

BEFORE THE PUBLIC UTILITIES COMMISSION

FILED

OF THE STATE OF HAWAII

2011 MAR 31 P 3:55

In the Matter of the Application of )  
HAWAIIAN ELECTRIC COMPANY, INC. )  
For Approval to Modify the RBA Rate )  
Adjustment in its Revenue Balancing Account )  
Provision Tariff )  
\_\_\_\_\_  
)

PUBLIC UTILITIES  
COMMISSION

) Transmittal No. 11-02  
Effective  
Date: June 1, 2011

I

Hawaiian Electric Company, Inc. ("Hawaiian Electric," "Applicant" or "Company") files this transmittal to revise paragraph E (Sheet No. 92B) of its Revenue Balancing Account ("RBA") Provision tariff ("RBA Tariff") to establish an RBA Rate Adjustment of \$0.001694 per kilowatt-hour ("kwh") and thereby enable the implementation of its decoupling revenue adjustment mechanism ("RAM") for calendar year 2011. In accordance with the decoupling mechanism approved by the *Final Decision and Order and Dissenting Opinion of Leslie H. Kondo, Commissioner*, filed August 31, 2010 in Docket No. 2008-0274 ("Final Decoupling Order"), the Company requests the Commission to allow the proposed RBA Rate Adjustment rate to be implemented on June 1, 2011.<sup>1</sup> The RBA Rate Adjustment rate is based on the RAM Revenue Adjustment as determined by the Rate Adjustment Mechanism Provision tariff, approved by the *Order Approving Revised Results of Operations, Supporting Schedules and Tariffs* ("Order Approving 2009 Final Rates"), issued on February 25, 2011 in the Hawaiian Electric 2009 test year rate case (Docket No. 2008-0083). The RAM Revenue Adjustment has

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<sup>1</sup> Final Decoupling Order at 34-35.

been calculated to reflect a ten month period from March 1 through December 31, 2011. The beginning of the ten month period coincides with the March 1, 2011 effective date and implementation of the decoupling RBA Tariff approved by the Order Approving 2009 Final Rates. As stated in Section D (Sheet 92B) of its approved RBA Tariff, the Company will recover the RAM Revenue Adjustment through a per kwh RBA Rate Adjustment over the twelve months from June 1 of the current calendar year (i.e., 2011) to May 31 of the succeeding calendar year (i.e., 2012). In this transmittal, the Company proposes an RBA Rate Adjustment of \$0.001694 per kwh to recover the RAM Revenue Adjustment. For financial reporting purposes, the Company will accrue the associated revenues from March 1, 2011 through December 31, 2011.<sup>2</sup>

## II

Hawaiian Electric is a corporation organized and existing under the laws of the State of Hawaii, whose principal place of business is located at 900 Richards Street, Honolulu, Hawaii.

Correspondence and communications in regard to this Transmittal No. 11-02 should be addressed to:

Dean K. Matsuura  
Manager, Regulatory Affairs  
Hawaiian Electric Company, Inc.  
P. O. Box 2750  
Honolulu, Hawaii 96840

## III

Hawaiian Electric seeks Commission authorization of this tariff transmittal pursuant to Section 6-61-111 of the *Rules of Practice and Procedure before the Public Utilities Commission*,

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<sup>2</sup> See response to Question 5, "How will the RAM revenues be accounted for in the RBA/RAM process?", HECO's responses to Questions from Panel Hearings Held on June 29 to July 1, 2009, filed July 13, 2009, at 9-10, Docket No. 2008-0274.

Hawaii Administrative Rules, Title 6, Chapter 61. The proposed tariff revision is in accordance with the Final Decoupling Order, the *Final Decision and Order* filed December 29, 2010 in Docket No. 2008-0083 (Hawaiian Electric's 2009 test year rate case), and the Order Approving 2009 Final Rates.

IV

Hawaiian Electric's latest available balance sheet and income statement for the twelve months ending December 31, 2010, were filed with the Commission on February 22, 2011, and are incorporated by reference pursuant to Rule 6-61-76 of the Commission's Rules of Practice and Procedure, Title 6, Chapter 61, HAR.

V

By *Order Initiating Investigation* ("Opening Order"), filed October 24, 2008, the Commission opened the decoupling proceeding in Docket No. 2008-0274 to examine implementing a decoupling mechanism for the Hawaiian Electric Companies<sup>3</sup> that would modify the traditional model of ratemaking for the Hawaiian Electric Companies by separating the Hawaiian Electric Companies' revenues and profits from electricity sales. This proceeding arose from the *Energy Agreement among the State of Hawaii, Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs, and the Hawaiian Electric Companies* ("Energy Agreement"), which the Governor of the State of Hawaii, the Department of Business, Economic Development, and Tourism ("DBEDT"), the Hawaiian Electric Companies and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs ("Consumer Advocate") executed on October 20, 2008. The Energy Agreement resulted from

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<sup>3</sup> The "Hawaiian Electric Companies" include Hawaiian Electric, Hawaii Electric Light Company, Inc. ("HELCO") and Maui Electric Company, Limited ("MECO").

the Hawaii Clean Energy Initiative, a collaboration between the State of Hawaii and the U.S. Department of Energy with the goal of decreasing energy demand and accelerating the use of renewable, indigenous energy resources in Hawaii in the residential, building, industrial, utility, and transportation end-use sectors. The Energy Agreement committed the Hawaiian Electric Companies to facilitate the integration of substantial amounts of wind and other renewable energy into their grids and to enable electricity consumers to manage their electricity use more effectively. It also included certain regulatory changes to allow the Hawaiian Electric Companies to better support the initiatives of the Energy Agreement, including the adoption of a decoupling mechanism.

In the Opening Order, the Commission named the Hawaiian Electric Companies and the Consumer Advocate as parties to Docket No. 2008-0274 and directed them to file a joint proposal on decoupling within 60 days of the date of the order. Other parties that were granted intervention in Docket No. 2008-0274 included the Department of Business, Economic Development, and Tourism (“DBEDT”), Haiku Design and Analysis (“HDA”), Hawaii Renewable Energy Alliance (“HREA”), Hawaii Solar Energy Association (“HSEA”) and Blue Planet Foundation (“Blue Planet”).<sup>4</sup> The Hawaiian Electric Companies, the Consumer Advocate, DBEDT, HDA, HREA, HSEA, and Blue Planet are collectively referred to as the “Parties.” The Commission also retained a consultant, the National Regulatory Research Institute (“NRRI”), for the decoupling proceeding.

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<sup>4</sup> Life of the Land (“LOL”) was also granted intervention in the docket, but the Commission subsequently approved a request by LOL to withdraw from the docket. Hawaii Holdings, LLC dba First Wind Hawaii (“First Wind”) voluntarily changed from an intervenor to a participant in the docket. Tawhiri Power LLC was denied a motion for an enlargement of time to file a motion to intervene. After the issuance of the Final Decoupling Order, HDA filed a motion to withdraw from this proceeding, which the Commission approved.

The Commission and the Parties underwent an extensive and in-depth investigation in the decoupling proceeding, which included the filing of initial and final statements of position and decoupling proposals, participation in technical workshops, responding to information requests from the other parties and the Commission, participation in panel hearings and the filing of post-hearing opening and reply briefs. The Commission's February 19, 2010 *Order* in Docket No. 2008-0274 approved "the Joint Final Statement of Position of the HECO Companies and Consumer Advocate ["Joint FSOP"], filed on May 11, 2009, as amended by filings on June 25, 2009 and July 13, 2009, and as subsequently modified by the proposals in the HECO Companies' Motion of Interim Approval of a Decoupling Mechanism, filed on November 25, 2009, to the extent agreed-upon by the HECO Companies and the Consumer Advocate, as indicated in the present record, subject to the Commission's issuance of a final Decision and Order in this matter." (*Order* at 1-2.)

On August 31, 2010, the Commission issued the Final Decoupling Order in Docket No. 2008-0274 stating the "HECO Companies shall implement decoupling, and commence tracking target revenues and recorded adjusted revenues when rates that reflect a reduced ROR [rate of return] due to decoupling are approved by the commission in either an interim or final decision and order in the HECO Companies pending rate cases," subject to certain conditions and modifications. (Final Decoupling Order at 129.)

On December 29, 2010, the Commission issued its *Final Decision and Order* in Hawaiian Electric's 2009 test year rate case proceeding, Docket No. 2008-0083, stating that, "the commission approves the implementation of decoupling for HECO effective immediately with this Final Decision and Order. HECO may begin tracking target revenue and recorded adjusted revenue, which shall serve as the baseline for future decoupling calculations." (*Final*

*Decision and Order* at 42.) In accordance with this *Final Decision and Order*, on January 24, 2011, Hawaiian Electric filed its tariff sheets and rate schedules, reflecting the increase in rates allowed by the *Final Decision and Order*. This filing included the Company's RBA and RAM tariff provisions, and added heat rate deadbands and a provision for Target Heat Rates to the Energy Cost Adjustment Clause ("ECAC").<sup>5</sup> The Commission approved the tariff sheets and rate schedules on February 25, 2011. The effective date of the tariffs was March 1, 2011. Currently, there is no per-kWh RBA Rate Adjustment in the tariff.<sup>6</sup>

## VI

As explained above, the purpose of this filing is to modify Hawaiian Electric's existing RBA Tariff to include an RBA Rate Adjustment of \$0.001694 per kwh for the June 1, 2011 through May 31, 2012 recovery period. (See Section E of the RBA tariff.) This RBA Rate Adjustment is calculated as described in the tariff. Included in this transmittal are schedules and documentation in support of this rate adjustment.

As stated in the tariff, the Company will notify its customers of the RBA Rate Adjustment filing via newspaper and bill statements. The RBA Rate Adjustment is an automatic rate adjustment clause.

In Attachment 1, Hawaiian Electric submits its proposed RBA Tariff revision reflecting the RBA Rate Adjustment of \$0.001694 per kwh in paragraph E of Revised Sheet No. 92B. Attachment 1 also provides the existing Sheet Nos. 92 and 92A of the RBA Tariff so that the

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<sup>5</sup> Refer to the *Hawaiian Electric Revised Schedules Resulting from Final Decision and Order*, filed January 24, 2011, Exhibit 2A, pages 32 and 152-163, Docket No. 2008-0083.

<sup>6</sup> The Joint FSOP at 23, filed May 11, 2009, Docket No. 2008-0083, states that "HECO would make subsequent tariff filings in March of each year to establish the target revenue for the calendar year based on the RAM Revenue Adjustment and to re-set the RBA rate adjustments for the calendar year plus recovering the RAM Revenue Adjustment for the current calendar year."

proposed revision can be seen in the context of the entire RBA Tariff. Attachment 1A provides the existing tariff sheets for the RBA Tariff.

Attachment 2 provides a summary of the RBA rate adjustment and allocation, and its impact on customer bills. Attachment 2 also reflects the proration for 306 days out of 365 days, i.e., ten months, of the estimated annual O&M RAM and Rate Base RAM to reflect the March 1, 2011, decoupling effective/implementation date.<sup>7</sup> The O&M RAM component calculation and supporting workpapers are submitted as Attachment 3 and the Rate Base RAM component calculation and supporting workpapers are submitted as Attachment 4.

Finally, Attachment 5 provides an explanation of how the RAM will be revised to reflect the effective date of the rates approved by the Commission in its interim decision and order in Hawaiian Electric's 2011 test year rate case, Docket No. 2010-0080. The Commission's issuance of a rate case interim decision and order within a test year resets the level of target revenue and supersedes the target revenue calculated under the RAM Provision from the effective date of the interim rates.<sup>8</sup> From that date the RAM Revenue Adjustment for the

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<sup>7</sup> As reflected in Exhibit C, Item A, filed with the Letter dated June 25, 2009, Subject: Revised and New Exhibits for the Joint SOP, Docket No. 2008-0274, the Hawaiian Electric Companies accepted a delayed filing date as proposed in "Consumer Advocate's HECO/MECO/HELCO Rate Adjustment Mechanism "RAM" Conceptual Framework Proposal", filed on January 30, 2009, Docket No. 2008-0274. The Consumer Advocate's proposal states "A HECO RAM shall be implemented to commence with a 'base' year 2009 and with authorized revenue changes effective on January 1, 2010 and again at January 1, 2011, but with the corresponding rate adjustments delayed to May 1 of each year so that the established revenue variance will be recovered over the subsequent eight months of the year." However, as explained above, because decoupling did not commence until March 1, 2011, the RAM Revenue Adjustment cannot begin prior to that date. As a result, the RAM Revenue Adjustment is prorated to only reflect the 2011 period that decoupling is in place. Furthermore, the Consumer Advocate and Hawaiian Electric later agreed that the recovery of the established revenue variance would be over the subsequent 12 months, June 1<sup>st</sup> through May 31<sup>st</sup>.

<sup>8</sup> The Joint FSOP at 23, filed May 11, 2009, Docket No. 2008-0274 further explains that "The RAM Revenue Adjustment in the test year for HECO would be designated interim and subject to refund in the event the Commission finds a lower authorized base revenue amount to be reasonable for the 2011 test year. In addition, HECO will make tariff filings when necessary during the year to reset target revenues and to re-set RBA rate adjustments for re-calculated RAM Revenue Adjustments based on issuance of interim or final decision and orders in pending rate cases."

remainder of the test year is set to zero because the approved interim revenue requirement is recovered through interim rates.

Although the RAM Revenue Adjustment for the test year is set to zero from the date the interim rates become effective, the RBA Rate Adjustment, which begins June 1, must still be recalculated and reset to recover the RAM Revenue Adjustment accrued between March 1, 2011, the effective date for revenue decoupling and the effective date of the RBA and RAM tariff provisions, and the date that interim rates become effective. Hawaiian Electric will revise the RBA Rate Adjustment to reflect the new RAM Revenue Adjustment as a result of an interim decision in a rate case in the manner illustrated in Attachment 5.

## VII

WHEREFORE, Hawaiian Electric respectfully gives not less than 30 days' notice as required by law and requests that its proposed RBA Rate Adjustment be allowed to become effective June 1, 2011.

DATED: Honolulu, Hawaii, March 31, 2011.

HAWAIIAN ELECTRIC COMPANY, INC.

By:

  
Darcy L. Endo-Omoto  
Vice President, Government and  
Community Affairs

SHEET NO. 92  
Effective March 1, 2011

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 SS	- Standby Service
Schedule TOU EV-	Residential Time-of-Use Service with Electric Vehicle Pilot
Schedule EV-R	Residential Electric Vehicle Charging Service Pilot
Schedule EV-C	Commercial Electric Vehicle Charging Service Pilot

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 of the RAM Revenue Adjustment provided in the Rate Adjustment Mechanism ("RAM") Provision over the subsequent June 1<sup>st</sup> through May 31<sup>st</sup> period. Tracking of target revenue and recorded adjusted revenue will commence on the effective date of the tariff that implements 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.

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the most recent Authorized Base Revenue approved by the Public Utilities Commission

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2008-0083, Final Decision and Order, December 29, 2010.  
Transmittal Letter dated January 24, 2011.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

(PUC), plus or minus the RAM Revenue Adjustment calculated under the RAM Provision, adjusted to remove amounts for applicable revenue taxes. The target revenue will exclude revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause and all revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period to the extent that such errors are identified 15 days prior to the Annual implementation date specified in the RAM Provision.

Monthly Allocation Factors for the Target Revenue are as follows:

January	7.98%
February	7.30%
March	8.04%
April	7.87%
May	8.34%
June	8.36%
July	8.69%
August	9.05%
September	8.80%
October	8.90%
November	8.33%
December	<u>8.34%</u>
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2009 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.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2008-0083, Final Decision and Order, December 29, 2010.  
Transmittal Letter dated January 24, 2011.

Superseding SHEET NO. 92B  
Effective March 1, 2011

REVISED SHEET NO. 92B  
Effective June 1, 2011

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

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 6 percent.

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

At the Annual Evaluation Date provided in the Rate Adjustment Mechanism Provision, 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.

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 or Baseline Capital Projects Credits, 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.

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. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2011 to May 31, 2012

RBA Rate Adjustment

All Rate Schedules ..... 0.1694 ¢/kWh

F: COMMISSION'S AUTHORITY

The Commission may 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.

Docket No. 2008-0274 Final Decision and Order, August 31, 2010.  
Transmittal Letter dated March 31, 2011.

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
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B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the most recent Authorized Base Revenue approved by the Public Utilities Commission

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2008-0083, Final Decision and Order, December 29, 2010.  
Transmittal Letter dated January 24, 2011.

## REVENUE BALANCING ACCOUNT ("RBA") PROVISION

(PUC), plus or minus the RAM Revenue Adjustment calculated under the RAM Provision, adjusted to remove amounts for applicable revenue taxes. The target revenue will exclude revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause and all revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period to the extent that such errors are identified 15 days prior to the Annual implementation date specified in the RAM Provision.

Monthly Allocation Factors for the Target Revenue are as follows:

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July	8.69%
August	9.05%
September	8.80%
October	8.90%
November	8.33%
December	<u>8.34%</u>
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2009 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.

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2008-0083, Final Decision and Order, December 29, 2010.  
Transmittal Letter dated January 24, 2011.

## REVENUE BALANCING ACCOUNT ("RBA") PROVISION

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 6 percent.

## D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

At the Annual Evaluation Date provided in the Rate Adjustment Mechanism Provision, 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.

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 or Baseline Capital Projects Credits, 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.

## 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. The RBA rate adjustment is calculated based on the Company's forecast of mWh sales over the RBA rate adjustment recovery period.

Effective June 1, 2011 to May 31, 2012

## RBA Rate Adjustment

All Rate Schedules ..... ¢/kWh

## F: COMMISSION'S AUTHORITY

The Commission may 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.

Docket No. 2008-0083, Final Decision and Order, December 29, 2010.  
Transmittal Letter dated January 24, 2011.

**HAWAIIAN ELECTRIC COMPANY**

**DETERMINATION OF 2011 REVENUE BALANCING ACCOUNT RATE ADJUSTMENT**

		<u>In \$000s</u>	<u>In \$000s</u>
L1	2010 Earnings Sharing Revenue Credit (N.1), Major Capital Projects Credits and/or Baseline Capital Projects Credit		(NA)
L2	RBA 2010 calendar year-end balance		NA
L3	O&M RAM Attachment 3	\$5,629	
L4	RATE BASE RAM Attachment 4	\$9,570	
L5 = L3 + L4	TOTAL RAM	\$15,199	
L6	Adjustment for RAM Period March 1, 2011 - December 31, 2011 306 days ÷ 365 days	83.84%	
L7 = L5 x L6	2011 RAM to be Recovered	<u>\$12,742</u>	
L8 = L1 + L2 + L7	Total RBA Rate Adjustment	\$12,742	
L9	Estimated GWH Sales, June 2011 to May 2012 Attachment 2, Page 2	7,521.8	
L10 = (L8 x 1000 x 100) ÷ (L9 x 1000000)	RBA Rate Adjustment, ¢ per kWh Effective June 1, 2011 through May 31, 2012	0.1694	
L11 = L10 ÷ 100 x 600	Monthly Bill Impact @ 600 kWh	\$1.02	

NA = Not Applicable (Implementation of Decoupling began on March 1, 2011)

N.1 Because decoupling was implemented on March 1, 2011, the first Evaluation Period Earnings Sharing calculation as described in the RAM tariff provision, Sheet No. 93-C to 93-D, will be provided as part of the Company's 2012 Rate Adjustment Mechanism filing for the Evaluation Period of 2011.

Hawaiian Electric Company, Inc.

**2010-2015 SALES FORECAST**  
**May 2010 Sales Forecast**  
**Including Future DSM**

In GWH

<b>2011</b>													
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>
R	173.8	147.6	166.2	160.9	169.7	174.2	180.9	186.4	177.4	177.7	167.9	171.8	2,054.5
G	25.7	24.2	27.0	26.2	28.5	28.0	29.2	29.7	28.1	28.7	27.1	26.5	328.9
J	161.3	150.2	167.7	161.0	176.6	176.7	179.1	189.4	182.1	183.8	171.3	168.6	2,067.8
H	2.0	1.8	2.0	1.9	2.1	2.1	2.1	2.1	2.0	2.0	1.9	1.7	23.7
P	238.9	215.3	239.3	232.2	250.5	249.0	260.5	264.6	255.8	260.5	245.5	244.9	2,957.0
F	3.2	3.1	3.1	3.1	3.2	3.0	3.1	3.2	3.0	3.2	3.2	3.2	37.6
Total	604.9	542.2	605.3	585.3	630.6	633.0	654.9	675.4	648.4	655.9	616.9	616.7	7,469.5

<b>2012</b>													
	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Total</u>
R	177.5	156.1	169.4	163.9	172.9	177.6	184.2	189.9	180.7	180.9	170.9	174.7	2,098.7
G	26.1	25.5	27.2	26.5	28.7	28.3	29.5	30.0	28.4	28.9	27.3	26.9	333.3
J	168.3	151.7	169.5	162.6	178.6	178.7	181.2	191.7	184.5	186.2	173.6	171.1	2,097.7
H	1.6	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	1.5	1.4	19.3
P	248.8	216.9	241.1	233.4	252.1	250.7	261.9	266.4	257.1	262.0	246.8	246.6	2,983.8
F	3.2	3.2	3.1	3.1	3.2	3.0	3.1	3.2	3.0	3.2	3.2	3.2	37.7
Total	625.5	554.9	611.9	591.1	637.2	640.0	661.6	682.9	655.4	662.8	623.3	623.9	7,570.5

**Sales Estimate, June 2011 through May 2012**

**7,521.8 GWH**

ATTACHMENT 2  
PAGE 2 OF 2

Hawaiian Electric Company, Inc.  
**2011 O&M Expense RAM**  
(\\$ Thousands)

2010 O&M Expense Escalation	3,241	<sup>a</sup>
2011 O&M Expense Escalation	2,388	<sup>b</sup>
2011 O&M Expense RAM	<u>5,629</u>	

<sup>a</sup> See Attachment 3, page 2

<sup>b</sup> See Attachment 3, page 3

Hawaiian Electric Company, Inc.  
**2010 O&M EXPENSE Escalation for O&M RAM**  
 (\$ Thousands)

	(A) 2009 Base O&M Expense	(B) 2010 O&M Expense Escalation Escalation	(C) Exp Amount	(D) = (A) + ( C) 2010 O&M Expense with RAM
O&M Bargaining Unit Labor Only	44,062	3.43%	1,511	45,573
O&M Non-Labor	119,033	1.10%	1,309	120,342
Payroll Taxes	3,864	3.43%	133	3,997
Total Expenses	<u>166,959</u>		<u>2,953</u>	<u>169,912</u>
Revenue Tax Factor			1.0975	
O&M RAM (Total Expenses x Rev Tax Factor)			<u>3,241</u>	

(A) See Attachment 3, page 4 O&M worksheet (O&M Labor tab)

(B) Escalation Rates

Labor:

Bargaining Unit Wage Increase                          4.19% (See Attachment 3.1)

Approved in Final D&O in Docket No. 2008-0274, page 71 (part of Amended Joint

Less: Productivity Factor                                  0.76% Proposal), filed on August 31, 2010

3.43%

Non-Labor:

GDP Price Index for 2010                                  1.1% (See Attachment 3.2, page 2)

(C) Computation of O&M RAM = Base O&M Expense x Applicable Escalation Factor x Revenue Tax Factor

Computation of Revenue Tax Factor

Public Service Tax Rate	0.05885
PUC Fees Rate	0.00500
Franchise Tax Rate	0.02500
Total Rev Tax Rate	0.08885

Revenue Tax Facotor

= 1 / (1 - Total Rev Tax Rate)                          1.0975

Hawaiian Electric Company, Inc.  
**2011 O&M EXPENSE Escalation for O&M RAM**  
(\$ Thousands)

	(A)	(B)	(C)	(D) = (A) + (C)
	2010 O&M Expense with RAM	2011 O&M Expense Escalation Escalation	2011 O&M Expense with RAM	O&M Expense with RAM
O&M Bargaining Unit Labor Only	45,573	0.99%	451	46,024
O&M Non-Labor	120,342	1.40%	1,685	122,027
Payroll Taxes	3,997	0.99%	40	4,037
Total Expenses	<u>169,912</u>		<u>2,176</u>	<u>172,088</u>
Revenue Tax Factor			1.0975	
O&M RAM (Total Expenses x Rev Tax Factor)			<u>2,388</u>	

(A) See Attachment 3, page 4 O&M worksheet (O&M Labor tab)

#### (B) Escalation Rates

## Labor:

### Bargaining Unit Wage Increase

1.75% (See Attachment 3.1)

Approved in Final D&O in Docket No. 2008-0274, page 71 (part of Amended Joint

Less: Productivity Factor 0.76% Proposal), filed on August 31, 2010

### Labor Escalation Rate

0.99%

### Non-Labor:

### GDP Price Index for 2011

1.4% (See Attachment 3.2, page 4)

(C) Computation of O&M RAM = Base O&M Expense x Applicable Escalation Factor x Revenue Tax Factor

### Computation of Revenue Tax Factor

<b>Public Service Tax Rate</b>	0.05885
<b>PUC Fees Rate</b>	0.00500
<b>Franchise Tax Rate</b>	<u>0.02500</u>
<b>Total Rev Tax Rate</b>	0.08885

### Revenue Tax Factor

= 1 / (1 - Total Rev Tax Rate)

	(A)	(B)	(C) (A) + (B)	(D)	(E) (C) + (D)	(F)	(G) (E) + (F)
	Amount Per Final D&O	Excluded Amounts	Amount for 2010 O&M RAM	2010 Escalation	2010 O&M Expense with RAM	2011 Escalation	2011 O&M Expense with RAM
O&M Bargaining Unit (BU) Labor	44,062	0	44,062	1,511	45,573	451	46,024
O&M Non-BU Labor	35,415	(35,415) <sup>a</sup>	-				
O&M Labor	79,477	-	44,062	1,511	45,573	451	46,024
O&M Non-Labor (total less labor)	146,653	(27,620) <sup>b</sup>	119,033	1,309	120,342	1,685	122,027
Total O&M per 2nd Interim	226,130		163,095	2,820	165,915	2,136	168,051
Payroll taxes to RAM calculation	6,970	(3,106) <sup>c</sup>	3,864	133	3,997	40	4,037
					<u>2,953</u>		<u>2,176</u>

Excluded amounts:

- <sup>a</sup> Per Final Decoupling Decision and Order, page 130, filed 8/31/10, Docket No. 2008-0274, labor escalation not applied to non-BU labor. See Attachment 3.3.
- <sup>b</sup> Tracked pension and OPEB expenses. See Attachment 3.6.
- <sup>c</sup> Portion of payroll taxes related to non-BU labor (44.56%)  $6,970 \times .4456 = 3,106$ . See Attachment 3.3 for calculation of percentage related non-BU labor.

Hawaiian Electric Company, Inc.

Bargaining Unit Wage Increase per Collective Bargaining Agreement - Effective November 1, 2007

Bargaining Unit Wage Increase per Collective Bargaining Agreement - Effective January 1, 2011

11/1/2007	3.5% of 10/31/2007 wage rates	
1/1/2009	4.0% of 10/31/2007 wage rates	
1/1/2010	4.5% of 12/31/2007 wage rates	
1/1/2011	1.75% of 12/31/10 wage rates	(a)

	Increase effective	increase amount (a)	wage rate with increase (b)	relative increase (b)-(a)/prev (b)
1.00	3.5% 11/1/2007	0.0350	1.0350	0.0350
	4.0% 1/1/2009	0.0400	1.0750	0.0386
	4.5% 1/1/2010	0.0450	1.1200	0.0419 4.19%
	1.75% 1/1/2011	0.0196	1.1396	0.0175 1.75%

(a) Agreement ratified by the IBEW, Local 1260 on March 11, 2011, reflects a 1.75% increase effective 1/1/2011. See HECO's Form 8-K dated March 11, 2011 filed with Securities and Exchange Commission at [www.hei.com](http://www.hei.com), under SEC filings.

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# Blue Chip Economic Indicators<sup>®</sup>

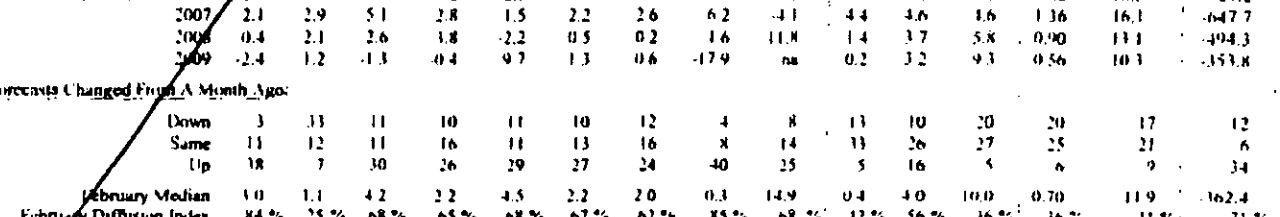
**'Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead**  
**Vol. 35, No. 2 February 10, 2010**

Wolters Kluwer  
Law & Business

12 ■ BLUE CHIP ECONOMIC INDICATORS ■ FEBRUARY 10, 2010

**2010 Real GDP Consensus Forecast Increased To 3.0%**

FEBRUARY 2010 Forecast For 2010 SOURCE:	Percent Change 2010 From 2009 (Year-Over-Year)										Average For 2010				Total Units-2010		2010
	1 Real GDP (Chained) (2005 \$)	2 GDP Price Index	3 Nominal GDP (Cur. \$)	4 Consumer Price Index	5 Indust. Prod.	6 Dif. Pers. Income (2005 \$)	7 Personal Consp. Exp. (2005 \$)	8 Non-Res. Fix. Inv. (2005 \$)	9 Corp. Profits (Cur. \$)	10 Fiscal Bills 3-yr.	11 Treas. Notes 10-Year	12 Unempl. Rate (Civ.)	13 Housing Starts (Mil.)	14 Auto & Light Truck Sales (Mil.)	15 Net Exports (2005 \$)		
RBS	3.9 H	1.6	5.6 H	2.8	4.5	2.4	2.5	3.4	15.0	1.1 H	4.5 H	9.7	0.94 H	12.3	-347.0		
Citibank*	3.9 H	1.0	5.0	2.1	7.0 H	3.1	3.0 H	1.8	12.7	0.3	3.9	9.8	0.79	12.5	-365.0		
Macroeconomic Advisers, LLC**	3.7	0.7	4.5	2.1	4.5	2.3	2.7	2.9	21.1	0.2	4.0	10.0	0.83	12.4	-373.3		
Credit Suisse	3.6	1.1	4.7	2.2	5.2	na	1.8	2.1	14.6	0.6	3.3	9.8	0.8	na	-375.7		
DuPont***	3.6	1.0	4.6	2.5	6.1	2.5	1.8	3.4	14.0	0.7	4.1	9.7	0.78	11.8	-330.0		
Barclays Capital	3.6	0.9	4.6	2.1	6.2	3.2 H	2.3	3.9	17.6	0.2	4.1	9.5	0.75	12.4	-368.5		
ClearView Economics*	3.5	1.3	4.8	3.0 H	5.3	2.1	2.3	1.0	24.3	0.5	4.2	10.1	0.69	11.1	-339.0		
Societe Generale	3.5	0.7	4.2	1.9	4.9	2.6	2.4	3.1	11.3	0.2	4.0	9.8	0.75	11.7	-380.0		
J.P. Morgan Chase	3.5	0.5	4.1	2.3	4.6	2.4	2.2	2.0	21.4	0.2	4.1	9.9	0.69	11.5	-324.7		
Wells Capital Management	3.3	1.5	4.9	2.3	4.3	2.3	2.3	1.7	19.4	0.3	4.3	10.0	0.62	11.8	-355.0		
FedEx Corporation	3.3	1.5	4.8	2.9	4.6	2.5	2.3	4.2	14.9	0.6	4.1	9.8 L	0.69	13.1	-410.0		
RDX Economics	3.3	1.3	4.7	2.9	5.9	2.2	2.0	0.3	16.0	0.1	4.4	9.9	0.70	11.5	-336.3		
Daiwa Securities America	3.3	1.3	4.7	2.4	3.9	2.1	1.7	0.7	19.6	0.4	4.0	10.0	0.64	11.9	-327.0		
Woodley Park Research	3.3	1.0	4.3	1.8	4.6	2.2	2.4	0.3	14.8	0.3	3.7	9.8	0.76	12.4	-382.9		
Morgan Stanley	3.3	1.0	4.2	2.6	5.1	3.2 H	2.0	0.7	15.2	0.4	4.4	10.0	0.61	11.6	-315.3		
National Assn. of Home Builders	3.3	0.9	4.1	2.1	4.8	1.7	2.0	1.4	15.2	0.2	3.8	10.0	0.65	12.0	-320.0		
Potomac Research Group*	3.1	0.7	4.1	2.2	4.4	2.2	2.3	1.7	17.0	0.2	4.0	10.1	0.76	12.1	-361.0		
SIM Economics, Inc.	3.2	1.6	4.8	2.0	4.8	1.8	2.0	0.5	13.5	0.6	4.2	10.1	0.73	11.9	-349.0		
Bank of America-Merrill Lynch	3.2	0.9	4.1	2.5	5.2	2.3	1.7	2.3	na	0.5	4.3	9.7	0.85	12.2	-347.6		
Inforium - Univ. of Maryland	3.1	1.4	4.5	2.6	4.9	1.8	2.2	0.4	10.1	0.4	4.0	9.6	0.61	12.1	-371.0		
J.W. Coats Advisors	3.1	1.2	4.3	2.7	3.7	2.2	2.4	3.2 H	19.5	0.4	3.6	10.0	0.63	12.6	-401.0		
U.S. Chamber of Commerce	3.1	1.1	4.2	2.3	4.1	2.1	2.3	0.1	11.0	0.6	1.8	9.8	0.74	na	-333.3		
Nomura Securities	3.1	1.1	4.2	1.8	6.6	2.1	2.0	1.0	26.2	1.1	3.8	9.7	0.65	12.0	-325.1		
Swiss Re	3.1	0.9	4.0	2.0	5.4	2.2	2.1	0.9	17.2	0.1	3.8	9.9	0.69	12.0	-371.9		
Merrill Financial	3.1	0.7	3.9	1.8	5.1	2.5	2.4	0.1	16.0	0.2	3.9	10.0	0.73	12.4	-378.6		
BHS	3.0	1.2	4.2	1.7	4.0	2.6	2.2	0.3	na	0.7	3.8	9.9	0.70	na	-338.0		
Ford Motor Company*	3.0	1.1	4.0	1.5 L	4.6	2.2	2.2	-1.4	na	1.1	4.1	9.8	0.79	na	-375.2		
Moody's Capital Markets	3.0	1.1	3.6	2.3	4.0	1.9	2.0	-1.2	12.5	0.2	3.7	9.9	0.67	11.9	-348.3		
Turning Points (Micrometrics)	3.0	1.0	4.0	2.0	3.9	2.1	1.8	5.9	13.8	0.1	3.8	9.9	0.68	11.9	-334.6		
Fannie Mae	3.0	0.8	3.9	2.1	5.3	2.4	2.4	-0.3	15.5	0.2	4.1	10.0	0.76	12.4	-380.8		
Northern Trust Company*	2.9	1.6	4.6	2.7	na	na	1.9	-1.1	na	0.5	3.7	10.3	0.59 L	12.0	-313.7 H		
Action Economics	2.9	1.5	4.5	2.5	5.1	1.9	1.9	-2.2	17.3	0.3	4.0	10.1	0.65	11.7	-355.0		
PNC Financial Services Group	2.9	1.5	4.3	2.3	3.3	2.4	1.9	0.1	7.8	0.4	3.9	9.9	0.79	11.2	-410.0 L		
Russell Investments	2.9	1.4	4.3	2.6	2.1 L	2.3	2.7	-0.7	16.0	0.2	3.9	10.1	0.65	11.4	-353.0		
BMO Capital Markets	2.9	1.1	4.0	2.4	3.7	2.4	1.9	-0.2	16.0	0.3	3.9	10.0	0.67	13.0	-330.0		
General Motors Corporation	2.9	0.7	3.6	1.9	4.4	2.3	2.0	-1.1	13.7	0.4	4.1	10.1	0.71	na	-369.0		
National Assn. of Realtors	2.8	1.5	4.3	1.8	6.2	1.5	2.2	0.2	10.0	0.5	3.8	10.0	0.67	13.0	-375.0		
Lucent Corporation	2.8	1.1	4.0	2.1	4.6	2.6	1.9	1.0	3.2 L	0.5	3.8	9.7	0.79	11.8	-389.8		
Technostat	2.8	1.0	3.8	2.2	3.3	2.3	1.8	0.5	13.8	0.4	4.1	10.1	0.81	12.8	-324.0		
Macrofin Analytics	2.8	0.9	3.7	1.7	3.7	1.4	1.8	-1.4	10.3	0.6	4.1	10.0	0.65	11.3	-363.8		
Bank of Tokyo-Mitsubishi UFJ	2.7	1.3	4.2	2.0	4.4	2.0	1.8	0.6	12.7	0.5	3.9	9.9	0.74	11.6	-318.9		
Georgia State University*	2.7	1.3	4.0	2.1	5.4	1.6	2.0	0.8	14.3	0.5	4.0	10.0	0.65	11.6	-372.1		
Wells Fargo	2.7	0.9	3.6	2.3	4.3	1.2	1.4	-1.0	13.8	0.3	4.1	10.4 H	0.66	11.1	-342.8		
Moody's Economy.com	2.7	0.2 L	3.1	2.0	3.0	0.9 L	1.3	0.8	8.9	0.4	4.2	10.3	0.74	11.7	-346.7		
UCLA Business Forecasting Proj.*	2.6	1.0	3.6	1.9	3.5	1.5	1.5	0.1	15.3	0.5	3.7	10.2	0.84	11.4	-405.1		
Goldman Sachs & Co.*	2.6	0.4	3.0 L	2.0	5.3	1.2	1.6	-1.5	8.4	0.0 L	3.1 L	10.3	0.67	10.8 L	-326.9		
Kellner Economic Advisers	2.5	1.5	4.0	2.5	3.5	1.8	1.6	0.0	11.0	0.6	4.1	10.1	0.73	11.7	-370.0		
Economist Intelligence Unit	2.5	1.4	3.9	1.7	2.5	1.8	1.2	-2.4	na	0.4	3.9	9.7	0.80	11.1	-370.0		
Wayne Hummer Investments LLC*	2.5	1.1	3.6	2.0	4.2	1.8	1.7	2.0	14.9	0.5	3.9	10.1	0.67	12.5	-340.0		
Standard & Poors Corp.*	2.4	1.3	3.7	2.2	3.2	1.4	1.7	-1.1	15.6	0.4	4.2	10.3	0.75	11.2	-375.0		
Conference Board*	2.2	1.1	3.3	2.6	3.6	1.5	1.2 L	0.3	9.4	0.2	3.7	10.4 H	0.65	11.6	-374.0		
Naroff Economic Advisors*	2.1 L	2.1 H	4.6	2.5	2.8	2.7	1.9	-2.4 L	7.2	1.1	4.2	10.2	0.65	14.0 H	-375.0		
<b>2010 Consensus: February Avg.</b>	<b>3.0</b>	<b>1.1</b>	<b>3.2</b>	<b>2.2</b>	<b>4.5</b>	<b>2.1</b>	<b>2.0</b>	<b>0.9</b>	<b>14.5</b>	<b>0.4</b>	<b>4.0</b>	<b>10.0</b>	<b>0.71</b>	<b>12.0</b>	<b>-358.4</b>		
Top 10 Avg.	3.6	1.0	4.9	2.7	5.9	2.8	2.5	4.1	20.5	0.8	4.3	10.3	0.82	12.8	-325.0		
Bottom 10 Avg.	2.5	0.6	3.5	1.8	3.1	1.4	1.5	-1.3	8.6	0.1	3.6	9.6	0.63	11.2	-391.4		
January Avg.	2.1	1.2	4.0	2.1	4.2	2.0	1.9	-0.4	13.6	0.4	3.9	10.0	0.73	12.0	-369.6		



\*Former winner of annual Lawrence R. Klein Award for Blue Chip Forecast Accuracy. \*\*Denotes two-time winner. \*\*\*Denotes three-time winner.

