545	4,181,253	1,082,599	1,444,602	6,708,455	70,785,000	4%	
			5,625,855				4,124,152	To page 1 of 5
Tie out of TCI:								
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		To page 1 of 5
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%		From page 4 of 5
TCI	6,768,010	441,175	83,465	214,385	739,025	7,507,036		To page 1 of 5
			655,561					

Source: Ellipse & SAP

Note 1:
Allocated 12/31/18 Plant Addition subject to the cap of \$141.57M. See further discussion at HECO-WP-L1-001.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

To page 3 of 5

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

To page 1 of 5

SOURCE: Ellipse & SAP

**Schedule L exhibit,
with additional supporting workpapers**

Excerpt from Docket No. 2017-0213 - Schofield Generating Station Cost Recovery through the Major Project Interim Recovery Adjustment Mechanism Hawaiian Electric's Update of Target Revenues and Updated Responses to the Commission's Information Requests, filed July 18, 2018. Approved in Order No. 35647, issued August 15, 2018. Effective July 1, 2018. Pages 1 through 9.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7a)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,581,445	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (5,000)	\$ -	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (6,000)	\$ -	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (1), (5), (7), (7a)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (1), (5), (7), (7a)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rates)	Note (1), (5), (7), (7a)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (135,934)	\$ (135,934)	\$ (135,934)	\$ (135,934)	\$ (135,934)
5	Last Rate Order Target Annual Revenues	Sum Lines 1...4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (2)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Authorized MPR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Net MPR Adjustment	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Less: EARNINGS SHARING REVENUE CREDITS	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Total Annual Target Revenues		\$ 604,302	\$ 604,302	\$ 604,302	\$ 604,302	\$ 637,077	\$ 599,960	\$ 612,574	\$ 618,587	\$ 618,587
20	June 1, 2017 Annualized Revenues w/ RAM Increase	Col (g), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21	February 16, 2018 Annualized Revenues w/ interim increase	Col (h), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April 13, 2018 Annualized Revenues w/ 2nd interim increase	Col (i), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	June 1, 2018 Annualized Revenues w/ RAM Increase	Col (k), lines (5+9+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	June 1, 2018 Annualized Revenues w/ RAM Increase & MPR, eff 7/1/18	Col (l), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Distribution of Target Revenues by Month:										
26	January	Note (3)	8.10%	\$48,009,623	\$48,009,623	\$48,946,443	\$22,450,132	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296
27	February	7.26%	\$43,030,848	\$43,030,848	\$43,030,848	\$23,503,022	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
28	March	8.10%	\$48,009,623	\$48,009,623	\$48,009,623	\$22,450,132	\$51,603,222	\$28,726,095	\$59,817,091	\$50,662,296	
29	April	7.84%	\$46,468,574	\$46,468,574	\$46,468,574	\$20,335,492	\$20,335,492	\$28,726,095	\$59,817,091	\$50,662,296	
30	May	8.44%	\$50,024,842	\$50,024,842	\$50,024,842	\$28,726,095	\$28,726,095	\$28,726,095	\$59,817,091	\$50,662,296	
31	June	8.07%	\$51,184,359	\$51,184,359	\$51,184,359	\$28,726,095	\$28,726,095	\$28,726,095	\$59,817,091	\$50,662,296	
32	July	8.77%	\$52,997,265	\$52,997,265	\$52,997,265	\$28,726,095	\$28,726,095	\$28,726,095	\$59,817,091	\$50,662,296	
33	August	9.04%	\$53,681,111	\$53,681,111	\$53,681,111	\$28,726,095	\$28,726,095	\$28,726,095	\$59,817,091	\$50,662,296	
34	September	8.65%	\$51,447,350	\$51,447,350	\$51,447,350	\$28,726,095	\$28,726,095	\$28,726,095	\$59,817,091	\$50,662,296	
35	October	8.78%	\$52,040,061	\$52,040,061	\$52,040,061	\$28,726,095	\$28,726,095	\$28,726,095	\$59,817,091	\$50,662,296	
36	November	8.26%	\$48,957,962	\$48,957,962	\$48,957,962	\$28,726,095	\$28,726,095	\$28,726,095	\$59,817,091	\$50,662,296	
37	December	8.26%	\$48,957,962	\$48,957,962	\$48,957,962	\$28,726,095	\$28,726,095	\$28,726,095	\$59,817,091	\$50,662,296	
38	Total Distributed Target Revenues	100.00%	\$357,167,892	\$357,167,892	\$357,167,892	\$72,451,465	\$94,388,846	\$79,122,753	\$49,434,684	\$319,624,035	\$249,043,223
39											

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 28, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for tax Act implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 28, 2018, establishing 2018 target revenue effective June 1, 2018.

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY**

**MPIR PROJECT
\$ in thousands**

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2017 (c)	Recorded at In Service Date (June 2018) (d)	Ending Balance as of 6/30/18 (e)	Average Balance (f)	MPIR (f)
Return on Investment							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	-	141,275	141,275	70,638	
2	Accum Depreciation	Schedule TBD	-	-	-	-	
3	Net Cost of Plant in Service		-	141,275	141,275	70,638	
4	Fuel Inventory - Avoided	Note 3	-	(1,534)	(1,534)	(767)	
5	M&S Inventory	Note 3	-	100	100	50	
6	Total Additions		-	(1,434)	(1,434)	(717)	
7	CIAC	Schedule TBD, if needed	-	-	-	-	
8	ADIT	HECO-WP-L-002	-	(8,689)	(8,689)	(4,344)	
9	State ITC	HECO-WP-L-002	-	(4,147)	(4,147)	(2,074)	
10	Total Deductions		-	(12,836)	(12,836)	(6,418)	
11	Total Rate Base		\$ -	\$ 127,005	\$ 127,005	63,502	
12	Average Rate Base					\$ 63,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 6,014
15	Depreciation Expense (Note 1)	Schedule E				-	
16	Operating & Maintenance Expense	Note 2				-	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				-	
18	Lease Rent Expense	Schedule TBD, if needed				-	
19	Other Expense	Schedule TBD, if needed				-	
20	Total Expenses					\$ -	
21	Total Major Project Interim Recovery						\$ 6,014
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	2019 Annualized Revenue for Major Project Interim Recovery						\$ 6,600.0
							To Sch B & B1

Reconciliation to Schedule B1 (Info Only)	
Sum of Monthly Factors for Jul-Dec 2018	51.67%
Prorated MPIR for Year 1	\$ 3,410
Rev Tax Adj	\$ (303)
Prorated MPIR for Year 1 excl Rev Tax	\$ 3,107

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Per Order No. 35556, page 74, Docket No. 2017-0213, For Approval to Recover Costs for Schofield Generating Station through the Major Project Interim Recovery Adjustment Mechanism, filed on June 27, 2018. Total estimated annual O&M expense will be excluded from the MPIR calculation until an acceptable business case study has been reviewed and approved by the Commission.

Note 3: Difference in fuel inventory and difference in materials & supplies inventory derived from the "with Schofield" and "without Schofield" rate bases in the HECO 2017 test year rate cases. See Docket No. 2016-0328 HECO-3201 p. 3 and HECO-3203 p. 3.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Hawaiian Electric Company, Inc.
 MPIR Plant Additions
 Actuals Through June 30, 2018

Indicator Code	NI
Row Labels	Sum of amount
150: Labor Cost	4,542,416
155: Labor True-up	284,309
201: Matl-Issues/Purchases	33,529,637
205: Matl-Purchasing Card	63,740
301: Vehicles	112,180
404: Energy Delivery	1,758,310
405: Power Supply	10,752,643
406: Corp Admin Expense	929,503
421: Non-Productive Wages	610,417
422: Employee Benefits	1,348,674
423: Payroll Taxes	403,436
430: AFUDC-Debt	3,260,337
431: AFUDC-Equity	8,704,625
501: Outside Svcs-General	1,461,336
502: Outside Svcs-Legal	177,774
503: Outside Svcs-TempHire	2,916
505: Outside Svcs-Constr	70,093,402
506: Outside Svcs-Engr	1,596,895
508: Outside Svcs-Environ	1,213,832
520: Mainland Travel	90,358
522: Interisland Travel	1,706
570: Rents	9,300
521: Meals	13,202
900: Fin Stmt Items	314,048
Grand Total	141,274,996

SOURCE: UIPlanner Actual Data

HAWAIIAN ELECTRIC CO., INC.
 SCHOFIELD GENERATING STATION
 DECEMBER 31, 2018 (Based on Actuals Through June 30, 2018)

	source	Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	Total
FEDERAL DEFERRED TAXES							
1	State Book/Tax Difference	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
2							
3	Subtotal	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%
5	Federal Def Tax on State Book/Tax Diff	(1,325,136)	(2,361,501)	1,514,515	818,578	(36,513)	(1,390,057)
6	Addback State Book/Tax Difference	6,714,039	11,964,962	(7,673,560)	(4,147,471)	185,002	7,042,972
7	Federal Book/Tax Difference	(39,452,276)	(11,964,962)	7,673,560	4,147,471	(185,002)	(39,781,209)
8							
9	Federal State Difference	(32,738,237)	-	-	-	-	(32,738,237)
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%
11	Federal Deferred Tax Adjustment	(6,875,030)	-	-	-	-	(6,875,030)
12	Total Federal Deferred Taxes	(8,200,166)	(2,361,501)	1,514,515	818,578	(36,513)	(8,265,087)
STATE DEFERRED TAXES							
13	State Book/Tax Difference	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
14							
15	Subtotal	(6,714,039)	(11,964,962)	7,673,560	4,147,471	(185,002)	(7,042,972)
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	(403,852)	(719,697)	461,568	249,472	(11,128)	(423,637)
18	TOTAL DEFERRED TAXES	(8,604,018)	(3,081,198)	1,976,083	1,068,050	(47,641)	(8,688,724)

HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFFIELD GENERATION STATION
 (Based on Actuals Through June 30, 2018)

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct Life	(Note 1) Bonus	2018	Net Book Value
FEDERAL									
P0001576	Schoffield Generation Station	63,995,593	(5,393,539)	3,459,071	62,061,124	Oth Prod 15	50%	32,582,090	31,413,503
P0001576	Schoffield Generation Station	63,995,593	(5,393,539)	3,459,071	62,061,124	Oth Prod 15	0%	3,103,056	60,892,537
P0001576	Schoffield Generation Station	5,661,768	(180,733)	335,052	5,816,087	Trans 20	50%	3,017,095	2,644,673
P0001576	Schoffield Generation Station	5,661,768	(180,733)	335,052	5,816,087	Trans 20	0%	218,103	5,443,665
P0001576	Schoffield Generation Station	980,137	(66,514)	42,658	956,281	Comm 20	50%	496,071	484,066
P0001576	Schoffield Generation Station	980,137	(66,514)	42,658	956,281	Comm 20	0%	35,861	944,276
	Total	141,274,996	(11,281,574)	7,673,560	137,666,982			39,452,276	101,822,720
HAWAII									
P0001576	Schoffield Generation Station	127,991,185	(10,787,079)	6,918,141	124,122,248	Oth Prod 15	0	6,206,112	121,785,073
P0001576	Schoffield Generation Station	11,323,536	(361,466)	670,103	11,632,173	Trans 20	0	436,206	10,887,330
P0001576	Schoffield Generation Station	1,960,274	(133,029)	85,316	1,912,561	Comm 20	0	71,721	1,888,553
	Total	141,274,996	(11,281,574)	7,673,560	137,666,982			6,714,039	134,560,957

Note 1:

The Tax Technical Corrections Act of 2018 made changes to the phase down rules of §168(k) as it existed just prior to the enactment of the 2017 Tax Reform Act. These changes indicated that 50% bonus depreciation (under the old law) would apply to longer production period property that was pursuant to a written binding contract entered into prior to September 28, 2017 but placed into service in 2018. Based on this statutory revision, the current best assessment is that one-half of the Schoffield project components should meet the written binding contract requirements and will be grandfathered under the old law, which allowed 50% bonus depreciation on public utility property. The Company continues to monitor the tax developments for further guidance.

SOURCE: PUC-HECO-IR-7 (Update of CA-IR-19)

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through June 2018

Row	Expense Element	A		B		C		D		E = SUM(B:D)		F = A + E
		Oth Prod Generating Station and Switchyard	Trans 46kV Line	Trans Wahaiwa Substation	Comm Telecom	Trans Wahaiwa Substation	Interconnection Total	Interconnection Total	Total Project			
1	150: Labor Cost	2,036,413	1,505,621	698,537	301,845	2,506,003	4,542,416					
2	155: Labor True-up	99,413	149,735	37,744	(2,583)	184,896	284,309					
3	201: Maint-Issues/Purchases	31,024,176	1,466,766	494,978	543,716	2,505,461	33,529,637					33,529,637
4	205: Maint-Purchasing Card	5,329	39,500	17,588	1,323	58,411	63,740					63,740
5	301: Vehicles	1,213	110,407	560	-	110,967	112,180					
6	404: Energy Delivery	52,075	1,108,794	359,388	238,053	1,706,235	1,758,310					
7	405: Power Supply	10,442,252	190,953	83,082	36,356	310,392	10,752,643					
8	406: Corp Admin Expense	414,446	310,795	141,180	63,083	515,057	929,503					
9	421: Non-Productive Wages	265,486	210,398	43,543	90,990	344,931	610,417					
10	422: Employee Benefits	627,481	441,079	185,141	94,973	721,193	1,348,674					
11	423: Payroll Taxes	181,698	133,734	62,654	25,350	221,738	403,436					
12	430: AFUDC-Debt	2,940,954	190,052	97,899	36,432	319,383	3,260,337					
13	431: AFUDC-Equity	7,846,125	513,108	248,795	96,597	838,500	8,704,625					
14	501: Outside Svcs-General	453,275	775,828	62,767	169,466	1,008,061	1,461,336					
15	502: Outside Svcs-Legal	136,675	41,099	-	-	41,099	177,774					
16	503: Outside Svcs-TempHire	2,916	-	-	-	-	2,916					
17	505: Outside Svcs-Constr	69,339,679	614,746	79,883	59,095	753,723	70,093,402					70,093,402
18	506: Outside Svcs-Engr	483,431	580,122	284,614	248,729	1,113,464	1,596,895					
19	508: Outside Svcs-Environ	1,213,832	-	-	-	-	1,213,832					
20	520: Mainland Travel	86,254	-	-	4,104	4,104	90,358					
21	522: Interisland Travel	1,706	-	-	-	-	1,706					
22	570: Rents	9,300	-	-	-	-	9,300					
23	521: Meals	13,010	-	-	192	192	13,202					
24	900: Fin Stmt Items	314,048	-	-	-	-	314,048					
25	Grand Total	127,991,185	8,382,735	2,940,801	1,960,274	13,283,810	141,274,996					103,686,779
	Bonus Depr	50%	50%	50%	50%	50%	4%					
	To Tax Depr	63,995,593	4,191,368	1,470,400	980,137	1,470,400	4,147,471					

Note 1: Project was placed into service on June 7, 2018.

Note 2: To arrive at direct costs per categories listed in PUC-HECO-IR-7 Attachment 2:

26	Grand Total per Row 25	127,991,185	8,382,735	2,940,801	1,960,274	13,283,810	141,274,996
27	Less: Overheads (rows 6, 7, 8, 9, 10, 11)	11,983,438	2,395,752	922,436	501,358	3,819,546	15,802,984
28	Less: AFUDC (rows 12, 13)	10,787,079	703,160	341,694	133,029	1,177,883	11,964,962
29	Total Direct Costs by Major Area	105,220,669	5,283,823	1,676,671	1,325,887	8,286,381	113,507,050

Note 3: Agrees to 'Total Generating Station' per PUC-HECO-IR-7 Attachment 2 row 5

Note 4: Agrees to 'Total Interconnection' per PUC-HECO-IR-7 Attachment 2 row 10 (minor difference in total for 46kV, Telecom, and Wahaiwa Sub due to Project Management costs being allocated in Attachment 1 vs. not allocated in Attachment 2).

Note 5: Agrees to 'Subtotal Direct Costs' per PUC-HECO-IR-7 Attachment 2 row 11.

Tie out of ICI:							
AFUDC	10,787,079	703,160	341,694	133,029	341,694	1,177,883	11,964,962
ratio - 5 year average	64.13%	64.13%	64.13%	64.13%	64.13%	64.13%	64.13%
TCI	6,918,141	450,962	219,141	85,316	755,419	7,673,560	

**Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio**

	2013	2014	2015	2016	2017	5 Yr Ave
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,036,221	22,038,913
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608366	0.641336

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through June 30, 2018

Indicator Code	NR
Row Labels	Sum of amount
150: Labor Cost	83,369
155: Labor True-up	7,161
205: Matl-Purchasing Card	46
404: Energy Delivery	38,302
406: Corp Admin Expense	15,495
421: Non-Productive Wages	10,390
422: Employee Benefits	22,600
423: Payroll Taxes	7,639
Grand Total	185,002

SOURCE: UIPlanner Actual Data

Exhibit C

Updated Schedule L

Excerpt from Docket No. 2017-0213 - Schofield Generating Station MPIR Adjustment Mechanism Cost Recovery Request Hawaiian Electric's Business Case Analysis Supporting Net O&M Project Costs and Update of Target Revenues, filed September 6, 2018. Approved in Order No. 35953, issued December 14, 2018. Effective October 1, 2018. Pages 10 through 13.

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY
MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2017 (c)	Recorded at In Service Date (June 2018) (d)	Ending Balance as of 6/30/18 (e)	Average Balance	MPIR (f)
Return on Investment							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	-	141,275	141,275	70,638	
2	Accum Depreciation	Schedule TBD	-	-	-	-	
3	Net Cost of Plant in Service		-	141,275	141,275	70,638	
4	Fuel Inventory - Avoided	Note 3	-	(1,534)	(1,534)	(767)	
5	M&S Inventory	Note 3	-	100	100	50	
6	Total Additions		-	(1,434)	(1,434)	(717)	
7	CIAC	Schedule TBD, if needed	-	-	-	-	
8	ADIT	HECO-WP-L-002	-	(8,689)	(8,689)	(4,344)	
9	State ITC	HECO-WP-L-002	-	(4,147)	(4,147)	(2,074)	
10	Total Deductions		-	(12,836)	(12,836)	(6,418)	
11	Total Rate Base		\$ -	\$ 127,005	\$ 127,005	63,502	
12	Average Rate Base					\$ 63,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 6,014
15	Depreciation Expense (Note 1)	Schedule E				-	
16	Operating & Maintenance Expense	Note 2				1,787	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				-	
18	Lease Rent Expense	Schedule TBD, if needed				-	
19	Other Expense	Schedule TBD, if needed				-	
20	Total Expenses						\$ 1,787
21	Total Major Project Interim Recovery						\$ 7,801
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						\$ 8,561.2

To Sch B & B1

Reconciliation to Schedule B1 (Info Only)	
Sum of Monthly Factors for Jul-Dec 2018	51.67%
Prorated MPIR for Year 1	\$ 4,424
Rev Tax Adj	\$ (393)
Prorated MPIR for Year 1 excl Rev Tax	\$ 4,031

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update.

