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William A. Bonnet
Vice President
Government & Community Affairs

Ms. Cheryl Kikuta
Utilities Administrator
Division of Consumer Advocacy
Department of Commerce and
Consumer Affairs
335 Merchant Street, Room 326
Honolulu, Hawaii 96813

Dr. Kay Davoodi
Utilities Rates and Studies Office
NAVFAC Washington
1314 Harwood Street, S.E.
Washington Navy Yard, DC 20374-5018

Dear Ms. Kikuta and Dr. Davoodi:

Subject: Docket No. 04-0113
HECO 2005 Test Year Rate Case - Updates

By letter filed May 5, 2005, Hawaiian Electric Company, Inc. ("HECO") provided a list of changes in revenue requirements inputs, but did not have available the updates for pension and OBEB costs, which were expected to be available in June.

Transmitted with this letter is new Attachment 8, which updates the pension and OPEB estimates (and shows how the rate case exhibits for employee benefits would be updated). A new Attachment 9 is provided to show all of the Administrative and General expense updates, including the employee benefit updates, as well as changes referred to in the May 5, 2005 letter and in earlier information responses.

Also transmitted with this letter are certain revisions to Attachments 5 and 6, and related information responses exhibits, to reflect the King Street Lease change referred to in CA-IR-688, submitted June 10, 2005, and to reflect a delay in the in-service date for the Mamala Substation Project and a correction to cost of another project.

These Attachments are explained below:

Attachment 5

Pages 1 and 3 to Attachment 5 were revised by pages 4 and 5 of the response to CA-IR-688, pages 4-5 and are attached hereto.

In response to CA-IR-688, submitted June 10, 2005, HECO indicated that: "HECO will propose rate making based on capital lease with recovery based on lease payments (with rebalancing of the capital structure to reflect that the lease is a capital lease), as shown in response to CA-IR-260 (revised 6/9/05), provided that appropriate treatment under SFAS 71 can be obtained. This was the alternate, acceptable treatment shown in the response to CA-IR-615. Revised cost of capital to

reflect the capital lease with recovery based on lease payments and to reflect the start of the lease on 7/1/05 is attached on pages 4 and 5.”

The revisions to pages 1 and 4 of CA-IR-260 were not filed on June 9, 2005, as had been intended, and are being submitted. Corresponding revisions to CA-IR-615, pages 2 and 5-12, to reflect a 7/1/05 start date for the lease, and a corresponding minor change in the interest rate assumption (5.75%, instead of 5.789%),¹ and to CA-IR-616, page 1, also are being submitted. Copies of the responses to CA-IR-260, CA-IR-615, and CA-IR-616, with the revised pages, are attached.

“Rate making based on capital lease with recovery based on lease payments” results in a lower test year revenue requirements.

Attachment 6

Attachment 6 is revised to correct an error with respect to the estimated 2005 capital expenditures for Project P0000682 (Waiiau Annunciator Upgrade), and to update the status of Project Y00039 (Malama Substation).

P0000682 - - There was an error for the 2005 expenditures. The 2005 expenditures should have been \$499,821, as shown on CA-IR-43, p. 4 (rev. 4/21/05). After adding the 2004 expenditures (\$6,465), the total is \$506,286. Correction of the error increases the 2005 plant additions by \$450,530 (\$506,286 - \$55,756).

Y00039 - - 2005 plant additions are updated to reflect an expected change in the in-service date for the Mamala Substation project to 2006. This update reduces 2005 plant additions by \$3,213,279 (\$1,915,035 + \$3,774,946 + \$523,298 - \$3,000,000).

The net result is a reduction in 2005 plant additions for projects from \$57,575,535 to \$54,812,786, and a reduction in total plant additions from \$106,950,000 to \$104,187,000.

¹ Rate making treatment of the King Street lease was revised to incorporate the following assumptions:

1. Rate making based on lease payments - - This changes the amortization of the lease asset, which results in changes to the ending rate base amount and the amortization expenses. This also eliminates any accumulated deferred income tax balance relating to the transaction.
2. Change in start of lease from May 1, 2005 to July 1, 2005 - - This changes the embedded interest rate in the lease and the number of months in the lease. It results in changes to the amortization of the lease asset (which changes the ending rate base amount and amortization expense) and changes to the amortization of the lease obligation (which changes the ending lease obligation in the cost of capital calculation and the interest expense).



Attachment 8

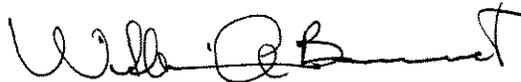
A new Attachment 8 is provided to include the revised pension and OPEB estimates. Page 1 shows the revisions to the employee benefits amounts shown in HECO-1502, including the changes reflected in the responses to CA-IR-345, 348, 349 and 350 (3/22/05), as well as the pension and OPEB updates, and updates to Flex Credits Less Prices, Group Life Insurance, Dependent Life, and Accidental Death and Dismemberment. (Electronic files labeled "HECO2005_1495-Rate Case-Final Exhibits.xls" including updated exhibits were submitted to the CA and DOD on March 31, 2005, in response to CA-IR-345, 348, 349, and 350. These updates were made to reflect January 1, 2005 enrollment data, and actual 2005 premium rates. Long term care premiums referred to in HECO-T-15, page 20, were updated to reflect January 1, 2005 enrollment data.) In addition, premiums for Non-Flexplan participants have been updated based on 2004 actuals. (Non-Flexplan participants include employees on probationary status and on leave of absences.)

Pages 2-3 update the information for the pension and OPEB estimates included in HECO-1504. Additional details were provided in the response to CA-IR-337 (4/7/05), pages 3-4. Pages 4 - 28 provide the detail for the revised pension estimate. The detail for the direct pension estimate was included in the response to CA-IR-338 (3/22/05). Pages 29 to 42 provide the detail for the revised OPEB estimate. The detail for the OPEB estimate was included in the response to CA-IR-340 (3/22/05). Pages 43 to 48 show the revisions to HECO-1508 (Projected Flexplan & Premium Expense), HECO-1513 (Calculation of Group Life Insurance), HECO-1514 (Calculation of Dependent Life Insurance) and HECO-1515 (Calculation of Accidental Death & Dismemberment). Page 49 provides the worksheet for Non-Flexplan premiums.

Attachment 9

Attachment 9 updates HECO-1302 to show the net effect of the changes to various amounts impacting A&G expenses.

Sincerely,



Attachments

cc: Public Utilities Commission
Utilitech, Inc.
Larkin & Associates
M. Brubaker
Hill Associates



Attachment 5

Hawaiian Electric Company, Inc.

Composite Embedded Cost of Capital
Test Year 2005 Average
(\$ Thousands)

		(A)	(B) = (A)/Total(A)	(C)	(D) = (B)*(C)
		Capitalization		Earnings Requirement	Weighted Earnings Requirements
	WP Series Reference	Amount	Percent of Total		
Short-Term Debt	WP-2102	\$ 37,429	3.22%	3.50%	0.11%
Lease Obligation	WP-2102A	10,113	0.87%	5.75%	0.05%
Long-Term Debt	WP-2103	423,565	36.49%	6.25%	2.28%
Hybrid Securities	WP-2104	27,303	2.35%	7.55%	0.18%
Preferred Stock	WP-2105	20,476	1.76%	5.54%	0.10%
Common Equity	WP-2106	641,955	55.30%	11.50%	6.36%
Total Capitalization		<u>\$1,160,839</u>	<u>100.00%</u>		<u>9.08%</u>
Estimated 2005 Test Year Composite Cost of Capital					<u><u>9.08%</u></u>

Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Lease Obligation
Test Year 2005 Average
(\$ Thousands)

	<u>WP Reference</u>	<u>Total</u>
Lease Obligation, beginning	CA-IR-260 p. 4	10,209 (A)
Estimated Net Change	CA-IR-260 p. 4	<u>(193)</u>
Lease Obligation, ending	CA-IR-260 p. 4	<u>\$ 10,016 (B)</u>
Test Year 2005 Average = [(A)+(B)]/2		<u>\$ 10,113 (C)</u>

Totals may not add exactly due to rounding.

Implicit Interest Rate Calculation

Total Monthly Interest for the Year	CA-IR-260 p. 4	<u>\$ 582 (D)</u>
Implicit Annual Interest Rate		5.750% (D)/(C)

CA-IR-260

Ref: HECO-1605 (Rent Expense).

Please provide the following information regarding 2005 forecast of rent case expense:

- a. Please update the Company's test year forecast of rent expense, including any additional leased space or revised rental rates.
- b. For each listed area, building or suite referenced in the revised HECO-1605, please identify the occupants of the leased square footage by HECO RA (or department).
- c. For each listed area, building or suite referenced in the revised HECO-1605, please identify the occupants of the leased square footage by HEI RA (or department).
- d. Referring to items (a) and (b) above, please identify the square footage and lease rent attributed to DSM and how such amount is, or will be, reflected in the 2005 test year forecast.

HECO Response:

- a. See page 3 for the updated HECO-1605 exhibit. Please note that the ratemaking treatment for the King Street lease has been updated to reflect the new lease currently awaiting PUC approval in Docket No. 05-0084. The ratemaking treatment is consistent with the accounting determination that the new lease will be a capital lease. Since it is a capital lease, HECO will reflect a lease property asset and a lease obligation on its balance sheet.
The lease property test year estimate of ~~\$9,948,000~~ ^{\$10,112,734*} (see page 4) will be included in rate base in rebuttal testimony. The lease obligation test year estimate of ~~\$10,115,000~~ ^{\$10,112,734*} (see page 4) will be included in return on rate base in rebuttal testimony. The lease property will be amortized over the lease term, therefore amortization expense will be revised in rebuttal to include a test year estimate of ~~\$521,315~~ ^{\$192,685*} (see p. 4).
- b. See page 5 for a listing of the occupants of each rental listed on the revised HECO-1605.
- c. See page 5 for a listing of the occupants of the HEI rental.

* SEE FURTHER EXPLANATION OF CHANGES ON PAGES 4 OF 5.

- d. DSM is allocated 79% of the square footage and lease rent of CPP Suite 1201/1212 and CPP Suite 1250/1270. The lease rent attributable to DSM of approximately \$91,200 will be included in the 2005 test year estimate as a DSM program expense.

Revised HECO-1605

Hawaiian Electric Company, Inc.
Account 931 - Rent Expense
Test Year 2005 - Rent

	(a)	(b)	(c)	(d)	(a)x(b)x12+ (c)x(d)x12=(e)	(f)	(g)	(h)	(i)	(e)+(f)+(g)+ (h)+(i) x.04167 =(j)	(e)+(f)+(g)+ (h)+(i)+(j) = (k)	Annual Rent TY 2005
EXISTING LEASES	Net sq ft	Monthly Rent per sq ft	Gross sq ft	Monthly CAM ⁽¹⁾ per sq ft	Annual Rent (incl CAM)	Annual Real Prop Tax Credit	Op Exp Recon	Misc Exp ⁽²⁾	After Hour A/C chg ⁽³⁾	Annual Gen Excise Tax		\$ in 1000's
Central Pacific Plaza (CPP)												
Suite 700 (4)	7,598	1.35	7,598	0.975	211,984	(16,608)	2,649	144		8,258		206
Suite 1010	3,930	1.43	4,509	0.975	120,194	(9,864)	1,572	144		4,669		117
Suite 1020, 1025 & 1075	3,947	1.44	4,532	0.975	121,229	(9,912)		144		4,645		116
Suite 1201 & 1212 (5)	2,500	1.44	2,871	0.975	16,126	(1,320)	210	30		627		16
Suite 1250 & 1270 (5)	1,464	1.36	1,598	0.975	8,944	(733)		30		343		9
Suite 1300 (5)	9,601	1.35	9,601	0.975	267,868	(20,988)	3,348	144	2,664	10,544		264
Suite 1425	2,404	1.45	2,788	0.975	74,449	(6,096)		144		2,854		71
Suite 1480	1,085	1.43	1,242	0.975	33,150	(2,712)	433	144		1,292		32
Suite 1515	637	1.44	732	0.975	19,572	(1,596)	255	144		766		19
Suite 1520 & 1530 (5)	2,139	1.55	2,451	0.975	68,462	(3,364)	855	144		2,671		67
Suite 1570	2,594	1.43	2,969	0.975	79,250	(6,492)	1,035	144		3,081		77
HEIPC Sublease (5)			1,537	0.975	41,928	(3,360)	536	56		1,632		41
Total - CPP												
King Street (6)	see calculation below											1,035
Honolulu Club		2.45	2,544		74,794							(269)
Pacific Tower 8th floor										3,117		78
Waiuu Viaduct (7)												54
Pauahi Tower												32
												453
												1,383

(1) CAM = Common Area Maintenance

(2) Rents are proposed and awaiting landlord approval.

(3) CPP 12th floor: Lease rent is allocated 21% to O&M and 79% to DSM.

(4) Additional expense per month for miscellaneous key and card charges.

(5) HEIPC Sublease is 39% of HEIPC's total agreement.

(6) King Street rent: (Amortization of lease property will be included in Depreciation and Amortization expense)

GIT on Lease Payments	32,294	see p. 4
less: HEI rent	(301,365)	[4]
Annual rent	(269,071)	

HEI rent:

Total King St. lease payments	807,294	[1]
Total bldg sq ft	58,313	[2]

Monthly Base rent/sq ft	1.15	[1] / [2] / 12
Monthly CAM	1.50	represents the estimated costs of operating expenses per sq. ft.
PSC tax and PUC fees	0.18	(1.15+1.50) x .0682*
	2.83	

HEI sq ft	x	8,874	* .0682 represents the composite PUC Fees and PSC Taxes rate
Monthly HEI rent		25,114	[3]
Annual HEI rent		301,365	[3] x 12 = [4]

(7) Quarterly payment (\$7,925 x 4 x .001 = \$32,000)

(8) Additional expense related to "after-hour" air-conditioning charges (estimate \$222 / month)

Note: Numbers may not add exactly due to rounding.

HECO
 King Street Capital Lease (Rate making based on lease payments)
 Monthly Journal Entries

Monthly discount rate 0.4794%
 FV of leased asset 10,209,077

HECO:
 Monthly discount rate has changed to .4794% from .4824%. Assumptions have been updated to assume the new lease is executed on July 1, 2005. This resulted in a change in the embedded interest rate calculated due to the change in the value of lease payments over the term of the lease.

Month Beginning	Monthly Payments A	Excise Tax Payment B	Lease Payment C	Monthly Interest Expense D	Monthly Obligation Reduction E	Ending Lease Obligation F	Monthly Amortization Expense G	Ending Lease Property H
	B+C	C*1.04167-C	Per Lease	F*Monthly discount rate	C-D	Prior Balance -E	E	Prior Balance -G
					-	10,209,077 (c)		10,209,077 (a)
1 July 1, 2005	67,275	2,691	64,583	48,945	15,638	10,193,439	15,638	10,193,439
2 August 1, 2005	67,275	2,691	64,583	48,870	15,713	10,177,726	15,713	10,177,726
3 September 1, 2005	67,275	2,691	64,583	48,795	15,788	10,161,938	15,788	10,161,938
4 October 1, 2005	67,275	2,691	64,583	48,719	15,864	10,146,073	15,864	10,146,073
5 November 1, 2005	67,275	2,691	64,583	48,643	15,940	10,130,133	15,940	10,130,133
6 December 1, 2005	67,275	2,691	64,583	48,567	16,017	10,114,117	16,017	10,114,117
7 January 1, 2006	67,275	2,691	64,583	48,490	16,093	10,098,023	16,093	10,098,023
8 February 1, 2006	67,275	2,691	64,583	48,413	16,170	10,081,853	16,170	10,081,853
9 March 1, 2006	67,275	2,691	64,583	48,335	16,248	10,065,605	16,248	10,065,605
10 April 1, 2006	67,275	2,691	64,583	48,257	16,326	10,049,279	16,326	10,049,279
11 May 1, 2006	67,275	2,691	64,583	48,179	16,404	10,032,875	16,404	10,032,875
12 June 1, 2006	67,275	2,691	64,583	48,100	16,483	10,016,392 (d)	16,483	10,016,392 (b)
Total	807,294	32,294	775,000	582,315	192,685		192,685	

Rate Base Impact:

Lease Property	
Beginning of Year (July 1, 2005)	10,209,077 (a)
End of Year (June 30, 2006)	10,016,392 (b)
Test Year Average	<u>10,112,734 [(a)+(b)]/2</u>

HECO:
 Interest Expense has changed to \$582,315 from \$586,010 as a result of the change in the monthly discount rate.

Return on Rate Base Impact:

Lease Obligation	
Beginning of Year (July 1, 2005)	10,209,077 (c)
End of Year (June 30, 2006)	10,016,392 (d)
Test Year Average	<u>10,112,734 [(c)+(d)]/2</u>

HECO:
 Amortization has changed to \$192,685 from \$521,315 as a result in a proposed change to ratemaking treatment based on lease payments as discussed in CA-IR-688.

HECO:
 Obligation reduction has changed to \$192,685 from \$188,990 as a result of the change in the monthly discount rate.

Property Location	Occupied by HECO RAs:
Central Pacific Plaza (CPP)	
Suite 700	FA, FD, FI, FB, FC, PW, 6V
Suite 1010/1020/1025/1075	1W, SM, SN, 9S, SR, 4V
Suite 1201/1212/1250/1270	SP, SD, SA
Suite 1300	NC, 9P, NP, KI
Suite 1425	NG
Suite 1480	NL
Suite 1515	PA, PI
Suite 1520 & 1530	PA, PI, NA
Suite 1570	NA, NS, NX
HEIPC Sublease	To be determined
King Street	AA, AC, AD, AT, CA, CB, CD, CP, CS, EM, KB, KC, KF, KM, KT, QC, QE, 9P, 4V, 9V, 8V, PS, 5V, 1V
Honolulu Club	Training/Meeting Rooms
Pacific Tower 8th floor	3V/NI
Waiiau Viaduct	Vehicle parking & Storage
Pauahi Tower	EA, EC, ED, EI, EP
	Occupied by HEI RAs:
King Street	9Z, Z4, 4T, 4F, TL, 4C, Z3

CA-IR-615

Ref: HECO response to CA-IR-260 & HECO-1605 (Rent Expense).

In response to CA-IR-260, the Company updated HECO-1605 to reflect revised lease rates, including the proposed capital lease treatment of the renegotiated King Street lease. Please provide the following:

- a. In response to CA-IR-260(a), HECO summarizes its proposed ratemaking treatment of the King Street lease, as follows: \$521,315 in amortization expense; \$9.948 million in rate base; \$10.115 million lease obligation; and a \$301,365 HEI rent credit (see revised HECO-1605). Please compare the revenue requirement effect of the proposed capital lease treatment to an operating lease treatment, showing all calculations.
- b. Referring to item (a) above, does HECO plan on including the long-term lease obligation in the capital structure or using it as a rate base reduction to offset the lease asset? Please explain, indicating the cost rate to be applied to any lease obligation included in the capital structure.
- c. In renegotiating the King Street lease, were any economic or financial studies/analyses conducted by or for HECO/HEI for purposes of analyzing the relative costs and benefits of the renegotiated lease terms?
 1. If so, please provide a copy of each study, showing all calculations.
 2. If not, please explain the basis for not undertaking such analyses.
- d. Please identify and describe the key changes in the provisions of the renegotiated King Street lease from the immediately preceding agreement.