Aspen Publishers

# Blue Chip Economic Indicators<sup>®</sup>

**Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead**

**Vol. 36, No. 2 February 10, 2011**

Wolters Kluwer  
Law & Business

## 2 ■ BLUE CHIP ECONOMIC INDICATORS ■ FEBRUARY 10, 2011

## 2011 Real GDP Forecast Increases To 3.2%

<b>FEBRUARY 2011 Forecast For 2011 SOURCE:</b>	Percent Change 2011 From 2010 (Full Year-Over-Prior Year)									Average For 2011 —			Total Units-2011 -		-2011-				
	1 (2005 \$)	2 Index	3 GDP (Cur. \$)	4 Nominal GDP (Cur. \$)	5 Consumer Prod. (Total)	6 (2005 \$)	7 Dis. Pers. Income (2005 \$)	8 Personal Cons. Exp (2005 \$)	9 Non-Res. Fix. Inv. (Cur. \$)	10 Treas. Bills	11 Treas. Notes	12 Unempl. Rate	13 Housing Starts (Mil.)	14 Auto & Light Truck Sales (Mil.)	15 Net Exports (2005 \$)				
Pierpont Securities	3.9	H	1.6	5.5	H	2.6	5.0	2.6	3.3	11.8	12.0	0.3	4.1	H	9.2	0.78	13.2	-392.0	
Moody's Analytics	3.7	1.3	4.4	1.7	4.8	3.2	3.6	8.5	1.2	0.3	3.7	9.4	0.84	H	13.1	-429.8			
Macroeconomic Advisers, LLC**	3.7	1.0	4.7	1.6	4.6	2.7	3.7	9.7	8.5	0.2	3.7	9.1	0.69	13.3	-426.3				
RBS	3.6	1.7	5.3	2.2	5.2	2.9	2.9	9.1	12.0	0.2	3.3	9.3	0.70	12.8	-385.0				
DuPont***	3.6	1.4	5.0	1.6	4.5	2.5	3.0	9.1	12.0	0.3	3.4	9.4	0.75	13.0	-410.0				
Societe Generale	3.5	1.8	5.4	2.0	3.1	2.1	3.3	9.4	9.6	0.2	3.6	9.1	0.65	13.3	-418.0				
Ford Motor Company*	3.5	1.7	5.2	2.0	5.1	2.7	3.4	9.4	na	0.3	3.6	9.5	0.69	na	-432.1				
Morgan Stanley	3.5	1.4	5.0	2.4	5.9	H	3.5	3.2	10.2	8.3	0.2	3.5	9.0	L	0.56	13.1	-386.4		
Comerica Bank*	3.5	1.3	4.2	2.2	4.9	2.7	3.4	8.7	8.0	0.2	3.7	9.4	0.60	13.3	-517.5				
General Motors Corporation	3.5	1.2	4.7	1.6	3.8	2.8	3.7	9.1	7.5	0.3	3.7	9.4	0.74	na	-475.0				
Action Economics	3.4	1.7	5.1	2.4	5.1	3.0	3.1	8.6	28.9	H	0.2	3.7	9.3	0.64	12.9	-409.0			
SOM Economics, Inc.	3.4	1.5	5.0	1.5	4.8	2.7	3.1	11.2	7.5	0.3	3.6	9.5	0.70	13.0	-483.0				
Bank of Tokyo-Mitsubishi UFJ	3.4	1.4	4.8	1.9	4.3	2.9	3.2	9.7	na	0.2	3.5	9.1	0.66	13.1	-393.6				
J P MorganChase	3.4	1.1	4.5	1.8	4.6	2.9	3.6	9.3	8.8	0.2	3.4	9.3	0.66	12.7	-429.9				
Goldman Sachs & Co.*	3.4	1.0	4.5	1.7	4.3	3.1	3.6	7.0	16.7	0.2	3.6	9.3	0.63	13.2	-388.1				
ClearView Economics*	3.3	1.7	5.0	1.9	4.5	3.3	3.6	7.3	6.4	0.2	3.5	9.4	0.64	12.8	-384.2				
Swiss Re	3.3	1.6	4.9	1.8	4.0	2.6	2.9	8.8	6.5	0.2	3.5	9.4	0.68	13.5	-387.5				
UBS	3.3	1.5	4.8	1.8	5.6	3.4	3.9	H	8.4	na	0.3	3.3	9.1	0.60	na	-446.0			
Credit Suisse	3.3	1.3	4.6	1.6	5.0	na	3.7	8.7	7.6	na	3.2	9.0	L	0.65	na	-439.0			
Wells Fargo	3.3	1.3	4.6	2.2	4.4	3.0	2.7	12.8	6.8	0.2	3.6	9.4	0.64	12.9	-393.4				
National Assn. of Home Builders	3.3	1.2	4.5	1.4	L	4.4	2.7	3.3	8.6	6.5	0.2	3.6	9.3	0.69	12.9	-450.0			
RDQ Economics	3.2	1.7	5.0	2.3	4.7	2.5	3.2	6.9	12.6	0.1	L	3.7	9.2	0.80	12.5	-401.5			
Kellner Economic Advisers	3.2	1.7	4.9	2.0	4.4	2.8	3.4	15.0	H	10.0	0.5	H	3.6	9.2	0.75	13.5	-465.0		
Wells Capital Management	3.2	1.5	4.7	2.4	4.2	2.6	3.5	9.0	10.2	0.2	3.8	9.2	0.58	13.5	-410.0				
U.S. Chamber of Commerce	3.2	1.4	4.7	1.7	4.5	2.8	3.3	6.8	6.2	0.2	3.1	L	9.2	0.65	na	-394.1			
Moody's Capital Markets	3.2	1.4	4.7	2.2	4.6	2.3	3.2	5.9	L	8.0	0.2	3.5	9.2	0.68	12.9	-390.5			
Russell Investments	3.2	1.4	4.6	2.2	4.8	3.0	3.1	9.0	8.0	0.2	3.7	9.1	0.65	12.8	-438.0				
Daiwa Capital Markets America	3.2	1.2	4.4	1.8	4.2	2.3	3.3	7.5	3.8	0.3	3.7	9.3	0.65	12.8	-400.0				
Fannie Mae	3.2	1.1	4.4	1.5	4.2	2.6	3.2	8.2	8.0	0.3	3.5	9.4	0.71	12.9	-442.4				
Mesirow Financial	3.2	1.0	4.3	1.4	L	3.9	2.6	3.4	9.4	6.9	0.3	3.4	9.6	H	0.67	13.2	-464.8		
Potomac Research Group*	3.2	1.0	4.3	1.7	4.3	2.6	3.2	9.1	6.2	0.2	3.6	9.2	0.69	13.0	-425.0				
Bank of America-Merrill Lynch	3.2	1.0	4.3	1.6	3.9	2.8	2.8	9.8	na	0.1	L	3.5	9.4	0.65	13.3	-400.0			
BMO Capital Markets*	3.2	0.9	L	4.2	1.6	4.6	3.7	H	3.4	9.0	5.2	0.1	L	3.5	9.1	0.63	13.7	H	-439.0
Eaton Corporation	3.1	2.1	5.3	1.9	5.6	3.3	2.6	L	8.3	9.0	0.2	3.5	9.4	0.72	12.8	-364.3			
Barclays Capital	3.1	1.4	4.6	1.8	4.7	2.9	3.2	11.2	9.4	0.2	3.1	L	9.0	L	0.61	13.5	-474.7		
UCLA Business Forecasting Proj.*	3.1	1.4	4.5	1.7	3.0	1.5	L	3.1	6.2	0.1	0.3	3.8	9.5	0.76	12.9	-414.2			
Naroff Economic Advisors*	3.0	2.2	H	5.2	3.5	H	4.0	2.8	6.4	9.6	0.5	H	3.9	9.4	0.61	13.7	H	-520.0	
Northern Trust Company*	3.0	2.0	5.1	1.9	na	na	3.0	8.5	na	0.1	L	3.6	9.6	H	na	na	na	na	
FedEx Corporation	3.0	1.7	4.8	1.9	5.1	2.3	3.3	6.2	6.7	0.5	H	3.9	9.0	L	0.72	13.4	-472.5		
Wintrust Wealth Management*	3.0	1.6	4.8	1.8	4.5	2.7	3.0	9.0	7.0	0.3	3.6	9.5	0.71	13.3	-480.0				
PNC Financial Services Group	3.0	1.5	4.6	1.6	4.8	2.6	3.1	11.7	na	0.1	L	3.5	9.1	0.65	13.1	-542.5	L		
Turning Points (Micrometrics)	3.0	1.3	4.3	2.2	4.4	2.7	3.3	9.5	13.5	0.3	3.8	9.2	0.62	13.0	-402.0				
Nomura Securities	3.0	1.2	4.1	1.7	3.8	2.6	3.2	6.3	3.0	0.5	H	3.5	9.3	0.67	12.7	-353.9	H		
Standard & Poors Corp.*	3.0	1.1	4.2	1.6	3.6	2.7	3.0	7.9	na	0.2	3.8	9.4	0.67	13.1	-405.9				
Inforum - Univ. of Maryland	2.9	1.7	4.7	2.1	5.0	2.4	2.9	8.8	3.2	0.3	3.6	9.2	0.61	12.4	L	-460.0			
Econoclast	2.9	1.1	4.0	1.8	4.1	3.0	2.9	8.7	6.0	0.3	3.7	9.2	0.71	13.2	-456.0				
Georgia State University*	2.8	1.1	4.0	1.5	4.5	2.9	2.9	7.8	-2.5	L	0.3	3.7	9.3	0.55	L	12.9	-392.5		
Economist Intelligence Unit	2.7	2.0	4.7	1.9	2.5	2.3	2.9	7.2	na	0.3	3.7	9.0	L	0.70	13.0	-496.0			
MacroFin Analytics	2.7	1.1	3.8	L	1.4	4.5	1.8	2.8	7.5	6.4	0.3	3.6	9.3	0.63	12.4	L	-476.3		
J.W. Coons Advisors	2.6	L	1.8	4.5	2.1	2.0	L	2.4	3.0	9.8	4.5	0.4	3.4	9.3	0.56	13.0	-535.0		
National Assn. of Realtors	2.6	L	1.4	4.0	2.4	3.3	2.6	2.6	L	10.4	8.0	0.4	3.7	9.2	0.68	12.8	-496.0		
Conference Board*	2.6	L	1.2	3.8	1.7	2.8	2.7	7.2	4.3	0.2	3.4	9.4	0.67	13.0	-403.5				
<b>2011 Consensus: February Avg.</b>	<b>3.2</b>	<b>1.4</b>	<b>4.6</b>	<b>1.9</b>	<b>4.4</b>	<b>2.7</b>	<b>3.2</b>	<b>8.8</b>	<b>7.9</b>	<b>0.3</b>	<b>3.6</b>	<b>9.3</b>	<b>0.67</b>	<b>13.1</b>	<b>-433.2</b>				
Top 10 Avg.	3.6	1.9	5.2	2.4	5.3	3.3	3.6	11.2	13.5	0.4	3.8	9.5	0.75	13.5	-382.6				
Bottom 10 Avg.	2.8	1.0	4.1	1.5	3.2	2.2	2.8	6.6	2.9	0.2	3.3	9.1	0.59	12.7	-502.1				
January Avg.	3.1	1.5	4.6	1.7	4.2	2.7	3.1	9.1	5.7	0.3	3.5	9.4	0.68	13.0	-479.8				
2007	1.9	2.9	4.9	2.8	2.7	2.3	2.4	6.7	-6.1	4.4	4.6	4.6	1.36	16.1	-654.9				
2008	0.0	2.2	2.2	3.8	-3.3	1.7	-0.3	0.3	-16.4	1.4	3.7	5.8	0.91	13.1	-504.1				
2009	-2.6	0.9	-1.7	-0.4	-9.3	0.6	-1.2	-17.1	-0.4	0.2	3.2	9.3	0.55	10.3	-363.0				
2010	2.9	1.0	3.8	1.6	5.8	1.4	1.8	5.5	na	0.1	3.2	9.6	0.59	11.6	-421.1				
Number Of Forecasts Changed From A Month Ago:																			
Down	3	27	19	1	15	18	4	31	12	10	8	27	21	5	5				
Same	22	13	14	14	9	11	16	6	17	40	27	23	19	8					
Up	27	12	19	37	27	21	32	15	15	1	17	2	7	22	38				
February Median	3.2	1.4	4.7	1.8	4.5	2.7	3.2	8.8	7.6	0.2	3.6	9.3	0.67	13.0	-426.3				
February Diffusion Index	73 %	36 %	50 %	85 %	62 %	53 %	77 %	35 %	53 %	41 %	59 %	26 %	36 %	68 %	82 %				

\*Former winner of annual Lawrence R. Klein Award for Blue Chip Forecast Accuracy. \*\*Denotes two-time winner. \*\*\*Denotes three-time winner.

HAWAIIAN ELECTRIC COMPANY, INC.

DOCKET NO. 2008-0083  
2009 TEST YEAR RATE CASE  
SUMMARY OF  
OPERATIONS AND MAINTENANCE LABOR AND NON-LABOR EXPENSE  
BY BLOCK OF ACCOUNTS  
Final D&O  
('000)

<u>DESCRIPTION</u>	(1) <u>BU LABOR</u>	(2) <u>Non-BU LABOR</u>	(3)=(1)+(2) <u>Total LABOR</u>	(4) <u>NON-LABOR</u>	(5) <u>TOTAL</u>
Production	23,510	8,934	32,444	45,850	78,294
Transmission	3,085	1,638	4,723	8,910	13,633
Distribution	9,349	2,532	11,881	17,540	29,420
Customer Accounts	5,565	1,251	6,816	5,288	12,104
Allowance for Uncoll Accounts	-	-	0	1,302	1,302
Customer Service	177	2,916	3,093	1,907	5,000
Administrative & General	<u>2,378</u>	<u>18,142</u>	<u>20,520</u>	<u>65,858</u>	<u>86,377</u>
<b>Operation and Maintenance</b>	<b>44,062</b>	<b>35,415</b>	<b>79,477</b>	<b>146,653</b>	<b>226,130</b>
Percentage of Total O&M Labor	55.44%	44.56%	100%		

\* amounts may not add due to rounding

- (1) See Attachment 3.4, page 1
- (2) See Attachment 3.4, page 1
- (3) See DOCKET NO. 2008-0083, January 24, 2011 Exhibit 1C, p.18, Operations and Maintenance Labor Adjustments - O&M Summary (for Docket No. 2008-0083), col.(J).
- (4) See DOCKET NO. 2008-0083, January 24, 2011 Exhibit 1C, p.27, Operations and Maintenance Non-Labor Adjustments - O&M Summary (for Docket No. 2008-0083), col. (J), less Fuel and Purchased Power.
- (5) See DOCKET NO. 2008-0083, January 24, 2011 Exhibit 1C, p. 9, Operations and Maintenance Labor and Non-Labor Adjustments - O&M Summary (for Docket No. 2008-0083) col. (J), less Fuel and Purchased Power.

ATTACHMENT 3.4  
PAGE 1 OF 1

HAWAIIAN ELECTRIC COMPANY, INC. BU vs Merit O&M Labor Expenses											
2009 TEST YEAR											
	(A)	(B)	(C)	(D)	(E) Adjustments		(G)	(H)	(I) Adjustments		(K)
					Merit	2007			2nd	Temp	
					HCEI	Levels			Interim	HCEI	Employees
<b>Production</b>											
Merit	9,266	(2)		(49)	(128)	(426)	(679)	7,982	426		8,408
BU	23,643	(3)		(130)				23,510			23,510
Merit w OT	503	(1)		(3)				499			499
Summer	27			(0)				27			27
	33,439	(6)	0	(182)	(128)	(426)	(679)	32,018	426	0	32,444
<b>Transmission</b>											
Merit	1,858	55		(6)	(43)		(226)	1,638			1,638
BU	3,090	5		(10)				3,085			3,085
Merit w OT								0			0
Summer								0			0
	4,948	60	0	(16)	(43)	0	(226)	4,723	0	0	4,723
<b>Distribution</b>											
Merit	3,017	24		(9)	(80)		(424)	2,528			2,528
BU	9,395	(16)		(30)				9,349			9,349
Merit w OT	4			(0)				4			4
Summer								0			0
	12,416	8	0	(39)	(80)	0	(424)	11,881	0	0	11,881
<b>Customer Accounts</b>											
Merit	1,413	(551)		(4)	(27)		(142)	688			688
BU	5,595	(13)		(18)				5,565			5,565
Merit w OT	353	(82)		(1)				270			270
Summer	549			(2)				547		(254)	293
	7,910	(646)	0	(25)	(27)	0	(142)	7,070	0	(254)	6,816
<b>Customer Service</b>											
Merit	2,990	(5)	(41)	(10)	(37)	(72)	(198)	2,627	72		2,699
BU	180		(3)	(1)				177			177
Merit w OT	218			(1)				218			218
Summer								0			0
	3,388	(5)	(44)	(11)	(37)	(72)	(198)	3,021	72	0	3,093
<b>A&amp;G</b>											
Merit	17,063	(14)		(53.43)	(218)	(199)	(1,160)	15,419	199		15,618
BU	2,388	(3)		(7.45)				2,378			2,378
Merit w OT	2,483	1		(7.97)				2,476			2,476
Summer	48			(0.14)				48			48
	21,983	(16)	0	(69)	(218)	(199)	(1,160)	20,321	199	0	20,520
<b>Total</b>											
Merit	35,607	(493)	(41)	(131)	(533)	(697)	(2,829)	30,883	697	0	31,580
BU	44,291	(30)	(3)	(196)	0	0	0	44,062	0	0	44,062
Merit w OT	3,562	(82)	0	(13)	0	0	0	3,467	0	0	3,467
Summer	624	0	0	(2)	0	0	0	622	0	(254)	368
	84,084	(605)	(44)	(342)	(533)	(697)	(2,829)	79,034	697	(254)	79,477
											100.00%
<u>Calculated Proportions</u>											
Non-BU portion Σa = 44.56%											

- (A) ATTACHMENT 3.5, PAGES 1-9
- (B) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 10 OF 31
- (C) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 10 OF 31
- (D) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 11 OF 31
- (E) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 12 OF 31
- (F) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 13 OF 31
- (G) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 13 OF 31
- (H) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 18 OF 31
- (I) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 15 OF 31
- (J) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 15 OF 31
- (K) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 18 OF 31

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR</u> <u>ADJUST</u>	<u>UPDATE W/O</u> <u>LABOR ADJ</u>
<b>D. Giovanni</b>								
<b>PRODUCTION O &amp; M EXPENSE</b>								
<b>PRODUCTION OPER</b>								
MERIT	5,381		29 (A)		5,410	427 (B)	5,837	5,837
BU	9,494				9,494		9,494	9,494
MERIT W OT	471				471		471	471
SUMMER	27				27		27	27
<b>TOTAL</b>	<b>15,373 (A)</b>	<b>29</b>	<b>0</b>	<b>15,402</b>	<b>427</b>	<b>15,829</b>	<b>15,829</b>	
<b>PRODUCTION MAINT</b>								
MERIT	3,429				3,429		3,429	3,429
BU	14,149				14,149		14,149	14,149
MERIT W OT	32				32		32	32
<b>TOTAL</b>	<b>17,610 (A)</b>	<b>0</b>	<b>0</b>	<b>17,610</b>	<b>0</b>	<b>17,610</b>	<b>17,610</b>	
<b>PRODUCTION - TOTAL</b>								
MERIT	8,810	28	0	8,839	427	9,266	9,266	
BU	23,643	0	0	23,643	0	23,643	23,643	
MERIT W OT	503			503		503	503	
SUMMER	27			27		27	27	
<b>TOTAL</b>	<b>32,983 (A)</b>	<b>29</b>	<b>0</b>	<b>33,012</b>	<b>427</b>	<b>33,439</b>	<b>33,439</b>	

(A) DOCKET NO. 2008-0083, HECO-701 PAGE 1

(B) DOCKET NO. 2008-0083, RATE CASE UPDATE, HECO T-7 ATTACHMENT 1 PAGE 1 (filed Dec. 12, 2008)

\*\* The breakdown of the labor amounts for BU, Merit, Merit with overtime and Summer was determined based on the labor class for the individual budgeted labor amounts for 2009 in Attachment 3.7, which is provided electronically and is consistent with the detailed budget data file provided on July 14, 2008 in Docket No. 2008-0083.

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR ADJUST</u>	<u>UPDATE W/O LABOR ADJ</u>
R. Young <b>TRANSMISSION O &amp; M EXPENSE</b>								
<b>TRANSMISSION OPER</b>								
MERIT	1,431			1,431	49 (A)	1,480		1,480
BU	1,471			1,471		1,471		1,471
<b>TOTAL</b>	<b>2,902 (C)</b>	<b>0</b>	<b>0</b>	<b>2,902</b>	<b>49</b>	<b>2,951</b>		<b>2,951</b>
<b>TRANSMISSION MAINT</b>								
MERIT	388			388	34 (A)	422		422
BU	1,695			1,695		1,695		1,695
<b>TOTAL</b>	<b>2,083 (C)</b>	<b>0</b>	<b>0</b>	<b>2,083</b>	<b>34</b>	<b>2,117</b>		<b>2,117</b>
<b>TRANSMISSION - TOTAL</b>								
MERIT	1,819	0	0	1,819	83	1,902	(44) (B)	1,858
BU	3,166	0	0	3,166	0	3,166	(76) (B)	3,090
<b>TOTAL</b>	<b>4,985</b>	<b>0</b>	<b>0</b>	<b>4,985</b>	<b>83</b>	<b>5,068</b>	<b>(120)</b>	<b>4,948</b>

(A) DOCKET NO. 2008-0083, RATE CASE UPDATE, HECO T-8 ATTACHMENT 2 PAGE 1 (filed Dec. 4, 2008)

(B) DOCKET NO. 2008-0083, RATE CASE UPDATE, HECO T-15 ATTACHMENT 6 PAGE 5 (filed Dec. 12, 2008)

(C) DOCKET NO. 2008-0083, HECO-809 PAGE 1

\*\* The breakdown of the labor amounts for BU, Merit, Merit with overtime and Summer was determined based on the labor class for the individual budgeted labor amounts for 2009 in Attachment 3.7, which is provided electronically and is consistent with the detailed budget data file provided on July 14, 2008 in Docket No. 2008-0083.

ATTACHMENT 3.5  
PAGE 3 OF 9

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR ADJUST</u>	<u>UPDATE W/O LABOR ADJ</u>
<b>D. Mizumura</b>								
<b>DISTRIBUTION O &amp; M EXPENSE</b>								
<b>DISTRIBUTION OPER</b>								
MERIT	2,091	0		2,091	151 (A)	2,242		2,242
BU	4,617			4,617		4,617		4,617
MERIT W OT	4			4		4		4
TOTAL	6,712 (C)	0	0	6,712	151	6,863		6,863
								6,863
<b>DISTRIBUTION MAINT</b>								
MERIT	750			750	94 (A)	844		844
BU	5,010			5,010		5,010		5,010
TOTAL	5,760 (C)	0	0	5,760	94	5,854		5,854
								5,854
<b>DISTRIBUTION - TOTAL</b>								
MERIT	2,841	0	0	2,841	245	3,086	(69) (B)	3,017
BU	9,627	0	0	9,627	0	9,627	(233) (B)	9,395
MERIT W OT	4			4	0	4	(0)	4
TOTAL	12,472	0	0	12,472	245	12,717	(302)	12,416

(A) DOCKET NO. 2008-0083, RATE CASE UPDATE, HECO T-8 ATTACHMENT2 PAGE 1 (filed Dec. 4, 2008)

(B) DOCKET NO. 2008-0083, RATE CASE UPDATE, HECO T-15 ATTACHMENT 6 PAGE 5 (filed Dec. 12, 2008)

(C) DOCKET NO. 2008-0083, HECO-809 PAGE 1

\*\* The breakdown of the labor amounts for BU, Merit, Merit with overtime and Summer was determined based on the labor class for the individual budgeted labor amounts for 2009 in Attachment 3.7, which is provided electronically and is consistent with the detailed budget data file provided on July 14, 2008 in Docket No. 2008-0083.

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR ADJUST</u>	<u>UPDATE W/O LABOR ADJ</u>
<b>D. Yamamoto</b>								
<b>CUSTOMER ACCTS EXPENSE</b>								
<b>901 SUPERVISION</b>								
MERIT	119			119		119		119
BU				0				
MERIT W OT	58			58		58		58
TOTAL 901	177 (B)	0	0	177	0	177		177
<b>902 METER READING EXPENSES</b>								
MERIT	130			130		130		130
BU	2,420			2,420		2,420		2,420
MERIT W OT	21			21		21		21
SUMMER	445			445		445		445
TOTAL 902	3,016 (B)	0	0	3,016	0	3,016		3,016
<b>903 CUSTOMER RECORDS &amp; COLLECT EXP</b>								
MERIT	1,198			1,198		1,198		1,198
BU	3,311			3,311		3,311		3,311
MERIT W OT	283			283		283		283
SUMMER	117			117		117		117
TOTAL 903	4,909 (B)	0	0	4,909	0	4,909		4,909
<b>SUBTOTAL</b>	<b>8,102 (B)</b>	<b>0</b>	<b>0</b>	<b>8,102</b>	<b>0</b>	<b>8,102</b>		<b>8,102</b>
<b>904 UNCOLLECTIBLE ACCOUNTS</b>								
NON-LABOR				0				
TOTAL 904	0	0	0	0	0	0		
<b>905 MISC CUSTOMER ACCOUNTS EXP</b>								
NON-LABOR	0			0				
TOTAL 905	0	0	0	0	0	0		
<b>TOTAL</b>	<b>8,102</b>	<b>0</b>	<b>0</b>	<b>8,102</b>	<b>0</b>	<b>8,102</b>		<b>8,102</b>
<b>CUSTOMER ACCOUNTS - TOTAL</b>								
MERIT	1,447			1,447		1,447	(34) (A)	1,413
BU	5,731			5,731		5,731	(136) (A)	5,595
MERIT W OT	362			362		362	(9) (A)	353
SUMMER	562			562		562	(13) (A)	549
TOTAL	8,102	0	0	8,102	0	8,102	(192)	7,910

(A) DOCKET NO. 2008-0083, RATE CASE UPDATE, HECO T-15 ATTACHMENT 6 PAGE 5 (filed Dec. 12, 2008)

(B) DOCKET NO. 2008-0083, HECO-901 PAGE 2

\*\* The breakdown of the labor amounts for BU, Merit, Merit with overtime and Summer was determined based on the labor class for the individual budgeted labor amounts for 2009 in Attachment 3.7, which is provided electronically and is consistent with the detailed budget data file provided on July 14, 2008 in Docket No. 2008-0083.

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR</u> <u>ADJUST</u>	<u>UPDATE W/O</u> <u>LABOR ADJ</u>
<b>A. Hee</b>								
<b>CUSTOMER SVC EXPENSE</b>								
<b>909 SUPERVISION</b>								
MERIT	337			337	72 (B)	409		409
BU	0			0				
MERIT W OT	56			56		56		56
<b>TOTAL 909</b>	<b>393 (D)</b>	<b>0</b>	<b>0</b>	<b>393</b>	<b>72</b>	<b>465</b>		<b>465</b>
<b>910 CUSTOMER ASSISTANCE EXP</b>								
MERIT	3,061	(434) (A)		2,627		2,627		2,627
BU	179			179		179		179
MERIT W OT	167							
<b>TOTAL 910</b>	<b>3,407 (D)</b>	<b>(434)</b>	<b>0</b>	<b>2,806</b>	<b>0</b>	<b>2,806</b>		<b>2,806</b>
								<b>2,973</b>
<b>911 INFORMATIONAL ADVERTISING EXP</b>								
MERIT	27			27		27		27
BU	5			5		5		5
<b>TOTAL 911</b>	<b>32 (D)</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>0</b>	<b>32</b>		<b>32</b>
<b>912 MISC CUSTOMER SERVICE EXPENSES</b>								
MERIT	0			0		0		0
BU	0			0		0		0
<b>TOTAL 911</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
<b>CUSTOMER SERVICE - TOTAL</b>								
MERIT	3,425	(434)	0	2,991	72	3,063	(73) (C)	2,990
BU	184	0	0	184	0	184	(4) (C)	180
MERIT W OT	223			223		223	(5) (C)	218
<b>TOTAL</b>	<b>3,832 (D)</b>	<b>(434)</b>	<b>0</b>	<b>3,398</b>	<b>72</b>	<b>3,470</b>	<b>(82)</b>	<b>3,388</b>

(A) DOCKET NO. 2008-0083 HECO-1006 PAGE 1

(B) DOCKET NO. 2008-0083 RATE CASE UPDATE HECO T-10 PAGE 15 (Dec. 5, 2008)

(C) DOCKET NO. 2008-0083, RATE CASE UPDATE, HECO T-15 Attachment 6 PAGE 5 (Dec. 12, 2008)

(D) DOCKET NO. 2008-0083, HECO-1005 PAGE 1

\*\* The breakdown of the labor amounts for BU, Merit, Merit with overtime and Summer was determined based on the labor class for the individual budgeted labor amounts for 2009 in Attachment 3.7, which is provided electronically and is consistent with the detailed budget data file provided on July 14, 2008 in Docket No. 2008-0083.

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR</u>	<u>UPDATE W/O</u>
							<u>ADJUST</u>	<u>LABOR ADJ</u>
P. Nanbu								
<b>ADMIN &amp; GENL O &amp; M EXPENSE</b>								
<b>ADMINISTRATIVE</b>								
<b>920 ADMIN &amp; GENL EXP - LABR</b>								
MERIT	15,075		7 (A)		15,082	(2) (B)	15,080	15,080
BU	1,984				1,984		1,984	1,984
MERIT W OT	2,302				2,302	(56) (B)	2,246	2,246
SUMMER	49				49		49	49
TOTAL 920	19,410 (C)	7	0	19,417	(58)	19,359		19,359
<b>921 ADMIN &amp; GENL EXP - NLABR</b>					0			
NON-LABOR					0			
TOTAL 921	0	0	0	0	0	0		
<b>922 ADMIN EXPENSES TRANSFERRED</b>					0		0	
NON-LABOR					0		0	
TOTAL 922	0	0	0	0	0	0		
<b>TOTAL ADMINISTRATIVE</b>	<b>19,410</b>	<b>7</b>	<b>0</b>	<b>19,417</b>	<b>(58)</b>	<b>19,359</b>		<b>19,359</b>
<b>OUTSIDE SERVICES</b>								
<b>923010 OUTSIDE SERVICES - LEGAL</b>					0			
NON-LABOR					0			
TOTAL 923020	0	0	0	0	0	0		0
<b>923020 OUTSIDE SERVICES - OTHER</b>					0			
NON-LABOR					0			
TOTAL 923020	0	0	0	0	0	0		0
<b>923030 OUTSIDE SERVICES - ASSOC CO</b>					0			
NON-LABOR	0				0			
TOTAL 923030	0	0	0	0	0	0		0
<b>TOTAL OS SVCS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		<b>0</b>
<b>TOTAL 920-923 EXPENSE</b>	<b>19,410</b>	<b>7</b>	<b>0</b>	<b>19,417</b>	<b>(58)</b>	<b>19,359</b>		<b>19,359</b>

(A) DOCKET NO. 2008-0083, HECO-WP-1102 PAGE 1

(B) DOCKET NO. 2008-0083, RATE CASE UPDATE HECO T-11 ATTACHMENT 3 PAGE1 (filed Dec. 9, 2008)

(C) DOCKET NO. 2008-0083, HECO-1101 PAGE 1

\*\* The breakdown of the labor amounts for BU, Merit, Merit with overtime and Summer was determined based on the labor class for the individual budgeted labor amounts for 2009 in Attachment 3.7, which is provided electronically and is consistent with the detailed budget data file provided on July 14, 2008 in Docket No. 2008-0083.

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR</u> <u>ADJUST</u>	<u>UPDATE W/O</u> <u>LABOR ADJ</u>
R. Harris <b>INSURANCE EXPENSE</b>								
<b>INSURANCE</b>								
<b>924 PROPERTY INSURANCE</b>								
MERIT	121			121		121		121
BU	77			77		77		77
MERIT W OT	18			18		18		18
<b>TOTAL 924</b>	<b>216</b>	(A)	0	<b>216</b>	0	<b>216</b>		<b>216</b>
<b>925 INJURIES &amp; DAMAGES</b>								
MERIT	1,089			1,089		1,089		1,089
BU	305			305		305		305
MERIT W OT	56			56		56		56
<b>TOTAL 925</b>	<b>1,450</b>	(A)	0	<b>1,450</b>	0	<b>1,450</b>		<b>1,450</b>
<b>TOTAL INSURANCE</b>	<b>1,666</b>		0	<b>1,666</b>	0	<b>1,666</b>		<b>1,666</b>

(A) DOCKET NO. 2008-0083, HECO-1201 PAGE 1

\*\* The breakdown of the labor amounts for BU, Merit, Merit with overtime and Summer was determined based on the labor class for the individual budgeted labor amounts for 2009 in Attachment 3.7, which is provided electronically and is consistent with the detailed budget data file provided on July 14, 2008 in Docket No. 2008-0083.

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR ADJUST</u>	<u>UPDATE W/O LABOR ADJ</u>
J. Price								
<b>EMPLOYEE BENEFITS EXPENSE</b>								
EMPLOYEE BENEFITS								
926000 EMPL PENSIONS AND BENEFITS								
MERIT	672			672		672		672
BU				0				
MERIT W OT	169			169		169		169
TOTAL 926000	841 (B)	0	0	841	0	841		841
926010 EMPL BENEFITS - FLEX CREDITS								
MERIT	146			146	(26) (A)	120		120
BU	1			1		1		1
MERIT W OT	64			64	(10) (A)	54		54
TOTAL 926010	211 (B)	0	0	211	(36)	175		175
926020 EMPL BENEFITS TRANSFER				0				
NON-LABOR				0				
TOTAL 926020	0	0	0	0	0	0		
<b>TOTAL EMP BEN</b>	<b>1,052</b>	<b>0</b>	<b>0</b>	<b>1,052</b>	<b>(36)</b>	<b>1,016</b>		<b>1,016</b>

(A) DOCKET NO. 2008-0083 RATE CASE UPDATE HECO T-13 ATTACHMENT 1 PAGE 1 (filed Dec. 5, 2008)

(B) DOCKET NO. 2008-0083, HECO-1301 PAGE 1

\*\* The breakdown of the labor amounts for BU, Merit, Merit with overtime and Summer was determined based on the labor class for the individual budgeted labor amounts for 2009 in Attachment 3.7, which is provided electronically and is consistent with the detailed budget data file provided on July 14, 2008 in Docket No. 2008-0083.

HAWAIIAN ELECTRIC COMPANY, INC.  
BU vs Merit O&M Labor Expenses  
2009 Test Year

	<u>BUDGET**</u>	<u>BUD ADJ</u>	<u>NORM</u>	<u>DIRECT</u>	<u>ADJUST</u>	<u>UPDATE</u>	<u>LABOR ADJUST</u>	<u>UPDATE W/O LABOR ADJ</u>
<b>B. Tamashiro</b>								
<b>OTHER ADMINISTRATIVE &amp; GENERAL EXPENSE</b>								
OTHER ADMIN & GENL								
928 REGULATORY COMMISSION EXPENSES								
NON-LABOR					0			
TOTAL 928	0	0	0	0	0	0		
9301 INSTITUTN/GOODWILL ADVERT EXP								
MERIT	1				1		1	1
BU	13				13		13	13
TOTAL 9301	14 (E)	0	0	14	0	14		14
9302 MISCELLANEOUS GENERAL EXPENSES								
MERIT	298	(96) (A)			202		202	202
BU	11				11		11	11
MERIT W OT	7	(5) (A)			2		2	2
TOTAL 9302	316 (E)	(101)	0	215	0	215		215
931 RENTS EXPENSE								
NON-LABOR					0			
TOTAL 932	0	0	0	0	0	0		
932 ADMIN AND GENL MAINTENANCE								
MERIT	140	52 (A)			192		192	192
BU	55				55		55	55
TOTAL 932	195 (E)	52	0	247	0	247		247
TOTAL OTHER A&G	525	(49)	0	476	0	476		476
TOTAL A&G	22,653	(42)	0	22,611	(94)	22,517		22,517
ADMIN & GENL - TOTAL								
MERIT	17,542	(37)	0	17,505	(28)	17,477	(414) (B)	17,063
BU	2,446	0	0	2,446	0	2,446	(58) (B)	2,388
MERIT W OT	2,616	(5)		2,611	(66)	2,545	(62) (B)	2,483
SUMMER	49	0		49	0	49	(1) (B)	48
TOTAL	22,653	(42)	0	22,611	(94)	22,517	(534)	21,983
OTHER O&M - TOTAL								
MERIT	35,884	(442)	0	35,442	799	36,241	(521)	35,607
BU	44,797	0	0	44,797	0	44,797	(507)	44,291
MERIT W OT	3,708	(5)		3,703	(66)	3,637	(75)	3,562
SUMMER	638	0		638	0	638	(14)	624
TOTAL	85,027 (C)	(447)	0	84,580	733	85,313	(1,117)	84,084 (D)

(A) DOCKET NO. 2008-0083, HECO-1401 PAGE 1

(B) DOCKET NO. 2008-0083, RATE CASE UPDATE HECO T-15 ATTACHMENT 6 PAGE 5 (filed Dec. 12, 2008)

(C) DOCKET NO. 2008-0083, HECO-WP-101(A), p. 7

(D) DOCKET NO. 2008-0083, January 24, 2011 filing, EXHIBIT 1C, PAGE 18

(E) DOCKET NO. 2008-0083, HECO-1401 PAGE 1

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Hawaiian Electric Company, Inc.

**Non-Labor Exclusion**

**Adjustment for O&M RAM**

(\$ thousands)

Pension Expense	31,873	See HECO-S-1301, page 1 Docket No. 2008-0083
OPEB Expense	6,805	See HECO-S-1301, page 1 Docket No. 2008-0083
Total before amounts transfer	38,678	
O&M %	71.41%	See Exhibit 1, page 53 Settlement Agreement, filed May 15, 2009 in Dkt No. 2008-0083
Nominal Amount	<u>27,620</u>	

See Reconciliation of Total A&G Expenses and Benefits Expenses.