Note 3: Difference in fuel inventory and difference in materials & supplies inventory derived from the "with Schofield" and "without Schofield" rate bases in the HECO 2017 test year rate cases. See Docket No. 2016-0328 HECO-3201 p. 3 and HECO-3203 p. 3.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Exhibit D

Updated Schedule B1

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES**

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2010-0080 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7a)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,681,445	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (5,000)	\$ -	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ (6,000)	\$ -	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (1), (5), (7), (7a)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (1), (5), (7), (7a)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rates)		\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (139,534)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)
5	Last Rate Order Target Annual Revenues	Sum Lines 1..4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 637,091	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (2)	\$ -	\$ -	\$ 101,131	\$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ (8,986)	\$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ -	\$ -	\$ 92,146	\$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Authorized MPR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,561
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (761)
14	Net MPR Adjustment	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,801
15	Less: EARNINGS SHARING REVENUE CREDITS	Note (2), (9)	\$ -	\$ -	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ -
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ -
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$ -	\$ -	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ -
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Total Annual Target Revenues		\$ -	\$ -	\$ 604,302	\$ 604,302	\$ 637,077	\$ 599,960	\$ 612,574	\$ 620,374	\$ 620,374
20	June 1, 2017 Annualized Revenues w/ RAM Increase	Col (g), lines (5+8+17+18)	\$ -	\$ -	\$ 604,302	\$ 604,302	\$ -	\$ -	\$ -	\$ -	\$ -
21	February 16, 2018 Annualized Revenues w/ Interim Increase	Col (i), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ 637,077	\$ -	\$ -	\$ -	\$ -
22	April 13, 2018 Annualized Revenues w/ 2nd Interim Increase	Col (j), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	June 1, 2018 Annualized Revenues w/ RAM Increase	Col (k), lines (5+9+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	June 1, 2018 Annualized Revenues w/ RAM Increase & MPR - eff 7/1/18	Col (l), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	Distribution of Target Revenues by Month:	Note (3)									
26	January	8.10%	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623
27	February	7.26%	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848	\$43,030,848
28	March	8.10%	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623	\$48,009,623
29	April	7.84%	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574	\$46,468,574
30	May	8.44%	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842	\$50,024,842
31	June	8.07%	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656	\$50,202,656
32	July	8.77%	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790	\$51,980,790
33	August	9.04%	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111	\$53,581,111
34	September	8.65%	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350	\$51,447,350
35	October	8.78%	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061	\$52,040,061
36	November	8.26%	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962
37	December	8.28%	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962	\$48,957,962
38	Total Distributed Target Revenues	100.000%	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892	\$357,167,892
39			\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510	\$235,543,510

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 29, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335).
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.

\$35,971
0.46429
-\$603
-\$2,143
0.60000

\$000s
\$000s
\$000s
\$000s

\$49,434,694
\$28,726,095
\$50,396,658

\$79,122,753
\$94,388,846
\$72,451,465

\$620,374
\$620,374
\$620,374

\$50,808,650
\$47,086,404
\$50,250,313
\$49,505,864
\$52,111,435

\$53,972,558
\$55,461,456
\$53,662,371
\$54,841,062
\$51,366,966
\$320,547,365

ATTACHMENT 1

Schedule B1, Schedule L and Supporting Workpapers

HAWAIIAN ELECTRIC COMPANY, INC.

Excerpt from Transmittal No. 19-01 - Notice Transmittal to Update Target Revenue for Schofield Generating Station through the Major Project Interim Recovery Adjustment Mechanism, filed February 7, 2019 and effective January 1, 2019.
Pages 14 through 22.

**HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
DETERMINATION OF TARGET REVENUES**

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)	Docket No. 2016-0328 Amounts (i)	Docket No. 2016-0328 Amounts (j)	Docket No. 2016-0328 Amounts (k)	Docket No. 2016-0328 Amounts (l)	Docket No. 2016-0328 Amounts (m)	Docket No. 2016-0328 Amounts (n)
1	Last Rate Case Annual Electric Revenue at Approved Rate Levels	Note (1), (5), (7), (7e)	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709	\$ 1,529,709
1a	Less: Holdback of Interim Revenues	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1b	Less: Customer Benefit Adjustment	Note (5)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2	Less: Fuel Expense	Note (1), (5), (7), (7e)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (658,172)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)	\$ (327,609)
3	Purchased Power Expense	Note (1), (5), (7), (7e)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)	\$ (466,211)
4	Revenue Taxes on Line 1 to 1b (8.885% statutory rates)	Note (1), (5), (7), (7e)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)	\$ (135,915)
5	Last Rate Order Target Annual Revenues	Sum Lines 1..4	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974	\$ 599,974
6	Authorized RAM Revenues	Note (2)	\$ -	\$ -	\$ 101,131	\$ 101,131	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 6 at 8.885%		\$ -	\$ -	\$ (8,986)	\$ (8,986)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +6	Lines 6 + 7	\$ -	\$ -	\$ 92,146	\$ 92,146	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	Less: Revenue Taxes on Line 9 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	Net RAM Adjustment - Test Year +1	Lines 9 + 10	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Authorized MPIR Revenues	Schedule L	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Less: Revenue Taxes on Line 12 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Net MPIR Adjustment	Lines 12 + 13	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15	Less: EARNINGS SHARING REVENUE CREDITS	Note (2), (9)	\$ -	\$ -	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)	\$ (16)
16	Less: Revenue Taxes on Line 15 at 8.885%		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$ -	\$ -	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)	\$ (14)
18	PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:	Note (2), (9)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	Total Annual Target Revenues		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
20	June 1, 2017 Annualized Revenues w/ RAM Increase	Col (g), lines (5+8+17+18)	\$ 604,302	\$ 604,302	\$ 604,302	\$ 604,302	\$ 637,077	\$ 599,960	\$ 612,574	\$ 618,587	\$ 620,374	\$ 630,624
21	February 16, 2018 Annualized Revenues w/ Interim Increase	Col (j), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	April 13, 2018 Annualized Revenues w/ 2nd Interim Increase	Col (j), lines (5+8+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	June 1, 2018 Annualized Revenues w/ RAM Increase	Col (k), lines (5+9+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 7/1/18	Col (l), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 10/1/18	Col (m), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	June 1, 2018 Annualized Revenues w/ RAM Increase & MPIR eff 1/1/19	Col (m), lines (5+11+14+17+18)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	Distribution of Target Revenues by Month:											
28	January	Note (3)	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623	\$ 48,009,623
29	February	8.10%	\$ 4,300,848	\$ 4,300,848	\$ 4,300,848	\$ 4,300,848	\$ 4,300,848	\$ 4,300,848	\$ 4,300,848	\$ 4,300,848	\$ 4,300,848	\$ 4,300,848
30	March	7.26%	\$ 4,009,623	\$ 4,009,623	\$ 4,009,623	\$ 4,009,623	\$ 4,009,623	\$ 4,009,623	\$ 4,009,623	\$ 4,009,623	\$ 4,009,623	\$ 4,009,623
31	April	8.10%	\$ 4,668,574	\$ 4,668,574	\$ 4,668,574	\$ 4,668,574	\$ 4,668,574	\$ 4,668,574	\$ 4,668,574	\$ 4,668,574	\$ 4,668,574	\$ 4,668,574
32	May	7.84%	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842	\$ 50,024,842
33	June	8.44%	\$ 50,202,656	\$ 50,202,656	\$ 50,202,656	\$ 50,202,656	\$ 50,202,656	\$ 50,202,656	\$ 50,202,656	\$ 50,202,656	\$ 50,202,656	\$ 50,202,656
34	July	8.47%	\$ 51,980,790	\$ 51,980,790	\$ 51,980,790	\$ 51,980,790	\$ 51,980,790	\$ 51,980,790	\$ 51,980,790	\$ 51,980,790	\$ 51,980,790	\$ 51,980,790
35	August	8.77%	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111	\$ 53,581,111
36	September	9.04%	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350	\$ 51,447,350
37	October	8.68%	\$ 52,040,061	\$ 52,040,061	\$ 52,040,061	\$ 52,040,061	\$ 52,040,061	\$ 52,040,061	\$ 52,040,061	\$ 52,040,061	\$ 52,040,061	\$ 52,040,061
38	November	8.78%	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962	\$ 48,957,962
39	December	8.26%	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892
40	Total Distributed Target Revenues	100.00%	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892
41	Total Distributed Target Revenues	100.00%	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892	\$ 357,167,892

Footnotes:

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 29, 2012.
- Transmittal 17-02 filed March 31, 2017, establishing 2017 target revenue effective June 1, 2017.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.
- RBA Tariff Effective February 16, 2018 to reflect 2017 test year.
- Test Year 2017 Interim Increase provided for in Interim Decision and Order 35100, issued December 15, 2017 in Docket No. 2016-0328.
- For the month of the initial implementation (Feb 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Test Year 2017 2nd Interim Increase provided for in Order No. 35335, issued March 9, 2018 in Docket No. 2016-0328.
- Reduction for Tax Act Implementation Lag (March 2018 Settlement Tariff Sheets, Attachment 3, filed March 16, 2018, in accordance with Order No. 35335).
- For the month of the initial implementation (April 2018), adjust the monthly allocation by the number of effective days in the month over the total number of days.
- Transmittal 18-01 filed May 29, 2018, establishing 2018 target revenue effective June 1, 2018.
- MPIR Revenues effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018, in Docket No. 2017-0213.
- MPIR Revenues effective October 1, 2018 approved in Order No. 35953, issued December 14, 2018 in Docket No. 2017-0213.
- MPIR Revenues effective January 1, 2019 filed in Transmittal 19-01 on February 7, 2019.