HECO Response:

- a. Revenue requirement comparison of treatment of the capital lease for ratemaking purposes v. capital lease with rate recovery based on lease payments for ratemaking purposes is attached on pages 5 to 12. Under FAS 71 "Accounting for Certain Types of Regulation", a lease may be treated as an operating lease for ratemaking purposes even though the lease would be classified as a capital lease under FAS 13 "Accounting for Leases". For financial reporting purposes, however, the lease would still be classified as a capital lease. The

relevant guidance from FAS 71 is attached on page 4. The impact of the financial statement treatment is that the capital structure is impacted by the lease obligation even if the lease is treated as an operating lease for ratemaking purposes.

- b. HECO proposes to include the lease obligation in its capital structure and incorporate the embedded interest rate of ~~5.789%~~ ^{5.75 % *} in its cost of capital.
- c. Yes, numerous comparisons of options were prepared based on the offers as they were being considered by the Company. The comparisons are voluminous, please contact Irene Sekiya at 543-4778 to arrange for viewing.
- d. Key features of the new lease are:

1. Fixed monthly payments for the twenty-year term as follows:

Effective Date to November 30, 2009	\$64,583.34
December 1, 2009 to November 30, 2014	\$71,041.67
December 1, 2014 to November 30, 2019	\$78,145.84
December 1, 2019 to November 30, 2024	\$85,960.42

2. KSBE to pay for building improvements as follows:

Effective Date to 4 th anniversary	up to \$5 million
4 th anniversary	additional \$2 million
11 th anniversary	additional \$2 million

In the prior King Street lease dated April 18, 1980, annual payments were fixed for the first two years and eight months at \$67,000 and for the next five years at \$134,000. Thereafter, the payments were subject to renegotiation every five years. The lease was first amended on March 6, 1990 to reflect annual rent of \$385,000 for the period December 1, 1987 to November 30, 1992. On April 20, 1998, the lease was further amended to reflect annual

* INTEREST RATE CHANGED DUE TO UPDATED ASSUMPTION OF THE NEW LEASE BEGINNING JULY 1, 2005. THIS RESULTED IN A CHANGE TO THE VALUE OF THE LEASE PAYMENTS OVER THE TERM OF THE LEASE.

rent payments of \$750,000 for the period December 1, 1992 to November 30, 1997 and \$775,000 for the period December 1, 1997 to November 30, 2004. HECO was responsible for all building improvements.

Per Financial Accounting Standard No. 71 "Accounting for Certain Types of Regulation"

Accounting for Leases

40. Statement 13, as amended, specifies criteria for classification of leases and the method of accounting for each type of lease. For rate-making purposes, a lease may be treated as an operating lease even though the lease would be classified as a capital lease under the criteria of Statement 13. In effect, the amount of the lease payment is included in allowable costs as rental expense in the period it covers.

41. For financial reporting purposes, the classification of the lease is not affected by the regulator's actions. The regulator cannot eliminate an obligation that was not imposed by the regulator (paragraph 12). Also, by including the lease payments as allowable costs, the regulator sets rates that will provide revenue approximately equal to the combined amount of the capitalized leased asset and interest on the lease obligation over the term of the lease and, thus, provides reasonable assurance of the existence of an asset (paragraph 9). Accordingly, regulated enterprises would classify leases in accordance with Statement 13 as amended.

42. The nature of the expense elements related to a capitalized lease (amortization of the leased asset and interest on the lease obligation) is not changed by the regulator's action; however, the timing of expense recognition related to the lease would be modified to conform to the rate treatment. Thus, amortization of the leased asset would be modified so that the total of interest on the lease obligation and amortization of the leased asset would equal the rental expense that was allowed for rate-making purposes.

43. The Board notes that generally accepted accounting principles do not require interest expense or amortization of leased assets to be classified as separate items in an income statement. For example, the amounts of amortization of capitalized leased nuclear fuel and interest on the related lease obligation could be combined with other costs and displayed as "fuel cost." However, the disclosure of total interest cost incurred, required by Statement 34, would include the interest on that lease obligation; and the disclosure of the total amortization charge, required by Statement 13, would include amortization of that leased asset.

King St. Lease

Year	Capital Lease for Book and Ratemaking		Capital Lease With Recovery based on Lease Payments	
	Revenue Requirements	Net Income	Revenue Requirements	Net Income
2005	1,993,000	649,000	1,643,000	655,000
2006	1,933,000	623,000	1,626,000	642,000
2007	1,872,000	597,000	1,607,000	629,000
2008	1,810,000	570,000	1,587,000	614,000
2009	1,741,000	543,000	1,607,000	598,000
2010	1,669,000	514,000	1,611,000	577,000
2011	1,600,000	485,000	1,580,000	555,000
2012	1,529,000	455,000	1,547,000	531,000
2013	1,457,000	424,000	1,512,000	505,000
2014	1,377,000	392,000	1,521,000	477,000
2015	1,292,000	358,000	1,509,000	444,000
2016	1,210,000	323,000	1,460,000	408,000
2017	1,127,000	288,000	1,407,000	369,000
2018	1,041,000	251,000	1,351,000	329,000
2019	944,000	213,000	1,343,000	284,000
2020	843,000	172,000	1,311,000	234,000
2021	744,000	130,000	1,235,000	179,000
2022	642,000	87,000	1,156,000	121,000
2023	537,000	42,000	1,071,000	59,000
2024	197,000	10,000	431,000	14,000
	25,558,000	7,126,000 *	28,115,000	8,224,000 *

* Revenue requirements and net income has changed as a result of the updated assumption of the new lease beginning July 1, 2005. This has impacted the ending rate base and lease obligation being included in the capital structure as it resulted in changes due to revised amortization expense and lease obligation reduction.

Assumptions Input

<u>Cost of Capital Assumptions:</u>	Weight	Rate	Weighted Average	After-tax Weighted Average	Weighted Average Revenue Requirement	Rev Req
ST Debt	3.00%	6.00%	0.180%	0.110%	0.198%	
Taxable Debt **	36.00%	5.63%	2.027%	1.238%	2.224%	6.179%
Preferred Stock	7.00%	8.00%	0.560%	0.560%	1.006%	
Common Stock	54.00%	12.00%	6.480%	6.480%	11.642%	
			<u>9.247%</u>	<u>8.388%</u>	<u>15.070%</u>	

Tax Assumptions:

Federal	35.00%	32.89%
State	6.40%	6.02%
		<u>38.91%</u>

Public Service Company Tax	5.885%	(on gross receipts)
PUC Fee	0.500%	(on gross receipts)
Franchise Tax	2.500%	(on electricity sales)
Revenue Tax Rate	<u>8.885%</u>	

	Annual	Monthly
Incremental Borrowing Rate	5.630%	0.469%

	Total	GET	Total including GET
Appraisal	3,470,000		
		4.0000%	
<u>Monthly Lease Payments</u>		4.1670%	
Effective Date to 11/30/2009	64,583.34	2,691.19	67,274.53
12/1/2009 to 11/30/2014	71,041.67	2,960.31	74,001.98
12/1/2014 to 11/30/2019	78,145.84	3,256.34	81,402.18
12/1/2019 to 11/30/2024	85,960.42	3,581.97	89,542.39
<u>Annual Lease Payments</u>			
Effective Date to 11/30/2009	775,000	32,294	807,294
12/1/2009 to 11/30/2014	852,500	35,524	888,024
12/1/2014 to 11/30/2019	937,750	39,076	976,826
12/1/2019 to 11/30/2024	1,031,525	42,984	1,074,509
HEI sq. ft.	8,874		
Total building sq. ft.	58,313		
HEI %	15%		

Capitalized Leased Property 10,209,077

** Assumed "taxable debt" as theoretical quantification of the impact to HECO to simplify the analysis.
(Eliminates the need to adjust income tax deferral for adjustment to tax depreciation if revenue bond financing is assumed.)

King Street Lease

Year		1	2	3	4	5	6
Number of Months in Year		12	12	12	12	12	12
Total Payments	(10,209,077)	807,294	807,294	807,294	807,294	854,386	888,024
Excise Tax Pmt		32,294	32,294	32,294	32,294	34,178	35,524
Lease Pmt		775,000	775,000	775,000	775,000	820,208	852,500
HEI Payments		129,353	129,353	129,353	129,353	136,899	142,289
Capital Lease Treatment							
Cash Flow		807,294	807,294	807,294	807,294	854,386	888,024
Lease Payment							
Excise Tax Expense		32,294	32,294	32,294	32,294	34,178	35,524
Interest Expense on Lease Obligation		582,315	570,932	558,878	546,111	531,934	513,484
Principal Repayment		192,685	204,068	216,122	228,889	288,274	339,016
Total Debits		807,294	807,294	807,294	807,294	854,386	888,024
Current Tax Deduction		807,294	807,294	807,294	807,294	854,386	888,024
Book Expense		1,140,399	1,129,016	1,116,961	1,104,194	1,091,901	1,074,797
Deferred Tax Base		(333,104)	(321,722)	(309,667)	(296,900)	(237,515)	(186,773)
Deferred Tax		(129,610)	(125,181)	(120,491)	(115,523)	(92,417)	(72,673)
Accumulated Deferred Tax		(129,610)	(254,791)	(375,282)	(490,805)	(583,222)	(655,895)
Leased Property		10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077
Amortization Expense		525,789	525,789	525,789	525,789	525,789	525,789
Accumulated Amortization		525,789	1,051,579	1,577,368	2,103,157	2,628,947	3,154,736
Net Leased Property	10,209,077	9,683,288	9,157,498	8,631,709	8,105,920	7,580,130	7,054,341
Ending Rate Base	10,209,077	9,812,898	9,412,290	9,006,991	8,596,725	8,163,352	7,710,235
Average Rate Base		10,010,987	9,612,594	9,209,640	8,801,858	8,380,038	7,936,794
Beginning Lease Obligation		10,209,077	10,016,392	9,812,324	9,596,202	9,367,313	9,079,038
Lease Interest Expense		582,315	570,932	558,878	546,111	531,934	513,484
Principal Repayments		192,685	204,068	216,122	228,889	288,274	339,016
Ending Lease Obligation		10,209,077	10,016,392	9,812,324	9,596,202	9,367,313	9,079,038
ST Debt	3.0%	306,272	294,387	282,369	270,210	244,901	231,307
Taxable Debt	36.0%	(6,533,809)	(6,483,749)	(6,423,900)	(6,353,685)	(6,272,492)	(5,964,337)
Preferred Stock	7.0%	714,635	686,903	658,860	630,489	601,771	571,435
Common Stock	54.0%	5,512,902	5,298,965	5,082,636	4,863,775	4,642,231	4,408,210
Total Ending Capitalization		10,209,077	9,812,898	9,412,290	9,006,991	8,596,725	8,163,352
Average ST Debt		300,330	288,378	276,289	264,056	251,401	238,104
Average Taxable Debt		(6,508,779)	(6,453,824)	(6,388,793)	(6,313,088)	(6,206,362)	(6,052,284)
Average Preferred Stock		700,769	672,882	644,675	616,130	586,603	555,576
Average Common Stock		5,405,933	5,190,801	4,973,206	4,753,003	4,525,221	4,285,869
Average Capitalization		10,010,987	9,612,594	9,209,640	8,801,858	8,380,038	7,936,794
ST Interest Expense	6.00%	18,020	17,303	16,577	15,843	15,084	14,286
Taxable Debt Interest Expense	5.63%	(366,444)	(363,350)	(359,689)	(355,427)	(349,418)	(340,744)
Preferred Dividends	8.00%	56,062	53,831	51,574	49,290	46,928	44,446
Return on Common	12.00%	648,712	622,896	596,785	570,360	543,026	514,304
Revenue Requirements		1,993,394	1,933,122	1,872,150	1,810,435	1,741,073	1,668,970
Revenue Taxes		177,113	171,758	166,341	160,857	154,694	148,288
Amortization Expense		525,789	525,789	525,789	525,789	525,789	525,789
Excise Tax Expense		32,294	32,294	32,294	32,294	34,178	35,524
HEI Rent Payments		(129,353)	(129,353)	(129,353)	(129,353)	(136,899)	(142,289)
Interest Expense		233,890	224,885	215,766	206,527	197,600	187,026
Income Before Taxes		1,153,660	1,107,749	1,061,313	1,014,321	965,710	914,631
Income Taxes		448,887	431,023	412,955	394,670	375,756	355,881
Preferred Dividends		56,062	53,831	51,574	49,290	46,928	44,446
Net Income		648,712	622,896	596,785	570,360	543,026	514,304

HECO:
Ending lease obligation changed due to a change in the obligation reduction as a result of the updated assumption of the new lease beginning July 1, 2005.

HECO:
Ending rate base changed due to a change in amortization expense as a result of the updated assumption of the new lease beginning July 1, 2005.

King Street Lease

Year	7	8	9	10	11	12	13	14
Number of Months in Year	12	12	12	12	12	12	12	12
Total Payments	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
Excise Tax Pmt	35,524	35,524	35,524	37,596	39,076	39,076	39,076	39,076
Lease Pmt	852,500	852,500	852,500	902,229	937,750	937,750	937,750	937,750
HEI Payments	142,289	142,289	142,289	150,589	156,518	156,518	156,518	156,518
Capital Lease Treatment								
Cash Flow								
Lease Payment	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
Excise Tax Expense	35,524	35,524	35,524	37,596	39,076	39,076	39,076	39,076
Interest Expense on Lease Obligati	493,457	472,247	449,784	425,274	395,535	363,505	329,583	293,657
Principal Repayment	359,043	380,253	402,716	476,955	542,215	574,245	608,167	644,093
Total Debits	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
Current Tax Deduction	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
Book Expense	1,054,770	1,033,560	1,011,097	988,659	960,401	928,371	894,448	858,522
Deferred Tax Base	(166,746)	(145,536)	(123,074)	(48,834)	16,425	48,455	82,378	118,304
Deferred Tax	(64,881)	(56,628)	(47,888)	(19,001)	6,391	18,854	32,053	46,032
Accumulated Deferred Tax	(720,775)	(777,403)	(825,291)	(844,292)	(837,901)	(819,047)	(786,994)	(740,962)
Leased Property	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077
Amortization Expense	525,789	525,789	525,789	525,789	525,789	525,789	525,789	525,789
Accumulated Amortization	3,680,526	4,206,315	4,732,104	5,257,894	5,783,683	6,309,472	6,835,262	7,361,051
Net Leased Property	6,528,551	6,002,762	5,476,973	4,951,183	4,425,394	3,899,605	3,373,815	2,848,026
Ending Rate Base	7,249,327	6,780,165	6,302,264	5,795,475	5,263,295	4,718,652	4,160,809	3,588,988
Average Rate Base	7,479,781	7,014,746	6,541,214	6,048,870	5,529,385	4,990,973	4,439,731	3,874,899
Beginning Lease Obligation	8,740,022	8,380,979	8,000,726	7,598,010	7,121,055	6,578,840	6,004,596	5,396,428
Lease Interest Expense	493,457	472,247	449,784	425,274	395,535	363,505	329,583	293,657
Principal Repayments	359,043	380,253	402,716	476,955	542,215	574,245	608,167	644,093
Ending Lease Obligation	8,380,979	8,000,726	7,598,010	7,121,055	6,578,840	6,004,596	5,396,428	4,752,335
ST Debt	217,480	203,405	189,068	173,864	157,899	141,560	124,824	107,670
Taxable Debt	(5,771,221)	(5,559,866)	(5,329,195)	(5,034,684)	(4,684,054)	(4,305,881)	(3,898,537)	(3,460,299)
Preferred Stock	507,453	474,612	441,158	405,683	368,431	330,306	291,257	251,229
Common Stock	3,914,636	3,661,289	3,403,222	3,129,557	2,842,179	2,548,072	2,246,837	1,938,054
Total Ending Capitalization	7,249,327	6,780,165	6,302,264	5,795,475	5,263,295	4,718,652	4,160,809	3,588,988
Average ST Debt	224,393	210,442	196,236	181,466	165,882	149,729	133,192	116,247
Average Taxable Debt	(5,867,779)	(5,665,544)	(5,444,531)	(5,181,940)	(4,859,369)	(4,494,968)	(4,102,209)	(3,679,418)
Average Preferred Stock	523,585	491,032	457,885	423,421	387,057	349,368	310,781	271,243
Average Common Stock	4,039,082	3,787,963	3,532,256	3,266,390	2,985,868	2,695,126	2,397,455	2,092,445
Average Capitalization	7,479,781	7,014,746	6,541,214	6,048,870	5,529,385	4,990,973	4,439,731	3,874,899
ST Interest Expense	13,464	12,627	11,774	10,888	9,953	8,984	7,992	6,975
Taxable Debt interest Expense	(330,356)	(318,970)	(306,527)	(291,743)	(273,582)	(253,067)	(230,954)	(207,151)
Preferred Dividends	41,887	39,283	36,631	33,874	30,965	27,949	24,862	21,699
Return on Common	484,690	454,556	423,871	391,967	358,304	323,415	287,695	251,093
Revenue Requirements	1,599,686	1,529,170	1,457,347	1,376,593	1,292,275	1,210,478	1,126,708	1,040,848
Revenue Taxes	142,132	135,867	129,485	122,310	114,819	107,551	100,108	92,479
Amortization Expense	525,789	525,789	525,789	525,789	525,789	525,789	525,789	525,789
Excise Tax Expense	35,524	35,524	35,524	37,596	39,076	39,076	39,076	39,076
HEI Rent Payments	(142,289)	(142,289)	(142,289)	(150,589)	(156,518)	(156,518)	(156,518)	(156,518)
Interest Expense	176,565	165,904	155,032	144,419	131,906	119,422	106,620	93,480
Income Before Taxes	861,965	808,375	753,806	697,068	637,203	575,157	511,632	446,541
Income Taxes	335,389	314,537	293,304	271,228	247,934	223,792	199,075	173,748
Preferred Dividends	41,887	39,283	36,631	33,874	30,965	27,949	24,862	21,699
Net Income	484,690	454,556	423,871	391,967	358,304	323,415	287,695	251,093

