



Dean K. Matsuura
Manager
Regulatory Affairs

May 10, 2011

FILED
2011 MAY 10 P 3:49
PUBLIC UTILITIES
COMMISSION

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

Dear Commissioners:

Subject: Transmittal No. 11-02 – Decoupling RBA Rate Adjustment Tariff Filing
Hawaiian Electric Revisions to Tariff Filing

Enclosed are revised and new pages of the attachments to Hawaiian Electric Company, Inc.'s ("Hawaiian Electric" or "Company") Transmittal No. 11-02 filed March 31, 2011. The enclosed provides corrections to its March 31, 2011 filing as well as revisions in response to the *Division of Consumer Advocacy's Statement of Position on Hawaiian Electric Company, Inc.'s Transmittal No. 11-02, Exhibit 1 Revised Rate Calculation and Certificate of Service* ("Statement of Position on Transmittal No. 11-02") filed April 29, 2011. Attachment 5, page 4, has also been modified to reflect the recently approved Interim Decision and Order issuance date of July 22, 2011, in the Company's 2011 test year rate case.¹ A summary of the revisions filed is provided in Attachment A of this letter.

The Company agrees with the comments filed in Sections III and IV of the Statement of Position on Transmittal No. 11-02, and has revised its rate base revenue adjustment mechanism ("RAM") estimate accordingly, with corrections to the Consumer Advocate's calculations.² There are no outstanding issues between the Company and the Consumer Advocate except for the effective period and accrual of the revenue adjustment mechanism in 2011.

The \$0.001672 rate per kWh requested by Hawaiian Electric (reflected on Attachment 1, page 3, of the enclosed) is based on an effective period of ten months, from March 1, 2011, through December 31, 2011, for the revenue adjustment mechanism. As a result, this rate is

¹ *Order Approving Hawaiian Electric Company Inc.'s Extension Request, filed May 3, 2011; and the Consumer Advocate's Extension Request, Filed April 25, 2011, Docket No. 2010-0080, filed May 9, 2011.*

² During informal discussions with the Consumer Advocate, the Company provided the Consumer Advocate with revised inputs to the rate base RAM calculation. The Consumer Advocate inadvertently did not reflect all these revisions in its Statement of Position on Transmittal No. 11-02. The enclosed updates the Consumer Advocate's calculations.

The Honorable Chair and Members
of the Hawaii Public Utilities Commission
May 10, 2011
Page 2

lower than the Consumer Advocate's proposed rate which is based on an effective period of twelve months, from January 1, 2011, through December 31, 2011. Hawaiian Electric requests that its proposed lower rate of \$0.001672 be allowed to go into effect on June 1, 2011. This will allow the rate to go into effect on schedule, according to the time table specified in the Amended Joint Proposal approved by this Commission.³ Hawaiian Electric, not its customers, will bear the risks pending a decision on the Consumer Advocate's recommendations in its Statement of Position. If the Commission should approve the higher rate as proposed by the Consumer Advocate after the effective date of the tariff, customers will not be harmed by the implementation of the lower rate, as Hawaiian Electric will not seek recovery of the difference between the higher and lower rate for the time that the lower rate would be in effect.

For the Commission's convenience, a complete copy of Transmittal No.11-02 with corrections is provided.

Very truly yours,



Dean K. Matsuura
Manager, Regulatory Affairs

Enclosures

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

³ In the Final Decision and Order, filed on August 31, 2010 in Docket No. 2008-0274, the Commission approved the decoupling mechanism proposed in the *Joint Final Statement of Position of the HECO Companies and Consumer Advocate*, 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 for Interim Approval of a Decoupling Mechanism*, filed on November 25, 2009, collectively, the "Amended Joint Proposal", subject to the modification made therein.



Summary of Revisions to Attachments 1 through 5

Attachment 1

Page 3 Revised the RBA Rate Adjustment, All Rate Schedules

Attachment 1A

No change.

Attachment 2

Page 1 Revised the Rate Base RAM (L4), which changed the Total RAM (L5), 2011 RAM to be recovered (L7), Total RBA Rate Adjustment (L8), RBA Rate Adjustment, ¢ per kWh (L10) and Monthly Bill Impact (L11).

Attachment 3

No change.

Attachment 3.1

Page 1 Added reference to pages 2-11 (see below) and a clarifying note on providing wage rates in a previous submission.

Pages 2 -12 Added the latest Memorandum of Agreement Between the Hawaiian Electric Companies and IBEW Local Union 1260.

Attachments 3.2 – 3.4

No change.

Attachment 3.5

Page 9 Corrected the merit labor adjustment amount for Other O&M-Total. Correction does not change Other O&M-Total, as the Other O&M Total was calculated by adding the adjusted merit labor amount for each block of account instead of using the merit labor adjustment amount. See item highlighted.

Attachments 3.6 – 3.7

No change.

Attachment 4

Page 1 Revised the 2011 estimate of Average Rate Base from \$1,159,195 to \$1,157,698, resulting in a Rate Base RAM (related to rate base items) decrease from \$1,841 to \$1,648 (see Att. 4 Page 2 revisions below for further details). Total Rate Base RAM decreased from \$9,570 to \$9,376.

Page 1 Replaced the Revenue Tax and Bad Debt Reciprocal (Note 2) with the revenue tax multiplier. There was no impact on the Rate Base RAM calculation.

Page 2 Added HECO TY 2009 detailed support for Plant in Service and Accumulated Depreciation, relabeled column headings and renumbered lines.

- Page 2 Revised the workpaper reference for the 2011 starting balance of Accumulated Def Income Taxes on line 24, column F, from Att. 4.1 page 1 to Att. 4.3 page 1
- Page 2 Revised the 2011 CIAC amortization amount on line 21 column E (originally line 18, column G) from \$10,175 to \$10,083.
- Page 2 Revised the 12/31/2010 Ending balance of Accumulated Deferred Income Taxes on line 26 column D (originally line 22, column F) from \$212,931 to \$212,702. See notes to Att. 4.3 below for further details.
- Page 2 Revised ADIT related to Baseline and Major Projects on line 35 (originally line 31) from -\$19,979 to -\$23,340.
- Page 2 The preceding 3 changes resulted in: 1) a change in Average Rate Base from \$1,159,195 to \$1,157,698 on line 29, column E (originally line 25, column G), 2) change in Revenue Requirement line 41, column F (originally line 37, column H) from \$1,841 to \$1,648 and 3) change in Total Revenue Requirement on line 44, column F (originally line 40, column H) from \$9,570 to \$9,376.
- Page 3 Replaced the Revenue Tax and Bad Debt Reciprocal in column G with the revenue tax multiplier. There was no impact on the Grossed up Cost of Capital estimate of 12.91%.

Attachment 4.1

- Page 1 Clarified all references made to First Wind (HCEI) to First Wind/Kahuku Wind (REIP).
- Page 1 Removed the reconciliation of the 12/31/10 Accumulated Deferred Income Tax balance as the exact amounts are noted on Att. 4.3 page 1.
- Page 2 Revised project description from First Wind - cost recovered thru surcharge to First Wind/Kahuku Wind (REIP).
- Page 3 Revised project description from First Wind - cost recovered thru surcharge to First Wind/Kahuku Wind (REIP).

Attachment 4.2

No change.

Attachment 4.3

- Page 1 Added note, and changed First Wind to First Wind/Kahuku Wind (REIP).
- Page 1 Added Federal ADIT adjustment for CIP bonus depreciation of - \$229,062, resulting in a revised total ADIT balance at 12/31/10 of \$212,702,153.62.
- Page 1 Added Notes 1 and 2 for clarification purposes.
- Page 2 Revised all references from First Wind to First Wind/Kahuku Wind.
- Page 13 Added new page to support ADIT adjustment for CIP bonus depreciation on Attachment 4.3, page 1.

Attachment 4.4

- Page 1 Amounts here are noted in exact dollars vs. rounding to the 000's. Changes in amounts on this page are a result of changes made to Page 2 (see below). Total deferred taxes changed from \$19,978,944.46 to \$23,339,630.61.
- Page 2 Changed W8 Boiler Controls Upgrade to 50% bonus depreciation from no bonus depreciation. Changed Percentage of Project subject to 100% bonus depreciation as a result of changes made to Page 10 (see below).
- Page 2 Total Federal depreciation changed from \$56,737,310 to \$66,339,273. Total State depreciation changed from \$3,091,891 to \$3,091,868.
- Page 3 Reformatted the entire schedule and added note. Total Repairs Deduction revised from \$12,971,013 to \$12,971,577--no impact to depreciation.
- Page 10 Added reference to CA-IR-292 plant adds on bottom of page, updated Note (now Note A), and added Note B. Added adjustment to CA proposed 100 bonus qualified property % of 32.33%.

Attachment 4.5

- Pages 37-38 Pages added to support the Plant in Service and Accumulated Depreciation amounts for 2009 test year on Attachment 4 page 2

Attachment 5

- Page 4 Because of the recent change to the issuance date of the interim decision in the Company's 2011 test year rate case from July 1, 2011, to July 22, 2011, and the change to the total RAM, all amounts in the illustration have been revised.

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 1st through May 31st 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	8.34%
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.

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 0.1672 ¢/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.

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 1st through May 31st 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.

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.

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	\$9,376	
L5 = L3 + L4	TOTAL RAM	\$15,005	
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>\$12,580</u>
L8 = L1 + L2 + L7	Total RBA Rate Adjustment		\$12,580
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		0.1672
L11 = L10 ÷ 100 x 600	Monthly Bill Impact @ 600 kWh		\$1.00

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

2011											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
R	173.8	147.6	166.2	160.9	169.7	174.2	180.9	186.4	177.4	177.7	2,054.5
G	25.7	24.2	27.0	26.2	28.5	28.0	29.2	29.7	28.1	28.7	328.9
J	161.3	150.2	167.7	161.0	176.6	176.7	179.1	189.4	182.1	183.8	2,067.8
H	2.0	1.8	2.0	1.9	2.1	2.1	2.1	2.1	2.0	2.0	23.7
P	238.9	215.3	239.3	232.2	250.5	249.0	260.5	264.6	255.8	260.5	2,957.0
F	3.2	3.1	3.1	3.1	3.2	3.0	3.1	3.2	3.0	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	7,469.5

2012											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
R	177.5	156.1	169.4	163.9	172.9	177.6	184.2	189.9	180.7	180.9	2,098.7
G	26.1	25.5	27.2	26.5	28.7	28.3	29.5	30.0	28.4	28.9	333.3
J	168.3	151.7	169.5	162.6	178.6	178.7	181.2	191.7	184.5	186.2	2,097.7
H	1.6	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.6	19.3
P	248.8	216.9	241.1	233.4	252.1	250.7	261.9	266.4	257.1	262.0	2,983.8
F	3.2	3.2	3.1	3.1	3.2	3.0	3.1	3.2	3.0	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	7,570.5

Sales Estimate, June 2011 through May 2012

7,521.8 GWH

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

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

^a See Attachment 3, page 2

^b 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	166,959		2,953	169,912
Revenue Tax Factor			1.0975	
O&M RAM (Total Expenses x Rev Tax Factor)			3,241	

(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 Proposal), filed on August 31, 2010

Less: Productivity Factor 0.76%

Labor Escalation Rate 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 Escalation Exp Amount	2011 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	169,912		2,176	172,088
Revenue Tax Factor			1.0975	
O&M RAM (Total Expenses x Rev Tax Factor)			2,388	

(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 Proposal), filed on August 31, 2010

Less: Productivity Factor 0.76%

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

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

	(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) ^a	-				
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) ^b	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) ^c	3,864	133	3,997	40	4,037
				<u>2,953</u>		<u>2,176</u>	

Excluded amounts:

- ^a 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.
- ^b Tracked pension and OPEB expenses. See Attachment 3.6.
- ^c Portion of payroll taxes related to non-BU labor (44.56%) 6,970*.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)

<u>Increase effective</u>		<u>increase amount</u>	<u>wage rate with increase</u>	<u>relative increase</u>	
		(a)	(b)	(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, under SEC filings.

See Attachment 3.1 pages 2-11 for the tentative agreement reached with the Union on March 7, 2011, that was ratified by the union membership on March 11, 2011.

Note that Classification and Wage Rates for the IBEW Local 1260 for the period November 1, 2007 to October 31, 2010 were provided as Attachment 6 to the HECO Companies' Revenue Decoupling Proposal, submitted on January 30, 2009 in Docket No. 2008-0274.

**MEMORANDUM OF AGREEMENT
BETWEEN**

**HAWAIIAN ELECTRIC COMPANY, INC. ("HECO")
HAWAII ELECTRIC LIGHT COMPANY, INC. ("HELCO") AND
MAUI ELECTRIC COMPANY, LTD. ("MECO")
hereinafter collectively referred to as the "Company"**

and

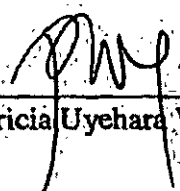
**LOCAL UNION 1260 OF THE INTERNATIONAL BROTHERHOOD OF
ELECTRICAL WORKERS, AFL-CIO,
hereinafter referred to as the "Union"**

This Memorandum of Agreement, between HECO, MECO and HELCO and the International Brotherhood of Electrical Workers AFL-CIO, Local Union 1260, constitutes the basis of a settlement of a three year extension of the collective bargaining agreement between the parties which were concluded on March 7, 2011.

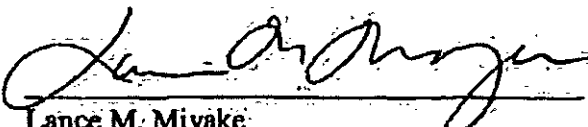
The agreement reached is as attached. The present collective bargaining agreement will hereby expire on October 31, 2013.

HAWAIIAN ELECTRIC COMPANY, INC.
and its subsidiaries
HAWAII ELECTRIC LIGHT COMPANY, INC.
and MAUI ELECTRIC COMPANY, LTD.

LOCAL UNION 1260 of the
INTERNATIONAL BROTHERHOOD OF
OF ELECTRICAL WORKERS AFL-CIO



Patricia Uyehara Wong



Lance M. Miyake

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

The effect of this agreement shall only affect employees on payroll as of the date of ratification of the contract and subject to the terms and conditions contained therein.

Wages (Non-compounded)

<u>1/1/2011</u>	<u>1/1/2012</u>	<u>1/1/2013</u>
1.75%	2.50%	3.00%

1. Section 1, Duration Of Agreement

Page 2, lines 8 – 9 shall be amended to read:

"This agreement shall become effective January 1, 2011 and shall remain in effect until October 31, 2013."

2. Section 11B, Meals

Page 20, lines 1 – 2 shall be replaced with the following language:

"Effective 1/1/2011, when an employee is entitled to a meal, the employee shall be paid \$14.00."

3. Section 11C, Work Base

Page 20, lines 40 – 41 shall be replaced with the following language:

"Traveling Crew employees will be paid a premium of the following amount for each hour worked up to a maximum cap per day, whichever is greater:

			<u>8 hr Schedule</u>	<u>4/10 Schedule</u>
1/1/2011	\$1.50 / hour	or	\$12.00 / day	\$15.00 / day
1/1/2013	\$2.00 / hour	or	\$16.00 / day	\$20.00 / day"

4. Section 11D, Neighbor Island Work Assignments

Page 22, lines 20 – 23 shall be replaced with the following language:

"(e) The per diem allowance shall be awarded with overnight stays as follows:
1/1/2011 \$32.00
11/1/2012 \$34.00"

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

5. Section 14, Sickness Benefits

Article 2, page 26, lines 20 – 36 shall be replaced with the following:

"Effective 1/1/12:

<u>Years of Service with Company</u>	<u>Maximum Sick Benefit Schedule</u>
Date of hire	40 hours full pay on date of hire
1 year	40 hours full pay on anniversary date
2 years	*80 hours full pay
3 years – 6 years	*128 hours full pay
7 years – 9 years	*256 hours full pay
10 years and over	*384 hours full pay

"Sick leave benefits will be awarded on January 1, for the entire year, except in the case of retirement, in which case, sick leave will be awarded on a pro-rated basis throughout the year."

Article 9, page 28, lines 35 – 37 shall be replaced with the following language:

"As of 1/1/12, sick leave hours for Retro 1 (2011) and Retro 2 (2010) will be "frozen" and transferred to a "sick leave bank". In the case of a serious illness when the absence exceeds five working days and the current year's sickness benefits have been used up, unused sickness benefits from the sick leave bank may be used. Any unused current year sick leave hours will be added to the sick leave bank and allowed to accumulate up to a maximum of 1,440 hours."

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

6. Section 15, Workers' Compensation

Page 29, lines 18-39 shall be revised to read:

"The basis of compensation for an employee during the period of temporary total disability from an injury arising from employment will be as follows:

An employee receiving Workers' Compensation benefits will receive a proportional amount of available sick leave benefits then available vacation benefits where the sum of both equals the net income earned after taxes until such benefits are exhausted. Subsequent to this, the employee will be paid in accordance with the provisions of the Workers' Compensation Law.

Willful negligence will be applied in accordance with State law."

7. Section 25, Miscellaneous Items

Page 38, Item #12, lines 12 – 18 shall be replaced with the following language:

- "12. Discounts to Employees - This Item and any related Memo of Understanding if still in effect shall be deleted in their entirety as of close of business January 31, 2011 thereby terminating the Company's obligation to continue and/or provide the electricity discount practice in any form for all bargaining unit employees and pensioners from and after the close of business January 31, 2011."

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

BENEFIT AGREEMENT

1. Section 1, Duration Of Agreement

Page 1 shall be amended to read:

"This agreement is effective January 1, 2011 and shall remain in effect until October 31, 2014."

2. "Section 2, Partners to Civil Unions"

Add new section to page 1

Effective January 1, 2012, employees may elect coverage of their civil union partners under certain of the Company's welfare benefit plans, including medical, dental, vision and dependent life insurance, to the extent permitted by the terms of the insurance carrier's policies. The employee contribution for medical, dental, and vision benefits under the FlexPlan may be paid on a pre-tax basis for federal purposes if the civil union partner is also the tax dependent of the electing employee. In addition, the employer contribution towards such benefits is excludible from employee income if the civil union partner is the employee's tax dependent. If the civil union partner is not a tax dependent, then the employee share of medical, dental and vision benefits must be paid on an after-tax basis, and any employer contribution will be includible in the employee's income. For State income tax purposes, the employee share of medical, dental, and vision benefits may be paid pre-tax, and the employer contribution for such benefits is excludible from employee income. Dependent Life insurance must always be paid on an after-tax basis. In addition, employees may elect flex spending account benefits with respect to civil union partners if their civil union partners are tax dependents. In order for civil union partners to be eligible for coverage, employees and their partners must have entered into civil unions under Hawaii law or the law of a jurisdiction recognized by Hawaii law and must document the existence of the unions. The Company reserves the right to determine whether the requirements of the law have been met. Civil Union partners will be covered under the PostRetirement Welfare Benefit Plan for employees hired before May 1, 2011."

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

3. Section 3, Medical Plans

Amend paragraph 1, page 2 to read:

“Medical plans will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefit Plan. The Companies will provide regular full-time employees, their spouses, and children up to age 26, medical plan coverage under one of the following plans (“medical plans”), subject to the membership requirements of the Collective Bargaining Agreement:”

Add the following to page 3:

Effective January 1, 2012:

- (1) HMSA CompMed A Plan with coverage at 80% of eligible charges with \$100 per person / \$300 per family annual deductible*, \$3,000 per person / \$9,000 per family calendar year maximum out-of-pocket limit.
- (2) HMSA HPH+ Plan with \$20.00 per visit co-payment, \$20 per lab(test)/x-ray co-payment, \$75 per day hospital co-payment, and \$2,500 per person / \$7,500 per family calendar year maximum out-of-pocket limit.
- (3) Kaiser Plan with \$20.00 per visit co-payment, \$20.00 per dept. per day lab/x-ray services co-payment, \$75 per day hospital co-payment, and \$2,500 per person / \$7,500 per family calendar year maximum out-of-pocket limit.

*Deductible does not apply to preventive services, wellness, and immunizations.

Amend paragraph 2, 3 and 4, page 4 to read:

“The Companies will provide probationary employees, their spouses, and children up to age 26, coverage under the HMSA CompMed A (1) above or Kaiser (3) above.

A probationary employee will be eligible for coverage on the first of the month coincident with or following the employee's hire date.

Upon retirement, eligible retirees and their eligible spouses and dependents will be eligible to elect medical plan coverage under the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers. On and after December 31, 2011, only regular full-time employees who have

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

attained at least age 50 and accrued at least 20 years of service at date of retirement are eligible for coverage. If such retirees were hired before May 1, 2011, then their eligible spouses and eligible dependents will also be eligible for coverage. Eligible retirees and their eligible spouses and dependents who elect to participate will be provided coverage in one of the medical plans listed above ((1),(2),(3)). Spouses are eligible for coverage by the health plans provided the spouse does not have comparable coverage available from his/her employer or former employer. Effective January 1, 2011, at the time the eligible retiree and his/her eligible spouse reach Medicare age, medical plan coverage will be provided by one of the following Medicare supplemental plans:

- (4) HMSA Akamai Advantage Assured
- (5) HMSA Akamai Advantage Preferred
- (6) Kaiser Senior Advantage

4. Section 4 – Drug Plan

Amend paragraph 1, page 7 to read:

"Drug coverage will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefits Plan. The Companies will provide regular full-time employees, their spouses, and dependents that are covered under a medical plan, coverage under a drug rider (HMSA, Kaiser)."