Hawaiian Electric Company  
Reconciliation of Total A&G Expenses and Benefits Expenses  
In Second Interim D&O

Total A&G expenses in settlement	88,948	See HECO-S-1101, HECO-SWP-1101 Amount includes benefits expenses of \$36,817( which included Pension expense of \$31,873 and OPEB expense of \$6,805) as shown in HECO-S-1301 Docket No. 2008-0083
Less adjustments to A&G expenses for Interim D&O	(1,800)	See Attachment A, page 1 to July 9, 2009 filing, column H Docket No. 2008-0083
<hr/>	<hr/>	<hr/>
Total A&G Expense in first interim D&O	87,148	
Plus adjustment for CT-1 labor for second interim	138	See Attachment A, page 1, to July 9, 2009 filing, column E Docket No. 2008-0083
<hr/>	<hr/>	<hr/>
Total A&G Expense in second interim D&O	87,286	
Less adjustments to A&G expense in final D&O	(909)	See Attachment J, page 9, to January 20, 2011 filing, column I Docket No. 2008-0083
<hr/>	<hr/>	<hr/>
	<u>86,377</u>	

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**ATTACHMENT 3.7**

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## **ATTACHMENT 3.7**

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Project ID	Project Name	Project Type	Project Status		Project Details		Project Resources		Project Locations		Project Timeline	
			Active	In Progress	Start Date	End Date	Lead	Team	Location	Lead	Team	Location
P0001147	Project Alpha	Software Development	Active	In Progress	2023-01-01	2023-06-30	John Doe	Team A	New York	John Doe	Team B	2023-01-01
P0001148	Project Beta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Jane Smith	Team C	New York	Jane Smith	Team D	2023-01-01
P0001149	Project Gamma	Software Development	Active	In Progress	2023-01-01	2023-06-30	Mike Johnson	Team E	New York	Mike Johnson	Team F	2023-01-01
P0001150	Project Delta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Sarah Lee	Team G	New York	Sarah Lee	Team H	2023-01-01
P0001151	Project Epsilon	Software Development	Active	In Progress	2023-01-01	2023-06-30	David White	Team I	New York	David White	Team J	2023-01-01
P0001152	Project Zeta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Emily Blue	Team K	New York	Emily Blue	Team L	2023-01-01
P0001153	Project Mu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Frank Red	Team M	New York	Frank Red	Team N	2023-01-01
P0001154	Project Nu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Grace Green	Team O	New York	Grace Green	Team P	2023-01-01
P0001155	Project Xi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Hannah Purple	Team Q	New York	Hannah Purple	Team R	2023-01-01
P0001156	Project Phi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Ivan Orange	Team S	New York	Ivan Orange	Team T	2023-01-01
P0001157	Project Chi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Jessica Yellow	Team U	New York	Jessica Yellow	Team V	2023-01-01
P0001158	Project Psi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Karen Teal	Team W	New York	Karen Teal	Team X	2023-01-01
P0001159	Project Omega	Software Development	Active	In Progress	2023-01-01	2023-06-30	Liam Brown	Team Y	New York	Liam Brown	Team Z	2023-01-01
P0001160	Project Eta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Mia Grey	Team A	New York	Mia Grey	Team B	2023-01-01
P0001161	Project Theta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Nick Black	Team C	New York	Nick Black	Team D	2023-01-01
P0001162	Project Iota	Software Development	Active	In Progress	2023-01-01	2023-06-30	Olivia White	Team E	New York	Olivia White	Team F	2023-01-01
P0001163	Project Kappa	Software Development	Active	In Progress	2023-01-01	2023-06-30	Peter Green	Team G	New York	Peter Green	Team H	2023-01-01
P0001164	Project Lambda	Software Development	Active	In Progress	2023-01-01	2023-06-30	Quinn Blue	Team I	New York	Quinn Blue	Team J	2023-01-01
P0001165	Project Mu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Riley Red	Team K	New York	Riley Red	Team L	2023-01-01
P0001166	Project Nu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Sammy Yellow	Team M	New York	Sammy Yellow	Team N	2023-01-01
P0001167	Project Xi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Taylor Purple	Team O	New York	Taylor Purple	Team P	2023-01-01
P0001168	Project Phi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Ulysses Brown	Team Q	New York	Ulysses Brown	Team R	2023-01-01
P0001169	Project Chi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Vivian Grey	Team S	New York	Vivian Grey	Team T	2023-01-01
P0001170	Project Psi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Wade Black	Team U	New York	Wade Black	Team V	2023-01-01
P0001171	Project Omega	Software Development	Active	In Progress	2023-01-01	2023-06-30	Xavier White	Team W	New York	Xavier White	Team X	2023-01-01
P0001172	Project Eta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Yara Green	Team Y	New York	Yara Green	Team Z	2023-01-01
P0001173	Project Theta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Zane Blue	Team A	New York	Zane Blue	Team B	2023-01-01
P0001174	Project Iota	Software Development	Active	In Progress	2023-01-01	2023-06-30	Alfredo Red	Team C	New York	Alfredo Red	Team D	2023-01-01
P0001175	Project Kappa	Software Development	Active	In Progress	2023-01-01	2023-06-30	Bogart Green	Team E	New York	Bogart Green	Team F	2023-01-01
P0001176	Project Lambda	Software Development	Active	In Progress	2023-01-01	2023-06-30	Craig Brown	Team G	New York	Craig Brown	Team H	2023-01-01
P0001177	Project Mu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Dante Grey	Team I	New York	Dante Grey	Team J	2023-01-01
P0001178	Project Nu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Eduardo Yellow	Team K	New York	Eduardo Yellow	Team L	2023-01-01
P0001179	Project Xi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Felicity Purple	Team M	New York	Felicity Purple	Team N	2023-01-01
P0001180	Project Phi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Garrison Brown	Team O	New York	Garrison Brown	Team P	2023-01-01
P0001181	Project Chi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Hector Green	Team Q	New York	Hector Green	Team R	2023-01-01
P0001182	Project Psi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Ivan Brown	Team S	New York	Ivan Brown	Team T	2023-01-01
P0001183	Project Omega	Software Development	Active	In Progress	2023-01-01	2023-06-30	Jessie Yellow	Team U	New York	Jessie Yellow	Team V	2023-01-01
P0001184	Project Eta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Karen Purple	Team W	New York	Karen Purple	Team X	2023-01-01
P0001185	Project Theta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Liam Grey	Team Y	New York	Liam Grey	Team Z	2023-01-01
P0001186	Project Iota	Software Development	Active	In Progress	2023-01-01	2023-06-30	Olivia Red	Team A	New York	Olivia Red	Team B	2023-01-01
P0001187	Project Kappa	Software Development	Active	In Progress	2023-01-01	2023-06-30	Peter Green	Team C	New York	Peter Green	Team D	2023-01-01
P0001188	Project Lambda	Software Development	Active	In Progress	2023-01-01	2023-06-30	Quinn Blue	Team E	New York	Quinn Blue	Team F	2023-01-01
P0001189	Project Mu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Riley Yellow	Team G	New York	Riley Yellow	Team H	2023-01-01
P0001190	Project Nu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Sammy Purple	Team I	New York	Sammy Purple	Team J	2023-01-01
P0001191	Project Xi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Taylor Red	Team K	New York	Taylor Red	Team L	2023-01-01
P0001192	Project Phi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Ulysses Green	Team M	New York	Ulysses Green	Team N	2023-01-01
P0001193	Project Chi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Vivian Blue	Team O	New York	Vivian Blue	Team P	2023-01-01
P0001194	Project Psi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Wade Yellow	Team Q	New York	Wade Yellow	Team R	2023-01-01
P0001195	Project Omega	Software Development	Active	In Progress	2023-01-01	2023-06-30	Xavier Purple	Team S	New York	Xavier Purple	Team T	2023-01-01
P0001196	Project Eta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Yara Red	Team U	New York	Yara Red	Team V	2023-01-01
P0001197	Project Theta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Zane Green	Team W	New York	Zane Green	Team X	2023-01-01
P0001198	Project Iota	Software Development	Active	In Progress	2023-01-01	2023-06-30	Alfredo Blue	Team Y	New York	Alfredo Blue	Team Z	2023-01-01
P0001199	Project Kappa	Software Development	Active	In Progress	2023-01-01	2023-06-30	Bogart Yellow	Team A	New York	Bogart Yellow	Team B	2023-01-01
P0001200	Project Lambda	Software Development	Active	In Progress	2023-01-01	2023-06-30	Craig Purple	Team C	New York	Craig Purple	Team D	2023-01-01
P0001201	Project Mu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Dante Red	Team E	New York	Dante Red	Team F	2023-01-01
P0001202	Project Nu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Eduardo Green	Team G	New York	Eduardo Green	Team H	2023-01-01
P0001203	Project Xi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Felicity Blue	Team I	New York	Felicity Blue	Team J	2023-01-01
P0001204	Project Phi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Garrison Yellow	Team K	New York	Garrison Yellow	Team L	2023-01-01
P0001205	Project Chi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Hector Purple	Team M	New York	Hector Purple	Team N	2023-01-01
P0001206	Project Psi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Ivan Red	Team O	New York	Ivan Red	Team P	2023-01-01
P0001207	Project Omega	Software Development	Active	In Progress	2023-01-01	2023-06-30	Jessie Green	Team Q	New York	Jessie Green	Team R	2023-01-01
P0001208	Project Eta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Karen Blue	Team S	New York	Karen Blue	Team T	2023-01-01
P0001209	Project Theta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Liam Yellow	Team U	New York	Liam Yellow	Team V	2023-01-01
P0001210	Project Iota	Software Development	Active	In Progress	2023-01-01	2023-06-30	Olivia Purple	Team W	New York	Olivia Purple	Team X	2023-01-01
P0001211	Project Kappa	Software Development	Active	In Progress	2023-01-01	2023-06-30	Peter Red	Team Y	New York	Peter Red	Team Z	2023-01-01
P0001212	Project Lambda	Software Development	Active	In Progress	2023-01-01	2023-06-30	Quinn Green	Team A	New York	Quinn Green	Team B	2023-01-01
P0001213	Project Mu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Riley Blue	Team C	New York	Riley Blue	Team D	2023-01-01
P0001214	Project Nu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Sammy Red	Team E	New York	Sammy Red	Team F	2023-01-01
P0001215	Project Xi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Taylor Green	Team G	New York	Taylor Green	Team H	2023-01-01
P0001216	Project Phi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Ulysses Purple	Team I	New York	Ulysses Purple	Team J	2023-01-01
P0001217	Project Chi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Vivian Red	Team K	New York	Vivian Red	Team L	2023-01-01
P0001218	Project Psi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Wade Yellow	Team M	New York	Wade Yellow	Team N	2023-01-01
P0001219	Project Omega	Software Development	Active	In Progress	2023-01-01	2023-06-30	Xavier Purple	Team O	New York	Xavier Purple	Team P	2023-01-01
P0001220	Project Eta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Yara Red	Team Q	New York	Yara Red	Team R	2023-01-01
P0001221	Project Theta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Zane Green	Team S	New York	Zane Green	Team T	2023-01-01
P0001222	Project Iota	Software Development	Active	In Progress	2023-01-01	2023-06-30	Alfredo Blue	Team U	New York	Alfredo Blue	Team V	2023-01-01
P0001223	Project Kappa	Software Development	Active	In Progress	2023-01-01	2023-06-30	Bogart Yellow	Team W	New York	Bogart Yellow	Team X	2023-01-01
P0001224	Project Lambda	Software Development	Active	In Progress	2023-01-01	2023-06-30	Craig Purple	Team Y	New York	Craig Purple	Team Z	2023-01-01
P0001225	Project Mu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Dante Red	Team A	New York	Dante Red	Team B	2023-01-01
P0001226	Project Nu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Eduardo Green	Team C	New York	Eduardo Green	Team D	2023-01-01
P0001227	Project Xi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Felicity Blue	Team E	New York	Felicity Blue	Team F	2023-01-01
P0001228	Project Phi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Garrison Yellow	Team G	New York	Garrison Yellow	Team H	2023-01-01
P0001229	Project Chi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Hector Purple	Team I	New York	Hector Purple	Team J	2023-01-01
P0001230	Project Psi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Ivan Red	Team K	New York	Ivan Red	Team L	2023-01-01
P0001231	Project Omega	Software Development	Active	In Progress	2023-01-01	2023-06-30	Jessie Green	Team M	New York	Jessie Green	Team N	2023-01-01
P0001232	Project Eta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Karen Blue	Team O	New York	Karen Blue	Team P	2023-01-01
P0001233	Project Theta	Software Development	Active	In Progress	2023-01-01	2023-06-30	Liam Yellow	Team Q	New York	Liam Yellow	Team R	2023-01-01
P0001234	Project Iota	Software Development	Active	In Progress	2023-01-01	2023-06-30	Olivia Purple	Team S	New York	Olivia Purple	Team T	2023-01-01
P0001235	Project Kappa	Software Development	Active	In Progress	2023-01-01	2023-06-30	Peter Red	Team U	New York	Peter Red	Team V	2023-01-01
P0001236	Project Lambda	Software Development	Active	In Progress	2023-01-01	2023-06-30	Quinn Green	Team W	New York	Quinn Green	Team X	2023-01-01
P0001237	Project Mu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Riley Blue	Team Y	New York	Riley Blue	Team Z	2023-01-01
P0001238	Project Nu	Software Development	Active	In Progress	2023-01-01	2023-06-30	Sammy Red	Team A	New York	Sammy Red	Team B	2023-01-01
P0001239	Project Xi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Taylor Green	Team C	New York	Taylor Green	Team D	2023-01-01
P0001240	Project Phi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Ulysses Purple	Team E	New York	Ulysses Purple	Team F	2023-01-01
P0001241	Project Chi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Vivian Red	Team G	New York	Vivian Red	Team H	2023-01-01
P0001242	Project Psi	Software Development	Active	In Progress	2023-01-01	2023-06-30	Wade Yellow	Team I	New York	Wade Yellow		



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Category	Sub-Category	Type	Key Metrics		Performance Indicators		Risk & Compliance		Operational Efficiency		Financial Health		Strategic Focus			
			Current	Target	Actual	Forecast	Impact	Severity	Efficiency Score	Completion %	Cost Var.	Margin %	Revenue	Profit	Market Share	Future Outlook
Product A	Manufacturing	Process	95.8	96.0	95.7	95.9	Medium	Low	88.5	90%	+5%	15%	\$12M	\$1.2M	10%	Stable
Product A	Manufacturing	Quality Control	92.0	92.5	91.8	92.1	High	Medium	85.2	85%	-2%	10%	\$10M	\$1M	9%	Growth
Product B	Manufacturing	Process	92.0	92.5	91.5	92.0	Medium	Low	87.8	90%	+3%	12%	\$13M	\$1.3M	11%	Stable
Product B	Manufacturing	Quality Control	91.5	92.0	91.0	91.8	High	Medium	86.5	85%	-1%	10%	\$11M	\$1.1M	10%	Growth
Product C	Manufacturing	Process	91.0	91.5	90.5	91.2	Medium	Low	85.0	88%	+4%	10%	\$14M	\$1.4M	12%	Stable
Product C	Manufacturing	Quality Control	90.5	91.0	90.0	90.8	High	Medium	84.5	86%	-3%	10%	\$12M	\$1.2M	11%	Growth
Product D	Manufacturing	Process	90.0	90.5	89.5	90.2	Medium	Low	84.0	87%	+2%	10%	\$15M	\$1.5M	13%	Stable
Product D	Manufacturing	Quality Control	89.5	90.0	89.0	89.8	High	Medium	83.5	85%	-1%	10%	\$13M	\$1.3M	12%	Growth
Product E	Manufacturing	Process	89.0	89.5	88.5	89.2	Medium	Low	83.0	86%	+1%	10%	\$16M	\$1.6M	14%	Stable
Product E	Manufacturing	Quality Control	88.5	89.0	88.0	88.8	High	Medium	82.5	84%	-2%	10%	\$14M	\$1.4M	13%	Growth
Product F	Manufacturing	Process	88.0	88.5	87.5	88.2	Medium	Low	82.0	85%	+3%	10%	\$17M	\$1.7M	15%	Stable
Product F	Manufacturing	Quality Control	87.5	88.0	87.0	87.8	High	Medium	81.5	83%	-1%	10%	\$15M	\$1.5M	14%	Growth
Product G	Manufacturing	Process	87.0	87.5	86.5	87.2	Medium	Low	81.0	84%	+2%	10%	\$18M	\$1.8M	16%	Stable
Product G	Manufacturing	Quality Control	86.5	87.0	86.0	86.8	High	Medium	80.5	82%	-3%	10%	\$16M	\$1.6M	15%	Growth
Product H	Manufacturing	Process	86.0	86.5	85.5	86.2	Medium	Low	80.0	83%	+1%	10%	\$19M	\$1.9M	17%	Stable
Product H	Manufacturing	Quality Control	85.5	86.0	85.0	85.8	High	Medium	79.5	81%	-2%	10%	\$17M	\$1.7M	16%	Growth
Product I	Manufacturing	Process	85.0	85.5	84.5	85.2	Medium	Low	79.0	82%	+3%	10%	\$20M	\$2M	18%	Stable
Product I	Manufacturing	Quality Control	84.5	85.0	84.0	84.8	High	Medium	78.5	80%	-1%	10%	\$18M	\$1.8M	17%	Growth
Product J	Manufacturing	Process	84.0	84.5	83.5	84.2	Medium	Low	78.0	81%	+2%	10%	\$21M	\$2.1M	19%	Stable
Product J	Manufacturing	Quality Control	83.5	84.0	83.0	83.8	High	Medium	77.5	79%	-3%	10%	\$19M	\$1.9M	18%	Growth
Product K	Manufacturing	Process	83.0	83.5	82.5	83.2	Medium	Low	77.0	80%	+1%	10%	\$22M	\$2.2M	20%	Stable
Product K	Manufacturing	Quality Control	82.5	83.0	82.0	82.8	High	Medium	76.5	78%	-2%	10%	\$20M	\$2M	19%	Growth
Product L	Manufacturing	Process	82.0	82.5	81.5	82.2	Medium	Low	76.0	79%	+3%	10%	\$23M	\$2.3M	21%	Stable
Product L	Manufacturing	Quality Control	81.5	82.0	81.0	81.8	High	Medium	75.5	77%	-1%	10%	\$21M	\$2.1M	20%	Growth
Product M	Manufacturing	Process	81.0	81.5	80.5	81.2	Medium	Low	75.0	78%	+2%	10%	\$24M	\$2.4M	22%	Stable
Product M	Manufacturing	Quality Control	80.5	81.0	80.0	80.8	High	Medium	74.5	76%	-3%	10%	\$22M	\$2.2M	21%	Growth
Product N	Manufacturing	Process	80.0	80.5	79.5	80.2	Medium	Low	74.0	77%	+1%	10%	\$25M	\$2.5M	23%	Stable
Product N	Manufacturing	Quality Control	79.5	80.0	79.0	79.8	High	Medium	73.5	75%	-2%	10%	\$23M	\$2.3M	22%	Growth
Product O	Manufacturing	Process	79.0	79.5	78.5	79.2	Medium	Low	73.0	76%	+3%	10%	\$26M	\$2.6M	24%	Stable
Product O	Manufacturing	Quality Control	78.5	79.0	78.0	78.8	High	Medium	72.5	74%	-1%	10%	\$24M	\$2.4M	23%	Growth
Product P	Manufacturing	Process	78.0	78.5	77.5	78.2	Medium	Low	72.0	75%	+2%	10%	\$27M	\$2.7M	25%	Stable
Product P	Manufacturing	Quality Control	77.5	78.0	77.0	77.8	High	Medium	71.5	73%	-3%	10%	\$25M	\$2.5M	24%	Growth
Product Q	Manufacturing	Process	77.0	77.5	76.5	77.2	Medium	Low	71.0	74%	+1%	10%	\$28M	\$2.8M	26%	Stable
Product Q	Manufacturing	Quality Control	76.5	77.0	76.0	76.8	High	Medium	70.5	72%	-2%	10%	\$26M	\$2.6M	25%	Growth
Product R	Manufacturing	Process	76.0	76.5	75.5	76.2	Medium	Low	70.0	73%	+3%	10%	\$29M	\$2.9M	27%	Stable
Product R	Manufacturing	Quality Control	75.5	76.0	75.0	75.8	High	Medium	69.5	71%	-1%	10%	\$27M	\$2.7M	26%	Growth
Product S	Manufacturing	Process	75.0	75.5	74.5	75.2	Medium	Low	69.0	72%	+2%	10%	\$30M	\$3M	28%	Stable
Product S	Manufacturing	Quality Control	74.5	75.0	74.0	74.8	High	Medium	68.5	70%	-3%	10%	\$28M	\$2.8M	27%	Growth
Product T	Manufacturing	Process	74.0	74.5	73.5	74.2	Medium	Low	68.0	71%	+1%	10%	\$31M	\$3.1M	29%	Stable
Product T	Manufacturing	Quality Control	73.5	74.0	73.0	73.8	High	Medium	67.5	69%	-2%	10%	\$29M	\$2.9M	28%	Growth
Product U	Manufacturing	Process	73.0	73.5	72.5	73.2	Medium	Low	67.0	70%	+3%	10%	\$32M	\$3.2M	30%	Stable
Product U	Manufacturing	Quality Control	72.5	73.0	72.0	72.8	High	Medium	66.5	68%	-1%	10%	\$30M	\$3M	29%	Growth
Product V	Manufacturing	Process	72.0	72.5	71.5	72.2	Medium	Low	66.0	69%	+2%	10%	\$33M	\$3.3M	31%	Stable
Product V	Manufacturing	Quality Control	71.5	72.0	71.0	71.8	High	Medium	65.5	67%	-3%	10%	\$31M	\$3.1M	30%	Growth
Product W	Manufacturing	Process	71.0	71.5	70.5	71.2	Medium	Low	65.0	68%	+1%	10%	\$34M	\$3.4M	32%	Stable
Product W	Manufacturing	Quality Control	70.5	71.0	70.0	70.8	High	Medium	64.5	66%	-2%	10%	\$32M	\$3.2M	31%	Growth
Product X	Manufacturing	Process	70.0	70.5	69.5	70.2	Medium	Low	64.0	67%	+3%	10%	\$35M	\$3.5M	33%	Stable
Product X	Manufacturing	Quality Control	69.5	70.0	69.0	69.8	High	Medium	63.5	65%	-1%	10%	\$33M	\$3.3M	32%	Growth
Product Y	Manufacturing	Process	69.0	69.5	68.5	69.2	Medium	Low	63.0	66%	+2%	10%	\$36M	\$3.6M	34%	Stable
Product Y	Manufacturing	Quality Control	68.5	69.0	68.0	68.8	High	Medium	62.5	64%	-3%	10%	\$34M	\$3.4M	33%	Growth
Product Z	Manufacturing	Process	68.0	68.5	67.5	68.2	Medium	Low	62.0	65%	+1%	10%	\$37M	\$3.7M	35%	Stable
Product Z	Manufacturing	Quality Control	67.5	68.0	67.0	67.8	High	Medium	61.5	63%	-2%	10%	\$35M	\$3.5M	34%	Growth
Product A	Sales & Distribution	Channel Management	95.0	95.5	94.5	95.0	Medium	Low	90.0	92%	+5%	15%	\$12M	\$1.2M	10%	Stable
Product A	Sales & Distribution	Customer Acquisition	92.0	92.5	91.5	92.0	Medium	Low	87.0	89%	+3%	10%	\$10M	\$1M	9%	Growth
Product B	Sales & Distribution	Channel Management	91.0	91.5	90.5	91.0	Medium	Low	86.0	88%	+4%	12%	\$13M	\$1.3M	11%	Stable
Product B	Sales & Distribution	Customer Acquisition	89.0	90.0	88.5	89.5	Medium	Low	84.0	86%	+2%	10%	\$11M	\$1.1M	10%	Growth
Product C	Sales & Distribution	Channel Management	88.0	88.5	87.5	88.0	Medium	Low	83.0	85%	+3%	10%	\$14M	\$1.4M	12%	Stable
Product C	Sales & Distribution	Customer Acquisition	86.0	87.0	85.5	86.5	Medium	Low	81.0	84%	+1%	10%	\$12M	\$1.2M	11%	Growth
Product D	Sales & Distribution	Channel Management	85.0	85.5	84.5	85.0	Medium	Low	80.0	83%	+2%	10%	\$15M	\$1.5M	13%	Stable
Product D	Sales & Distribution	Customer Acquisition	83.0	84.0	82.5	83.5	Medium	Low	78.0	81%	+3%	10%	\$13M	\$1.3M	12%	Growth
Product E	Sales & Distribution	Channel Management	82.0	82.5	81.5	82.0	Medium	Low	77.0	80%	+1%	10%	\$16M	\$1.6M	14%	Stable
Product E	Sales & Distribution	Customer Acquisition	80.0	81.0	79.5	80.5	Medium	Low	76.0	79%	+2%	10%	\$14M	\$1.4M	13%	Growth
Product F	Sales & Distribution	Channel Management	79.0	80.0	78.5	79.5	Medium	Low	75.0	78%	+3%	10%	\$17M	\$1.7M	15%	Stable
Product F	Sales & Distribution	Customer Acquisition	77.0	78.0	76.5	77.5	Medium	Low	72.0	77%	+1%	10%	\$15M	\$1.5M	14%	Growth
Product G	Sales & Distribution	Channel Management	76.0	77.0	75.5	76.5	Medium	Low	71.0	76%	+2%	10%	\$18M	\$1.8M	16%	Stable
Product G	Sales & Distribution	Customer Acquisition	74.0	75.0	73.5	74.5	Medium	Low	69.0	75%	+3%	10%	\$16M	\$1.6M	15%	Growth
Product H	Sales & Distribution	Channel Management	73.0	74.0	72.5	73.5	Medium	Low	68.0	74%	+1%	10%	\$19M	\$1.9M	17%	Stable
Product H	Sales & Distribution	Customer Acquisition	71.0	72.0	70.5	71.5	Medium	Low	67.0	73%	+2%	10%	\$17M	\$1.7M	16%	Growth
Product I	Sales & Distribution	Channel Management	70.0	71.0	69.5	70.5	Medium	Low	66.0	72%	+3%	10%	\$20M	\$2M	18%	Stable
Product I	Sales & Distribution	Customer Acquisition	68.0	69.0	67.5	68.5	Medium	Low	63.0	71%	+1%	10%	\$18M	\$1.8M	17%	Growth
Product J	Sales & Distribution	Channel Management	67.0	68.0	66.5	67.5	Medium	Low	62.0	70%	+2%	10%	\$21M	\$2.1M	19%	Stable
Product J	Sales & Distribution	Customer Acquisition	65.0	66.0	64.5	65.5	Medium	Low	60.0	69%	+3%	10%	\$19M	\$1.9M	18%	Growth
Product K	Sales & Distribution	Channel Management	64.0	65.0	63.5	64.5	Medium	Low	59.0	68%	+1%	10%	\$22M	\$2.2M	20%	Stable
Product K	Sales & Distribution	Customer Acquisition	62.0	63.0	61.5	62.5	Medium	Low	58.0	67%	+2%	10%	\$20M	\$2M	19%	Growth
Product L	Sales & Distribution	Channel Management	61.0	62.0	60.5	61.5	Medium	Low	57.0	66%	+3%	10%	\$23M	\$2.3M	21%	Stable
Product L	Sales & Distribution	Customer Acquisition	59.0	60.0	58.5	60.0	Medium	Low	56.0	65%	+1%	10%	\$21M	\$2.1M	20%	Growth
Product M	Sales & Distribution	Channel Management	58.0	59.0	57.5	59.5	Medium	Low	55.0	54%	+2%	10%	\$24M	\$2.4M	22%	Stable
Product M	Sales & Distribution	Customer Acquisition	56.0	57.0	55.5	57.0	Medium	Low	53.0	53%	+3%	10%	\$22M	\$2.2M	21%	Growth
Product N	Sales & Distribution	Channel Management	55.0	56.0	54.5	56.0	Medium	Low	52.0	52%	+1%	10%	\$25M	\$2.5M	23%	Stable
Product N	Sales & Distribution	Customer Acquisition	53.0	54.0	52.5	54.5	Medium	Low	50.0	50%	+2%	10%	\$23M	\$2.3M	22%	Growth
Product O	Sales & Distribution	Channel Management	52.0	53.0	51.5	53.0	Medium	Low	49.0	49%	+3%	10%	\$26M	\$2.6M	24%	Stable
Product O	Sales & Distribution	Customer Acquisition	50.0	51.0	49.5	51.5	Medium	Low	47.0	47%	+1%	10%	\$24M	\$2.4M	23%	Growth
Product P	Sales & Distribution	Channel Management	49.0	50.0	48.5	50.5	Medium	Low	46.0	46%	+2%	10%	\$27M	\$2.7M	25%	Stable
Product P	Sales & Distribution	Customer Acquisition	47.0	48.0	46.5	48.5	Medium	Low	44.0	44%	+3%	10%	\$25M	\$2.5M	24%	Growth
Product Q	Sales & Distribution	Channel Management	46.0	47.0	45.5	47.5	Medium	Low	43.0	43%	+1%	10%	\$28M	\$2.8M	26%	Stable
Product Q	Sales & Distribution	Customer Acquisition	44.0	45.0	43.5	45.5	Medium	Low	41.0	41%	+2%	10%	\$26M	\$2.6M	25%	Growth
Product R	Sales & Distribution	Channel Management	43.0	44.0	42.5	44.5	Medium	Low	40.0	40%	+3%	10%	\$29M	\$2.9M	27%	Stable
Product R	Sales & Distribution	Customer Acquisition	41.0	42.0	40.											

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Pillar	class type for Merit OT tab (actuals)
_BUOC	bu
_BUOCB	bu
_BUOCED	bu
_BUOCI	bu
_BUOCW	bu
_BUOCY	bu
_BUTC	bu
_BUTCED	bu
_BUTCI	bu
_E	MERIT
_E-B	MERIT
_E-ED	MERIT
_E-I	MERIT
_E-W	MERIT
_EXEC	MERIT
_EXEC2	MERIT
_E-Y	MERIT
_F	MERIT
_F-ED	MERIT
_FS	MERIT
_FS-B	MERIT
_FS-ED	MERIT
_FS-I	MERIT
_FS-W	MERIT
_I	MERIT w OT
_I-B	MERIT w OT
_I-ED	MERIT w OT
_I-I	MERIT w OT
_I-W	MERIT w OT
_I-Y	MERIT w OT
_POLICE	police
_SUMMER	summer
_TC	MERIT
_TC-ED	MERIT
_TC-I	MERIT
_TCS	MERIT
_TCS-B	MERIT
_TCS-ED	MERIT
_TCS-I	MERIT
_TCS-W	MERIT
_TCS-Y	MERIT
_TC-W	MERIT
B_DISPLN	MERIT
B_PRJMGT	MERIT
B_PRJSUP	MERIT
B_PROTEC	MERIT
B_SSENG	MERIT
B_STRDFT	bu
B_STRENG	MERIT
B_SUBDFT	bu
B_SURVBU	bu
B_SURVEY	MERIT
B_TCENGR	MERIT
B_TCSENG	MERIT
B_TECDFT	bu
B_TECENG	MERIT
B_TNDDFT	bu
B_TNDENG	MERIT
D_OHCREW	bu
D_PTM	bu
D_UGCREW	bu
I_HPPMNT	bu

Pillar	class type for Merit OT tab (actuals)
I_KPPMNT	bu
I_PPENGR	MERIT
I_PPPLAN	MERIT
I_PPSPVR	MERIT
I_TVLBLR	bu
I_TVLELC	bu
I_TVLMCH	bu
I_TVLSPV	MERIT
I_TVLTCH	bu
I_WPPMNT	bu
J_AIRSCI	MERIT
J_CHEMST	MERIT
J_WHMAID	MERIT
J_WHMSCI	MERIT
R_COOMELE	bu
R_COMENG	MERIT
R_COMSUP	MERIT
R_COMTEC	bu
R_CONCRW	bu
R_CONSUP	MERIT
R_ENGMAP	bu
R_ENGSRE	MERIT
R_ENGSTF	MERIT
R_ENGSUP	MERIT
R_INSCRW	bu
R_INSENG	MERIT
R_INSSUP	MERIT
R_OPEDIS	bu
R_OPESPT	MERIT
R_OPESTF	MERIT
R_OPESUP	MERIT
R_RELCRW	bu
R_RELENG	MERIT
R_RELSUP	MERIT
R_SUBCRW	bu
R_SUBENG	MERIT
R_SUBPLN	MERIT
R_SUBSUP	MERIT
R_TECSPT	MERIT
W_CUENGR	MERIT
W_CUPLNR	bu
W_DEPLNR	bu
W_JPCORD	bu
W_JRDRFT	bu
W_JRPLNR	bu
W_MTELEC	bu
W_MTENGR	MERIT
W_MTSUPV	MERIT
W_PDSUPV	MERIT
W_RECORD	MERIT
W_RESHER	bu
Y_GENPLN	MERIT
Y_IRP	MERIT
Y_PPDRAF	bu
Y_PPELEC	MERIT
Y_PPMECH	MERIT
Y_PPPROJ	MERIT
Y_TECHSV	MERIT
Y_TRNPLN	MERIT

Hawaiian Electric Company, Inc.  
Revenue Decoupling - 2011 Rate Base RAM  
Based on 2009 Test Year  
(\$000's)

	(A) Test Year 2009	(B) 2011 Estimate	(B) - (A) Difference		Rate Base RAM
Average Rate Base (RAM components only)	1,144,935	1,159,195	14,260	x 12.91% (1)	1,841
<u>Income Statement Effects:</u>					
CIAC Amortization	(9,335)	(10,083)	(748)	÷ 91.12% (2)	(820)
Annualized Depreciation adjusted for RAM purposes	89,678	97,468	7,790	÷ 91.12% (2)	8,549
					<u><u>9,570</u></u>

Source: Attachment 4 page 2

(1) Effective Pre-Tax Rate of Return. Attachment 4 page 3

(2) Revenue Tax and Bad Debt Reciprocal. Attachment 4.5 page 8

ATTACHMENT 4  
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**Hawaiian Electric Company, Inc.**  
**2011 Rate Base RAM**  
(\$000's)

	A	B	C	F	G	H	
	HECO 2009 Test Year Rate Base	References for Col. A & B		2011 Rate Base RAM		Reference for Col. H	
	Beg. Balance	Ending Balance		Actual	2011 Changes	Estimated	
	12/31/2008	12/31/2009		12/31/2010		12/31/2011	
1	<b>Net Plant in Service</b>						
2	<b>Plant in Service:</b>						
3	Starting Balance						
4	Additions					\$ 2,946,751	Attachment 4.1 page 1
5	Retirements					91,838	91,838 Line 27 + Line 28
6	Ending Balance					2,946,750.8	3,038,589 Sum: Lines 3...5
7	<b>Accumulated Depreciation:</b>						
8	Starting Balance					(1,374,017)	Attachment 4.1 page 1
9	Cost of Removal					(99,920)	(99,920) Line 29
10	Salvage					(1,374,017)	(1,473,937) Sum: Lines 8...12
11	Depreciation Accrual					(99,920)	
12	Retirements					(186,553)	
13	Ending Balance					(47)	(186,800) Sum: Lines 16...18
14	Net Plant in Service	1,365,578	1,575,485	Attachment 4.5 page 6	1,572,734	(8,082)	1,584,652 Line 6 - Line 13
15	<b>Deductions</b>						
16	Starting Balance					(186,553)	Attachment 4.1 page 1
17	Unamortized CIAC					(10,222)	(10,222) Line 32+ Line 33
18	Adjustment for CIAC amortization - previous year's amortization portion					10,175	10,175 Line 34
19	Ending Balance	(178,757)	(183,375)	Attachment 4.5 page 6	(186,553)	(47)	(186,800) Sum: Lines 16...18
20	<b>Accumulated Def Income Taxes:</b>						
21	Starting Balance					(212,931)	(212,931) Attachment 4.1 page 1
22	Additions					(19,979)	(19,979) Attachment 4.4 page 1, line 13
23	Ending Balance	(132,510)	(156,551)	Attachment 4.5 page 6	(212,931)	(19,979)	(232,910) Line 20 + Line 21
24	Total Deductions	(311,287)	(339,926)	Ln 19 + Ln 22	(399,484)	(20,026)	(419,510) Line 19 + Line 22
25	Net Rate Base (before working cash)	\$ 1,054,311	\$ 1,235,559	Line 14 + Line 23	\$ 1,173,249	\$ (28,108)	\$ 1,145,141 Line 14 + Line 23
26	<b>Change in Rate Base:</b>						
27	Baseline Additions						
28	Major CIP Project Additions						
29	Depreciation						
30	Net Plant						
31	ADIT - Baseline and Major Projects						
32	CIAC - Baseline						
33	CIAC - Major CIP						
34	Amortization of CIAC						
35	Total Change in Rate Base						
36	Effective Pre-Tax Return						
37	Gross Return on Rate Base		12.91%	Attachment 4 page 3	\$ 149,652	\$ 1,841	Line 25 x Line 38
38	<b>Income Statement Effects:</b>						
39	Less: CIAC Amortization						
40	Add: Annualized Prior Year Depreciation						
	Revenue Requirement on Plant Additions						
41	<b>Income Statement Effects:</b>						
42	Annualized Prior Year Depreciation						
43	Est. 2011						
44	TY 2009						
45	2011 Change						
46	CIAC Amortization						
	Est. 2011						
47	TY 2009						
48	2011 Change						
49	TY 2009						
50	2011 Change						
51	TY 2009						
52	2011 Change						
53	TY 2009						
54	2011 Change						
55	TY 2009						
56	2011 Change						
57	TY 2009						
58	2011 Change						
59	TY 2009						
60	2011 Change						
61	TY 2009						
62	2011 Change						
63	TY 2009						
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131	TY 2009						
132	2011 Change						
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135	TY 2009						
136	2011 Change						
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164	2011 Change						
165	TY 2009						
166	2011 Change						
167	TY 2009						
168	2011 Change						
169	TY 2009						
170	2011 Change						
171	TY 2009						
172	2011 Change						
173	TY 2009						
174	2011 Change						
175	TY 2009						
176	2011 Change						
177	TY 2009						
178	2011 Change						
179	TY 2009						
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182	2011 Change						
183	TY 2009						
184	2011 Change						
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186	2011 Change						
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190	2011 Change						
191	TY 2009						
192	2011 Change						
193	TY 2009						
194	2011 Change						
195	TY 2009						
196	2011 Change						
197	TY 2009						
198	2011 Change						
199	TY 2009						
200	2011 Change						
201	TY 2009						
202	2011 Change						
203	TY 2009						
204	2011 Change						
205	TY 2009						
206	2011 Change						
207	TY 2009						
208	2011 Change						
209	TY 2009						
210	2011 Change						
211	TY 2009						
212	2011 Change						
213	TY 2009						
214	2011 Change						
215	TY 2009						
216	2011 Change						

Hawaiian Electric Company, Inc.

Revenue Decoupling at 10.0% at Curr Eff Rates  
PRE-TAX COMPOSITE EMBEDDED COST OF CAPITAL  
Estimated 2009 Average

A	B	C	D	E	F	G	H
Capitalization				Gross Up for Rev Taxes D / G			
Amount in Thousands	Percent of Total	Earnings Reqmts	Weighted Earnings Reqmts (B) x (C)	Inc Tax Factor	Inc Taxes D / E	Rev Tax & Bad Debt Reciprocal	
Short-Term Debt	0	0	0.75%	0.000%	n/a	0.000%	0.000%
Long-Term Debt	576,569	40.76	5.77%	2.352%	n/a	2.352%	0.91119 2.581%
Hybrid Securities	27,775	1.96	7.41%	0.146%	n/a	0.146%	0.91119 0.160%
Preferred Stock	20,696	1.46	5.48%	0.080%	61.090%	0.131%	0.91119 0.144%
Common Equity	789,374	55.81	10.00%	5.581%	61.090%	9.136%	0.91119 10.026%
Total	1,414,414	100.00					
Estimated Composite Cost of Capital				8.159%		12.911%	
				or	8.16%	or	12.91%

Notes:  
Col. A-D Per Revised Results of Operations supporting schedules and tariffs for the final rates, which reflect the increase in rates allowed by the Final D&O for the 2009 test year, filed by the Company on 1/24/11.  
See Attachment 4.5 page 5

Col. E 1 - .3891 Composite Income Tax Rate per Revised Results of Operations supporting schedules and tariffs for the final rates, which reflect the increase in rates allowed by the Final D&O for the 2009 test year, filed by the Company on 1/24/11. See Attachment 4.5 page 7.  
Col. G Attachment 4.5 page 8

**Hawaiian Electric Company, Inc.**  
**2010 Recorded and 2011 Estimated Information**  
**Workpaper Supporting Input Sheet**  
(in thousands)

	Amount	Source:
<b>CIP CT-1 Costs in Excess of Interim 09 TY RC:</b>		
CIP CT-1 Costs (actual as of 12/31/10)	192,912	Attachment 4.1 page 7
Less: Interim 2009 TY RC	<u>(161,470)</u>	Attachment 4.5 page 12
Actual CIP CT-1 Costs in Excess of Interim	<u>31,442</u>	
<b>Plant In-Service:</b>		
12/31/10 Plant Balance	3,024,037	Attachment 4.5 page 14
Less: Actual CIP CT-1 Costs in Excess of Interim	<u>(31,442)</u>	Calculation above
Kamoku 46kV UG Alt Phase 1 Costs in Excess of Interim (EOTP)	<u>(43,005)</u>	Attachment 4.1 page 8
Kahe 3 Biofuel Co-Firing Costs in Excess of Interim	<u>(271)</u>	Attachment 4.1 page 8
First Wind (HCEI)	<u>(2,567)</u>	Attachment 4.1 page 10
Revised Plant In-Service at 12/31/10	<u>2,946,751</u>	
<b>Accumulated Depreciation:</b>		
12/31/10 Total Reserves for Depreciation and Amortization	(1,142,625)	Attachment 4.5 page 15
Add: Removal Regulatory Liability & ARO Regulatory Asset	<u>(183,381) (A)</u>	
Asset Retirement Obligation	<u>(48,423) (A)</u>	
Total Accumulated Depreciation	<u>(1,374,429)</u>	
Less: CT-1 depreciation on YTD 2009 excess costs	<u>412</u>	Attachment 4.1 page 6
Adjusted Beginning Balance	<u>(1,374,017)</u>	
<b>Unamortized CIAC:</b>		
12/31/2010 Unamortized CIAC Balance	(189,315)	Attachment 4.5 page 13
Less: Adj for First Wind (HCEI)	<u>2,762</u>	Attachment 4.5 page 27
Adjusted Beginning Balance at 12/31/10	<u>(186,553)</u>	
<b>2011 Estimated Depreciation:</b>		
Utility Book Depreciation and Leasehold Amortization	97,378	Attachment 4.1 page 4
Vintage Accounting Amortization	<u>4,404</u>	Attachment 4.1 page 5
Total 2011 Depreciation Accrual	<u>101,782</u>	Attachment 4.5 page 17
Less: Adj for CIP CT-1 Costs in Excess of Interim	<u>(466)</u>	Attachment 4.1 page 8
Adj for Kamoku 46kV UG Alt Phase 1 Costs in Excess of Interim	<u>(1,285)</u>	Attachment 4.1 page 8
Adj for Kahe 3 Biofuel Co-Firing Costs in Excess of Interim	<u>(5)</u>	Attachment 4.1 page 8
Adj for First Wind (HCEI)	<u>(107)</u>	Attachment 4.1 page 10
Adjusted 2011 Depreciation & Amortization Accrual	<u>99,920</u>	
Less: Vehicle Depreciation	<u>(2,452)</u>	Attachment 4.5 page 17
Adjusted 2011 Depreciation & Amortization Expense	<u>97,468</u>	
<b>2011 Estimated CIAC Amortization:</b>		
2011 Amortization Expense	(10,175)	Attachment 4.5 page 17
Less: Adj for First Wind (HCEI)	<u>92 (B)</u>	
Adjusted 2011 CIAC Amortization Expense	<u>(10,083)</u>	
<b>Accumulated Deferred Income Taxes:</b>		
12/31/2010 Accumulated Deferred Income Taxes Balance	208,731	Attachment 4.3 page 1
Exclude: FIN 48 tax	<u>7,397</u>	Attachment 4.3 page 1
ADIT excluding FIN 48 tax	<u>216,128</u>	
Less: ADIT on First Wind	<u>(446)</u>	Attachment 4.3 page 1
ADIT on Major Project Excess Depreciation	<u>(2,751)</u>	Attachment 4.3 page 1
12/31/2010 Accumulated Deferred Income Taxes Balance - Adjusted	<u>212,931</u>	
(A) Per HECO Detail General Ledger Summary as of 12-31-2010		
(B) First Wind CIAC - 2010 Actual	2,762	Attachment 4.5 page 27
Divided by 30 year amortization period	<u>30 yrs</u>	
2011 CIAC amortization related to First Wind	<u>92</u>	

Hawaiian Electric Company, Inc.  
Estimated Decoupling Ratebase RAM  
Baseline Plant Additions Calculation

	Source: Docket No. 03-0257 General Order No. 7 Plant Additions Annual Reports filed with the PUC dated: 6/3/2005 5/31/2006 5/31/2007 5/30/2008 5/28/2009 5/28/2010						Attachment 4.5 p. 20 NOTE (B)
	2004	2005	2006	2007	2008	2009	2010
<b>Total Plant Additions (Sum of Exhs. 1, 2, and 3 of Reports)</b>	<b>146,577,817</b>	<b>109,529,898</b>	<b>131,037,817</b>	<b>106,094,629</b>	<b>96,457,503</b>	<b>287,760,439</b>	<b>170,051,118</b>
<b>Less Major Projects: (+\$2.5 Million)</b>	<b>Dkt No.</b>	<b>Item No.</b>					
2004 In-service:							
Mokuone Substation	02-0142	Y00027	(1,346,091)	(4,890,666)	(625,846)		
Kahe 5 Boiler Controls Upgrade	01-0272	P0000078	(3,415,223)			(11,116)	(1,133)
Waiau Fuel Oil Pipeline	01-0444	Y00032	(38,851,540)	(1,919,934)	(40,880)		
2005 In-service:							
Ward Air Conditioning Improvement	00-0040	Y00023	(4,381,591)	(325,241)	(130,686)	(1,236)	
New Kuahua Substation	03-0260	Y00021	(8,161,978)	(1,919,335)	(4,377)		
Salt Lake Boulevard Widening	01-0189	P0000143	(1,915,516)	(2,957,571)	(804)		
New Dispatch Center	03-0360	Y00030	(1,190,385)	(24,339,825)	(1,323,478)	(350,257)	(3,133)
2006 In-service:							
Ford Island Substation	04-0278	Y00040	(603,089)	(23,880,234)	(26,673)	(141,027)	(6,205)
Ocean Pointe Substation	05-0217	Y00045		(3,550,139)	(107,525)		
Kahe 4 Boiler Control Upgrade	02-0207	P9454000		(4,560,910)	(50,422)	(1,765)	
2007 In-service:							
Mamala Substation	04-0350	Y00039		(7,424,707)	(17,073)		
Kahe 3 Boiler Controls Upgrade	02-0206	P9539000		(4,185,117)	(92,548)	(5,355)	(24,522)
2008 In-service:							
KoOlina Substation	05-0056	Y00044			(5,006,729)		
CIP Generating Unit	05-0145	Y49000			(6,119,686)	(185,099,299)	(1,693,198)
2009 In-service:							
CIP0 Kahe RO Water Project	05-0146	P0001169				(749,833)	(373,480)
Barbers Point Fuel Oil Tank	2007-0409	P0001534				(3,931,173)	
Whitmore Substation	2008-0132	P0001390				(4,199,832)	(212,825)
2010 In-Service:							
Beckoning Point 46kv Line Ext	2008-0321	P0001497					(1,506,538)
Beckoning Point Substation	2008-0321	P0001498					(948,191)
Kamoku 46kv UG At Ph 1 (EOTP)	03-0417	Y48500					(58,502,483)
K3 Biofuel Co-Firing	2009-0155	P0001577					(4,957,351)
Air Quality Monitoring Station		Transfer from HELCO					(361,926)
First Wind - cost recovered thru surcharge							(2,567,414)
<b>Total Net Plant Additions</b>		<b>103,164,953</b>	<b>86,466,739</b>	<b>68,837,936</b>	<b>92,829,724</b>	<b>84,726,049</b>	<b>93,765,610</b>
<b>Last Five-Year Average</b>						<b>87,205,082</b>	<b>85,325,212</b>
							<b>87,812,319</b>

(1) Net of customer advance of \$777,838. See Attachment 4.5 page 20.