King Street Lease

Year	15	16	17	18	19	20	Total
Number of Months in Year	12	12	12	12	12	5	233
Total Payments	1,033,808	1,074,509	1,074,509	1,074,509	1,074,509	447,712	18,262,341
Excise Tax Pmt	41,355	42,984	42,984	42,984	42,984	17,910	730,550
Lease Pmt	992,452	1,031,525	1,031,525	1,031,525	1,031,525	429,802	17,531,792
HEI Payments	165,648	172,169	172,169	172,169	172,169	71,737	2,926,188
Capital Lease Treatment							
Cash Flow							
Lease Payment	1,033,808	1,074,509	1,074,509	1,074,509	1,074,509	447,712	18,262,341
Excise Tax Expense	41,355	42,984	42,984	42,984	42,984	17,910	730,550
Interest Expense on Lease Obligati	254,815	209,521	160,963	109,536	55,071	6,113	7,322,715
Principal Repayment	737,637	822,004	870,562	921,989	976,454	423,689	10,209,077
Total Debits	1,033,808	1,074,509	1,074,509	1,074,509	1,074,509	447,712	18,262,341
Current Tax Deduction	1,033,808	1,074,509	1,074,509	1,074,509	1,074,509	447,712	18,262,341
Book Expense	821,960	778,294	729,736	678,309	623,844	243,102	18,262,341
Deferred Tax Base	211,848	296,215	344,773	396,200	450,664	204,610	
Deferred Tax	82,429	115,256	134,150	154,160	175,352	79,613	
Accumulated Deferred Tax	(658,533)	(543,276)	(409,126)	(254,966)	(79,613)	(0)	
Leased Property	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	
Amortization Expense	525,789	525,789	525,789	525,789	525,789	219,079	10,209,077
Accumulated Amortization	7,886,841	8,412,630	8,938,419	9,464,209	9,989,998	10,209,077	
Net Leased Property	2,322,236	1,796,447	1,270,658	744,868	219,079	(0)	
Ending Rate Base	2,980,769	2,339,723	1,679,784	999,834	298,692	(0)	
Average Rate Base	3,284,879	2,660,246	2,009,754	1,339,809	649,263	149,346	
Beginning Lease Obligation	4,752,335	4,014,698	3,192,694	2,322,131	1,400,142	423,689	
Lease Interest Expense	254,815	209,521	160,963	109,536	55,071	6,113	7,322,715
Principal Repayments	737,637	822,004	870,562	921,989	976,454	423,689	10,209,077
Ending Lease Obligation	4,014,698	3,192,694	2,322,131	1,400,142	423,689	0	
ST Debt	89,423	70,192	50,394	29,995	8,961	(0)	
Taxable Debt	(2,941,621)	(2,350,393)	(1,717,409)	(1,040,202)	(316,160)	(0)	
Preferred Stock	208,654	163,781	117,585	69,988	20,908	(0)	
Common Stock	1,609,615	1,263,451	907,083	539,910	161,294	(0)	
Total Ending Capitalization	2,980,769	2,339,723	1,679,784	999,834	298,692	(0)	
Average ST Debt	98,546	79,807	60,293	40,194	19,478	4,480	
Average Taxable Debt	(3,200,960)	(2,646,007)	(2,033,901)	(1,378,806)	(678,181)	(158,080)	
Average Preferred Stock	229,942	186,217	140,683	93,787	45,448	10,454	
Average Common Stock	1,773,835	1,436,533	1,085,267	723,497	350,602	80,647	
Average Capitalization	3,284,879	2,660,246	2,009,754	1,339,809	649,263	149,346	
ST Interest Expense	5,913	4,788	3,618	2,412	1,169	269	197,937
Taxable Debt Interest Expense	(180,214)	(148,970)	(114,509)	(77,627)	(38,182)	(8,900)	(4,915,824)
Preferred Dividends	18,395	14,897	11,255	7,503	3,636	836	615,803
Return on Common	212,860	172,384	130,232	86,820	42,072	9,678	7,125,719
Revenue Requirements	944,475	843,448	744,420	642,401	537,214	197,491	25,561,699
Revenue Taxes	83,917	74,940	66,142	57,077	47,731	17,547	2,271,157
Amortization Expense	525,789	525,789	525,789	525,789	525,789	219,079	10,209,077
Excise Tax Expense	41,355	42,984	42,984	42,984	42,984	17,910	730,550
HEI Rent Payments	(165,648)	(172,169)	(172,169)	(172,169)	(172,169)	(71,737)	(2,926,188)
Interest Expense	80,514	65,339	50,072	34,321	18,058	(2,518)	2,604,827
Income Before Taxes	378,547	306,565	231,603	154,399	74,821	17,211	12,672,277
Income Taxes	147,292	119,284	90,116	60,076	29,113	6,697	4,930,754
Preferred Dividends	18,395	14,897	11,255	7,503	3,636	836	615,803
Net Income	212,860	172,384	130,232	86,820	42,072	9,678	7,125,719

King Street Lease

Year	1	2	3	4	5	6	
Capital Lease for Books with Rates based on Lease Payments							
Cash Flow							
Lease Payment	807,294	807,294	807,294	807,294	854,386	888,024	
Excise Tax Expense	32,294	32,294	32,294	32,294	34,178	35,524	
Interest Expense on Lease Obligation	582,315	570,932	558,878	546,111	531,934	513,484	
Principal Repayment	192,685	204,068	216,122	228,889	288,274	339,016	
Total Debits	807,294	807,294	807,294	807,294	854,386	888,024	
Current Tax Deduction	807,294	807,294	807,294	807,294	854,386	888,024	
Book Expense	807,294	807,294	807,294	807,294	854,386	888,024	
Deferred Tax Base	-	-	-	-	-	-	
Deferred Tax	-	-	-	-	-	-	
Accumulated Deferred Tax	-	-	-	-	-	-	
Financial Statements Adjusted to Reflect Ratemaking based on Lease Payments							
Leased Property	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	
Adjusted Amortization Expense	192,685	204,068	216,122	228,889	288,274	339,016	
Accumulated Amortization	192,685	396,753	612,875	841,764	1,130,039	1,469,055	
Net Leased Plant	10,209,077	10,016,392	9,812,324	9,596,202	9,367,313	9,079,038	
Ending Net Assets	10,209,077	10,016,392	9,812,324	9,596,202	9,367,313	9,079,038	
Average Rate Base	10,112,734	9,914,358	9,704,263	9,481,757	9,223,175	8,909,530	
Beginning Lease Obligation	10,209,077	10,016,392	9,812,324	9,596,202	9,367,313	9,079,038	
Lease Interest Expense	582,315	570,932	558,878	546,111	531,934	513,484	
Principal Repayments	192,685	204,068	216,122	228,889	288,274	339,016	
Ending Lease Obligation	10,209,077	10,016,392	9,812,324	9,596,202	9,367,313	9,079,038	
ST Debt	3%	306,272	300,492	294,370	287,886	281,019	272,371
Taxable Debt	36%	(6,533,809)	(6,410,491)	(6,279,888)	(6,141,569)	(5,995,080)	(5,810,584)
Preferred Stock	7%	714,635	701,147	686,863	671,734	655,712	635,533
Common Stock	54%	5,512,902	5,408,852	5,298,655	5,181,949	5,058,349	4,902,681
Total Ending Capitalization	10,209,077	10,016,392	9,812,324	9,596,202	9,367,313	9,079,038	
Average ST Debt		303,382	297,431	291,128	284,453	276,695	267,286
Average Taxable Debt		(6,472,150)	(6,345,189)	(6,210,728)	(6,068,325)	(5,902,832)	(5,702,099)
Average Preferred Stock		707,891	694,005	679,298	663,723	645,622	623,667
Average Common Stock		5,460,877	5,353,753	5,240,302	5,120,149	4,980,515	4,811,146
Average Capitalization		10,112,734	9,914,358	9,704,263	9,481,757	9,223,175	8,909,530
ST Interest Expense	6.00%	18,203	17,846	17,468	17,067	16,602	16,037
Taxable Debt Interest Expense	5.63%	(364,382)	(357,234)	(349,664)	(341,647)	(332,329)	(321,028)
Preferred Dividends	8.00%	56,631	55,520	54,344	53,098	51,650	49,893
Return on Common	12.00%	655,305	642,450	628,836	614,418	597,662	577,338
Revenue Requirements (with Capital Structure Rebalancing in Rates)							
Revenue Requirement		1,643,140	1,625,503	1,606,824	1,587,042	1,607,455	1,610,572
Revenue Taxes		145,993	144,426	142,766	141,009	142,822	143,099
Lease Payments		807,294	807,294	807,294	807,294	854,386	888,024
HEI Rent Payments		(129,353)	(129,353)	(129,353)	(129,353)	(136,899)	(142,289)
Interest Expense		(346,179)	(339,388)	(332,196)	(324,580)	(315,728)	(304,991)
Income Before Taxes		1,165,385	1,142,525	1,118,313	1,092,672	1,062,873	1,026,729
Income Taxes		453,449	444,554	435,133	425,156	413,562	399,498
Preferred Dividends		56,631	55,520	54,344	53,098	51,650	49,893
Net Income (Ratemaking)		655,305	642,450	628,836	614,418	597,662	577,338
Book Returns		1,643,140	1,625,503	1,606,824	1,587,042	1,607,455	1,610,572
Revenues		145,993	144,426	142,766	141,009	142,822	143,099
Revenue Taxes		192,685	204,068	216,122	228,889	288,274	339,016
Amortization Expense		32,294	32,294	32,294	32,294	34,178	35,524
Excise Tax Expense		(129,353)	(129,353)	(129,353)	(129,353)	(136,899)	(142,289)
HEI Rent Payments		236,136	231,544	226,681	221,531	216,206	208,493
Interest Expense		1,165,385	1,142,525	1,118,313	1,092,672	1,062,873	1,026,729
Income Before Taxes		453,449	444,554	435,133	425,156	413,562	399,498
Income Taxes		56,631	55,520	54,344	53,098	51,650	49,893
Preferred Dividends		655,305	642,450	628,836	614,418	597,662	577,338
Net Income							

HECO:
Ending lease obligation changed due to a change in the obligation reduction as a result of the updated assumption of the new lease beginning July 1, 2005.

HECO:
Ending rate base changed due to a change in amortization expense as a result of the updated assumption of the new lease beginning July 1, 2005.

King Street Lease

Year	7	8	9	10	11	12	13	14
Capital Lease for Books with Rat								
Cash Flow								
Lease Payment	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
Excise Tax Expense	35,524	35,524	35,524	37,596	39,076	39,076	39,076	39,076
Interest Expense on Lease Obligati	493,457	472,247	449,784	425,274	395,535	363,505	329,583	293,657
Principal Repayment	359,043	380,253	402,716	476,955	542,215	574,245	608,167	644,093
Total Debits	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
Current Tax Deduction	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
Book Expense	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
Deferred Tax Base	-	-	-	-	-	-	-	-
Deferred Tax	-	-	-	-	-	-	-	-
Accumulated Deferred Tax	-	-	-	-	-	-	-	-
Financial Statements Adjusted to R								
Leased Property	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077
Adjusted Amortization Expense	359,043	380,253	402,716	476,955	542,215	574,245	608,167	644,093
Accumulated Amortization	1,828,098	2,208,351	2,611,067	3,088,022	3,630,237	4,204,481	4,812,649	5,456,742
Net Leased Plant	8,380,979	8,000,726	7,598,010	7,121,055	6,578,840	6,004,596	5,396,428	4,752,335
Ending Net Assets	8,380,979	8,000,726	7,598,010	7,121,055	6,578,840	6,004,596	5,396,428	4,752,335
Average Rate Base	8,560,500	8,190,852	7,799,368	7,359,533	6,849,948	6,291,718	5,700,512	5,074,382
Beginning Lease Obligation	8,740,022	8,380,979	8,000,726	7,598,010	7,121,055	6,578,840	6,004,596	5,396,428
Lease Interest Expense	493,457	472,247	449,784	425,274	395,535	363,505	329,583	293,657
Principal Repayments	359,043	380,253	402,716	476,955	542,215	574,245	608,167	644,093
Ending Lease Obligation	8,380,979	8,000,726	7,598,010	7,121,055	6,578,840	6,004,596	5,396,428	4,752,335
ST Debt	251,429	240,022	227,940	213,632	197,365	180,138	161,893	142,570
Taxable Debt	(5,363,826)	(5,120,465)	(4,862,727)	(4,557,475)	(4,210,458)	(3,842,941)	(3,453,714)	(3,041,494)
Preferred Stock	586,669	560,051	531,861	498,474	460,519	420,322	377,750	332,663
Common Stock	4,525,728	4,320,392	4,102,926	3,845,370	3,552,574	3,242,482	2,914,071	2,566,261
Total Ending Capitalization	8,380,979	8,000,726	7,598,010	7,121,055	6,578,840	6,004,596	5,396,428	4,752,335
Average ST Debt	256,815	245,726	233,981	220,786	205,498	188,752	171,015	152,231
Average Taxable Debt	(5,478,720)	(5,242,145)	(4,991,596)	(4,710,101)	(4,383,966)	(4,026,699)	(3,648,328)	(3,247,604)
Average Preferred Stock	599,235	573,360	545,956	515,167	479,496	440,420	399,036	355,207
Average Common Stock	4,622,670	4,423,060	4,211,659	3,974,148	3,698,972	3,397,528	3,078,276	2,740,166
Average Capitalization	8,560,500	8,190,852	7,799,368	7,359,533	6,849,948	6,291,718	5,700,512	5,074,382
ST Interest Expense	15,409	14,744	14,039	13,247	12,330	11,325	10,261	9,134
Taxable Debt Interest Expense	(308,452)	(295,133)	(281,027)	(265,179)	(246,817)	(226,703)	(205,401)	(182,840)
Preferred Dividends	47,939	45,869	43,676	41,213	38,360	35,234	31,923	28,417
Return on Common	554,720	530,767	505,399	476,898	443,877	407,703	369,393	328,820
Revenue Requirements (with Cap								
Revenue Requirement	1,579,541	1,546,677	1,511,871	1,520,510	1,509,307	1,459,676	1,407,114	1,351,447
Revenue Taxes	140,342	137,422	134,330	135,097	134,102	129,692	125,022	120,076
Lease Payments	888,024	888,024	888,024	939,825	976,826	976,826	976,826	976,826
HEI Rent Payments	(142,289)	(142,289)	(142,289)	(150,589)	(156,518)	(156,518)	(156,518)	(156,518)
Interest Expense	(293,043)	(280,389)	(266,988)	(251,932)	(234,487)	(215,378)	(195,140)	(173,706)
Income Before Taxes	986,507	943,909	898,794	848,108	789,384	725,054	656,923	584,769
Income Taxes	383,848	367,273	349,719	329,997	307,147	282,117	255,607	227,532
Preferred Dividends	47,939	45,869	43,676	41,213	38,360	35,234	31,923	28,417
Net Income (Rate-making)	554,720	530,767	505,399	476,898	443,877	407,703	369,393	328,820
Book Returns								
Revenues	1,579,541	1,546,677	1,511,871	1,520,510	1,509,307	1,459,676	1,407,114	1,351,447
Revenue Taxes	140,342	137,422	134,330	135,097	134,102	129,692	125,022	120,076
Amortization Expense	359,043	380,253	402,716	476,955	542,215	574,245	608,167	644,093
Excise Tax Expense	35,524	35,524	35,524	37,596	39,076	39,076	39,076	39,076
HEI Rent Payments	(142,289)	(142,289)	(142,289)	(150,589)	(156,518)	(156,518)	(156,518)	(156,518)
Interest Expense	200,414	191,858	182,796	173,342	161,048	148,127	134,443	119,950
Income Before Taxes	986,507	943,909	898,794	848,108	789,384	725,054	656,923	584,769
Income Taxes	383,848	367,273	349,719	329,997	307,147	282,117	255,607	227,532
Preferred Dividends	47,939	45,869	43,676	41,213	38,360	35,234	31,923	28,417
Net Income	554,720	530,767	505,399	476,898	443,877	407,703	369,393	328,820

King Street Lease

Year	15	16	17	18	19	20	Total
Capital Lease for Books with Rate							
Cash Flow							
Lease Payment	1,033,808	1,074,509	1,074,509	1,074,509	1,074,509	447,712	18,262,341
Excise Tax Expense	41,355	42,984	42,984	42,984	42,984	17,910	730,550
Interest Expense on Lease Obligati	254,815	209,521	160,963	109,536	55,071	6,113	7,322,715
Principal Repayment	737,637	822,004	870,562	921,989	976,454	423,689	10,209,077
Total Debits	<u>1,033,808</u>	<u>1,074,509</u>	<u>1,074,509</u>	<u>1,074,509</u>	<u>1,074,509</u>	<u>447,712</u>	<u>18,262,341</u>
Current Tax Deduction	1,033,808	1,074,509	1,074,509	1,074,509	1,074,509	447,712	18,262,341
Book Expense	1,033,808	1,074,509	1,074,509	1,074,509	1,074,509	447,712	18,262,341
Deferred Tax Base	-	-	-	-	-	-	-
Deferred Tax	-	-	-	-	-	-	-
Accumulated Deferred Tax	-	-	-	-	-	-	-
Financial Statements Adjusted to R							
Leased Property	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077	10,209,077
Adjusted Amortization Expense	737,637	822,004	870,562	921,989	976,454	423,689	
Accumulated Amortization	6,194,379	7,016,383	7,886,946	8,808,935	9,785,388	10,209,077	
Net Leased Plant	4,014,698	3,192,694	2,322,131	1,400,142	423,689	0	
Ending Net Assets	4,014,698	3,192,694	2,322,131	1,400,142	423,689	0	
Average Rate Base	4,383,516	3,603,696	2,757,413	1,861,137	911,916	211,844	
Beginning Lease Obligation	4,752,335	4,014,698	3,192,694	2,322,131	1,400,142	423,689	
Lease Interest Expense	254,815	209,521	160,963	109,536	55,071	6,113	7,322,715
Principal Repayments	737,637	822,004	870,562	921,989	976,454	423,689	10,209,077
Ending Lease Obligation	4,014,698	3,192,694	2,322,131	1,400,142	423,689	0	
ST Debt	120,441	95,781	69,664	42,004	12,711	0	
Taxable Debt	(2,569,407)	(2,043,324)	(1,486,164)	(896,091)	(271,161)	(0)	
Preferred Stock	281,029	223,489	162,549	98,010	29,658	0	
Common Stock	2,167,937	1,724,055	1,253,951	756,077	228,792	0	
Total Ending Capitalization	<u>4,014,698</u>	<u>3,192,694</u>	<u>2,322,131</u>	<u>1,400,142</u>	<u>423,689</u>	<u>0</u>	
Average ST Debt	131,505	108,111	82,722	55,834	27,357	6,355	
Average Taxable Debt	(2,805,450)	(2,306,365)	(1,764,744)	(1,191,128)	(583,626)	(135,580)	
Average Preferred Stock	306,846	252,259	193,019	130,280	63,834	14,829	
Average Common Stock	2,367,099	1,945,996	1,489,003	1,005,014	492,434	114,396	
Average Capitalization	<u>4,383,516</u>	<u>3,603,696</u>	<u>2,757,413</u>	<u>1,861,137</u>	<u>911,916</u>	<u>211,844</u>	
ST Interest Expense	7,890	6,487	4,963	3,350	1,641	381	228,424
Taxable Debt Interest Expense	(157,947)	(129,848)	(99,355)	(67,060)	(32,858)	(7,633)	(4,572,538)
Preferred Dividends	24,548	20,181	15,442	10,422	5,107	1,186	710,652
Return on Common	284,052	233,519	178,680	120,602	59,092	13,728	8,223,259
Revenue Requirements (with Cap)							
Revenue Requirement	1,342,542	1,310,723	1,235,483	1,155,798	1,071,406	431,472	28,114,103
Revenue Taxes	119,285	116,458	109,773	102,693	95,194	38,336	2,497,938
Lease Payments	1,033,808	1,074,509	1,074,509	1,074,509	1,074,509	447,712	18,262,341
HEI Rent Payments	(165,648)	(172,169)	(172,169)	(172,169)	(172,169)	(71,737)	(2,926,188)
Interest Expense	(150,057)	(123,362)	(94,392)	(63,710)	(31,217)	(7,252)	(4,344,114)
Income Before Taxes	505,154	415,288	317,763	214,476	105,089	24,413	14,624,126
Income Taxes	196,554	161,588	123,641	83,452	40,890	9,499	5,690,214
Preferred Dividends	24,548	20,181	15,442	10,422	5,107	1,186	710,652
Net Income (Rate-making)	<u>284,052</u>	<u>233,519</u>	<u>178,680</u>	<u>120,602</u>	<u>59,092</u>	<u>13,728</u>	<u>8,223,259</u>
Book Returns							
Revenues	1,342,542	1,310,723	1,235,483	1,155,798	1,071,406	431,472	28,114,103
Revenue Taxes	119,285	116,458	109,773	102,693	95,194	38,336	2,497,938
Amortization Expense	737,637	822,004	870,562	921,989	976,454	423,689	10,209,077
Excise Tax Expense	41,355	42,984	42,984	42,984	42,984	17,910	730,550
HEI Rent Payments	(165,648)	(172,169)	(172,169)	(172,169)	(172,169)	(71,737)	(2,926,188)
Interest Expense	104,758	86,159	66,571	45,826	23,855	(1,139)	2,978,600
Income Before Taxes	505,154	415,288	317,763	214,476	105,089	24,413	14,624,126
Income Taxes	196,554	161,588	123,641	83,452	40,890	9,499	5,690,214
Preferred Dividends	24,548	20,181	15,442	10,422	5,107	1,186	710,652
Net Income	<u>284,052</u>	<u>233,519</u>	<u>178,680</u>	<u>120,602</u>	<u>59,092</u>	<u>13,728</u>	<u>8,223,259</u>

CA-IR-616

Ref: HECO response to CA-IR-260 & HECO-1605 (Rent Expense).