Add the following to page 8:

"Effective January 1, 2011, in accordance with revised Medicare rules, the post-Medicare drug plan is only available to retirees who are not covered by another Medicare Prescription Drug Plan."

5. Section 5, Vision Plan

Amend paragraph 1, page 10 to read:

"Vision Plan coverage will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefits Plan. The Companies will provide regular full-time employees, their spouses, and children up to age 26 that are covered under a medical plan, coverage under the vision plan."

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

6. Section 6, Dental Plan

Amend paragraph 1, page 11 to read:

"Dental Plan coverage will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefits Plan. The Companies will provide regular full-time employees, their spouses, and children up to age 26, dental plan coverage, subject to the membership requirements of the Collective Bargaining Agreement."

7. Section 7, Retirement Plan

Add the following to page 12:

Effective May 1, 2011, provide new employees a combination defined benefit and defined contribution retirement plan:

- i. Defined Benefit Plan with 1.25% per year of service without a cap, with unreduced retirement at age 62 and early retirement reduction of 3% per year to age 55, earliest retirement age 55 with 20 years of service (no early retirement subsidy for retirement prior to age 65 without 20 years of service), vesting of 5 year cliff. There will be no cost of living adjustment.
- ii. Defined Contribution Plan with a 50% match for the first 6% of compensation, deferred, as defined in the HEI Retirement Savings Plan, vesting for matching contributions as follows:

<u>Years of Vesting Service</u>	<u>Vested Percentage</u>
Less than 2 Years	0%
2 Years	20%
3 Years	40%
4 Years	60%
5 Years	80%
6 or more Years	100%

Only regular full-time employees who have attained at least age 55 and accrued at least 20 years of service at date of retirement are eligible for coverage under the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers. Their spouses, dependents and civil union partners will

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

not be eligible for coverage. Eligible retirees who elect to participate will be provided coverage in one of the following medical plans:

Effective May 1, 2011:

Pre-Medicare Medical Plans:

- (1) HMSA PPP Plan with coverage at 80% of eligible charges with \$100 per person / \$300 per family annual deductible*, \$3,000 per person / \$9,000 per family calendar year maximum out-of-pocket limit.
- (2) HMSA HPH+ Plan with \$20.00 per visit co-payment, \$100 per hospital admission co-payment, and \$1,750 per person / \$5,250 per family calendar year maximum out-of-pocket limit.
- (3) Kaiser Plan with \$20.00 per visit co-payment, \$20.00 per dept. per day lab/x-ray services co-payment, \$100 per hospital admission co-payment, and \$1,750 per person / \$5,250 per family calendar year maximum out-of-pocket limit.

Medicare Medical Plans:

- (4) HMSA Akamai Advantage Assured
- (5) HMSA Akamai Advantage Preferred
- (6) Kaiser Senior Advantage

Effective January 1, 2012:

Pre-Medicare Medical Plans:

- (7) HMSA CompMed A Plan with coverage at 80% of eligible charges with \$100 per person / \$300 per family annual deductible*, \$3,000 per person / \$9,000 per family calendar year maximum out-of-pocket limit.
- (8) HMSA HPH+ Plan with \$20.00 per visit co-payment, \$20 per lab(test)/x-ray co-payment, \$75 per day hospital co-payment, and \$2,500 per person / \$7,500 per family calendar year maximum out-of-pocket limit.
- (9) Kaiser Plan with \$20.00 per visit co-payment, \$20.00 per dept. per day lab/x-ray services co-payment, \$75 per day hospital co-payment, and \$2,500 per person / \$7,500 per family calendar year maximum out-of-pocket limit.

*Deductible does not apply to preventive services, wellness, and immunizations.

Medicare Medical Plans remain the same.

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 – HECO, HELCO, MECO
March 7, 2011

Employees hired on or after May 1, 2011; their contribution towards health plan premiums upon retirement and the company's maximum annual contribution will be based on the following table:

Hired on or after 5/1/2011

Yrs of Svc	Under Age 65 EE Ctb. %	Age 65 + EE Ctb %	Maximum Annual Company Contribution
25 +	60%	0%	\$5,000 (medical/drug, dental, vision)
20-24	75%	30%	\$2,500 (medical/drug)

8. Section 8, Group Life Insurance Plan

Add the following to the end of paragraph 3 on page 13:

On and after May 1, 2011, regular full-time employees hired prior to May 1, 2011 who have attained at least age 50 and accrued at least 20 years of service at date of retirement are eligible for group life insurance coverage of \$20,000.

Regular full-time employees hired on or after May 1, 2011 who have attained at least age 55 and accrued at least 20 years of service at date of retirement are eligible for group life insurance coverage of \$20,000.

9. Section 9, FlexPlan

Amend 1.b. on Page 17 to read:

- 4) For January 1, 2012 to December 31, 2014, Flex Prices for health plans will be determined by the Companies provided employee contributions for health plans will be limited to the following:

	<u>COMP MED A / Kaiser</u>		<u>HPH+</u>	
	<u>Pay Period</u>	<u>Annual</u>	<u>Pay Period</u>	<u>Annual</u>
<u>January 1, 2012</u>				
Single	\$ 8.50	\$204.00	\$30.00	\$720.00
Single Parent	\$17.00	\$408.00	\$55.00	\$1,320.00
Couple	\$25.50	\$612.00	\$75.00	\$1,800.00
Family	\$34.00	\$816.00	\$100.00	\$2,400.00

TENTATIVE SETTLEMENT AGREEMENT
IBEW 1260 - HECO, HELCO, MECO
March 7, 2011

January 1, 2013

Single	\$ 9.50	\$228.00	\$35.00	\$840.00
Single Parent	\$19.00	\$456.00	\$65.00	\$1,560.00
Couple	\$28.50	\$684.00	\$85.00	\$2,040.00
Family	\$38.00	\$912.00	\$105.00	\$2,520.00

January 1, 2014

Single	\$10.50	\$252.00	\$40.00	\$960.00
Single Parent	\$21.00	\$504.00	\$70.00	\$1,680.00
Couple	\$31.50	\$756.00	\$90.00	\$2,160.00
Family	\$42.00	\$1,008.00	\$110.00	\$2,640.00

Payroll deductions will be based on a salary reduction agreement between the employee and one of the Companies. In addition, if the Companies receive an experience refund or surplus, such surplus will be credited to the plans premium rate for the subsequent year.

Aspen Publishers

Blue Chip Economic Indicators®

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

Wolters Kluwer
Law & Business

■ 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- Net Exports (2005 \$)
	1 Real GDP (Seasoned) (2005 \$)	2 GDP Price Index	3 Nominal GDP (Cur. \$)	4 Consumer Price Index	5 Indus. Prod. (Total)	6 Dis. Pers. Income (2005 \$)	7 Personal Cons. Exp. (2005 \$)	8 Non-Res. Fix. Inv. (2005 \$)	9 Corp. Profits (Cur. \$)	10 Econ. Bills 3-mo.	11 Treas. Notes 10-Year	12 Unempl. (Civ.)	13 Housing Starts (Mil.)	14 Auto & Light Truck Sales (Mil.)	
RHS	3.9 H	1.6	5.6 H	2.8	4.5	2.4	2.5	1.4	15.0	1.3 H	4.5 H	9.7	0.94 H	12.3	-347.0
Comerica Bank*	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	18.6	na	3.3	9.8	na	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	10.3	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	3.7	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	8.8 L	0.69	13.1	-410.0
RBC 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	-350.0
Pontiac Research Group*	3.3	0.7	4.1	2.2	4.4	2.2	2.3	1.2	17.0	0.2	4.0	10.1	0.76	12.1	-361.0
SCM 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
Inform - 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. Coons Advisors	3.1	1.2	4.3	2.7	3.7	2.2	2.4	8.2 H	19.5	0.4	3.6	10.0	0.63	12.6	-301.0
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	3.8	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 H	0.3	3.8	9.7	0.65	12.0	-325.3
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
Metric 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
FBS	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 Point (Macrometrics)	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	17.1	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
Farm Corporation	2.8	1.1	4.0	2.3	4.6	2.6	1.9	1.0	3.2 L	0.5	3.8	9.7	0.79	11.8	-389.8
Econoclast	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	-338.9
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	-375.9
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
Saruff Economic Advisers*	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
2010 Consensus: February Avg.	3.0	1.1	4.2	2.2	4.5	2.1	2.0	0.9	14.5	0.4	4.0	10.0	0.71	12.0	-358.4
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.	2.9	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
Historical Data:															
2006	2.7	1.1	6.0	3.2	2.3	4.0	2.9	7.9	10.5	4.7	4.8	4.6	1.80	16.5	-729.2
2007	2.1	2.9	5.1	2.8	1.5	2.2	2.6	6.2	-4.1	4.4	4.6	3.6	1.36	16.1	-647.7
2008	0.4	2.1	2.6	3.8	-2.2	0.5	0.2	1.6	11.8	1.4	3.7	5.8	0.90	13.1	-494.3
2009	-2.4	1.2	-1.3	0.4	9.7	1.3	0.6	-17.9	na	0.2	3.2	9.3	0.56	10.3	-353.8
Number Of Forecasts Changed From A Month Ago:															
Down	3	33	11	10	11	10	12	4	8	13	10	20	20	17	12
Same	11	12	11	16	11	13	16	8	14	33	26	27	25	21	6
Up	38	7	30	26	29	27	24	40	25	5	16	5	6	9	34
February Median	3.0	1.1	4.2	2.2	4.5	2.2	2.0	0.3	14.9	0.4	4.0	10.0	0.70	11.9	-362.4
February Diffusion Index	84 %	25 %	68 %	65 %	68 %	67 %	62 %	85 %	68 %	42 %	56 %	36 %	36 %	41 %	71 %

* 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®

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%

FEBRUARY 2011 Forecast For 2011 SOURCE:	Percent Change 2011 From 2010 (Full Year-Over-Prior Year)									Average For 2011			Total Units-2011 -		-2011- Net Exports (2005 \$)
	1 Real GDP (Chained) (2005 \$)	2 GDP Price Index	3 Nominal GDP (Cur. \$)	4 Consumer Price Index	5 Indust. Prod. (Total)	6 Dis. Pers. Income (2005 \$)	7 Personal Cons. Exp. (2005 \$)	8 Non-Res. Fix. Inv. (2005 \$)	9 Corp. Profits (Cur. \$)	10 Treas. Bills 3-mo.	11 Treas. Notes 10-Year	12 Unempl. Rate (Civ.)	13 Housing Starts (Mil.)	14 Auto & Light Truck Sales (Mil.)	
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 Morgan Chase	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	3.2	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
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
Inform - 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 L	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	2.7	7.2	4.3	0.2	3.4	9.4	0.67	13.0	-403.5
2011 Consensus: February Avg.	3.2	1.4	4.6	1.9	4.4	2.7	3.2	8.8	7.9	0.3	3.6	9.3	0.67	13.1	-433.2
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	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)

	(1)	(2)	(3)=(1)+(2)	(4)	(5)
			Total		
<u>DESCRIPTION</u>	<u>BU LABOR</u>	<u>Non-BU LABOR</u>	<u>LABOR</u>	<u>NON-LABOR</u>	<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>
Operation and Maintenance	44,062	35,415	79,477	146,653	226,130
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

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.

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

2009 TEST YEAR												
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)		
Adjustments								Adjustments				
Update	CIS	DSM	Vacancy	Merit Reduction	HCEI	2007 Levels	2nd Interim	HCEI	Temp Employees	Final D&O		
Production												
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	
Transmission												
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	
Distribution												
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	
Customer Accounts												
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	
Customer Service												
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	
A&G												
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	
Total												
Merit	35,607	(493)	(41)	(131)	(533)	(697)	(2,829)	30,883	697	0	31,580	Calculated Proportions 44.10% a
BU	44,291	(30)	(3)	(196)	0	0	0	44,062	0	0	44,062	55.44%
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	0.46% a
	84,084	(605)	(44)	(342)	(533)	(697)	(2,829)	79,034	697	(254)	79,477	100.00%

(A) ATTACHMENT 3.5, PAGES 1-9

Non-BU portion $\sum a = 44.56\%$

(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 ADJUST</u>	<u>UPDATE W/O LABOR ADJ</u>
D. Giovanni								
PRODUCTION O & M EXPENSE								
PRODUCTION OPER								
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
TOTAL	15,373 (A)	29	0	15,402	427	15,829		15,829
PRODUCTION MAINT								
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
TOTAL	17,610 (A)	0	0	17,610	0	17,610		17,610
PRODUCTION - TOTAL								
MERIT	8,810	29	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
TOTAL	32,983 (A)	29	0	33,012	427	33,439		33,439

(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								
TRANSMISSION O & M EXPENSE								
TRANSMISSION OPER								
MERIT	1,431			1,431	49 (A)	1,480		1,480
BU	1,471			1,471		1,471		1,471
TOTAL	2,902 (C)	0	0	2,902	49	2,951		2,951
TRANSMISSION MAINT								
MERIT	388			388	34 (A)	422		422
BU	1,695			1,695		1,695		1,695
TOTAL	2,083 (C)	0	0	2,083	34	2,117		2,117
TRANSMISSION - TOTAL								
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
TOTAL	4,985	0	0	4,985	83	5,068	(120)	4,948

(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.

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>
D. Mizumura								
DISTRIBUTION O & M EXPENSE								
DISTRIBUTION OPER								
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
DISTRIBUTION MAINT								
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
DISTRIBUTION - TOTAL								
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>
D. Yamamoto								
CUSTOMER ACCTS EXPENSE								
901 SUPERVISION								
MERIT	119			119		119		119
BU				0				
MERIT W OT	58			58		58		58
TOTAL 901	177 (B)	0	0	177	0	177		177
902 METER READING EXPENSES								
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
903 CUSTOMER RECORDS & COLLECT EXP								
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
SUBTOTAL	8,102 (B)	0	0	8,102	0	8,102		8,102
904 UNCOLLECTIBLE ACCOUNTS								
NON-LABOR				0				
TOTAL 904	0	0	0	0	0	0		
905 MISC CUSTOMER ACCOUNTS EXP								
NON-LABOR	0			0				
TOTAL 905	0	0	0	0	0	0		
TOTAL	8,102	0	0	8,102	0	8,102		8,102
CUSTOMER ACCOUNTS - TOTAL								
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 ADJUST</u>	<u>UPDATE W/O LABOR ADJ</u>
A. Hee								
CUSTOMER SVC EXPENSE								
909 SUPERVISION								
MERIT	337			337	72 (B)	409		409
BU	0			0				
MERIT W OT	56			56		56		56
TOTAL 909	393 (D)	0	0	393	72	465		465
910 CUSTOMER ASSISTANCE EXP								
MERIT	3,061	(434) (A)		2,627		2,627		2,627
BU	179			179		179		179
MERIT W OT	167							
TOTAL 910	3,407 (D)	(434)	0	2,806	0	2,806		2,806
								2,973
911 INFORMATIONAL ADVERTISING EXP								
MERIT	27			27		27		27
BU	5			5		5		5
TOTAL 911	32 (D)	0	0	32	0	32		32
912 MISC CUSTOMER SERVICE EXPENSES								
MERIT	0			0		0		
BU	0			0		0		
TOTAL 911	0	0	0	0	0	0		
CUSTOMER SERVICE - TOTAL								
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
TOTAL	3,832 (D)	(434)	0	3,398	72	3,470	(82)	3,388

(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 ADJUST</u>	<u>UPDATE W/O LABOR ADJ</u>
P. Nanbu								
ADMIN & GENL O & M EXPENSE								
ADMINISTRATIVE								
920 ADMIN & GENL EXP - LABR								
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
921 ADMIN & GENL EXP - NLABR								
NON-LABOR				0				
TOTAL 921	0	0	0	0	0	0		
922 ADMIN EXPENSES TRANSFERRED								
NON-LABOR				0		0		
TOTAL 922	0	0	0	0	0	0		
TOTAL ADMINISTRATIVE	19,410	7	0	19,417	(58)	19,359		19,359
OUTSIDE SERVICES								
923010 OUTSIDE SERVICES - LEGAL								
NON-LABOR				0				
TOTAL 923020	0	0	0	0	0	0		
923020 OUTSIDE SERVICES - OTHER								
NON-LABOR				0				
TOTAL 923020	0	0	0	0	0	0		
923030 OUTSIDE SERVICES - ASSOC CO								
NON-LABOR	0			0				
TOTAL 923030	0	0	0	0	0	0		
TOTAL OS SVCS	0	0	0	0	0	0		
TOTAL 920-923 EXPENSE	19,410	7	0	19,417	(58)	19,359		19,359

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

(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								
EMPLOYEE BENEFITS EXPENSE								
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								
NON-LABOR				0				
TOTAL 926020	0	0	0	0	0	0		
TOTAL EMP BEN	1,052	0	0	1,052	(36)	1,016		1,016

(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. Tamashiro								
OTHER ADMINISTRATIVE & GENERAL EXPENSE								
OTHER ADMIN & GENL								
928 REGULATORY COMMISSION EXPENSES								
NON-LABOR								
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								
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	(634)	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	(1,230)	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

** 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 d

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
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
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
	<u>86,377</u>	