\$35,971
0.46429
-\$603
-\$2,143
0.60000

\$000s
\$000s
\$000s

HAWAIIAN ELECTRIC COMPANY, INC.
DECOUPLING CALCULATION WORKBOOK
REVENUE REQUIREMENT AND DETERMINATION OF MAJOR PROJECT INTERIM RECOVERY
MPIR PROJECT
\$ in thousands

Line No.	Description (a)	Reference (b)	Recorded at 12/31/2018 (c)	2019 Activity (d)	Ending Balance as of 12/31/19 (e)	Average Balance (f) = ((c)+(e))/2	MPIR (g)
Return on Investment - Schofield Generating Station							
1	Gross Plant in Service (not to exceed PUC approved amount)	HECO-WP-L-001	141,570	-	141,570	141,570	
2	Accum Depreciation	HECO-WP-L-001	-	(4,586)	(4,586)	(2,293)	
3	Net Cost of Plant in Service		141,570	(4,586)	136,984	139,277	
4	Fuel Inventory - Avoided	Note 3	(1,534)	-	(1,534)	(1,534)	
5	M&S Inventory	Note 3	100	-	100	100	
6	Total Additions		(1,434)	-	(1,434)	(1,434)	
7	CIAC	Not Applicable	-	-	-	-	
8	ADIT	HECO-WP-L-002	(8,653)	(1,540)	(10,193)	(9,423)	
9	State ITC	HECO-WP-L-002	(4,124)	412	(3,712)	(3,918)	
10	Total Deductions		(12,777)	(1,128)	(13,905)	(13,341)	
11	Total Rate Base		\$ 127,359	\$ (5,713)	\$ 121,646	124,502	
12	Average Rate Base					\$ 124,502	
13	Rate of Return (grossed-up for income taxes, before revenue taxes)	Note 4				9.47%	
14	Annualized Return on Investment (before revenue taxes)						\$ 11,790
15	Depreciation Expense (Note 1)	HECO-WP-L-001				4,586	
16	Operating & Maintenance Expense	Note 2				2,087	
16a	Prior year reconciliation of O&M to actuals	Note 2				-	
17	Amortization of State ITC	see line 6				(412)	
18	Lease Rent Expense	Not Applicable				-	
19	Other Expense	Not Applicable				-	
20	Total Expenses						\$ 6,260
21	Total Major Project Interim Recovery						\$ 18,051
22	Revenue Tax Factor (1/(1-8.885%))						1.0975
23	Annualized Revenue for Major Project Interim Recovery						\$ 19,810.8

To Sch B & B1

	Reconciliation to Schedule B1 (Info Only)		
	Jul - Sep 2018	Oct - Dec 2018	2019
Annualized Revenue for MPIR	\$ 6,600	\$ 8,561	\$ 19,811
Rev Tax Adj	\$ (586)	\$ (761)	\$ (1,760)
Prorated MPIR for Year 1 excl Rev Tax	\$ 6,014	\$ 7,800	\$ 18,051
Incremental	\$ 6,014	\$ 1,787	\$ 10,250
	Note 5	Note 6	

Note 1: Depreciation expense is recorded beginning in the year after an asset is placed in service, therefore, depreciation expense is zero in year 1. The revenue requirement for year 2 and thereafter will include depreciation expense at existing, approved depreciation accrual rates at the time of filing.

Note 2: Total O&M expense is estimated to cost \$1.787 million annually for year 1 (\$2.087 million annually during the interim period thereafter), as referenced within Attachment 1 - SGS Business Case Revenue Requirement Update and approved in Order No. 35953, filed December 14, 2018.

Note 3: Decision and Order No. 35556 dated June 27, 2018 in Docket No. 2017-0213.

Note 4: Transmittal No. 18-01 (Decoupling) - Hawaiian Electric's RBA Rate Adjustment, Schedule D, filed May 29, 2018.

Note 5: MPIR Revenues effective July 1, 2018 approved in Order No. 35647, issued August 15, 2018 in Docket No. 2017-0213.

Note 6: MPIR Revenues effective October 1, 2018 filed December 21, 2018 in Docket No. 2017-0213.

Schofield Generating Station
 Plant Addition
 As of December 31, 2018

Utility Account	(Note 1)	Balance at 12/31/18	Depreciation 2019	Allocation %	(Note 2)	Depreciation 2019 (at Cap)
	PUC Approved Accrual Rate				Subject to Cap	
	a	b	c = a x b	d	e = d x Cap	f = a x e
343	0.03260	142,147,612	4,634,012	98.2%	139,030,987	4,532,410
352	0.01600	2,003,490	32,056	1.4%	1,959,563	31,353
353	0.01860	352,190	6,551	0.2%	344,468	6,407
397	0.06670	240,250	16,025	0.2%	234,983	15,673
		<u>144,743,542</u>	<u>4,688,643</u>	<u>100.0%</u>	<u>141,570,000</u>	<u>4,585,844</u>

Source: SAP and Powerplan WBS.

Note 1:

Depreciation rates approved in Docket No. 2010-0053, Decision and Order, filed May 12, 2011.

Note 2:

Decision and Order No. 33178, p. 84-85, Docket No. 2014-0113, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for the Purchase and Installation of Item P0001576, Schofield Generating Station Project, filed 09/29/2015. The Commission approved a cap on the amount of the total costs that may be recovered through any cost recovery mechanism other than base rates at 90% of the \$167 million cap. The \$167 million cap shall further be adjusted downward due to a reduction in the foreign exchange rate.

In the Letter to Commission Re: Docket No. 2014-0113, Schofield Generating Station; Notification of Euro Exchange Rate and Adjusted Project Cap, filed 01/27/2016, the Company locked in the foreign exchange rate at \$1.0928/euro which adjusted the project cap down from \$167 million to \$157.3 million. Revised cap on the amount of total costs allowed to be recovered through any cost recovery mechanism other than base rates is \$141.57 million (\$157.3 million x 90%).

HAWAIIAN ELECTRIC CO., INC.
 SCHOFIELD GENERATING STATION - WITH BONUS
 DECEMBER 31, 2019

	source	2018		2019		2019 Add					
		Tax Depreciation	AFUDC	Tax Cap Interest	State ITC	Removal	Total	Depr	State ITC	Amort	Total
FEDERAL DEFERRED TAXES											
1	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)	(412,415)	(19,716,566)	
2	Book Depreciation							4,585,844	(412,415)	4,173,428	
3	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)	(15,543,137)	
4	Effective Federal Tax Rate	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	19.7368%	
5	Federal Def Tax on State Book/Tax Diff	(1,323,584)	(2,309,724)	1,481,649	813,976	(36,513)	(1,374,197)	(1,612,123)	(81,398)	(3,067,718)	
6	Addback State Book/Tax Difference	Line 3	6,706,173	11,702,627	(7,507,036)	185,002	6,962,615	8,168,107	412,415	15,543,137	
7	Federal Book/Tax Difference	Line 2	(39,373,231)	(11,702,627)	7,507,036	4,124,152	(185,002)	(9,565,463)	(412,415)	(49,195,136)	
8	Book Depreciation	Line 6 + 7 + 8						4,585,844	(412,415)	4,173,428	
9	Federal State Difference							3,188,488	-	(29,478,570)	
10	Tax Rate on Federal Only Adjustment	21%	21%	21%	21%	21%	21%	21%	21%	21%	
11	Federal Deferred Tax Adjustment	(6,860,082)	-	-	-	-	(6,860,082)	669,582	-	(6,190,500)	
12	Total Federal Deferred Taxes	(8,183,666)	(2,309,724)	1,481,649	813,976	(36,513)	(8,234,279)	(942,541)	(81,398)	(9,258,218)	
STATE DEFERRED TAXES											
13	State Book/Tax Difference	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(12,753,951)	-	(19,716,566)	
14	Book Depreciation							4,585,844	(412,415)	4,173,428	
15	Subtotal	(6,706,173)	(11,702,627)	7,507,036	4,124,152	(185,002)	(6,962,615)	(8,168,107)	(412,415)	(15,543,137)	
16	Effective State Tax Rate	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	6.0150376%	
17	Total State Deferred Taxes	(403,379)	(703,917)	451,551	248,069	(111,128)	(418,804)	(491,315)	(24,807)	(934,926)	
18	TOTAL DEFERRED TAXES	(8,587,045)	(3,013,641)	1,933,200	1,062,045	(47,641)	(8,653,083)	(1,433,856)	(106,205)	(10,193,144)	