In response to CA-IR-260, the Company updated HECO-1605 to reflect revised lease rates, including the proposed capital lease treatment of the renegotiated King Street lease. On April 6, 2005, the Company filed a Petition with the HPUC (Docket No. 05-0084) seeking a declaratory order approving HECO's renegotiated "capital lease agreement" with the Trustees of the Estate of Bernice Pauahi Bishop. Attachment B of the referenced Petition represents the Company's detailed analysis of the applicability of capital lease Criteria d of FAS13. Please provide the following:

- a. Please provide a copy of the "2005 Braig appraisal" referenced as the data source for the land and building estimates on Petition Attachment B, including all supporting documents such as comparable property sales or other analyses.
- b. Petition Attachment B indicates that HECO's estimated incremental borrowing rate is 5.63%, citing to a 20-year uninsured taxable bond quote provided by Goldman Sachs. Page 4 of the Company's response to CA-IR-260 uses a monthly discount rate of 0.4824% (i.e., annual rate of 5.789%). Please explain and reconcile the difference between these discount rates.
- c. Page 4 of the response to CA-IR-260 calculates HECO's proposed monthly amortization by dividing the estimated FMV of the leased property of \$10.209 million (see HECO Petition, Attachment B) by 235 months. Since the renegotiated lease is for a 20-year term, please explain why HECO used a 235-month appropriate amortization period, rather than 240 months.

HECO Response:

- a. See attached pages 3 to 26.
- b. 5.63% is an estimate of HECO's incremental borrowing rate based on information provided by Goldman Sachs. ^{5.75%*} ~~5.789%~~ is the interest rate that is embedded in the lease pricing. The embedded rate was derived based on the monthly lease payments in the lease and assuming fair market value of \$10,209,077. The rates are from different sources and do not "reconcile."
- c. The lease term is from "Effective Date" to November 30, 2024. "Effective Date" is defined

* INTEREST RATE CHANGED DUE TO UPDATED ASSUMPTION OF THE NEW LEASE BEGINNING JULY 1, 2005. THIS RESULTED IN A CHANGE TO THE VALUE OF THE LEASE PAYMENTS OVER THE TERM OF THE LEASE.

in the lease as December 1, 2004; however, the lease will not be recorded on HECO's books until the lease is executed. The response to CA-IR-260 assumed that the lease would be executed on May 1, 2005 and would be amortized over the period May 1, 2005 to November 30, 2024.

Robert C. Hastings, Jr., MAI, CRE
Alan J. Conboy, MAI, SRA
Robert R. Braig, MAI, SRA
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HASTINGS, CONBOY, BRAIG & ASSOCIATES, LTD.

Real Estate Appraisers, Counselors and Economists

February 3, 2005

Mr. Philip Hauret
Senior Land Agent
Land & Rights of Way
Hawaiian Electric Company, Inc.
P.O. Box 2750
Honolulu, Hawaii 96840

RE: Phase I Analysis – Building Improvement Value, HECO Downtown Property

Dear Mr. Hauret:

We are pleased to transmit the results of our PRELIMINARY, PHASE I ANALYSIS of the Hawaiian Electric Company, Inc. (HECO) Downtown Property located at 233 South King Street, Honolulu, Hawaii. The subject property is further identified on State of Hawaii Tax Maps as First Division, Tax Map Key 2-1-16, Parcel 1.

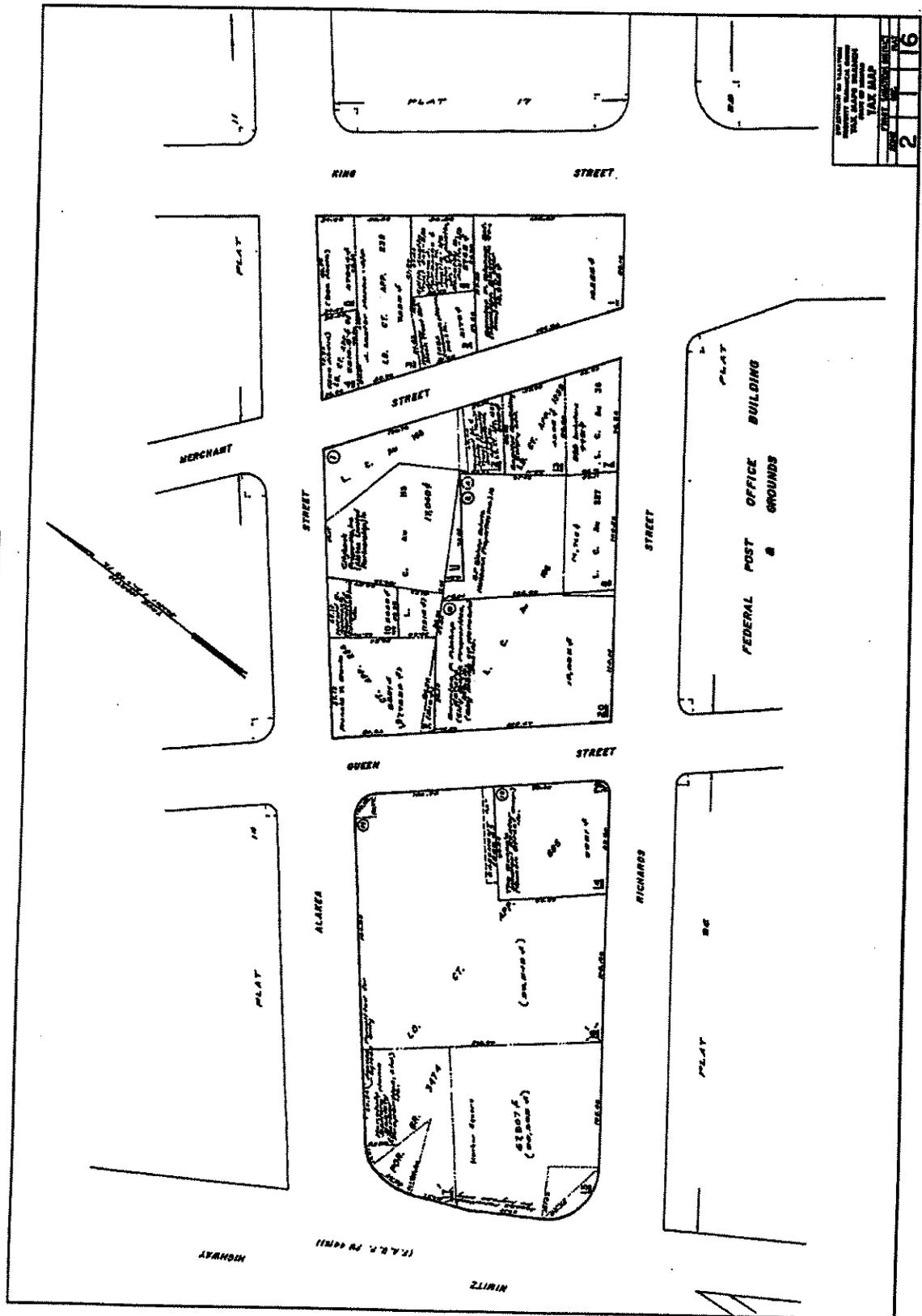
The subject property has a gross land area of 13,255 square feet and is zoned BMX-4, Central Business Mixed Use District, by the City and County of Honolulu. The property is presently leased and occupied by Hawaiian Electric Company, Inc. under a month-to-month agreement with the fee simple land owner, the Trustees of the Estate of Bernice Pauahi Bishop (Bishop Estate). Existing building improvements located on the property consist of a four-story masonry office building, with basement level, originally built in 1927.

ASSIGNMENT

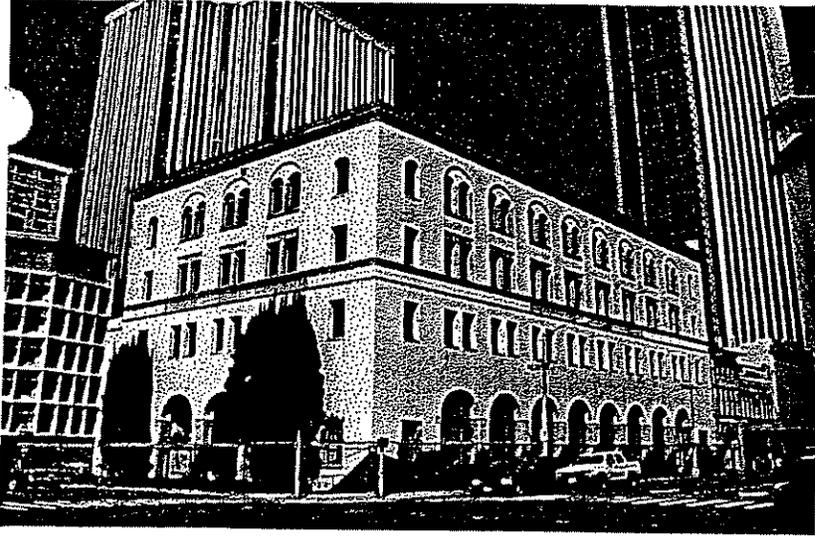
Our assignment is to estimate the "as is" value of Bishop Estate's leased fee interest in the existing building improvements located on the subject property. Due to the existing condition of the subject improvements, our analysis includes the proposed building renovation cost budget prepared by HECO, referred to herein as Exhibit D (Revised). Also, our analysis is based on the assumption that HECO vacates the subject building and that the building would then be available for occupancy at market rent.

Our assignment was to be completed in two phases. Phase 1 was to consist of reporting our preliminary value conclusions. Phase 2 was a completion of the final summary report. As described in our proposal letter (see attached) this letter summarizes the results of our preliminary, Phase I analysis of the "as is" value of the leased fee interest in the subject property's existing building improvements. The effective date of the analysis is February 1, 2005. The function of this analysis is for internal decision making purposes.

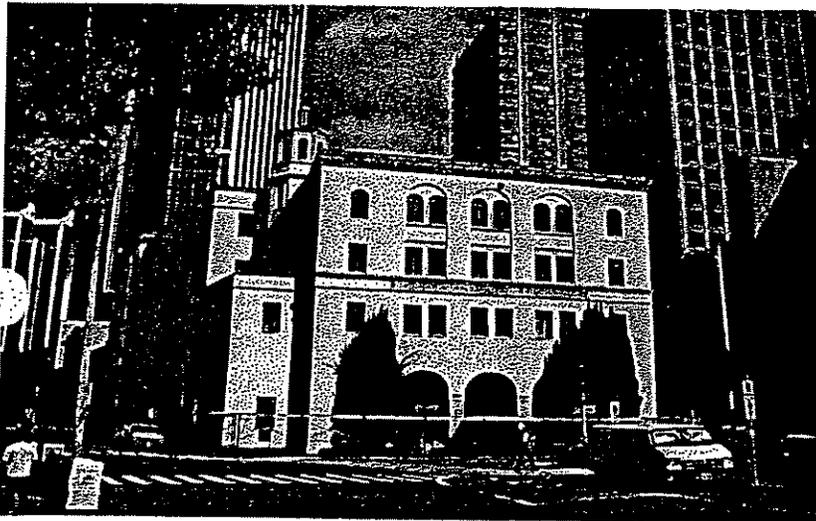
PROPERTY LOCATION MAP
Hawaiian Electric Company
Honolulu, Oahu, Hawaii



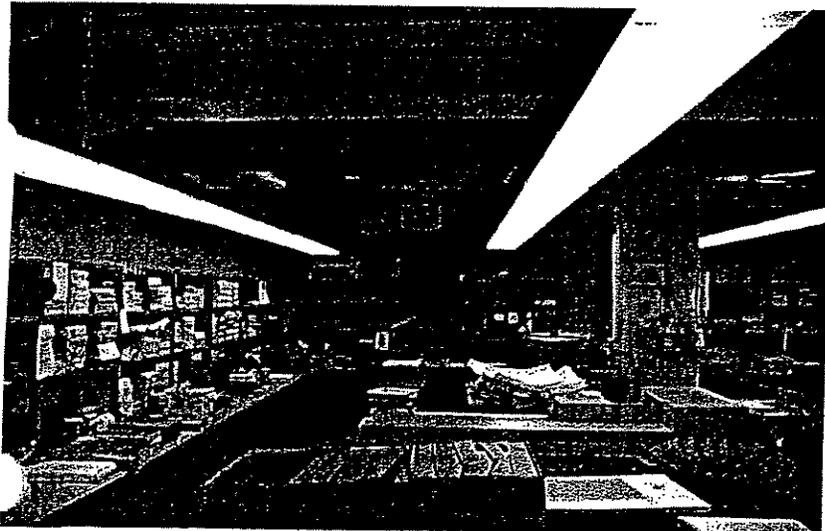
REPRODUCED BY THE HAWAIIAN ELECTRIC COMPANY FROM THE TAX MAP FILE NO. 100-100-100
2 16



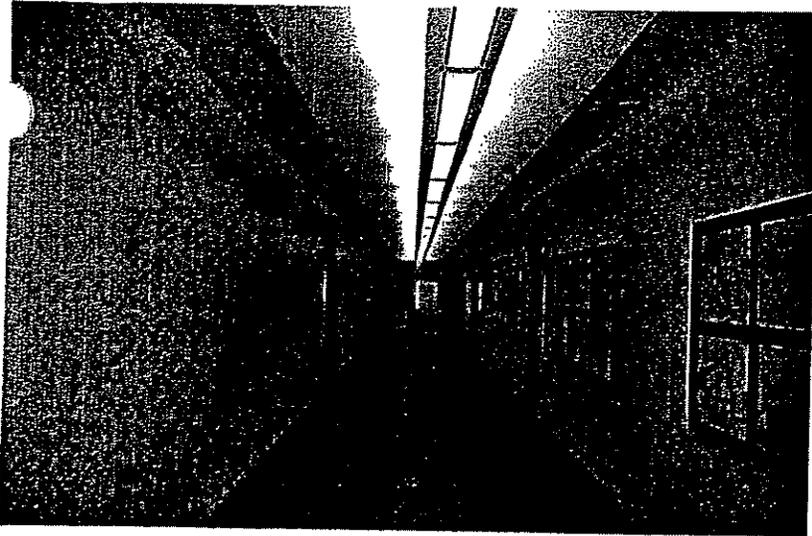
View of subject looking west
across King Street.



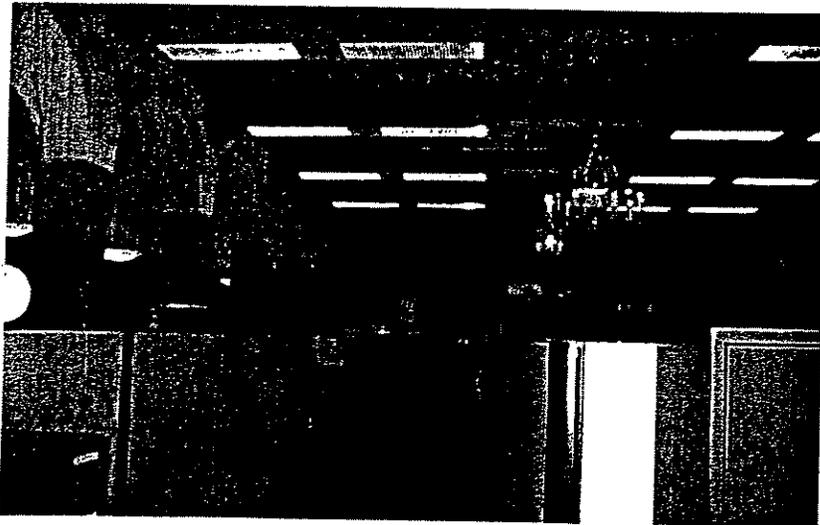
Eastern side of subject looking
west across Richards Street.



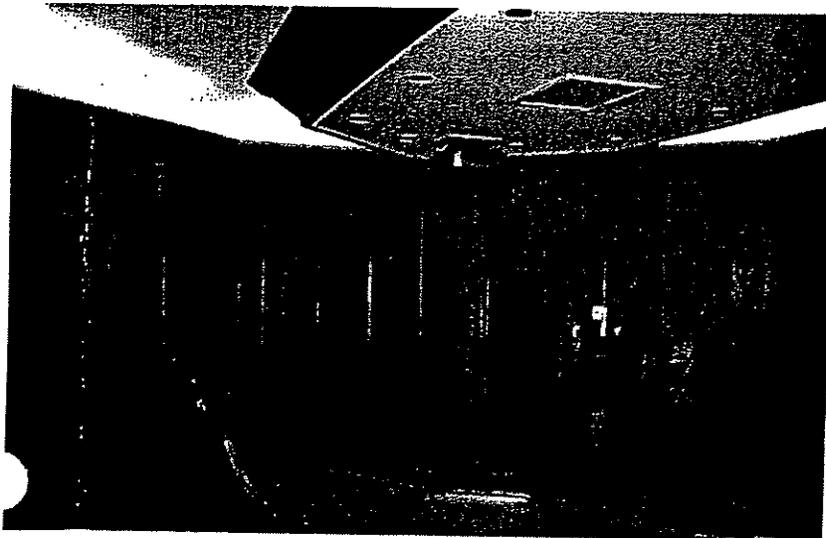
Basement area.