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Job Title	Grade	Pay Range	Min	Max	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16	Step 17	Step 18	Step 19	Step 20	Step 21	Step 22	Step 23	Step 24	Step 25	Step 26	Step 27	Step 28	Step 29	Step 30	Step 31	Step 32	Step 33	Step 34	Step 35	Step 36	Step 37	Step 38	Step 39	Step 40	Step 41	Step 42	Step 43	Step 44	Step 45	Step 46	Step 47	Step 48	Step 49	Step 50	Step 51	Step 52	Step 53	Step 54	Step 55	Step 56	Step 57	Step 58	Step 59	Step 60	Step 61	Step 62	Step 63	Step 64	Step 65	Step 66	Step 67	Step 68	Step 69	Step 70	Step 71	Step 72	Step 73	Step 74	Step 75	Step 76	Step 77	Step 78	Step 79	Step 80	Step 81	Step 82	Step 83	Step 84	Step 85	Step 86	Step 87	Step 88	Step 89	Step 90	Step 91	Step 92	Step 93	Step 94	Step 95	Step 96	Step 97	Step 98	Step 99	Step 100	Step 101	Step 102	Step 103	Step 104	Step 105	Step 106	Step 107	Step 108	Step 109	Step 110	Step 111	Step 112	Step 113	Step 114	Step 115	Step 116	Step 117	Step 118	Step 119	Step 120	Step 121	Step 122	Step 123	Step 124	Step 125	Step 126	Step 127	Step 128	Step 129	Step 130	Step 131	Step 132	Step 133	Step 134	Step 135	Step 136	Step 137	Step 138	Step 139	Step 140	Step 141	Step 142	Step 143	Step 144	Step 145	Step 146	Step 147	Step 148	Step 149	Step 150	Step 151	Step 152	Step 153	Step 154	Step 155	Step 156	Step 157	Step 158	Step 159	Step 160	Step 161	Step 162	Step 163	Step 164	Step 165	Step 166	Step 167	Step 168	Step 169	Step 170	Step 171	Step 172	Step 173	Step 174	Step 175	Step 176	Step 177	Step 178	Step 179	Step 180	Step 181	Step 182	Step 183	Step 184	Step 185	Step 186	Step 187	Step 188	Step 189	Step 190	Step 191	Step 192	Step 193	Step 194	Step 195	Step 196	Step 197	Step 198	Step 199	Step 200	Step 201	Step 202	Step 203	Step 204	Step 205	Step 206	Step 207	Step 208	Step 209	Step 210	Step 211	Step 212	Step 213	Step 214	Step 215	Step 216	Step 217	Step 218	Step 219	Step 220	Step 221	Step 222	Step 223	Step 224	Step 225	Step 226	Step 227	Step 228	Step 229	Step 230	Step 231	Step 232	Step 233	Step 234	Step 235	Step 236	Step 237	Step 238	Step 239	Step 240	Step 241	Step 242	Step 243	Step 244	Step 245	Step 246	Step 247	Step 248	Step 249	Step 250	Step 251	Step 252	Step 253	Step 254	Step 255	Step 256	Step 257	Step 258	Step 259	Step 260	Step 261	Step 262	Step 263	Step 264	Step 265	Step 266	Step 267	Step 268	Step 269	Step 270	Step 271	Step 272	Step 273	Step 274	Step 275	Step 276	Step 277	Step 278	Step 279	Step 280	Step 281	Step 282	Step 283	Step 284	Step 285	Step 286	Step 287	Step 288	Step 289	Step 290	Step 291	Step 292	Step 293	Step 294	Step 295	Step 296	Step 297	Step 298	Step 299	Step 300	Step 301	Step 302	Step 303	Step 304	Step 305	Step 306	Step 307	Step 308	Step 309	Step 310	Step 311	Step 312	Step 313	Step 314	Step 315	Step 316	Step 317	Step 318	Step 319	Step 320	Step 321	Step 322	Step 323	Step 324	Step 325	Step 326	Step 327	Step 328	Step 329	Step 330	Step 331	Step 332	Step 333	Step 334	Step 335	Step 336	Step 337	Step 338	Step 339	Step 340	Step 341	Step 342	Step 343	Step 344	Step 345	Step 346	Step 347	Step 348	Step 349	Step 350	Step 351	Step 352	Step 353	Step 354	Step 355	Step 356	Step 357	Step 358	Step 359	Step 360	Step 361	Step 362	Step 363	Step 364	Step 365	Step 366	Step 367	Step 368	Step 369	Step 370	Step 371	Step 372	Step 373	Step 374	Step 375	Step 376	Step 377	Step 378	Step 379	Step 380	Step 381	Step 382	Step 383	Step 384	Step 385	Step 386	Step 387	Step 388	Step 389	Step 390	Step 391	Step 392	Step 393	Step 394	Step 395	Step 396	Step 397	Step 398	Step 399	Step 400	Step 401	Step 402	Step 403	Step 404	Step 405	Step 406	Step 407	Step 408	Step 409	Step 410	Step 411	Step 412	Step 413	Step 414	Step 415	Step 416	Step 417	Step 418	Step 419	Step 420	Step 421	Step 422	Step 423	Step 424	Step 425	Step 426	Step 427	Step 428	Step 429	Step 430	Step 431	Step 432	Step 433	Step 434	Step 435	Step 436	Step 437	Step 438	Step 439	Step 440	Step 441	Step 442	Step 443	Step 444	Step 445	Step 446	Step 447	Step 448	Step 449	Step 450	Step 451	Step 452	Step 453	Step 454	Step 455	Step 456	Step 457	Step 458	Step 459	Step 460	Step 461	Step 462	Step 463	Step 464	Step 465	Step 466	Step 467	Step 468	Step 469	Step 470	Step 471	Step 472	Step 473	Step 474	Step 475	Step 476	Step 477	Step 478	Step 479	Step 480	Step 481	Step 482	Step 483	Step 484	Step 485	Step 486	Step 487	Step 488	Step 489	Step 490	Step 491	Step 492	Step 493	Step 494	Step 495	Step 496	Step 497	Step 498	Step 499	Step 500	Step 501	Step 502	Step 503	Step 504	Step 505	Step 506	Step 507	Step 508	Step 509	Step 510	Step 511	Step 512	Step 513	Step 514	Step 515	Step 516	Step 517	Step 518	Step 519	Step 520	Step 521	Step 522	Step 523	Step 524	Step 525	Step 526	Step 527	Step 528	Step 529	Step 530	Step 531	Step 532	Step 533	Step 534	Step 535	Step 536	Step 537	Step 538	Step 539	Step 540	Step 541	Step 542	Step 543	Step 544	Step 545	Step 546	Step 547	Step 548	Step 549	Step 550	Step 551	Step 552	Step 553	Step 554	Step 555	Step 556	Step 557	Step 558	Step 559	Step 560	Step 561	Step 562	Step 563	Step 564	Step 565	Step 566	Step 567	Step 568	Step 569	Step 570	Step 571	Step 572	Step 573	Step 574	Step 575	Step 576	Step 577	Step 578	Step 579	Step 580	Step 581	Step 582	Step 583	Step 584	Step 585	Step 586	Step 587	Step 588	Step 589	Step 590	Step 591	Step 592	Step 593	Step 594	Step 595	Step 596	Step 597	Step 598	Step 599	Step 600	Step 601	Step 602	Step 603	Step 604	Step 605	Step 606	Step 607	Step 608	Step 609	Step 610	Step 611	Step 612	Step 613	Step 614	Step 615	Step 616	Step 617	Step 618	Step 619	Step 620	Step 621	Step 622	Step 623	Step 624	Step 625	Step 626	Step 627	Step 628	Step 629	Step 630	Step 631	Step 632	Step 633	Step 634	Step 635	Step 636	Step 637	Step 638	Step 639	Step 640	Step 641	Step 642	Step 643	Step 644	Step 645	Step 646	Step 647	Step 648	Step 649	Step 650	Step 651	Step 652	Step 653	Step 654	Step 655	Step 656	Step 657	Step 658	Step 659	Step 660	Step 661	Step 662	Step 663	Step 664	Step 665	Step 666	Step 667	Step 668	Step 669	Step 670	Step 671	Step 672	Step 673	Step 674	Step 675	Step 676	Step 677	Step 678	Step 679	Step 680	Step 681	Step 682	Step 683	Step 684	Step 685	Step 686	Step 687	Step 688	Step 689	Step 690	Step 691	Step 692	Step 693	Step 694	Step 695	Step 696	Step 697	Step 698	Step 699	Step 700	Step 701	Step 702	Step 703	Step 704	Step 705	Step 706	Step 707	Step 708	Step 709	Step 710	Step 711	Step 712	Step 713	Step 714	Step 715	Step 716	Step 717	Step 718	Step 719	Step 720	Step 721	Step 722	Step 723	Step 724	Step 725	Step 726	Step 727	Step 728	Step 729	Step 730	Step 731	Step 732	Step 733	Step 734	Step 735	Step 736	Step 737	Step 738	Step 739	Step 740	Step 741	Step 742	Step 743	Step 744	Step 745	Step 746	Step 747	Step 748	Step 749	Step 750	Step 751	Step 752	Step 753	Step 754	Step 755	Step 756	Step 757	Step 758	Step 759	Step 760	Step 761	Step 762	Step 763	Step 764	Step 765	Step 766	Step 767	Step 768	Step 769	Step 770	Step 771	Step 772	Step 773	Step 774	Step 775	Step 776	Step 777	Step 778	Step 779	Step 780	Step 781	Step 782	Step 783	Step 784	Step 785	Step 786	Step 787	Step 788	Step 789	Step 790	Step 791	Step 792	Step 793	Step 794	Step 795	Step 796	Step 797	Step 798	Step 799	Step 800	Step 801	Step 802	Step 803	Step 804	Step 805	Step 806	Step 807	Step 808	Step 809	Step 810	Step 811	Step 812	Step 813	Step 814	Step 815	Step 816	Step 817	Step 818	Step 819	Step 820	Step 821	Step 822	Step 823	Step 824	Step 825	Step 826	Step 827	Step 828	Step 829	Step 830	Step 831	Step 832	Step 833	Step 834	Step 835	Step 836	Step 837	Step 838	Step 839	Step 840	Step 841	Step 842	Step 843	Step 844	Step 845	Step 846	Step 847	Step 848	Step 849	Step 850	Step 851	Step 852	Step 853	Step 854	Step 855	Step 856	Step 857	Step 858	Step 859	Step 860	Step 861	Step 862	Step 863	Step 864	Step 865	Step 866	Step 867	Step 868	Step 869	Step 870	Step 871	Step 872	Step 873	Step 874	Step 875	Step 876	Step 877	Step 878	Step 879	Step 880	Step 881	Step 882	Step 883	Step 884	Step 885	Step 886	Step 887	Step 888	Step 889	Step 890	Step 891	Step 892	Step 893	Step 894	Step 895	Step 896	Step 897	Step 898	Step 899	Step 900	Step 901	Step 902	Step 903	Step 904	Step 905	Step 906	Step 907	Step 908	Step 909	Step 910	Step 911	Step 912	Step 913	Step 914	Step 915	Step 916	Step 917	Step 918	Step 919	Step 920	Step 921	Step 922	Step 923	Step 924	Step 925	Step 926	Step 927	Step 928	Step 929	Step 930	Step 931	Step 932	Step 933	Step 934	Step 935	Step 936	Step 937	Step 938	Step 939	Step 940	Step 941	Step 942	Step 943	Step 944	Step 945	Step 946	Step 947	Step 948	Step 949	Step 950	Step 951	Step 952	Step 953	Step 954	Step 955	Step 956	Step 957	Step 958	Step 959	Step 960	Step 961	Step 962	Step 963	Step 964	Step 965	Step 966	Step 967	Step 968	Step 969	Step 970	Step 971	Step 972	Step 973	Step 974	Step 975	Step 976	Step 977	Step 978	Step 979	Step 980	Step 981	Step 982	Step 983	Step 984	Step 985	Step 986	Step 987	Step 988	Step 989	Step 990	Step 991	Step 992	Step 993	Step 994	Step 995	Step 996	Step 997	Step 998	Step 999	Step 1000
-----------	-------	-----------	-----	-----	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	-----------

[illegible]

[illegible]

[illegible]

[illegible]

Job	Job Title	Job Description	Job Location	Job Status	Job Type	Job Category	Job Code	Job Date	Job Time	Job Duration	Job Cost	Job Profit	Job Margin	Job Return	Job Yield	Job Quality	Job Safety	Job Health	Job Environment	Job Culture	Job Values	Job Mission	Job Vision	Job Strategy	Job Tactics	Job Tools	Job Equipment	Job Materials	Job Supplies	Job Services	Job Contractors	Job Vendors	Job Suppliers	Job Customers	Job Partners	Job Stakeholders	Job Interests	Job Risks	Job Opportunities	Job Challenges	Job Obstacles	Job Barriers	Job Constraints	Job Limitations	Job Restrictions	Job Regulations	Job Standards	Job Norms	Job Customs	Job Traditions	Job Beliefs	Job Attitudes	Job Behaviors	Job Habits	Job Routines	Job Schedules	Job Timelines	Job Deadlines	Job Milestones	Job Deliverables	Job Outputs	Job Results	Job Outcomes	Job Impacts	Job Effects	Job Consequences	Job Reactions	Job Responses	Job Actions	Job Initiatives	Job Programs	Job Projects	Job Tasks	Job Duties	Job Responsibilities	Job Roles	Job Positions	Job Titles	Job Names	Job Surnames	Job First Names	Job Middle Names	Job Last Names	Job Nicknames	Job Aliases	Job Pseudonyms	Job Anonyms	Job Avatars	Job Logos	Job Emblems	Job Seals	Job Stamps	Job Signatures	Job Handwritten	Job Printed	Job Digital	Job Physical	Job Virtual	Job Hybrid	Job Multi-Media	Job Cross-Media	Job Multi-Platform	Job Multi-Channel	Job Multi-Sector	Job Multi-Industry	Job Multi-National	Job Multi-Cultural	Job Multi-Lingual	Job Multi-Religious	Job Multi-Ethnic	Job Multi-Racial	Job Multi-Social	Job Multi-Economic	Job Multi-Political	Job Multi-Legal	Job Multi-Moral	Job Multi-Ethical	Job Multi-Environmental	Job Multi-Technological	Job Multi-Scientific	Job Multi-Artistic	Job Multi-Creative	Job Multi-Innovative	Job Multi-Entrepreneurial	Job Multi-Leadership	Job Multi-Management	Job Multi-Organization	Job Multi-Institution	Job Multi-System	Job Multi-Process	Job Multi-Method	Job Multi-Tool	Job Multi-Equipment	Job Multi-Material	Job Multi-Supply	Job Multi-Service	Job Multi-Contractor	Job Multi-Vendor	Job Multi-Supplier	Job Multi-Customer	Job Multi-Partner	Job Multi-Stakeholder	Job Multi-Interest	Job Multi-Risk	Job Multi-Opportunity	Job Multi-Challenge	Job Multi-Obstacle	Job Multi-Barrier	Job Multi-Constraint	Job Multi-Limitation	Job Multi-Restriction	Job Multi-Regulation	Job Multi-Standard	Job Multi-Norm	Job Multi-Custom	Job Multi-Tradition	Job Multi-Belief	Job Multi-Attitude	Job Multi-Behavior	Job Multi-Habit	Job Multi-Routine	Job Multi-Schedule	Job Multi-Timeline	Job Multi-Deadline	Job Multi-Milestone	Job Multi-Deliverable	Job Multi-Output	Job Multi-Result	Job Multi-Outcome	Job Multi-Impact	Job Multi-Effect	Job Multi-Consequence	Job Multi-Reaction	Job Multi-Response	Job Multi-Action	Job Multi-Initiative	Job Multi-Program	Job Multi-Project	Job Multi-Task	Job Multi-Duty	Job Multi-Responsibility	Job Multi-Role	Job Multi-Position	Job Multi-Title	Job Multi-Name	Job Multi-Surname	Job Multi-First Name	Job Multi-Middle Name	Job Multi-Last Name	Job Multi-Nickname	Job Multi-Alias	Job Multi-Pseudonym	Job Multi-Anonym	Job Multi-Avatar	Job Multi-Logo	Job Multi-Emblem	Job Multi-Seal	Job Multi-Stamp	Job Multi-Signature	Job Multi-Handwritten	Job Multi-Printed	Job Multi-Digital	Job Multi-Physical	Job Multi-Virtual	Job Multi-Hybrid	Job Multi-Multi-Media	Job Multi-Cross-Media	Job Multi-Multi-Platform	Job Multi-Multi-Channel	Job Multi-Multi-Sector	Job Multi-Multi-Industry	Job Multi-Multi-National	Job Multi-Multi-Cultural	Job Multi-Multi-Lingual	Job Multi-Multi-Religious	Job Multi-Multi-Ethnic	Job Multi-Multi-Racial	Job Multi-Multi-Social	Job Multi-Multi-Economic	Job Multi-Multi-Political	Job Multi-Multi-Legal	Job Multi-Multi-Moral	Job Multi-Multi-Ethical	Job Multi-Multi-Environmental	Job Multi-Multi-Technological	Job Multi-Multi-Scientific	Job Multi-Multi-Artistic	Job Multi-Multi-Creative	Job Multi-Multi-Innovative	Job Multi-Multi-Entrepreneurial	Job Multi-Multi-Leadership	Job Multi-Multi-Management	Job Multi-Multi-Organization	Job Multi-Multi-Institution	Job Multi-Multi-System	Job Multi-Multi-Process	Job Multi-Multi-Method	Job Multi-Multi-Tool	Job Multi-Multi-Equipment	Job Multi-Multi-Material	Job Multi-Multi-Supply	Job Multi-Multi-Service	Job Multi-Multi-Contractor	Job Multi-Multi-Vendor	Job Multi-Multi-Supplier	Job Multi-Multi-Customer	Job Multi-Multi-Partner	Job Multi-Multi-Stakeholder	Job Multi-Multi-Interest	Job Multi-Multi-Risk	Job Multi-Multi-Opportunity	Job Multi-Multi-Challenge	Job Multi-Multi-Obstacle	Job Multi-Multi-Barrier	Job Multi-Multi-Constraint	Job Multi-Multi-Limitation	Job Multi-Multi-Restriction	Job Multi-Multi-Regulation	Job Multi-Multi-Standard	Job Multi-Multi-Norm	Job Multi-Multi-Custom	Job Multi-Multi-Tradition	Job Multi-Multi-Belief	Job Multi-Multi-Attitude	Job Multi-Multi-Behavior	Job Multi-Multi-Habit	Job Multi-Multi-Routine	Job Multi-Multi-Schedule	Job Multi-Multi-Timeline	Job Multi-Multi-Deadline	Job Multi-Multi-Milestone	Job Multi-Multi-Deliverable	Job Multi-Multi-Output	Job Multi-Multi-Result	Job Multi-Multi-Outcome	Job Multi-Multi-Impact	Job Multi-Multi-Effect	Job Multi-Multi-Consequence	Job Multi-Multi-Reaction	Job Multi-Multi-Response	Job Multi-Multi-Action	Job Multi-Multi-Initiative	Job Multi-Multi-Program	Job Multi-Multi-Project	Job Multi-Multi-Task	Job Multi-Multi-Duty	Job Multi-Multi-Responsibility	Job Multi-Multi-Role	Job Multi-Multi-Position	Job Multi-Multi-Title	Job Multi-Multi-Name	Job Multi-Multi-Surname	Job Multi-Multi-First Name	Job Multi-Multi-Middle Name	Job Multi-Multi-Last Name	Job Multi-Multi-Nickname	Job Multi-Multi-Alias	Job Multi-Multi-Pseudonym	Job Multi-Multi-Anonym	Job Multi-Multi-Avatar	Job Multi-Multi-Logo	Job Multi-Multi-Emblem	Job Multi-Multi-Seal	Job Multi-Multi-Stamp	Job Multi-Multi-Signature	Job Multi-Multi-Handwritten	Job Multi-Multi-Printed	Job Multi-Multi-Digital	Job Multi-Multi-Physical	Job Multi-Multi-Virtual	Job Multi-Multi-Hybrid	Job Multi-Multi-Multi-Media	Job Multi-Multi-Cross-Media	Job Multi-Multi-Multi-Platform	Job Multi-Multi-Multi-Channel	Job Multi-Multi-Multi-Sector	Job Multi-Multi-Multi-Industry	Job Multi-Multi-Multi-National	Job Multi-Multi-Multi-Cultural	Job Multi-Multi-Multi-Lingual	Job Multi-Multi-Multi-Religious	Job Multi-Multi-Multi-Ethnic	Job Multi-Multi-Multi-Racial	Job Multi-Multi-Multi-Social	Job Multi-Multi-Multi-Economic	Job Multi-Multi-Multi-Political	Job Multi-Multi-Multi-Legal	Job Multi-Multi-Multi-Moral	Job Multi-Multi-Multi-Ethical	Job Multi-Multi-Multi-Environmental	Job Multi-Multi-Multi-Technological	Job Multi-Multi-Multi-Scientific	Job Multi-Multi-Multi-Artistic	Job Multi-Multi-Multi-Creative	Job Multi-Multi-Multi-Innovative	Job Multi-Multi-Multi-Entrepreneurial	Job Multi-Multi-Multi-Leadership	Job Multi-Multi-Multi-Management	Job Multi-Multi-Multi-Organization	Job Multi-Multi-Multi-Institution	Job Multi-Multi-Multi-System	Job Multi-Multi-Multi-Process	Job Multi-Multi-Multi-Method	Job Multi-Multi-Multi-Tool	Job Multi-Multi-Multi-Equipment	Job Multi-Multi-Multi-Material	Job Multi-Multi-Multi-Supply	Job Multi-Multi-Multi-Service	Job Multi-Multi-Multi-Contractor	Job Multi-Multi-Multi-Vendor	Job Multi-Multi-Multi-Supplier	Job Multi-Multi-Multi-Customer	Job Multi-Multi-Multi-Partner	Job Multi-Multi-Multi-Stakeholder	Job Multi-Multi-Multi-Interest	Job Multi-Multi-Multi-Risk	Job Multi-Multi-Multi-Opportunity	Job Multi-Multi-Multi-Challenge	Job Multi-Multi-Multi-Obstacle	Job Multi-Multi-Multi-Barrier	Job Multi-Multi-Multi-Constraint	Job Multi-Multi-Multi-Limitation	Job Multi-Multi-Multi-Restriction	Job Multi-Multi-Multi-Regulation	Job Multi-Multi-Multi-Standard	Job Multi-Multi-Multi-Norm	Job Multi-Multi-Multi-Custom	Job Multi-Multi-Multi-Tradition	Job Multi-Multi-Multi-Belief	Job Multi-Multi-Multi-Attitude	Job Multi-Multi-Multi-Behavior	Job Multi-Multi-Multi-Habit	Job Multi-Multi-Multi-Routine	Job Multi-Multi-Multi-Schedule	Job Multi-Multi-Multi-Timeline	Job Multi-Multi-Multi-Deadline	Job Multi-Multi-Multi-Milestone	Job Multi-Multi-Multi-Deliverable	Job Multi-Multi-Multi-Output	Job Multi-Multi-Multi-Result	Job Multi-Multi-Multi-Outcome	Job Multi-Multi-Multi-Impact	Job Multi-Multi-Multi-Effect	Job Multi-Multi-Multi-Consequence	Job Multi-Multi-Multi-Reaction	Job Multi-Multi-Multi-Response	Job Multi-Multi-Multi-Action	Job Multi-Multi-Multi-Initiative	Job Multi-Multi-Multi-Program	Job Multi-Multi-Multi-Project	Job Multi-Multi-Multi-Task	Job Multi-Multi-Multi-Duty	Job Multi-Multi-Multi-Responsibility	Job Multi-Multi-Multi-Role	Job Multi-Multi-Multi-Position	Job Multi-Multi-Multi-Title	Job Multi-Multi-Multi-Name	Job Multi-Multi
-----	-----------	-----------------	--------------	------------	----------	--------------	----------	----------	----------	--------------	----------	------------	------------	------------	-----------	-------------	------------	------------	-----------------	-------------	------------	-------------	------------	--------------	-------------	-----------	---------------	---------------	--------------	--------------	-----------------	-------------	---------------	---------------	--------------	------------------	---------------	-----------	-------------------	----------------	---------------	--------------	-----------------	-----------------	------------------	-----------------	---------------	-----------	-------------	----------------	-------------	---------------	---------------	------------	--------------	---------------	---------------	---------------	----------------	------------------	-------------	-------------	--------------	-------------	-------------	------------------	---------------	---------------	-------------	-----------------	--------------	--------------	-----------	------------	----------------------	-----------	---------------	------------	-----------	--------------	-----------------	------------------	----------------	---------------	-------------	----------------	-------------	-------------	-----------	-------------	-----------	------------	----------------	-----------------	-------------	-------------	--------------	-------------	------------	-----------------	-----------------	--------------------	-------------------	------------------	--------------------	--------------------	--------------------	-------------------	---------------------	------------------	------------------	------------------	--------------------	---------------------	-----------------	-----------------	-------------------	-------------------------	-------------------------	----------------------	--------------------	--------------------	----------------------	---------------------------	----------------------	----------------------	------------------------	-----------------------	------------------	-------------------	------------------	----------------	---------------------	--------------------	------------------	-------------------	----------------------	------------------	--------------------	--------------------	-------------------	-----------------------	--------------------	----------------	-----------------------	---------------------	--------------------	-------------------	----------------------	----------------------	-----------------------	----------------------	--------------------	----------------	------------------	---------------------	------------------	--------------------	--------------------	-----------------	-------------------	--------------------	--------------------	--------------------	---------------------	-----------------------	------------------	------------------	-------------------	------------------	------------------	-----------------------	--------------------	--------------------	------------------	----------------------	-------------------	-------------------	----------------	----------------	--------------------------	----------------	--------------------	-----------------	----------------	-------------------	----------------------	-----------------------	---------------------	--------------------	-----------------	---------------------	------------------	------------------	----------------	------------------	----------------	-----------------	---------------------	-----------------------	-------------------	-------------------	--------------------	-------------------	------------------	-----------------------	-----------------------	--------------------------	-------------------------	------------------------	--------------------------	--------------------------	--------------------------	-------------------------	---------------------------	------------------------	------------------------	------------------------	--------------------------	---------------------------	-----------------------	-----------------------	-------------------------	-------------------------------	-------------------------------	----------------------------	--------------------------	--------------------------	----------------------------	---------------------------------	----------------------------	----------------------------	------------------------------	-----------------------------	------------------------	-------------------------	------------------------	----------------------	---------------------------	--------------------------	------------------------	-------------------------	----------------------------	------------------------	--------------------------	--------------------------	-------------------------	-----------------------------	--------------------------	----------------------	-----------------------------	---------------------------	--------------------------	-------------------------	----------------------------	----------------------------	-----------------------------	----------------------------	--------------------------	----------------------	------------------------	---------------------------	------------------------	--------------------------	--------------------------	-----------------------	-------------------------	--------------------------	--------------------------	--------------------------	---------------------------	-----------------------------	------------------------	------------------------	-------------------------	------------------------	------------------------	-----------------------------	--------------------------	--------------------------	------------------------	----------------------------	-------------------------	-------------------------	----------------------	----------------------	--------------------------------	----------------------	--------------------------	-----------------------	----------------------	-------------------------	----------------------------	-----------------------------	---------------------------	--------------------------	-----------------------	---------------------------	------------------------	------------------------	----------------------	------------------------	----------------------	-----------------------	---------------------------	-----------------------------	-------------------------	-------------------------	--------------------------	-------------------------	------------------------	-----------------------------	-----------------------------	--------------------------------	-------------------------------	------------------------------	--------------------------------	--------------------------------	--------------------------------	-------------------------------	---------------------------------	------------------------------	------------------------------	------------------------------	--------------------------------	---------------------------------	-----------------------------	-----------------------------	-------------------------------	-------------------------------------	-------------------------------------	----------------------------------	--------------------------------	--------------------------------	----------------------------------	---------------------------------------	----------------------------------	----------------------------------	------------------------------------	-----------------------------------	------------------------------	-------------------------------	------------------------------	----------------------------	---------------------------------	--------------------------------	------------------------------	-------------------------------	----------------------------------	------------------------------	--------------------------------	--------------------------------	-------------------------------	-----------------------------------	--------------------------------	----------------------------	-----------------------------------	---------------------------------	--------------------------------	-------------------------------	----------------------------------	----------------------------------	-----------------------------------	----------------------------------	--------------------------------	----------------------------	------------------------------	---------------------------------	------------------------------	--------------------------------	--------------------------------	-----------------------------	-------------------------------	--------------------------------	--------------------------------	--------------------------------	---------------------------------	-----------------------------------	------------------------------	------------------------------	-------------------------------	------------------------------	------------------------------	-----------------------------------	--------------------------------	--------------------------------	------------------------------	----------------------------------	-------------------------------	-------------------------------	----------------------------	----------------------------	--------------------------------------	----------------------------	--------------------------------	-----------------------------	----------------------------	-----------------