**HAWAIIAN ELECTRIC CO., INC.
TAX DEPRECIATION
SCHOFIELD GENERATION STATION**

Project No.	Description	Book Basis	Less: AFUDC	Add: TCI	Tax Basis	Plant Acct	Life	Bonus	2018	2019	Net Book Value
FEDERAL											
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	50%	32,647,265	2,953,800	28,475,480
P0001576	Schofield Generation Station	64,076,545	(5,275,285)	3,384,005	62,185,266	Oth Prod	15	0%	3,109,263	5,907,600	55,059,682
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	50%	2,823,381	196,453	2,606,021
P0001576	Schofield Generation Station	5,625,855	(510,973)	327,780	5,442,663	Trans	20	0%	204,100	392,906	5,028,849
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	50%	549,499	38,235	494,865
P0001576	Schofield Generation Station	1,082,599	(65,056)	41,732	1,059,276	Comm	20	0%	39,723	76,469	966,407
Total		<u>141,570,000</u>	<u>(11,702,627)</u>	<u>7,507,036</u>	<u>137,374,409</u>				<u>39,373,231</u>	<u>9,565,463</u>	<u>92,631,306</u>
Cumulative									48,938,694		
HAWAII											
P0001576	Schofield Generation Station	128,153,091	(10,550,569)	6,768,010	124,370,532	Oth Prod	15	0	6,218,527	11,815,201	110,119,363
P0001576	Schofield Generation Station	11,251,710	(1,021,945)	655,561	10,885,325	Trans	20	0	408,200	785,812	10,057,698
P0001576	Schofield Generation Station	2,165,199	(130,112)	83,465	2,118,551	Comm	20	0	79,446	152,938	1,932,815
Total		<u>141,570,000</u>	<u>(11,702,627)</u>	<u>7,507,036</u>	<u>137,374,409</u>				<u>6,706,173</u>	<u>12,753,951</u>	<u>122,109,876</u>
Cumulative									19,460,124		

Hawaiian Electric Company, Inc.
Breakdown of SGS Costs by Major Area
Actuals through December 2018

TOTAL PLANT ADDITIONS:							(Note 1)	
Expense Element	A	B	C	D	E=SUM(B:D)	F=A+E	Allocation %	Subject to Cap
	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project		
Labor	2,293,428	1,712,982	305,919	741,234	2,760,135	5,053,564	3.5%	4,942,763
Materials	32,932,285	1,523,772	545,040	512,566	2,581,378	35,513,663	24.5%	34,735,016
Vehicles	2,062	117,109	187	563	117,859	119,921	0.1%	117,292
Overheads	12,885,912	2,456,221	544,975	928,736	3,929,932	16,815,844	11.6%	16,447,152
AFUDC	10,787,079	703,160	133,029	341,694	1,177,883	11,964,962	8.3%	11,702,627
Outside Services-Construction	69,147,360	614,746	59,095	80,179	754,019	69,901,379	48.3%	68,368,772
Outside Services-Other	2,550,389	1,421,977	621,195	348,999	2,392,171	4,942,560	3.4%	4,834,193
Other	427,354	-	4,296	-	4,296	431,650	0.3%	422,186
	<u>131,025,869</u>	<u>8,549,966</u>	<u>2,213,736</u>	<u>2,953,971</u>	<u>13,717,673</u>	<u>144,743,542</u>	<u>100.0%</u>	<u>141,570,000</u>

BREAKDOWN SUBJECT TO CAP:							(Note 1)	
Expense Element	A1	B1	C1	D1	E1=SUM(B1:D1)	F1=A1+E1	State ITC	
	Generating Station and Switchyard	46kV Line	Telecom	Wahiawa Substation	Total Interconnection	Total Project		
Labor	2,243,144	1,675,424	299,212	724,982	2,699,618	4,942,763		
Materials	32,210,236	1,490,363	533,090	501,328	2,524,781	34,735,016	34,735,016	
Vehicles	2,017	114,541	183	551	115,275	117,292		
Overheads	12,603,385	2,402,368	533,026	908,373	3,843,767	16,447,152		
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
Outside Services-Construction	67,631,285	601,267	57,799	78,421	737,487	68,368,772	68,368,772	
Outside Services-Other	2,494,471	1,390,800	607,576	341,347	2,339,722	4,834,193		
Other	417,984	-	4,202	-	4,202	422,186		
	<u>128,153,091</u>	<u>8,362,506</u>	<u>2,165,199</u>	<u>2,889,204</u>	<u>13,416,909</u>	<u>141,570,000</u>		
Amount subject to bonus	50%	50%	50%	50%	50%	50%		103,103,789
	<u>64,076,545</u>	<u>4,181,253</u>	<u>1,082,599</u>	<u>1,444,602</u>	<u>6,708,455</u>	<u>70,785,000</u>		<u>4%</u>
								<u>4,124,152</u>
								5,625,855
Tie out of TCI:								
AFUDC	10,550,569	687,743	130,112	334,202	1,152,058	11,702,627		
ratio - 5 year average	64.15%	64.15%	64.15%	64.15%	64.15%	64.15%		
TCI	<u>6,768,010</u>	<u>441,175</u>	<u>83,465</u>	<u>214,385</u>	<u>739,025</u>	<u>7,507,036</u>		
								655,561

Source: Ellipse & SAP

Note 1:

Allocated 12/31/18 Plant Addition subject to the cap of \$141.57M. See further discussion at HECO-WP-L-001.

Hawaiian Electric Company, Inc.
Annual - TCI Closed to AFUDC Closed Ratio

	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>5 Yr Ave</u>
TCI	3,820,695	4,825,860	4,299,588	4,056,549	5,041,274	22,043,966
AFUDC	5,511,275	7,365,025	6,668,924	6,540,575	8,278,273	34,364,072
Ratio	0.693251	0.655240	0.644720	0.620213	0.608977	0.641483

Hawaiian Electric Company, Inc.
MPIR Removal Costs
Actuals Through December 31, 2018

Row Labels	Sum of amount
Labor	90,530
Materials	46
Overheads	94,426
Grand Total	185,002

SOURCE: Ellipse & SAP

HAWAIIAN ELECTRIC COMPANY, INC.
2018 WEIGHTED AVERAGE PIM TARGET, DEADBAND, INCENTIVE CALCULATIONS

SAIFI	Period (a)	# of Days (b)	Max Penalty (c)	2018 Target (d)	Deadband (e)	Range for No Penalty		2018 Annual Total (h)	Delta vs Target (i) = (h) - (d)	(Penalty) / Reward (j)
						Lower (f)	Upper (g)			
	1/1/18-2/15/18	46	2,039,094	1.116	0.090	1.026	1.206	1.253	0.137	
	2/16/18-4/12/18	56	2,260,799	1.116	0.090	1.026	1.206	1.253	0.137	
	4/13/18-8/31/18	141	2,276,417	1.116	0.090	1.026	1.206	1.253	0.137	
	9/1/18-12/31/18	122	2,276,417	1.103	0.088	1.015	1.191	1.253	0.150	
	Annual (Weighted Avg)	365	2,244,112	1.112	0.089	1.022	1.201	1.253	0.141	(1,306,645) To Sch M
	1/1/18-2/15/18	46	2,039,094	99.030	9.070	89.960	108.100	111.940	12.910	
	2/16/18-4/12/18	56	2,260,799	99.030	9.070	89.960	108.100	111.940	12.910	
	4/13/18-8/31/18	141	2,276,417	99.030	9.070	89.960	108.100	111.940	12.910	
	9/1/18-12/31/18	122	2,276,417	99.230	8.960	90.270	108.190	111.940	12.710	
	Annual (Weighted Avg)	365	2,244,112	99.097	9.033	90.064	108.130	111.940	12.843	(946,492) To Sch M
	1/1/18-2/15/18	46	815,638	79.07%	3.00%	76.07%	82.07%	83.97%	4.31%	
	2/16/18-4/12/18	56	904,320	79.46%	3.00%	76.46%	82.46%	83.97%	4.31%	
	4/13/18-8/31/18	141	910,567	79.56%	3.00%	76.56%	82.56%	83.97%	4.31%	
	9/1/18-12/31/18	122	910,567	80.10%	3.00%	77.10%	83.10%	83.97%	4.31%	
	Annual Totals	365	897,645	79.66%	3.00%	76.66%	82.66%	83.97%	4.31%	391,972 To Sch M

Reference: See Hawaiian Electric Company Proposed PIM Tariff Revisions, filed on July 23, 2018 in Docket No. 2016-0328. The PIM Tariff Revisions were approved by the Commission in Order No. 35661, filed on August 30, 2018.

Note 1 SAIDI and SAIIFI Annual Totals include 25 kV Proactive Work (See HECO-WP-M-002):

	SAIDI	SAIFI
Occurrences / Minutes	111.94	1.253
Less: Exclusion for 25kV work	-5.52	-0.015
Annual Totals	106.41	1.238

HAWAIIAN ELECTRIC COMPANY, INC.
2018 SAIDI and SAIFI Calculations
With and Without 25 kV Scheduled Work Outages

HECO-WP-M-001
HECO-WP-M-001

HECO-WP-M-001
HECO-WP-M-001

Without 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	28,350.82	38,535.98	36,195.83	48,912.83	47,852.78	45,741.20	26,594.23	52,088.65	70,669.87	38,183.60	46,352.93	61,396.90	540,875.63
Customer Interruptions	19,170	25,947	26,983	49,443	27,712	34,644	21,028	29,939	46,557	24,863	21,382	49,779	377,447
SAIDI (Minutes)	5.58	7.58	7.12	9.62	9.41	9.00	5.23	10.25	13.90	7.51	9.12	12.08	106.41
SAIFI (Occurrences)	0.063	0.085	0.088	0.162	0.091	0.114	0.069	0.098	0.153	0.082	0.070	0.163	1.238

With 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	28,350.82	38,535.98	36,195.83	48,912.83	47,852.78	45,741.20	54,673.72	52,088.65	70,669.87	38,183.60	46,352.93	61,396.90	568,955.12
Customer Interruptions	19,170	25,947	26,983	49,443	27,712	34,644	25,686	29,939	46,557	24,863	21,382	49,779	382,105
SAIDI (Minutes)	5.58	7.58	7.12	9.62	9.41	9.00	10.76	10.25	13.90	7.51	9.12	12.08	111.94
SAIFI (Occurrences)	0.063	0.085	0.088	0.162	0.091	0.114	0.084	0.098	0.153	0.082	0.070	0.163	1.253