Interior hallway.



Ground floor.



Boardroom.

HECO Downtown Property

PRELIMINARY PHASE 1 ANALYSIS

PROPERTY BACKGROUND

Rentable Floor Areas

The following information regarding rentable floor areas associated with the subject building has been provided to the appraiser by the client.

<u>Floor Level</u>	<u>Gross Interior Square Footage</u>	<u>Non-Rentable Square Footage</u>	<u>Rentable Square Footage</u>
Basement	11,733	2,086	9,647
First/Ground	11,760	1,951	9,809
Second	11,760	1,070	10,690
Third	11,530	910	10,620
Fourth	<u>11,530</u>	<u>1,069</u>	<u>10,461</u>
Total	58,313	7,086	51,227

Estimated Building Renovation Costs, Exhibit D (Revised)

A schedule of estimated building renovation costs, referred to herein as Exhibit D (Revised), is included with this letter. Exhibit D (Revised) has been provided to the appraiser by the client.

PRELIMINARY VALUATION ANALYSIS

Fee Simple Land Value (Sales Comparison Analysis) – Our valuation analysis of the fee simple interest in land associated with the subject property is presented in Table 1. The three selected comparables are as follows. Transaction Number 1 is the recent sale of a 13,246 square-foot site located along Queen Emma Street, adjacent to the “Block J” development site. This site was formerly owned by HECO. Transaction Number 2 is the sale of the 2.386-acre, “Block J” development site, itself, from the City and County of Honolulu to the Pflueger group. Transaction Number 3 is the sale of a 38,177 square-foot site located at the intersection of Nuuanu Avenue and Nimitz Highway in the Chinatown area. This site was purchased by Hawaii National Bank from Bank of Hawaii.

The unadjusted sale prices of the three selected comparables range from \$1.5 to \$10.5 million. Their unadjusted average unit land prices range from approximately \$100.00 to \$150.00 per square foot of gross land area. From a comparative standpoint, each of the selected comparable properties is considered either similar or relatively inferior to the subject property with respect to market conditions (i.e., time of sale), property location, and street frontage/access. Conversely, all three selected comparables are considered substantially superior to the subject property with respect to the category of zoning/building height limit. The subject property has a significantly more restrictive height limit of 65 feet and is also listed on the National Register of Historic Sites.

After adjustments, the fee simple unit land value indications for the subject property range from \$61.08 to 88.01 per square foot of gross land area. The mean average unit land value

Table 1

FEE SIMPLE LAND VALUE ANALYSIS
First Division, Tax Map Key 2-1-16, Parcel 1
233 South King Street, Honolulu, Hawaii

Transaction Number	1	2	3
Subject			
First Division, Tax Map Key	2-1-16-01	2-1-09-18	1-7-02-02
Street Address	233 S. King St.	1212 Queen Emma St.	800 Nuuanu Ave.
Land Area (Sq. Ft.)	13,255	103,139	38,177
City & County Zoning (LUO)	BMX-4	BMX-4	BMX-4
Special District	Hawaii Capital	Hawaii Capital	Chinatown
Historic Site Register	National Register	None	None
Building Height Limit (Feet)	65	350	250
Transaction Date	1/05	6/04	4/04
Instrument/Financing	Deed	Deed	Deed
Sale Price/Indicated Fee Simple Value	\$1,500,000	\$10,500,000	\$5,600,000
Unit Land Value Indication (\$ Per Sq. Ft.)	\$113.24	\$101.80	\$146.69
Market Conditions/Time Factor	1.00	1.00	1.00
Time Adjusted Unit Value	\$113.24	\$101.80	\$146.69
Adjustments (%)			
Location	10%	10%	10%
Zoning and Height Limit	-50%	-50%	-50%
Street Frontage and Access	0%	0%	0%
Net Adjustment (%)	-40%	-40%	-40%
Adjusted Unit Value Before Size	\$67.94	\$61.08	\$88.01
Size Adjustment Factor	1.00	1.00	1.00
Indicated Unit Land Value (\$ Per Sq. Ft.)	\$67.94	\$61.08	\$88.01

Range of Indicated Unit Land Values \$61.08 to \$88.01 per sq. ft.
 Mean Unit Land Value Indication \$72.34 per sq. ft.
 Concluded Unit Land Value \$75.00 per sq. ft.
 Concluded Fee Simple Land Value \$75.00 x 13,255 sq. ft. = \$994,125
 Rounded = \$1,000,000

Source: Hastings, Conboy, Braig & Associates, Ltd., February 2005.

/6947.LTA

indication is \$72.34 per square foot. Based on these indications, we estimate an average fee simple unit land value of \$75.00 per square foot for the 13,255 square-foot subject property. This results in an estimated fee simple land value of \$1,000,000 as indicated by our sales comparison analysis.

Leased Fee Property Value, As Improved (Discounted Cash Flow Analysis) – Our valuation analysis of the leased fee value of the subject property, as improved, is summarized in Tables 2 and 3. For this Phase I portion of the assignment, two alternative discounted cash flow schedules are presented, each based on a different leasing forecast. Table 2 presents Leasing Scenario No. 1, and Table 3 presents Leasing Scenario No. 2. The primary differences among these two forecasted leasing scenarios are outlined in the following paragraphs, which summarize the various assumptions and forecasts utilized to derive our valuation estimates.

Revenues/Income – Forecasted Potential Gross Income consists of a combination of Base Rents, Common Area Maintenance (CAM) Expense Recovery, and General Excise Tax (GET) Expense Recovery. Forecasted Effective Gross Income is equal to Potential Gross Income less Vacancy and Credit Loss.

- Potential Base Rents are forecast as follows. In both Scenario Nos. 1 and 2, Base Rents in Year 1 are forecast at: \$1.00 per square foot of rentable floor area per month for the Basement; \$3.00 per square foot of rentable floor area for the Ground Floor; and \$1.50 per square foot of rentable floor area per month for Floors 2, 3, and 4. Also, in both scenarios, Base Rents are forecast to increase at a constant rate of three percent (3.0%) annually throughout a projected, ten-year investment holding period.
- Potential CAM Recovery is equal to one hundred percent (100.0%) of the forecasted CAM Expenses, based on the assumption of an absolute net lease(s).
- Potential GET Recovery is forecast at 4.166 percent of all other sources of Potential Gross Income.
- Vacancy and Credit Loss is forecast as follows. In Scenario No. 1, the annual Vacancy and Credit Loss factor is forecast at fifty percent (50.0%) in Year 1, twenty-five percent (25.0%) in Year 2, and stabilized at ten percent (10.0%) starting in Year 3. In Scenario No. 2, the annual Vacancy and Credit Loss factor is forecast at thirty-three percent (33.0%) in Year 1, fifteen percent (15.0%) in Year 2, and stabilized at ten percent (10.0%) starting in Year 3.

Operating Expenses – Annual Operating Expenses consists of a combination of Building Renovation Costs, CAM Expenses, General Excise Tax (GET), Tenant Improvement Allowances, Leasing Commissions, and Reserves for Repairs and Replacements.

- Building Renovation Costs are forecast as follows. In Year 1, \$3,505,000. In Year 2, \$2,060,000 (equal to \$2,000,000 escalated at three percent annually for one year). In Year 5, \$1,069,200 (equal to \$950,000 escalated at three percent annually for four

Table 2

DISCOUNTED CASH FLOW ANALYSIS NO. 1 (Leasing Scenario No. 1)
HECO Downtown Property
233 South Kline Street, Honolulu, Hawaii

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
REVENUES/INCOME											
Base Rent Income, Basement Level	\$115,760	\$119,240	\$122,810	\$126,500	\$130,290	\$134,200	\$138,230	\$142,380	\$146,650	\$151,050	\$155,580
Base Rent Income, Ground Floor Retail	353,120	363,720	374,630	385,870	397,440	409,370	421,650	434,300	447,330	460,750	474,570
Base Rent Income, Floors 2, 3 & 4, Office	571,880	589,030	606,710	624,910	643,650	662,960	682,850	703,340	724,440	746,170	768,560
CAM Expense Recovery	522,520	538,200	554,350	570,980	588,110	605,750	623,920	642,640	661,920	681,780	702,230
General Excise Tax Recovery	65,130	67,080	69,090	71,170	73,300	75,500	77,760	80,100	82,500	84,980	87,530
POTENTIAL GROSS INCOME	\$1,628,410	\$1,677,270	\$1,727,590	\$1,779,430	\$1,832,790	\$1,887,780	\$1,944,410	\$2,002,760	\$2,062,840	\$2,124,730	\$2,188,470
Vacancy and Credit Loss	814,210	419,320	172,760	177,940	183,280	188,780	194,440	200,280	206,280	212,470	218,850
EFFECTIVE GROSS INCOME	\$814,200	\$1,257,950	\$1,554,830	\$1,601,490	\$1,649,510	\$1,699,000	\$1,749,970	\$1,802,480	\$1,856,560	\$1,912,260	\$1,969,620
EXPENSES											
Building Renovation Costs	\$3,505,000	\$2,060,000	\$0	\$0	\$1,069,200	\$0	\$0	\$0	\$0	\$0	\$0
CAM Expenses	522,520	538,200	554,350	570,980	588,110	605,750	623,920	642,640	661,920	681,780	702,230
General Excise Tax	32,570	50,320	62,190	64,060	65,980	67,960	70,000	72,100	74,260	76,490	78,780
Tenant Improvements Allowances	130,000	65,000	37,500	0	0	0	0	0	0	0	0
Leasing Commissions	78,000	39,000	22,500	16,010	16,500	16,990	17,500	18,020	18,570	19,120	19,700
Reserves for Repairs and Replacements	16,280	25,160	31,100	32,030	32,990	33,980	35,000	36,050	37,130	38,250	39,390
TOTAL EXPENSES	4,284,370	2,777,680	707,640	683,080	1,772,780	724,680	746,420	768,810	791,880	815,640	840,100
NET OPERATING INCOME	(\$3,470,170)	(\$1,519,730)	\$847,190	\$918,410	(\$123,270)	\$974,320	\$1,003,550	\$1,033,670	\$1,064,680	\$1,096,620	\$1,129,520
Present Value Factor	0.8969	0.8044	0.7214	0.6470	0.5803	0.5204	0.4667	0.4186	0.3754	0.3367	
Net Present Value	(\$3,112,400)	(\$1,222,500)	\$611,200	\$594,200	(\$71,500)	\$507,000	\$468,400	\$432,700	\$399,700	\$369,200	(\$1,024,000)
CUMULATIVE NET PRESENT VALUE	(\$3,112,400)	(\$4,334,900)	(\$3,723,700)	(\$3,129,500)	(\$3,201,000)	(\$2,694,000)	(\$2,225,600)	(\$1,792,900)	(\$1,393,200)	(\$1,024,000)	

PRESENT VALUE OF CASH FLOW	
Eleventh Year Net Cash Flow	\$1,129,520
Capitalization Rate	0.090
Estimated Sales Price Year 11	\$12,550,200
Less Disposition Costs at 2.0%	251,000
Net Sales Proceeds	\$12,299,200
Present Value Factor	0.3367
PRESENT VALUE OF REVERSION	\$4,141,100
INDICATED PROPERTY VALUE	\$3,117,100
	ROUNDED
	\$3,120,000

Source: Hastings, Conboy, Braig, & Associates, Ltd., February 2005.

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Table 3

DISCOUNTED CASH FLOW ANALYSIS NO. 2 (Leasing Scenario No. 2)
HECO Downtown Property
233 South King Street, Honolulu, Hawaii

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11
REVENUES/INCOME											
Base Rent Income, Basement Level	\$115,760	\$119,240	\$122,810	\$126,500	\$130,290	\$134,200	\$138,230	\$142,380	\$146,650	\$151,050	\$155,580
Base Rent Income, Ground Floor Retail	353,120	363,720	374,630	385,870	397,440	409,370	421,650	434,300	447,330	460,750	474,570
Base Rent Income, Floors 2, 3 & 4, Office	571,880	589,030	606,710	624,910	643,650	662,960	682,850	703,340	724,440	746,170	768,560
CAM Expense Recovery	522,520	538,200	554,350	570,980	588,110	605,750	623,920	642,640	661,920	681,780	702,230
General Excise Tax Recovery	65,130	67,080	69,090	71,170	73,300	75,500	77,760	80,100	82,500	84,980	87,530
POTENTIAL GROSS INCOME	\$1,628,410	\$1,677,270	\$1,727,590	\$1,779,430	\$1,832,790	\$1,887,780	\$1,944,410	\$2,002,760	\$2,062,840	\$2,124,730	\$2,188,470
Vacancy and Credit Loss	537,380	251,590	172,760	177,940	183,280	188,780	194,440	200,280	206,280	212,470	218,850
EFFECTIVE GROSS INCOME	\$1,091,030	\$1,425,680	\$1,554,830	\$1,601,490	\$1,649,510	\$1,699,000	\$1,749,970	\$1,802,480	\$1,856,560	\$1,912,260	\$1,969,620
EXPENSES											
Building Renovation Costs	\$3,505,000	\$2,060,000	\$0	\$0	\$1,069,200	\$0	\$0	\$0	\$0	\$0	\$0
CAM Expenses	522,520	538,200	554,350	570,980	588,110	605,750	623,920	642,640	661,920	681,780	702,230
General Excise Tax	43,640	57,030	62,190	64,060	65,980	67,960	70,000	72,100	74,260	76,490	78,780
Tenant Improvements Allowances	170,000	45,000	12,500	0	0	0	0	0	0	0	0
Leasing Commissions	102,000	27,000	15,550	16,010	16,500	16,990	17,500	18,020	18,570	19,120	19,700
Reserves for Repairs and Replacements	21,820	28,510	31,100	32,030	32,990	33,980	35,000	36,050	37,130	38,250	39,390
TOTAL EXPENSES	4,364,980	2,755,740	675,690	683,080	1,772,780	724,680	746,420	768,810	791,880	815,640	840,100
NET OPERATING INCOME	(\$3,273,950)	(\$1,330,060)	\$879,140	\$918,410	(\$123,270)	\$974,320	\$1,003,550	\$1,033,670	\$1,064,680	\$1,096,620	\$1,129,520
Present Value Factor	0.8969	0.8044	0.7214	0.6470	0.5803	0.5204	0.4667	0.4186	0.3754	0.3367	
Net Present Value	(\$2,936,400)	(\$1,069,900)	\$634,200	\$594,200	(\$71,500)	\$507,000	\$468,400	\$432,700	\$399,700	\$369,200	(\$672,400)
CUMULATIVE NET PRESENT VALUE	(\$2,936,400)	(\$4,006,300)	(\$3,372,100)	(\$2,777,900)	(\$2,849,400)	(\$2,342,400)	(\$1,474,000)	(\$1,441,300)	(\$1,041,600)	(\$672,400)	\$1,129,520

PRESENT VALUE OF CASH FLOW	
Eleventh Year Net Cash Flow	\$1,129,520
Capitalization Rate	0.090
Estimated Sales Price Year 11	\$12,550,200
Less Disposition Costs at 2.0%	251,000
Net Sales Proceeds	\$12,299,200
Present Value Factor	0.3367
PRESENT VALUE OF REVERSION	\$4,141,100
INDICATED PROPERTY VALUE	\$3,468,700
	ROUNDED
	\$3,470,000

Source: Hastings, Conboy, Brigg & Associates, Ltd., February 2005.

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Initial Improvements

EXHIBIT D

Project Name/Description	Start Year*	Estimated Cost	Contractor
Chillwater Pipe/Reinsulate Pipes (attic) - Note 1	2004	\$82,000	Heldt & Cooke
Downspout Replacement - Note 2	2004	\$75,000	Heldt & Cooke
Replace or Refurbish Passenger Elevators - Note 3	2004-2006	\$300,000	ThyssenKrupp Elevator
Attic Project-Relocate Chillers Outside of Building	2005	\$155,000	TBD
Electrical Improvements to comply w/code (part 1) - Note 4	2005	\$250,000	Bennett Engineers Inc.
Window Replacement - Note 5	2005	\$1,125,000	TBD
HVAC Replacement - Note 5	2005-2006	\$3,300,000	See below**
Fire Sprinkler Installation	2006	\$250,000	TBD
Basement Leak Repairs	2004	\$25,000	TBD
Thermal/Moisture Protection of Exterior Walls	2006	\$350,000	TBD
Electrical improvements to comply w/code (part 2) - Note 4	2009	\$500,000	TBD
Roof Restoration/Reroof Building	2009	\$300,000	TBD
Building Sewer Improvements	2006	\$1,000,000	TBD
Assessment/Repair Exterior Walls***		\$150,000	TBD
Freight Elevator Restoration	2016	\$250,000	TBD
Electrical Upgrades (Emergency power, UPS, electric rooms)	2016	\$1,000,000	TBD
TOTAL		\$9,122,000	

* Anticipated

** Engineering Consultant: Miyashiro & Associates Inc.
Electrical Consultant: Bennett Engineers Inc.
Architectural Consultant: Richard Matsunaga & Associates Architects Inc.
A/C Contractor: Bids will be requested from Heldt & Cooke, Continental Mechanic,
Oshu Plumbing & Economy Plumbing

*** May need to do the work sooner

Note 1 - Work on attic pipes in progress; anticipate completion in December 2004; non-attic chillwater pipes work will be done as part of HVAC project.

Note 2 - (corroded interior spouts) Work completed, except for wall touch-up. HECO has paid \$47,968 to date.

Note 3 - HECO payment of \$84,125 already made as partial payment for major parts; installation planned for January 2005.

Note 4 - Electrical retrofit

Note 5 - Replacement of all windows, frames and perimeter frames

Note 5 - Includes replacement of chillerplant, pumps, cooling towers, chillwater pipes, condenser water piping, air handlers and air distribution ducts.

years). In all other years, Building Renovation Costs are forecast at zero dollars. All proposed renovation costs scheduled to occur after calendar year 2015 are disregarded for purposes of this analysis.