NOTE (A):

Highlighted amounts above were included in the "Cost of Less Than \$1 Million" plant addition section of the respective year's GO7 plant addition annual report. Included amounts for the purposes of this baseline five-year average calculation.

NOTE (B):

The total plant additions amount and the respective major projects' amounts are from the Company's 2010 recorded plant additions accounting records which was used to prepare the 2010 GO7 plant addition annual report. Refer to Attachment 4.5 pages 20 thru 28 for excerpts from the 2010 annual report.

NOTE (C):

The total plant additions for 2005 include approximately \$2,070,000 of plant additions that were not included in the original 2005 GO7 plant addition annual report. This additional amount is primarily comprised of Waiau Fuel Oil Pipeline late project costs that were recorded in 2005 but not included in the 2005 GO7 plant addition annual report.

ATTACHMENT 4.1  
PAGE 3 OF 11

**Hawaiian Electric Company, Inc.  
Estimated Decoupling Ratebase RAM  
Baseline CIAC Additions Calculation**

Source of CIAC balance and amort.: December Monthly Reports filed (non-confidential basis) with the PUC dated: 2/8/2005      3/7/2006      3/1/2007      2/29/2008      2/27/2009      3/1/2010							Attachment 4.1 p. 10
	2004	2005	2006	2007	2008	2009	2010
CIAC Balance, January 1 (Dec Rpt. pg. 10)		(143,814,238)	(144,321,635)	(156,287,107)	(164,091,609)	(176,424,632)	(178,757,254)
Less: CIAC Amortization (Dec Rpt. pg. 2)		7,286,654	7,483,701	8,055,713	8,488,330	9,009,447	9,335,034
Less: CIAC Balance, December 31 (Dec Rpt. pg. 10)		144,321,635	156,287,107	164,091,609	176,424,632	178,757,254	179,585,120
Total CIAC Additions	7,794,051	19,449,173	15,860,215	20,821,353	11,342,059	10,162,900	19,344,168
<b>Less Major Projects:</b>	<b>Dkt No.</b>	<b>Item No.</b>					
2004 In-service:							
Mokuone Substation	02-0142	Y00027					
Kahe 5 Boiler Controls Upgrade	01-0272	P0000078					
Waiau Fuel Oil Pipeline	01-0444	Y00032					
2005 In-service:							
Ward Air Conditioning Improvement	00-0040	Y00023					
New Kukuhua Substation	03-0260	Y00021					
Salt Lake Boulevard Widening	01-0189	P0000143					
New Dispatch Center	03-0360	Y00030					
				(2,462,295) NOTE (B)			
2006 In-service:							
Ford Island Substation	04-0278	Y00040					
Ocean Pointe Substation	05-0217	Y00045					
Kahe 4 Boiler Control Upgrade	02-0207	P9454000					
				(12,446,000) (854,800)			
2007 In-service:							
Mamala Substation	04-0350	Y00039					
Kahe 3 Boiler Controls Upgrade	02-0206	P9539000					
				(6,715,018)			
2008 In-service:							
Ko'olina Substation	05-0056	Y00044					
CIP Generating Unit	05-0145	Y49000					
				(1,182,000)			
2009 In-service:							
Kahe Reverse Osmosis	05-0146	P0001169					
Barbers Point Fuel Oil Tank	2007-0409	P0001534					
Whitmore Substation	2008-0132	P0001390					
2010 In-service:							
Beckoning Point 46kv Line Ext	2008-0321	P0001497					
Beckoning Point Substation	2008-0321	P0001498					
Kamoku 46kv UG Alt Ph 1 (EOTP)	03-0417	Y48500					
K3 Biofuel Co-Firing	2009-0155	P0001577					
First Wind - cost recovered thru surcharge							
Total Net CIAC Additions	7,794,051	19,449,173	97,120	14,106,335	10,160,069	10,162,900	16,582,134
Last Five-Year Average					10,321,350	10,795,119	10,221,712

**NOTE (A):**

The CIAC amounts of the major projects are from the respective year's GO7 plant addition annual reports. Refer to the Baseline Plant Additions Calculation workpaper for the dates of the report filings. The total CIAC additions reflect actual contributions received in the year, and therefore may not include the total major project CIAC from the GO 7 report to the extent that the CIAC was received in advance, or in multiple payments over a span of more than one year.

**NOTE (B):**

An estimate of the CIAC for the Salt Lake Blvd project was disclosed in a footnote in the 2005 GO7 plant addition annual report which stated, "Following audit completion, an estimated \$3,000,000 of In-Kind CIAC will be recorded." Amount represents actual CIAC recorded.

Attachment 4.5 p. 27  
(2,762,034)

30-Mar-11 Hawaiian Electric Company, Inc.  
2011 Utility Book Depreciation  
Based on D & O 21331 (2000 Depr Study Approved Rates)

Account	Depreciable Assets as of 1/1/11	Straight-Line Remaining-Life Rates	Depreciation Accrual Year 2011
311	80,712,542.95	0.01927	1,555,330.70
312	306,043,667.57	0.01714	5,245,588.46
314	144,492,057.39	0.01362	1,967,981.82
315	51,194,369.71	0.01737	889,246.20
316	15,927,094.78	0.02337	372,216.21
Tot - Steam	598,369,732.40	0.01676	10,030,363.39
341	36,265,255.25	0.00890	322,760.77
342	19,323,881.47	0.01569	303,191.70
343	62,613,810.17	0.00876	548,496.98
344	24,485,984.00	0.01131	276,936.48
345	33,659,862.76	0.01776	597,799.16
346	16,616,802.38	(0.00640)	(106,347.54)
Tot - Gas Turb	192,965,596.03	0.01007	1,942,837.55
Tot - Prod	791,335,328.43	0.01513	11,973,200.94
3501	1,959,714.82	0.00900	17,637.43
352	32,295,705.53	0.02400	775,096.93
353	255,715,063.99	0.02560	6,546,305.64
354	16,722,162.43	0.02570	429,759.57
355	173,901,887.52	0.03090	5,373,568.32
356	105,568,142.81	0.05190	5,478,986.61
357	60,034,491.01	0.01700	1,020,586.35
358	51,042,111.46	0.02410	1,230,114.89
359	2,647,454.94	0.01580	41,829.79
Tot - Transm	699,886,734.51	0.02988	20,913,885.53
3601	317,280.80	0.02050	6,504.26
361	19,567,286.47	0.03350	655,504.10
362	159,899,945.43	0.02990	4,781,008.37
364	122,201,753.54	0.03290	4,020,437.69
365	92,940,136.51	0.06540	6,078,284.93
366	211,108,957.33	0.02200	4,644,397.06
367	265,864,808.89	0.05450	14,489,632.08
368	159,235,812.34	0.06050	9,633,766.65
369.1	40,879,387.03	0.07260	2,967,843.50
369.2	153,703,064.10	0.03950	6,071,271.03
370	29,203,415.69	0.03050	890,704.18
Tot - Distr	1,254,921,848.13	0.04322	54,239,353.85
Tot - T & D	1,954,808,582.64		75,153,239.38
390	46,434,435.33	0.04090	1,899,168.40
394	2,536,901.03	0.03670	93,104.27
395	232,266.21	0.03450	8,013.18
397	95,001,488.42	0.05940	5,643,088.41
398	514,348.68	0.05180	26,643.26
Tot - General	144,719,439.67	0.05300	7,670,017.52
Sub-Total	2,890,863,350.74		94,796,457.84
3902 (King)	7,066,063.03	0.00946	66,825.00
3902 (CPP)	1,265,551.28	0.04962	62,794.13
3902 (Hon Cl)	6,883.11	0	0.00
Sub-Tot- LH Impr	8,338,497.42		129,619.13
392	33,732,178.06	0.07270	2,452,329.34
Utility Total	2,932,934,026.22	0.03320	97,378,406.31

For plant accounts which are 100% depreciable, used the plant ending balance @ 12/31/09 at A2 for the basis. For plant accounts which are depreciable and amortizable, used the plant ending balance @ 12/31/09 in Powerplant to determine the amortizable basis. Also used this methodology for the 369 plant account using the plant ending balance @ 12/31/09 in Powerplant to determine the 391.2 balance.

30-Mar-11

Hawaiian Electric Company, Inc.  
2011 Utility Book Amortization  
Based on D & O 21331 (2000 Depr Study Approved Rates)

Account	Amort Amts as of 1/1/11	Amortization Rates	Amortization Accrual Year 2011	Unrecovered Amortized Amounts	Total Amortization
316	8,540,778.61	0.05000	427,038.93	0.00	427,038.93
Tot - Steam	8,540,778.61	0.05000	427,038.93	0.00	427,038.93
346	1,483,502.65	0.05000	74,175.13	) 0.00	74,175.13
Tot - Gas Turb	1,483,502.65	0.05000	74,175.13	0.00	74,175.13
Tot - Prod	10,024,281.26	0.05000	501,214.06	0.00	501,214.06
3911	15,360,639.69	0.14286	2,194,420.99	0.00	2,194,420.99
3912	2,019,360.24	0.08334	168,293.48	0.00	168,293.48
3913	6,988,674.40	0.06667	465,934.92	0.00	465,934.92
393	1,215,858.16	0.04000	48,634.33	0.00	48,634.33
394	11,811,082.59	0.06667	787,444.88	0.00	787,444.88
395	625,209.19	0.06667	41,682.70	0.00	41,682.70
396	166,385.07	0.05556	9,244.35	0.00	9,244.35
398	3,734,077.88	0.05000	186,703.89	0.00	186,703.89
Tot - General	41,921,287.22	0.09309	3,902,359.54	0.00	3,902,359.54
Utility Total	51,945,568.48	0.08477	4,403,573.60	0.00	4,403,573.60

For plant accounts which are 100% amortizable, used the plant ending balance @ 12/31/09 at A2 for the basis. For plant accounts which are depreciable and amortizable, used the plant ending balance @ 12/31/09 in Powerplant to determine the amortizable basis. Also used this methodology for the 369 plant account using the plant ending balance @ 12/31/09 in Powerplant to determine the 391.2 balance.

SOURCE: PROPERTY ACCOUNTING

Hawaiian Electric Company, Inc.  
Campbell Industrial Park Generating Station and Transmission  
2010 Depreciation by Project

Project No.	DIS	Description	12/31/09 Act (A)	12/31/09 Cost Accrued	12/31/2009 Total	PUC allowed Page 2D	Attachment 4.5 From Docket	Incremental Difference From Docket	Plant Acct	Depr Rate	Incremental Diff in 2010 Depreciation
P0001052	4/7/21/09	CP1 CEIP Substation Mod	603,567	3,099	603,567	3,890	599,677	3530	0.02560	15,352	
P0001135	6/3/09	CP1 Unit Addition-Microwave	748,908		748,908	752,007	-	752,007	3970	0.05940	44,669
P0001340	12/30/08	CP1 Unit Addition-Easements	4,857,924		4,857,924	4,857,924	1,261,761	1,261,761	3,400 (B)		
P0001585	5/27/08	CP1 - Land - Gen Station	1,261,761		1,261,761	7,541,528	5,790,887	1,750,641	(C)		
P0001051	4/9/09	CP1 AES-CEIP#2 Trans. Line	3,809,430	12,901	3,822,331	3,822,331	1,153,110	669,221	(D)	18,502	
P0001134	7/27/09	CP1 Unit Addition-Fiber	638,775		638,775	638,775	531,769	107,006	3970	0.05940	6,356
P0001136	10/1/09	CP1 Unit Addition-Kahe Blrs	1,771,737		1,771,737	1,720,778	50,959	50,959	3530	0.02560	1,305
P0001137	4/1/09	CP1 Unit Addition-Kaleoia	210,680		210,680	289,912	(79,232)	(79,232)	3970	0.05940	(4,706)
P4900000	8/3/09	CP1 Unit 1 Addition	153,005,988	6,720,588	159,726,556	143,859,745	25,898,928	(E)	(E)		271,527
P0001880	10/15/09	CP1 Unit 1 Blackstart Diesel Generators	3,042,741		3,042,741			(E)	(E)		
P0001881	12/15/09	CP1 Unit 1 Water Treatment System	6,932,942	56,434	6,989,376			(E)	(E)		
		Plant Additions	184,425,981	6,793,002	191,218,983	161,469,776	29,749,207				412,014
P0001084		Parcel between Hanua Street and AES Substation included in PHFFU	1,809,875		1,809,875	1,809,875	-	-			
		Total Project Cost	186,235,856	6,793,002	193,028,858	163,279,651	29,749,207				
		(A) NI cost only									
		(B) Land and rights of way in fee are not depreciable assets									
(C)		Plant Account	Total	% of Project	1,750,641	Depr Rate	Depr				
	3550	6,605,098	87.58	1,533,264	0.03090	47,378					
	3560	735,197	9.75	170,664	0.05190	8,857					
	3970	201,233	2.57	46,713	0.05940	2,775					
	Total	7,541,528	100.00	1,750,641		59,010					
(D)		Plant Account	Total	23.69	669,221	Depr Rate	Depr				
	3520	905,502	69.13	158,537	0.02400	3,805					
	3530	2,642,422	47.40	462,640	0.02560	11,844					
	3970	274,407	7.18	48,044	0.05940	2,854					
	Total	3,822,331	100.00	669,221		18,502					
(E)		Plant Account	Total		25,898,928	Depr Rate	Depr				
	3410	29,100,000	17.14	4,339,589	0.00890	39,512					
	3420	13,500,000	7.95	2,939,603	0.01569	32,315					
	3430	68,126,356	40.13	10,393,606	0.00876	91,048					
	3440	15,900,000	9.37	2,425,755	0.01131	27,435					
	3450	23,742,741	13.99	3,622,269	0.01776	64,331					
	3460	11,089,376	6.53	1,691,831	(0.00640)	(10,826)					
	3520	700,000	0.41	106,794	0.02560	2,734					
	3570	6,000,000	3.53	915,379	0.01700	15,561					
	3580	1,100,000	0.65	167,820	0.02410	4,044					
	3912	200,000	0.12	30,513	0.08334	2,543					
	3913	100,000	0.06	15,256	0.06667	1,017					
	3970	200,000	0.12	30,513	0.05940	1,812					
	Total	169,758,673	100.00	25,898,928		271,527					

Hawaiian Electric Company, Inc.  
Campbell Industrial Park Generating Station and Transmission  
2011 Depreciation by Project

Project No.	DIS	Description	12/31/09 Act (A)	2010 Cost Incurred (F)	(1) (2)	(3) (1) + (2)	(4) Docket Total	(5) Incremental Difference From Docket	(6) Plant Acct.	(7) Depr. Rate	(8) (5) x (7)	2011 Depreciation
P0001052	4/22/09	CIP1 CEP Substation Mod	603,567		603,567		3,890	599,677	3530	0.02560	15,352	
P0001135	6/3/09	CIP1 Unit Addition-Microwave	752,007		1,108	753,115	-	753,115	-	0.05940	44,735	
P0001340	12/20/08	CIP1 Unit Addition-Facsimiles	4,857,924		4,857,924		-	-	3503 (B)	-	-	
P0001585	5/27/08	CIP1 - Land Gen Station	1,261,761		1,261,761		1,261,761	-	3400 (B)	-	-	
P0001050	7/22/09	CIP1 AES-CEP2 Trans. Line	7,590,528		135,433	7,625,961	5,790,867	1,886,074	(C)	0.03464	64,201	
P0001051	4/9/09	CIP1 AES Substation Add	3,822,331	(20,811)	3,801,320	3,153,110	648,410	(D)	0.02764	17,925		
P0001134	7/22/09	CIP1 Unit Addition-Fiber	638,775	28,419	668,194	531,769	136,425	3970	0.05940	8,104		
P0001136	10/1/09	CIP1 Unit Addition-Keha Bkrs	1,771,737	24,204	1,795,941	1,720,778	75,163	3530	0.02560	1,924		
P0001137	4/1/09	CIP1 Unit Addition-Kalaeloa	210,680	1,725	212,405	269,912	(77,507)	(G)	0.03706	(2,872)		
P4900000	8/3/09	CIP1 Unit 1 Addition	159,736,556	1,400,880	161,137,436	143,859,745	27,299,808	(E)	0.01162	317,227		
P0001880	10/1/09	Generators	3,042,741	3,581	3,046,322	3,581	3450	0.01776	64			
P0001881	12/15/09	CIP1 Unit 1 Water Treatment System	6,989,376	117,660	7,107,036	117,660	3460	(0.00640)	(73)			
		Plant Additions	<u>191,218,983</u>	<u>1,693,199</u>	<u>192,912,182</u>	<u>161,489,776</u>	<u>31,442,406</u>					
P0001084		Parcels between Hanua Street and AES Substation Included in PHFFU	1,809,875		1,809,875							<u>465,906</u>
		Total Project Cost	<u>193,026,858</u>	<u>1,693,199</u>	<u>194,720,057</u>							
(A) NI cost only												
(B) Land and rights of way in fee are not depreciable assets												
(C)	Plant Account	Total	Total	Depr. Rate	Depr.	204,272						
	3550	6,610,735	837,906	0.031090	43,487							
	3560	283,320	0.05940	13,462								
	Total	<u>7,636,961</u>			<u>261,331</u>							
(D)	Plant Account	Total	Total	Depr. Rate	Depr.	2,1951						
	3520	914,613	0.02400	66,912								
	3530	2,613,738	0.02560	16,05940	16,05940							
	3970	273,169	0.05940									
	Total	<u>3,601,520</u>			<u>105,089</u>							
(E)	Plant Account	Total	Total	Depr. Rate	Depr.							
	3410	35,245,454	0.00890	113,685								
	3420	14,519,227	0.01569	227,807								
	3430	49,711,555	0.00876	435,999								
	3440	16,261,082	0.01131	183,913								
	3450	26,546,349	0.01776	471,463								
	3460	7,932,105	(0.00540)	(51,419)								
	3464	1,194,486	0.03000	59,724								
	3370	6,578,912	0.01700	111,842								
	3380	1,171,022	0.02410	28,222								
	3620	807,734	0.02990	24,151								
	3912	156,810	0.08334	15,069								
	3913	160,240	0.06667	10,683								
	3970	722,460	0.05940	42,914								
	Total	<u>161,177,426</u>			<u>1,872,331</u>							
(F) Includes 12/31/2010 Accounts												
(G)	Plant Account	Total	140,397	Depr. Rate	Depr.	2,594						
	3550	72,008	0.02560	4,277								
	Total	<u>212,405</u>	0.05940	<u>7,871</u>								

Hawaiian Electric Company, Inc.  
Revenue Decoupling - Rate Base RAM  
**2010 Major Project Plant Additions - Depreciation on Excess Costs**

Grandparent #	Project #	Project	Plant Addn. Date	Project Cost (1)	(a) Total	(b) Customer Advance	(c) Net	(d) PUC Approved (2)	(e) - (d) (a) - (b) (c)	(f) Variance from PUC Approved	(g) Functional Plant	(h) Current Depr. Rates	(i) (e) x (g) (h)
					Project Cost (1)	Customer Advance	Net	PUC Approved (2)	(e)	(f)	(g)	(h)	(i)
<b>2010</b>													
1.	Y001118	PP001497 Backoning Point 46kV Line Ex. PP001498 Backoning Point Substation	2010/04 2010/05	1,506,538 1,726,029 3,232,567	(777,836) (777,836)	945,911 2,454,729	1,506,538 3,295,391	15,497,000	43,005,483 (830,682)	Transmission Distribution	0.029880 0.043220	0	0
2.	Y48500	PP000922 Kamoku 46kV UG Alt Phase 1 (EOTP)	2010/06	58,502,483		58,502,483							1,285,004
3.	-	PP001577 K3 Biulul Co-Firing	2010/09	4,957,351		4,957,351		4,686,000	271,351	Steam Prod.	0.016760		4,548
4.	Y49000	CIP 1 Unit Addition CIP 1 Unit Addition	2010 As of 12/31/09	1,693,198 Excess Costs	Straggling Costs	1,693,198	0	1,693,198	29,749,207				
					CIP 1 Total Project excess costs			31,442,405	Various (3)	Various (3)	465,906 (3)		
											\$ 1,755,458		

(1) Source: Attachment 4.5 page 20 (2010 Annual General Order No. 7 Plant Additions Annual Report)

(2) Attachment 4.2 page 1

(3) 2011 Depreciation under current depreciation rates are done on a project and plant account basis.  
See Attachment 4.1 page 7

DISTRICT&CODE	Func Category	5th Segm	PROJECT&CODE	DESCRIPTION	Job#	Task#	Priority	WMO Desc	DATE IN SERVICE	Amount	Sum of Amount	Utility Account ID	Aded CPRI Utility Account ID
HECO	Distribution	P0001821	First Wind Waiāluā Relay	EE016578	Kahuku FW Waiāluā Rel - Eng				17.256	20101219	201012	3620	
HECO	Distribution	P0001821	First Wind Waiāluā Relay	P0001821	First Wind Waiāluā Relay	EE001821	First Wind Waiāluā Relay	Kahuku FW Waiāluā Rel - Eng	423	20101219	201012	3620	
HECO	Distribution	P0001821	First Wind Waiāluā Relay	EE016041	Kahuku FW Waiāluā Rel-Eng-SS Eng				17.079	20101219	201012	3620	
HECO	Distribution	P0001821	First Wind Waiāluā Relay	EE016042	Kahuku FW Waiāluā Rel-Cons-HDR Rel Eng				20.055	20101219	201012	3620	
HECO	Distribution	P0001821	First Wind Waiāluā Relay	EE016043	Kahuku FW Waiāluā Rel-Const-HDR Ground St				5.290	20101219	201012	3620	
HECO	Distribution	P0001821	First Wind Waiāluā Relay	EE016046	Kahuku FW Waiāluā Rel-Const-Elec. Subst				42.935	20101219	201012	3620	
HECO	Distribution	P0001821	First Wind Waiāluā Relay	EE016047	Kahuku FW Waiāluā Rel-Const-Elec. Relay				20.590	20101219	201012	3620	
HECO	Distribution	P0001821	First Wind Waiāluā Relay	EE016048	Kahuku FW Waiāluā Rel-Const-Elec. Instru				14.114	20101219	201012	3620	
HECO	Distribution	P0001821	First Wind Waiāluā Relay	EE017793	Kahuku FW Waiāluā RTU - Eng				9.857	20101219	201012	3620	
HECO	Transmission	P0001822	Switching SIn Outside Services	P0001822	Switching SIn Outside Services				26.506	20101219	201012	3620	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	EE016582	Kahuku FW Waiāluā Rel-Eng			(8)	123.251	20101219	201012	3520	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	EE016584	Kahuku FW Waiāluā Rel-Con-Sup Equip				43.695	20101219	201012	3520	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	P0001823	First Wind Waiāluā Relay	EE001823	First Wind Waiāluā Relay	Kahuku FW Waiāluā Rel-Const-Sub Equip	287	20101219	201012	3620	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	EE017263	Kahuku FW Waiāluā Rel-Const-Substation				15.876	20101219	201012	3520	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	EE017264	Kahuku FW Rel-Const-Relay				26.506	20101219	201012	3520	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	EE017265	Kahuku FW Rel-Const-Inst&Cont				7.695	20101219	201012	3520	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	EE016588	Kahuku FW Switching Sun-Eng				194.413	20101219	201012	3520	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	P0001823	First Wind Waiāluā Relay	EE001823	First Wind Waiāluā Relay	Kahuku FW Switching Sun-Mainage-PM	167.941	20101219	201012	3523	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	EE016593	Kahuku FW Switching Sun-Eng-OS				39.393	20101219	201012	3523	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	EE016594	Kahuku FW Switching Sun-Eng-Ping				46.106	20101219	201012	3520	
HECO	Transmission	P0001823	First Wind Waiāluā Relay	P0001824	FW Switching Station				337	20101219	201012	3620	
HECO	Transmission	P0001824	FW Switching Station	EE015343	Kahuku FW SS-Manage-PM-Rel Eng				90.347	20101219	201012	3520	
HECO	Transmission	P0001824	FW Switching Station	EE016278	Kahuku FW Switching Station-Conn-LH				4.105	20101219	201012	3610	
HECO	Transmission	P0001824	FW Switching Station	EE017275	Kahuku FW Switching Sun-Mainage-PM				2.689	20101219	201012	3520	
HECO	Transmission	P0001824	FW Switching Station	EE017279	Kahuku FW Sun-Eng-VARIANCE-Loss of Comm				327	20101219	201012	3520	
HECO	Transmission	P0001824	FW Switching Station	EE017280	Kahuku FW Sun-Eng-VARIANCE-Extensy Rwsngs				21.218	20101219	201012	3520	
HECO	Transmission	P0001824	FW Switching Station	P0001824	FW Switching Station				60.177	20101219	201012	3520	
HECO	Transmission	P0001824	FW Switching Station	EE017985	Kahuku FW SS-Const-Inst&Conn				90.347	20101219	201012	3520	
HECO	Transmission	P0001824	FW Switching Station	EE018039	Kahuku FW SW-Const-Comm-SCHEDULE DELAYS				46	20101219	201012	3520	
HECO	Transmission	P0001824	FW Switching Station	EE017317	Kahuku Wind 46kV OH - Eng				2.250	20101217	201012	3520	
HECO	Transmission	P0001825	First Wind T&D 46kV	EE017317	Kahuku Wind 46kV OH - Eng				13.675	20101217	201012	3520	
HECO	Transmission	P0001825	First Wind T&D 46kV	EE017318	Kahuku Wind 46kV OH - Inst				78.361	20101217	201012	3520	
HECO	Transmission	P0001825	First Wind T&D 46kV	EE016602	Kahuku FW T&D 12kV OH-Eng				5.542	20101223	201009	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE015462	Kahuku Wind OH Dist Eng				2	20101223	201006	3640	
HECO	Transmission	P0001826	First Wind T&D 46kV	EE015462	Kahuku Wind 46kV OH - Eng				32.719	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 46kV	EE016026	Kahuku Wind OH Dist Survey				33.926	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 46kV	EE016026	Kahuku Wind OH Dist Survey				4.34	20101223	201009	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016026	Kahuku Wind OH Dist Survey				271	20101223	201009	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016026	Kahuku Wind OH Dist Survey				120	20101223	201010	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				198.007	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				32.719	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				34.798	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				13.675	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				4.34	20101223	201009	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				271	20101223	201009	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				120	20101223	201010	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				198.007	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				32.719	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				34.798	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				13.675	20101223	201008	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				4.34	20101223	201012	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				271	20101223	201012	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				120	20101223	201012	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				198.007	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				32.719	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				34.798	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				13.675	20101223	201009	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				4.34	20101223	201012	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				271	20101223	201012	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				120	20101223	201012	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				198.007	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				32.719	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				34.798	20101223	201006	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				13.675	20101223	201009	3520	
HECO	Transmission	P0001826	First Wind T&D 12kV	EE016230	Kahuku Wind 12kV OH Reloc-Ins				4.34	20101223	201012	3520	
HECO	Communication	P0001830	First Wind Telecom Testing	EE016040	Kahuku FW Telecom Kawela Eng				309	20101219	201012	3970	
HECO	Communication	P0001830	First Wind Telecom Testing	E0016610	Kahuku FW Telecom Mokuleia Eng				4.455	20101219	201012	3970	
HECO	Communication	P0001830	First Wind Telecom Testing	E0016610	Kahuku FW Telecom Testing-Eng				1.536	20101219	201012	3970	
HECO	Communication	P0001830	First Wind Telecom Testing	E0016780	Kahuku FW Telecom Ward Eng				1.853	20101219	201012	3970	
HECO	Communication	P0001830	First Wind Telecom Ward	E0016780	Constr - First Wind Telecom Ward				84.873	20101219	201012	3970	
HECO	Communication	P0001830	First Wind Telecom Ward	E0016616	Kahuku FW Telecom Kawela Eng				4.258	20101219	201012	3970	
HECO	Communication	P0001830	First Wind Telecom Ward	E0016616	Kahuku FW Telecom Kawela Eng				9.847	20101219	201012	3970	
HECO	Communication	P0001830	First Wind Telecom Ward	E0016153	Kahuku FW Telecom Kawela Eng				9.847	20101219	201012	3970	
HECO	Communication	P0001832	First Wind Telecom Mokuleia	E0016618	Kahuku FW Telecom Mokuleia Eng				16.608	20101219	201012	3970	
HECO	Communication	P0001832	First Wind Telecom Mokuleia	E0016720	Kahuku FW Telecom Mokuleia - VARIANCE-Kaala				3.776	20101219	201012	3970	
HECO	Communication	P0001833	First Wind Telecom Waialua	E0016620	Kahuku FW Telecom Waialua Eng				2.885	20101219	201012	3970	
HECO	Communication	P0001833	First Wind Telecom Waialua	E0016039	Kahuku FW Telecom Waialua Eng				3.26	20101219	201012	3970	
HECO	Communication	P0001833	First Wind Telecom Waialua	E0016098	Kahuku FW Telecom Waialua - O/E				27.363	20101219	201012	3970	

DISTRICT/CODE	Func Category	Proj/Ser#	PROJECT DESCRIPTION	JOB/TASK ID	DATE IN	AMOUNT	SumOfAMOUNT	DATE OF SERVICE	Addrs2CP	Util/Inv/ACCOUNT ID
HECO	Communication	P0001833	First Wind Telecom Waialua	EE016226	Const - First Wind Telecom Waialua	184,129	184,129	20101219	201012	3970
HECO	Communication	P0001833	First Wind Telecom Waialua	EE016227	Engr - First Wind Telecom Waialua	103,367	103,367	20101219	201012	3970
HECO	Communication	P0001833	First Wind Telecom Waialua	EE016221	Engr - First Wind Telecom Waialua - E&I	18,105	18,105	20101219	201012	3970
HECO	Communication	P0001833	First Wind Telecom Waialua	EE017574	Constr - First Wind Waialua - Grid Grid	9,701	9,701	20101219	201012	3970
HECO	Communication	P0001833	First Wind Telecom Waialua	EE018015	Constr - First Wind Telecom Waialua Batt	1,338	1,338	20101219	201012	3970
HECO	Communication	P0001834	First Wind Telecom MaunaKapu	EE016623	Kahuku FW Telecom MaunaKapu-Eng	9,623	9,623	20101219	201012	3970
HECO	Communication	P0001834	First Wind Telecom MaunaKapu	EE017273	FW Telecom-Mauna Kapu-VARIANCE-Mauna Kapu	4,983	4,983	20101219	201012	3970
HECO	Communication	P0001834	First Wind Telecom MaunaKapu	EE017274	FW Telecom-MaunaKapu-VAR-Kaala Repeater	1,930	1,930	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE016625	Kahuku FW Telecom Kahuku-E&I	2,883	2,883	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE016089	Engr - First Wind Telecom Kahuku - O/E	37,618	37,618	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE016224	Constr - First Wind Telecom Kahuku	147,053	147,053	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE016277	FW Telecom Kahuku-Corr-TLH	287	287	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE017542	Engr - First Wind Telecom Kahuku	77,736	77,736	20101219	201012	3970
HECO	Distribution	P0001840	First Wind Site Const Kawela	EE001840	First Wind Site Const Kawela	(0)	(0)	20101219	201012	3970
HECO	Distribution	P0001854	First Wind UFLS	EE017456	First Wind UFLS-CEIP-MANAGE	13,807	13,807	20101219	201012	3620
HECO	Distribution	P0001854	First Wind UFLS	EE017460	First Wind UFLS-Kahuku-Engineer	505	505	20101219	201012	3620
HECO	Distribution	P0001854	First Wind UFLS	EE016111	First Wind UFLS-CEIP-Engineer	75,041	75,041	20101219	201012	3620
HECO	Distribution	P0001854	First Wind UFLS	EE016112	First Wind UFLS-CEIP-Construct	6,117	6,117	20101219	201012	3620
HECO	Distribution	P0001854	First Wind UFLS	EE016126	First Wind UFLS-Kahuku-Engineer	23,445	23,445	20101219	201012	3620
HECO	Distribution	P0001854	First Wind UFLS	EE016127	First Wind UFLS-Ewa Nu-Engineer	44,834	44,834	20101219	201012	3620
HECO	Distribution	P0001854	First Wind UFLS	EE016165	Construct - First Wind UFLS - CEIP - SUB	24,747	24,747	20101219	201012	3530
HECO	Distribution	P0001854	First Wind UFLS	EE016166	Construct - First Wind UFLS-CEIP - RELAY	23,102	23,102	20101219	201012	3530
HECO	Distribution	P0001854	First Wind UFLS	EE016167	Construct - First Wind UFLS-CEIP - I & C	14,335	14,335	20101219	201012	3970
HECO	Distribution	P0001854	First Wind UFLS	EE016170	Construct-First Wind UFLS-KAHUKU - SUB	23,081	23,081	20101219	201012	3620
HECO	Distribution	P0001854	First Wind UFLS	EE016172	Construct-First Wind UFLS-KAHUKU - RELAY	14,072	14,072	20101219	201012	3620
HECO	Distribution	P0001854	First Wind UFLS	EE016174	Construct-First Wind UFLS-KAHUKU - I&C	18,672	18,672	20101219	201012	3970
HECO	Distribution	P0001854	First Wind UFLS	EE016175	Construct-First Wind UFLS-KAHUKU-RE OP ENGR	2,852	2,852	20101219	201012	3530
HECO	Distribution	P0001854	First Wind UFLS	EE016176	Construct-First Wind UFLS-EWA NUI-SUB	4,830	4,830	20101219	201012	3530
HECO	Distribution	P0001854	First Wind UFLS	EE016177	Construct-First Wind UFLS-EWA NUI-RELAY	14,057	14,057	20101219	201012	3530
HECO	Distribution	P0001854	First Wind UFLS	EE016177	Construct-First Wind UFLS-EWA NUI - I&C	7,098	7,098	20101219	201012	3970
HECO	Distribution	P0001854	First Wind UFLS	SI00239	FW UFLS - Hila Install - Elec Engr	997	997	20101219	201012	3620

(a)	Existing Degr.	Rate	(b)	2011 Depreciation Exp.
941,046	0.02888	Att. 4.1	5	28,118
754,224	0.04322	Att. 4.1	5	32,598
872,144	0.05300	Att. 4.1	5	45,224
				<u>106,940</u>

Transmission  
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2,567,414

**HECO - CIAC**

	<b>2008 balance</b>	<b>2009 amort</b>	<b>2009 balance</b>	<b>2010 amort</b>	<b>2010 balance (a)</b>	<b>2011 amort (b)</b>
1981	274,236.00	91,412.00	182,824.00	91,412.00	91,412.00	91,412.00
1982	338,712.00	84,678.00	254,034.00	84,678.00	169,356.00	84,678.00
1983	513,525.00	102,705.00	410,820.00	102,705.00	308,115.00	102,705.00
1984	444,294.00	74,049.00	370,245.00	74,049.00	296,196.00	74,049.00
1985	525,644.00	75,092.00	450,552.00	75,092.00	375,460.00	75,092.00
1986	720,736.00	90,092.00	630,644.00	90,092.00	540,552.00	90,092.00
1987	1,362,393.00	151,377.00	1,211,016.00	151,377.00	1,059,639.00	151,377.00
1988	1,912,980.00	191,298.00	1,721,682.00	191,298.00	1,530,384.00	191,298.00
1989	1,579,699.00	143,609.00	1,436,090.00	143,609.00	1,292,481.00	143,609.00
1990	8,625,695.81	718,808.00	7,906,887.81	718,808.00	7,188,079.81	718,808.00
	1,303,408.00	0.00	1,303,408.00	0.00	1,303,408.00	0.00
1991	4,148,765.04	319,136.00	3,829,629.04	319,136.00	3,510,493.04	319,136.00
1992	3,748,682.36	267,763.00	3,480,919.36	267,763.00	3,213,156.36	267,763.00
1993	8,099,598.80	539,973.00	7,559,625.80	539,973.00	7,019,652.80	539,973.00
1994	5,890,825.17	368,176.00	5,522,649.17	368,176.00	5,154,473.17	368,176.00
1995	4,503,276.97	264,898.00	4,238,378.97	264,898.00	3,973,480.97	264,898.00
1996	3,492,740.60	194,041.00	3,298,699.60	194,041.00	3,104,658.60	194,041.00
1997	2,632,237.99	138,538.00	2,493,699.99	138,538.00	2,355,161.99	138,538.00
1998	3,837,010.37	191,850.00	3,645,160.37	191,850.00	3,453,310.37	191,850.00
1999	4,284,116.82	204,005.00	4,080,111.82	204,005.00	3,876,106.82	204,005.00
2000	2,859,997.71	130,000.00	2,729,997.71	130,000.00	2,599,997.71	130,000.00
2001	3,585,919.73	155,910.00	3,430,009.73	155,910.00	3,274,099.73	155,910.00
2002	5,048,618.74	210,359.00	4,838,259.74	210,359.00	4,627,900.74	210,359.00
2003	5,445,611.18	217,825.00	5,227,788.16	217,825.00	5,009,961.16	217,825.00
2004	3,766,633.43	144,871.00	3,621,762.43	144,871.00	3,476,891.43	144,871.00
2005	12,477,027.48	462,112.00	12,014,915.48	462,112.00	11,552,803.48	462,112.00
2006	10,681,650.25	381,488.00	10,300,162.25	381,488.00	9,918,674.25	381,488.00
2007	11,297,046.19	389,553.00	10,907,493.19	389,553.00	10,517,940.19	389,553.00
2008	10,357,491.69	345,250.00	10,012,241.69	345,250.00	9,666,991.69	345,250.00
2009			8,061,554.04	268,718.47	7,792,835.57	268,718.47
2010				14,552,305.31	485,076.84	
-adj 92-96 GET	(165,395.00)	(8,705.00)	(156,690.00)	(8,705.00)	(147,985.00)	(8,705.00)
-adj 97 GET	(60,736.80)	(3,196.00)	(57,540.80)	(3,196.00)	(54,344.80)	(3,196.00)
-adj 98 GET	(74,873.17)	(3,743.00)	(71,130.17)	(3,743.00)	(67,387.17)	(3,743.00)
-adj 99 GET	(97,497.67)	(4,643.00)	(92,854.67)	(4,643.00)	(88,211.67)	(4,643.00)
-adj 00 GET	(92,902.23)	(4,223.00)	(88,679.23)	(4,223.00)	(84,456.23)	(4,223.00)
-adj 01 GET	(137,183.50)	(5,964.00)	(131,219.50)	(5,964.00)	(125,255.50)	(5,964.00)
-adj 02 GET	(147,862.50)	(6,161.00)	(141,701.50)	(6,161.00)	(135,540.50)	(6,161.00)
-adj 03 GET	(199,810.70)	(7,984.00)	(191,826.70)	(7,984.00)	(183,642.70)	(7,984.00)
-adj 04 GET	(138,609.45)	(5,331.00)	(133,278.45)	(5,331.00)	(127,947.45)	(5,331.00)
-adj 05 GET	(283,050.23)	(10,483.00)	(272,567.23)	(10,483.00)	(262,084.23)	(10,483.00)
-adj 06 GET	(616,674.53)	(22,024.00)	(594,650.53)	(22,024.00)	(572,626.53)	(22,024.00)
-adj 07 GET	(494,285.90)	(17,044.00)	(477,241.90)	(17,044.00)	(460,197.90)	(17,044.00)
-adj 08 GET	(402,432.23)	(13,415.00)	(389,017.23)	(13,415.00)	(375,602.23)	(13,415.00)
-adj 09 GET			(360,621.20)	(12,020.71)	(348,600.49)	(12,020.71)
-adj 10 GET				(524,224.27)	(17,474.14)	
<b>In kind CIAC</b>						
1988	528,999.00	52,901.00	476,098.00	52,901.00	423,197.00	52,901.00
1989	576,760.00	52,434.00	524,326.00	52,434.00	471,892.00	52,434.00
1990	291,648.00	24,305.00	267,343.00	24,305.00	243,038.00	24,305.00
1991	610,262.00	46,944.00	563,318.00	46,944.00	516,374.00	46,944.00
1992	1,684,712.00	120,337.00	1,564,375.00	120,337.00	1,444,038.00	120,337.00
1993	1,418,486.86	94,566.00	1,323,920.86	94,566.00	1,229,354.86	94,566.00
1994	2,342,269.39	146,391.00	2,195,878.39	146,391.00	2,049,487.39	146,391.00
1995	4,742,990.17	279,000.00	4,463,990.17	279,000.00	4,184,990.17	279,000.00
1995 adjustmt	(98,679.78)	(5,805.00)	(92,874.78)	(5,805.00)	(87,069.78)	(5,805.00)
1996	2,387,683.41	132,649.00	2,255,034.41	132,649.00	2,122,385.41	132,649.00
1997	1,232,895.45	64,889.00	1,168,006.45	64,889.00	1,103,117.45	64,889.00
1998	2,360,668.69	118,034.00	2,242,534.69	118,034.00	2,124,600.69	118,034.00
1999	1,849,482.51	88,071.00	1,761,411.51	88,071.00	1,673,340.51	88,071.00
2000	3,784,249.58	172,012.00	3,612,237.58	172,012.00	3,440,225.58	172,012.00
2001	1,562,321.31	67,927.00	1,494,394.31	67,927.00	1,426,467.31	67,927.00
2002	3,398,564.44	141,607.00	3,256,957.44	141,607.00	3,115,350.44	141,607.00
2003	5,120,839.09	204,834.00	4,918,005.09	204,834.00	4,711,171.09	204,834.00
2004	3,126,819.48	120,262.00	3,006,557.48	120,262.00	2,886,295.48	120,262.00
2005	5,310,277.98	196,677.00	5,113,600.98	196,677.00	4,916,923.98	196,677.00
2006	4,737,891.77	169,210.00	4,566,681.77	169,210.00	4,399,471.77	169,210.00
2007 Adj	0.00	0.00	0.00	0.00	0.00	0.00
2007	9,324,547.41	321,536.00	9,003,011.41	321,536.00	8,681,475.41	321,536.00
2008	1,387,009.47	46,234.00	1,340,775.47	46,234.00	1,294,541.47	46,234.00
2009			2,461,967.87	82,065.60	2,379,902.27	82,065.60
2010					5,316,086.58	177,202.89
GL balance	178,757,253.64	9,335,034.00	179,585,120.35	9,614,759.38	189,314,528.61	10,174,535.95

(a) Actual balance at 12/31/10 agrees to Attachment 4.5 page 13

(b) Total annual amortization per Attachment 4.5 page 16

**Hawaiian Electric Company, Inc.  
Revenue Decoupling - Rate Base RAM  
2010 Major Projects**

Description	In-Service Date	Amount	Reference
Beckoning Point Substation & 46KV Amount Qualifying for 2010 RAM CIAC	May-10	2,454,729 (a) - (b)	Docket No. 2008-0321 (D&O dated 10/1/09) Note A Not applicable
Kamoku 46kv UG Alt Ph 1 (EOTP) Amount Qualifying for 2010 RAM CIAC	Jun-10	15,497,000 (a) - (b)	Docket No. 03-0417 (D&O 23747 dated 10/19/07) Note B Not applicable
Kahe 3 Biodiesel Amount Qualifying for 2010 RAM CIAC	Sep-10	4,686,000 (a) - (b)	Docket No. 2009-0155 (D&O dated 6/10/10) Attachment 4.5 page 35 Not applicable
<b>Total Major CIP</b> Amount Qualifying for 2010 RAM CIAC		22,637,729 $\Sigma(a)$ - $\Sigma(b)$	

Note A:

Per Docket No. 2008-0321	
Total Project Cost	3,232,567
Customer Advance	(777,838)
Amount Qualifying for 2010 RAM	<u>2,454,729</u>

Note B:

Per Docket No. 03-0417 HECO-R-902	
Total Phase 1 Costs	41,893,000
Phase 1 Planning Costs	(12,836,000)
Phase 1 AFUDC on Planning Costs	<u>(13,560,000)</u>
Amount Qualifying for 2010 RAM	<u>15,497,000</u>

**Hawaiian Electric Company, Inc.  
Revenue Decoupling - Rate Base RAM  
2011 Major Projects**

Description	Estimated In-Service Date	Amount	Reference
Waiau 8 Boiler Control Upgrade	May-11		Per Docket No. 2007-0365 (D&O 23983, dated 1/26/2008)
Amount Qualifying for 2011 RAM		3,987,730 (a)	Attachment 4.5 page 36
CIAC		- (b)	Not applicable
Beckoning Point Substation & 46KV	May-10		Docket No. 2008-0321 (D&O dated 10/1/2009)
2011 Straggling costs		10,019 (a)	Pillar Budget files
CIP0 Kahe RO Water Project	Aug-09		Docket No. 05-0146 (D&O dated 06/27/2007)
2011 Straggling costs		28,000 (a)	Pillar Budget files
<b>Total Major CIP</b>			
Amount Qualifying for 2011 RAM		4,025,749 $\Sigma(a)$	
CIAC		- $\Sigma(b)$	

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**HAWAIIAN ELECTRIC CO., INC.**  
**ACCUMULATED DEFERRED INCOME TAXES (ADIT)**  
**12/31/10 ACTUAL**

	Source	FED	STATE	TOTAL
Actual 12/31/10 ADIT	Att. 4.3 pg 9 & 12	183,536,789.18	25,194,868.32	208,731,657.50
Exclude FIN 48 tax	Att. 4.3 pg 8 & 11	5,620,585.00	1,776,139.00	7,396,724.00
<b>Subtotal</b>		<b>189,157,374.18</b>	<b>26,971,007.32</b>	<b>216,128,381.50</b>
ADIT on First Wind	Att. 4.3 pg 2	(440,737.42)	(5,507.19)	(446,244.60)
ADIT on Major Project excess depreciation	Att. 4.3 pg 3	(2,419,597.10)	(331,324.18)	(2,750,921.28)
<b>Actual 12/31/10 ADIT - revised</b>		<b>186,297,039.66</b>	<b>26,634,175.96</b>	<b>212,931,215.62</b>

<b>FEDERAL DEFERRED TAXES</b>			<b>2010</b>
1 State Tax Depreciation			91,557
2 Effective Federal Tax Rate			32.89473684%
3 Federal Deferred Tax on State Deduction	Line 1 * Line 2		<u>30,117</u>
4 Addback State Tax Depreciation	Line 1		(91,557)
5 Federal Tax Depreciation			<u>1,264,758</u>
6 Federal State Difference	Line 4 + Line 5		<u>1,173,201</u>
7 Tax Rate on Federal Only Adjustment			35%
8 Federal Deferred Tax Adjustment	Line 6 * Line 7		<u>410,620</u>
9 Total Federal Deferred Taxes	Line 3 + Line 8		<u>440,737</u>
<b>STATE DEFERRED TAXES</b>			
10 State Tax Depreciation	Line 1		91,557
11 Effective State Tax Rate			6.0150376%
12 Total State Deferred Taxes	Line 10 * Line 11		<u>5,507</u>
13 <b>TOTAL DEFERRED TAXES</b>	Line 9 + Line 12		<u>446,245</u>

(A) <u>Calculation of Depreciation Adjustment</u>	Life	Yr 1 depr rate	50% bonus	reg depr	total fed depr	total state depr
First Wind personal property (subject to 50% bonus)	20	2,437,821	0.0375	1,218,911	45,709	1,264,620
First Wind real property	39	129,593	0.00107		139	139
Total First Wind plant additions		<u>2,567,414</u>			<u>1,264,758</u>	<u>91,557</u>

NOTE> First Wind plant adds of \$2,567,414 was included in the 2010 actuals. Upon further review, First Wind should not have been included because it will be recovered through an REIP program.  
Thus, we will reverse out the deferred taxes on the tax depreciation of First Wind.