Difference Between With and Without 25 kV Scheduled Work Outages (See Note Below)													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Hours Interrupted	-	-	-	-	-	-	(28,079)	-	-	-	-	-	(28,079)
Customer Interruptions	-	-	-	-	-	-	(4,658)	-	-	-	-	-	(4,658)
SAIDI (Minutes)	-	-	-	-	-	-	5.52	-	-	-	-	-	5.52
SAIFI (Occurrences)	-	-	-	-	-	-	0.015	-	-	-	-	-	0.015

Note:

25 kV Schedule Work Outage Events
(see HECO-WP-M-003 for more details)

Date of exclusion event	Customer Interruptions	Customer Minutes Interrupted
7/5/2018	(329)	(138,838)
7/16/2018	(881)	(317,160)
7/17/2018	(1,003)	(399,020)
7/18/2018	(1,004)	(341,342)
7/19/2018	(585)	(192,357)
7/23/2018	(418)	(150,062)
7/24/2018	(418)	(138,610)
7/25/2018	(20)	(7,380)
Total	(4,658)	(1,684,769)

(28,079) Hours Interrupted

Total Customer Minutes Interrupted without 25 kV Scheduled Work Outages													
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
Total Customer Minutes Interrupted with 25 kV Scheduled Work Outages	1,701,049	2,312,159	2,171,750	2,934,770	2,871,167	2,744,472	1,595,654	3,125,319	4,240,192	2,291,016	2,781,176	3,683,814	32,452,538
Difference	-	-	-	-	-	-	(1,684,769)	-	-	-	-	-	(1,684,769)

**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
IWILEI 138KV 3 SUB IWILEI 9 25KV CKT CB-7754 BREAKER 7754	23:00	06:02 07/06/2018	7 HR 2 MIN	D-2	821 BETHEL ST V-8196, 821 BETHEL ST V-6645	1664	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN H/C NEAR V10308 PIER 12 AND H/C NEAR V10309 PIER 15 TO REPAIR A DEFECTIVE UNDERGROUND CABLE. IWILEI 13 CKT WAS ABNORMAL DUE TO HOT CAPS ON RO#125230 REQ#2054. E#259743. RELATED TO IR#1671. PTM: DELACRUZ, KEALI; ROSALES, RAY; PITT, ANTHONY; AHMOOK SANG, BRAD; PARK, JAMES; AHMOOK SANG, NATE; MOUNTHONGDY, PAT SIGN: OSHIRO, KELLY
BREAKER CB-7754		06:02 07/06/2018	7 HR 2 MIN		821 BETHEL ST V-8196, 821 BETHEL ST V-6645 CUST: 3		
IWILEI 138KV 4 SUB IWILEI 13 25KV CKT CB-7759 SECTIONALIZER CB7754	23:00			D-2	1020 MAUNAKEA ST V-7566, 60 NIMITZ N. HWY V-6646, 60 NIMITZ N. HWY V-6646B, 801 NUUANU AVE V-6936, 12 Pier V-10308, 15 Pier V-10309	1671	SECTIONALIZER ABC PHASE #CB7754 WAS OPENED IN IWILEI SUBSTATION DUE TO A SCHEDULED OUTAGE BETWEEN H/C NEAR SW V10309 AND H/C NEAR SW V10308 TO REPAIR A DEFECTIVE UNDERGROUND CABLE. SCHEDULED OUTAGE TO REPAIR FAULTED IWILEI 13 CKT RO#125230 REQ#2054. E#259743 RELATED TO IR#1664 REQ#2076 PTM: AHMOOK SANG, BRAD SIGN: MACEY, JENNIFER
BREAKER CB7754		06:02 07/06/2018	7 HR 2 MIN		1020 MAUNAKEA ST V-7566, 60 NIMITZ N. HWY V-6646B, 801 NUUANU AVE V-6936, 12 Pier V-10308, 15 Pier V-10309 CUST: 326		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Rearranged outage.
 Class E: Affecting no cust.; parallel lines

Type 1: COMPANY: Confined within HECO system
 Type 2: EQUIP: Failure of HECO equipment
 Type 3: PUBILC: Caused by public/equip. not HECO Related
 Type 4: EXTERNAL: Act of nature [Storm; Flood; Etc.]

**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
IWILEI 138KV 3 SUB IWILEI 9 25KV CKT CB-7754 BREAKER 7754	22:00			D-1	SECTIONS OF BETHEL ST	1748	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON IWILEI 9 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE 25KV CABLE SPLICES E#260398. RELATED TO E#260399 IR#1749 REQ#2150. PTM: AHMOOK SANG, NATE; CHING, THOMAS SIGN: MIYAKE, LANCE
BREAKER CB7754		04:00 07/17/2018	6 HR 0 MIN		FROM CB7754 IWILEI SUBSTATION TO ALL TERMINATIONS CUST: 174		
IWILEI 138KV 4 SUB IWILEI 13 25KV CKT CB-7759 BREAKER 7759	22:00			D-1	KING, MAUNAKEA ST, NUUANU AVE, SECTIONS OF NIMITZ HWY	1749	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON IWILEI 13 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE 25KV CABLE SPLICES E#260399. RELATED TO E#260398 IR#1748 REQ#2149. PTM: DELACRUZ, KEALI; PITT, ANTHONY; WON, BRONSON; KAPOI, KALEI SIGN: MIYAKE, LANCE
BREAKER CB7759		04:00 07/17/2018	6 HR 0 MIN		FROM CB7759 IWILEI SUB TO ALL TERMINATIONS CUST: 707		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:04			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1757	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 5 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260487 REQ#2168. RELATED TO IR#1758 REQ#2169, IR#1759 REQ#2170, IR#1760 REQ#2171. PTM: AHMOOK SANG, NATE SIGN: MIYAKE, LANCE
BREAKER CB7706		04:39 07/18/2018	6 HR 35 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:04			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1758	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260501 REQ#2169. RELATED TO IR#1757 REQ#2168, IR#1759 REQ#2170, IR#1760 REQ#2171. PTM: DELACRUZ, KEALI SIGN: MIYAKE, LANCE
BREAKER CB7707		04:39 07/18/2018	6 HR 35 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:04			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1759	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 9 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260499 REQ#2170. RELATED TO IR#1757 REQ#2168, IR#1758 REQ#2169, IR#1760 REQ#2171. PTM: MOUNTHONGDY, PAT SIGN: MIYAKE, LANCE
BREAKER CB8329		04:39 07/18/2018	6 HR 35 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
 Class C: Small group of cust.; transformers; lines.
 Class D: Rearranged outage.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:04			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1760	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260500 REQ#2171. RELATED TO IR#1757 REQ#2168, IR#1758 REQ#2169, IR#1759 REQ#2170. PTM: ROSALES, RAY SIGN: MIYAKE, LANCE
BREAKER CB8330		04:44 07/18/2018	6 HR 40 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		

Class A: Large areas; important Cust.; Transmission lines.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:08			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1766	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 5 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260590 REQ#2179. RELATED TO IR#1767 REQ#2180, IR#1768 REQ#2181, IR#1769 REQ#2182. PTM: AHMOOK SANG, NATE SIGN: MIYAKE, LANCE
BREAKER CB7706		03:48 07/19/2018	5 HR 40 MIN		FROM CB7706 KEWALO SUB TO ALL TERMINATIONS CUST: 336		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:08			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1768	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 9 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260589 REQ#2181. RELATED TO IR#1766 REQ#2179, IR#1767 REQ#2180, IR#1769 REQ#2182. PTM: KAPOI, KALEI SIGN: MIYAKE, LANCE
BREAKER CB8329		03:48 07/19/2018	5 HR 40 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:09			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1767	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260601 REQ#2180. RELATED TO IR#1766 REQ#2179, IR#1768 REQ#2181, IR#1769 REQ#2182. PTM: DELACRUZ, KEALI SIGN: MIYAKE, LANCE
BREAKER CB7707		03:48 07/19/2018	5 HR 39 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		

Class A: Large areas; important Cust.; Transmission lines.
 Class B: Large group of cust.; junctions; circuits; tsfs.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:09			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1769	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260601 REQ#2182. RELATED TO IR#1766 REQ#2179, IR#1767 REQ#2180, IR#1768 REQ#2181. PTM: MOUNTHONGDY, PAT SIGN: MIYAKE, LANCE
BREAKER CB8330		03:49 07/19/2018	5 HR 40 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 10 25KV CKT CB-8330 BREAKER 8330	22:00			D-1	ALA MOANA SC, SECTIONS OF KEEAUMOKU ST	1773	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KAMOKU 10 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#260678 REQ#2197. RELATED TO IR#1774 REQ#2196. PTM: PITT, ANTHONY SIGN: MIYAKE, LANCE
BREAKER CB8330		03:29 07/20/2018	5 HR 29 MIN		FROM CB8330 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 567		
KEWALO T3 SUB KEWALO 6 25KV CKT CB-7707 BREAKER 7707	22:00			D-1	SECTIONS OF KEEAUMOKU ST, KAPIOLANI BLVD, AND WAIMANU ST	1774	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 6 25KV CKT. TO REPLACE A DEFECTIVE AL/AL CONNECTOR. TO REPLACE UG SPLICES E#?? REQ#2196. RELATED TO IR#1773 REQ#2197. PTM: ROSALES, RAY SIGN: MIYAKE, LANCE
BREAKER CB7707		03:23 07/20/2018	5 HR 23 MIN		FROM CB7707 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 18		