- CAM Expenses are forecast at \$0.85 per square foot of rentable floor area per month in Year 1 and escalated at three percent (3.0%) annually thereafter.
- GET is forecast at four percent (4.0%) of Effective Gross Income.
- Tenant Improvement Allowances are forecast as follows. In Scenario No. 1, at \$5.00 per square foot of rentable floor area multiplied by 26,000 square feet in Year 1; 13,000 square feet in Year 2; and 7,500 square feet in Year 3. In Scenario No. 2, at \$5.00 per square foot of rentable floor area multiplied by 34,000 square feet in Year 1; 9,000 square feet in Year 2; and 2,500 square feet in Year 3.
- Leasing Commissions are forecast as follows. In Scenario No. 1, at \$3.00 per square foot of rentable floor multiplied by 26,000 square feet in Year 1; 13,000 square feet in Year 2; 7,500 square feet in Year 3; and at one percent (1.0%) of Effective Gross Income thereafter starting in Year 4. In Scenario No. 2, at \$3.00 per square foot of rentable floor multiplied by 34,000 square feet in Year 1; 9,000 square feet in Year 2; and at one percent (1.0%) of Effective Gross Income thereafter starting in Year 3.
- Reserves for Repairs and Replacement are forecast at two percent (2.0%) of Effective Gross Income.

Net Operating Income -- Deducting Operating Expenses from Effective Gross Income results in the annual Net Operating Income forecast for the subject property. This future net income stream is discounted to a corresponding net present value based on an annual Internal Rate of Return (IRR) requirement (i.e., Discount Rate) of 11.5 percent. The selected discount rate is supported by recent published results of the Korpacz Real Estate Investor Survey and information gathered from interviews with local commercial investment firms.

Reversionary Interest in the Property -- The reversionary interest in the subject property is based on the assumption that the property is sold at the end of the tenth year of the cash flow analysis. This anticipated future disposition value is adjusted downward for selected marketing costs and then discounted to a corresponding net present value indication.

In this analysis, the subject property's forecasted Net Operating Income in Year 11 is converted into a forecasted future sale price based on an overall, Terminal Capitalization Rate of 9.0 percent. This terminal capitalization rate is supported by the results of the Korpacz Survey. After deducting a two percent allowance for sale disposition and marketing costs, the resulting net sale proceeds are discounted to a present value indication at an 11.5 percent internal rate of return.

HECO Downtown Property

PRELIMINARY PHASE I ANALYSIS

Leased Fee Property Value Estimates -- The sum of the net present value indications corresponding to the forecasted ten-year Net Operating Income stream and the anticipated Reversionary Interest represents the market value of the leased fee interest in the subject property, as improved. For the two alternative scenarios, the value estimates indicated by our ten-year, discounted cash flow analysis of the subject property are as follows:

Scenario No. 1 (See Table 2)	\$3,120,000
Scenario No. 2 (See Table 3)	\$3,470,000

Building Improvement Value (Leased Fee Property Value Less Fee Simple Land Value) -- The "as is" value of Bishop Estate's leased fee interest in the existing building improvements located on the subject property is estimated by deducting the estimated Fee Simple Land Value from the estimated Leased Fee Property Value. In Scenario No. 1, the Leased Fee Property Value is estimated at \$3.12 million, and in Scenario No. 2, the Leased Fee Property Value is estimated at \$3.47 million. The subject property's fee simple land value is estimated at \$1.0 million. Based on these value indications, the "as is" value of leased fee interest in the existing building improvements located on the subject property is estimated to range from \$2,120,000 to \$2,470,000 as indicated below.

	<u>Estimated Property Value</u>	<u>Less Estimated Land Value</u>	<u>Estimated Building Value</u>
Scenario No. 1	\$3,120,000	\$1,000,000	\$2,120,000
Scenario No. 2	\$3,470,000	\$1,000,000	\$2,470,000

CERTIFICATION

The undersigned hereby certifies that, to the best of their knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial and unbiased professional analyses, opinions, and conclusions.
- We have no present or prospective interest in the property that is the subject of this report, and have no personal interest with respect to the parties involved.
- We have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
- Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated

HECO Downtown Property

PRELIMINARY PHASE 1 ANALYSIS

result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.

- The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- Robert R. Braig, MAI, SRA and Ricky P. Minn have made a personal inspection of the property that is the subject of this report.
- No one provided significant real property appraisal assistance to the person signing this certification.
- As of the date of this report Robert R. Braig, MAI, SRA has completed the requirements of the continuing education program of the Appraisal Institute.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

February 3, 2005


Robert R. Braig, MAI, SRA
State Certified General Appraiser, CGA-149
Certificate Expires: December 31, 2005


Ricky P. Minn

/6947.Phase 1

**CONTRACT OF
APPRAISAL SERVICES**

Robert C. Hastings, Jr., MAI, CRE
Alan J. Conboy, MAI, SRA
Robert R. Braig, MAI, SRA
Ricky P. Minn
Don H. Kono, MAI
Robert C. Hastings, III, MAI
Liza F. Hernadez
Elsie R. Rose, CCIM

HASTINGS, CONBOY, BRAIG & ASSOCIATES, LTD.

Real Estate Appraisers, Counselors and Economists

December 30, 2004

Mr. Phil Hauret
Hawaiian Electric Company
PO Box 2750
Honolulu, Hawaii 96840

Dear Mr. Hauret:

Assignment

This letter will serve as our proposal to provide you with a counseling report addressing the value of the improvements in the Hawaiian Electric Building located at 233 South King Street, Honolulu, Hawaii. The property is further identified on Hawaii Tax Maps as First Division, Tax Map Key 2-1-16, Parcel 1 containing a gross land area of 13,255 square feet.

The function of this analysis is for internal decision making purposes. This analysis will be performed in conformance with and will be subject to the requirements of the Uniform Standards of Professional Appraisal Practice (USPAP) of the Appraisal Foundation, and Code of Professional Ethics and Standards of Professional Conduct of the Appraisal Institute. The use of the report is subject to the requirements relating to review by duly authorized representatives of the Appraisal Institute.

Proposed Scope of Services

Per your request, this analysis will be limited to valuing the "as is" leased fee interest in the subject improvements assuming HECO vacates the building. Our analysis will consider any improvements which will be required for deferred maintenance plus tenant improvement. Furthermore, we will project market rents, absorption and marketing costs for an assumed lease-up of the property on a multi-tenant basis. The estimated value of the land will be deducted from the leased fee value to estimate the value of the improvements. This assignment will be completed in two phases. Phase One will consist of reporting our preliminary value conclusions. Phase Two will be completion of the report. The results of this analysis will be communicated in the form of a brief summary report.

Our report will be subject to various conditions and assumptions appropriate to our analysis and conclusions. Typical assumptions and conditions are in the attached Addendum.

Required Items for This Assignment

To complete this assignment, we will require the following:

1. Copy of and/or summary of the building improvements.
2. Gross and net leasable areas of the subject building and floor plans, if available.

Proposed Fees and Timing

Based on our present staff availability, we anticipate that we can complete Phase One of our analysis within five to six weeks from the receipt of your written authorization and retainer. Phase Two will require an additional two weeks.

Professional fees charged by our firm are computed on the basis of the complexity of the problem and the time spent by members of our staff at their established billing rates, plus reimbursement of out-of-pocket expenses. We estimate that the first phase of this assignment can be completed for a fee ranging from \$5,500 to \$6,000 plus gross excise tax. Should you wish to complete this assignment, the second phase can be completed for additional fee ranging from \$1,000 to \$1,500.

It is our standard practice to require a 60 percent retainer at the commencement of an assignment; the balance upon delivery of the report. If the balance is not received within 15 days, a one percent per month interest fee will be charged. If the terms of this letter are satisfactory, please acknowledge your authorization by signing and dating a copy of this letter and returning it together with your check in the amount of \$3,300.

The terms and conditions of this proposal are based on present and anticipated staff availability. If the executed copy of this proposal and retainer are not received before January 10, 2004, we reserve the right to reschedule the anticipated date of delivery and revise the estimated fee.

If you have any questions regarding the scope of the assignment or wish to clarify this proposal, please contact us at your earliest convenience. We look forward to working with you on this assignment.

Sincerely,
**HASTINGS, CONBOY, BRAIG
& ASSOCIATES, LTD.**



Robert R. Braig, MAI, SRA
Executive Vice President



Ricky Minn
Senior Vice President

deps
APPROVED:
HAWAIIAN ELECTRIC COMPANY
By: *Suzanne*
(Authorized Signature)
Date: JANUARY 4, 2004 5

ADDENDUM
(Page 1)

CONTRACT ADDENDUM REGARDING APPRAISAL ASSUMPTIONS AND CONDITIONS

Our report will be subject to the following conditions and assumptions which will constitute the primary framework of our analysis and conclusions. Various other assumptions and limiting conditions may be required to complete the assignment.

1. The appraisal will be based upon the present condition of the national economy and the present purchasing power of the dollar.
2. The report will express the opinion of the signer(s) on a specified date; in no way will it be contingent upon the reporting of specified values or findings.
3. It will be assumed that the subject property is free and clear of any and all encumbrances other than those referred to in the report, and no responsibility will be assumed for matters of a legal nature. The report will not be construed as rendering any opinion of title, which will be assumed to be good and marketable.
4. Any maps or plot plans reproduced and included in the report will be intended only for the purpose of showing special relationships. They are not necessarily measured surveys or measured maps, and we will not be responsible for topographic or surveying errors. No liability will be assumed for soil conditions, bearing capacity of the subsoil or for engineering matters relating to proposed or existing structures.
5. The appraiser will not give testimony or appear in court because of having made this appraisal unless arrangements for the appearance and the fee for such appearance have been agreed upon by the person or corporation requiring such testimony.
6. The value conclusions reported will assume completion of any proposed improvements in accordance with furnished architectural plans.
7. When the appraisal report contains an allocation of the total valuation between land and improvements such allocation applies only under the existing program of utilization. The separate valuations for land and building can not be used in conjunction with any other appraisal and will be invalid if so used.
8. When the appraisal report contains a valuation relating to a geographical portion or tract of real estate, the value reported for such geographical portion relates to such portion only and should not be construed as applying with equal validity to other portions of the larger parcel or tract, and, the value reported for such geographical portion plus the value of all other geographical portions may or may not equal the value of the entire parcel or tract considered as an entity.

ADDENDUM
(Page 2)

9. When the appraisal report contains a valuation relating to an estate in land that is less than the whole fee simple estate, the value reported for such estate relates to a fractional interest only in the real estate involved and, the value of this fractional interest plus the value of all other fractional interests may or may not equal the value of the entire fee simple estate considered as a whole.
10. Information provided by informed local sources such as governmental agencies, financial institutions, Realtors, buyers, sellers and others, will be weighed in the light in which it was supplied and checked by secondary means where possible; however, no responsibility will be assumed for possible misinformation.
11. Possession of the report, or a copy thereof, does not carry with it the right of publication, and the report may not be used by any person or organization except the client without the previous written consent of the appraiser, and then only in its entirety.
12. Disclosure of the contents of the report is governed by the Bylaws and Regulations of the Appraisal Institute. The contents of the report (especially any conclusions as to value, the identity of the appraiser, or the firm with which he or she is connected, or any reference to the Appraisal Institute, or the MAI or SRA designation) shall not be disseminated to the public through advertising, public relations, news, sales, or any public means of communication without prior written consent and approval.

HASTINGS, CONBOY, BRAIG & ASSOCIATES, LTD.

Real Estate Appraisers, Counselors and Economists

1067 Alaiea Street / Honolulu, Hawaii 96813 / Telephone (808) 524-1700 / Fax (808) 538-1337

GENERAL

Hastings, Conboy, Braig & Associates, Ltd. (HCBA) is one of the largest real estate counseling firms headquartered in the State of Hawaii. The firm has a staff of professional real estate counselors, appraisers, economists and market analysts, and investment analysts. Its staff has extensive experience analyzing and appraising South and West Pacific real estate; three members hold designations from the American Institute of Real Estate Appraisers (MAI) and from the Society of Real Estate Appraisers (SRPA). Associated companies offer development management, real estate brokerage, and investment services.

The firm assists clients with solutions to real estate problems. Its purpose is to provide sound and objective analysis directed toward reducing the financial risks inherent in the real estate decision-making process. This is accomplished by the application of intensive research and analysis to interpreting the dynamics influencing real estate markets and real estate investments, and the subsequent identification of opportunities and courses of action which can be profitably employed.

In executing its assignments, HCBA utilizes the broad experience of its highly qualified staff to identify specific problem areas associated with client programs and to structure and implement effective solutions.

Hastings, Conboy, Braig & Associates, Ltd. maintains an extensive technical library of books, monographs, journals and special statistical compilations in the fields of land use, recreation, investment analysis, urban planning and development. Surveys of market conditions for a variety of land use are maintained in our library and updated constantly. In conjunction with being headquartered in Hawaii, these library resources allow HCBA to closely monitor local real estate developments and activity. On an annual basis, HCBA receives the operating statistics from approximately 60 office buildings, and 26 shopping centers, which are compiled into the Hawaii version of the BOMA, and ICSC annual exchange reports.

Our clients include builders and developers, financial institutions and advisors, corporations, private individuals, estates, and governmental agencies at all levels.

PROFESSIONAL SERVICES

Problem solving is a major function of HCBA. Although specific services and approaches to problems differ from case to case, they may be generally described by the following basic types of studies. Study results can be evaluated utilizing the computerized analysis program to determine financial feasibility and to calculate measurements of project performance.

Real Estate Investment Counseling — Determination and evaluation of effective real estate investment strategies including project selection, analysis of highest and best use, and determination of optimum development strategy based upon an iterative process of conceptualizing and evaluating alternative development schemes.

Market Value Appraisal — Valuations for mortgage loans, investment counseling, lease negotiations, condemnation, assessment appeal and policy decisions. Appraisals extend to a variety of properties, including income properties, existing and proposed resort and residential developments, industrial properties, high-rise office buildings and condominiums, hotels and apartments, sugar plantations and large vacant acreage ownerships.

Negotiation/Arbitration — Counseling on space and ground lease rents for original negotiation or reporting and availability as arbiters when agreement between principals cannot be reached.

Special Valuation Assignments — Estimates of value diminution or enhancement caused by public policy decisions, analysis and quantification of cost-benefit effects, future value projections, portfolio reviews, corporate planning and disposition strategy studies, and analysis and valuation of air rights, easements and water rights.

Resort and Recreation Projects — Application of travel, recreation and leisure trends to determination of demand for transient and recreation

accommodations and services, including determination of sources of patronage and consumer preferences, in addition to marketing strategies for sale of recreation properties.

Housing Marketing Studies — Analysis of housing marketing conditions, determination of consumer housing preferences, and identification of housing market opportunity areas; including analysis of single family and multiple family projects regarding pricing, sizing and marketing strategies.

Retail Analysis — Determination of market area sales potential and penetration estimates for specific sites based upon locational attributes and relationship to competitive facilities, including on-site analysis to coordinate functional uses to facilitate merchandising space and maximizing overall return.

Office Space Analysis — Measurement of office space supply including tenancy, vacancy, rental patterns; evaluation of demand factors leading to forecasts of office space demand for whole communities, specific subareas, and individual sites; and translation of supply and demand factors into prospects for particular projects.

Industrial Studies — Analysis of local labor markets and economic conditions to determine industrial space requirements, including site analysis to evaluate competitive positions within the market structure.

HASTINGS, CONBOY, BRAIG & ASSOCIATES, LTD.

Major Clientele

Commercial Banks and Thrift Institutions

Bancorp Finance
Bank of America
Bank of Hawaii
Bank of Honolulu
Bank of Maui
Central Pacific Bank
City Bank of Honolulu
Crocker National Bank
First Hawaiian Bank
First Hawaiian Credit Corp.
First National Bank - Seattle
GECC Financial Corp.
Honfed Bank
Pioneer Savings Bank
Westpac Banking

Savings Institutions

American Savings & Loan Association
Citizens Federal Savings & Loan
Coast Savings & Loan
Continental Savings & Loan
First Federal Savings & Loan Association
Pacific Coast Mortgage
Provident Federal Savings
State Savings & Loan Association
Territorial Savings & Loan Association

Insurance Companies and Pension Funds

American National Life Insurance Co.
Bankers Life of Nebraska
Equitable Life Assurance Co.
John Hancock
Mutual of Omaha
Prudential Life Insurance Co.
Teachers Insurance Co.

Mortgage Bankers/Brokers

Brooks Harvey & Co.
Dwyer Curlett
Fidelity Pacific
Nagy & Thoele Ltd.
Sherwood & Roberts
Sonnenblick-Goldman

Investors and Investment Groups

American Land Company
A.E. LePage Limited
Duty Free Shoppers
Hawaiian Airlines
North American Acceptance Corp.
Pocklington Enterprises
Shidler & Company
Title Insurance & Trust Co.

Investment Bankers

E.F. Hutton & Company
First Boston Corporation
Kidder Peabody
Morgan Stanley Co., Inc.
Saloman Brothers

Accounting Firms

Ernst & Whinney
Grant Thornton
Peat Marwick Main
Touche Ross & Co.

Trusts and Estates

American Trust Company
Bernice Pauahi Bishop Estate
Bishop Trust Company
Harold K.L. Castle Estate
Hawaiian Trust Company
James B. Campbell Estate
Liliuokalani Trust
Magoon Estate
McCandless Properties
Moody Estate

Builders, Developers and Industrial Firms

Alcoa
Alexander & Baldwin
Amelco Corp.
Amfac, Inc.
Asahi Development
Aston Hotels & Resorts
Blackfield Hawaii Corp.
Bedford Properties
Boise Cascade
Campbell Industrial Park
Castle & Cooke, Inc.
Charles Pankow Builders
Chevron U.S.A.
Cooke Land Company, Inc.
C. Brewer & Co., Ltd.
Dillingham Land Corporation
Dow Chemical
Frito-Lay of Hawaii
Gentry Pacific, Ltd.
GO Financial Group
Grosvenor International (Hawaii), Inc.
Hawaiian Land Company
Hemmeter Investment Co.
Herbert K. Horita
Honest Corp.
HTH Corporation
James Schuler & Associates
Jardine Matheson
JGL Enterprises
Kalus Kai Corporation
Kamehameha Development Corp.
Lewers & Cooke
Lone Star Hawaii, Inc.
Lusk Hawaii
Makana Resort
Mauna Kea Properties
McCormack Land Co., Ltd.
McDonald's of Hawaii
Oceanic Properties
Opperman-Simpson Co.
Pacific Construction Co.
Pacific Resources, Inc.
Princeville Corporation
Seatrain Lines
Signal Properties
The Petty Corporation
Theo H. Davies & Company, Ltd.
Wailea Land Corp.