Job Title	Grade	Pay Range	Min	Max	Step	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16	Step 17	Step 18	Step 19	Step 20	Step 21	Step 22	Step 23	Step 24	Step 25	Step 26	Step 27	Step 28	Step 29	Step 30	Step 31	Step 32	Step 33	Step 34	Step 35	Step 36	Step 37	Step 38	Step 39	Step 40	Step 41	Step 42	Step 43	Step 44	Step 45	Step 46	Step 47	Step 48	Step 49	Step 50	Step 51	Step 52	Step 53	Step 54	Step 55	Step 56	Step 57	Step 58	Step 59	Step 60	Step 61	Step 62	Step 63	Step 64	Step 65	Step 66	Step 67	Step 68	Step 69	Step 70	Step 71	Step 72	Step 73	Step 74	Step 75	Step 76	Step 77	Step 78	Step 79	Step 80	Step 81	Step 82	Step 83	Step 84	Step 85	Step 86	Step 87	Step 88	Step 89	Step 90	Step 91	Step 92	Step 93	Step 94	Step 95	Step 96	Step 97	Step 98	Step 99	Step 100	Step 101	Step 102	Step 103	Step 104	Step 105	Step 106	Step 107	Step 108	Step 109	Step 110	Step 111	Step 112	Step 113	Step 114	Step 115	Step 116	Step 117	Step 118	Step 119	Step 120	Step 121	Step 122	Step 123	Step 124	Step 125	Step 126	Step 127	Step 128	Step 129	Step 130	Step 131	Step 132	Step 133	Step 134	Step 135	Step 136	Step 137	Step 138	Step 139	Step 140	Step 141	Step 142	Step 143	Step 144	Step 145	Step 146	Step 147	Step 148	Step 149	Step 150	Step 151	Step 152	Step 153	Step 154	Step 155	Step 156	Step 157	Step 158	Step 159	Step 160	Step 161	Step 162	Step 163	Step 164	Step 165	Step 166	Step 167	Step 168	Step 169	Step 170	Step 171	Step 172	Step 173	Step 174	Step 175	Step 176	Step 177	Step 178	Step 179	Step 180	Step 181	Step 182	Step 183	Step 184	Step 185	Step 186	Step 187	Step 188	Step 189	Step 190	Step 191	Step 192	Step 193	Step 194	Step 195	Step 196	Step 197	Step 198	Step 199	Step 200	Step 201	Step 202	Step 203	Step 204	Step 205	Step 206	Step 207	Step 208	Step 209	Step 210	Step 211	Step 212	Step 213	Step 214	Step 215	Step 216	Step 217	Step 218	Step 219	Step 220	Step 221	Step 222	Step 223	Step 224	Step 225	Step 226	Step 227	Step 228	Step 229	Step 230	Step 231	Step 232	Step 233	Step 234	Step 235	Step 236	Step 237	Step 238	Step 239	Step 240	Step 241	Step 242	Step 243	Step 244	Step 245	Step 246	Step 247	Step 248	Step 249	Step 250	Step 251	Step 252	Step 253	Step 254	Step 255	Step 256	Step 257	Step 258	Step 259	Step 260	Step 261	Step 262	Step 263	Step 264	Step 265	Step 266	Step 267	Step 268	Step 269	Step 270	Step 271	Step 272	Step 273	Step 274	Step 275	Step 276	Step 277	Step 278	Step 279	Step 280	Step 281	Step 282	Step 283	Step 284	Step 285	Step 286	Step 287	Step 288	Step 289	Step 290	Step 291	Step 292	Step 293	Step 294	Step 295	Step 296	Step 297	Step 298	Step 299	Step 300	Step 301	Step 302	Step 303	Step 304	Step 305	Step 306	Step 307	Step 308	Step 309	Step 310	Step 311	Step 312	Step 313	Step 314	Step 315	Step 316	Step 317	Step 318	Step 319	Step 320	Step 321	Step 322	Step 323	Step 324	Step 325	Step 326	Step 327	Step 328	Step 329	Step 330	Step 331	Step 332	Step 333	Step 334	Step 335	Step 336	Step 337	Step 338	Step 339	Step 340	Step 341	Step 342	Step 343	Step 344	Step 345	Step 346	Step 347	Step 348	Step 349	Step 350	Step 351	Step 352	Step 353	Step 354	Step 355	Step 356	Step 357	Step 358	Step 359	Step 360	Step 361	Step 362	Step 363	Step 364	Step 365	Step 366	Step 367	Step 368	Step 369	Step 370	Step 371	Step 372	Step 373	Step 374	Step 375	Step 376	Step 377	Step 378	Step 379	Step 380	Step 381	Step 382	Step 383	Step 384	Step 385	Step 386	Step 387	Step 388	Step 389	Step 390	Step 391	Step 392	Step 393	Step 394	Step 395	Step 396	Step 397	Step 398	Step 399	Step 400	Step 401	Step 402	Step 403	Step 404	Step 405	Step 406	Step 407	Step 408	Step 409	Step 410	Step 411	Step 412	Step 413	Step 414	Step 415	Step 416	Step 417	Step 418	Step 419	Step 420	Step 421	Step 422	Step 423	Step 424	Step 425	Step 426	Step 427	Step 428	Step 429	Step 430	Step 431	Step 432	Step 433	Step 434	Step 435	Step 436	Step 437	Step 438	Step 439	Step 440	Step 441	Step 442	Step 443	Step 444	Step 445	Step 446	Step 447	Step 448	Step 449	Step 450	Step 451	Step 452	Step 453	Step 454	Step 455	Step 456	Step 457	Step 458	Step 459	Step 460	Step 461	Step 462	Step 463	Step 464	Step 465	Step 466	Step 467	Step 468	Step 469	Step 470	Step 471	Step 472	Step 473	Step 474	Step 475	Step 476	Step 477	Step 478	Step 479	Step 480	Step 481	Step 482	Step 483	Step 484	Step 485	Step 486	Step 487	Step 488	Step 489	Step 490	Step 491	Step 492	Step 493	Step 494	Step 495	Step 496	Step 497	Step 498	Step 499	Step 500	Step 501	Step 502	Step 503	Step 504	Step 505	Step 506	Step 507	Step 508	Step 509	Step 510	Step 511	Step 512	Step 513	Step 514	Step 515	Step 516	Step 517	Step 518	Step 519	Step 520	Step 521	Step 522	Step 523	Step 524	Step 525	Step 526	Step 527	Step 528	Step 529	Step 530	Step 531	Step 532	Step 533	Step 534	Step 535	Step 536	Step 537	Step 538	Step 539	Step 540	Step 541	Step 542	Step 543	Step 544	Step 545	Step 546	Step 547	Step 548	Step 549	Step 550	Step 551	Step 552	Step 553	Step 554	Step 555	Step 556	Step 557	Step 558	Step 559	Step 560	Step 561	Step 562	Step 563	Step 564	Step 565	Step 566	Step 567	Step 568	Step 569	Step 570	Step 571	Step 572	Step 573	Step 574	Step 575	Step 576	Step 577	Step 578	Step 579	Step 580	Step 581	Step 582	Step 583	Step 584	Step 585	Step 586	Step 587	Step 588	Step 589	Step 590	Step 591	Step 592	Step 593	Step 594	Step 595	Step 596	Step 597	Step 598	Step 599	Step 600	Step 601	Step 602	Step 603	Step 604	Step 605	Step 606	Step 607	Step 608	Step 609	Step 610	Step 611	Step 612	Step 613	Step 614	Step 615	Step 616	Step 617	Step 618	Step 619	Step 620	Step 621	Step 622	Step 623	Step 624	Step 625	Step 626	Step 627	Step 628	Step 629	Step 630	Step 631	Step 632	Step 633	Step 634	Step 635	Step 636	Step 637	Step 638	Step 639	Step 640	Step 641	Step 642	Step 643	Step 644	Step 645	Step 646	Step 647	Step 648	Step 649	Step 650	Step 651	Step 652	Step 653	Step 654	Step 655	Step 656	Step 657	Step 658	Step 659	Step 660	Step 661	Step 662	Step 663	Step 664	Step 665	Step 666	Step 667	Step 668	Step 669	Step 670	Step 671	Step 672	Step 673	Step 674	Step 675	Step 676	Step 677	Step 678	Step 679	Step 680	Step 681	Step 682	Step 683	Step 684	Step 685	Step 686	Step 687	Step 688	Step 689	Step 690	Step 691	Step 692	Step 693	Step 694	Step 695	Step 696	Step 697	Step 698	Step 699	Step 700	Step 701	Step 702	Step 703	Step 704	Step 705	Step 706	Step 707	Step 708	Step 709	Step 710	Step 711	Step 712	Step 713	Step 714	Step 715	Step 716	Step 717	Step 718	Step 719	Step 720	Step 721	Step 722	Step 723	Step 724	Step 725	Step 726	Step 727	Step 728	Step 729	Step 730	Step 731	Step 732	Step 733	Step 734	Step 735	Step 736	Step 737	Step 738	Step 739	Step 740	Step 741	Step 742	Step 743	Step 744	Step 745	Step 746	Step 747	Step 748	Step 749	Step 750	Step 751	Step 752	Step 753	Step 754	Step 755	Step 756	Step 757	Step 758	Step 759	Step 760	Step 761	Step 762	Step 763	Step 764	Step 765	Step 766	Step 767	Step 768	Step 769	Step 770	Step 771	Step 772	Step 773	Step 774	Step 775	Step 776	Step 777	Step 778	Step 779	Step 780	Step 781	Step 782	Step 783	Step 784	Step 785	Step 786	Step 787	Step 788	Step 789	Step 790	Step 791	Step 792	Step 793	Step 794	Step 795	Step 796	Step 797	Step 798	Step 799	Step 800	Step 801	Step 802	Step 803	Step 804	Step 805	Step 806	Step 807	Step 808	Step 809	Step 810	Step 811	Step 812	Step 813	Step 814	Step 815	Step 816	Step 817	Step 818	Step 819	Step 820	Step 821	Step 822	Step 823	Step 824	Step 825	Step 826	Step 827	Step 828	Step 829	Step 830	Step 831	Step 832	Step 833	Step 834	Step 835	Step 836	Step 837	Step 838	Step 839	Step 840	Step 841	Step 842	Step 843	Step 844	Step 845	Step 846	Step 847	Step 848	Step 849	Step 850	Step 851	Step 852	Step 853	Step 854	Step 855	Step 856	Step 857	Step 858	Step 859	Step 860	Step 861	Step 862	Step 863	Step 864	Step 865	Step 866	Step 867	Step 868	Step 869	Step 870	Step 871	Step 872	Step 873	Step 874	Step 875	Step 876	Step 877	Step 878	Step 879	Step 880	Step 881	Step 882	Step 883	Step 884	Step 885	Step 886	Step 887	Step 888	Step 889	Step 890	Step 891	Step 892	Step 893	Step 894	Step 895	Step 896	Step 897	Step 898	Step 899	Step 900	Step 901	Step 902	Step 903	Step 904	Step 905	Step 906	Step 907	Step 908	Step 909	Step 910	Step 911	Step 912	Step 913	Step 914	Step 915	Step 916	Step 917	Step 918	Step 919	Step 920	Step 921	Step 922	Step 923	Step 924	Step 925	Step 926	Step 927	Step 928	Step 929	Step 930	Step 931	Step 932	Step 933	Step 934	Step 935	Step 936	Step 937	Step 938	Step 939	Step 940	Step 941	Step 942	Step 943	Step 944	Step 945	Step 946	Step 947	Step 948	Step 949	Step 950	Step 951	Step 952	Step 953	Step 954	Step 955	Step 956	Step 957	Step 958	Step 959	Step 960	Step 961	Step 962	Step 963	Step 964	Step 965	Step 966	Step 967	Step 968	Step 969	Step 970	Step 971	Step 972	Step 973	Step 974	Step 975	Step 976	Step 977	Step 978	Step 979	Step 980	Step 981	Step 982	Step 983	Step 984	Step 985	Step 986	Step 987	Step 988	Step 989	Step 990	Step 991	Step 992	Step 993	Step 994	Step 995	Step 996	Step 997	Step 998	Step 999	Step 1000
-----------	-------	-----------	-----	-----	------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	---------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	-----------

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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_PRJMG	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_COMELE	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_OPESTF	MERIT
R_OPESTF	MERIT
R_OPESTF	MERIT
R_RELCRW	bu
R_RELENG	MERIT
R_RELSUP	MERIT
R_SUBCRW	bu
R_SUBENG	MERIT
R_SUBPLN	MERIT
R_SUBSUP	MERIT
R_TECSTF	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	1,157,698	12,763	x	12.91% (1)	1,648
<u>Income Statement Effects:</u>						
CIAC Amortization	(9,335)	(10,083)	(748)	x	1.0975 (2)	(820)
Annualized Depreciation adjusted for RAM purposes	89,678	97,468	7,790	x	1.0975 (2)	8,549
						<u><u>9,376</u></u>

Source: Attachment 4 page 2

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

(2) Revenue Tax Multiplier. Attachment 3 page 3

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

	A	B	C		D	E	F	
	A + B				D + E			
	HECO 2009 Test Year Rate Base			References for Col. C	2011 Rate Base RAM			Reference for Col. F
	Beg. Balance 12/31/2008	2009 Changes	Ending Balance 12/31/2009		Actual 12/31/2010	2011 Changes	Estimated 12/31/2011	
1	Net Plant In Service							
2	Plant in Service:							
3	Starting Balance		2,597,900	Attachment 4.5 page 37			2,946,751	Attachment 4.1 page 1
4	Additions	288,334	288,334	Attachment 4.5 page 38		91,838	91,838	Line 31 + Line 32
5	Retirements	(16,063)	(16,063)	Attachment 4.5 page 38				
6	Adjustments	18,415	18,415	Note (1)				
7	Ending Balance	2,597,900	2,888,586	Sum: Lines 3-6	2,946,750.8	91,838	3,038,589	Sum: Lines 3-6
8	Accumulated Depreciation:							
9	Starting Balance		(1,232,322)	Note (2)			(1,374,017)	Attachment 4.1 page 1
10	Cost of Removal	6,770	6,770	Attachment 4.5 page 38				
11	Salvage	(277)	(277)	Attachment 4.5 page 38				
12	Depreciation Accrual	(92,979)	(92,979)	Attachment 4.5 page 38		(99,920)	(99,920)	Line 33
13	Retirements	16,063	16,063	Attachment 4.5 page 38				
14	Adjustments	(10,356)	(10,356)	Note (1)				
15	Ending Balance	(1,232,322)	(80,779)	Sum: Lines 9-14	(1,374,017)	(99,920)	(1,473,937)	Sum: Lines 9-14
16	Net Plant in Service	1,365,578	209,907	Attachment 4.5 page 6	1,572,734	(8,082)	1,564,652	Line 7 - Line 15
17	Deductions							
18	Unamortized CIAC							
19	Starting Balance						(186,553)	Attachment 4.1 page 1
20	Unamortized CIAC					(10,222)	(10,222)	Line 36+ Line 37
21	Adjustment for CIAC amortization -					10,083	10,083	Line 38
22	Previous year's amortization portion							
22	Ending Balance	(178,757)	(4,618)	Attachment 4.5 page 6	(186,553)	(139)	(186,692)	Sum: Lines 19-21
23	Accumulated Def Income Taxes:							
24	Starting Balance						(212,702)	Attachment 4.3 page 1
25	Additions					(23,340)	(23,340)	Line 35
26	Ending Balance	(132,510)	(24,041)	Attachment 4.5 page 6	(212,702)	(23,340)	(236,042)	Line 24 + Line 25
27	Total Deductions	(311,267)	(28,659)	Line 22 + Line 26	(399,255)	(23,479)	(422,734)	Line 22 + Line 26
28	Net Rate Base (before working cash)	\$ 1,054,311	\$ 181,248	Line 16 + Line 27	\$ 1,173,478	\$ (31,561)	\$ 1,141,918	Line 16 + Line 27
29	Average Rate Base (RAM components only)	\$ 1,144,935			\$ 1,157,698			
30	Change in Rate Base:							
31	Baseline Additions		87,812	Attachment 4.1 page 2				
32	Major CIP Project Additions		4,026	Attachment 4.2 page 2				
33	Depreciation		(99,920)	Attachment 4.1 page 1				
34	Net Plant		(8,082)	Sum: Lines 31-33				
35	ADIT - Baseline and Major Projects		(23,340)	Attachment 4.4 p. 1, line 13				
36	CIAC - Baseline		(10,222)	Attachment 4.1 page 3				
37	CIAC - Major CIP		-	Attachment 4.2 page 1				
38	Amortization of CIAC		10,083	Attachment 4.1 page 1				
39	Total Change in Rate Base		(31,561)	Sum: Lines 34-38				
40	Effective Pre-Tax Return		12.91%	Attachment 4 page 3	12.91%			
41	Gross Return on Rate Base		\$ 147,811	Line 29 x Line 40	\$ 149,459	\$ 1,648		Line 29 x Line 40
42	Income Statement Effects:							
43	Less: CIAC Amortization				change in exp	(748)	(820)	Line 50
44	Add: Annualized Prior Year Depreciation				7,790	6,549		Line 47
44	Revenue Requirement on Plant Additions					\$ 9,376		
Income Statement Effects:								
2011	Annualized Prior Year Depreciation:							
45	Est. 2011		97,468	Att. 4.1, p. 1				
46	TY 2009		89,678	Attachment 4.5 page 11 line				
47	2011 Change		7,790	4+5(Supplemental Testimonies) Line 45- Line 46				
48	CIAC Amortization:							
48	Est. 2011		(10,083)	Att. 4.1, p. 1				
49	TY 2009		(9,335)	Attachment 4.5 page 11				
50	2011 Change		(748)	(Supplemental Testimonies) Line 48 - Line 49				

Note (1) In the Hawaiian Electric 2009 test year rate case, the Commission-approved rate base (as proposed in the settlement agreement between the parties) was based on: 1) the beginning balance of Plant in Service and Accumulated Depreciation based on the actual balance at 12/31/08 and 2) the ending balance at 12/31/09 for those same accounts however, based on an estimated beginning balance at 12/31/08, not the actual balance. This adjustment primarily represents the difference between those two amounts (the actual 12/31/08 balance and the estimated 12/31/08 balance that was carried forward in the calculation of average rate base).