HAWAIIAN ELECTRIC CO., INC.  
ADIT ON EXCESS DEPRECIATION

	source	CIP 2009	CIP 2010	EOTP 2010	K-3 BIOFUEL 2010	TOTAL
<b>FEDERAL DEFERRED TAXES</b>						
1	State Tax Depreciation		1,451,953	2,845,444 (412,015)	1,612,706	10,176
2	Book Depreciation		Line 1 + Line 2	1,451,953 2,433,429	1,612,706	10,176
3	Subtotal					
4	Effective Federal Tax Rate		32.89473684%	32.89473684%	32.89473684%	32.89473684%
5	Federal Deferred Tax on State Depreciation	Line 3 * Line 4	477,616	800,470	530,495	3,347
6	Addback State Tax Depreciation	Line 3	(1,451,953) 2,971,895	(2,433,429) 2,800,522 (412,015)	(1,612,706) 1,612,706	(10,176) 271,351
7	Federal Tax Depreciation	Line 2	-			
8	Book Depreciation	Line 6 + 7 + 8	1,519,942	(44,922)	-	261,175
9	Federal State Difference					
10	Tax Rate on Federal Only Adjustment		35%	35%	35%	35%
11	Federal Deferred Tax Adjustment	Line 9 * Line 10	531,980	(15,723)	-	91,411
12	Total Federal Deferred Taxes	Line 5 + Line 11	1,009,596	784,747	530,495	94,758
<b>STATE DEFERRED TAXES</b>						
13	State Tax Depreciation	Line 1	1,451,953	2,845,444 (412,015)	1,612,706	10,176
14	Book Depreciation	Line 2	-			
15	Subtotal	Line 1 + Line 2	1,451,953 2,433,429		1,612,706	10,176
16	Effective State Tax Rate		6.0150376%	6.0150376%	6.0150376%	6.0150376%
17	Total State Deferred Taxes	Line 15 * Line 16	87,336	146,372	97,005	612
18	<b>TOTAL DEFERRED TAXES</b>	Line 12 + Line 17	1,096,932	931,119	627,500	95,370
						2,750,921

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HAWAIIAN ELECTRIC CO., INC.  
TAX DEPRECIATION ON MAJOR PROJECTS

Project Number	Date In Service	Description	Total Project Costs	PUC Approved Cost	Difference	Functional Plant	Tax Life	Tax Rate	1st year 2010 Fed	1st year 2010 State	1st year Tax Rate	1st year Tax Depr
P0000922	06/2010	Kamoku 46kV UG Alt Phase 1 (EOTP)	58,502,483	15,497,000	43,005,483	Transmission	20 yr	3.75%	1,612,706	3.75%	1,612,706	
P0001577	09/2010	K3 Biofuel Co-Firing	4,957,351	4,686,000	271,351	Steam Prod	20 yr	100%	271,351	3.75%	10,176	

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**HAWAIIAN ELECTRIC COMPANY, INC.**  
**SUMMARY OF DEFERRED INCOME TAX LIABILITY**  
**BALANCES FOR RATE BASE PURPOSES**  
**FEDERAL AND STATE**

(\$ Thousand)

	A Actual Balance 12/31/2007	B Actual 2008 Adds (Amort), Net	C Actual Balance 12/31/2008	D Actual 2009 Adds (Amort), Net	E Actual Balance 12/31/2009
Accelerated Depreciation over Straight Line					
1 FEDERAL	56,373	2,155	58,528	8,701	67,229
2 STATE	6,553	(529)	6,024	(122)	5,902
3 Subtotal	62,926	1,626	64,552	8,579	73,131
All Other Items					
4 FEDERAL	63,782	2,669	66,451	(312)	66,139
5 STATE	11,686	580	12,266	(231)	12,035
6 Subtotal	75,468	3,249	78,717	(543)	78,174
7 TOTAL	138,394	4,875	143,269	8,036	151,305

	Actual Balance 12/31/2009	Actual 2010 Adds (Amort), Net	Actual Balance 12/31/2010	Revised Existing Depreciation Rates		Revised Depreciation Study Rates	
				Estimate	Estimate Balance 12/31/2011	Estimate	Estimate Balance 12/31/2011
				2011 Adds (Amort), Net			
Accelerated Depreciation over Straight Line							
8 FEDERAL	67,229	19,052	86,281	33,831	120,112	34,044	120,325
9 STATE	5,902	760	6,662	763	7,425	802	7,464
10 Subtotal	73,131	19,812	92,943	34,594	127,537	34,846	127,789
All Other Items							
11 FEDERAL	66,139	31,117	97,256	13,822	111,078	14,213	111,469
12 STATE	12,035	6,497	18,532	2,085	20,617	2,157	20,689
13 Subtotal	78,174	37,614	115,788	15,907	131,695	16,370	132,158
14 TOTAL	151,305	57,426	208,731	50,501	259,232	51,216	259,947
15 AVERAGE BALANCE				233,982		234,339	

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**HAWAIIAN ELECTRIC CO., INC.**  
**DEFERRED INCOME TAXES**  
**FEDERAL**

LIAB (DR)CR	Actual 12-31-09	Estimate 2010	Update to	
			Actual 2010	Actual 12-31-10
28310 State ITC	(9,765,061.77)	(1,199,028.26)	246,626.64	(10,717,463.39)
28311 Unearned Lease	(1,238.63)	420.66	-	(817.97)
28312 Accrued Vacation	1,188,845.47	-	6,008.88	1,194,854.35
28313 Uncollectible Acct	(1,451,194.61)	-	818,693.09	(632,501.52)
28314 Directors Def Comp	(27,122.65)	-	997.37	(26,125.28)
28317 Discounted Work Comp	(846,886.41)	-	40,668.36	(806,218.05)
28319 Cap to Construction	36,020,900.98	3,164,408.59	(640,271.13)	38,545,038.44
28321 Pension	2,354,017.75	(1,303,739.66)	7,635,522.67	8,685,800.76
28323 Excess Benefit Plan	(489,341.67)	-	(55,808.23)	(545,149.90)
28326 Def Exec Comp	(45,745.19)	-	2,515.47	(43,229.72)
28327 Software	(71,021.43)	90,276.03	(4,599.66)	14,654.94
28328 G/L ACRS Retirements	9,682,471.72	328,947.00	220,337.15	10,231,755.87
28330 EICP	(214,727.14)	-	(93,599.24)	(308,326.38)
28331 CIAC	(30,857,050.84)	(1,395,905.30)	(67,802.40)	(32,320,758.54)
28332 Customer Advances	(354,979.97)	-	(325,484.74)	(680,464.71)
28333 Capitalized Interest	(17,624,828.43)	(52,620.53)	822,971.62	(16,854,477.34)
28335 Connection Fees	16,019.85	-	-	16,019.85
28336 Nondeductible Interest	(384,293.00)	-	301,946.37	(82,346.63)
28337 Supplemental Benefits -SERP	(720,761.33)	-	55,511.93	(665,249.40)
28338 Nondeductible Vacation	(1,084,196.31)	-	-	(1,084,196.31)
28340 LTIP	(238,412.97)	-	(321,924.31)	(560,337.28)
28341 Waipahu Baseyard Int	(111,861.55)	-	-	(111,861.55)
28347 Waiau Water Well Pmts	(324,369.24)	-	21,242.70	(303,126.54)
28348 Nonutil Bad Debt	8,047.29	-	-	8,047.29
28401 Genl/Auto (& Accidents)	(193,142.13)	-	(289,850.00)	(482,992.13)
28403 CWIP Debt Transition	424,494.42	(20,889.45)	0.00	403,604.97
28404 CWIP Equity Trans	1,301,658.34	(63,795.98)	(0.00)	1,237,862.36
28405 Iolani Ct Plaza Sale	(157,505.23)	57,703.73	(70,547.46)	(170,348.96)
28406 Kaonohi Sale	37,751.68	-	-	37,751.68
28407 FAS 109 Flow Through	1,655,171.84	(275,857.92)	0.00	1,379,313.92
28408 Plant Transition	13,837,049.75	(864,818.44)	0.00	12,972,231.31
28409 CWIP Equity Net	21,992,602.35	1,049,936.05	(45,720.09)	22,996,818.31
28410 CWIP Equity Grossup	14,007,220.50	668,729.53	(29,120.06)	14,646,829.97
28411 CWIP Debt	10,415,692.29	426,999.47	(50,263.00)	10,792,428.76
28412 General/Auto Liability - Legal	(43,158.14)	-	(21,973.66)	(65,131.80)
28413 Post Retirement Ben	(1,270,720.53)	104,719.62	748,224.96	(417,775.95)
28414 Reg Liab Federal ITC	(943,863.07)	285,052.64	-	(658,810.43)
28418 IRP & DSM Costs	10,971.54	5,379.09	6,793.37	23,144.00
28419 Reg Liab Excess 283	(389,608.61)	18,947.35	0.00	(370,661.26)
28422 Miscellaneous	(28,511.61)	-	(93,997.04)	(122,508.65)
28427 Prepaid Expenses	797,971.58	14,543.73	(45,082.31)	767,433.00
28430 FMB X Premium	151,601.94	(21,918.73)	-	129,683.21
28434 EEO Claims	(3,848.00)	-	(9,515.47)	(13,363.47)
28435 Differential	758,798.92	(73,074.92)	(679.52)	685,044.48
28436 TIP	(278,702.11)	-	159,146.47	(119,555.64)
28440 Kalaeloa	(120,884.06)	15,153.83	0.00	(105,730.23)
28441 Sun Power	577.09	-	-	577.09
28442 Overhaul	(29,565.95)	11,355.07	(55,606.00)	(73,816.88)
28512 Revenue Bond Cost Amort	1,020,690.97	(155,127.06)	508,812.00	1,374,375.91
28516 Honolulu Harbor Reserve	(475,784.16)	-	49,517.76	(426,266.40)
28520 Deferred Comp - restricted stock	58,824.59	-	(87,879.08)	(29,054.49)
28522 Knapp lawsuit	(3,276.52)	-	(2,473.68)	(5,750.20)
28526 Emissions Fees	(360,374.99)	(86,202.86)	-	(446,577.85)
28528 Substation land - Kulouou	(184.22)	-	183.88	(0.34)

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**HAWAIIAN ELECTRIC CO., INC.**  
**DEFERRED INCOME TAXES**  
**FEDERAL**

LIAB (DR)CR	Actual 12-31-09	Estimate 2010	Update to Actual 2010		Actual 12-31-10
28530 AES Hawaii PPA	(39,506.54)	3,948.68	(10,507.24)	(46,065.10)	
28532 CIS Project Costs	1,297,529.93	684,515.68	(806,049.43)	1,175,996.18	
28536 Substation land - Queen Emma	(10,069.12)	7,674.71	2,210.26	(184.15)	
28538 Rate Case - TY 2005	305,995.63	-	58,669.43	364,665.06	
28540 Kalaeloa PPA	(49,263.21)	7,778.61	0.00	(41,484.60)	
28542 QUIPS amortization	466,201.98	(25,761.60)	0.00	440,440.38	
28544 OPEB Exec Life	(3,735,083.57)	-	48,037.44	(3,687,046.13)	
28546 Percentage Repairs Allowance	4,530,848.19	73,061.23	1,759,339.17	6,363,248.59	
28548 Capitalized Interest (D&T)	5,537,884.05	(6,297.15)	(409,664.18)	5,121,922.72	
28550 E-Business hardware	32,884.47	-	-	32,884.47	
28552 OMS project costs	287,906.37	(58,921.74)	-	228,984.63	
28554 Substation Land - Palolo	(5,074.61)	2,899.77	-	(2,174.84)	
28556 Substation Land - Waianae	(32,734.78)	13,408.87	321.82	(19,004.09)	
28558 Substation Land - Aiea	(22,659.36)	7,723.09	185.36	(14,750.91)	
28560 Solar tax credit	(1,050.66)	-	-	(1,050.66)	
28562 Revenue Adj - TY 2005	-	-	-	-	
28564 HR Suites project costs	402,496.00	112,166.76	626,595.52	1,141,258.28	
28566 §481(a) adjustment (CIAC)	3,368,380.20	(3,368,380.19)	-	0.01	
28568 Solar Saver Program	(480,427.26)	39,008.32	5,153.25	(436,265.69)	
28570 Pension Tracker	1,582,510.07	(2,896,931.62)	-	(1,314,421.55)	
28572 OPEB Tracker	(476,546.84)	(1,621,118.58)	-	(2,097,665.42)	
28574 Substation Land - Barber's Pt	(9,221.40)	2,555.82	61.36	(6,604.22)	
28576 Substation Land - Haiku	(79,343.13)	20,113.44	482.73	(58,746.96)	
28578 Moving Expense	-	-	-	-	
28580 Blue Earth reserve	(191,307.35)	-	89,387.37	(101,919.98)	
28582 HMSC Premium	(408,095.92)	55,263.10	37,615.35	(315,217.47)	
28584 RO Water Pipeline	(15,759.85)	(37,823.64)	-	(53,583.49)	
28586 Big Wind costs	783,448.46	644,813.09	(334,244.22)	1,094,017.33	
28588 Microsoft Reserve	-	-	-	-	
28590 Repairs Deduction	-	-	29,741,078.87	29,741,078.87	
AOCI - NQ Pension	(230,456.53)	-	(289,506.00)	(519,962.53)	
AOCI - OPEB Exec Life	1,022,231.32	-	(223,357.00)	798,874.32	
FIN 48 tax	(2,987,773.00)	23,026.00	(2,655,838.00)	(5,620,585.00)	
FIN 48 interest	(162,888.00)	-	-	(162,888.00)	
<b>TOTAL ACCOUNT 283</b>	<b>57,510,213.93</b>	<b>(5,587,684.07)</b>	<b>36,973,495.47</b>	<b>88,896,025.33</b>	
<b>ACCOUNT 282 DEPR</b>	<b>67,228,640.06</b>	<b>392,372.92</b>	<b>18,659,621.03</b>	<b>86,280,634.01</b>	
<b>TOTAL FEDERAL DEFERRED TAX LIABILITY (before rate case adjustments)</b>	<b>124,738,853.99</b>	<b>(5,195,311.15)</b>	<b>55,633,116.50</b>	<b>175,176,659.34</b>	
<b>TOTAL ACCOUNT 283</b>	<b>57,510,213.93</b>	<b>(5,587,684.07)</b>	<b>36,973,495.47</b>	<b>88,896,025.33</b>	
<b><u>Less Rate Case Adjustments:</u></b>					
28312 Accrued Vacation	1,188,845.47	-	6,008.88	1,194,854.35	
28313 Uncollectible Account	(1,451,194.61)	-	818,693.09	(632,501.52)	
28314 Directors Def Comp	(27,122.65)	-	997.37	(26,125.28)	
28317 Discounted Work Comp	(846,886.41)	-	40,668.36	(806,218.05)	
28323 Excess Benefit Plan	(489,341.67)	-	(55,808.23)	(545,149.90)	
28326 Def Exec Comp (Def LTIP)	(45,745.19)	-	2,515.47	(43,229.72)	
28330 EICP	(214,727.14)	-	(93,599.24)	(308,326.38)	
28336 Nondeductible Interest	(384,293.00)	-	301,946.37	(82,346.63)	
28337 Supplemental Benefits -SERP	(720,761.33)	-	55,511.93	(665,249.40)	

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**HAWAIIAN ELECTRIC CO., INC.**  
**DEFERRED INCOME TAXES**  
**FEDERAL**

LIAB (DR)CR	Actual 12-31-09	Estimate 2010	Update to	
			Actual 2010	Actual 12-31-10
28338 Nondeductible Vacation	(1,084,196.31)	-	-	(1,084,196.31)
28340 LTIP	(238,412.97)	-	(321,924.31)	(560,337.28)
28341 Waipahu Baseyard Int	(111,861.55)	-	-	(111,861.55)
28347 Waiau Water Well Pmts	(324,369.24)	-	21,242.70	(303,126.54)
28348 Nonutil Bad Debt	8,047.29	-	-	8,047.29
28401 Genl/Auto (& Accidents)	(193,142.13)	-	(289,850.00)	(482,992.13)
28412 Genl/Auto Legal	(43,158.14)	-	(21,973.66)	(65,131.80)
28418 IRP Costs	10,971.54	5,379.09	6,793.37	23,144.00
28434 EEO Claims	(3,848.00)	-	(9,515.47)	(13,363.47)
28436 TIP	(278,702.11)	-	159,146.47	(119,555.64)
28516 Honolulu Harbor Reserve	(475,784.16)	-	49,517.76	(426,266.40)
28520 Deferred Comp - restricted stock	58,824.59	-	(87,879.08)	(29,054.49)
28522 Knapp lawsuit	(3,276.52)	-	(2,473.68)	(5,750.20)
28538 Rate Case - TY 2005	305,995.63	-	58,669.43	364,665.06
28544 OPEB Exec Life	(3,735,083.57)	-	48,037.44	(3,687,046.13)
28550 E-Business hardware	32,884.47	-	-	32,884.47
28580 Blue Earth reserve	(191,307.35)	-	89,387.37	(101,919.98)
28588 Microsoft Reserve	-	-	-	-
AOCI - NQ Pension	(230,456.53)	-	(289,506.00)	(519,962.53)
AOCI - OPEB Exec Life	1,022,231.32	-	(223,357.00)	798,874.32
FIN 48 interest	(162,888.00)	-	-	(162,888.00)
<b>FED DEF'D TAX LIABILITY - OTHER</b>	<b>66,138,972.20</b>	<b>(5,593,063.16)</b>	<b>36,710,246.13</b>	<b>97,256,155.17</b>
<b>FED DEF'D TAX LIAB - ACCEL DEPR</b>	<b>67,228,640.06</b>	<b>392,372.92</b>	<b>18,659,621.03</b>	<b>86,280,634.01</b>
<b>TOTAL FEDERAL DEFERRED TAX LIABILITY (after rate case adjustments)</b>	<b>133,367,612.26</b>	<b>(5,200,690.24)</b>	<b>55,369,867.16</b>	<b>183,536,789.18</b>

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**HAWAIIAN ELECTRIC CO., INC.**  
**DEFERRED INCOME TAXES**  
**STATE**

LIAB (DR)CR	Actual 12-31-09	Estimate 2010	Update to Actual 2010		Actual 12-31-10
28310 State ITC	(1,774,785.29)	(219,249.76)	51,048.41	(1,942,986.64)	
28311 Unearned Lease	(148.51)	76.92	0.00	(71.59)	
28312 Accrued Vacation	220,911.82	0.00	1,098.77	222,010.59	
28313 Uncollectible Acct	(260,720.93)	0.00	149,703.16	(111,017.77)	
28314 Directors Def Comp	(4,057.55)	0.00	182.38	(3,875.17)	
28317 Discounted Work Comp	(155,111.43)	0.00	7,436.46	(147,674.97)	
28319 Cap to Construction	6,595,379.19	578,771.32	(116,659.93)	7,057,490.58	
28321 Pension	430,449.10	(238,396.89)	1,396,206.82	1,588,259.03	
28323 Excess Benefit Plan	(84,952.16)	0.00	(10,204.89)	(95,157.05)	
28326 Def Exec Comp	(8,365.93)	0.00	459.97	(7,905.96)	
28327 Software	5,983.16	26,653.27	(9,491.16)	23,145.27	
28328 G/L ACRS Retirements	1,780,054.93	60,150.00	46,084.27	1,886,289.20	
28330 EICP	(23,093.99)	0.00	(17,115.21)	(40,209.20)	
28331 CIAC	(5,840,319.37)	(253,106.37)	(12,397.96)	(6,105,823.70)	
28332 Customer Advances	(64,247.82)	0.00	(59,516.91)	(123,764.73)	
28333 Capitalized Interest	(3,468,315.12)	2,509.28	117,835.95	(3,347,969.89)	
28335 Connection Fees	8,444.14	0.00	0.00	8,444.14	
28336 Nondeductible Interest	(70,270.11)	0.00	55,212.77	(15,057.34)	
28337 Supplemental Benefits -SERP	(121,511.74)	0.00	10,150.70	(111,361.04)	
28338 Nondeductible Vacation	(195,605.00)	0.00	0.00	(195,605.00)	
28340 LTIP	(43,595.35)	0.00	(58,865.86)	(102,461.21)	
28341 Waipahu Baseyard Int	(20,452.91)	0.00	0.00	(20,452.91)	
28347 Waiau Water Well Pmts	(59,329.00)	0.00	3,884.36	(55,444.64)	
28348 Nonutil Bad Debt	1,317.69	0.00	0.00	1,317.69	
28350 Loss Adj Exp	24,509.00	0.00	0.00	24,509.00	
28401 Genl/Auto (& Accidents)	(35,317.46)	0.00	(53,000.87)	(88,318.33)	
28403 CWIP Debt Transition	77,624.03	(3,819.77)	0.00	73,804.26	
28404 CWIP Equity Trans	238,018.14	(11,665.49)	0.00	226,352.65	
28405 Iolani Ct Plaza Sale	(12,521.71)	10,551.48	(12,149.17)	(14,119.40)	
28406 Kaonohi Sale	6,942.61	0.00	0.00	6,942.61	
28407 FAS 109 Flow Through	302,615.39	(50,442.34)	0.00	252,173.05	
28408 Plant Transition	2,530,234.31	(158,137.41)	0.00	2,372,096.90	
28409 CWIP Equity Net	4,021,489.31	191,987.32	(8,360.20)	4,205,116.43	
28410 CWIP Equity Grossup	2,561,309.78	122,281.34	(5,324.78)	2,678,266.34	
28411 CWIP Debt	1,908,117.75	78,079.50	(9,190.90)	1,977,006.35	
28412 General/Auto Liability - Legal	(5,462.90)	0.00	(4,018.02)	(9,480.92)	
28413 Post Retirement Ben	(252,324.34)	19,148.63	136,817.69	(96,358.02)	
28414 Reg Liab Federal ITC	(173,429.89)	52,123.65	0.00	(121,306.24)	
28418 IRP & DSM Costs	1,769.44	1,461.74	296.36	3,527.54	
28419 Reg Liab Excess 283	(71,882.74)	3,464.64	0.00	(68,418.10)	
28422 Miscellaneous	16,970.02	0.00	(17,188.03)	(218.01)	
28427 Prepaid Expenses	145,913.96	2,659.41	(8,243.58)	140,329.79	
28430 FMB X Premium	27,722.71	(4,007.97)	0.00	23,714.74	
28432 Coal Gasif Costs	11,273.00	0.00	0.00	11,273.00	
28434 EEO Claims	(703.66)	0.00	(1,739.96)	(2,443.62)	
28435 Differential	138,751.03	(13,362.20)	(124.26)	125,264.57	
28436 TIP	(51,222.35)	0.00	29,100.91	(22,121.44)	
28437 HACOA	1,533.00	0.00	0.00	1,533.00	
28438 BONY Rev	74.00	0.00	0.00	74.00	
28439 GAQS Tel	255.00	0.00	0.00	255.00	
28440 Kalaeloa	26,806.67	2,770.97	0.00	29,577.64	
28441 Sun Power	(0.28)	0.00	0.00	(0.28)	
28442 Overhaul	(5,406.80)	2,076.35	(10,168.00)	(13,498.45)	
28443 EV Tax Credit	74.00	0.00	0.00	74.00	

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**HAWAIIAN ELECTRIC CO., INC.**  
**DEFERRED INCOME TAXES**  
**STATE**

LIAB (DR)CR	Actual 12-31-09	Estimate 2010	Update to Actual 2010	Actual 12-31-10
28512 Revenue Bond Cost Amort	186,640.22	(28,365.95)	93,040.00	251,314.27
28514 APPRISE Software	22,551.00	0.00	0.00	22,551.00
28516 Honolulu Harbor Reserve	(87,001.27)	0.00	9,054.63	(77,946.64)
28520 Deferred Comp - restricted stock	10,756.64	0.00	(16,069.25)	(5,312.61)
28522 Knapp lawsuit	(598.65)	0.00	(452.33)	(1,050.98)
28526 Emissions Fees	(65,897.36)	(15,762.73)	0.00	(81,660.09)
28528 Substation land - Kulouou	525.02	0.00	(525.36)	(0.34)
28530 AES Hawaii PPA	(7,224.23)	722.04	(1,921.32)	(8,423.51)
28532 CIS Project Costs	234,897.08	125,167.94	(147,391.14)	212,673.88
28536 Substation land - Queen Emma	5,437.63	1,403.37	(6,315.21)	525.79
28538 Rate Case - TY 2005	55,953.69	0.00	10,728.12	66,681.81
28540 Kalaeloa PPA	(9,007.83)	1,422.37	0.00	(7,585.46)
28542 QUIPS amortization	85,248.62	(4,710.67)	0.00	80,537.95
28544 OPEB Exec Life	(682,983.42)	0.00	8,783.70	(674,199.72)
28546 Percentage Repairs Allowance	982,447.16	(3,552.28)	416,281.07	1,395,175.95
28548 Capitalized Interest (D&T)	1,065,354.95	(10,125.89)	32,143.15	1,087,372.21
28550 E-Business hardware	8,206.93	0.00	0.00	8,206.93
28552 OMS project costs	50,548.35	(10,774.21)	0.00	39,774.14
28554 Substation Land - Palolo	(927.93)	530.24	0.00	(397.69)
28556 Substation Land - Waianae	(2,698.01)	2,451.89	(919.46)	(1,165.58)
28558 Substation Land - Aiea	176.03	1,412.21	(529.57)	1,058.67
28560 Solar Tax Credit	(192.12)	0.00	0.00	(192.12)
28562 Revenue Adj - TY 2005	0.00	0.00	0.00	0.00
28564 HR Suites project costs	73,796.06	20,510.39	114,577.47	208,883.92
28566 §481(a) adjustment (CIAC)	615,929.22	(615,929.22)	0.00	0.00
28568 Solar Saver Program	(87,849.11)	7,132.91	942.31	(79,773.89)
28570 Pension Tracker	289,371.79	(529,721.92)	0.00	(240,350.13)
28572 OPEB Tracker	(87,139.55)	(296,431.59)	0.00	(383,571.14)
28574 Substation Land - Barber's Pt	(847.06)	467.35	(175.26)	(554.97)
28576 Substation Land - Haiku	(7,415.57)	3,677.87	(1,379.21)	(5,116.91)
28578 Moving Expense	0.00	0.00	0.00	0.00
28580 Blue Earth reserve	(34,981.74)	0.00	16,345.03	(18,636.71)
28582 HMSA Premium	(74,622.87)	10,105.20	6,878.20	(57,639.47)
28584 RO Water Pipeline	(2,881.79)	(6,916.29)	0.00	(9,798.08)
28586 Big Wind costs	143,258.41	117,908.08	(61,118.64)	200,047.85
28588 Microsoft Reserve	0.00	0.00	0.00	0.00
28590 Repairs Deduction		0.00	6,832,105.12	6,832,105.12
AOCI - Qualified Pension	0.00	0.00	0.00	0.00
AOCI - NQ Pension	(50,735.50)	0.00	(52,941.00)	(103,676.50)
AOCI - OPEB	0.00	0.00	0.00	0.00
AOCI - OPEB Exec Life	195,520.38	0.00	(40,842.00)	154,678.38
FIN 48 tax	(546,336.00)	4,212.00	(1,234,015.00)	(1,776,139.00)
FIN 48 interest	(29,788.00)	0.00	0.00	(29,788.00)
TOTAL ACCOUNT 283	10,528,880.01	(1,022,589.27)	7,568,043.34	17,074,334.08
ACCOUNT 282 DEPR	5,901,971.24	571,376.08	188,921.13	6,662,268.45
TOTAL STATE DEFERRED TAX LIABILITY (before rate case adjustments)	16,430,851.25	(451,213.19)	7,756,964.47	23,736,602.53
TOTAL ACCOUNT 283	10,528,880.01	(1,022,589.27)	7,568,043.34	17,074,334.08

Less Rate Case Adjustments:

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**HAWAIIAN ELECTRIC CO., INC.**  
**DEFERRED INCOME TAXES**  
**STATE**

	LIAB (DR)CR	Actual 12-31-09	Estimate 2010	Update to Actual 2010	
				Actual 12-31-10	Actual 12-31-10
28312	Accrued Vacation	220,911.82	0.00	1,098.77	222,010.59
28313	Uncollectible Account	(260,720.93)	0.00	149,703.16	(111,017.77)
28314	Directors Def Comp	(4,057.55)	0.00	182.38	(3,875.17)
28315	Computer Conversion Costs	0.00	0.00	0.00	0.00
28317	Discounted Work Comp	(155,111.43)	0.00	7,436.46	(147,674.97)
28320	Gain HIRI Sub/misc	0.00	0.00	0.00	0.00
28323	Excess Benefit Plan	(84,952.16)	0.00	(10,204.89)	(95,157.05)
28324	Nonop Deferred Gain	0.00	0.00	0.00	0.00
28326	Def Exec Comp (Def LTIP)	(8,365.93)	0.00	459.97	(7,905.96)
28330	EICP	(23,093.99)	0.00	(17,115.21)	(40,209.20)
28336	Nondeductible Interest	(70,270.11)	0.00	55,212.77	(15,057.34)
28337	Supplemental Benefits -SERP	(121,511.74)	0.00	10,150.70	(111,361.04)
28338	Nondeductible Vacation	(195,605.00)	0.00	0.00	(195,605.00)
28340	LTIP	(43,595.35)	0.00	(58,865.86)	(102,461.21)
28341	Waipahu Baseyard Int	(20,452.91)	0.00	0.00	(20,452.91)
28342	1990 Rate Case Exp	0.00	0.00	0.00	0.00
28345	Ross Cap Legal Fees	0.00	0.00	0.00	0.00
28347	Waiau Water Well Pmts	(59,329.00)	0.00	3,884.36	(55,444.64)
28348	Nonutil Bad Debt	1,317.69	0.00	0.00	1,317.69
28349	Cap Corp Logo	0.00	0.00	0.00	0.00
28350	Outage Loss Adj Exp	24,509.00	0.00	0.00	24,509.00
28400	92 Rate Case	0.00	0.00	0.00	0.00
28401	Genl/Auto (& Accidents)	(35,317.46)	0.00	(53,000.87)	(88,318.33)
28412	Genl/Auto Legal	(5,462.90)	0.00	(4,018.02)	(9,480.92)
28418	IRP Costs	1,769.44	1,461.74	296.36	3,527.54
28434	EEO Claims	(703.66)	0.00	(1,739.96)	(2,443.62)
28436	TIP	(51,222.35)	0.00	29,100.91	(22,121.44)
28516	Honolulu Harbor Reserve	(87,001.27)	0.00	9,054.63	(77,946.64)
28520	Deferred Comp - restricted stock	10,756.64	0.00	(16,069.25)	(5,312.61)
28522	Knapp lawsuit	(598.65)	0.00	(452.33)	(1,050.98)
28538	Rate Case - TY 2005	55,953.69	0.00	10,728.12	66,681.81
28544	OPEB Exec Life	(682,983.42)	0.00	8,783.70	(674,199.72)
28550	E-Business hardware	8,206.93	0.00	0.00	8,206.93
28580	Blue Earth reserve	(34,981.74)	0.00	16,345.03	(18,636.71)
28588	Microsoft Reserve	0.00	0.00	0.00	0.00
	AOCI - Qualified Pension	0.00	0.00	0.00	0.00
	AOCI - NQ Pension	(50,735.50)	0.00	(52,941.00)	(103,676.50)
	AOCI - OPEB	0.00	0.00	0.00	0.00
	AOCI - OPEB Exec Life	195,520.38	0.00	(40,842.00)	154,678.38
	FIN 48 interest	(29,788.00)	0.00	0.00	(29,788.00)
<b>STATE DEF'D TAX LIABILITY - OTHER</b>		<b>12,035,795.47</b>	<b>(1,024,051.01)</b>	<b>7,520,855.41</b>	<b>18,532,599.87</b>
<b>STATE DEF'D TAX LIAB - ACCEL DEPR</b>		<b>5,901,971.24</b>	<b>571,376.08</b>	<b>188,921.13</b>	<b>6,662,268.45</b>
<b>TOTAL STATE DEFERRED TAX LIABILITY (after rate case adjustments)</b>		<b>17,937,766.71</b>	<b>(452,674.93)</b>	<b>7,709,776.54</b>	<b>25,194,868.32</b>

HAWAIIAN ELECTRIC CO., INC.  
ADIT ON TAX DEPRECIATION FOR VINTAGE 2011

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TAX DEPR

**FEDERAL DEFERRED TAXES**

1 State Tax Depreciation		3,091,891.00
2 Effective Federal Tax Rate		32.8947%
3 Federal Deferred Tax on State Tax Depreciation	Line 1 x Line 2	<u>1,017,069.41</u>
4 Addback State Tax Depreciation	Line 1	(3,091,891.00)
5 Federal Tax Depreciation		<u>56,737,310.00</u>
6 Federal/State Difference		<u>53,645,419.00</u>
7 Tax Rate on Federal Only Adjustment		35%
8 Federal Deferred Tax Adjustment	Line 6 x Line 7	<u>18,775,896.65</u>
9 Total Federal Deferred Taxes	Line 3 + Line 8	<u>19,792,966.06</u>

**STATE DEFERRED TAXES**

10 State Tax Depreciation	Line 1	3,091,891.00
11 Effective State Tax Rate		6.0150376%
12 Total State Deferred Taxes	Line 10 x Line 11	<u>185,978.41</u>
13 TOTAL FED AND STATE DEFERRED TAXES	Line 9 + Line 12	<u>19,978,944.46</u> CR

NOTE: 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 projects and baseline plant additions). It does not include any estimated ADIT related to the repairs deduction or CIAC on RAM year plant additions.