Government Agencies

City and County of Honolulu—
Department of Transportation
County of Hawaii
County of Kauai
General Services Administration (GSA)
Hawaii Housing Authority

Government Agencies (continued)

Marianas Public Land Corporation,
Commonwealth of the Marianas
Maui Redevelopment Agency
National Park Service
State of Hawaii—
Department of Planning & Economic
Development
U.S. Department of Commerce—
Economic Development Administration
U.S. Department of Interior
U.S. Department of Transportation
U.S. Fish and Wildlife Service

Others

Belt, Collins & Associates
Brewer Chemical Co.
Hawaiian Electric Co.
Hawaiian Telephone Co.
Holiday Inns, Inc.
Honolulu International Airport
MCI Telecommunications
Northwest Airlines
Pacific International
Public Storage, Inc.
Rosewood Properties, Inc.
Safeway Stores, Inc.
Texaco, Inc.
The Nature Conservancy
United Airlines
Westin Hotels

Foreign Corporations and Banks

Asahi
Azabu
Bank of Tokyo
Chitose
Chiyoda Hawaii
Hachidai USA, Inc.
Hasegawa Komuten (USA), Inc.
Industrial Bank of Japan, Ltd.
Itoman Total Housing
JAL Development
Japan Travel Bureau, Inc.
Kumagai Gumi
Kyo Ya Company
Misawa Resorts
Mitsubishi Trust & Bank Corp.
Mitsui Trust and Bank
Mizuno Kohgyo
Nakano Company, Ltd.
Nippon Meat Packers
Nippon Shinpan
Nissho Iwai Corp.
Nissin Construction
Nomura Securities
Obayashi Gumi
ORIX Corporation
Otaka, Inc.
Seibu Hawaii, Inc.
Sports Shinko
Sukamoto Holdings
Sumitomo Corporation
Taisei Corporation
Taisei Koyu Company
Takenaka Komuten Company
Tayasu Shoji Company

**PROFESSIONAL QUALIFICATIONS OF
ROBERT R. BRAIG, MAI, SRA**

Professional Affiliations

Appraisal Institute - MAI and SRA designations
Qualified Instructor for Course 201 - Principles of Income Property Appraising (1983) and
Course 202 - Applied Income Property Valuation (1984)
President of Hawaii Chapter 15 - American Institute of Real Estate Appraisers (1989)

Licensing and Certification

State of Hawaii - Certified General Appraiser (CGA-149)
Certificate Expires December 31, 2005
Real Estate Brokers License - State of Hawaii

Education

M.B.A. (Finance) University of Nebraska
B.S. (Business Administration) University of Nebraska

Employment Experience

Mr. Braig is presently Executive Vice President and Director of Hastings, Conboy, Braig & Associates, Ltd. (HCBA) and its subsidiary real estate brokerage company Pacific Area Realty. He has been associated with this firm since 1973 and is one of three principals. HCBA was founded in 1973 and is one of the largest real estate counseling firms in the State of Hawaii. This committed team of professional real estate appraisers, counselors, economists and market analysts provide assistance involving all forms of commercial real estate. This company has extensive experience throughout the State of Hawaii, Micronesia and the U.S. mainland. Included among its staff of professionals are five individuals who hold the MAI designation; three of these also hold the SRA designation and one holds the CRE designation.

Mr. Braig's area of expertise spans the entire spectrum of commercial real estate ranging from commercial, industrial, shopping centers, office buildings, residential development (apartments, condominiums and subdivisions), golf course, tax appeal and mixed use land development.

Over the last fifteen years Mr. Braig has served on numerous arbitration panels throughout the State of Hawaii involving ground rent renegotiations and commercial space lease reopenings. His involvement has ranged from witness, appointed panel member, appointment as third person and sole arbitrator.

Selected clients include:

Financial Institutions – Bank of Hawaii, First Hawaiian Bank, G.E. Capital, First Federal Savings and Loan, Central Pacific Bank, American Savings Bank, Construction Lending Corporation of America, Nipon Credit Bank, Territorial Savings and Loan, First Hawaiian Credit Corporation, Nomura Credit Corporation, Bank of Tokyo – Mitsubishi, Metzler North America, City Bank, Hawaii National Bank, Bank of Honolulu, Finance Factors, Trans Pacific Mortgage and Homestreet Bank.

Robert R. Braig, MAI, SRA
(Page 2)

Developers -- The Gentry Companies, Schuler Homes, Grove Farm Land Corp., Seibu Hawaii, Haseko Hawaii, C. Brewer Homes, John D. Lusk & Sons, The Petty Corporation, Sports Shinko (Hawaii), Waikoloa Properties, Pacific Construction, The McNaughton Group, Maui Lani Partners, Alexander & Baldwin, Inc., Servco Pacific, GTE Hawaiian Telephone, K.H. Properties, Aloha Petroleum, Ltd., Duty Free Shoppers.

Trusts, Estates and Consultants -- The Nature Conservancy, The Estate of James Campbell, C. Brewer & Company, Queen Emma Foundation, Realty Investment, Co., McCandless Estate, Hawaiian Trust Company, Pacific Century Trust, Damon Estate, Deloitte & Touche LLP, Arthur Anderson, Koll, Cushman & Wakefield.

Selected Assignments include:

Commercial Properties -- Kahala Mall, Kukui Grove Shopping Center, Stadium Mall Shopping Center, Liliha Square Shopping Center, Pearl City Plaza, Kaimuki Shopping Center, Hilo Shopping Center, Salt Lake Shopping Center, Kings Shops (Waikoloa Beach Resort), Manoa Shopping Center, Hawaii Kai Towne Center, Kihei Longs Shopping Center, Maui Marketplace, Kauai Kmart, Kona Kmart, Ewa Beach Shopping Center, Kapolei Shopping Center, Aina Haina Shopping Center, Kapolei State Office Building, Micronesia Mall (Guam), Windward City Shopping Center, Waianae Mall, Gentry Shopping Center, Coconut Grove Marketplace, Kuakini Physician's Tower, Pearl Kai Shopping Center, Gentry Marina, Duty Free Shoppers -- Waikiki, Royal Hawaiian Shopping Center.

Master Planned Communities -- Ewa by Gentry, Waikele, Gentry Waipio, Waikoloa (Hawaii), Mililani Town, Makenna Resort (Maui), Wailuna, Ko'Olina Resort, City of Kapolei, Waiawa, Kehalani (Maui), Wailea Golf Courses.

Subdivisions -- The Lofts by Gentry (305), Kula Lei (193), Maui Lani (268), Summerhill (84), Villages at Leialii, Sunrise Estates (143), Sun Terra, West Loch Fairways (73), Westcliff (39), Waialae Iki, Soda Creek, Heights at Wailuna, Wailuku Heights, 49 Black Sand Beach (49) Kohala Waterfront (50), Westhills, Lombard Way, Islands at Maui Lani, Greens at Maui Lani, The Carriages.

Condominiums -- Alii Cove, Punahou Cliffs, Wailuna, Crosspointe, Villages at Waipio, Cliffside Villages, Kihei Villages, Waikoloa Hills, Palm Court, Palm Villas, Kuani Hillside, Keonikai Villages, Makakilo Cliffs, Southpointe, Sun Rise, Greens at Waikele, Iao Parkside, Coronado, Country Club Village, Courtyards at Punahou, Sun Crest, SunPoint, Napilihau Villages.

Rental Apartments -- Napilihau Townhomes, Sunpointe Apartments, Bayview Banyan Apartments, Waiakea Villas, Kihei Regency, Makana Hale, Coronado, Palm Villas, Lagoon View, Honuakaha Apartments, 1133 Waimanu Street, 1450 Young Street Apartments, Royal Kunia Apartments.

Industrial Developments -- Mill Towne Center, Gentry Business Park, Ukee Industrial Court, Kohanaiki Business Park.

PROFESSIONAL QUALIFICATIONS OF RICKY P. MINN

BUSINESS BACKGROUND

Hastings, Conboy, Braig & Associates, Ltd., Senior Vice President.
Employed with Hastings, Conboy, Braig & Associates, Ltd. since November 1977.

EDUCATIONAL BACKGROUND

University of Hawaii at Manoa, Bachelor of Arts Degree in Economics, Awarded 1977.
Appraisal Institute, Credit for the following Educational Courses:
Standards of Professional Practice, Parts A, B, and C.
Capitalization Theory and Techniques, Parts A and B.

PROFESSIONAL AFFILIATIONS

Appraisal Institute, Affiliate Member.

LIST OF SELECTED CLIENTS AND STUDIES

Island of Kauai:

U.S. Department of the Navy	Port Allen Pier Rental Rates
Central Pacific Bank	Old Koloa Town Shopping Center
State of Hawaii Department of Agriculture	Kekaha Agricultural Park
Art and Elizabeth Charitable Remainder Unitrust	Kalapaki Villas Condominium

Island of Oahu:

Hawaii Carpenter's Financial Security Fund	Waimalu Shopping Paza
Pacific Century Trust	Alexander Gardens Condominium
Roscha Woodwork, Inc.	Roscha Woodwork Industrial Building
Condiotti Enterprises, Inc.	Queen Emma Office Building
First Hawaiian Bank	Mililani Shopping Center
First Hawaiian Bank	SJS Office Building
A & B Properties, Inc.	Mill Town Center Business Park
Hotels In Paradise	Waikiki Whaler Apartments
City Bank	Lee & Young Building
Bank of Hawaii	SunPoint Condominium
The Bank of Tokyo-Mitsubishi, Ltd.	Royal Kunia Gardens Condominium
Bank of Hawaii	377 Keahole Street Building
Woodmen of the World Life Insurance Society	4400 Kalamianaole Highway
First Hawaiian Bank	Westhills Subdivision, Phases II and III
GE Capital Hawaii, Inc.	1450 Young Street Condominium

LIST OF SELECTED CLIENTS AND STUDIES

Island of Maui:

Baldwin*Malama
The Trust for Public Land
U.S. National Park Service
First Hawaiian Bank
First Hawaiian Bank

Piilani Village Development Sites
Nu'u and Waiu Properties
Kaupo Ranch Trail Easement
Kihei Longs Shopping Center
Proposed Napili Hau Townhomes

Island of Hawaii:

First Hawaiian Bank
Bank of Hawaii
Owens Financial Group, Inc.
Raymond K. Hasegawa, Attorney At Law
Carlsmith Ball
Farm Credit Bank of Texas
Banc One Commercial Loan Origination Corp.
Bank of Hawaii
Bank of Hawaii
Central Pacific Bank
Bank of Hawaii
Bank of Hawaii
American Savings Bank
State of California Department of Insurance
Pacific Century Trust
Trans-Pacific Mortgage Group
Housing & Community Develop. Corp. of Hawaii
Metzler North American Corporation
The Stewart Living Trust
Marcus & Associates, Inc.
First Hawaiian Bank
Puuanui Partnership
Hillwood/Mills Big Island Development LLC
Center for Family Business
U.S. Postal Service
Bank of Hawaii
Bank of Hawaii
Bank of Hawaii
Transatlantic Capital Company LLC
Bank of Hawaii
Spectrum Mortgage
The Bank of Tokyo-Mitsubishi, Ltd.

Nani Mau Gardens
Pahoa Natural Foods and Emporium
Waiakea Village
Dodo Mortuary
MacFarms of Hawaii
IASCO Macadamia Nut Orchards
Liliha Healthcare Center
Kilauea Plaza
BFS Hilo Center
Suisan Company Jumbo and Super Jumbo
Big Island Toyota Suzuki Hyundai
Ka Waena Lapa'au, Hilo Radiologic Offices
Aloha Building
Bayview Banyan Apartments
Kamuela Ace Hardware
Coconut Grove Marketplace
Kamaaina Hale Leased Fee
Kohala Waterfront Subdivision
Hoomau Ranch
Kealakekua Business Plaza
Hualalai Center
Puuanui Partnership Properties
49 Black Sand Beach Subdivision
Gentry Pacific Kahua Makai Property
Kailua-Kona Main Post Office
Kilohana Subdivision
Waimea Center
Kaei Hana II, Hokuloa Industrial Property
Kailua Trade Center
Kawaihae Minit Stop
Kamuela Inn Bed and Breakfast Hotel
Elima Lani at Waikoloa Village

Attachment 6

(REVISED 6-15-05)

Hawaiian Electric Company, Inc.

2005

PLANT ADDITIONS

(\$ Thousands)

	<u>2005</u>	<u>Reference</u>
Projects	\$54,813	page 4
Programs	49,374	page 8
Total	<u><u>\$104,187</u></u>	

Hawaiian Electric Company, Inc.

(REVISED 6-15-05)

2005 PLANT ADDITIONS - PROJECTS

<u>Grand parent</u>	<u>Project #</u>	<u>Project Title</u>	<u>Expenditures</u>				<u>Total</u>
			<u>Project to Date Recorded</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	
			<u>12/31/04</u>				
	P0000086	Waiau WW Oil Detectors	59,611	12,706	0	0	72,317
	P0000143	Salt Lake Blvd Widening Ph2	1,746,403	697,257	3,303,125	0	5,746,785
	P0000172	Iwilei Fuel Oil Pump Rpl	84,599	128,650	0	0	213,249
	P0000211	W6 Cycle Chem Instr.	431,663	191,787	0	0	623,450
	P0000215	K2 Cycle Chem Instr.	168,404	232,782	0	0	401,186
	P0000231	W8 BFP Rec Ctrl Valves Upg	97,395	6,641	0	0	104,036
	P0000233	W7&8 Service Air Compressor	205,660	129,087	0	0	334,747
	P0000238	K6 BFP Rec Ctrl Valves Upg	0	75,413	0	0	75,413
	P0000287	Waiau 1&2 Admin Bldg ReRoof	0	546,044	1,174	0	547,218
	P0000299	W9 Compressor Wash	0	117,015	0	0	117,015
	P0000300	W10 Compressor Wash	0	122,791	0	0	122,791
	P0000302	Waiau FWH #72 Replacement	242,229	51,833	0	0	294,062
	P0000336	K5 Burner Front Roof	7,068	63,785	0	0	70,853
	P0000338	K6 Burner Front Roof	7,899	64,057	0	0	71,956
	P0000449	Kahe Electronic Parts Store	32,414	25,439	0	0	57,853
	P0000452	Waiau Electric Parts Store	22,991	10,077	0	0	33,068
	P0000454	K6 Fan Enclosure	48,865	547,249	0	0	596,114
	P0000469	K5&6 Service Air Compressors	125,452	59,079	0	0	184,531
	P0000474	WSC Privatization	1,229,570	312,603	0	0	1,542,173
	P0000491	K-H#2/Wai-Wah Str 86/25	31,589	767,665	0	0	799,254
	P0000493	W6 HP Turbine Blades	1,143,151	589,330	0	0	1,732,481
	P0000497	Waiau WW Pond Closure	41,274	196,052	0	0	237,326
	P0000509	PM-Ewa Nui MW Replace	11,042	216,658	0	0	227,700
	P0000565	W10 DCS Processor Upgrade	24,358	440,637	0	0	464,995
	P0000598	Kahekili Hy Ltg OH/UG Conv	66,780	77,931	0	0	144,711
	P0000609	K2 Blr Access Door Addition	42,240	51,814	0	0	94,054
	P0000623	K1-4 & K5-6 Fire Main Tie-in	0	115,673	0	0	115,673
	P0000625	HPP Swyd Cable Tray Sprinkler	104,763	7,797	0	0	112,560
	P0000634	W7&8 Boiler Wash Sump Pump	12,721	90,943	0	0	103,664
	P0000641	K6 AEH Limit Switch Upgrd	1,366	7,634	0	0	9,000
	P0000646	Kahe 24FWH Replacement	248,828	151,172	0	0	400,000
	P0000647	Kahe 23FWH Replacement	99,356	300,644	0	0	400,000
	P0000657	W10 Exhaust Duct Replacement	193,766	563,749	0	0	757,515
	P0000658	W9 Exhaust Duct Replacement	469,210	847,792	0	0	1,317,002
	P0000659	Kahe 25FWH Replacement	208,294	191,706	0	0	400,000
	P0000667	Kahe Sewer System Upgrade	261,696	509,110	0	0	770,806
	P0000675	W6 Control/DC Cables to Swyd	64,705	22,157	0	0	86,862
	P0000676	K2 Opacity Monitor Upgrade	0	129,676	0	0	129,676
*	P0000682	W6 Annunciator Upgrade	6,465	499,821	0	0	506,286
	P0000699	Fire sprinkler-tsfc oil stora	29,928	10,224	0	0	40,152
	P0000764	H-1 Widening Waimalu Reloc	94,908	23,406	98,466	0	216,780
	P0000774	Kukui Gardens Conversion	774,040	-5,084	0	0	768,956
	P0000786	Kahe 1 BW Sump Upgrade	112,920	48,444	0	0	161,364
	P0000788	Kahe 2 BW Sump Upgrade	69,682	46,316	0	0	115,998
	P0000789	Kahe 3 BW Sump Upgrade	105,007	62,540	0	0	167,547
	P0000790	Kahe 4 BW Sump Upgrade	61,762	77,109	0	0	138,871
	P0000791	Kahe 5 BW Sump Upgrade	69,431	59,922	0	0	129,353
	P0000792	Kahe 6 BW Sump Upgrade	58,698	52,776	0	0	111,474
	P0000797	W3-W4 Svc Air Compr	0	236,069	0	0	236,069
	P0000798	W6 Instr Air Compr	0	120,454	0	0	120,454
	P0000804	W6 Operator Console Upgrade	154,736	187,293	0	0	342,029
	P0000806	K06 CWP MOV Replacement	279,681	74,229	0	0	353,910
	P0000809	K6 Annunciator Replacement	170	656,636	0	0	656,806
	P0000813	K3&4 Control Room AC	0	122,450	0	0	122,450
	P0000821	K2 Battery Bank Replacement	0	200,361	0	0	200,361

* The estimated 2005 amount reported on Attachment 6 was in error. The amount should be \$499,821 instead of \$49,291.

Hawaiian Electric Company, Inc.