Note (2) Represents the balance at 12/31/08 per the trial balance of: Accumulated Depreciation, Removal Regulatory Liability and the Accumulated Retirement Obligation.

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	
								Amount in Thousands	Percent of Total
Short-Term Debt	0	0	0.75%	0.000%	n/a	0.000%	1.0975	0.000%	
Long-Term Debt	576,569	40.76	5.77%	2.352%	n/a	2.352%	1.0975	2.581%	
Hybrid Securities	27,775	1.96	7.41%	0.146%	n/a	0.146%	1.0975	0.160%	
Preferred Stock	20,696	1.46	5.48%	0.080%	61.090%	0.131%	1.0975	0.144%	
Common Equity	789,374	55.81	10.00%	5.581%	61.090%	9.136%	1.0975	10.026%	
Total	1,414,414	100.00							
Estimated Composite Cost of Capital			8.159%					12.912%	
			or	8.16%			or	12.91%	

Notes:

Cols. 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 3 page 3

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

	Amount	Source:
<u>CIP CT-1 Costs in Excess of Interim 09 TY RC:</u>		
CIP CT-1 Costs (actual as of 12/31/10)	192,912	Attachment 4.1 page 7
Less: Interim 2009 TY RC	(161,470)	Attachment 4.5 page 12
Actual CIP CT-1 Costs in Excess of Interim	31,442	
<u>Plant In-Service:</u>		
12/31/10 Plant Balance	3,024,037	Attachment 4.5 page 14
Less: Actual CIP CT-1 Costs in Excess of Interim	(31,442)	Calculation above
Kamoku 46kV UG Alt Phase 1 (EOTP) Costs in Excess of Interim	(43,005)	Attachment 4.1 page 8
Kahe 3 Biofuel Co-Firing Costs in Excess of Interim	(271)	Attachment 4.1 page 8
First Wind/Kahuku Wind (REIP)	(2,567)	Attachment 4.1 page 10
Revised Plant In-Service at 12/31/10	2,946,751	
<u>Accumulated Depreciation:</u>		
12/31/10 Total Reserves for Depreciation and Amortization	(1,142,625)	Attachment 4.5 page 15
Add: Removal Regulatory Liability & ARO Regulatory Asset	(183,381) (A)	
Asset Retirement Obligation	(48,423) (A)	
Total Accumulated Depreciation	(1,374,429)	
Less: CT-1 depreciation on YTD 2009 excess costs	412	Attachment 4.1 page 6
Adjusted Beginning Balance	(1,374,017)	
<u>Unamortized CIAC:</u>		
12/31/2010 Unamortized CIAC Balance	(189,315)	Attachment 4.5 page 13
Less: Adj for First Wind/Kahuku Wind (REIP)	2,762	Attachment 4.5 page 27
Adjusted Beginning Balance at 12/31/10	(186,553)	
<u>2011 Estimated Depreciation:</u>		
Utility Book Depreciation and Leasehold Amortization	97,378	Attachment 4.1 page 4
Vintage Accounting Amortization	4,404	Attachment 4.1 page 5
Total 2011 Depreciation Accrual	101,782	Attachment 4.5 page 17
Less: Adj for CIP CT-1 Costs in Excess of Interim	(466)	Attachment 4.1 page 8
Adj for Kamoku 46kV UG Alt Phase 1 (EOTP) Costs in Excess of Interim	(1,285)	Attachment 4.1 page 8
Adj for Kahe 3 Biofuel Co-Firing Costs in Excess of Interim	(5)	Attachment 4.1 page 8
Adj for First Wind/Kahuku Wind (REIP)	(107)	Attachment 4.1 page 10
Adjusted 2011 Depreciation & Amortization Accrual	99,920	
Less: Vehicle Depreciation	(2,452)	Attachment 4.5 page 17
Adjusted 2011 Depreciation & Amortization Expense	97,468	
<u>2011 Estimated CIAC Amortization:</u>		
2011 Amortization Expense	(10,175)	Attachment 4.5 page 17
Less: Adj for First Wind/Kahuku Wind (REIP)	92 (B)	
Adjusted 2011 CIAC Amortization Expense	(10,083)	

(A) Per HECO Detail General Ledger Summary as of 12-31-2010

(B) First Wind/Kahuku Wind (REIP) CIAC - 2010 Actual
Divided by 30 year amortization period
2011 CIAC amortization related to First Wind/Kahuku Wind

2,762	Attachment 4.5 page 27
30 yrs	
92	

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:							Attachment 4.5 p. 20
6/3/2005	5/31/2006	5/31/2007	5/30/2008	5/28/2009	5/28/2010	NOTE (B)	
NOTE (C)							
2004	2005	2006	2007	2008	2009	2010	
Total Plant Additions (Sum of Exhs. 1, 2, and 3 of Reports)							
146,577,817	109,529,898	131,037,917	106,094,629	96,457,503	287,760,439	170,051,118	
Less Major Projects: (+\$2.5 Million)							
Dkt No.	Item No.						
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	(38,651,540)	(1,919,934)	(40,680)		
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)	(914)	
2006 In-service:							
Ford Island Substation	04-0278	Y00040	(603,089)	(23,880,234)	(26,673)	(141,027)	
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 Alt 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/Kahuku Wind (REIP)						(2,567,414)	
Total Net Plant Additions							
103,164,963	86,466,739	68,837,936	92,829,724	84,726,049	93,765,610	98,902,275	
Last Five-Year Average							
				87,205,082	85,325,212	87,812,319	

(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.

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)	(179,585,120)
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	9,614,759
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	189,314,529
Total CIAC Additions	7,794,051	19,449,173	15,860,215	20,821,353	11,342,069	10,162,900	19,344,168
Less Major Projects:	Dkt No.	Item No.					
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 Kuahua Substation	03-0260	Y00021					
Salt Lake Boulevard Widening	01-0189	P0000143	(2,462,295)	NOTE (B)			
New Dispatch Center	03-0360	Y00030					
2006 In-service:							
Ford Island Substation	04-0278	Y00040	(12,446,000)				
Ocean Pointe Substation	05-0217	Y00045	(854,800)				
Kahe 4 Boiler Control Upgrade	02-0207	P9454000					
2007 In-service:							
Mamala Substation	04-0350	Y00039		(6,715,018)			
Kahe 3 Boiler Controls Upgrade	02-0206	P9539000					
2008 In-service:							
KoOlina Substation	05-0056	Y00044			(1,182,000)		
CIP Generating Unit	05-0145	Y49000					
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/Kahuku Wind (REIP)							Attachment 4.5 p. 27 (2,762,034)
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 worksheet 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.

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.

SOURCE: PROPERTY ACCOUNTING

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.	DTS	Description	12/31/09 Act (A)	12/31/09 Cost Accrued	12/31/2009 Total	PUC allowed Attachment 4.5 page 2D	Incremental Difference From Docket	Plant Acct	Depr Rate	Incremental Diff in 2010 Depreciation
P0001052	4/22/09	CIP1 CEIP Substation Mod	603,567		603,567	3,890	599,677	3530	0.02560	15,352
P0001135	6/3/09	CIP1 Unit Addition-Microwave	748,908		752,007	-	752,007	3970	0.05940	44,669
P0001340	12/30/08	CIP1 Unit Addition-Easements	4,857,924	3,099	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	7/27/09	CIP1 AES-CEIP#2 Trans. Line	7,541,528		7,541,528	5,790,887	1,750,641	(C)	(C)	59,010
P0001051	4/9/09	CIP1 AES Substation Add	3,809,430	12,901	3,822,331	3,153,110	669,221	(D)	(D)	18,502
P0001134	7/27/09	CIP1 Unit Addition-Fiber	638,775		638,775	531,769	107,006	3970	0.05940	6,356
P0001136	10/1/09	CIP1 Unit Addition-Kahe Bkrs	1,771,737		1,771,737	1,720,778	50,959	3530	0.02560	1,305
P0001137	4/1/09	CIP1 Unit Addition-Kalaheola	210,680		210,680	289,912	(79,232)	3970	0.05940	(4,706)
P4900000	8/3/09	CIP1 Unit 1 Addition	153,005,988	6,720,568	159,726,556	143,859,745	25,898,928	(E)	(E)	271,527
P0001880	10/15/09	Generators	3,042,741		3,042,741			(E)	(E)	
P0001881	12/15/09	CIP1 Unit 1 Water Treatment System	6,932,942	56,434	6,989,376			(E)	(E)	
		Plant Additions	<u>184,425,981</u>	<u>6,793,002</u>	<u>191,218,983</u>	<u>161,469,776</u>	<u>29,749,207</u>			<u>412,014</u>
		Parcel between Hanua Street and AES Substation included in PHFFU	1,809,875		1,809,875	1,809,875	-			
P0001084		Total Project Cost	<u>186,235,856</u>	<u>6,793,002</u>	<u>193,028,858</u>	<u>163,279,651</u>	<u>29,749,207</u>			
(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	2.67	46,713	0.05940	2,775			
		Total	<u>7,541,528</u>	<u>100.00</u>	<u>1,750,641</u>		<u>59,010</u>			
(D)		Plant Account	Total		669,221	Depr Rate	Depr			
		3520	905,502	23.69	158,537	0.02400	3,805			
		3530	2,642,422	69.13	462,640	0.02560	11,844			
		3970	274,407	7.18	48,044	0.05940	2,854			
		Total	<u>3,822,331</u>	<u>100.00</u>	<u>669,221</u>		<u>18,502</u>			
(E)		Plant Account	Total		25,898,928	Depr Rate	Depr			
		3410	29,100,000	17.14	4,439,589	0.00890	39,512			
		3420	13,500,000	7.95	2,059,603	0.01569	32,315			
		3430	68,126,556	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)	(10,828)			
		3530	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	<u>169,758,673</u>	<u>100.00</u>	<u>25,898,928</u>		<u>271,527</u>			

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

Project No.	DIV	Description	12/31/09 Act (A)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					2010 Cost Incurred (F)	(1) + (2)	Docket Total	(3) - (4) Incremental From Docket	Plant Acct	Depr Rate	2011 Depreciation (5) x (7)
P0001052	4/22/09	CIP1 CEEP 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	3970	0.05940	44,735
P0001340	12/30/08	CIP1 Unit Addition-Exemptions	4,857,924			4,857,924		-	3503 (B)		-
P0001585	5/27/08	CIP1 - Land - Gen Station	1,261,761			1,261,761			3400 (B)		
P0001050	7/27/09	CIP1 AES-CEIP#2 Trans. Line	7,541,528		135,433	7,676,961		1,886,074	(C)	0.03404	64,201
P0001051	4/9/09	CIP1 AES Substation Add	3,822,331		(20,811)	3,801,520		648,410	(D)	0.02764	17,925
P0001134	7/27/09	CIP1 Unit Addition-Fiber	638,775		29,419	668,194		136,425	3970	0.05940	6,104
P0001136	10/1/09	CIP1 Unit Addition-Kahe Bks	1,771,737		24,204	1,795,941		75,163	(G)	0.02560	1,924
P0001137	4/1/09	CIP1 Unit 1 Addition	210,680		1,725	212,405		(77,507)	(G)	0.03706	(2,872)
P4900000	8/3/09	CIP1 Unit 1 Blackstart Diesel	159,726,556		1,400,880	161,127,436		27,299,808	(E)	0.01162	317,227
P0001880	10/15/09	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)	(753)
		Plant Additions	191,218,983		1,693,199	192,912,182		161,469,776			465,906
		Parcel between Henua Street and AES Substation included in PHFRU	1,809,875			1,809,875					
P0001084		Total Project Cost	193,028,858		1,693,199	194,722,057					

(A) NI cost only

(B) Land and rights of way in fee are not depreciable assets

(C)	Plant Account	Total	Depr Rate	Depr
	3550	6,610,735	0.03090	204,272
	3560	837,906	0.05190	43,487
	3970	228,320	0.05940	13,562
	Total	7,676,961		261,321

(D)	Plant Account	Total	Depr Rate	Depr
	3520	914,613	0.02400	21,951
	3530	2,613,738	0.02560	66,912
	3970	273,169	0.05940	16,226
	Total	3,801,520		105,089

(E)	Plant Account	Total	Depr Rate	Depr
	3410	35,245,454	0.00890	313,685
	3420	14,519,227	0.01569	227,807
	3430	49,771,555	0.00876	435,999
	3440	16,261,082	0.01131	183,913
	3450	26,546,349	0.01776	471,463
	3460	7,992,105	(0.00640)	(51,149)
	346A	1,194,486	0.05000	59,724
	3570	6,578,912	0.01700	111,842
	3580	1,171,022	0.02410	28,222
	3620	807,734	0.02990	24,151
	3912	156,810	0.08334	13,069
	3913	160,240	0.06667	10,683
	3970	722,460	0.05940	42,914
	Total	161,127,436		1,872,321

(F) Includes 12/31/2010 Accruals

(G)	Plant Account	Total	Depr Rate	Depr
	3530	140,397	0.02560	3,594
	3970	72,008	0.05940	4,277
	Total	212,405		7,871

SOURCE: PROPERTY ACCOUNTING

(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	Job Seq	PROJECT DESCRIPTION	JOB TASK ID	Proj/WO Desc	Sum of Amount	DATE IN SERVICE	Added to CRR	UTILITY/ACCOUNT ID
HECO	Distribution	P0001821	First Wind Waialua Relay	E0016578	Kahuku FW Waialua Rel - Engr	17,256	20101219		3620
HECO	Distribution	P0001821	First Wind Waialua Relay	E0016578	First Wind Waialua Relay	423	20101219		3620
HECO	Distribution	P0001821	First Wind Waialua Relay	E0016041	Kahuku FW Waialua Rel-Eng-SS Engr	17,079	20101219		3620
HECO	Distribution	P0001821	First Wind Waialua Relay	E0016042	Kahuku FW Waialua Rel-Cons-HDR Rel Eng	28,055	20101219		3620
HECO	Distribution	P0001821	First Wind Waialua Relay	E0016043	Kahuku FW Waialua Rel-Cons-HDR GroundgSt	5,290	20101219		3620
HECO	Distribution	P0001821	First Wind Waialua Relay	E0016046	Kahuku FW Waialua Rel-Constr-Elec Subst	42,935	20101219		3620
HECO	Distribution	P0001821	First Wind Waialua Relay	E0016047	Kahuku FW Waialua Rel-Constr-Elec. Relay	20,590	20101219		3620
HECO	Distribution	P0001821	First Wind Waialua Relay	E0016048	Kahuku FW Waialua Rel-Constr-Elec. Instru	14,114	20101219		3620
HECO	Distribution	P0001821	First Wind Waialua Relay	E0017793	Kahuku FW Waialua RTU - Engr	9,857	20101219		3620
HECO	Transmission	P0001822	Switching Sn Outside Services	E0016582	Switching Sn Outside Services	(8)	20101219		3620
HECO	Transmission	P0001823	First Wind Waialua Relay	E0016582	FW Waialua Rel-Eng	123,251	20101219		3530
HECO	Transmission	P0001823	First Wind Waialua Relay	E0016584	FW Waialua Rel-Con-Sub Equip	43,695	20101219		3530
HECO	Transmission	P0001823	First Wind Waialua Relay	E0017263	FW Waialua Rel-Con-Substation	287	20101219		3530
HECO	Transmission	P0001823	First Wind Waialua Relay	E0017264	FW Waialua Rel-Con-Substation	15,876	20101219		3530
HECO	Transmission	P0001823	First Wind Waialua Relay	E0017265	FW Waialua Rel-Con-Inst&Cont	26,506	20101219		3530
HECO	Transmission	P0001824	FW Switching Station	E0016588	Kahuku FW Switching Sn-Eng	7,695	20101219		3530
HECO	Transmission	P0001824	FW Switching Station	E0016590	Kahuku FW Switching Sn-Eng-PM	194,413	20101219		3523
HECO	Transmission	P0001824	FW Switching Station	E0016593	Kahuku FW Switching Sn-Eng-OS	167,941	20101219		3530
HECO	Transmission	P0001824	FW Switching Station	E0016594	Kahuku FW Switching Sn-Eng-Plng	39,393	20101219		3530
HECO	Transmission	P0001824	FW Switching Station	E001824	FW Switching Station	46,106	20101219		3620
HECO	Transmission	P0001824	FW Switching Station	E0015343	Kahuku FW SS-Const-Inst&Cont	337	20101219		3610
HECO	Transmission	P0001824	FW Switching Station	E0016278	Kahuku FW SS-Const-Inst&Cont	90,347	20101219		3530
HECO	Transmission	P0001824	FW Switching Station	E0017275	FW Sw Sn-Eng-VARIANCE-B Contact	4,105	20101219		3530
HECO	Transmission	P0001824	FW Switching Station	E0017278	FW Sw Sn-Eng-VARIANCE-Loss of Comm	2,689	20101219		3530
HECO	Transmission	P0001824	FW Switching Station	E0017280	FW Sw Sn-Eng-VARIANCE-Extensv Rws/migs	327	20101219		3530
HECO	Transmission	P0001824	FW Switching Station	E0017955	Kahuku FW SS-Const-Inst&Cont	21,218	20101219		3530
HECO	Transmission	P0001825	First Wind T&D 46kV	E0018039	Kahuku FW SS-Const-Inst&Cont	60,177	20101219		3530
HECO	Transmission	P0001825	First Wind T&D 46kV	E0017317	Kahuku Wind 46kV OH - Engr	46	20101219		3560
HECO	Transmission	P0001825	First Wind T&D 46kV	E0017317	Kahuku Wind 46kV OH - Engr	2,250	20101217		3560
HECO	Transmission	P0001825	First Wind T&D 46kV	E0017318	Kahuku Wind 46kV OH - Inst	13,675	20101217		3560
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016602	Kahuku FW T&D 12kV OH-Engr	78,361	20101217		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0015462	Kahuku Wind OH Dist-Eng	5,542	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0015462	Kahuku Wind OH Dist-Eng	2	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016026	Kahuku Wind OH Dist-Survey	32,719	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016026	Kahuku Wind OH Dist-Survey	33,391	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016026	Kahuku Wind OH Dist-Survey	434	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016026	Kahuku Wind OH Dist-Survey	271	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016026	Kahuku Wind OH Dist-Survey	120	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016026	Kahuku Wind 12kV OH Reloc-Ins	199,079	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016230	Kahuku Wind 12kV OH Reloc-Ins	34,798	20100623		3640
HECO	Distribution	P0001826	First Wind T&D 12kV	E0016230	Kahuku Wind 12kV OH Reloc-Ins	(19,233)	20100623		3640
HECO	Transmission	P0001827	First Wind Metering	E0016606	Kahuku FW Metering-Engr	319	20101219		3560
HECO	Transmission	P0001827	First Wind Metering	E0016606	Kahuku FW Metering-Engr	825	20101219		3560
HECO	Transmission	P0001827	First Wind Metering	E0017267	FW Kahuku Meterg - VARIANCE - Mtr Locatn	1,215	20101219		3970
HECO	Communication	P0001828	First Wind Telecom Testing	E0016610	Kahuku FW Telecom Testing-Engr	4,455	20101219		3970
HECO	Communication	P0001828	First Wind Telecom Testing	E0016610	Kahuku FW Telecom Testing-Engr	1,536	20101219		3970
HECO	Communication	P0001829	First Wind Telecom Ward	E0017810	Engr - First Wind Telecom Ward	4,853	20101219		3970
HECO	Communication	P0001829	First Wind Telecom Ward	E0017810	Engr - First Wind Telecom Ward	84,873	20101219		3970
HECO	Communication	P0001830	First Wind Telecom Waialua	E0016613	Kahuku FW Telecom Waialua-Engr	4,258	20101219		3970
HECO	Communication	P0001830	First Wind Telecom Waialua	E0016613	Kahuku FW Telecom Waialua-Engr	309	20101219		3970
HECO	Communication	P0001830	First Wind Telecom Waialua	E0016100	Engr - First Wind Telecom Waialua - O/E	16,606	20101219		3970
HECO	Communication	P0001830	First Wind Telecom Waialua	E0016225	Engr - First Wind Telecom Waialua	95,075	20101219		3970
HECO	Communication	P0001830	First Wind Telecom Waialua	E0016225	Engr - First Wind Telecom Waialua	12,376	20101219		3970
HECO	Communication	P0001831	First Wind Telecom Kawela	E0016616	Kahuku FW Telecom Kawela-Engr	9,847	20101219		3970
HECO	Communication	P0001831	First Wind Telecom Kawela	E0016616	Kahuku FW Telecom Kawela-Engr	771	20101219		3970
HECO	Communication	P0001832	First Wind Telecom Mokuleia	E0016618	Kahuku FW Telecom Mokuleia-Engr	4,081	20101219		3970
HECO	Communication	P0001832	First Wind Telecom Mokuleia	E0017270	FW Telecom-Mokuleia-VARIANCE-Kaala	3,776	20101219		3970
HECO	Communication	P0001833	First Wind Telecom Waialua	E0016620	Kahuku FW Telecom Waialua-Engr	2,885	20101219		3970
HECO	Communication	P0001833	First Wind Telecom Waialua	E0016039	Engr - First Wind Telecom Waialua - Sec Bkgrd Chk	326	20101219		3970
HECO	Communication	P0001833	First Wind Telecom Waialua	E0016039	Engr - First Wind Telecom Waialua - O/E	27,363	20101219		3970