HAWAIIAN ELECTRIC CO., INC.  
AUDIT ON TAX DEPRECIATION OF BASELINE PLANT ADDS  
2011

LIFE	PROJECTS	2010 ACTUAL PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL
Communication Comp/Off/Furn/Tools	20	2,581	1,441	4,022	1.52%	0.65%
Distribution	7	1,243	3,383	4,626	0.73%	1.99%
Land	20	14,241	37,168	51,409	8.37%	21.86%
Non-Steam Production	-	-	44	44	0.00%	0.03%
Steam Production	15	5,082	-	5,082	2.99%	0.00%
Structural	20	22,719	4,368	27,087	13.36%	2.57%
Transmission	39	231	20	251	0.14%	0.01%
Vehicles	20	66,596	4,684	71,280	39.16%	41.91%
<b>TOTAL</b>	<b>112,693</b>	<b>57,361</b>	<b>170,054</b>	<b>66,27%</b>	<b>33.74%</b>	<b>100.01%</b>
Amounts subject to 100% bonus		Att. 4.4 pg 10	100%			
		(Total less amounts subject to 100% bonus)		Vintage 2011 - 100% bonus		
		7 yr	0.73%	1.99%	2.72%	
		15 yr	2.99%	0.00%	2.99%	
		20 yr	62.41%	28.03%	90.44%	
		39 yr	0.14%	0.01%	0.15%	
		Land	0.00%	0.03%	0.03%	
		Vehicles	0.00%	3.68%	3.68%	
		Total	66.27%	33.74%	100.01%	
Amounts subject to 50% bonus				Vintage 2011 - 50% bonus		
		7 yr	0.26%	1.99%	2.25%	
		15 yr	1.06%	0.00%	1.06%	
		20 yr	22.05%	28.03%	50.08%	
		39 yr				
		Land				
		Vehicles				
		Total	23.37%	30.02%	53.39%	
Amounts subject to regular depreciation		(no bonus depreciation)		Vintage 2011 - regular		
		39 yr	0.14%	0.01%	0.15%	
<b>TOTAL ASSETS</b>	<b>66.27%</b>	<b>30.03%</b>	<b>96.30%</b>	<b>72,072,177</b>	<b>56,587,770</b>	<b>2,942,351</b>
		excludes land and vehicles		74,941,306		
WB Boiler Controls Upgrade						
Total Baseline Plant Adds				3,987,730	3.750%	149,540
				<u>76,059,907</u>	<u>3.750%</u>	<u>149,540</u>
				<u>78,829,036</u>	<u>3.091,891</u>	<u>3.091,891</u>
Baseline Plant Adds						
Less: Repairs deduction						
Net plant add basis						

**HAWAIIAN ELECTRIC CO., INC.**  
**ADIT ON TAX DEPRECIATION OF BASELINE PLANT ADDS**  
2011

	<b>2010 ACTUAL</b>			
LIFE	PROJECTS	PROGRAMS	TOTAL	PROJECTS
Communication	20	2,581	1,441	4,022
Com/Off/Furn/Tools	7	1,243	3,383	4,626
Distribution	20	14,241	37,168	51,409
Land	-	-	44	44
Non-Steam Production	15	5,082	-	5,082
Steam Production	20	22,719	4,368	27,087
Structural	39	231	20	251
Transmission	20	66,596	4,684	71,280
Vehicles	-	-	6,253	6,253
<b>TOTAL</b>	<b>112,693</b>	<b>57,361</b>	<b>170,054</b>	<b>66,27%</b>

	Amounts subject to 100% bonus	83%	100%	
Distribution	6.95%	21.86%	28.81%	25,298,729
Non-Steam Production	2.48%	0.00%	2.48%	2,177,746
Steam Production	11.09%	2.57%	13.66%	11,995,163
Transmission	32.50%	2.75%	35.25%	30,953,842
Total for repairs	53.02%	27.18%	80.20%	70,425,480

Amounts subject to 50% bonus

Distribution	1.42%	0.00%	1.42%	1,246,935
Non-Steam Production	0.51%	0.00%	0.51%	447,843
Steam Production	2.27%	0.00%	2.27%	1,993,340
Transmission	6.66%	0.00%	6.66%	5,848,300

Total for repairs

**Baseline Plant Adds**

**87,812,319**

Total Repairs

**12,971,013**

	Repairs Allocation	Repairs Deduction
Communication	1.52%	0.85%
Com/Off/Furn/Tools	0.73%	1.99%
Distribution	8.37%	21.86%
Land	0.00%	0.03%
Non-Steam Production	2.99%	0.00%
Steam Production	13.36%	2.57%
Structural	0.14%	0.01%
Transmission	39.16%	2.75%
Vehicles	0.00%	3.68%
<b>TOTAL</b>	<b>66,27%</b>	<b>33.74%</b>
	<b>100.01%</b>	

(Total less amounts subject to 100% bonus)

Distribution	1.42%	0.00%	1.42%	1,246,935
Non-Steam Production	0.51%	0.00%	0.51%	447,843
Steam Production	2.27%	0.00%	2.27%	1,993,340
Transmission	6.66%	0.00%	6.66%	5,848,300
Total for repairs	10.86%	0.00%	10.86%	9,536,418

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HAWAIIAN ELECTRIC CO., INC.  
REPAIRS DEDUCTION

	Distribution	Non Steam	Steam	Transmission
Repairs %:				
Total book basis repairs (1999-2009)	109,325,302.00	2,932,077.00	56,615,131.00	9,585,430.00
Total book basis adds (1999-2009)	456,506,196.00	12,595,092.00	218,144,773.00	148,712,375.00
Repairs %	23.948262%	23.279520%	25.953008%	6.445617%

Hawaiian Electric Company, Inc.  
2011 PLANT ADDITIONS - PROJECTS

Grand parent	Project #	Project Title	Expenditures					
			Project to Date	Recorded	12/31/10	2011 Plant Addition	Future Years	Total Update
								100%
Y00017	P0000191	Waikiki Rehab Project 2	-		1,494,804		-	1,494,804
Y00017	P0000192	Waikiki Rehabilitation Project 3	1,750,598		1,914,242		-	1,914,242
Y00047	P0001037	Puuloa Rd Widening - UG	404,742		104,386		-	104,386
Y00064	P0001169	CIP0 Kahe RO Water Project	1,123,313		28,000		-	28,000
Y00065	P0001177	W8 BFP Automated Test	12,006		52,070		-	52,070
Y00066	P0001191	W9 Gen Protective Relay	3,131		113,442		-	113,442
Y00068	P0001202	W6 Hydrogen Gas Dryer	-		80		-	80
Y00071	P0001217	W7 Turbine Drains	56,749		437,217		-	437,217
Y00073	P0001251	K3 Condensate Pump	523,062		9,351		-	9,351
Y00073	P0001252	K4 Condensate Pump	380,585		474,838		-	474,838
Y00074	P0001254	W0 Waiau Tank #3 Lvl Gauge	22,697		71,201		-	71,201
Y00074	P0001257	K0 Kahe Tank #11 Lvl Gauge	51,623		285		-	285
Y00074	P0001258	K0 Kahe Tank #12 Lvl Gauge	47,820		142		-	142
Y00074	P0001260	K0 Kahe Tank #14 Lvl Gauge	49,744		142		-	142
Y00079	P0000980	H8 Battery Bank Replacement	467,772		482,348		-	482,348
Y00081	P0001131	H9 Honolulu FWH 94 Replace	-		89		-	89
Y00083	P0000622	K1 Kahe I3 FWH Replace	-		159		-	159
Y00083	P0000644	K1 Kahe FWH 14 Replace	-		140		-	140
Y00083	P0000854	K1 Excitation System	-		(25,388)		-	(25,388)
Y00084	P0000301	K1 Kahe FWH 12 Replace	911,785		87		-	87
Y00084	P0000494	K1 Kahe FWH 11 Replace	995,917		259		-	259
Y00084	P0000871	K1 Sootblower Controls	531,431		1,900		-	1,900
Y00085	P0000853	K2 Excitation System	-		(25,404)		-	(25,404)
Y00087	P0000872	K3 Sootblower Controls	774,965		58,650		-	58,650
Y00089	P0000781	K4 Kahe FWH 41 Replacement	645,061		1,064,578		-	1,064,578
Y00089	P0000782	K4 Kahe FWH 42 Replacement	597,533		1,016,075		-	1,016,075
Y00089	P0000869	K4 Annunciator Replacement	986,682		1,453,207		-	1,453,207
Y00089	P0000874	K4 Sootblower Controls	525,643		839,030		-	839,030
Y00089	P9537000	K4 Turbine Controls Upgrade	1,167,119		2,176,985		-	2,176,985
Y00096	P0000817	W6 Exciter/Regulator Replace	1,824,683		9,316		-	9,316
Y00097	P0000096	W7 Sootblower Cts Upg	303,341		643,212		-	643,212
Y00097	P0000314	W7 APH Sootblower Upgrade	12,911		174,085		-	174,085
Y00097	P0000818	W7 Exciter/Regulator Repl	148,596		1,729,773	11,590	-	1,741,363
Y00098	P0000315	W7 Air Htr Steam Coils	7,424		317,730		-	317,730
Y00098	P0000810	W7 Annunciator Replacement	254,174		1,232,148	1	-	1,232,149
Y00098	P7590000	W7 Controls Upgrade	1,419,907		4,918,113	103,327	-	5,021,440
Y00099	P0000316	W8 Air Htr Steam Coils	25,234		356,542		-	356,542
Y00099	P0000811	W8 Annunciator Replacement	705,220		1,375,157		-	1,375,157
Y00103	P0001315	Capitol Ctr V6608 Trayer Sw Rpl	16,989		36,605		-	36,605
Y00104	P0001324	K1 UPS Panel Upgrade	129,927		4,620		-	4,620
Y00104	P0001325	W8 UPS Panel Upgrade	40,871		114,506		-	114,506
Y00104	P0001328	W6 UPS Panel Upgrade	90,005		704		-	704
Y00104	P0001332	K2 UPS Panel Upgrade	122,194		3,827		-	3,827
Y00105	P0001347	N. Kahana Bridge Perm OH	48,316		108,234		-	108,234
Y00106	P0001351	Baseyards Priority 2 - 2010	-		83,440		-	83,440
Y00106	P0001726	Baseyards Pr2 - 2011	-		28,615		-	28,615
Y00107	P0001355	MEVA Priority 1 - 2010	-		38,852		-	38,852
Y00107	P0001725	MEVA-Pr1 - 2011	-		131,684		-	131,684
Y00114	P0001459	W6 FWH 61 Instrumentation	152,278		35		-	35
Y00114	P0001463	W7 FWH 71 Instrumentation	-		103,386		-	103,386
Y00114	P0001464	W7 FWH 72 Instrumentation	-		102,990		-	102,990
Y00114	P0001465	W7 FWH 73 Instrumentation	-		102,990		-	102,990
Y00114	P0001466	W7 FWH 74 Instrumentation	-		102,990		-	102,990
Y00114	P0001467	W8 FWH 81 Instrumentation	22,569		157,383		-	157,383
Y00114	P0001468	W8 FWH 82 Instrumentation	25,082		132,510		-	132,510
Y00116	P0001468	School-Bkr4568 Rly Up	77,565		1,990		-	1,990
Y00118	P0001497	Beckoning Point 46kV Line Ex	1,506,538		9,444		-	9,444
Y00118	P0001498	Beckoning Point Substation	1,726,029		575		-	575
Y00126	P0001586	Mamala Phase 5 T&D	750,977		77		-	77
Y00126	P0001588	Mamala Phase 5 Hickam Sub	609,662		25,212		-	25,212
Y00126	P0001589	Mamala Phase 5 Mamala Sub	896,916		13,256		-	13,256

Hawaiian Electric Company, Inc.  
2011 PLANT ADDITIONS - PROJECTS

Grand parent	Project #	Project Title	Expenditures				
			Project to Date		Future Years	Total Update	100%
			Recorded	12/31/10			
Y00129	P0001557	Makakilo C&D Ph1 46kV UG	1,042,205	349	-	349	-
Y00130	P0001684	Ewa Nui Security Enhancement	4,998	10,590	-	10,590	-
Y00132	P0001711	Chevron Electrical Upgrade	289,604	11,053	-	11,053	-
Y00132	P0001879	Chevron 46kV Line Extension	121,765	1,171	-	1,171	-
Y00133	P0001713	Iwilei T1 Replacement	22,696	1,370,802	-	1,370,802	-
Y00133	P0001714	Iwilei T1 12kV Circuiting	1,531	268,069	-	268,069	-
Y00134	P0001715	Iwilei T2 12kV Circuiting	20,628	248,907	-	248,907	-
Y00134	P0001716	Iwilei T2 Replacement	30,520	1,383,146	-	1,383,146	-
Y00136	P0001752	Ko Olina Tsf #2 Sub Work	12,682	1,649,625	-	1,649,625	-
Y00136	P0001753	Ko Olina Tsf #2 T&D Work	222	109,813	-	109,813	-
Y00138	P0001821	First Wind Waialua Relay	155,601	84,526	-	84,526	-
Y00138	P0001822	Switching Stn Outside Services	(7)	500,000	-	500,000	500,000
Y00138	P0001823	First Wind Wahiawa Relay	217,310	5,440	-	5,440	-
Y00138	P0001824	FW Switching Station	627,098	46,419	-	46,419	-
Y00138	P0001825	First Wind T&D 46kV	94,287	98	-	98	-
Y00138	P0001828	First Wind Telecom Testing	5,991	9,984	-	9,984	-
Y00138	P0001829	First Wind Telecom Ward	89,726	1,812	-	1,812	-
Y00138	P0001830	First Wind Telecom Wahiawa	128,624	6,005	-	6,005	-
Y00138	P0001831	First Wind Telecom Kawela	10,618	2,148	-	2,148	-
Y00138	P0001832	First Wind Telecom Mokuleia	7,856	2,576	-	2,576	-
Y00138	P0001833	First Wind Telecom Waialua	347,207	26,531	-	26,531	-
Y00138	P0001834	First Wind Telecom MaunaKapu	16,546	1,921	-	1,921	-
Y00138	P0001835	First Wind Telecom Kahuku	265,576	19,348	-	19,348	-
Y00138	P0001836	First Wind Tel In-Kind CIAC	-	2,287,200	-	2,287,200	2,287,200
Y00138	P0001839	First Wind MW Tripler	-	210	-	210	210
Y00138	P0001840	First Wind Site Const Kawela	-	342,693	-	342,693	342,693
Y00138	P0001841	First Wind SiteConstMokuleia	-	720,592	-	720,592	720,592
Y00138	P0001842	First WindSiteConstMaunaKapu	-	531,663	-	531,663	531,663
Y00138	P0001843	First Wind Site ConstWahiawa	-	268,918	-	268,918	268,918
Y00138	P0001954	First Wind UFLS	311,501	17,599	-	17,599	-
Y00138	P0001955	First Wind Kahipa Telecom	-	419	-	419	419
Y00138	P0001956	First Wind Waialua Telecom	-	1,470	-	1,470	1,470
Y00138	P0001957	First Wind Wahiawa Telecom	-	1,470	-	1,470	1,470
Y00139	P0001693	NCTAMS Whitmore 46kV Line	1,691,753	1,704,596	-	1,704,596	-
Y00143	P0001907	S. Punaluu Bridge 46kV Temp	66,987	2,850	-	2,850	-
Y00143	P0001908	S. Punaluu Bridge 46kV Perm	-	29,571	-	29,571	29,571
Y00148	P0001985	Extended AMI Test - MDMS	-	42,534	-	42,534	42,534
Y00148	P0001988	Extended AMI Test - Meters	-	631,669	-	631,669	631,669
Y00149	P0001989	Office Renovations	-	41,325	-	41,325	41,325
Y00151	P0002154	CIS @ Waterhouse	97,142	185,076	-	185,076	-
Y00151	P0002155	CIS @ Waterhouse/Furniture	174,228	175,221	-	175,221	-
Y00152	P0002162	CIP Admin 3rd Flr Furniture	118,536	118,536	-	118,536	-
Y00152	P0002163	CIP Admin 3rd Flr Renovation	197,245	213,975	57,500	271,475	-
Y00154	P0002171	Legal Dept Relocation	-	364,647	-	364,647	364,647
Y00154	P0002177	Legal Dept FURNITURE	-	339,800	-	339,800	339,800
Y00155	P0002174	Waiau Office Space	173,293	319,581	-	319,581	-
Y00155	P0002176	Waiau Office - FURNITURE	-	85,370	-	85,370	85,370
Y00156	P0002175	Credit Relocation FURNITURE	25,720	99,704	-	99,704	-
Y00157	P0001788	Environmental Relocation	35,303	393,259	-	393,259	-
Y00157	P0002180	Environmental Relo-FURNITURE	-	181,535	-	181,535	181,535
Y00158	P0002172	Acctng Division - FURNITURE	-	15,000	-	15,000	15,000
Y00158	P0002173	Acctng Division Relo	-	291,349	-	291,349	291,349
Y00159	P0001790	System Intergration Renovatn	37,734	496,076	-	496,076	-
Y00159	P0002183	Sys Intergration - FURNITURE	81,883	121,323	-	121,323	-
Y00161	P0002198	Test & Substation Renovation	-	109,943	-	109,943	109,943
Y00163	P0002223	Makaha #1 12kV Bkr 1695 UFLS	-	92,073	-	92,073	92,073
Y00163	P0002224	Makalapa #2 12 Bkr 3166 UFLS	-	92,073	-	92,073	92,073
Y00163	P0002225	Pohakupu #2 12 Bkr 2123 UFLS	-	92,119	-	92,119	92,119
Y00163	P0002226	Waihee #2 12 Bkr 3047 UFLS	-	92,119	-	92,119	92,119
Y00163	P0002227	Ft Weaver #1 12 Bkr 8024 UFL	-	92,119	-	92,119	92,119
Y00163	P0002228	Ft Weaver #1 12 Bkr 8025 UFL	-	92,119	-	92,119	92,119

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Hawaiian Electric Company, Inc.  
2011 PLANT ADDITIONS - PROJECTS

Grand parent	Project #	Project Title	Expenditures					
			Project to Date		Recorded	12/31/10	2011 Plant Addition	Future Years
			12/31/10	2011 Plant Addition				
Y00163	P000229	Ft Weaver #2 12 Bkr 8594 UFL	-	92,165	-	-	92,165	92,165
Y00163	P000230	Ft Weaver #2 12 Bkr 8595 UFL	-	92,165	-	-	92,165	92,165
Y00163	P000231	Wahiawa #2 12 Bkr 1219 UFLS	-	92,165	-	-	92,165	92,165
Y48500	P0000922	Kamoku 46kV UG Alt Phase 1	58,212,998	288,433	-	-	288,433	-
Y49000	P0001051	CIP1 AES Substation Add	3,801,520	8,406	-	-	8,406	-
Y49000	P0001136	CIP1 Unit Addition-Kahe Bkrs	1,795,940	2,096	-	-	2,096	-
Y49000	P0001881	CIP Unit 1, Water treatment System	7,107,036	20,000	-	-	20,000	-
Y49000	P4900000	CIP1 Unit 1 Addition	160,558,463	799,087	-	-	799,087	-
	P0000062	Ce-Terminating Trust Esmnts	721,323	97	-	-	97	-
	P0000086	W0 Waiau WW Oil Detectors	73,211	214,834	-	-	214,834	-
	P0000287	W0 W1&2 Admn Bldg ReRoof	6,091	6,091	-	-	6,091	-
	P0000450	K0 Kahe Mtr Part Wash Encl	17,132	17,132	-	-	17,132	-
	P0000465	K1&2 Service Air Compressors	468,970	8,313	-	-	8,313	-
	P0000467	K3&4 Instr Air Compressors	-	325,752	-	-	325,752	325,752
	P0000485	W3 Waiau FWH 35 Replace	771,925	3,829	-	-	3,829	-
	P0000497	W0 Waiau WW Pond Closure	93,696	414,175	1	-	414,176	-
	P0000571	CIS Replacement	828,098	2,220,098	-	-	2,220,098	-
	P0000616	K0 Kahe Parking Lot Addition	57,830	57,830	-	-	57,830	-
	P0000636	W0 Waiau Chlorine Dioxide	848,330	415	-	-	415	-
	P0000665	W0 Waiau Parking Lot Add	31,502	31,502	-	-	31,502	-
	P0000677	W7/8 Overhead Utilities	452,506	984,521	-	-	984,521	-
	P0000798	W6 Instr Air Compr	26,366	218,678	-	-	218,678	-
	P0000956	W0 WWTF Chem Feed Upgrades	604,309	1,602,888	-	-	1,602,888	-
	P0000992	Airport-Iwilei FO Replacemen	-	524,471	-	-	524,471	524,471
	P0001000	K0 Kahe Demin Water Tank #54	293,360	1,979,677	-	-	1,979,677	-
	P0001078	K0 Kahe Maint Shop Reroof	-	144,881	-	-	144,881	144,881
	P0001081	Auahi Street 12kV OH to UG	31,232	200,059	34,425	-	234,484	-
	P0001109	Wahiawa 46Kv Ln-Schofield	440,974	440,974	-	-	440,974	-
	P0001334	W10 Inlet Air Filtration	1,523,250	306,643	-	-	306,643	-
	P0001335	W9 Inlet Air Filtration	298,306	2,229,429	149,099	-	2,378,528	-
	P0001341	Ellipse Migration to Unix	265,790	265,790	-	-	265,790	-
	P0001342	Walmart Manana OH Relocation	31,581	167,274	1,018	-	168,292	-
	P0001367	Distributed Energy Resource	12,169	627,855	-	-	627,855	-
	P0001388	K0 Replace Kahe Tank #32	86,780	703,868	-	-	703,868	-
	P0001392	W0 WWTF Filter Press	487,950	1,359,511	-	-	1,359,511	-
	P0001393	W0 WWTF Misc Upgrades	-	291,731	-	-	291,731	291,731
	P0001399	W8 Main Transformer Replace	2,146,840	2,357,425	-	-	2,357,425	-
	P0001403	Wah 138KV Lines - Schofield	13,712	1,037,712	-	-	1,037,712	-
	P0001404	Kal Hwy at Makapuu - 12kV UG	220,681	590,184	-	-	590,184	-
	P0001418	W5 FWH Turb. Wtr. Ind. Pvt.	226,947	226,947	-	-	226,947	-
	P0001421	School St #1 Swgr Repl	585,469	1,206	-	-	1,206	-
	P0001434	En Dlvy C&M Byard Impvmnts	-	107,221	-	-	107,221	107,221
	P0001442	K5/K6 Diesel Tank Expansion	180,800	455,993	-	-	455,993	-
	P0001478	Waiau 138KV, Bkr 107&108 Repl	-	3,391	-	-	3,391	3,391
	P0001479	HPP 46KV Bkr 4552 Replace	266,013	5,178	-	-	5,178	-
	P0001480	Kahe-Wah/Kahe-Hal #2 Str 27	91,292	461,212	-	-	461,212	-
	P0001481	AES-CEIP #1 Relay Upgrade	525,993	16,952	-	-	16,952	-
	P0001490	Ahuimanu PI OH & UG Cbl Upgr	107,181	107,181	-	-	107,181	-
	P0001499	Kahe 138kV Bkr 247 Replace	378,793	8,528	-	-	8,528	-
	P0001500	Kahe 138kV Bkr 133 Replace	334,911	10,148	-	-	10,148	-
	P0001501	HPP 46kV Bkr 4553 Replace	283,688	25,062	-	-	25,062	-
	P0001502	North South Rd Ph1B UG Conv	229,197	212,727	-	-	212,727	-
	P0001503	Kahe 138 kV Bkr 172 Replace	329,012	10,148	-	-	10,148	-
	P0001513	Waiau 46kV Bkr 4499 Replace	150,592	284,047	-	-	284,047	-
	P0001518	Spare 48/80mva Tsf #2	656,585	11,481	-	-	11,481	-
	P0001538	K3 PCT Upgrade	402,513	77	-	-	77	-
	P0001541	Pali Ckt Tree Wire Install	416,675	1,925,438	-	-	1,925,438	-
	P0001547	Ward ITS Generator Repl	395,269	419	-	-	419	-
	P0001548	Meter Engr Shop Reloc	-	7,905	-	-	7,905	7,905
	P0001561	Kamokila #4 12 kV Line Ext	577,183	172	-	-	172	-
	P0001572	Bougainville Subd SV4613	118,610	118,610	-	-	118,610	-

Hawaiian Electric Company, Inc.  
2011 PLANT ADDITIONS - PROJECTS

Grand parent	Project #	Project Title	Expenditures					
			Project to Date		Future Years	Total Update	100 %	
			Recorded	12/31/10				
P0001577	K3 Biofuel Co-Firing	4,957,350	272,727	-	272,727		-	
P0001590	Kailua 2 & Aalapapa 4kV Conv	71,020	173,485	-	173,485		-	
P0001594	Allure Waikiki 12kV UG Reloc	464,386	5,100	-	5,100		-	
P0001597	CEIP3 138kV Tsf Replacement	423,636	427	-	427		-	
P0001600	2010 Spare 8% Tsf #1	-	688,554	-	688,554	688,554	-	
P0001601	2010 Spare 10% Tsf #1	-	695,683	7,722	703,405	695,683	-	
P0001622	K4 Service Water Strainer	102,151	131,370	-	131,370		-	
P0001623	K5 Service Water Strainer	3,696	64,426	-	64,426		-	
P0001628	W7 Repl H2 Purity Meter	869	171,281	-	171,281		-	
P0001629	W8 Repl H2 Purity Meter	25,651	166,448	-	166,448		-	
P0001630	H9 Exciter Air Conditioning	20,267	233,308	-	233,308		-	
P0001631	K3 Repl H2 Purity Meter	359,944	35	-	35		-	
P0001632	K4 Repl H2 Purity Meter	220,206	306,973	-	306,973		-	
P0001637	W4 Exciter Air Conditioning	316,138	10,099	-	10,099		-	
P0001639	K1 Service Water Strainer	108,532	3,171	-	3,171		-	
P0001640	K2 Service Water Strainer	122,532	3,171	-	3,171		-	
P0001646	Koolau-Pukele #2 OPGW Repl	5,947	2,214,808	-	2,214,808		-	
P0001647	Koolau-Pukele #1 SW Replacement	-	1,797,609	-	1,797,609	1,797,609	-	
P0001658	W6 Turb-Gen Brg Fire Protect	154,566	2,975	-	2,975		-	
P0001659	W7 Turb-Gen Brg Fire Protect	-	250,005	839	250,844	250,005	-	
P0001660	W8 Turb-Gen Brg Fire Protect	788	236,845	-	236,845		-	
P0001669	Waiau 138kV Bkr 112 Replace	970	344,989	-	344,989		-	
P0001670	Waiau 138kV Bkr 110 Replace	970	344,937	-	344,937		-	
P0001673	Wahiawa 46kV Bkr 4448 Replace	-	260,251	-	260,251	260,251	-	
P0001681	Halawa-School OPGW	1,038,918	1,388,162	-	1,388,162		-	
P0001682	Kapolei IC, Ph1-12kV OH & UG	563,668	402,376	-	402,376		-	
P0001686	Kapolei IC, Ph1-12kV OH Conv	130,520	157,639	-	157,639		-	
P0001688	W5 BFP 51 Motor Replacement	256,718	340	-	340		-	
P0001690	Ironwoods - 12kV OH to UG	54,471	561,589	389,051	950,640		-	
P0001694	CEIP46 Recond(near Kalaeloa)	-	1,389,965	-	1,389,965	1,389,965	-	
P0001697	Keehi Circuits Reconnection	-	229,006	-	229,006	229,006	-	
P0001707	K4 Static Exciter Ventilation	71,452	275,791	-	275,791		-	
P0001723	K2 21 Traveling Screen	5,548	288,773	-	288,773		-	
P0001728	Kalaeloa Dead Bus Energizing	50,118	6,212	-	6,212		-	
P0001751	2009 Spare 46-4 kV Tsf #1	535,894	536,178	-	536,178		-	
P0001756	Archer-School HPFF Cbl Repl	2,095,002	761	-	761		-	
P0001759	Kal Hwy, Keahole St-12kV UG	132,253	1,465,069	-	1,465,069		-	
P0001761	H8 Sootblr Air Compressor 83	513,857	902	-	902		-	
P0001772	W8 Hot Reheat Line Repl.	153,763	1,392,678	-	1,392,678		-	
P0001774	W7W8 Battery Bank Separation	-	406,991	-	406,991	406,991	-	
P0001781	Waiau C&M Trailers (repl)	-	410,207	-	410,207	410,207	-	
P0001782	Kahe C&M Trailer (repl)	-	489,579	-	489,579	489,579	-	
P0001784	Archer Substation Phase 2	-	-	-	-		-	
P0001787	CPP 21st Flr Renovation	299,623	301,583	-	301,583		-	
P0001792	K3 Feed Reg Valve Upgrade	177,471	2,596	-	2,596		-	
P0001794	K4 32Aux Clg Hx Replacement	313,788	671,266	-	671,266		-	
P0001795	K5 51Aux Clg Hx Replacement	-	708,655	3,388	712,043	708,655	-	
P0001797	K3/4 Emergency Generator Upg	9,328	225,702	-	225,702		-	
P0001798	W5/6 Emergency Generator Upg	9,534	204,515	-	204,515		-	
P0001799	W7/8 Emergency Generator Upg	184,250	375,977	-	375,977		-	
P0001800	K5 Emergency Generator Upgra	-	238,682	-	238,682	238,682	-	
P0001804	W10 Exciter Upgrade	1,674,630	(2,615)	-	(2,615)		-	
P0001807	Halawa SS Access Road	305,310	935,949	-	935,949		-	
P0001856	P13/2/72 Halawa Accs Rd	24,545	185,936	-	185,936		-	
P0001859	K0 Kahe Demin Anion Tanks	262,417	274,086	-	274,086		-	
P0001862	P24-25 Valkenburgh Pole Rep	442,825	23,130	-	23,130		-	
P0001871	W8 CWP Upgrades	240,519	1,937,869	29,619	1,967,488		-	
P0001877	P13 Hamakua Dr - 46kV OH	32,605	108,144	-	108,144		-	
P0001899	W9 Exciter Upgrade	330,097	1,833,479	-	1,833,479		-	
P0001903	Ala Moana Park 4kV Conversio	120,982	141,186	-	141,186		-	
P0001904	Waiau OCB 4655 Replace	199,590	27,105	-	27,105		-	

Hawaiian Electric Company, Inc.  
2011 PLANT ADDITIONS - PROJECTS

Grand parent	Project #	Project Title	Expenditures					
			Project to Date	12/31/10	2011 Plant Addition	Future Years	Total Update	100 %
			Recorded					
	P0001905	K5 CWP K51 motor replacement	-	1	-	-	1	1
	P0001906	W7 CWP Upgrades	208,184	2,000,967	-	-	2,000,967	-
	P0001930	P2-4X Kalaeloa Blvd Relocate	57,125	243,428	-	-	243,428	-
	P0001933	Honolulu Units 5 & 7 Removal	57,749	66,677	-	-	66,677	-
	P0001934	W7 BFP Recirc CV Upgrade	-	220,325	-	-	220,325	220,325
	P0001935	Kaiuana PI 1 Ph UG Install	64,814	531,206	-	-	531,206	-
	P0001936	Kam Hwy/Ford Isle Line Reloc	75,965	538,393	-	-	538,393	-
	P0001937	W3 ID Fan Rotor Replacement	52,939	574,687	-	-	574,687	-
	P0001938	W8 UPS Upgrade	193,776	314,711	-	-	314,711	-
	P0001950	Kamekila Ckt OH to UG Conver	-	426,932	-	-	426,932	426,932
	P0001953	K0 EMD VOLT REG UPGRADE	96,292	806,760	6,234	-	812,994	-
	P0001971	Load Dispatch EMS Upgrade	-	186,439	-	-	186,439	186,439
	P0001972	MOKIAWE V2V CABL REPL	-	32	-	-	32	32
	P0001973	DLP/Web 2.0	-	285,538	-	-	285,538	285,538
	P0001976	Remedy Upgrade Help Desk v 7	-	43,848	-	-	43,848	43,848
	P0001977	W0 Env Chem Lab Elec Upgrade	-	1,314	-	-	1,314	1,314
	P0001996	2010 TSF Install #1 10mva 8%	-	80,875	10,118	-	90,993	80,875
	P0002000	2010 Spare 10mva 8% TSF #2	560,796	560,947	-	-	560,947	-
	P0002001	2010 Spare 138kV BKR #1	92,481	2,169	-	-	2,169	-
	P0002003	2010 Spare 10mva 10% TSF #2	512,687	516,040	-	-	516,040	-
	P0002005	2010 spare 10mva 10% TSF #3	558,174	561,825	-	-	561,825	-
	P0002006	2010 Spare 138kV BKR #2	91,644	2,257	-	-	2,257	-
	P0002007	2010 Spare 138kV BKR #3	119,932	2,768	-	-	2,768	-
	P0002010	2010 Spare 10mva 8% TSF #4	560,796	560,852	-	-	560,852	-
	P0002011	2010 Spare 10mva 8% TSF #3	556,829	560,471	-	-	560,471	-
	P0002014	2011 Spare 80mva TSF #3	13,612	1,863,710	-	-	1,863,710	-
	P0002015	2011 Install #1 80mva TSF	-	410,204	14,369	-	424,573	410,204
	P0002016	Lowes Iwilei Pole Reloc	151,940	804	-	-	804	-
	P0002017	K0 Demin - HMI Addition	8,533	246,384	-	-	246,384	-
	P0002018	K0 Demin - System Split	62,147	530,178	-	-	530,178	-
	P0002019	2011 Install #1 46kV BKR	-	158,775	11,905	-	170,680	158,775
	P0002020	2011 Install #2 46kV BKR	-	158,154	11,905	-	170,059	158,154
	P0002021	2011 TSF Install #1 10mva 8%	-	88,589	10,118	-	98,707	88,589
	P0002022	2011 TSF Install #2 10mva 8%	-	88,589	10,118	-	98,707	88,589
	P0002023	2011 TSF Install #3 10mva 8%	-	88,589	10,118	-	98,707	88,589
	P0002024	2011 TSF Instal #1 10mva 10%	-	88,589	10,118	-	98,707	88,589
	P0002053	2011 Spare 10mva 8% TSF #2	-	820,787	10,762	-	831,549	820,787
	P0002054	2011 Spare 10mva 8% TSF #3	-	822,977	8,511	-	831,488	822,977
	P0002055	2011 Spare 10mva 8% TSF #4	-	820,787	10,762	-	831,549	820,787
	P0002058	2011 Spare 138kV BKR #1	-	167,147	2,069	-	169,216	167,147
	P0002059	2011 Spare 46kV BKR #1	-	97,099	-	-	97,099	97,099
	P0002060	2011 Spare 46kV BKR #2	-	97,099	-	-	97,099	97,099
	P0002061	2011 Spare 46kV BKR #3	-	97,099	-	-	97,099	97,099
	P0002063	W7 UPS Upgrade	162,571	318,304	-	-	318,304	-
	P0002064	W7 UPS Panel Upgrade	17,114	101,620	-	-	101,620	-
	P0002066	Middle Street P42 Relocation	41,887	167,611	-	-	167,611	-
	P0002067	CIP FO Unloading Ladder	8,203	44,262	-	-	44,262	-
	P0002068	Burger Subdiv 46kV OH to UG	73,847	456,213	-	-	456,213	-
	P0002121	K-H#2/K-WAHIAWA STR3	-	786,631	-	-	786,631	786,631
	P0002122	K-W/K-H #1 STR # 38	-	550,528	-	-	550,528	550,528
	P0002149	Inst Load Bank for M003 Gen	24,493	24,653	-	-	24,653	-
	P0002152	HPP EDI REPLACEMENT	104,277	147,581	-	-	147,581	-
	P0002153	W0 Waiau FOT 4/5 Drainage	207,966	778,077	-	-	778,077	-
	P0002178	Mail Inserter Replacement	181,398	33,002	-	-	33,002	-
	P0002186	W5 CWP51 Dischg Head Repl	-	36,472	-	-	36,472	36,472
	P0002188	Ewa Nui 80MVA TSF A Install	68,272	20,964	-	-	20,964	-
	P0002189	K3 H2 Cooler Replacement	147,387	145,417	-	-	145,417	-
	P0002197	Harding Ave. Pole Relocation	42,278	384,127	-	-	384,127	-
	P0002200	WAIMALU V3735E-3735F DB	-	400,063	-	-	400,063	400,063
	P0002201	K4 H2 Cooler Tube Bundle Rep	-	209,787	-	-	209,787	209,787
	P0002202	k5/6 Stillen Basin Hoist Rep	-	129,480	-	-	129,480	129,480

Hawaiian Electric Company, Inc.  
2011 PLANT ADDITIONS - PROJECTS

Grand parent	Project #	Project Title	Expenditures						
			Project to Date	Recorded	12/31/10	2011 Plant Addition	Future Years	Total Update	100%
	P0002207	2011 80mva TSF Wahiawa #2	-		1,962,457	47,243	2,009,700	1,962,457	
	P0002208	2011 Spare 80mva TSF #2	-		1,739,408	4,442	1,743,850	1,739,408	
	P0002209	2011 Spare 15kV Switchgear#1	-		363,404	-	363,404	363,404	
	P0002210	2011 Spare 15kV Switchgear#2	-		363,404	-	363,404	363,404	
	P0002211	2011 Spare 15kV Switchgear#3	-		363,404	-	363,404	363,404	
	P0002212	2011 Spare 15kV Switchgear#4	-		363,404	-	363,404	363,404	
	P0002213	KAALAKEI P29 - P30 DB	-		619,460	-	619,460	619,460	
	P0002214	POHAKUPU 4 V2809-2810 DB	-		443,721	-	443,721	443,721	
	P0002218	Aliamanu 12KV UG Relocation	-		144,845	-	144,845	144,845	
	P0002219	W72 BFP MOTOR REPLACE	-		195,324	-	195,324	195,324	
	P7650000	W8 Boiler Controls Upgrade	3,767,471		5,227,145	7,314	5,234,459	-	
			304,591,483		123,209,174	973,686	124,182,860	32,648,041	
							% based on 12/31 cutoff	26.50%	
							Add 4 months	133.33%	
							Total subject to 100%	35.33%	

NOTE: This estimate of % qualified for 100% bonus is based on budgeted plant additions for 2011 and it assumes only projects incurring costs after the 100% bonus depreciation effective date (9/9/2010) will qualify. The first step in this calculation was to assume a 12/31/2010 cutoff/effective date since the information for 9/9/2010 was not yet available. The second step was to gross up this percentage by a 33% factor to account for the additional 4 month period 100% bonus was available in 2010.

Hawaiian Electric Company, Inc. • P.O. Box 2750 • Honolulu, HI 96840-0001



**Darcy L. Endo-Omoto**  
*Vice President*  
*Government & Community Affairs*

January 24, 2011

The Honorable Chairman and Members  
of the Hawaii Public Utilities Commission  
Kekuanaoa Building, First Floor  
465 South King Street  
Honolulu, Hawaii 96813

Dear Commissioners:

**Subject: Docket No. 2008-0083 – Hawaiian Electric 2009 Test Year Rate Case**  
**Hawaiian Electric Revised Schedules Resulting from *Final Decision and Order***

In accordance with the *Final Decision and Order* filed in this proceeding on December 29, 2010 ("Final D&O"), enclosed for the Commission's review and approval are Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or "Company") revised results of operations, supporting schedules and tariffs for the final rates, which reflect the increase in rates allowed by the Final D&O for the 2009 test year. Hawaiian Electric respectfully requests that the Commission allow the tariffs to go into effect on March 1, 2011.

Exhibit 1A provides the 2009 test year results of operations, incorporating the adjustments that the Commission's Final D&O requires. Page 1 of Exhibit 1A shows that the Final D&O results in a test year revenue requirement of \$1,363,815,000 for a revenue increase of \$66,375,000 over revenues at current effective rates. This constitutes a reduction in test year revenue requirement compared to the interim revenue requirement of \$1,371,209,000 and the interim revenue increase of \$73,769,000 over current effective rates, as approved by the *Second Interim Decision and Order* (Exhibit A, page 1), issued on February 19, 2010, in this rate case.

The proposed tariffs in Exhibit 2A include rates that are based on the test year revenue requirement of \$1,363,815,000, calculated using a rate of return on rate base ("ROR") of 8.16%. As shown in Exhibit 1A (page 2), this ROR incorporates a rate of return on common equity ("ROE") of 10.00%. As stated in the Final D&O (at 94), the Commission found 10.00% to be a fair and reasonable ROE, reflecting the lower business risk to Hawaiian Electric that would result from the implementation of the approved decoupling and other cost recovery mechanisms, and approved an ROR of 8.16% for the 2009 test year. Exhibit 2 also includes tariffs for the decoupling revenue balancing account ("RBA") and the revenue adjustment mechanism ("RAM"). Approving the tariffs in Exhibit 2A for the final rates and the decoupling mechanism

The Honorable Chairman and Members  
of the Hawaii Public Utilities Commission  
January 24, 2011  
Page 2

to go into effect on March 1, 2011 (and therefore enabling the commencement of decoupling and the implementation of final rates that reflect the ROR of 8.16% to occur at the same time) will be consistent with the requirement in the *Final Decision and Order* (at 129) in the decoupling proceeding (Docket No. 2008-0274) that the "HECO Companies shall implement decoupling, and commence tracking target revenues and recorded adjusted revenues when rates that reflect a reduced ROR due to decoupling are approved by the commission in either an interim or final decision and order in the HECO Companies' pending rate cases."

Exhibit 2A also includes tariffs to implement other aspects of the decoupling mechanism, including the heat rate deadbands for the energy cost adjustment clause ("ECAC") and the earnings sharing mechanism.

If the Commission approves the proposed 2009 test year final rates for implementation effective March 1, 2011, Hawaiian Electric's filing for the Energy Cost Adjustment Factor ("ECAF"), to be effective March 1, 2011, will reflect the calculation and form of the Energy Cost Adjustment Clause that is approved in the 2009 test year rate case. This is consistent with the process used in the HELCO 2006 and MECO 2007 rate cases to adjust the ECAF through separate filing. In addition, Hawaiian Electric will terminate the 2007 Interim Rate Surcharge, related to Docket No. 2006-0386 and the 2009 Interim Rate Surcharge, related to Docket No. 2008-0083 effective March 1, 2011.

Exhibit 3 explains the adjustments resulting from the Final D&O that are reflected in the revised schedules.

An index of the exhibits and attachments appears on the first page of the enclosed.

Should the Commission have any questions, please call Dean K. Matsuura at 543-4622.

Sincerely,



Darcy L. Endo-Omoto  
Vice President  
Government & Community Affairs

Enclosures

cc: Division of Consumer Advocacy  
Dr. Kay Davoodi, Department of Defense  
James N. McCormick, Department of Defense



Index to Exhibits and Attachments

Exhibit 1A: Results of Operations - Final D&O

Exhibit 1B: Revenue Requirement Input Sheet

Exhibit 1C: Summary of Income Statement Adjustments

Exhibit 2A: Proposed Tariff Sheets and Rate Schedules

Exhibit 2B: Existing Tariff Sheets and Rate Schedules

Exhibit 2C: Summary of Revenue Increase Allocation by Rate Schedule

Exhibit 2D: Cost of Service Study Workpapers

Exhibit 2E: Workpapers Illustrating the Calculation of Present and Proposed Revenues by Rate Schedule

Exhibit 3: Adjustments Resulting from and Implementation of Final D&O

HECO T-9 Attachment 1: Cost of Eight Temporary Meter Readers Removed from Final Rates

HECO T-11 Attachment 1: Administrative and General Expense Summary

HECO T-11 Attachment 2: Administrative and General Expense, Interim and Final D&O Adjustments

EXHIBIT 1A  
PAGE 1 OF 15

Hawaiian Electric Company, Inc. Final D&O Results of Operations 2009 (\$ Thousands)		Revenue Requirements to Produce 8.16%	
	Current Effective Rates	Additional Amount	Return on Average Rate Base
Electric Sales Revenue	1,292,685	66,265	1,358,950
Other Operating Revenue	4,140	110	4,250
Gain on Sale of Land	615		615
<b>TOTAL OPERATING REVENUES</b>	<b>1,297,440</b>	<b>66,375</b>	<b>1,363,815</b>
Fuel	438,348		438,348
Purchased Power	346,467		346,467
Production	78,294		78,294
Transmission	13,633		13,633
Distribution	29,420		29,420
Customer Accounts	12,104		12,104
Allowance for Uncoll. Accounts	1,302	0	1,302
Customer Service	5,000		5,000
Administration & General	86,377		86,377
Operation and Maintenance	1,010,945	0	1,010,945
Depreciation & Amortization	81,868		81,868
Amortization of State ITC	(1,453)		(1,453)
Taxes Other Than Income	121,975	5,895	127,870
Interest on Customer Deposits	479		479
Income Taxes	18,533	23,533	42,066
<b>TOTAL OPERATING EXPENSES</b>	<b>1,232,347</b>	<b>29,428</b>	<b>1,261,775</b>
<b>OPERATING INCOME</b>	<b>65,093</b>	<b>36,947</b>	<b>102,040</b>
<b>AVERAGE RATE BASE</b>	<b>1,251,087</b>	<b>(597)</b>	<b>1,250,490</b>
<b>RATE OF RETURN ON AVERAGE RATE BASE</b>	<b>5.20%</b>		<b>8.16%</b>

EXHIBIT 1A  
PAGE 2 OF 15

Hawaiian Electric Company, Inc.