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 Class B: Large group of cust.; junctions; circuits; tsfs.
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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:03			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1805	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KEWALO SUBSTATION TO ALL TERMINATIONS TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED 25KV SPLICES E#260897 REQ#2205. RELATED TO IR#1806 REQ#2206. PTM: PITT, ANTHONY; AHMOOK SANG, NATE; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB7706		04:02 07/24/2018	5 HR 59 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:03			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1806	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KAMOKU SUBSTATION TO ALL TERMINATIONS TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED 25KV SPLICES E#260897 REQ#2206. RELATED TO IR#1805 REQ#2205. PTM: PITT, ANTHONY; AHMOOK SANG, NATE; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB-8329		04:02 07/24/2018	5 HR 59 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KAMOKU T2 25KV SUB KAMOKU 9 25KV CKT CB-8329 BREAKER 8329	22:04			D-1	HI CONVENTION CENTER, VICTORIA WARD CTRS	1822	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KAMOKU SUBSTATION TO ALL TERMINATIONS. UG REPLACED SPLICES REQ#2208 E#261016. RELATED TO IR#1821 REQ#2207. PTM: MAKAIU, DAROL; KATADA, RANDY; RABE, JENSEN; KAPOI, KALEI; OKAGAWA, JON; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB-8329		03:34 07/25/2018	5 HR 30 MIN		FROM CB8329 KAMOKU SUBSTATION TO ALL TERMINATIONS CUST: 83		
KEWALO T3 SUB KEWALO 5 25KV CKT CB-7706 BREAKER 7706	22:05			D-1	SECTIONS OF ALA MOANA BLVD, CONVENTION CTR, ALA MOANA S.C. AND LATERALS	1821	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE BETWEEN KEWALO SUBSTATION TO ALL TERMINATIONS. UG REPLACED SPLICES ON REQ#2207 E#261016. RELATED TO IR#1822 REQ#2208. PTM: MAKAIU, DAROL; KATADA, RANDY; RABE, JENSEN; OKAGAWA, JON; MOUNTHONGDY, PAT; CHING, THOMAS SIGN: MANZOKU, KEITH
BREAKER CB-7706		03:37 07/25/2018	5 HR 32 MIN		FROM CB7706 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 335		

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**System Operation Department
Interruption Report**

SUBSTATION CKT NAME, VOLTAGE, SWITCH NO	TIME OUT	TIME IN	TOTAL TIME	CLASS -TYPE	AREA, DISTRICT OR SUBSTATION AFFECTED	RPT NBR	EXPLANATION
KEWALO T3 SUB KEWALO 7 25KV CKT CB-7708 BREAKER 7708	22:01			D-1	FROM CB7708 KEWALO SUBSTATION TO ALL TERMINATIONS	1830	CIRCUIT BREAKER WAS OPENED DUE TO A SCHEDULED OUTAGE ON KEWALO 7 25KV CKT TO REPLACE A DEFECTIVE AL/AL CONNECTOR. UG REPLACED SPLICES E#261078 PTM: KAPOI, KALEI; YAMANE, ROSS SIGN: MANZOKU, KEITH
SWITCH SW V10397		04:10 07/26/2018	6 HR 9 MIN		FROM CB7708 KEWALO SUBSTATION TO ALL TERMINATIONS CUST: 20		

Class A: Large areas; important Cust.; Transmission lines.
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HAWAIIAN ELECTRIC COMPANY, INC.
Call Center Performance (Service Level) Results
2018

Call Center Performance (Service Level)
Excludes Blocked Calls

Month	Total Calls Accepted *	Calls Answered Within 30 Seconds	Service Level	Weighted Total	Weighted Service Level
Jan-18	27,380	24,550	89.66%	8.37%	7.51%
Feb-18	22,944	20,577	89.68%	7.02%	6.29%
Mar-18	23,827	21,393	89.79%	7.29%	6.54%
Apr-18	26,277	23,095	87.89%	8.04%	7.06%
May-18	27,042	24,152	89.31%	8.27%	7.39%
Jun-18	27,941	22,446	80.33%	8.55%	6.86%
Jul-18	30,579	23,648	77.33%	9.35%	7.23%
Aug-18	31,082	23,749	76.41%	9.51%	7.26%
Sep-18	27,644	22,345	80.83%	8.45%	6.83%
Oct-18	30,957	25,586	82.65%	9.47%	7.82%
Nov-18	26,496	21,556	81.36%	8.10%	6.59%
Dec-18	24,817	21,460	86.47%	7.59%	6.56%
				Total	83.97%

To HECO-WP-M-001

* All customer calls handled by a Customer Service Representative (including abandoned calls)

Source: Generated from Genesys Interactive Insights system.

HAWAIIAN ELECTRIC COMPANY, INC.
Phase I Renewable Energy RFP Performance Incentive Mechanism
2018

Line	Awarded Projects	Reference	BAFO Levelized Price (\$/MWh) a	Net Energy Potential (MWh) b	PIM Calculation c = (x or y-a)*b	PIM Calculation (20% utility share) d = c * 20%
1	Ho'ohana Solar 1 (O-2) (with battery storage)	Docket No. 2018-0431 D&O No. 36236	99.78 Note 3	114,481	\$ 1,742,401	\$ 348,480
2	Mililani Solar I (O-17) (with battery storage)	Docket No. 2018-0434 D&O No. 36232	88.16	93,121	\$ 2,499,368	\$ 499,874
3	Waiawa Solar (O-20) (with battery storage)	Docket No. 2018-0435 D&O No. 36231	95.93	87,927	\$ 1,676,768	\$ 335,354
4	Total Final Variable Requests for Proposals				\$ 5,918,536	\$ 1,183,707
5	50% Year 1				Note 2	<u>\$ 591,854</u> <i>To Sch M</i>

Note 1

PIM Benchmark	¢/kWh	\$/MWh
Energy Only	9.5	95.00
Paired with Storage	11.5	115.00

Note 1 Per Order No. 35405, Docket No. 2017-0352, filed April 6, 2018, PIM benchmarks per pages 11 and 12.

Language from Order 35405:

The Companies share would be 20% of the estimated first-year savings compared to the applicable benchmark up to a cap of \$3,500,000.

The estimated first-year savings will be calculated by multiplying the forecasted first-year energy production (in kWh) of the project by the difference between the applicable benchmark price and the equivalent price (in cents per kWh).

The equivalent PPA price will be established by the levelized cost of the project computed by the Companies during the evaluation and selection process in the Phase I procurement effort.

Similarly, the forecasted first-year energy production will be determined by using the energy production estimated in the evaluation and selection process.

Per Order No. 35664, Docket No. 2017-0352, filed September 6, 2018:

The Commission ruled on the treatment of the Additional PPAs proposed in the Companies' June 20, 2018 Letter indicating that the additional PIM for these PPAs will function in a similar manner to the original PIM. The Companies shall receive a performance incentive equivalent to 20% of the estimated first-year savings compared to the applicable benchmark, up to a cap of \$3,000,000, for the Additional PPAs filed with the commission by December 31, 2018. For any Additional PPAs submitted after December 31, 2018, until March 31, 2019, the Companies' share of the savings pursuant to the PIM will be reduced in accordance with the proposal in the Companies' June 20, 2018 Letter.

Note 2 Per Decision and Order No. 35405, Docket No. 2017-0352, filed April 6, 2018, Timing of Incentive Award, p 14

First Allocation: The first allocation of the PIM will be shortly after the approval of the PPAs. At that time, the commission will allocate the first 50% of the total PIM to the Companies, based on the equivalent PPA prices and the forecasted first-year energy production. The commission intends that the applicable performance incentive would be awarded to the Companies through their respective Revenue Balancing Account Provision tariffs.

Second Allocation: Following the first year of commercial operations for each project, the Companies shall submit a report of the actual energy utilized for each of the PPAs approved by the Commission. The Commission will provide the Companies with a portion, or all, of the remaining 50% of the PIM, dependent upon the actual amount of energy output utilized.

Note 3: Ho'ohana Solar's Levelized Price (\$99.78/MWh) includes the unit price of \$0.098858/kWh and the \$0.00092/kWh.

CIAC Treatment
Resulting from FERC Adoption

Adoption of FERC USOA required a change in presentation change to Contributions in Aid of Construction (CIAC)

Prior to October 2018, and in establishing rates in previous test year rate cases, the Company's presentation of contributions in aid of construction ("CIAC") followed the guidelines of the National Associate of Regulatory Utility Commissioners Uniform System of Accounts (NARUC USOA). Under the NARUC reporting system, CIAC is reported under an exclusive account, account 271, which includes donations or contributions in cash, services or property from states, municipalities, or other governmental agencies, individuals and others for construction purposes. All CIAC was incorporated as a deduction in the calculation of rate base in part because the Companies' systems did not facilitate on-going reporting of CIAC related to plant in service separate from CIAC related to construction work in progress ("CWIP").

The Commission approved the Companies' request to change to Federal Energy Regulatory Commission Uniform System of Accounts (FERC USOA), beginning with the implementation of the Companies' new ERP/EAM, in Decision and Order No. 31757, issued December 19, 2013 in Docket No. 2013-0007.

Beginning in October 2018 with the transition to FERC, the net balance of CIAC in account 271 less the CIAC amortization to be recorded for October to December 2018, was credited against the account balances charged with the cost of construction, i.e., gross plant in service and CWIP, resulting in the account becoming zero (i.e. "0") at December 31, 2018.