DISTRICT CODE	Func. Category	ProjSeq	PROJECT DESCRIPTION	JOB TASK ID	PROJWO - Desc	Sum of Amount	DATE IN SERVICE	Added to PR	UTILITY ACCOUNT ID
HECO	Communication	P0001833	First Wind Telecom Waialua	EE016226	Constr - First Wind Telecom Waialua	184,124	20101219	201012	3970
HECO	Communication	P0001833	First Wind Telecom Waialua	EE016227	Engr - First Wind Telecom Waialua	103,367	20101219	201012	3970
HECO	Communication	P0001833	First Wind Telecom Waialua	EE016271	Engr - First Wind Telecom Waialua - EF&I	18,105	20101219	201012	3970
HECO	Communication	P0001833	First Wind Telecom Waialua	EE017574	Constr - First Wind Telecom Waialua - Grid	9,701	20101219	201012	3970
HECO	Communication	P0001833	First Wind Telecom Waialua	EE018015	Constr - First Wind Telecom Waialua Batt	1,336	20101219	201012	3970
HECO	Communication	P0001834	First Wind Telecom Maunakapu	EE016623	Kahuku FW Telecom Maunakapu-Eng	9,933	20101219	201012	3970
HECO	Communication	P0001834	First Wind Telecom Maunakapu	EE017273	FW Telecom-Mauna Kapu-VARIANCE-Mauna Kapu	4,933	20101219	201012	3970
HECO	Communication	P0001834	First Wind Telecom Maunakapu	EE017274	FW Telecom-Maunakapu-VAR-Kaala Repeater	1,930	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE016625	Kahuku FW Telecom Kahuku-Eng	2,883	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE016099	Engr - First Wind Telecom Kahuku - O/E	37,618	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE016224	Constr - First Wind Telecom Kahuku	147,053	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE016277	FW Telecom Kahuku-Con-TLH	287	20101219	201012	3970
HECO	Communication	P0001835	First Wind Telecom Kahuku	EE017642	Engr - First Wind Telecom Kahuku	77,736	20101219	201012	3970
HECO	Distribution	P0001840	First Wind Site Const Kawela	P0001840	First Wind Site Const Kawela	(0)	20101219	201012	3970
HECO	Distribution	P0001954	First Wind UFLS	EE007456	First Wind UFLS-CEIP-MANAGE	13,807	20101219	201012	3620
HECO	Distribution	P0001954	First Wind UFLS	EE007460	First Wind UFLS-Kahuku-Engineer	505	20101219	201012	3620
HECO	Distribution	P0001954	First Wind UFLS	EE016111	First Wind UFLS-CEIP-Engineer	75,041	20101219	201012	3620
HECO	Distribution	P0001954	First Wind UFLS	EE016112	First Wind UFLS-CEIP-Construct	6,117	20101219	201012	3620
HECO	Distribution	P0001954	First Wind UFLS	EE016126	First Wind UFLS-Kahuku-Engineer	23,445	20101219	201012	3620
HECO	Distribution	P0001954	First Wind UFLS	EE016127	First Wind UFLS-Ewa Nui-Engineer	44,834	20101219	201012	3530
HECO	Distribution	P0001954	First Wind UFLS	EE016165	Construct - First Wind UFLS-CEIP - SUB	24,747	20101219	201012	3530
HECO	Distribution	P0001954	First Wind UFLS	EE016166	Construct - First Wind UFLS-CEIP - RELAY	23,102	20101219	201012	3530
HECO	Distribution	P0001954	First Wind UFLS	EE016167	Construct-First Wind UFLS-CEIP - I & C	14,335	20101219	201012	3620
HECO	Distribution	P0001954	First Wind UFLS	EE016170	Construct-First Wind UFLS-KAHUKU - SUB	23,081	20101219	201012	3620
HECO	Distribution	P0001954	First Wind UFLS	EE016171	Construct-First Wind UFLS-KAHUKU-RELAY	14,072	20101219	201012	3620
HECO	Distribution	P0001954	First Wind UFLS	EE016172	Construct-First Wind UFLS-KAHUKU - I&C	18,672	20101219	201012	3970
HECO	Distribution	P0001954	First Wind UFLS	EE016174	Const-First Wind UFLS-KAHUKU-RE OP ENGR	2,852	20101219	201012	3970
HECO	Distribution	P0001954	First Wind UFLS	EE016175	Construct-First Wind UFLS-EWA NUI - SUB	4,830	20101219	201012	3530
HECO	Distribution	P0001954	First Wind UFLS	EE016176	Construct-First Wind UFLS-EWA NUI-RELAY	14,057	20101219	201012	3530
HECO	Distribution	P0001954	First Wind UFLS	EE016177	Construct-First Wind UFLS-EWA NUI- I&C	7,009	20101219	201012	3970
HECO	Distribution	P0001954	First Wind UFLS	SD00239	FW UFLS - Hila Install - Elec Engr	997	20101219	201012	3620
						2,567,414			
						(a)	(b)	(a) x (b)	
						941,046	Existing Depr. Rate	2011 Depreciation Exp.	
						754,224	0.02988 Att. 4.1 p. 5	28,118	
						872,144	0.04322 Att. 4.1 p. 5	32,588	
						2,567,414	0.05300 Att. 4.1 p. 5	46,224	
								106,940	

Transmission
Distribution
Communication/General

HECO - CIAC

	2008 balance	2009 amort	2009 balance	2010 amort	2010 balance (a)	2011 amort (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	5,227,786.18	217,825.00	5,009,961.18	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	(60,738.80)	(3,196.00)	(57,542.80)	(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	(199,610.70)	(7,984.00)	(191,626.70)	(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)
In kind CIAC						
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	2,242,634.69	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	4,916,005.09	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	4,568,681.77	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	9,614,759.36	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
Total Major CIP 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	Attachment 4.5 page 20
Customer Advance	(777,838)	Attachment 4.5 page 20
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	Attachment 4.5 page 33
Phase 1 Planning Costs	(12,836,000)	Attachment 4.5 page 33
Phase 1 AFUDC on Planning Costs	(13,560,000)	Attachment 4.5 page 33
Amount Qualifying for 2010 RAM	<u>15,497,000</u>	Attachment 4.5 page 33

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

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

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 (Note 1)	Att. 4.3 pg 8 & 11	5,620,585.00	1,776,139.00	7,396,724.00
Subtotal		189,157,374.18	26,971,007.32	216,128,381.50
ADIT on First Wind/Kahuku Wind (REIP)	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)
ADIT adjustment for CIP bonus depreciation	Att. 4.3 pg 13	(229,062.00)		(229,062.00)
Actual 12/31/10 ADIT - revised		186,067,977.66	26,634,175.96	212,702,153.62

NOTE 1> The FIN 48 adjustment is excluded from ADIT for rate base RAM purposes to be consistent with the 2009 final D&O filing. The FIN 48 adjustment to ADIT represents an amount that estimates uncertain tax positions taken by HECO. This quantification of tax risk is separately stated in the balance sheet and has the effect of decreasing ADIT and increasing rate base. In the 2011 rate case, HECO has proposed to include the FIN 48 adjustment in ADIT in order to recover the cost of these uncertain tax positions. This position was not taken in the 2009 test year, and therefore, HECO excluded this adjustment from ADIT in this rate base RAM calculation to be consistent with the 2009 D&O.

NOTE 2> The large increase in ADIT liability in rate base from December 31, 2009 to December 31, 2010 was due to ADIT on bonus depreciation of about \$16 million and the adjustment to ADIT for the change in the tax accounting method for deducting repairs of about \$35 million. Note that the repairs adjustment was a non-recurring one-time adjustment for the cumulative change over 11 years.

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

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

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

HAWAIIAN ELECTRIC CO., INC.
ADIT ON EXCESS DEPRECIATION

		CIP		EOTP		K-3 BIOFUEL		TOTAL
		2009	2010	2010	2010	2010	2010	
source								
FEDERAL DEFERRED TAXES								
1	State Tax Depreciation	1,451,953	2,845,444	1,612,706	10,176			
2	Book Depreciation		(412,015)					
3	Subtotal	1,451,953	2,433,429	1,612,706	10,176			
4	Effective Federal Tax Rate	32.89473684%	32.89473684%	32.89473684%	32.89473684%			
5	Federal Deferred Tax on State Depreciation	477,616	800,470	530,495	3,347	1,811,929		
6	Addback State Tax Depreciation		(2,433,429)	(1,612,706)	(10,176)			
7	Federal Tax Depreciation	(1,451,953)	2,800,522	1,612,706	271,351			
8	Book Depreciation	2,971,895	(412,015)					
9	Federal State Difference	-	(44,922)	-	261,175			
10	Tax Rate on Federal Only Adjustment	35%	35%	35%	35%			
11	Federal Deferred Tax Adjustment	531,980	(15,723)	-	91,411	607,668		
12	Total Federal Deferred Taxes	1,009,596	784,747	530,495	94,758	2,419,597		
STATE DEFERRED TAXES								
13	State Tax Depreciation	1,451,953	2,845,444	1,612,706	10,176			
14	Book Depreciation	-	(412,015)					
15	Subtotal	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	87,336	146,372	97,005	612	331,324		
18	TOTAL DEFERRED TAXES	1,096,932	931,119	627,500	95,370	2,750,921		

ATTACHMENT 4.3
PAGE 3 OF 13

ATTACHMENT 4.3
PAGE 3 OF 12

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

Project No.	D/S	Description	12/31/09 Act (A)	12/31/09 Cost Accrued	Total	Docket Total	Total - Docket Difference	Plant Acct	Depr Rate	Depreciation 2010	50% Bonus	1st year 2009 Fed Tax Depreciation	1st year 2009 HI Tax Depreciation	2nd year 2010 Fed Tax Depreciation	2nd year 2010 HI Tax Depreciation	Additional 2010 Fed Tax Depreciation	1st year 2010 HI Tax Depreciation
P0001052	4/22/09	CIP1 CEEP Substation Mod	603,567	3,099	603,567	3,890	599,677	3530	0.02560	15,352	Yes	311,082	22,448	21,645	43,291	-	-
P0001135	6/3/09	CIP1 Unit Addition-Microwave	748,908		752,007	-	752,007	3970	0.05940	44,669	No	390,104	28,200	27,144	54,287	1,108	1,675
P0001340	12/30/08	CIP1 Unit Addition-Exempts	4,857,924		4,857,924	4,857,924	-	3503 (B)		-	No	-	-	-	-	-	-
P0001585	5/27/08	CIP1 - Land - Gen Station	1,261,761		1,261,761	1,261,761	-	3400 (B)		-	No	-	-	-	-	-	-
P0001050	7/27/09	CIP1 AES-CEP#2 Trans. Line	7,541,528		7,541,528	5,790,887	1,750,641	(D)	0.05940	59,010	Yes	919,087	87,532	83,155	166,311	135,433	6,772
P0001051	4/9/09	CIP1 AES Substation Add	3,809,430	12,901	3,822,331	3,153,110	669,221	(D)	0.05940	18,502	No	25,096	25,096	48,311	48,311	(20,811)	(780)
P0001134	7/27/09	CIP1 Unit Addition-Fiber	638,775		638,775	107,066	531,709	3970	0.02560	6,356	Yes	55,509	4,013	3,862	7,725	29,419	1,103
P0001136	10/1/09	CIP1 Unit Addition-Kane Burs	1,771,737		1,771,737	1,720,778	50,959	3530	0.05940	1,305	Yes	26,435	1,911	1,839	3,679	24,204	908
P0001137	4/1/09	CIP1 Unit Addition-Kababoa	210,680		210,680	289,912	(79,232)	3970	0.05940	(4,706)	No	(41,102)	(2,971)	(2,860)	(5,720)	1,725	65
P4900000	8/3/09	CIP1 Unit 1 Addition	162,981,671	6,777,002	169,758,673	143,859,745	25,898,928	(E)		271,527	No	1,285,684	1,285,684	2,441,711	2,441,711	1,522,121	76,106
		Plant Additions	184,425,981	6,793,002	191,218,983	161,409,776	29,749,207			412,015		2,971,805	1,451,953	2,624,807	2,759,595	1,693,190	175,713
		Parcel between Manua Street and AES Substation included in PHIFU	1,809,875		1,809,875	1,809,875	-									2010 Tax Depreciation	2,845,444
P0001084		Total Project Cost	186,235,856	6,793,002	193,028,858	163,219,651	29,749,207										

(A) NI cost only

(B) Land and rights of way in fee are not depreciable assets

(C) Plant Account

(D) Plant Account

(E) Plant Account

Project No.	D/S	Description	12/31/09 Act (A)	12/31/09 Cost Accrued	Total	Docket Total	Total - Docket Difference	Plant Acct	Depr Rate	Depreciation 2010	50% Bonus	1st year 2009 Fed Tax Depreciation	1st year 2009 HI Tax Depreciation	2nd year 2010 Fed Tax Depreciation	2nd year 2010 HI Tax Depreciation	Additional 2010 Fed Tax Depreciation	1st year 2010 HI Tax Depreciation
P0001052	4/22/09	CIP1 CEEP Substation Mod	603,567	3,099	603,567	3,890	599,677	3530	0.02560	15,352	Yes	311,082	22,448	21,645	43,291	-	-
P0001135	6/3/09	CIP1 Unit Addition-Microwave	748,908		752,007	-	752,007	3970	0.05940	44,669	No	390,104	28,200	27,144	54,287	1,108	1,675
P0001340	12/30/08	CIP1 Unit Addition-Exempts	4,857,924		4,857,924	4,857,924	-	3503 (B)		-	No	-	-	-	-	-	-
P0001585	5/27/08	CIP1 - Land - Gen Station	1,261,761		1,261,761	1,261,761	-	3400 (B)		-	No	-	-	-	-	-	-
P0001050	7/27/09	CIP1 AES-CEP#2 Trans. Line	7,541,528		7,541,528	5,790,887	1,750,641	(D)	0.05940	59,010	Yes	919,087	87,532	83,155	166,311	135,433	6,772
P0001051	4/9/09	CIP1 AES Substation Add	3,809,430	12,901	3,822,331	3,153,110	669,221	(D)	0.05940	18,502	No	25,096	25,096	48,311	48,311	(20,811)	(780)
P0001134	7/27/09	CIP1 Unit Addition-Fiber	638,775		638,775	107,066	531,709	3970	0.02560	6,356	Yes	55,509	4,013	3,862	7,725	29,419	1,103
P0001136	10/1/09	CIP1 Unit Addition-Kane Burs	1,771,737		1,771,737	1,720,778	50,959	3530	0.05940	1,305	Yes	26,435	1,911	1,839	3,679	24,204	908
P0001137	4/1/09	CIP1 Unit Addition-Kababoa	210,680		210,680	289,912	(79,232)	3970	0.05940	(4,706)	No	(41,102)	(2,971)	(2,860)	(5,720)	1,725	65
P4900000	8/3/09	CIP1 Unit 1 Addition	162,981,671	6,777,002	169,758,673	143,859,745	25,898,928	(E)		271,527	No	1,285,684	1,285,684	2,441,711	2,441,711	1,522,121	76,106
		Plant Additions	184,425,981	6,793,002	191,218,983	161,409,776	29,749,207			412,015		2,971,805	1,451,953	2,624,807	2,759,595	1,693,190	175,713
		Parcel between Manua Street and AES Substation included in PHIFU	1,809,875		1,809,875	1,809,875	-									2010 Tax Depreciation	2,845,444
P0001084		Total Project Cost	186,235,856	6,793,002	193,028,858	163,219,651	29,749,207										

(A) NI cost only

(B) Land and rights of way in fee are not depreciable assets

(C) Plant Account

(D) Plant Account

(E) Plant Account

Project No.	D/S	Description	12/31/09 Act (A)	12/31/09 Cost Accrued	Total	Docket Total	Total - Docket Difference	Plant Acct	Depr Rate	Depreciation 2010	50% Bonus	1st year 2009 Fed Tax Depreciation	1st year 2009 HI Tax Depreciation	2nd year 2010 Fed Tax Depreciation	2nd year 2010 HI Tax Depreciation	Additional 2010 Fed Tax Depreciation	1st year 2010 HI Tax Depreciation
P0001052	4/22/09	CIP1 CEEP Substation Mod	603,567	3,099	603,567	3,890	599,677	3530	0.02560	15,352	Yes	311,082	22,448	21,645	43,291	-	-
P0001135	6/3/09	CIP1 Unit Addition-Microwave	748,908		752,007	-	752,007	3970	0.05940	44,669	No	390,104	28,200	27,144	54,287	1,108	1,675
P0001340	12/30/08	CIP1 Unit Addition-Exempts	4,857,924		4,857,924	4,857,924	-	3503 (B)		-	No	-	-	-	-	-	-
P0001585	5/27/08	CIP1 - Land - Gen Station	1,261,761		1,261,761	1,261,761	-	3400 (B)		-	No	-	-	-	-	-	-
P0001050	7/27/09	CIP1 AES-CEP#2 Trans. Line	7,541,528		7,541,528	5,790,887	1,750,641	(D)	0.05940	59,010	Yes	919,087	87,532	83,155	166,311	135,433	6,772
P0001051	4/9/09	CIP1 AES Substation Add	3,809,430	12,901	3,822,331	3,153,110	669,221	(D)	0.05940	18,502	No	25,096	25,096	48,311	48,311	(20,811)	(780)
P0001134	7/27/09	CIP1 Unit Addition-Fiber	638,775		638,775	107,066	531,709	3970	0.02560	6,356	Yes	55,509	4,013	3,862	7,725	29,419	1,103
P0001136	10/1/09	CIP1 Unit Addition-Kane Burs	1,771,737		1,771,737	1,720,778	50,959	3530	0.05940	1,305	Yes	26,435	1,911	1,839	3,679	24,204	908
P0001137	4/1/09	CIP1 Unit Addition-Kababoa	210,680		210,680	289,912	(79,232)	3970	0.05940	(4,706)	No	(41,102)	(2,971)	(2,860)	(5,720)	1,725	65
P4900000	8/3/09	CIP1 Unit 1 Addition	162,981,671	6,777,002	169,758,673	143,859,745	25,898,928	(E)		271,527	No	1,285,684	1,285,684	2,441,711	2,441,711	1,522,121	76,106
		Plant Additions	184,425,981	6,793,002	191,218,983	161,409,776	29,749,207			412,015		2,971,805	1,451,953	2,624,807	2,759,595	1,693,190	175,713
		Parcel between Manua Street and AES Substation included in PHIFU	1,809,875		1,809,875	1,809,875	-									2010 Tax Depreciation	2,845,444
P0001084		Total Project Cost	186,235,856	6,793,002	193,028,858	163,219,651	29,749,207										

(A) NI cost only

(B) Land and rights of way in fee are not depreciable assets

(C) Plant Account

(D) Plant Account

(E) Plant Account

Project No.	D/S	Description	12/31/09 Act (A)	12/31/09 Cost Accrued	Total	Docket Total	Total - Docket Difference	Plant Acct	Depr Rate	Depreciation 2010	50% Bonus	1st year 2009 Fed Tax Depreciation	1st year 2009 HI Tax Depreciation	2nd year 2010 Fed Tax Depreciation	2nd year 2010 HI Tax Depreciation	Additional 2010 Fed Tax Depreciation	1st year 2010 HI Tax Depreciation
P0001052	4/22/09	CIP1 CEEP Substation Mod	603,567	3,099	603,567	3,890	599,677	3530	0.02560	15,352	Yes	311,082	22,448	21,645	43,291	-	-
P0001135	6/3/09	CIP1 Unit Addition-Microwave	748,908		752,007	-	752,007	3970	0.05940	44,669	No	390,104	28,200	27,144	54,287	1,108	1,675
P0001340	12/30/08	CIP1 Unit Addition-Exempts	4,857,924		4,857,924	4,857,924	-	3503 (B)		-	No	-	-	-	-	-	-
P0001585	5/27/08	CIP1 - Land - Gen Station	1,261,761		1,261,761	1,261,761	-	3400 (B)		-	No	-	-	-	-	-	-
P0001050	7/27/09	CIP1 AES-CEP#2 Trans. Line	7,541,528		7,541,528	5,790,887	1,750,641	(D)	0.05940	59,010	Yes	919,087	87,532	83,155	166,311	135,433	6,772
P0001051	4/9/09	CIP1 AES Substation Add	3,809,430	12,901	3,822,331	3,153,110	669,221	(D)	0.05940	18,502	No	25,096	25,096	48,311	48,311	(20,811)	(780)
P0001134	7/27/09	CIP1 Unit Addition-Fiber	638,775		638,775	107,066	531,709	3970	0.02560	6,356	Yes	55,509	4,013	3,862	7,725	29,419	1,103
P0001136	10/1/09	CIP1 Unit Addition-Kane Burs	1,771,737		1,771,737	1,720,778	50,959	3530	0.05940	1,305	Yes	26,435	1,911	1,839	3,679	24,204	908
P0001137	4/1/09	CIP1 Unit Addition-Kababoa	210,680		210,680	289,912	(79,232)	3970	0.05940	(4,706)	No	(41,102)	(2,971)	(2,860)	(5,720)	1,725	65
P4900000	8/3/09	CIP1 Unit 1 Addition	162,981,671	6,777,002	169,758,673	143,859,745	25,898,928	(E)		271,527	No	1,285,684	1,285,684	2,441,711	2,441,711	1,522,121	76,106
		Plant Additions	184,425,981	6,793,002	191,218,983	161,409,776	29,749,207			412,015		2,971,805	1,451,953	2,624,807	2,759,595	1,693,190	175,713
		Parcel between Manua Street and AES Substation included in PHIFU	1,809,875		1,809,875	1,809,875	-									2010 Tax Depreciation	2,845,444
P0001084		Total Project Cost	186,235,856	6,793,002	193,028,858	163,219,651	29,749,207										