Final D&O  
COMPOSITE EMBEDDED COST OF CAPITAL  
Estimated 2009 Average

	A	B	C	D
	Capitalization			
	Amount in Thousands	Percent of Total	Earnings Reqmts	Weighted Earnings Reqmts (B) x (C)
Short-Term Debt	0	0	0.75%	0.000%
Long-Term Debt	576,569	40.76	5.77%	2.352%
Hybrid Securities	27,775	1.96	7.41%	0.146%
Preferred Stock	20,696	1.46	5.48%	0.080%
Common Equity	789,374	55.81	10.00%	5.581%
Total	1,414,414	100.00		
Estimated Composite Cost of Capital			8.159%	
		or		8.16%

Hawaiian Electric Company, Inc.

EXHIBIT IA  
PAGE 3 OF 15

Final D&O  
2009 AVERAGE RATE BASE  
(\$ Thousands)

	Beginning Balance	End of Year Balance	Average Balance
<b>Investments in Assets Serving Customers</b>			
<hr/>			
Net Cost of Plant in Service	1,365,578	1,575,485	1,470,532
Property Held for Future Use	1,814	1,814	1,814
Fuel Inventory	43,274	43,274	43,274
Materials & Supplies Inventories	16,391	16,015	16,203
Unamort. Net SFAS 109 Reg. Asset	57,753	62,718	60,236
Unamort Sys Dev Costs	4,684	7,936	6,310
RO Pipeline Reg Asset	0	6,366	3,183
ARO Reg Asset	10	12	11
Total Investments in Assets	1,489,504	1,713,620	1,601,563
<b>Funds From Non-Investors</b>			
<hr/>			
Unamortized CIAC	178,757	183,375	181,066
Customer Advances	947	807	877
Customer Deposits	8,201	8,581	8,391
Accumulated Def. Income Taxes	132,510	156,551	144,531
Unamort State ITC (Gross)	30,102	28,650	29,376
Unamortized Gain on Sale	1,345	746	1,046
Pension Reg Liability	3,051	-3,454	-202
OPEB Reg Liability	777	433	605
Total Deductions	355,690	375,689	365,690
Difference			1,235,873
Working Cash at Current Effective Rates			15,214
Rate Base at Current Effective Rates			1,251,087
Change in Rate Base - Working Cash			(597)
Rate Base at Proposed Rates			1,250,490

EXHIBIT 1A  
PAGE 12 OF 15

Hawaiian Electric Company, Inc.

Final D&O  
SUPPORT WORKSHEET  
2009

Franchise Tax	
Electric Sales Revenues	1,292,685
Less: Bad Debt Expense	(1,302)
	<hr/>
Franchise Tax Rate	1,291,383
x      2.500%	
Total Franchise Tax	32,285
	<hr/>
TOTAL REVENUE TAX	115,004
	<hr/>
INTEREST EXPENSE:	
Weighted Cost of Debt	
Short-Term Debt	0.000%
Long-Term Debt	2.352%
Hybrid Securities	0.146%
Total	2.498%
Rate Base at Proposed Rates	x      1,250,490
	<hr/>
TOTAL INTEREST EXPENSE	31,237
	<hr/>
INCOME TAX EXPENSE SUMMARY	
Current	(5,508)
Deferred	24,041
State ITC	0
	<hr/>
TOTAL INCOME TAX EXPENSE	18,533
	<hr/>
CALCULATIONS OF REVENUE TAX RATE:	
Franchise Tax Rate adjusted for Change in Oth Oper	
Revenues and Bad Debt	0.02496
PSC Tax Rate adjusted for Bad Debt	0.05885
PUC Tax Rate adjusted for Bad Debt	0.00500
	<hr/>
REVENUE TAX RATE	0.08881
	<hr/>
CALCULATIONS OF COMPOSITE INCOME TAX RATE:	
State Tax Rate	0.06015
Federal Tax Rate	0.35000
	<hr/>
State Tax Rate	0.06015
Federal Tax Rate	x      0.35000
	<hr/>
Federal Tax Effect on State Tax	(0.02105)
	<hr/>
COMPOSITE INCOME TAX RATE	0.38910
	<hr/>

EXHIBIT 1A  
PAGE 13 OF 15

Hawaiian Electric Company, Inc.

Final D&O  
SUPPORT WORKSHEET  
2009

CALCULATIONS OF COMPOSITE CAPITAL GAINS TAX RATE:

State Capital Gains Tax Rate	0.03759
Federal Tax Rate	0.35000
State Capital Gains Tax Rate	0.03759
Federal Tax Rate	x 0.35000
Federal Tax Effect on State Capital Gains Tax Rate	(0.01316)
COMPOSITE CAPITAL GAINS TAX RATE	<u>0.37444</u>

CALCULATIONS OF EFFECTIVE INCOME TAX RATE:

PSC Tax & PUC Fees Rates adjusted for Bad Debt	0.06385
Franchise Tax adjusted for Change in Oth Oper Rev and Bad Debt	0.02496
Bad Debt Rate adjusted for Change in Oth Oper Rev	-
Revenue Tax and Bad Debt rate	0.08881
Rev Tax & Bad Debt Reciprocal (1 - 0.08881)	0.91119
Composite Income Tax Rate	x <u>0.38910</u>
EFFECTIVE INCOME TAX RATE AFTER CONSIDERING REVENUE TAX & BAD DEBT	<u>0.35454</u>

CALCULATIONS OF OPERATING INCOME DIVISOR:

PSC Tax & PUC Fees Rates	0.06385
Franchise Tax adjusted for Change in Oth Oper Rev	0.02496
Bad Debt Rate adjusted for Change in Oth Oper Rev	-
Effective Income Tax Rate after considering revenue tax & bad debt	<u>0.35454</u>
OPERATING INCOME DIVISOR (1 - 0.35454)	<u>0.55665</u>

Hawaiian Electric Company, Inc. • PO Box 2750 • Honolulu, HI 96840-0001



Darcy L. Endo-Omoto  
Vice President  
Government & Community Affairs

July 20, 2009

The Honorable Chairman and Members of the  
Hawaii Public Utilities Commission  
Kekuanaoa Building, 1st Floor  
465 South King Street  
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Docket No. 2008-0083 – Hawaiian Electric 2009 Test Year Rate Case  
Hawaiian Electric Supplemental Testimonies, Exhibits and Workpapers

In accordance with the *Interim Decision and Order* issued July 2, 2009 in Docket No. 2008-0083, enclosed for filing are Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or "Company") Supplemental Testimonies, Exhibits and Workpapers for the following Hawaiian Electric witnesses:

- HECO ST-1 – Robert A. Alm
- HECO ST-3 – Peter C. Young
- HECO ST-4 – Ross H. Sakuda
- HECO ST-7 – Dan V. Giovanni
- HECO ST-8 – Robert K.S. Young
- HECO ST-9 – Darren S. Yamamoto
- HECO ST-10 – Alan K.C. Hee
- HECO ST-10B – Jeff Makholm, Ph.D.
- HECO ST-11 – Patsy H. Nanbu
- HECO ST-12 – Russell R. Harris
- HECO ST-13 – Julie K. Price
- HECO ST-13A – Leonard E. Smothermon
- HECO ST-14 – Bruce K. Tamashiro
- HECO ST-15 – Faye R. Chiogioji
- HECO ST-15A – Gayle Furuta-Okayama
- HECO ST-15B – Mike H. McInerny
- HECO ST-15C – Leon R. Roose
- HECO ST-15D – Scott W.H. Seu
- HECO ST-16 – Lon K. Okada
- HECO ST-17 – Lorie Ann Nagata

FILED

2009 JUL 20 P 4:2b

PUBLIC UTILITIES  
COMMISSION

The Honorable Chairman and Members of the  
Hawaii Public Utilities Commission

July 20, 2009

Page 2

- HECO ST-17A – Robert C. Isler
- HECO ST-17B – Anthony L Lunardini
- HECO ST-17C – Brenner Munger
- HECO ST-17D – Ken T. Morikami
- HECO ST-17E – Tom C. Simmons
- HECO ST-20 – Tayne S.Y. Sekimura
- HECO ST-21 – Steven M. Fetter
- HECO ST-22 – Peter C. Young

Information contained in the HECO ST-9 testimony and exhibit HECO-S-901 is confidential and is not to be provided or disclosed to the general public. The April and May 2009 information is submitted under protective order as the April and May 2009 information is confidential until publicly disclosed in the financial statements submitted to the Securities and Exchange Commission ("SEC"), which is scheduled for August 2009. The information will not be considered final until the Company issues its financial statements to the SEC. Should any of the preliminary information change, the Company will provide the revisions as soon as practicable.

Information contained in the HECO ST-15A testimony and exhibits HECO-S-15A02 and HECO-S-15A03 is confidential and is not to be provided or disclosed to the general public. The information was gathered as part of private compensation and salary surveys. Survey participants are not linked specifically to the data in question, and the survey data and results are provided only to the participants. The information is deemed confidential and solely for the use as intended. Absent authorization from the surveyor the information is provided subject to the terms of the Protective Order filed November 21, 2008 in this proceeding.

Information contained in the HECO ST-15B testimony and exhibit HECO HECO-S-15B04 is based on third-party proprietary data, which is confidential and is submitted pursuant to the Protective Order filed November 21, 2008 in this proceeding.

Sincerely,

  
Darcy L. Endo-Omoto  
Vice President  
Government & Community Affairs

Enclosures



cc: Division of Consumer Advocacy  
Department of Defense

Witness: S. Carver  
 HAWAIIAN ELECTRIC COMPANY, INC.  
 DOCKET NO. 2008-0083  
 DEPRECIATION & AMORTIZATION  
 FOR THE FORECAST 2009 TEST YEAR  
 (000's)

Exhibit CA-101  
 Schedule C-22  
 Page 1 of 1

LINE NO.	DESCRIPTION	REFERENCE	HECO UPDATE	CA PROPOSED	CA ADJUSTMENT	HECO ADJ.	ADJ. RST.	HECO's Position
(A)	(B)	(C)	(D)	(E)				
1	Depreciation Expense	(a)(b)	\$ 87,429	\$ 66,783	\$ (646)	\$ 86,783		
2	Amortization Expense	(a)(b)	3,626	3,863	237	237	3,863	
3	Additional Amortization – Net Unrecovered	(a)(c)(d)	1,924		(1,924)	(826)	1,099	
4	Subtotal	(a)	92,975	90,646	(2,333)	(1,234)	91,745	
5	Less: Depreciation on Vehicles	(a)(b)	(2,155)	(2,067)	88	88	(2,067)	
6	Less: CIAC Amortization	(a)(e)	(9,383)	(9,335)	48	48	(9,335)	
7	Add: Regulatory Asset Amortization	(a)	2,169	2,169	0	0	2,169	
8	Less: Federal ITC Amortization	(a)	(644)	(644)	0	0	(644)	
9	Total Depreciation & Amortization Expense		\$ 82,966	\$ 80,769				
10	CA Adjustment to Depreciation & Amortization on Actual Investment at 12/31/2008				\$ (2,197)	\$ (1,098)	\$ 1,868	
(1)	Adjust amounts to 12/31/08 Actuals.							
(1)	Calculations of Addtl Amortization-Net Unrecovered		HECO Update	HECO Current	(3) = (2)-(1)			
	Additional Amortization – Net Unrecovered		1,924	2,198	274			
	Amortize over 2 years (DOE's position)		-	-	(1,099)	(1,099)		
			1,924	1,099	(825)			

Footnotes:

(a) Source: HECCO T-14 Update (pp. 15, 20-22).

(b) Source: CA Proposed amount from HECCO response to CA-IR-417.

(c) Par CA-IR-418, the Additional Amortization represents the net book value of assets subject to five-year vintage amortization that were retired from Company books on September 4, 2004, representing a stranded net investment. Decision & Order No. 21331 (Docket No. 02-0391) approved a Settlement Agreement between HECCO and the Consumer Advocate commencing amortization on the effective date of the Commission's D&O (i.e., 9/4/04). This amortization sunset two months after the interim scheduled for the pending docket for July 2, 2009. The amortization is nonrecurring and should be removed from proforma rates.

(d) According to CA-IR-418, the \$1,924 should have been \$2,198 for 2009 -- representing 8/12s of the 2008 annual amortization of \$3,297 (HECCO-WP-1401, p. 1).

(e) CIAC Amortization for 2008:

Vintage Amortizations through 2006	\$ 8,263
2007 Vintage Amortization	694
2008 Vintage Amortization	
Actual 2008 Receipts	\$ 11,314
Actual 2008 Trans. from Cust. Adv.	28
Subtotal	11,342
Amortization Period	30
Total 2008 CIAC Amortization	\$ 378
Source: HECCO T-14 Update (p. 23) & CA-IR-419	\$ 9,335

HECO-S-1403  
 DOCKET NO. 2008-0083  
 PAGE 1 OF 1

HECO-S-1701  
DOCKET NO. 2008-0083  
PAGE 1 OF 1

RATE CASE UPDATE  
DOCKET NO. 2008-0083  
HECO T-17  
PAGE 6 OF 21

HECO-1703  
DOCKET NO. 2008-0083  
PAGE 1 OF 1  
(REVISED 7/20/09)

Hawaiian Electric Company, Inc.  
Campbell Industrial Park Generating Station  
and Transmission Additions  
Plant Additions

Project No.	Description	2008	2009	2010	Total
P0001052	CIP1 CEIP Substation Mod*		3,890		3,890
P0001135	CIP1 Unit Addition-Microwave*				-
P0001340	CIP1 Unit Addition-Easements	4,857,924			4,857,924
P0001585	CIP1 - Land - Gen Station	1,261,761			1,261,761
P0001050	CIP1 AES-CEIP#2 Trans. Line		5,790,887		5,790,887
P0001051	CIP1 AES Substation Add		3,153,110		3,153,110
P0001134	CIP1 Unit Addition-Fiber		531,769		531,769
P0001136	CIP1 Unit Addition-Kahe Bkrs		1,720,778		1,720,778
P0001137	CIP1 Unit Addition-Kalaeloa		289,912		289,912
P4900000	CIP1 Unit 1 Addition		143,809,745	50,000	143,859,745
Plant Additions		6,119,685	155,300,091	50,000	161,469,776
P0001084	Parcel between Hanua Street and AES Substation (TMK 9-1-26:38) included in Property Held for Future Use				1,809,875
Total Project Cost					163,279,651

\* In Service dates for the projects P0001052 and P0001135 moved beyond 2008. See HECO T-17, Attachment 1, page 1 in the Company's Revised Schedules Resulting from Interim Decision and Order filed July 8, 2009. During Settlement, the Parties agreed to include adjustments resulting from the introduction of 2008 year-end actuals. Thus, plant additions included in the Statement of Probable Entitlement include 2008 recorded plant additions but do not include updates to 2009 plant addition estimates. For CIP1, this results in \$456,832 (P0001052) and \$523,193 (P0001135) being excluded.

HAWAIIAN ELECTRIC COMPANY, INC.  
MONTHLY FINANCIAL REPORT  
December 2010

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

Page 10

	BALANCE AT CLOSE OF LAST YEAR	ACCURED BALANCES THIS MONTH	BALANCES SAME PERIOD LAST YEAR	INC / DSC (-) YEAR
<b>PROPRIETARY CAPITAL:</b>				
Common Stock Issued	91,931,144	92,223,757	91,931,184	292,573
Cumulative Pfd Stock Issued	22,233,140	22,293,140	22,233,140	3,957,427
Premium on Capital Stock	389,552	393,829	389,552	-1,071,695
Other Paid-In-Capital	7,711,612	7,709,728	7,711,612	-1,716,231
Capital Stock Expense	3,521,532	3,539,754	3,521,532	27,816,258
Unappro Retained Earnings	627,035,945	854,755,722	82,033,965	82,033,965
<b>TOTAL PROPRIETARY CAPITAL</b>	<b>1,128,707,771</b>	<b>1,359,691,622</b>	<b>1,321,700,771</b>	<b>30,990,851</b>
<b>LONG TERM DEBT:</b>				
Bonds	672,200,321	672,268,321	672,200,321	68,000
Other Long Term Debt	672,200,321	672,268,321	672,200,321	68,000
<b>TOTAL LONG TERM DEBT</b>	<b>672,200,321</b>	<b>672,268,321</b>	<b>672,200,321</b>	<b>68,000</b>
<b>CURRENT &amp; ACCRUED LIABILITIES:</b>				
Pref Stock Sinking Fund Requirements	103,000,000	60,450,000	103,000,000	49,450,000
Short Term Borrowings	103,071,961	135,738,199	103,072,961	32,665,438
Accounts Payable	243,781	244,544	243,781	743
Customer to Assoc Co	101,428,618	111,550,377	101,428,618	10,628,819
Customer Deposits	101,428,618	111,550,377	101,428,618	10,628,819
Taxes Accrued	113,254,597	116,680	113,254,597	15,551,417
Interest Accrued	113,254,597	116,680	113,254,597	15,551,417
Dividends Declared	231,038	230,856	231,038	-182
Maturing Long-Term Debt	21,762,747	29,066,112	21,762,747	7,303,259
Tax Collection Payable	21,762,747	29,066,112	21,762,747	7,303,259
Misc Current & Accrued Liab	262,514,695	367,337,333	262,514,695	104,822,637
<b>DEFERRED CREDITS:</b>				
Unamort Premiums on Debt	0	0	0	0
Customer Advances	855,408	1,878,735	855,408	1,023,327
Other Deferred Credits	252,556,487	331,840,576	252,556,487	79,084,089
Regulatory Liabilities	196,288,441	201,587,037	196,288,441	5,303,596
Accum Deferred Inc	31,339,057	33,660,166	31,339,057	2,267,108
<b>TOTAL DEFERRED CREDITS</b>	<b>481,059,394</b>	<b>568,766,513</b>	<b>481,059,394</b>	<b>87,677,119</b>
<b>CONTRIBUTIONS IN AID OF CONSTR</b>				
Accum Deferred Taxes:				
Accum Deferred Depreciation	73,220,904	93,037,357	73,220,904	19,806,453
Other Deferred Taxes	67,921,002	105,715,334	67,921,002	37,786,332
TOTAL ACCUM DEFER TAXES	141,151,906	198,752,991	141,151,906	57,592,685
<b>TOTAL LIABILITIES &amp; CREDITS</b>	<b>3,065,250,207</b>	<b>3,356,130,909</b>	<b>3,065,250,207</b>	<b>290,980,702</b>

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HAWAIIAN ELECTRIC COMPANY, INC.  
MONTHLY FINANCIAL REPORT  
December 2010

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII  
ANALYSIS OF UTILITY PLANT

UTILITY PLANT IN SERVICE:	BALANCE AT CLOSE OF LAST YEAR	ACCRUED BALANCES		INCR / (DECR) DURING THE YEAR
		AT CLOSE OF THIS MONTH	SAME PERIOD LAST YEAR	
<b>Production Plant</b>				
Steam Production	595,490,790	617,830,225	595,490,790	22,529,435
Hydraulic Production	0	0	0	0
Other Production	191,874,122	195,748,886	191,874,122	3,874,844
Transmission Plant	653,846,366	718,985,767	653,846,366	65,106,389
Distribution Plant	1,213,857,398	1,262,478,372	1,213,857,398	48,820,974
General Plant	217,045,057	228,864,079	217,045,057	11,831,022
<b>TOTAL UTILITY PLANT IN SERVICE</b>	<b>2,871,783,734</b>	<b>3,024,037,469</b>	<b>2,871,783,734</b>	<b>152,273,676</b>
Property Held for Future Use	4,607,187	4,048,920	4,607,187	(517,277)
Construction Work in Progress	115,643,388	78,833,584	115,643,388	(36,709,804)
<b>TOTAL UTILITY PLANT</b>	<b>2,892,014,330</b>	<b>3,107,060,823</b>	<b>2,892,014,330</b>	<b>115,046,594</b>

HAWAIIAN ELECTRIC COMPANY  
MONTHLY FINANCIAL REPORT  
December 31, 2010

TO THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII  
ANALYSIS OF RESERVE FOR DEPRECIATION & AMORTIZATION

Account Number	Account Title	Accrued Balances		Increase-Decrease During The Year
		At Close of Last Year	At Close of This Month	
<b>RESERVES:</b>				
310/16	Production Plant	310,420,019	312,781,288	2,361,249
340/46	Steam Production	15,610,975	16,984,916	1,373,941
350/59	Other Production	275,185,550	289,715,494	14,528,944
360/70	Transmission Plant	597,092,787	639,487,072	42,394,305
380/68	Distribution Plant	105,882,089	116,143,031	10,260,932
	General Plant	(214,500,496)	(232,487,637)	(17,987,141)
<b>TOTAL RESERVES FOR DEPRECIATION AND AMORTIZATION</b>				
		1,088,681,915	1,142,625,145	52,933,230

## **INTEROFFICE CORRESPONDENCE**

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**Hawaiian Electric Co., Inc.**

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January 25, 2011

To: P. Nanbu  
B. Tamashiro  
J. Oshiro  
G. Ohashi  
G. Nitta  
J. Takamura /  
L. Okada (HEI)  
M. Zane (HEI)

From: M. Koyanagi

Subject: 2011 Accruals for  
- Book Depreciation and Amortization  
- State ITC  
- SFAS 109 Items

Please find attached the amounts for the above accrual for your processing or future reference.

If you have any questions, please call me at 543-7907.

**Hawaiian Electric Company, Inc.**  
**2011 Book Depreciation and Amortization Accruals**  
**Includes State ITC and SFAS 109 Accruals**

<u>REF</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
<b>Utility Book Depreciation -</b>		
A1	Steam Prod	10,030,363
A1	Other Prod	1,942,838
A1	Transmission	20,913,886
A1	Distribution	54,239,354
A1	General	7,670,017
	<b>Subtotal</b>	<b>94,796,458</b>
A1	Vehicles	2,452,329
	<b>Total</b>	<b>97,248,787</b>
<b>Leasehold Amortization -</b>		
A1	King, CPP, Hono Club	129,619
<b>Vintage Accounting Amortization</b>		
A1	Selected Plant Accts (40304000)	4,403,574
<b>Total Utility Book Depr &amp; Amort</b>		
		<b>101,781,980</b>
<b>B Non-Utility Book Depreciation -</b>		
	Heat Pump	2,284
	E-Business	12,290
		<b>14,574</b>
<b>Book Depreciation on Capitalized Items (Post-Norm Vintages)</b>		
H		450,913
C	<b>CIAC Amortization</b>	<b>10,174,536</b>
<b>Amortization of Deferred ITC-1971 Rev Act(Acct 25502)</b>		
D		384,984
F	<b>2011 State ITC Entries</b>	<b>SEE ATTACHED</b>
G	<b>Amortization of SFAS 109 Items</b>	<b>SEE ATTACHED</b>

*Note: If more detail required, please call Michelle Koyanagi  
E Ref not used*

**HAWAIIAN ELECTRIC COMPANY, INC.  
STATE ITC CALCULATION -  
FOR THE YEAR ENDING 12/31/2011 - ACCRUAL**

				<b>ANNUAL EST</b>
<b><u>1. 2011 VINTAGE STATE ITC</u></b>				
<b>2011 Gross State ITC</b>				
				4,008,700.00
<b>STATE TAX Entries:</b>				
DR	State Current I/T Liability	(PA43A)	23611000	4,008,700.00
CR	State Current I/T Expense		40911000	(4,008,700.00)
To record 2011 vintage state ITC at gross				
DR	State Current I/T Expense	(PA43B)	40911000	241,124.81
CR	State Current I/T Liability		23611000	(241,124.81)
To record state tax expense on state ITC (gross state ITC x 6.0150376%)				
DR	State ITC Deferred	(PA43C)	41211000	4,008,700.00
CR	Acc Def State ITC		25520000	(4,008,700.00)
To record deferral of 2011 vintage state ITC				
DR	State Def'd I/T Liability	(PA43H)	28302000	241,124.81
CR	State Def'd Tax Expense		41013000	(241,124.81)
To record state tax expense on deferral of 2011 vintage state ITC (gross state ITC x 6.0150376%)				
<b>FEDERAL TAX Entries:</b>				
DR	Federal Current I/T Expense	(PA43D)	40901000	1,318,651.32
CR	Federal Current I/T Liability		23601000	(1,318,651.32)
To record federal tax expense on state ITC (gross state ITC x 32.89473684%)				
DR	Federal Def'd I/T Liability	(PA43E)	28301000	1,318,651.32
CR	Federal Def'd Tax Expense		41011000	(1,318,651.32)
To record deferral of federal tax on 2011 vintage state ITC				
<b><u>2. 2011 AMORTIZATION OF STATE ITC</u></b>				
<b>2011 Amortization of State ITC =</b>				<b>1,637,367.00</b>
<b>STATE TAX Entry:</b>				
DR	Acc Def State ITC	(PA43F)	25520004	1,637,367.00
CR	State ITC Restored		41230000	(1,637,367.00)
To record 2011 amortization of state ITC				
DR	State Def'd Tax Expense	(PA43I)	41013000	98,487.63
CR	State Def'd I/T Liability		28302000	(98,487.63)
To record deferred tax on 2011 amortization of state ITC (amortization x 6.015%)				
<b>FEDERAL TAX Entry:</b>				
DR	Fed Def'd Tax Expense	(PA43G)	41011000	538,606.96
CR	Fed Def'd I/T Liability		28301000	(538,606.96)
To record federal deferred tax on 2011 amortization of state ITC (amortization x 32.8947%)				

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**AMORTIZATION OF SFAS 109 ITEMS**  
**2011**

<b>STANDING JOURNAL ENTRIES</b>				
<b>Expense DR(CR)</b>				
	<b>ANNUAL AMORT.</b>	<b>MONTHLY AMORT.</b>	<b>FED TAX on Amort</b>	<b>STATE TAX on Amort</b>
G1 CWIP Equity Transition Activity #18673100 (amort activity #40330003)	75,464	6,289	(5,317)	(972)
G2 Flow Through Activity #18673200 (amort activity #40330001)	326,301	27,192	(22,988)	(4,204)
G3 Plant Transition Activity #18673300 (amort activity #40330002)	1,022,958	85,247	(72,069)	(13,178)
G1 CWIP Equity Ongoing Activity #18673400 (amort activity #40330004)	1,307,274	108,940	(92,099)	(16,841)
G4 Reg Liability-Fed ITC Activity #18673500 (amort activity #40330006)	(245,382)	(20,449)	17,288	3,161
G5 Reg Liability-Excess Def'd 283 Activity #18673900 (amort activity #40330009)	(57,600)	(4,800)	1,579	289
G6 Reg Liability-Deficit Def'd 283 Activity #18673190 (amort activity #40330010)	0	0	0	0
G7 Reg Liability-Excess Def'd 282 Activity #18673110 (amort activity #40330012)	0	0	0	0
G8 Reg Asset-Deficit Def'd 282 Activity #18673120 (amort activity #40330013)	110,682	9,224	(3,034)	(555)

Note - Per discussion with Lon Okado 9/7/05 -

Most reg asset/liability was created in 1993 basically for employee benefits and other overhead which were expensed prior for tax purposes. This would stay the same until amortized completely. Component that would change is Reg Liability - Fed ITC (credit) which is decreasing as you go forward (no longer have ITC) and CWIP Equity Ongoing which is the AFUDC (debit) which is increasing.

## 2010 General Order No. 7 (GO 7) Report Summary Plant Additions

<b>Projects</b>	<b>2010</b>
	<b>Plant Addition (1)</b>
Less than \$1M	81,593,166
\$1M to \$2.5M	12,593,511
Greater than \$2.5M	10,831,348
Other Non GO7 projects	6,505,174
PUC application filed prior to July 1,2004	<u>58,527,920</u>
<b>Total Plant Additions</b>	<b>170,051,118</b>
 <b>Less: Major Project additions in 2010</b>	
CIP1 Unit 1 Addition (straggling costs)	(1,693,198)
Beckoning Point Substation	(3,232,567)
Whitmore Sub & 46 kV Line (straggling costs)	(212,825)
CIP0 Kahe RO Water Project (straggling costs)	(373,480)
Air Quality Monitoring Station	(361,926)
Kahe 3 Biofuel Co-Firing	(4,957,351)
K3 Boiler Control Upgrade (straggling costs)	(24,522)
Dispatch Center Building (straggling costs)	(914)
Kamoku 46kV UG Alt Phase 1	<u>(58,502,483)</u>
<b>Subtotal Major Projects</b>	<b>(69,359,268)</b>
 <b>Less: HCEI Projects cost in 2010 (recovered thru surcharge)</b>	
First Wind UFLS	(2,567,414)
 <b>Add: Beckoning Point Substation - Customer Advance</b>	<b>777,838 (2)</b>
 <b>Baseline Plant Additions</b>	<b><u>98,902,274</u></b>

(1) Source: Attachment 4.5, pages 21-28 were filed in 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 2010*, in Docket No. 03-0257 on March 31, 2011.

(2) Attachment 4.5, page 30

Hawaiian Electric Company, Inc.

Completed Projects  
As Of 12/31/2010  
Total Cost of \$0 to \$1,000,000

Item Number	Project Description	2010 Recorded	2010 Budget	Variance \$	Variance %
P0000056	H8 Boiler Elec Warm System	\$ 1,093	\$ -	\$ 1,093	(a)
P0000120	Corrective (Incl Emergency) OH Transformer Rpl	\$ 368,962	\$ 446,253	\$ (77,291)	-17% (1)
P0000121	Corr (Inc Emg) UG Transformer Rpl	\$ 21,264	\$ 472,075	\$ (450,811)	-95% (2)
P0000122	Corr (Inc Emg) Misc Cable Rpl	\$ 1,879,198	\$ 6,482,928	\$ (4,603,730)	-71% (3)
P0000123	Corr (Inc Emg) OH Distribution Rpl	\$ 1,507,387	\$ 3,001,362	\$ (1,493,975)	-50% (4)
P0000124	Corr (Inc Emg) OH Subtransmission Rpl	\$ 213,029	\$ 553,657	\$ (340,628)	-62% (5)
P0000125	Corr (Inc Emg) OH Transmission Rpl	\$ 89,416	\$ -	\$ 89,416	(6)
P0000301	K1 Kahe Feed Water Heater (FWH) 12 Replace	\$ 67,039	\$ -	\$ 67,039	(a)
P0000465	K1&2 Service Air Compressors	\$ 47,319	\$ -	\$ 47,319	(a)
P0000485	W3 Waiāu FWH 35 Replace	\$ 3,088	\$ -	\$ 3,088	(a)
P0000487	H8 Honolulu FWH 82 Replace	\$ (3,368)	\$ -	\$ (3,368)	(a)
P0000494	K1 Kahe FWH 11 Replace	\$ 99,324	\$ -	\$ 99,324	(a)
P0000500	Misc Office Furniture	\$ 182	\$ 276,418	\$ (276,236)	-100% (7)
P0000501	Misc Office Equipment	\$ 35,285	\$ 21,233	\$ 14,052	66% (8)
P0000503	Ward Ave Minor Addns	\$ 5,126	\$ 481,061	\$ (475,935)	-99% (9)
P0000505	Other Minor Gen Pft Addns	\$ 14,596	\$ 85,637	\$ (71,041)	-83% (10)
P0000571	CIS Replacement	\$ 344,170	\$ -	\$ 344,170	(a)
P0000622	K1 Kahe 13 FWH Replace	\$ 342	\$ -	\$ 342	(a)
P0000636	W0 Waiau Chlorine Dioxide	\$ 47,387	\$ -	\$ 47,387	(a)
P0000637	K0 Kahe Chlorine Dioxide	\$ 14,574	\$ -	\$ 14,574	(a)
P0000644	K1 Kahe FWH 14 Replace	\$ 313	\$ -	\$ 313	(a)
P0000653	Collaborative Communications	\$ 78,645	\$ 22,139	\$ 56,506	255% (11)
P0000733	Trns Sub RTU Migration Pgm	\$ 11,619	\$ 375,570	\$ (363,951)	-97% (12)
P0000786	K1 Kahe 1 Boiler Water (BW) Sump Upgrade	\$ 3,094	\$ -	\$ 3,094	(a)
P0000788	K2 Kahe 2 BW Sump Upgrade	\$ 2,164	\$ -	\$ 2,164	(a)
P0000789	K3 Kahe 3 BW Sump Upgrade	\$ 5,037	\$ -	\$ 5,037	(a)
P0000790	K4 Kahe 4 BW Sump Upgrade	\$ 2,733	\$ -	\$ 2,733	(a)
P0000791	K5 Kahe 5 BW Sump Upgrade	\$ 3,298	\$ -	\$ 3,298	(a)
P0000792	K6 Kahe 6 BW Sump Upgrade	\$ 5,214	\$ -	\$ 5,214	(a)
P0000797	W3-W4 Service Air Compressors	\$ 785,857	\$ -	\$ 785,857	(13)
P0000799	K2 Operator Console Upgrade	\$ 2,469	\$ -	\$ 2,469	(a)
P0000807	H8 Turbine Supervisory Instrumentation (TSI) Upgrade	\$ 4,073	\$ -	\$ 4,073	(a)
P0000808	K3 Annunciator Replacement	\$ 271	\$ -	\$ 271	(a)
P0000827	K3 DCS Balance of Plant I/O	\$ (23)	\$ -	\$ (23)	(a)
P0000831	H8 Operator Console Upgrade	\$ 2,458	\$ -	\$ 2,458	(a)
P0000853	K2 Excitation System	\$ 12,022	\$ -	\$ 12,022	(a)
P0000858	H8 Annunciator Replacement	\$ 20,049	\$ -	\$ 20,049	(a)
P0000860	K2 Annunciator Replacement	\$ 8,958	\$ -	\$ 8,958	(a)
P0000861	K1 Annunciator Replacement	\$ 102,143	\$ -	\$ 102,143	(a)
P0000871	K1 Sootblower Controls	\$ 119,391	\$ -	\$ 119,391	(a)
P0000872	K3 Sootblower Controls	\$ 774,965	\$ 499,305	\$ 275,660	55% (14)
P0000873	K2 Sootblower Controls	\$ 17,562	\$ -	\$ 17,562	(a)
P0001131	H9 Honolulu FWH 94 Replace	\$ 164,943	\$ -	\$ 164,943	(a)
P0001132	K6 Kahe FWH 64 Replace	\$ 886,750	\$ 907,524	\$ (20,774)	-2%
P0001174	K2 Boiler Feed Pump (BFP) Automated Test	\$ 87,372	\$ -	\$ 87,372	(a)
P0001202	W6 Hydrogen Gas Dryer	\$ 190,755	\$ 160,628	\$ 30,127	19% (15)
P0001216	W6 Turbine Drains	\$ 348,422	\$ 321,653	\$ 26,769	8%
P0001250	W7 Process Parameter Monitor	\$ 2,335	\$ -	\$ 2,335	(a)
P0001251	K3 Condensate Pump	\$ 523,062	\$ 473,243	\$ 49,819	11%
P0001257	K0 Kahe Tank #11 Lvl Gauge	\$ 51,623	\$ -	\$ 51,623	(a)
P0001258	K0 Kahe Tank #12 Lvl Gauge	\$ 47,820	\$ -	\$ 47,820	(a)
P0001260	K0 Kahe Tank #14 Lvl Gauge	\$ 49,744	\$ -	\$ 49,744	(a)
P0001309	Net Energy Metering	\$ 53,265	\$ -	\$ 53,265	(a)
P0001316	Inn Prk V4322 Trayer Switch Repl	\$ 1,257	\$ -	\$ 1,257	(a)
P0001324	K1 uninterruptible power supply (UPS) Panel Upgrade	\$ 18,377	\$ -	\$ 18,377	(a)
P0001327	W5 uninterruptible power supply (UPS) Panel Upgrade	\$ 544	\$ -	\$ 544	(a)

Hawaiian Electric Company, Inc.

Completed Projects  
As Of 12/31/2010  
Total Cost of \$0 to \$1,000,000

Item Number	Project Description	2010 Recorded	2010 Budget	Variance \$	Variance %
P0001328	W6 uninterruptible power supply (UPS) Panel Upgrade	\$ 90,006	\$ 80,767	\$ 9,239	11%
P0001329	K6 uninterruptible power supply (UPS) Panel Upgrade	\$ 1,984	\$ -	\$ 1,984	(a)
P0001332	K2 uninterruptible power supply (UPS) Panel Upgrade	\$ 8,460	\$ -	\$ 8,460	(a)
P0001350	Baseyards Priority 2 - 2009 (Security upgrades)	\$ 47,688	\$ -	\$ 47,688	(a)
P0001357	Kapolei Pkwy Ext. OH to UG	\$ 43,010	\$ -	\$ 43,010	(a)
P0001381	K5 Kahe FWH 53 Replace	\$ 109,148	\$ -	\$ 109,148	(a)
P0001384	W6 Waiau FWH 62 Replace	\$ 886,147	\$ 739,780	\$ 146,367	20% (16)
P0001391	K1 Opacity Monitor	\$ 4,752	\$ -	\$ 4,752	(a)
P0001404	Kal Hwy at Makapuu - 12kV UG	\$ 220,681	\$ 588,394	\$ (367,713)	-62% (17)
P0001411	Waiau 138KV Breaker 111 Replace	\$ 6,013	\$ -	\$ 6,013	(a)
P0001415	Archer Breaker 6050 Repl	\$ 587,701	\$ -	\$ 587,701	(18)
P0001421	School St #1 Switch gear Repl	\$ 23,610	\$ -	\$ 23,610	(a)
P0001444	K6 Seal Air Damper Drive Replace	\$ (8,354)	\$ -	\$ (8,354)	(a)
P0001459	W6 FWH 61 Instrumentation	\$ 152,278	\$ 134,019	\$ 18,259	14%
P0001460	W6 FWH 63 Instrumentation	\$ 139,687	\$ 134,260	\$ 5,407	4%
P0001461	W6 FWH 64 Instrumentation	\$ 126,469	\$ 134,355	\$ (7,886)	-6%
P0001462	W6 FWH 65 Instrumentation	\$ 99,254	\$ 134,987	\$ (35,733)	-26% (19)
P0001473	K6 Voltage Regulator Upgrade	\$ 4,760	\$ -	\$ 4,760	(a)
P0001478	Waiau 138KV Breaker 107&108 Repl	\$ 78,295	\$ -	\$ 78,295	(a)
P0001479	HPP 46kV Breaker 4552 Replace	\$ 2,112	\$ -	\$ 2,112	(a)
P0001481	AES-CEIP #1 Relay Upgrade	\$ 525,993	\$ 541,075	\$ (15,082)	-3%
P0001482	Mikilua Sub T&D Work	\$ 2,237	\$ -	\$ 2,237	(a)
P0001486	School St Relay Upgrd	\$ 365	\$ -	\$ 365	(a)
P0001490	Ahuimanu Pi OH & UG Cable Upgr	\$ 107,181	\$ 160,539	\$ (53,358)	-33% (20)
P0001499	Kahe 138kV Breaker 247 Replace	\$ 6,603	\$ -	\$ 6,603	(a)
P0001500	Kahe 138kV Breaker 133 Replace	\$ 13,628	\$ -	\$ 13,628	(a)
P0001501	HPP 46kV Breaker 4553 Replace	\$ 3,670	\$ -	\$ 3,670	(a)
P0001502	North South Rd Ph1B UG Conv	\$ 2,899	\$ -	\$ 2,899	(a)
P0001503	Kahe 138 kV Breaker 172 Replace	\$ 3,929	\$ -	\$ 3,929	(a)
P0001519	Mak-Airport 138kV Shield Wire (SW) Repl	\$ 946	\$ -	\$ 946	(a)
P0001525	Tesoro Electrical Upgrade	\$ 632,323	\$ -	\$ 632,323	(21)
P0001529	Power Supply - Capital Tools	\$ 578,067	\$ 610,682	\$ (32,615)	-5%
P0001531	W0 Startup Transformer	\$ 1,166	\$ -	\$ 1,166	(a)
P0001536	W3&4 Phase Shift Transformer	\$ 29,884	\$ -	\$ 29,884	(a)
P0001538	K3 Power Current Transformer (PCT) Upgrade	\$ 402,513	\$ 341,655	\$ 60,858	18% (22)
P0001542	Call Queuing	\$ 23,003	\$ -	\$ 23,003	(23)
P0001547	Ward ITS Generator Repl	\$ 395,269	\$ -	\$ 395,269	(24)
P0001550	Sys Spare 2008 80MVA Tsf #1	\$ 204,832	\$ -	\$ 204,832	(a)
P0001552	Kahe-Permanente 46kV Nanakuli	\$ (17,529)	\$ -	\$ (17,529)	(a)
P0001553	Halawa-Iwilei Shield Wire	\$ 14,812	\$ -	\$ 14,812	(a)
P0001557	Makakilo C&D Ph1 46kV UG	\$ 6,632	\$ -	\$ 6,632	(a)
P0001560	Waiaakamilo Tsf #2 Replace	\$ 37,273	\$ -	\$ 37,273	(a)
P0001561	Kamokila #4 12 kV Line Ext	\$ 577,183	\$ 549,926	\$ 27,257	5%
P0001572	Bougainville Subd SV4613	\$ 61	\$ -	\$ 61	(a)
P0001573	K1 Boiler Feedwater Pump (BFP) 12 Motor Replacement	\$ (187)	\$ -	\$ (187)	(a)
P0001574	K2 Repl H2 Purity Meter	\$ 945	\$ -	\$ 945	(a)
P0001575	K1 Repl H2 Purity Meter	\$ (45,241)	\$ -	\$ (45,241)	(25)
P0001584	Chevron Refinery 12kV Reloc	\$ 25,735	\$ -	\$ 25,735	(a)
P0001594	Allure Waikiki 12kV UG Reloc	\$ 464,386	\$ 413,098	\$ 51,288	12%
P0001596	Wah2 138kV Tsf Replacement	\$ 22,839	\$ -	\$ 22,839	(a)
P0001597	CEIP3 138kV Tsf Replacement	\$ 116	\$ -	\$ 116	(a)
P0001617	W6 Condensate Pump Replace	\$ 394,221	\$ 341,927	\$ 52,294	15% (26)
P0001618	W6 Circulating Water Pump (CWP) No. 61 Replacement	\$ 733,202	\$ -	\$ 733,202	(27)
P0001627	W6 Repl H2 Purity Meter	\$ 249,754	\$ 191,909	\$ 57,845	30% (28)
P0001631	K3 Repl H2 Purity Meter	\$ 359,944	\$ 245,559	\$ 114,385	47% (29)
P0001637	W4 Exciter Air Conditioning	\$ 316,138	\$ 222,195	\$ 93,943	42% (30)

Hawaiian Electric Company, Inc.