Ratemaking treatment for CIAC

The Company's ratemaking treatment of contributions in aid of construction is summarized below:

- *CIAC associated with Plant in Service* – When a utility capital project is placed into service, the plant in service net of the associated CIAC is included as net cost of plant in service in rate base. The plant in service net of the CIAC is included as part of the basis for the depreciation accrual the year after it is placed into service (i.e. January 1 of the year after it is placed into service).
- *CIAC associated with CWIP* – For book purposes, CIAC that is received while projects are still under construction (i.e. in CWIP) will offset the costs incurred and is presented net in CWIP. The CWIP net of the associated CIAC is subject to the AFUDC accrual if there is a net CWIP balance. In the next rate case, the Company will request CIAC associated with CWIP be excluded from the rate base calculation since CWIP net of

CIAC earns AFUDC. CIAC associated with CWIP is however, included in rate base in this RAM calculation for consistency with the 2017 Test Year treatment. See further discussion of Company's requested treatment of CIAC associated with CWIP below.

- *Developer Advances* - Cash contributions received in advance of construction of a utility capital project that are temporarily not classified as CIAC because the funds received are in excess of the specific project expenditures. The balance of developer advances is presented as funds from non-investors, included in its own exclusive account, and deducted in the calculation of rate base. As project costs are incurred for a utility capital project, an equal portion of developer advances associated with the project will be reclassified as CIAC and credit the accounts charged with the cost of construction. Developer Advances were included as a part of CIAC as a reduction to rate base in the 2017 Test Year.

Treatment of CIAC within the 2019 Annual Decoupling Filing

For the 2019 Decoupling Filing, the Company treated CIAC consistently with prior filings resulting in no impact to rate base.

Schedule D1, Determination of Rate Base RAM Adjustment – Change in Rate Base

Plant in Service - There is no change in rate base for plant in service and CIAC associated with plant in service. Under NARUC, in rate base, plant in service was the gross cost of plant (net of accumulated depreciation), and CIAC was a separate reduction to rate base. Under FERC, the plant in service amounts are net of (i.e., already reduced by) CIAC, and presented net of accumulated depreciation in the calculation of rate base. There is no separate CIAC line item reducing rate base because it is already net in utility plant. Therefore, there is no net rate base impact. The difference between NARUC and FERC for plant in service is a matter of where the costs are classified in rate base, and not a matter of inclusion or exclusion of costs in rate base.

CIAC associated with CWIP - There is no change in rate base for CIAC associated with CWIP. Previously, presentation of CIAC aligned with NARUC and all CIAC, including amounts associated with projects in CWIP, were included as a reduction to rate base under account 271. The 2019 estimated balance continues the treatment of including the CIAC in CWIP to be consistent with the recorded balance at 2018 year-end because all 2019 estimated CIAC additions have been included at Schedule D2 and included as part of net cost of plant at Schedule D1. Although the treatment described above was used in the 2019 annual decoupling filing, see Company's requested treatment to exclude CIAC associated with CWIP from rate base in future filings in the discussion below.

Developer Advances - With the transition to FERC, CIAC is credited when received against the related project costs in CWIP. To the extent funds are not yet expended for a project in

CWIP, the CIAC will be classified as developer advances and deducted in the calculation of rate base at Schedule D1. The recorded balance at 2018 year-end is not adjusted for 2019 activity as it is incorporated in Schedule D2.

Schedule D2, Determination of Baseline Capital Projects Additions

Schedule D2 was revised to incorporate the baseline and major project CIAC (including Developer Advances) for 2014 to 2017 into the baseline average calculation of net plant in service, consistent with the presentation of rate base. The 2018 CIAC additions calculated at HECO-WP-D2-003 includes additions to CIAC from all sources, i.e. Plant, CWIP and Developer Advances, which were used in the 5-year baseline calculation. As a result, the estimated 2019 additions to CIAC in CWIP and Developer Advances balances at Schedule D1 for the Change in Rate Base are not required as they are already included in the net cost of plant line item.

Schedule E, Determination of Depreciation & Amortization RAM Adjustment

FERC Uniform System of Accounts Electric Plant Instructions, 2. Electric Plant To Be Recorded at Cost. D. states, "The electric plant accounts shall not include the cost or other value of electric plant contributed to the company." Therefore, the Recorded Depreciable/Amortizable Balances at December 31, 2018 in Schedule E represents plant in service net of CIAC which is used as the basis to estimate the 2019 annual accrual amount. In calculating the 2019 RAM Depreciation and Amortization, Depreciation and Amortization in Current Revenues also includes CIAC amortization approved in the 2017 Test Year.

Schedule F & F1, Determination of Change in Deferred Income Taxes & Tax Depreciation

The methodology for computing the deferred taxes related to RAM year tax depreciation was not changed within the 2019 annual decoupling filing. Gross plant additions are used as the basis for calculating tax depreciation. However, see the CIAC impact to ADIT section below for the Company's preferred treatment considering the effects of netting CIAC against plant in service.

Schedule G-series, CIAC

Schedule G, G1 and G2 were removed from the Decoupling filings and instead incorporated into either Plant in Service, CIAC in CWIP or Developer Advances. The December 31, 2018 balances for CIAC associated with CWIP and Developer Advances were extracted from PowerPlan. Additionally, as noted above, the calculation of the 5-year baseline average of CIAC and amortization was incorporated within Schedule D2 and Schedule E, respectively.

The Company will continue to include CIAC associated with CWIP and Developer Advances as a reduction to rate base until the FERC presentation of rate base is approved in the Company's next rate case.

Company's requested CIAC treatment

The Company requests to reflect the following changes to the treatment of CIAC within the annual decoupling filings.

CIAC associated with CWIP

In Mr. Franklin's T-12 direct testimony in Hawaii Electric Light's 2019 Test Year rate case, the Company proposes to remove CIAC associated with CWIP from the calculation of rate base due to the fact that CWIP net of associated CIAC earns AFUDC, therefore the CWIP and its associated CIAC should be excluded from rate base.

Excluding CWIP net of CIAC, to better align the source of funds with its use (i.e. the CIAC funds received were applied against the costs incurred for the project) and is therefore properly excluded from the calculation of rate base. In addition, and as mentioned previously, any material CIAC received in advance of construction expenditures will continue to be deductions in the calculation of rate base as Developer Advances.

CIAC impact to ADIT

ADIT associated with CIAC in CWIP should be divided between nontaxable and taxable CIAC. Nontaxable CIAC (primarily interconnection CIAC) is treated as a reduction in basis for both book and tax purposes. On the other hand, although taxable CIAC is also a reduction in basis for book purposes, for tax purposes, the receipt of taxable CIAC creates tax basis by way of the recognition of taxable income and reverses by way of tax depreciation.

Nontaxable CIAC does not create ADIT since there is no book tax difference. Consequently, the regulatory netting of nontaxable CIAC against the plant assets should not create any issue with respect to the ADIT beginning balance for the rate base RAM calculation

Taxable CIAC generates a Deferred Tax Asset (DTA) as it is received and recorded into CWIP under the new FERC accounting. Prior NARUC accounting treatment with account 271 created DTA as CIAC was booked to 271, which is equivalent to what is now booked to CWIP. The origination and timing of the DTA under the FERC method will be equivalent to the NARUC method. However, under the old method, the DTA was immediately recognized as part of rate base, consistent with the treatment of the account 271 inclusion. However, under the FERC method, the generation of the DTA must be inventoried and tracked to match up with the amount of CIAC in CWIP and the amounts closed to plant in service. This tracking is necessary to ensure that the amount of DTA related to CWIP is excluded from rate base. Once CWIP costs are closed to plant, the related DTA will be included in rate base and will begin reversal through tax depreciation taken on the CIAC tax basis.

FERC accounting imbeds the book treatment of CIAC within CWIP and the ultimate plant and related depreciation. The separation will disappear and the Company asserts that the ADIT

effects will be the same with respect to the beginning balance of ADIT for the annual decoupling filing except to the extent CIAC is still in CWIP. This issue will be addressed along with the rate base treatment of CIAC associated with CWIP as mentioned above.

FERC accounting nets CIAC against Plant in Service for purposes of computing baseline and major plant additions. For RAM year tax depreciation and the related ADIT calculated for the change in RAM year ADIT, adopting the net plant additions as the RAM year tax additions will be a change that will result in a smaller amount of tax depreciation and ADIT “change” since the Company previously has assumed the gross additions to be the RAM year tax depreciable base. The Company asserts this is reasonable for the following reasons:

- 1) Under the old method, to the extent nontaxable CIAC was included in the RAM year numbers (through major projects or baseline projects), tax depreciable basis was overstated since there is no tax basis for assets funded by nontaxable CIAC.
- 2) With respect to taxable CIAC, the funded assets do have depreciable tax basis and it is accounted for in the RAM year additions tax depreciation. However, the receipt of taxable CIAC generates taxable income and deferred tax assets that increase rate base. The effect of this DTA from taxable CIAC was never recognized in the RAM tariff, which resulted in an overstatement of RAM year ADIT change, as it related to the projected plant additions.

For purposes of the 2019 RAM calculation, ADIT has been calculated on gross plant additions, consistent with the 2017 Test Year treatment and prior decoupling filings, however the Company is requesting treatment of CIAC in deferred tax to follow FERC accounting.

Summary

In summary, Hawaiian Electric prepared the 2019 annual decoupling filings in accordance with the historical treatment of CIAC. Historically, due to system constraints, CIAC records were not maintained with matching of the separate components (plant in service, CWIP, developer advances). As a result, the entire amount of CIAC was treated as a reduction to rate base and the Return on Investment was understated. As stated in Mr. Franklin’s T-12 direct testimony in Hawaii Electric Light’s 2019 Test Year rate case, the Companies propose to exclude the CIAC associated with CWIP in its calculation of rate base in the rate base RAM filings. Should the Commission approve Hawaii Electric Light’s proposal, Hawaiian Electric will implement this change in the annual decoupling filing in the year following the Commission’s approval.