(A) NI cost only

(B) Land and rights of way in fee are not depreciable assets

(C) Plant Account

(D) Plant Account

(E) Plant Account

File #	no bonus		2009	2010	
		tax depr	tax depr	tax depr	
12	5.00%	221,679	9,500\$	185,179	
13	5.00%	519,380	9,500\$	509,880	
15	5.00%	519,680	9,500\$	510,180	
15	5.00%	121,288	9,500\$	111,788	
15	5.00%	181,113	9,500\$	171,613	
15	5.00%	84,592	9,500\$	75,092	
20	3.75%	4,005	7,219\$	709	
20	3.75%	34,327	7,219\$	66,081	
20	3.75%	6,293	7,219\$	12,115	
5	20.00%	6,103	32,000\$	9,764	
7	14.29%	2,180	24,600\$	3,736	
20	3.75%	1,144	7,219\$	2,203	
		<u>1,385,684</u>		<u>2,441,711</u>	

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	1st year 2010 Fed Tax Rate	1st year 2010 Fed Tax Depr	1st year 2010 State Tax Rate	1st year 2010 State 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

Non-Confidential 2/28/2011

CA-IR-77
DOCKET NO. 2010-0080
ATTACHMENT 1
PAGE 1 OF 1**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 Estimate 2011 Adds (Amort), Net	Revised Estimate Balance 12/31/2011	Revised Depreciation Study Rates Estimate 2011 Adds (Amort), Net	Revised Estimate Balance 12/31/2011
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

Non-Confidential 2/28/2011

CA-IR-77
DOCKET NO. 2010-0080
ATTACHMENT 2
PAGE 1 OF 18HAWAIIAN 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 Kalaheo	(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 - Kuliouou	(184.22)	-	183.88	(0.34)

Non-Confidential 2/28/2011

CA-IR-77
DOCKET NO. 2010-0080
ATTACHMENT 2
PAGE 2 OF 18HAWAIIAN 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 HMSA 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)
TOTAL ACCOUNT 283	57,510,213.93	(5,587,684.07)	36,973,495.47	88,896,025.33
ACCOUNT 282 DEPR	67,228,640.06	392,372.92	18,659,621.03	86,280,634.01
TOTAL FEDERAL DEFERRED TAX LIABILITY (before rate case adjustments)	124,738,853.99	(5,195,311.15)	55,633,116.50	175,176,659.34
TOTAL ACCOUNT 283	57,510,213.93	(5,587,684.07)	36,973,495.47	88,896,025.33
<u>Less Rate Case Adjustments:</u>				
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)

Non-Confidential 2/28/2011

CA-IR-77
DOCKET NO. 2010-0080
ATTACHMENT 2
PAGE 3 OF 18HAWAIIAN 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)
FED DEF'D TAX LIABILITY - OTHER		66,138,972.20	(5,593,063.16)	36,710,246.13	97,256,155.17
FED DEF'D TAX LIAB - ACCEL DEPR		67,228,640.06	392,372.92	18,659,621.03	86,280,634.01
TOTAL FEDERAL DEFERRED TAX LIABILITY (after rate case adjustments)		133,367,612.26	(5,200,690.24)	55,369,867.16	183,536,789.18

Non-Confidential 2/28/2011

CA-IR-77
DOCKET NO. 2010-0080
ATTACHMENT 2
PAGE 10 OF 18HAWAIIAN 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

Non-Confidential 2/28/2011

CA-IR-77
DOCKET NO. 2010-0080
ATTACHMENT 2
PAGE 11 OF 18HAWAIIAN 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 - Kuliouou	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 IIR 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	0.00	6,832,105.12	6,832,105.12
AOCl - Qualified Pension	0.00	0.00	0.00	0.00
AOCl - NQ Pension	(50,735.50)	0.00	(52,941.00)	(103,676.50)
AOCl - OPEB	0.00	0.00	0.00	0.00
AOCl - 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:

Non-Confidential 2/28/2011

CA-IR-77
DOCKET NO. 2010-0080
ATTACHMENT 2
PAGE 12 OF 18HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
STATE

LIAB (DR)CR		Actual 12-31-09	Estimate 2010	Update to Actual 2010	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)
STATE DEF'D TAX LIABILITY - OTHER		12,035,795.47	(1,024,051.01)	7,520,855.41	18,532,599.87
STATE DEF'D TAX LIAB - ACCEL DEPR		5,901,971.24	571,376.08	188,921.13	6,662,268.45
TOTAL STATE DEFERRED TAX LIABILITY (after rate case adjustments)		17,937,766.71	(452,674.93)	7,709,776.54	25,194,868.32

HAWAIIAN ELECTRIC CO., INC.
CIP - BLACK START GENERATOR & WATER TREATMENT SYSTEM

Plant Account	Cost	15.26% Disallow	Tax Life	2009 Tax Depreciation			2010 Tax	
				50% bonus depr	5% reg depr	Total	9.5% reg depr	
P0001880 Black Start Generator	3,042,741	464,322	15	232,161	11,608	243,769		22,055
P0001881 Water Treatment System	6,989,376	1,066,579	15	533,290	26,665	559,955		50,663
Total	10,032,117	1,530,901		765,451	38,273	803,724		72,718

CORRECTED

ORIGINAL

P0001880 Black Start Generator	3,042,741	464,322	15	23,216	23,216	44,111
P0001881 Water Treatment System	6,989,376	1,066,579	15	53,329	53,329	101,325
Total	10,032,117	1,530,901		-	76,545	145,436
			Difference	765,451	(38,272)	(72,718)
			Fed Def Tax rate		35%	
			Fed Def Tax		254,513	(25,451)
			Total ADIT adjustment			229,062

NOTE 1> In our original filing on March 31, 2011, we did not include 50% bonus depreciation on two projects that were included in P4900000, CIP Unit 1 Addition. These two projects, Black Start Generator and Water Treatment System started after 1/1/08, and qualify for 50% bonus depreciation. Thus, an adjustment will be made to the ADIT balance as of 12/31/10. See Attachment 4.3, page 1.

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

		<u>TAX DEPR</u>
FEDERAL DEFERRED TAXES		
1	State Tax Depreciation	3,091,868.00
2	Effective Federal Tax Rate	32.8947%
3	Federal Deferred Tax on State Tax Depreciation	Line 1 x Line 2 <u>1,017,061.84</u>
4	Addback State Tax Depreciation	Line 1 (3,091,868.00)
5	Federal Tax Depreciation	<u>66,339,273.00</u>
6	Federal/State Difference	<u>63,247,405.00</u>
7	Tax Rate on Federal Only Adjustment	35%
8	Federal Deferred Tax Adjustment	Line 6 x Line 7 <u>22,136,591.75</u>
9	Total Federal Deferred Taxes	Line 3 + Line 8 <u>23,153,653.59</u>
STATE DEFERRED TAXES		
10	State Tax Depreciation	Line 1 3,091,868.00
11	Effective State Tax Rate	6.0150376%
12	Total State Deferred Taxes	Line 10 x Line 11 <u>185,977.02</u>
13	TOTAL FED AND STATE DEFERRED TAXES	Line 9 + Line 12 <u>23,339,630.61</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	2010 ACTUAL			TOTAL
	PROJECTS	PROGRAMS	PROGRAMS	
Communication	20	2,581	1,441	4,022
Comp/Off/Furn/Tools	7	1,243	3,383	4,626
Distribution	20	14,241	37,186	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
TOTAL		112,693	57,361	170,054

7 yr	1.99%	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 100% bonus

Alt. 4.4, pg 10

7 yr	0.49%	1.99%	2.48%
15 yr	2.02%	0.00%	2.02%
20 yr	42.23%	28.03%	70.26%
39 yr	-	-	-
Land	-	-	-
Vehicles	-	-	-
Total	44.74%	30.02%	74.76%

Amounts subject to 50% bonus

(Total less amounts subject to 100% bonus)

7 yr	0.24%	0.00%	0.24%
15 yr	0.97%	0.00%	0.97%
20 yr	20.18%	0.00%	20.18%
39 yr	-	-	-
Land	-	-	-
Vehicles	-	-	-
Total	21.39%	0.00%	21.39%

Amounts subject to regular depreciation

(no bonus depreciation)

39 yr	0.14%	0.01%	0.15%
TOTAL ASSETS	66.27%	30.03%	96.30%

excludes land and vehicles

2011 Major Projects:

W8 Boiler Controls Upgrade (A)

Total Baseline Plant Add

Baseline Plant Add	87,812,319
Less: Repairs deduction	12,971,577
Net plant add basis	<u>74,840,742</u>

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

Vintage 2011 - 100% bonus

7 yr	1,856,050	100%	1,856,050	14.29%	265,230
15 yr	1,511,783	100%	1,511,783	5.00%	75,589
20 yr	52,583,105	100%	52,583,105	3.75%	1,971,866

Vintage 2011 - 50% bonus

7 yr	179,618	57.145%	102,643	14.29%	25,667
15 yr	725,955	52.500%	381,126	5.00%	36,298
20 yr	15,102,862	51.875%	7,834,610	3.75%	566,357

Vintage 2011 - regular

39 yr	112,261	1.177%	1,321	1.177%	1,321
-------	---------	--------	-------	--------	-------

Baseline plant adds net of repairs

72,071,634	64,270,638
74,940,742	66,339,273
76,059,364	66,339,273
78,828,472	3,091,868

3.750%

149,540

NOTE A- After review of the W8 Boiler Controls Upgrade project, it appears to be subject to 50% bonus depreciation. Initial determination was based on the raised date, which was prior to 1/1/08, but it appears no costs were incurred prior to 1/1/08 and construction started after 1/1/08.

HAWAIIAN ELECTRIC CO., INC.
TAX REPAIRS ADJUSTMENT
2011

2011				A	B (Att 4.4, pg 4)	C = A x B	D = A - C
	LIFE	2010 Actual	2010 Allocation	Allocated Plant Adds	Repairs Allocation	Repairs Deduction	Depreciable Basis
Communication	20	4,022	2.37%				
Comp/Off/Furn/Tools	7	4,626	2.72%				
Distribution	20	51,409	30.23%	26,545,664	23.95%	6,357,225	20,188,439
Land	-	44	0.03%				
Non-Steam Production	15	5,082	2.99%	2,625,588	23.28%	611,224	2,014,364
Steam Production	20	27,087	15.93%	13,988,502	25.95%	3,630,437	10,358,065
Structural	39	251	0.15%				
Transmission	20	71,280	41.92%	36,810,924	6.45%	2,372,691	34,438,233
Vehicles	-	6,253	3.68%				
TOTAL		170,054	100.02%	79,970,678		12,971,577	66,999,101
		Baseline Plant Adds		87,812,319			

NOTE> This schedule computes the depreciable basis for the RAM year plant additions. This basis is carried forward to page 2 of 10 for the calculation of 2011 tax depreciation. Depreciable basis is determined by reducing plant additions by that portion of the total allocated to repairs for tax purposes. The repairs deduction analysis was performed in 2010 in connection with changing Hawaiian Electric's method of identifying deductible repairs for tax accounting purposes. The repairs percentage (column B) for each functional group represents the aggregate average of the identified repairs costs for the period 1999 through 2009, as shown on page 4 of 10. These percentages are applied to the related group's plant additions (column A) to determine the estimated repairs deduction in each functional group covered by the repairs project (column C). Plant additions are then reduced by the repairs deduction, by functional group, to arrive at the depreciable tax basis (column D).

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

		Expenditures					
Grand parent	Project #	Project Title	Project	2011 Plant Addition	Future Years	Total Update	100%
			to Date				
			Recorded				
			12/31/10				
Y00017	P0000191	Waikiki Rehab Project 2	-	1,494,804	-	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	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	89
Y00083	P0000622	K1 Kahe 13 FWH Replace	-	159	-	159	159
Y00083	P0000644	K1 Kahe FWH 14 Replace	-	140	-	140	140
Y00083	P0000854	K1 Excitation System	-	(25,388)	-	(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)	(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 Ctls 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	83,440
Y00106	P0001726	Baseyards Pr2 - 2011	-	28,615	-	28,615	28,615
Y00107	P0001355	MEVA Priority 1 - 2010	-	38,852	-	38,852	38,852
Y00107	P0001725	MEVA-Pr1 - 2011	-	131,684	-	131,684	131,684
Y00114	P0001459	W6 FWH 61 Instrumentation	152,278	35	-	35	-
Y00114	P0001463	W7 FWH 71 Instrumentation	-	103,386	-	103,386	103,386
Y00114	P0001464	W7 FWH 72 Instrumentation	-	102,990	-	102,990	102,990
Y00114	P0001465	W7 FWH 73 Instrumentation	-	102,990	-	102,990	102,990
Y00114	P0001466	W7 FWH 74 Instrumentation	-	102,990	-	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	P0001486	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

			Expenditures				
<u>Grand parent</u>	<u>Project #</u>	<u>Project Title</u>	<u>Project to Date</u>	<u>2011 Plant Addition</u>	<u>Future Years</u>	<u>Total Update</u>	<u>100%</u>
			<u>Recorded 12/31/10</u>				
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	Accting Division - FURNITURE	-	15,000	-	15,000	15,000
Y00158	P0002173	Accting 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

Hawaiian Electric Company, Inc.
2011 PLANT ADDITIONS - PROJECTS

<u>Grand parent</u>	<u>Project #</u>	<u>Project Title</u>	<u>Expenditures</u>				<u>100%</u>
			<u>Project to Date Recorded 12/31/10</u>	<u>2011 Plant Addition</u>	<u>Future Years</u>	<u>Total Update</u>	
Y00163	P0002229	Ft Weaver #2 12 Bkr 8594 UFL	-	92,165	-	92,165	92,165
Y00163	P0002230	Ft Weaver #2 12 Bkr 8595 UFL	-	92,165	-	92,165	92,165
Y00163	P0002231	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 Dlvry 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 Pl 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					100%
			Project to Date	2011 Plant Addition	Future Years	Total Update		
			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	Waiiau OCB 4655 Replace	199,590	27,105	-	27,105	-	

Hawaiian Electric Company, Inc.
2011 PLANT ADDITIONS - PROJECTS

		Expenditures					
		Project to Date Recorded					
Grand parent	Project #	Project Title	12/31/10	2011 Plant Addition	Future Years	Total Update	100%
	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	Kailuana 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	Kamokila 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 Waiiau 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	2011 Plant Addition	Future Years	Total Update	100%	
			12/31/10					
	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	-	
		Estimate as of March 30, 2011	304,591,483	123,209,174	973,686	124,182,860	32,648,041	
							% based on 12/31 cutoff	26.50%
							4 month gross up for 9/9/10 cutoff	133.33%
							HECO proposal of 100% bonus	35.33%
							NOTE A	
							Adjustment for CA proposal	32.33%
							Total 100% bonus depreciation	67.66%
							NOTE C	
Per CA-IR-292			304,591,483	122,431,048				
Difference			-	778,126				
			NOTE B					

NOTE A> The computation above estimates the percentage of total budgeted specific project plant additions qualifying for 100% bonus. Program projects are excluded since all program projects are assumed to qualify for 100% bonus, as they are generally numerous short term projects. On 3/29/11, the Internal Revenue Service issued guidance on 100% bonus and specifically, to which self-constructed projects it applies. In general, projects that began prior to 9/9/10 will not qualify for 100% bonus.

The estimation logic was necessary since the actual data showing the beginning and ending dates of project additions for 2011 will not be available until after December 31, 2011.

In this light, the computation starts with the detailed listing of budgeted plant additions for 2011 and identifies which projects were not on the 12/31/10 CWIP listing (no 9/9/10 listing was available). Those projects NOT on the listing were assumed to start and end in 2011 and therefore would qualify for 100% bonus. The ratio of these identified project costs over total 2011 plant additions is the estimate of 100% bonus projects using a 12/31/10 cutoff. The second step was to gross up this percentage by a 33% factor to account for the additional 4 month period (accounting for the 9/9/10 cutoff) during which projects could have started and still qualified for 100% bonus.

Prior estimates of 100% bonus were much greater since the previous assumption was that the cutoff date was 1/1/08, as indicated by the legislative committee reports.

NOTE B> The 2011 plant additions - projects were updated after March 30, 2011, resulting in the \$778,126 difference from the prior listing above. Note that the difference does not include the corporate admin adjustment and the placeholder adjustment in CA-IR-292, Att. 1, pg. 1. This difference should not have a significant effect on the computation of 2011 rate base RAM ADIT. The updated plant additions - projects was filed 4/18/11 in our response to CA-IR-292, Docket No. 2010-0080, HECO 2011 Rate Case.

NOTE C> Hawaiian Electric and the Consumer Advocate differ in the methodology used to estimate 100% bonus - qualified property. In an effort to implement decoupling on a timely basis, the Company has adjusted the percentage to match the Consumer Advocate's estimates of 100% bonus qualified property.

Hawaiian Electric Company, Inc. • PO 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)

	Current Effective Rates	Additional Amount	Revenue Requirements to Produce 8.16% 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
TOTAL OPERATING REVENUES	1,297,440	66,375	1,363,815
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
TOTAL OPERATING EXPENSES	1,232,347	29,428	1,261,775
OPERATING INCOME	65,093	36,947	102,040
AVERAGE RATE BASE	1,251,087	(597)	1,250,490
RATE OF RETURN ON AVERAGE RATE BASE	5.20%		8.16%

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
	<u>Capitalization</u>			
	<u>Amount in Thousands</u>	<u>Percent of Total</u>	<u>Earnings Reqmts</u>	<u>Weighted Earnings Reqmts (B) x (C)</u>
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	<u>789,374</u>	<u>55.81</u>	<u>10.00%</u>	<u>5.581%</u>
Total	1,414,414	100.00		
Estimated Composite Cost of Capital				8.159%
			or	<u>8.16%</u>

Hawaiian Electric Company, Inc.

EXHIBIT 1A
PAGE 3 OF 15Final D&O
2009 AVERAGE RATE BASE
(\$ Thousands)

	Beginning Balance	End of Year Balance	Average Balance
<u>Investments in Assets Serving Customers</u>			
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
<u>Funds From Non-Investors</u>			
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)
		<u>1,291,383</u>
Franchise Tax Rate	x	<u>2.500%</u>
Total Franchise Tax		<u>32,285</u>
TOTAL REVENUE TAX		<u>115,004</u>
INTEREST EXPENSE:		
Weighted Cost of Debt		
Short-Term Debt		0.000%
Long-Term Debt		2.352%
Hybrid Securities		<u>0.146%</u>
Total		<u>2.498%</u>
Rate Base at Proposed Rates	x	<u>1,250,490</u>
TOTAL INTEREST EXPENSE		<u>31,237</u>
INCOME TAX EXPENSE SUMMARY		
Current		(5,508)
Deferred		24,041
State ITC		<u>0</u>
TOTAL INCOME TAX EXPENSE		<u>18,533</u>
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		<u>0.00500</u>
REVENUE TAX RATE		<u>0.08881</u>
CALCULATIONS OF COMPOSITE INCOME TAX RATE:		
State Tax Rate		0.06015
Federal Tax Rate		0.35000
State Tax Rate		0.06015
Federal Tax Rate	x	<u>0.35000</u>
Federal Tax Effect on State Tax		<u>(0.02105)</u>
COMPOSITE INCOME TAX RATE		<u>0.38910</u>

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		0.37444

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	0.38910
EFFECTIVE INCOME TAX RATE AFTER CONSIDERING REVENUE TAX & BAD DEBT		0.35454

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		0.35454
		0.44335
OPERATING INCOME DIVISOR (1 - 0.44335)		0.55665

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 Makhholm, 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. McInerney
- 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

PUBLIC UTILITIES
COMMISSION

2009 JUL 20 PM 4:26

FILED

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

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

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	HECO's Position
	(A)	(B)	(C)	(D)	(E)	Adjustment Ref	
1	Depreciation Expense	(a)(b)	\$ 87,429	\$ 86,783	\$ (646)	(646) (1)	\$ 86,783
2	Amortization Expense	(a)(b)	3,626	3,863	237	237 (1)	3,863
3	Additional Amortization -- Net Unrecovered	(a)(c)(d)	1,924	(1,924)	(1,924)	(825) (2)	1,099
4	Subtotal	(a)	92,979	90,646	(2,333)	(1,234)	91,745
5	Less: Depreciation on Vehicles	(a)(b)	(2,155)	(2,067)	88	88 (1)	(2,067)
6	Less: CIAC Amortization	(a)(e)	(9,383)	(9,335)	48	48 (1)	(9,335)
7	Add: Regulatory Asset Amortization	(a)	2,169	2,169	-	0 (1)	2,169
8	Less: Federal ITC Amortization	(a)	(644)	(644)	-	0 (1)	(644)
9	Total Depreciation & Amortization Expense	(a)	\$ 82,966	\$ 80,769	\$ (2,197)	\$ (1,099)	\$ 81,868
10	CA Adjustment to Depreciation & Amortization on Actual Investment at 12/31/2008				\$ (2,197)	\$ (1,099)	\$ 81,868

(1) Adjust amounts to 12/31/08 Actuals.