Completed Projects  
As Of 12/31/2010  
Total Cost of \$0 to \$1,000,000

Item Number	Project Description	2010 Recorded	2010 Budget	Variance \$	Variance %
P0001639	K1 Service Water Strainer	\$ 454	\$ -	\$ 454	(a)
P0001640	K2 Service Water Strainer	\$ 4,398	\$ -	\$ 4,398	(a)
P0001658	W6 Turbine Generator Bearings Fire Protect	\$ 154,566	\$ 192,315	\$ (37,749)	-20% (31)
P0001682	Kapolei interchange (IC), Ph1-12kV OH & UG	\$ 563,668	\$ 901,117	\$ (337,449)	-37% (32)
P0001686	Kapolei IC, Ph1-12kV OH Conv	\$ 130,520	\$ 237,923	\$ (107,403)	-45% (33)
P0001687	K3 Boiler Feedwater Pump (BFP) 32 Motor Replacement	\$ 246,041	\$ 244,196	\$ 1,845	1%
P0001688	W5 BFP 51 Motor Replacement	\$ 256,718	\$ 95,574	\$ 161,144	169% (34)
P0001692	Kahe-Permanente 46kV Impr Waianae	\$ (1,607)	\$ -	\$ (1,607)	(a)
P0001698	Check Processing Upgrade	\$ 224,216	\$ -	\$ 224,216	(35)
P0001705	Wrd undgd security cabling	\$ 966	\$ -	\$ 966	(a)
P0001706	East Kapolei II Circuit	\$ 449,551	\$ 606,839	\$ (157,288)	-26% (36)
P0001708	Environmental Lab Expansion	\$ 6,565	\$ -	\$ 6,565	(a)
P0001720	Purch, Inst, & Test AMI Metr	\$ (994)	\$ -	\$ (994)	(37)
P0001728	Kalaeloa Dead Bus Energizing	\$ 849	\$ -	\$ 849	(a)
P0001751	2009 Spare 46-4 KV Tsf #1	\$ 535,894	\$ 654,196	\$ (118,302)	-18% (38)
P0001754	Switchboard Replacement-Ward	\$ 234,202	\$ -	\$ 234,202	(39)
P0001755	Ward Fire Alarm Install & UG	\$ 88,188	\$ -	\$ 88,188	(40)
P0001756	Archer-School High Pressure Fluid Filled (HPFF) Cbl Repl	\$ 6,644	\$ -	\$ 6,644	(a)
P0001757	Iwilei 4kV Conversion T&D	\$ 79,537	\$ 198,387	\$ (118,850)	-60% (41)
P0001761	H8 Sootblower Air Compressor 83	\$ 513,857	\$ 554,374	\$ (40,517)	-7%
P0001764	Ward Byard Concrete Work	\$ 141,921	\$ -	\$ 141,921	(42)
P0001792	K3 Feedwater Regulator Valve Upgrade	\$ 177,471	\$ 250,574	\$ (73,103)	-29% (43)
P0001805	H0 #7 Freight Elevator Modernization	\$ 163,670	\$ 182,321	\$ (18,651)	-10%
P0001806	2009 Spare 10% Tsf #1	\$ 651,770	\$ 641,939	\$ 9,831	2%
P0001820	Iwilei Support Structure 138kV Terminator Replmt	\$ 7,279	\$ 1,484,964	\$ (1,477,685)	-100% (44)
P0001844	School St Support Structure 138kV Terminator Replmt	\$ 9,460	\$ 1,487,265	\$ (1,477,805)	-99% (45)
P0001845	H0 Iwilei FO Tk 3 Floor Ren	\$ 45,806	\$ 142,421	\$ (96,615)	-68% (46)
P0001852	H0 Iwilei Fuel Oil Tank 4 Floor Ren	\$ 309,800	\$ 142,421	\$ 167,379	118% (47)
P0001858	W0 Fuel Oil Tank 4 Steam Coils	\$ 318,277	\$ -	\$ 318,277	(48)
P0001862	P24-25 Valkenburgh Pole Rep	\$ 442,825	\$ 502,418	\$ (59,593)	-12%
P0001872	IBM MAINFRAME UPGRADE	\$ (74,361)	\$ -	\$ (74,361)	(49)
P0001876	Trumpp Tower 12kV Relocation	\$ 883,455	\$ -	\$ 883,455	(a)
P0001903	Ala Moana Park 4kV Conversion	\$ 32,513	\$ 132,246	\$ (99,733)	-75% (a)
P0001904	Walau 46kV Bkr 4655 Replace	\$ 199,590	\$ 268,620	\$ (69,030)	-26% (50)
P0001905	replacement	\$ 214,059	\$ -	\$ 214,059	(51)
P0001931	2009 Spare 8% Tsf #2	\$ 636,165	\$ -	\$ 636,165	(52)
P0001932	2009 Spare 8% Tsf #1	\$ 635,612	\$ -	\$ 635,612	(53)
P0001972	MOKIAWE V2V CABL REPL	\$ 361,878	\$ -	\$ 361,878	(54)
P0001977	W0 Env Chern Lab Elec Upgrade	\$ 89,068	\$ -	\$ 89,068	(55)
P0002001	2010 Spare 138kV BKR #1	\$ 92,481	\$ -	\$ 92,481	(56)
P0002002	2010 Spare 46kV BKR #3	\$ 53,122	\$ -	\$ 53,122	(57)
P0002004	2010 Spare 46kV BKR #4	\$ 53,065	\$ -	\$ 53,065	(58)
P0002008	2010 Spare 138kV BKR #2	\$ 91,644	\$ -	\$ 91,644	(59)
P0002007	2010 Spare 138kV BKR #3	\$ 119,932	\$ -	\$ 119,932	(60)
P0002008	2010 Spare 46kV BKR #5	\$ 58,226	\$ -	\$ 58,226	(61)
P0002009	2010 Spare 46kV BKR #6	\$ 58,170	\$ -	\$ 58,170	(62)
P0002016	Lowes Iwilei Pole Reloc	\$ 151,940	\$ -	\$ 151,940	(63)
P0002065	K3 BFP 31 Motor Replacement	\$ 216,903	\$ -	\$ 216,903	(64)
P0002178	Mail Inserter Replacement	\$ 181,398	\$ -	\$ 181,398	(65)
P0002181	InfoPrinter Replacement	\$ 118,132	\$ -	\$ 118,132	(66)
P0002188	Ewa Nui 80MVA TSF A Install	\$ 68,273	\$ -	\$ 68,273	(67)
P1081000	ED Capitalized Tools & Equip	\$ 833,595	\$ 294,174	\$ 539,421	183% (68)
P1243000	PCs, Servers & Network	\$ 1,737,592	\$ 1,492,965	\$ 244,627	16% (69)
P1244000	Printers/Copiers/Faxes	\$ 119,695	\$ 82,943	\$ 36,752	44% (70)
P1250000	Capital Vehicle Budget	\$ 6,252,516	\$ 4,012,039	\$ 2,240,477	56% (71)
P1251000	Misc Tel Eqpt (NT)	\$ 458,766	\$ 525,302	\$ (66,536)	-13%

Hawaiian Electric Company, Inc.

Completed Projects

As Of 12/31/2010

Total Cost of \$0 to \$1,000,000

Item Number	Project Description	2010 Recorded	2010 Budget	Variance \$	Variance %
P1370000	Distr Rights of Way (R/W) Purch	\$ 43,486	\$ 60,000	\$ (16,514)	-28% (72)
P1373000	46kv Rightst of Way (R/W) Purch	\$ 30	\$ 36,000	\$ (35,970)	-100% (73)
P1429000	PROG Misc Power Plant Adds	\$ 3,603,845	\$ 2,619,471	\$ 984,374	38% (74)
P1470000	Minor Trans Sub Addns	\$ 476,694	\$ 810,139	\$ (333,445)	-41% (75)
P1480000	Minor Dist Sub Addns	\$ 3,057,102	\$ 1,717,392	\$ 1,339,710	78% (76)
P1500000	Comm & Control Program	\$ 700,116	\$ 304,878	\$ 395,238	130% (77)
P1505000	Mobile Radio Program - communication system support	\$ 281,787	\$ 174,188	\$ 107,599	62% (78)
P1510000	Misc OH Svc & Extn (CID)	\$ 1,352,338	\$ 1,406,284	\$ (53,946)	-4%
P1580000	Minor OH Dist Addn (CID)	\$ 1,857,018	\$ 1,906,395	\$ (49,377)	-3%
P1670000	Purchase, Install & Test Meters & Mtr Eq	\$ 1,019,202	\$ 1,407,855	\$ (388,653)	-28% (79)
P1680000	Transformer & Equip Pur CID	\$ 5,693,196	\$ 4,825,312	\$ 867,884	18% (80)
P1690000	Minor T&D Customer Programs	\$ 170,533	\$ 253,678	\$ (83,145)	-33% (81)
P1700000	Misc UG Svc & Extn (CID)	\$ 10,726,975	\$ 12,546,933	\$ (1,819,958)	-15% (82)
P1789000	Preventive OH Transf Repl	\$ 308,820	\$ 518,627	\$ (209,807)	-40% (83)
P1793000	Preventive UG Transf Repl	\$ 1,302,272	\$ 505,125	\$ 797,147	158% (84)
P1810000	Prev Misc Cable Failure Rpl	\$ 1,811,232	\$ 3,462,942	\$ (1,651,710)	-48% (85)
P1820000	Minor UG Addns (CID)	\$ 1,312,543	\$ 1,666,026	\$ (353,483)	-21% (86)
P1870000	PROG Power Station Misc	\$ 764,469	\$ 196,475	\$ 567,994	289% (87)
P1990000	Minor T&D System Programs	\$ 512,455	\$ 1,588,488	\$ (1,076,033)	-68% (88)
P3400000	Prev OH Dist Repl	\$ 4,385,293	\$ 4,235,806	\$ 149,487	4%
P3410000	Prev OH Subtrans Repl	\$ 1,892,618	\$ 3,188,450	\$ (1,295,832)	-41% (89)
P3402000	Prev OH Trans Repl	\$ 1,829,951	\$ 1,915,437	\$ (85,486)	-4%
Y00105	N. Kahana Bridge Temp OH	\$ 204,487	\$ 187,293	\$ 17,194	9%
Y00121	Barbers Pt TF Tsf #2 Install	\$ 20,633	\$ -	\$ 20,633	(a)
Y00123	Kamokila-Tsf #3 Install	\$ 2,583	\$ -	\$ 2,583	(a)
Y00124	Ocean Pointe SS Tsf 2	\$ 3,940	\$ -	\$ 3,940	(a)
Y00132	Chevron 46kV Line Extension	\$ 944,158	\$ 901,745	\$ 42,413	5%
Y00143	S. Punaluu Bridge 46kV Temp	\$ 66,987	\$ -	\$ 66,987	(90)
		\$ 81,593,166	\$ 81,908,285	\$ (315,119)	

(a) Straggling cost - includes adjustments (increases or decreases) to projects after being added to plant.

Hawaiian Electric Company, Inc.

Completed Projects  
As Of 12/31/2010  
Total Cost of \$1,000,000 to \$2,500,000

Item Number	Project Description	2010 Recorded	2010 Budget	Variance \$	Variance %
P0001562	Archer Bkr Rupture Disk Inst	\$ 1,108,299	\$ -	\$ 1,108,299	(1)
P0000484	W7 Waiau FWH 75 Replace	\$ 8,569	\$ -	\$ 8,569	(a)
P0000809	K6 Annunciator Replacement	\$ 16,376	\$ -	\$ 16,376	(a)
P0000812	K5 Annunciator Replacement	\$ 1,318	\$ -	\$ 1,318	(a)
P0000815	H9 Volt Reg/Exciter Replace	\$ 1,403	\$ -	\$ 1,403	(a)
P0000817	W6 Exciter/Regulator Replace	\$ 1,824,683	\$ 1,807,212	\$ 17,471	1%
P0000854	K1 Excitation System	\$ 50,339	\$ -	\$ 50,339	(a)
P0000856	W7 Main Transformer	\$ 2,484	\$ -	\$ 2,484	(a)
P0000895	H8 Main Xfrm Replacement	\$ 3,499	\$ -	\$ 3,499	(a)
P0001121	Maunalani Heights Cable Repl	\$ 85,352	\$ -	\$ 85,352	(a)
P0001167	Waiau-Ewa Nui Fiber Optic Replacement	\$ 1,460,521	\$ 1,618,869	\$ (156,348)	-10%
P0001334	W10 Inlet Air Filtration	\$ 1,523,250	\$ 1,778,201	\$ (254,951)	-14%
P0001438	W6 Main Condenser Refurb	\$ 2,222,568	\$ 1,497,476	\$ 725,092	48% (2)
P0001441	K2 FWH Turb, Wtr. Ind. Pvt.	\$ 1,943,750	\$ -	\$ 1,943,750	(3)
P0001483	Mikilua Sub Tsf #3 Work	\$ 9,884	\$ -	\$ 9,884	(a)
P0001518	Spare 48/80mva Tsf #2	\$ 656,584	\$ 2,234,620	\$ (1,578,036)	-71% (4)
P0001804	W10 Exciter Upgrade	\$ 1,674,630	\$ 1,471,360	\$ 203,270	14%
		\$ 12,593,511	\$ 10,405,738	\$ 983,996	

(a) Straggling cost

- (1) This project was unbudgeted in 2010. During the detailed inspections required for the rupture disk installation, additional work was identified that needed to be addressed. This work was required to be completed at this time while the equipment was open and the equipment vendor was on-site.
- (2) This project variance is largely due to the scope of work for the contractors increasing to include anti-vibration tube staking material and labor and cathodic protection material and labor.
- (3) This project was included in the 2009 approved capital budget for \$980,000. It was not included in the 2010 capital budget as this project was initially projected to be completed in 2009. The cost overrun is due to more equipment/material required than originally estimated, and the actual labor installation hours were higher than originally estimated. This project was a first-time "pilot" that HECO undertook, to retrofit turbine water induction countermeasures onto generating units not originally designed with these systems. After detailed design, and during procurement, it was determined that the retrofit equipment would not meet performance requirements, necessitating changes that impacted material costs and installation labor.
- (4) Project credited with \$1.28M insurance coverage because this spare unit was used immediately to replace the failed Ewa Nui Tsf A. Labor hours for assembling & testing the transformer as a spare unit under P0001518 was instead charged to the Ewa Nui 80MVA Tsf A Replace (P0002188) project.

Hawaiian Electric Company, Inc.  
Completed Projects  
As Of 12/31/2010  
Total Cost of \$2,500,000 or Greater  
(PUC Application filed July 1, 2004 or later)

Docket Number	Item Number	Project Description	2010 Incurred Cost	CIAC Recorded	Net Cost	In-Service Date	Cost Report Filed
05-0145	Y49000	CIP1 Unit 1 Addition	\$ 1,693,198	\$ -	\$ 1,693,198	8/3/2009	10/2/2009 (a)
2008-0321	Y00118	Beckoning Point Substation	\$ 3,232,567	\$ -	\$ 3,232,567	5/3/2010	6/21/2010
2008-0132	P0001390	Whitmore Sub & 46 kV Line	\$ 212,825	\$ -	\$ 212,825	11/25/2009	2/22/2011 (a)
05-0146	P0001169	CIP0 Kahe RO Water Project	\$ 373,480	\$ -	\$ 373,480	7/28/2009	9/2/2009 (a)
05-0146	P0001170	CIP0 AQ Monitoring Stns	\$ 361,926	\$ -	\$ 361,926	8/13/2008	2/11/2011 (a)
2009-0155	P0001577	K3 Biofuel Co-Firing	\$ 4,957,351	\$ -	\$ 4,957,351	9/10/2010	11/19/2010
			\$ 10,831,348	\$ -	\$ 10,831,348		

(a) Straggling Cost

Hawaiian Electric Company, Inc.

Completed Projects  
As Of 12/31/2010  
Other PUC Projects (non GO7)

Docket Number	Item Number	Project Description	2010			In-Service Date
			Incurred Cost	CIAC Recorded	Net Cost	
2009-0176	Y00138	First Wind UFLS	\$ 2,567,414	\$ 2,762,034	\$ (194,620)	12/19/2010
2009-0351	Y00139	NCTAMS Whitmore Substation	\$ 1,512,854	\$ 1,400,000	\$ 112,854	3/31/2010
2008-0279	Y00126	Mamala Phase 5 Mamala Sub	\$ 2,424,906	\$ 2,498,112	\$ (73,206)	10/15/2010
			\$ 6,505,174	\$ 6,660,146	\$ (154,973)	

Hawaiian Electric Company, Inc.

Completed Projects

As Of 12/31/2010

Total Cost of \$500,000 or Greater  
(PUC Application filed prior to July 1, 2004)

Docket Number	Item Number	Project Description	2010 Incurred Cost	In-Service Date	Cost Report Filed
02-0206	P9539000	K3 Boiler Control Upgrade	\$ 24,522	9/19/2007	11/15/2007 (a)
03-0360	Y00030	Dispatch Center Building	\$ 914	3/27/2006	4/21/2008 (a)
03-0417	Y48500	Kamoku 46kV UG Alt Phase 1	\$ 58,502,483	6/29/2010	8/26/2010
					\$ 58,527,920

(a) Straggling Cost

\* Final Cost Report filed 11/29/10

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of )  
HAWAIIAN ELECTRIC COMPANY, INC. ) Docket No. 2008-0321  
For Approval to Commit Funds in )  
Excess of \$2,500,000 (excluding )  
Customer contributions) for Item )  
Y00118, Beckoning Point Substation )  
And 46 kV Circuit. )  
\_\_\_\_\_  
)

DECISION AND ORDER

By this Decision and Order, the commission approves HAWAIIAN ELECTRIC COMPANY, INC.'s ("HECO") request to commit approximately \$3,285,391 (excluding customer contributions) for Item Y00118, Beckoning Point Substation and 46 kilovolt ("kV") Circuit ("Proposed Project"), pursuant to Section 2.3.g.2 of General Order No. 7, Standards for Electric Utility Service in the State of Hawaii ("General Order No. 7"). The commission also determines that it is appropriate for HECO to construct the 46 kV subtransmission line above the surface of the ground, as proposed in its application filed on December 23, 2008, under Hawaii Revised Statutes ("HRS") § 269-27.6(a).

I.

Background

HECO, a Hawaii corporation, is a public utility as defined by HRS § 269-1. HECO was initially organized under the

## COST ESTIMATE

Project Title: Installation of Beckoning Point Substation  
Budget Item: Y00118

	TOTAL
LABOR	\$618,481
ON-COST	<u>\$781,229</u>
Sub-Total	<u>\$1,399,710</u>
 MATERIALS	 <u>\$1,453,473</u>
 OUTSIDE SERVICES	 <u>\$971,197</u>
 OTHER (Freight)	 <u>\$98,130</u>
 ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION	 <u>\$140,719</u>
 TOTAL COST OF PROJECT	 <u>\$4,063,229</u>
 ESTIMATED CONTRIBUTIONS (1)	 <u>\$777,838</u>
 NET PROJECT COST (Less Cash Contributions)	 <u>\$3,285,391</u>

Note: CIAC is less the Hawaii GET of \$38,464

- (1) This amount was erroneously listed as a customer contribution in the Cost Estimate but should have been presented as a customer advance as indicated on page 5 of the Application and Certificate of Service (2008-0321). It is treated as an advance for the Rate Base RAM calculation.

HECO RT-9  
DOCKET NO. 03-0417

(A)

REBUTTAL TESTIMONY OF  
EARLYNNE F. OSHIRO

PROJECT MANAGER  
PROJECT MANAGEMENT DIVISION  
ENGINEERING DEPARTMENT  
HAWAIIAN ELECTRIC COMPANY, INC.

Subject: Project Cost

HECO-R-902  
DOCKET NO. 04-0317  
PAGE 1 OF 2

03-04/

**COST INPUT DATA**  
(\$ in 000's)

Ph.1

Ph.2

SERVICE DATE ==>	PUC Application			Revised Estimate	
	2006	2008	2007	2009	
<b>INITIAL INSTALLATION COSTS</b>					
Planning Costs	\$25,269	\$0	\$26,396	\$0	
Estimated	\$12,836	N/A	\$12,836	N/A	
AFUDC	\$12,433	N/A	\$13,580	N/A	
Permitting & Approval Costs	\$1,456	\$579	\$1,491	\$580	
Estimated	\$1,159	\$415	\$1,172	\$420	
AFUDC	\$297	\$164	\$319	\$170	
Subtransmission Line Costs	\$5,196	\$9,709	\$3,399	\$9,529	
Estimated	\$4,916	\$8,969	\$3,208	\$8,987	
AFUDC	\$280	\$740	\$191	\$541	
Transmission Substation Costs	\$8,408	\$3,549	\$8,604	\$3,632	
Estimated	\$7,821	\$3,322	\$7,830	\$3,326	
AFUDC	\$587	\$227	\$774	\$306	
Distribution Substation Costs	\$1,258	\$0	\$2,003	\$0	
Estimated	\$1,233	N/A	\$1,886	N/A	
AFUDC	\$25	N/A	\$117	N/A	
<b>TOTAL</b>	<b>\$41,587</b>	<b>\$13,837</b>	<b>\$41,893</b>	<b>\$13,751</b>	<b>= 55,644</b>
<b>REMOVAL COSTS</b>					
Subtransmission Line Costs	Note 1 \$232	2043 \$339	Note 1 2045 \$239	Note 1 2044 \$348	Note 1 2046 \$348
Transmission Substation Costs	\$95 \$95	2036 \$17	2023 \$98	2037 \$17	2024 \$17
Distribution Substation Costs	\$120 \$201 \$313 \$487	2052 2021 2036 2051	\$127 \$127 \$322 \$502	2038 2053 2054 2052	2053 \$131 \$42 \$131 2039 2054 2055
Subtransmission Line Costs	Note 1 \$3,549	2043 \$6,890	Note 1 2045 \$3,656	Note 1 2044 \$7,097	Note 1 2046 \$7,097
Transmission Substation Costs	\$585 \$4,782	2036 2052	\$195 \$1,073	2023 2038 \$603 \$4,926	2037 2053 \$201 \$1,105
Distribution Substation Costs	\$920 \$1,433 \$2,233	2021 2036 2051	\$474 \$4,604	2053 2054 \$488 \$4,742	2039 2052 2054 2055
<b>NEW CYCLE COSTS</b>					
Subtransmission Line Costs	Note 1 \$3,549	2043 \$6,890	Note 1 2045 \$3,656	Note 1 2044 \$7,097	Note 1 2046 \$7,097
Transmission Substation Costs	\$585 \$4,782	2036 2052	\$195 \$1,073	2023 2038 \$603 \$4,926	2037 2053 \$201 \$1,105
Distribution Substation Costs	\$920 \$1,433 \$2,233	2021 2036 2051	\$474 \$4,604	2053 2054 \$488 \$4,742	2039 2052 2054 2055
<b>O&amp;M COSTS (ANNUAL)</b>					
Subtransmission Line Costs	\$10	Note 2 \$54	\$40 \$108	Note 3 Note 4 \$54	\$40 Note 5 \$108
Transmission Substation Costs	\$54	Note 2 \$108	\$108 \$15	Note 3 Note 4 \$15	Note 5 \$108 \$15
Distribution Substation Costs	\$15	Note 2 \$15	\$15 Note 3	Note 4 \$15	Note 5 \$15 Note 5, 6

**Notes:**

1. Year in which removal and replacement occurs.
2. O&M costs applicable for 2007 and 2008.
3. O&M costs applicable for years 2009 and beyond.
4. O&M costs applicable for 2008 and 2009.
5. O&M costs applicable for years 2010 and beyond.
6. O&M costs does not include maintenance on the transformer installed at Makaloa Substation as a transformer at McCully Substation is removed. Therefore, the net effect on distribution substation O&M is no change.

**EAST OAHU TRANSMISSION PROJECT ("EOTP") COSTS IN  
DOCKET NO. 03-0417 FOR THE DECOUPLING DOCKET NO. 2008-0274**

Total EOTP costs	\$55,644,000
Phase I costs	\$41,893,000
Less planning costs	(\$12,836,000)
Less associated AFUDC	<u>(\$13,560,000)</u>
	<u>\$ 15,497,000</u>

Source: Dkt. No. 03-0417, HECO-R-902, page 1,  
Order No. 22104, pp. 4 and 8, Decision and Order  
No. 23747, p. 35.

Support for the EOTP costs. Refer to the referenced documents attached. Shaded information foots to dollars above.)

Att. A. In its rebuttal testimony in the EOTP proceeding, Dkt. No. 03-0417, Hawaiian Electric showed its revised cost estimates broken down by 2007 Phase I costs of \$41,893,000 and 2009 Phase II costs of \$13,751,000 (total \$55,644,000). For the Phase I costs, it showed planning costs of \$12,836,000 and AFUDC associated with these costs of \$13,560,000. HECO-R-902, page 1.

Att. B. According to the Consumer Advocate's testimony, "(t)he estimated cost of the instant EOTP ranging from \$55,644,000 to \$60,910,000 should be reduced by \$12 million (i.e., \$43,644,000 to \$48,910,000) to remove the costs incurred during the period from 1991 through June 2002 to plan, scope and receive public input, route selection, environmental review and CDUP process for the initial 138kV EOTP proposal. The costs should also include any Allowance for Funds Used During Construction ('AFUDC') accruals that were made for the costs incurred to pursue the 138kV EOTP alternative." CA-T-1, page 9, lines 1-8. (For the decoupling docket, specifically \$12,836,000 in planning costs and associated AFUDC of \$13,560,000 provided in the Company's rebuttal.)

Att. C. According to the joint motion filed in Dkt. No. 03-0417, "(a)ny issue as to whether the pre-2003 planning and permitting costs, and related AFUDC should be included in the costs of the instant project has been reserved to and may be raised in the next general rate increase proceeding (or other proceeding) in which HECO seeks approval to recover the East Oahu Transmission Project costs." Joint Motion for Approval of Stipulation, page 5.

Att. D. The Commission approved the Stipulation, in part. "The commission accepts the withdrawal of the Pre-2003 Permitting and Planning Costs issue from this proceeding," but denied the request to withdraw the information on this from the record. Order No. 22104, Ordering Paragraph 2, pages 8-9.

Att. E. In D&O No. 23747, the Commission approved HECO's request to expend an estimated \$55,644,000 for EOTP, "provided that no part of the Proposed Project may be included in HECO's rate base unless and until the Proposed Project is in fact installed, and is used and useful for public utility purposes, and provided that HECO present data in the next rate proceeding concurrent with or following the in-service date of Phase 2 of the Proposed Project that demonstrates the need and use of the Archer D transformer." D&O No. 23474, Ordering Par. 1, pages 37-38. It is important to note that the PUC held to the Stipulation and Order No. 22104 approving the Stip:

1. However, the D&O also states that "(i)n approving the commitment of funds for the Proposed Project, the Commission notes that it is not modifying Order No. 22104 [which approved the Stipulation accepting the withdrawal of the permitting and planning costs]. The Consumer Advocate may raise the issue of whether the pre-2003 planning and permitting costs, and related AFUDC should be included in the costs of the Proposed Project in the next general rate case proceeding (or other proceeding) in which HECO seeks approval to recover the costs of the Proposed Project." D&O 23474, footnote 17, page 35.
2. Moreover, the D&O reiterated that the Commission accepted the withdrawal of the permitting and planning costs issue, but denied the agreement to withdraw the info on this from the record. "Accordingly, as stated in Order No. 22104, the commission will not address the pre-2003 planning and permitting costs incurred by HECO in the Decision and Order." D&O 23747, page 26.

Att. F. EOTP without planning and permitting costs have been included in the Company's revenue decoupling proposal in Docket No. 2008-0274, which the Consumer Advocate and the parties agreed to in this proceeding. Refer to the Hawaiian Electric Companies Revenue Decoupling Proposal, January 30, 2009, footnote 12, page 27 and Attachment 13A, page 1. Also refer to the response to PUC-IR-6.

Project Manager  
Kenji Kusaki  
x 7644

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC. ) Docket No. 2009-0155

For Approval to Commit Funds in )  
Excess of \$2,500,000 (excluding )  
customer contributions) for the )  
Purchase and Installation of the )  
Capital Equipment, Item P0001577, )  
For the Kahe 3 Biofuel Co-firing )  
Demonstration Project, and for )  
Approval of the Biofuel Supply )  
Contract for the Kahe 3 Biofuel )  
Co-firing Demonstration Project )  
and to Include the Biofuel Supply )  
Contract Costs in Hawaiian )  
Electric's Energy Cost Adjustment )  
Clause. )

DECISION AND ORDER

By this Decision and Order, the commission approves HAWAIIAN ELECTRIC COMPANY, INC.'s ("HECO") request: (1) to commit an estimated \$4,686,000 (excluding customer contributions) for the purchase and installation of capital equipment, Item P0001577, for the Kahe 3 Biofuel Co-firing Demonstration Project ("Biofuel Co-Firing Project"); (2) to approve the biofuel supply contract ("Supply Contract") between HECO and Sime Darby Biodiesel SDN BHD ("Sime Darby") to provide approximately 1,575,000 net U.S. gallons of biofuel for use in HECO's Biofuel Co-Firing Project and the related throughput contract; and (3) to include the costs of the Supply Contract and costs associated with the biofuel, transportation, and related taxes in its

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of )  
HAWAIIAN ELECTRIC COMPANY, INC. ) Docket No. 2007-0365  
For Approval to Commit Funds in ) Decision and Order No. 23983  
Excess of \$2,500,000 (Excluding )  
Customer Contributions) for Item )  
P7650000, the Waiau 8 Boiler )  
Control System Upgrade Project )  
\_\_\_\_\_  
)

DECISION AND ORDER

By this Decision and Order, the commission approves HAWAIIAN ELECTRIC COMPANY, INC.'s ("HECO") request to commit approximately \$3,987,730 for Item P7650000, the Waiau 8 Boiler Control System Upgrade Project ("Project"), in accordance with Paragraph 2.3(g)(2) of the commission's General Order No. 7, Standards for Electric Utility Service in the State of Hawaii, ("G.O. No. 7").

I.

Background

A.

Application

HECO is a Hawaii corporation organized under the laws of the Kingdom of Hawaii on or about October 13, 1891, and now exists under and by virtue of the laws of the State of Hawaii. HECO is an operating public utility engaged in the production,

**RBA Rate Adjustment Revision Due to  
Issuance of Interim Decision & Order**

The RBA Rate Adjustment is a per kilowatt-hour rate that provides for: 1) the collection or return of the prior calendar year-end balance in the RBA; 2) the return of the Earnings Sharing Revenue Credits, Major Capital Projects Credits or Baseline Capital Projects Credits<sup>1</sup> for the prior calendar year; and 3) recovery of the RAM Revenue Adjustment for the RAM Period as defined in the RAM Provision tariff.<sup>2</sup> The RAM Period is typically January 1 through December 31 of the year the RAM filing is made. In 2011, the beginning of the RAM period is March 1 instead of January 1 due to the March 1, 2011 effective date of the RBA and RAM tariffs. The RBA Rate Adjustment will be billed on a lagged basis to customers over the subsequent June 1<sup>st</sup> through May 31<sup>st</sup> period (see Tariff Sheet 92 of Hawaiian Electric Company's approved RBA tariff). Thus, typically, the annual tariff filings in March of each year, including a test year<sup>3</sup>, establish the target revenue for the entire calendar year and re-set the RBA rate adjustment to be effective June 1<sup>st</sup>.

The Commission's issuance of a rate case interim decision and order within a test year resets the level of target revenue and supersedes the target revenue calculated under the RBA Provision tariff from the effective date of the interim rates. From that date, the RAM Revenue Adjustment for the remainder of the test year is adjusted to zero because the approved interim revenue requirement is recovered through interim rates.<sup>4,5</sup>

Although the RAM Revenue Adjustment for the test year is adjusted to zero from the date the interim rates become effective, the RBA Rate Adjustment, which is billed to customers beginning June 1, must still be recalculated and reset to recover the RAM Revenue Adjustment accrued between the beginning of the test year (or from March 1, 2011, as reflected in this filing which is the effective date for decoupling and the effective

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<sup>1</sup> Earnings Sharing Revenue Credits are amounts to be returned to customers as credits through the RBA Provision to implement the earnings sharing percentages and procedures described in the RAM tariff provision on Tariff Sheets 93C and 93D. Major Capital Projects Credits and Baseline Capital Projects Credits are amounts to be returned to customers as credits through the RBA Provision as described in the RAM tariff provision on Tariff Sheets 93B and 93C.

<sup>2</sup> The RAM Period is defined as the calendar year containing the Annual Evaluation Date. The Annual Evaluation Date is the Date the Company will make its annual filing under this [RAM] mechanism. The Annual Evaluation Date shall be no later than March 31<sup>st</sup> of each year, commencing March 31, 2011. (See Tariff Sheet 93.)

<sup>3</sup> See letter from the HECO Companies and Consumer Advocate, filed June 25, 2009, attached Exhibit C at 8 (Revised 6/25/09), Docket No. 2008-0274.

<sup>4</sup> The RAM for the calendar year following the test year will be calculated and filed on March 31<sup>st</sup> of the year following the test year.

<sup>5</sup> The establishment of a new target revenue does not affect the level of collection or return of the prior calendar year-end balance in the RBA or the Earnings Sharing Revenue Credits, Major Capital Projects Credits or Baseline Capital Projects Credits that are requested in the Company's annual filing for the RBA Rate Adjustment.

date of the RBA and RAM tariff provisions) and the date that interim rates become effective. Hawaiian Electric will revise the RBA Rate Adjustment to reflect the RAM Revenue Adjustment that must be included in the following manner, which is further illustrated on page 4 of this attachment:<sup>6</sup>

1. Identify the interim rate effective date. This date would depend on provisions in the Commission's order approving interim rates.
2. Determine the number of calendar days from the beginning of the test year (or from March 1, 2011, as reflected in this filing which is the effective date for decoupling and the effective date of the RBA and RAM tariff provisions) and the effective date of the interim rates.
3. Prorate the annual RAM Revenue Adjustment based on the number of calendar days the RAM Revenue Adjustment is effective. Calculate the revised RAM Revenue Adjustment based on Step 2 for the period from the beginning of the test year (or from March 1, 2011, as reflected in this filing which is the effective date for decoupling and the effective date of the RBA and RAM tariff provisions) and the interim rates' effective date.
4. Estimate the RBA Rate Adjustment revenue recovered from ratepayers between June 1 and the interim rate effective date by multiplying the RBA Rate Adjustment filed on March 31 by the estimated kilowatthour sales between June 1 and the interim rate effective date.
5. Calculate the RBA Rate Adjustment revenues remaining to be recovered for the test year by subtracting the amount in Step 4 from the amount in Step 3.
6. Calculate a revised RBA Rate Adjustment to be effective on the same date that interim rates are effective, through May 31<sup>st</sup> of the following year, by dividing the amount in Step 5 by projected kilowatthour sales over the same period.

As indicated above and in the accompanying illustration, the revised RBA Rate Adjustment as a result of an interim decision in the rate case is a function of 1) the impact on the RAM Revenue Adjustment for the calendar year based on when the interim rates become effective and 2) the estimated revenues collected for the RAM Revenue Adjustment through the RBA Rate Adjustment until that date. Prorating the RAM Revenue Adjustment will be done using calendar days.

Hawaiian Electric will submit the revised RBA tariff provision for the revised RBA Rate Adjustment as part of the rate case tariff filing to place interim rates in effect. The Company will request that both the interim rates and the revised RBA Rate Adjustment be effective on the same date.

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<sup>6</sup> There may be some overlap in the billing of interim rates and the billing of the RAM Revenue Adjustment through the RBA Rate Adjustment because while interim rates are billed immediately after they become effective, the billing of the RAM Revenue Adjustment through the RBA Rate Adjustment occurs on a lagged basis during the June 1 through May 31 period following the filing of the RBA Rate Adjustment.

ATTACHMENT 5  
PAGE 3 OF 4

The RAM Revenue Adjustment in a year that is a rate case test year would be designated interim and subject to refund in the event the Commission finds a lower authorized base revenue amount to be reasonable for the test year. (See page 23 of the Joint Final Statement of Position of the HECO Companies and Consumer Advocate, filed May 11, 2009, in Docket No. 2008-0274.) The refund, if one is necessary, would be included in the revised RBA tariff provision and revised RBA Rate Adjustment filed with the Commission with test year interim or final rates.

Based on the filing of the RBA tariff on March 31, 2011, when it is probable the tariff will become effective, the Company will begin accruing the RAM Revenue Adjustment ratably from March. The difference between the revenue accrued and the revenue collected through the RBA tariff will be included in a regulatory asset.

HAWAIIAN ELECTRIC COMPANY

DETERMINATION OF ADJUSTMENT to REVENUE BALANCING ACCOUNT (RBA) RATE ADJUSTMENT  
BASED ON REVISING THE RAM REVENUE ADJUSTMENT

ILLUSTRATION ASSUMING 2011 INTERIM RATE INCREASE EFFECTIVE JULY 1, 2011

		<u>In \$000s</u>	<u>In \$000s</u>
	Step 1	Assumed Interim rate effective date: July 1, 2011 (Day of the year = 182) Effective date of RBA and RAM: March 1, 2011 (Day of the year = 60)	
L1	Step 2	TOTAL RAM Attachment 2, Page 1	\$15,199
L2		Adjustment for Adjusted RAM Period March 1, 2011 - June 30, 2011 122 days ÷ 365 days	33.42%
L3 = L1 x L2	Step 3	Adjusted 2011 RAM to be Recovered	\$5,080
L4		RBA calendar year balance + Earnings Sharing Revenue Credits, Major Capital Projects Credits, and/or Baseline Capital Projects Credits	NA
L5		RBA Rate Adjustment revenue reflecting interim	\$5,080
L6	Step 4	Estimated GWH Sales, June 2011 Attachment 2, Page 2	633.0
L7		Initial RBA Rate Adjustment, ¢ per kWh Effective June 1, 2011 through May 31, 2012	0.1694
L8 = (L6 x 1000000) x (L7 ÷ 100) ÷ 1000		Estimated RBA Rate Adjustment Revenue June 2011	\$1,072
L9 = L3 - L8	Step 5	Remaining Adjusted 2011 RAM to be Recovered July 2011 to May 2012	\$4,008
L10	Step 6	Estimated GWH Sales (7521.8-633.0) July 2011 to May 2012 Attachment 2, Page 2	6,888.8
L11 = (L9 x 1000 x 100) ÷ (L10 x 1000000)		Revised RBA Rate Adjustment, ¢ per kWh Effective July 1, 2011 through May 31, 2012	0.0582
L12 = L11 ÷ 100 x 600		Monthly Bill Impact @ 600 kWh	\$0.35

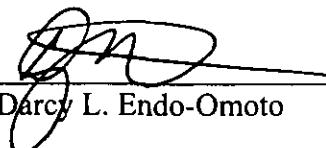
BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of )  
  )  
HAWAIIAN ELECTRIC COMPANY, INC. ) Transmittal No. 11-02  
  )  
For Approval to Modify the RBA Rate )  
Adjustment in its Revenue Balancing Account )  
Provision Tariff )  
  )

VERIFICATION

STATE OF HAWAII                            )  
  ) ss.  
CITY AND COUNTY OF HONOLULU            )

Darcy L. Endo-Omoto, being first duly sworn, deposes and says: That she is the Vice President, Government and Community Affairs, of Hawaiian Electric Company, Inc., Applicant in the above proceeding; that she makes this verification for and on behalf of Hawaiian Electric, and is authorized so to do; that she has read the foregoing Application, and knows the contents thereof; and that the same are true of her own knowledge except as to matters stated on information or belief, and that as to those matters she believes them to be true.

  
Darcy L. Endo-Omoto



Subscribed and sworn to before  
me this 31st day of March, 2011.

Deborah Ichishita

DEBORAH ICHISHITA

Notary Public, State of Hawaii

My Commission expires July 18, 2012

STATE OF HAWAII NOTARY CERTIFICATION

Doc. Date: 3/31/2011 # of pages 172

Notary Name: DEBORAH ICHISHITA First Circuit

Description: Hawaiian Electric

Transmittal No. 11-02



Notary Signature

3/31/11  
Date

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In the Matter of the Application of )  
HAWAIIAN ELECTRIC COMPANY, INC. ) Transmittal No. 11-02  
For Approval to Modify the RBA Rate )  
Adjustment in its Revenue Balancing Account )  
Provision Tariff )  
\_\_\_\_\_  
)

CERTIFICATE OF SERVICE

I hereby certify that the foregoing Transmittal No. 11-02 was served on the date of filing by hand delivery, or mail, postage prepaid and properly addressed, as indicated below.

JEFFREY T. ONO                                   2 Copies  
EXECUTIVE DIRECTOR                                 Via Hand Delivery  
DIVISION OF CONSUMER ADVOCACY  
DEPT. OF COMMERCE AND CONSUMER AFFAIRS  
P.O. Box 541  
Honolulu, Hawaii 96809

JAMES N. McCORMICK, ESQ.                           1 Copy  
ASSOCIATE COUNSEL                                     Via U.S. Mail  
NAVAL FACILITIES ENGINEERING COMMAND,  
PACIFIC  
258 Makalapa Drive, Suite 100  
Pearl Harbor, Hawaii 96860-3134

Dated: Honolulu, Hawaii, March 31, 2011.

HAWAIIAN ELECTRIC COMPANY, INC.

  
\_\_\_\_\_  
Kyle Kawata