	(1)	(2)	(3) = (2)-(1)
Calculations of Addtl Amortization-Net Unrecovered	HECO Update	HECO Corrected	Difference
Additional Amortization -- Net Unrecovered	1,924	2,198	274
Amortize over 2 years (DOD's position)	-	(1,099)	(1,099)
	1,924	1,099	(825)

Footnotes:

- (a) Source: HECO T-14 Update (pp 15, 20-22).
- (b) Source: CA Proposed amount from HECO response to CA-IR-417.
- (c) Per 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 HECO and the Consumer Advocate commencing amortization on the effective date of the Commission's D&D (i.e., 9/4/04). This amortization sunsets 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 8/12's of the 2008 annual amortization of \$3,297 (HECO-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 2009 CIAC Amortization | \$ 378 |
| Source: HECO T-14 Update (p. 23) & CA-IR-419. | \$ 9,335 |

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-Kalaehoa		289,912		289,912
P4900000	CIP1 Unit 1 Addition		143,809,745	50,000	143,859,745
	Plant Additions	<u>6,119,685</u>	<u>155,300,091</u>	<u>50,000</u>	<u>161,469,776</u>
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				<u>163,279,651</u>

* 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
COMPARATIVE BALANCE SHEET
LIABILITIES AND OTHER CREDITS

Page 10

	BALANCE AT CLOSE OF LAST YEAR	AT CLOSE OF THIS MONTH	ACCUMULATED BALANCES SAME PERIOD LAST YEAR	INC / DEC (-) DURING THE YEAR
PROPRIETARY CAPITAL:				
Common Stock Issued	91,931,184	92,223,757	91,931,184	292,573
Common Stock Issued, Issued	22,293,140	22,293,140	22,293,140	0
Common Stock Issued, Issued	393,581,402	393,581,402	393,581,402	0
Other Paid-In Capital	3,812,533	3,812,533	3,812,533	0
Capital Stock Expense	3,812,533	3,812,533	3,812,533	0
Unapplied Retained Earnings	837,035,965	837,035,965	837,035,965	0
TOTAL PROPRIETARY CAPITAL	1,328,700,771	1,328,700,771	1,328,700,771	0
LONG TERM DEBT:				
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
TOTAL LONG TERM DEBT	1,344,400,642	1,344,536,642	1,344,400,642	136,000
CURRENT & ACCRUED LIABILITIES:				
Short Term Sinking Fund Require	11,000,000	11,000,000	11,000,000	0
Short Term Borrowings	103,072,561	103,072,561	103,072,561	0
Payable to Palapala Co	10,411,414	10,411,414	10,411,414	0
Customer Deposits	10,411,414	10,411,414	10,411,414	0
Taxes Accrued	10,411,414	10,411,414	10,411,414	0
Interest Accrued	13,954,597	13,954,597	13,954,597	0
Interest Accrued	13,954,597	13,954,597	13,954,597	0
Matured Long-Term Debt	21,762,747	21,762,747	21,762,747	0
Tax Collection Payable	21,762,747	21,762,747	21,762,747	0
Misc Current & Accrued	262,514,695	262,514,695	262,514,695	0
TOTAL CURRENT & ACCRUED LIAB	438,870,765	438,870,765	438,870,765	0
DEFERRED CREDITS:				
Unamort Premiums on Debt	855,408	855,408	855,408	0
Customer Advances	252,556,487	252,556,487	252,556,487	0
Other Deferred Credits	196,284,441	196,284,441	196,284,441	0
Accum Deferred	31,391,057	31,391,057	31,391,057	0
TOTAL DEFERRED CREDITS	461,086,993	461,086,993	461,086,993	0
CONTRIBUTIONS IN AID OF CONSTR				
ACCUM DEFERRED TAXES:				
Liberated Depreciation	73,330,904	73,330,904	73,330,904	0
Other Deferred Taxes	67,339,002	67,339,002	67,339,002	0
TOTAL ACCUM DEFER TAXES	140,669,906	140,669,906	140,669,906	0
TOTAL LIABILITIES & CREDITS	3,065,250,207	3,065,250,207	3,065,250,207	0

PAGE 11

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	ACCURED BALANCES		INCR (DECR) DURING THE YEAR
		AT CLOSE OF THIS MONTH	SAME PERIOD LAST YEAR	
Production Plant				
Steam Production	595,400,790	617,930,225	595,400,790	22,529,435
Hydraulic Production	0	0	0	0
Other Production	191,874,122	195,749,966	191,874,122	3,874,844
Transmission Plant	653,886,368	718,985,767	653,886,368	65,109,399
Distribution Plant	1,213,557,398	1,262,478,372	1,213,557,398	48,920,974
General Plant	217,045,057	228,884,078	217,045,057	11,839,022
TOTAL UTILITY PLANT IN SERVICE	2,871,763,754	3,024,037,408	2,871,763,754	152,273,675
Property Held for Future Use	4,607,197	4,089,820	4,607,197	(517,377)
Construction Work in Progress	115,643,399	78,933,594	115,643,399	(36,709,804)
TOTAL UTILITY PLANT	2,992,014,350	3,107,060,823	2,992,014,350	115,046,594

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	Balance At Close of Last Year	Accrued Balances		Increase- Decrease During The Year
			At Close of This Month	Same Period Last Year	
RESERVES:					
Production Plant:					
310/16	Steam Production	310,420,019	312,781,268	310,420,019	2,361,249
340/46	Other Production	15,510,975	16,984,916	15,510,975	1,373,941
350/59	Transmission Plant	275,186,550	289,716,494	275,186,550	14,529,944
360/70	Distribution Plant	597,092,787	639,487,072	597,092,767	42,394,305
389/98	General Plant	105,882,099	116,143,031	105,882,099	10,260,932
	Cost of Removal-Reg Liability	(214,500,496)	(232,487,637)	(214,500,496)	(17,987,141)
TOTAL RESERVES FOR DEPRECIATION AND AMORTIZATION		1,089,891,915	1,142,625,145	1,089,691,915	52,933,230

INTEROFFICE CORRESPONDENCE



Hawaiian Electric Co., Inc.

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>
	Utility Book Depreciation -	
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
	Subtotal	94,796,458
A1	Vehicles	2,452,329
	Total	97,248,787
	Leasehold Amortization -	
A1	King, CPP, Hono Club	129,619
	Vintage Accounting Amortization	
A1	Selected Plant Accts (40304000)	4,403,574
	Total Utility Book Depr & Amort	101,781,980
B	Non-Utility Book Depreciation -	
	Heat Pump	2,284
	E-Business	12,290
		14,574
H	Book Depreciation on Capitalized Items (Post-Norm Vintages)	450,913
C	CIAC Amortization	10,174,536
D	Amortization of Deferred ITC- 1971 Rev Act(Acct 25502)	384,984
F	2011 State ITC Entries	SEE ATTACHED
G	Amortization of SFAS 109 Items	SEE ATTACHED

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

				ANNUAL EST
<u>1. 2011 VINTAGE STATE ITC</u>				
2011 Gross State ITC				4,008,700.00
<u>STATE TAX Entries:</u>				
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%)				
<u>FEDERAL TAX Entries:</u>				
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				
<u>2. 2011 AMORTIZATION OF STATE ITC</u>				
2011 Amortization of State ITC =				1,637,367.00
<u>STATE TAX Entry:</u>				
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%)				
<u>FEDERAL TAX Entry:</u>				
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

		STANDING JOURNAL ENTRIES Expense DR(CR)			
		ANNUAL AMORT.	MONTHLY AMORT.	FED TAX on Amort	STATE TAX on Amort
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

Projects	2010 Plant Addition (1)
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	58,527,920
Total Plant Additions	170,051,118
Less: Major Project additions in 2010	
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	(58,502,483)
Subtotal Major Projects	(69,359,268)
Less: HCEI Projects cost in 2010 (recovered thru surcharge)	
First Wind UFLS	(2,567,414)
Add: Beckoning Point Substation - Customer Advance	777,838 (2)
Baseline Plant Additions	98,902,274

(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 Waiau 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 Plt 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 Rpl	\$ 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	\$ 139,667	\$ 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	Waiakamilo 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	\$ 583,668	\$ 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	\$ 968	\$ -	\$ 968	(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 Pressue 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	Trump Tower 12kV Relocation	\$ 883,455	\$ -	\$ 883,455	(a)
P0001903	Ala Moana Park 4kV Conversion	\$ 32,513	\$ 132,246	\$ (99,733)	-75% (a)
P0001904	Waiau 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 Chem Lab Elec Upgrade	\$ 89,066	\$ -	\$ 89,066	(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)
P0002006	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 Right 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	\$ 12,548,933	\$ (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%
P3401000	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) Stragglng 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 Xlmr 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	\$ 1,616,869	\$ (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 Incurred Cost	CIAC Recorded	Net Cost	In-Service Date
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	\$1,399,710
MATERIALS	\$1,453,473
OUTSIDE SERVICES	\$971,197
OTHER (Freight)	\$98,130
ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION	<u>\$140,719</u>
TOTAL COST OF PROJECT	\$4,063,229
ESTIMATED CONTRIBUTIONS (1)	<u><u>\$777,838</u></u>
NET PROJECT COST (Less Cash Contributions)	\$3,285,391

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 MANAGMENT DIVISION
ENGINEERING DEPARTMENT
HAWAIIAN ELECTRIC COMPANY, INC.

Subject: Project Cost

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

03-0417

COST INPUT DATA									
(\$ in 000's)									
Ph.1 Ph.2									
SERVICE DATE ==>	PUC Application				Revised Estimate				
	2006		2008		2007		2009		
INITIAL INSTALLATION COSTS									
Planning Costs	\$25,269		\$0		\$26,396		\$0		
Estimated	\$12,836		N/A		\$12,836		N/A		
AFUDC	\$12,433		N/A		\$13,560		N/A		
Permitting & Approval Costs	\$1,456		\$579		\$1,491		\$590		
Estimated	\$1,159		\$415		\$1,172		\$420		
AFUDC	\$297		\$164		\$319		\$170		
Subtransmission Line Costs	\$5,196		\$9,709		\$3,399		\$9,529		
Estimated	\$4,918		\$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		
TOTAL	\$41,587		\$13,837		\$41,893	+	\$13,751	=	
REMOVAL COSTS									
Subtransmission Line Costs	\$232	Note 1 2043	\$339	Note 1 2045	\$239	Note 1 2044	\$349	Note 1 2046	
Transmission Substation Costs	\$95	2036	\$17	2023	\$96	2037	\$17	2024	
	\$120	2052	\$127	2038	\$123	2053	\$131	2039	
			\$41	2053			\$42	2054	
			\$127	2054			\$131	2055	
Distribution Substation Costs	\$201	2021			\$207	2022			
	\$313	2036			\$322	2037			
	\$487	2051			\$502	2052			
					\$108	2044			
NEW CYCLE COSTS									
Subtransmission Line Costs	\$3,549	Note 1 2043	\$6,890	Note 1 2045	\$3,656	Note 1 2044	\$7,097	Note 1 2046	
Transmission Substation Costs	\$585	2036	\$195	2023	\$603	2037	\$201	2024	
	\$4,782	2052	\$1,073	2038	\$4,926	2053	\$1,105	2039	
			\$474	2053			\$489	2054	
			\$4,604	2054			\$4,742	2055	
Distribution Substation Costs	\$920	2021			\$948	2022			
	\$1,433	2036			\$1,476	2037			
	\$2,233	2051			\$2,300	2052			
					\$1,841	2044			
O&M COSTS (ANNUAL)									
Subtransmission Line Costs	\$10	Note 2	\$40	Note 3	\$10	Note 4	\$40	Note 5	
Transmission Substation Costs	\$54	Note 2	\$108	Note 3	\$54	Note 4	\$108	Note 5	
Distribution Substation Costs	\$15	Note 2	\$15	Note 3	\$15	Note 4	\$15	Note 5	

55,644

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	(\$13,560,000)
	<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
Sergey Kuznetsov
x 7244

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)
Excess of \$2,500,000 (Excluding)
Customer Contributions) for Item)
P7650000, the Waiau 8 Boiler)
Control System Upgrade Project)

Decision and Order No. 23983

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,

CA-IR-271

DOCKET NO. 2008-0083

ATTACHMENT 1

PAGE 1 OF 15

R/M: SUB960A R/D: 12/08		HAWAIIAN ELECTRIC COMPANY, INC TRIAL BALANCE REPORT		RUN DATE: 02/09/09 RUN TIME: 15.10.32		PAGE 1	
ACCT	DESCRIPTION	BEGINNING BALANCE	NET DEBIT	NET CREDIT	ENDING BALANCE		
101	UTILITY PLANT IN SERVICE	2,582,246,073.56	15,653,859.00		2,597,899,932.56		
105	PROPERTY HELD FOR FUTURE USE	2,330,757.73			2,330,757.73		
107	CONSTRUCTION WORK IN PROGRESS	153,662,113.06	35,091,650.87		188,753,763.93		
	TOTAL OTHER UTILITY PLANT	155,992,870.79	35,091,650.87		191,084,521.66		
	TOTAL UTILITY PLANT	2,738,238,944.35	50,745,509.87		2,788,984,454.22		
(106)	ACCUMULATED DEPRECIATION	1,017,449,669.87 CR	4,532,336.38	6,366,397.03	1,019,283,730.52 CR		
	NET UTILITY PLANT	1,720,789,274.48	55,277,846.25		1,769,700,723.70		
(111)	ACCUM AMORT-UTILITY PROP	9,211,465.35 CR		5,547.50	9,217,012.85 CR		
	TOTAL ACCUMULATED DEPRECIATION	1,026,661,135.22 CR	4,532,336.38	6,371,944.53	1,028,500,743.37 CR		
(121)	NON-UTILITY PROPERTY	6,300,115.76		2,663.00	6,297,452.76		
122	ACCM PROV DEPR NON-UTIL	1,107,191.72 CR		3,982.76	1,111,174.48 CR		
	TOTAL OTHER PROPERTY, NET	5,192,924.04		6,645.76	5,186,278.28		
	TOTAL PROPERTY, PLANT AND EQUIPMENT, NET	1,716,770,733.17	55,277,846.25	6,378,590.29	1,765,669,989.13		
123010	INVEST IN ASSOC CO - HECO	216,443,085.33		1,061,706.42	215,381,378.91		
123020	INVEST IN ASSOC CO - HELCO	222,388,062.37		1,981,022.73	221,407,039.64		
123030	INVEST IN ASSOC CO - HAWAIIAN ELECTRIC	142,587.73		1,118.06	141,469.67		
123040	INVEST IN ASSOC CO - HECO CAP						
123050	INVEST IN TRUST II						
123060	Investment in Renewable Hawaii	114,422.27		9,333.82	105,088.45		
123070	Invest in Trust III	1,546,400.00			1,546,400.00		
	TOTAL INVESTMENTS IN SUBSIDIARIES	440,634,557.70		2,055,181.03	438,579,376.67		
124	OTHER INVESTMENTS						
128	SPECIAL FUNDS						
131	CASH	12,880,894.22		10,624,572.61	2,256,321.61		
135	WORKING FUNDS	7,770.37			7,770.37		
	TOTAL CASH	12,888,664.59		10,624,572.61	2,264,091.98		
136	TEMPORARY CASH INVESTMENTS						
141	NOTES RECEIVABLE						
145020	NOTES REC FROM ASSOC CO-HELCO						
145030	NOTES REC FROM ASSOC CO-HECO	59,850,000.00	2,150,000.00		62,000,000.00		
145040	NOTES REC FROM ASSOC CO-HECO						

RATE CASE UPDATE
DOCKET NO. 2008-0083
HECO T-18
PAGE 23 OF 23

HECO-WP-1802 (b)
DOCKET NO. 2008-0083
PAGE 1 OF 1

Hawaiian Electric Company, Inc.
Net Cost of Plant in Service
Base Case
(\$ in thousands)

	<u>Original Cost</u>	<u>Accum Deprec</u>	<u>Removal Reg Liability</u>	<u>Acc. Retire. Obligation</u>	<u>Net Plant In Service</u>	<u>HECO Reference</u>
Recorded Balances - 12/31/07	2,529,629	(995,190)	(179,249)	(79)	1,355,111	
ESTIMATED CHANGES in 2008:						
Net Plant Additions	103,523				103,523	1701*
Cost of Removal			6,548		6,548	1409*
Salvage			(260)		(260)	1409
Depreciation Accrual		(91,663)			(91,663)	1408
Deprec Accrual Reclass related to Cost of Removal ¹		24,398	(24,398)		0	WP-1404*
Accretion of ARO			5	(5)	0	
ARO Retirements			(1)	1	0	
Retirements ²	(17,215)	17,215			0	1409*
Estimated Balances - 12/31/08	2,615,937	(1,045,240)	(197,355)	(83)	1,373,259	
ESTIMATED CHANGES in 2009:						
Net Plant Additions	288,334				288,334	1701*
Cost of Removal			6,770		6,770	1409*
Salvage			(277)		(277)	1409*
Depreciation Accrual		(92,979)			(92,979)	1408*
Deprec Accrual Reclass related to Cost of Removal ¹		25,165	(25,165)		0	WP-1404*
Accretion of ARO			5	(5)	0	
ARO Retirements			(1)	1	0	
Retirements ²	(16,063)	16,063			0	1409*
Estimated Balances - 12/31/09	2,888,208	(1,096,991)	(216,023)	(87)	1,575,107	
AVERAGE 2009 BALANCE					1,474,183	

NOTE: Totals may not add exactly due to rounding.

¹ Represents the amount of removal costs that has been included in the depreciation expense that will be reclassified as a liability for financial statement purposes.

² Original cost of estimated retirements for the respective year.

* Per Rate Case Update.

**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 Credits¹ for the prior calendar year; and 3) recovery of the RAM Revenue Adjustment for the RAM Period as defined in the RAM Provision tariff.² 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 1st through May 31st 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 year³, establish the target revenue for the entire calendar year and re-set the RBA rate adjustment to be effective June 1st.

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.^{4,5}

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

¹ 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.

² 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 31st of each year, commencing March 31, 2011. (See Tariff Sheet 93.)

³ 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.

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

⁵ 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.⁶

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 31st 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.

⁶ 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.

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 22, 2011

			<u>In \$000s</u>	<u>In \$000s</u>
	Step 1	Assumed Interim rate effective date: July 22, 2011 (Day of the year = 203) Effective date of RBA and RAM: March 1, 2011 (Day of the year = 60)		
L1	Step 2	TOTAL RAM Attachment 2, Page 1	\$15,005	
L2		Adjustment for Adjusted RAM Period March 1, 2011 - July 21, 2011 143 days ÷ 365 days	39.18%	
L3 = L1 x L2	Step 3	Adjusted 2011 RAM to be Recovered		\$5,879
L4		RBA calendar year balance + Earnings Sharing Revenue Credits, Major Capital Projects Credits, and/or Baseline Capital Projects Credits		<u>NA</u>
L5		RBA Rate Adjustment revenue reflecting interim		\$5,879
L6	Step 4	Estimated GWH Sales, June 1 to July 21, 2011 Attachment 2, Page 2	1,076.6	
L7		Initial RBA Rate Adjustment, ¢ per kWh Effective June 1, 2011 through May 31, 2012	0.1672	
L8 = (L6 x 1000000) x (L7 ÷ 100) ÷ 1000		Estimated RBA Rate Adjustment Revenue June 1, 2011 to July 21, 2011		<u>\$1,800</u>
L9 = L3 - L8	Step 5	Remaining Adjusted 2011 RAM to be Recovered July 22, 2011 to May 31, 2012		\$4,079
L10	Step 6	Estimated GWH Sales (7521.8-1076.6) July 22, 2011 to May 31, 2012 Attachment 2, Page 2		6,445.2
L11 = (L9 x 1000 x 100) ÷ (L10 x 1000000)		Revised RBA Rate Adjustment, ¢ per kWh Effective July 22, 2011 through May 31, 2012		0.0633
L12 = L11 ÷ 100 x 600		Monthly Bill Impact @ 600 kWh		\$0.38