(REVISED 6-15-05)

2005 PLANT ADDITIONS - PROJECTS

<u>Grand parent</u>	<u>Project #</u>	<u>Project Title</u>	<u>Project</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>Total</u>
			<u>to Date</u>				
			<u>Recorded</u>				
			<u>12/31/04</u>				
	P0000825	C&M Renovation	0	624,727	0	0	624,727
	P0000826	ITS Renovation	0	379,513	0	0	379,513
	P0000860	K2 Annunciator Replacement	6,179	666,782	0	0	672,961
	P0000873	Kahe 2 Sootblower Controls	20,638	434,096	0	0	454,734
	P0000901	Kahe Reclaimed Oil Transfer	184,116	101,902	0	0	286,018
	P0000911	Palehua East A 46kV Reloc	24,134	385,866	0	0	410,000
	P0000917	Village Park - DB Cable Rpl	117,224	1,424,119	0	0	1,541,343
	P0000923	Kahala #2 4KV Tsf Replace	269,118	37,125	0	0	306,243
	P0000926	Mililani Mauka North Gulley	163,798	189,887	0	0	353,685
	P0000932	Beretania North V4259 Repl	0	124,540	0	0	124,540
	P0000939	Waiau CT Separation	235,186	392,051	0	0	627,237
	P0000940	Pearl Highlands 2nd Fdr	48,005	250,775	0	0	298,780
	P0000956	Waiau WWTF ChemFeed Mods	0	122,912	0	0	122,912
	P0000958	K6 SSH Element Replacement	29,777	1,546,997	0	0	1,576,774
	P0000961	W82 TVL SCREEN REPL	101,509	66,551	0	0	168,060
	P0000962	W71 TVL SCREEN REPL	0	172,954	0	0	172,954
	P0000964	K62 TVL SCREEN REPL	72,309	107,206	0	0	179,515
	P0000969	Waiau Maint Shop Mods	69,211	46,846	0	0	116,057
	P0000975	Tripler-Koolau Baseyard Comm	0	428,660	0	0	428,660
	P0000981	K5/6 Brkr Deck AC	0	121,798	0	0	121,798
	P0000982	Waiau 3/4 Elevator Upgrade	0	120,579	0	0	120,579
	P0000983	Waiau 5/6 Elevator Upgrade	0	122,393	0	0	122,393
	P0000999	W3&4 Turb Roof Drain Piping	0	87,039	0	0	87,039
	P0001003	Ward Ave Turnstile Gate	0	117,970	0	0	117,970
	P0001005	King St CCTV Cameras	0	132,999	0	0	132,999
	P0001008	W72 TVL SCREEN REPL	98,515	65,916	0	0	164,431
	P0001011	W81 TVL SCREEN REPL	98,515	54,688	0	0	153,203
	P0001015	Wahiawa-Waialua #2 P23X-P33	40,538	345,659	0	0	386,197
	P0001016	Lurline/Mariposa Cable Repl	12,367	379,710	0	0	392,077
	P0001019	Structure 22 Wailupe #2 Repl	44,602	197,613	0	0	242,215
	P0001022	Employee Smart Cards	14,901	18,699	0	0	33,600
	P0001024	Kahe 52 Traveling Screen	124,565	2,095	0	0	126,660
	P0001029	Mobile Substation Storage	4,117	106,729	0	0	110,846
	P0001030	H8&9 Roof Drain Piping	0	207,609	0	0	207,609
	P0001031	K6 Flame Scanner Det Replace	0	169,173	1	0	169,174
	P0001032	Honouliuli Reserv 46kV Reloc	9,077	231,741	0	0	240,818
	P0001047	HECO Vault 15 Relocate	8,135	452,198	0	0	460,333
	P0001055	Customer Solutions Consolidn	2,553	324,696	0	0	327,249
	P0001056	DSM Expansion	1,823	150,256	0	0	152,079
	P0001060	Lualualei Homestead Rd Impr.	7,052	107,481	1,000	0	115,533
	P0001062	Kahe Lightning Protection	0	94,788	0	0	94,788
	P0001063	Palehua East B Temp OH Reloc	0	65,767	0	0	65,767
	P0001065	Purchase Spare 20/33 MVA Tsf	0	637,131	0	0	637,131
	P0001066	Waiawa4 Ckt Extension	0	120,746	0	0	120,746
	P0001067	Air Heater Rotor Stop Alarm	0	88,643	25,236	0	113,879
	P0001068	Replace EW 8%, 10 MVA Tsf	107,576	428,964	0	0	536,540
	P0001077	Manoa Sub 4 kV Upgrade	0	198,075	0	0	198,075
	P0001079	W8 Aux Xfmr Replacement	0	224,940	0	0	224,940
	P0001080	Ko Olina Parcel 50 46/12kV	0	132,775	0	0	132,775
	P0001081	Auahi Street 12kV OH to UG	0	181,879	0	0	181,879
	P0001082	Waiau-Makalapa #2 NCI Repl	0	310,821	0	0	310,821
	P0001083	W3 Aux Transformer Replace	0	193,265	0	0	193,265
	P0001126	ITS Relocation to Pauahi	0	687,976	0	0	687,976
	P8290000	Tripler Wahiawa mwr replace	310,396	323,882	0	0	634,278
	P8470000	Koolau/Tripler MWR Repl	424,010	370,883	0	0	794,893
	P9497000	Honolulu Spur	77,081	49,980	0	0	127,061
	P9511000	Generation Hotline Upgrd	31,910	169,049	0	0	200,959
Y00021	P0000277	New Kuahua Substation	1,094,327	221,219	3,695,111	26,301	5,036,958
Y00021	P0000278	Makalapa Substation Prot	165,607	49,164	213,221	3,229	431,221

Hawaiian Electric Company, Inc.

(REVISED 6-15-05)

2005 PLANT ADDITIONS - PROJECTS

<u>Grand</u> <u>parent</u>	<u>Project #</u>	<u>Project Title</u>	<u>Project</u> <u>to Date</u> <u>Recorded</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>Total</u>
			<u>12/31/04</u>				
Y00021	P0000279	Puuloa Substation Prot	35,233	47,650	79,429	1	162,313
Y00021	P0000280	Makalapa-Kuahua FO Line	183,860	18,154	589,723	0	791,737
Y00021	P0000281	Makalapa-Puuloa FO Line	23,217	1,951	566,965	1	592,134
Y00021	P0000282	Kuahua 46kv Ln Reconnect	12,785	10,951	475,207	318	499,261
Y00023	P0000499	Ward A/C Imprv Phase II	677,461	3,081,331	0	0	3,758,792
Y00027	P0000562	Mokuone 46-12KV Line Ext	3,780,308	1,265,674	956,000	0	6,001,982
Y00029	P0000711	Remote PBXs	0	340,543	0	0	340,543
Y00029	P0001035	King/CPP PBX Replacement	248,439	317,191	0	0	565,630

31,799,343 10,004,658 29,850 60,166,815

From 2004 (page 6) 4,680,479
2006 Plant Additions -10,004,658
2007 Plant Additions -29,850

54,812,786 *

page 1

* Total reflects Mamala Substation adjustment (-\$3,213,279) and the W6 Annunciator Upgrade adjustment (+\$450,530 - see pg. 2). In-service date for Mamala Substation (Project Nos. P0000833, P0000834, P0000835) was changed from 2005 to March 2006. Impact of the Malama Substation adjustment and W6 Annunciator Upgrade adjustment on 2005 test year plant additions is a reduction of \$2.8 million.

Hawaiian Electric Company, Inc.

(REVISED 6-15-05)

2005 PLANT ADDITIONS

Stragglng Costs for Projects with Plant Additions Dates Prior to 2005		
<u>Grand</u>		<u>Expenditures</u>
<u>parent</u>	<u>Project #</u>	<u>Project Title</u>
		<u>2005</u>
	P0000057	H9 Blr Elec Warm Sys 6,918
	P0000078	K5 Boiler Controls Upgrade 22,378
	P0000079	K6 Boiler Controls Upgrade 75,270
	P0000097	Waiiau 8 Sootblower Ctls Upg 2,351
	P0000208	W3 Cycle Chem Instr. 1,654
	P0000213	W8 Cycle Chem Instr. 1,368
	P0000254	W3 Stack & Breeching Rpl 6,595
	P0000260	W3 Data Acq & Monitoring 952
	P0000274	W3&4 Boilder Bldg ReRoof 12,170
	P0000289	Halawa Cap Bank Brk 4436 1,270
	P0000294	Pukele Tie Breaker-Sw Rpl 1,270
	P0000297	W3 Condenser Refurbishment 122,507
	P0000303	Waiiau FWH #82 Replacement 2,798
	P0000313	W8 APH Sootblower Upgrade 460
	P0000330	Waiiau 3 Ignitor Replacement 3,617
	P0000423	Kailua Rd UG Conversion 818,043
	P0000459	Waiiau 3 ERV Replacement 104,407
	P0000466	K3&4 Service Air Compressor 46,080
	P0000485	WPP FWH #35 Replacement 6,328
	P0000507	Kam Hy Resurf Waiahole-Cr Ln 26,303
	P0000575	Nimitz Hwy Rehab-UA #1691 501
	P0000582	H9 Turbine Supv Instr 1,087
	P0000605	W3 and W4 Stack Drain 9,871
	P0000608	Sand Isle WWTP Disinfection 31,446
	P0000611	Kaneohe Bay Dr Improvements 68,708
	P0000624	Kahe Tank Farm Fire Main 12,041
	P0000638	W3 Air Heater Tube Replmnt 10,325
	P0000651	K5 AEH Limit Switch Upgrd 533
	P0000664	W3 UPS Installation 1,033
	P0000666	Waiiau Maint Shop Office 5,393
	P0000669	Kakaako ID10 27,740
	P0000690	W5 Annunciator Upgrade 42,468
	P0000741	W5 Demin raw wtr piping 43,772
	P0000750	K5 Reheater Element Replacements 1,856
	P0000784	K22 TVL Screen Repl 13,252
	P0000803	W3 Operator Console Upgrade 1,416
	P0000832	W3 Main Xfmr Replacement 1,639
	P0000840	Security/Campbell Station 4,961
	P0000841	Security/School Street Sub 4,882
	P0000851	Purchasing Warehouse Renov 6,647
	P0000855	K6 Aux Transformer 56,955

Hawaiian Electric Company, Inc.

(REVISED 6-15-05)

2005 PLANT ADDITIONS

Stragglng Costs for Projects with Plant Additions Dates Prior to 2005			
<u>Grand</u>			<u>Expenditures</u>
<u>parent</u>	<u>Project #</u>	<u>Project Title</u>	<u>2005</u>
	P0000889	Airport 12KV Ckts Install	2,825
	P0000893	H8 Generator Rotor Rewind	190
	P0000909	Kahe 13-14 FT Berm Upgrade	15,721
	P0000910	Kahe 11-12 FT Berm Upgrade	35,383
	P0000927	Mililani Mauka Unit 134A	-26
	P0000933	K2 to CW Basin Pipe Trench	3,124
	P0000941	Tree Wire - Lai Road	16,873
	P0000942	Waiau Tank 4 Bottom Replmt	107,489
	P0000944	Ala Wai Canal 46kV Dredging	196
	P0000970	W5 Mixed Bed Polisher	9,935
	P0001023	ACCESS SYSTEM	41,213
	P0001039	Purch Spare 8%, 10MVA Tsf	143
	P0001048	Kunia TSF Replacement	139,554
	P0001057	Energy Projects Relocation	10,919
	P0001058	Ward Ave Electronic Key Box	1,027
	P0001071	Data Center Cabinets	5,945
	P6740000	Iwilei Ntwk Bkr Failure	2,777
	P9401000	Kahe Fire Pump Inst	20,440
	P9492000	K6 A/H Acoustic Sootblower	1,628
	P9904000	H1 WIDENING AIEA	100,500
Y00027	P0000563	Mokuone 46-12KV Substation 1	55,758
Y00029	P0000710	King and Ward PBXs	95,773
Y00032	P0000064	Waiau Fuel Pipeline Project	1,844,432
Y00032	P0000747	Valve Station Service	703
Y00032	P0000748	Barbers Point TF 46kV Substation	1,612
Y00050	P0000886	Wal-Mart Sams Keeaumoku'	557,080
			<u>4,680,479</u>

Hawaiian Electric Company, Inc.

(REVISED 6-15-05)

PLANT ADDITIONS - PROGRAMS

<u>Project #</u>	<u>Project Title</u>	<u>2005</u>
P0000062	Ce-Terminating Trust Esmnts	588,813
P0000063	Conv Halawa School 138kv	5,000
P0000089	Pwr Quality Monitor Install	112,109
P0000120	Corr (Inc Emg) OH Trsf Rpl	325,964
P0000121	Corr (Inc Emg) UG Trsf Rpl	308,281
P0000122	Cor (Inc Emg) Mis Cable Rpl	1,771,120
P0000123	Corr (Inc Emg) OH Dist Rpl	974,095
P0000124	Cor (Inc Emg) OH Subtrn Rpl	428,737
P0000445	Trayer Sub Sw Repl Prog	39,234
P0000500	Misc Office Furniture	112,517
P0000501	Misc Office Equipment	69,425
P0000502	Waiiau Minor Gen Addns	47,304
P0000503	Ward Ave Minor Addns	161,458
P0000504	King St Minor Addns	93,712
P0000505	Other Minor Gen Plt Addns	83,913
P0000510	Circ Water Temp Monitors	14,562
P0000511	BFP Automated Test	154,034
P0000590	PP Security Hardware Upgrade	154,304
P0000601	Gen Prot Relay Replacement	242,261
P0000619	Kahe Demin/WWTF Smk Detect	29,115
P0000626	W3-8 Cable Rm Smoke Detector	36,205
P0000627	W3-8 Swgr Rm Smoke Detector	36,205
P0000628	K1-6 Cable Rm Smoke Detector	34,940
P0000629	K1-6 Swgr Rm Smoke Detectors	35,191
P0000652	Misc Mainframe Hardware	182,783
P0000653	Collaborative Communications	63,917
P0000674	Waiiau Start-Up SWGR Replace	1,787
P0000678	Kahe H2 Gas Dryers	92,838
P0000679	Waiiau H2 Gas Dryers	89,195
P0000685	Waiiau Start-Up Cable Replace	949
P0000692	CSD Technical Support Prgm	27,000
P0000733	Trns Sub RTU Migration Pgm	761,916
P0000934	Kahe Turbine Drains	87,579
P0000936	Waiiau Turbine Drains	87,878
P0000953	Kahe FWH Press/Temp Instr	56,754
P0000968	Process Parameter Monitoring	344,869
P0000993	Kahe/Waiiau WWTF PLC Upgrade	154,915
P0001014	Security CCTV System	386,098
P0001125	DG Substation	2,093,753
P1081000	Capitalized Tools & Equip	878,909
P1243000	Purchase PCs-ITS	1,005,215
P1244000	Copiers/Faxes/Printers	193,599
P1250000	Vehicle Purchases	1,819,198
P1251000	Misc Tel Eqpt NT	6,056
P1370000	Distr R/W Purch (Blanket)	74,095
P1373000	46kv R/W Purch (blanket)	100,000
P1429000	Misc PowerPlant Additions	1,077,773
P1470000	Minor Trans Sub Addns	673,728

Hawaiian Electric Company, Inc.

(REVISED 6-15-05)

PLANT ADDITIONS - PROGRAMS

<u>Project #</u>	<u>Project Title</u>	<u>2005</u>
P1480000	Minor Dist Sub Addns	965,843
P1500000	Misc CM Fac-Op & Ctrl (TD)	477,842
P1505000	Other Misc Comm Fac SOD	115,521
P1510000	Misc OH Svc & Extn (CID)	2,412,750
P1580000	Minor OH Dist Addn (CID)	841,772
P1670000	P&I&Test Meters & Mtr Eq	753,782
P1680000	Tsf & Equip Pur/Svc (CID)	4,987,855
P1690000	Minor T&D Customer Programs	358,354
P1700000	Misc UG Svc & Extn (CID)	11,707,273
P1789000	Preventive OH Transf Repl	478,433
P1793000	Preventive UG Transf Repl	703,570
P1810000	Prev Misc Cable Failure Rpl	3,100,361
P1820000	Minor UG Addns (CID)	961,637
P1870000	Power Station Misc	240,000
P1990000	Minor T&D System Programs	654,656
P1991000	Minor Dist Design UG Addns	2,188
P3400000	Prev OH Dist Repl	1,206,252
P3401000	Prev OH Subtrans Repl	1,652,283
P3402000	Prev OH Trans Repl	1,268,386
P9028000	Mobile Radio F1/F2 Replace	193,977
P9544000	FO Tank Level Gauge Upgrade	172,250

49,374,288

Attachment 8

HAWAIIAN ELECTRIC COMPANY, INC.
ADMINISTRATIVE AND GENERAL EXPENSES
(\$Thousands)

Line	Account Description	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
		2000	2001	Recorded 2002	2003	2004	Forecast 2004	2005	Adj	TY Est. 2005	Adj	Rev TY Est 2005
926000 Employee Pensions and Benefits												
1	Qualified Pension Plan	-19,323	-20,455	-15,655	5,894	-1,547	-1,547	4,349	-398 *	4,349	239	4,588
2	Non-Qualified Pension Plans	297	206	229	355	474	474	398	-886 *	0	0	0
3	Other Postretirement Benefits	3,063	3,409	5,565	8,208	7,535	7,535	7,713	-3	6,827	311	7,138 a
4	Long-Term Disability Benefits	258	262	300	498	509	540	687	457 *	684	-86	598 b
5	Other Benefits/Administration	64	214	-190	-252	-59	1,281	392	-830	849	-129 c	720
6	Subtotals: Non-Labor	-15,641	-16,374	-9,751	14,703	6,912	8,283	13,539	-830	12,709	335	13,044
7	Labor	399	435	363	496	485	512	562	-830	562	0	562
8	Total 926000	-15,242	-15,939	-9,388	15,199	7,397	8,795	14,101	-830	13,271	335	13,606
926010 Employee Benefits-Flex Credits												
9	Flex Credits Less Prices	-567	-612	-670	-744	-829	-1,101	-1,293	4	-1,289	168	-1,121 d
10	Group Medical Plan	5,117	5,245	6,245	6,097	7,005	7,349	8,310	9	8,310	-319	7,991 e
11	Group Dental Plan	879	919	941	957	977	1,048	1,174	9	1,183	39	1,222 f
12	Group Vision Plan	200	200	198	192	192	206	190	-7	190	-5	185 g
13	Group Life Insurance Plan	604	615	636	389	693	933	1,118	-7	1,111	112	1,223 h
14	Other/Administration	148	253	133	87	147	238	245	6	245	55 i	300
15	Subtotals: Non-Labor	6,381	6,620	7,483	6,978	8,185	8,673	9,744	6	9,750	50	9,800
16	Labor	86	58	67	66	60	82	61	6	61	0	61
17	Total 926010	6,467	6,678	7,550	7,044	8,245	8,755	9,805	6	9,811	50	9,861
18	926020 Employee Benefits Transfe	2,263	2,511	697	-6,543	-4,446	-5,455	-7,239	-824	-7,239	-121	-7,360
19	Grand Total Charged to O&M	-6,512	-6,750	-1,141	15,700	11,196	12,095	16,667	-824	15,843	264	16,107

* Deleted to limit issues

- a Net Periodic OPEB Cost 7,034 d Flex Credits Less Prices update
- Amort of Reg Asset 1,302 e CA-IR-348, HECO-1510 Updated (3/22/05)
- Elec Disc. For Retirees -297 f CA-IR-349, HECO-1511 Updated (3/22/05)
- Executive Life Adj -900 g CA-IR-350, HECO-1512 Updated (3/22/05)
- b CA-IR-345, HECO-1507 Updated (3/22/05)
- c Adj to delete 401(k) adm expenses per HECO T-1, pg. 26 -51 h Group Life Premium update
- Adj for increase in HEI interco billing and to delete EICP adm expenses -52 i Non-flex participant update
- Adj to delete HEI 401(k) adm expenses per HECO T-1, pg. 26 -28
- Long Term Care premium update 2

Hawaiian Electric Company, Inc.
Pension & OPEB Costs
1987-2005

Line		(a) 1987		(b) 1988		(c) 1989		(d) 1990		(e) 1991		(f) 1992		(g) 1993		(h) 1994		(i) 1995		(j) 1996		
		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		
1	Qualified Plan	9,216,777	8,307,882	9,007,061	9,739,662	10,617,695	11,382,007	10,939,516	10,924,690	6,408,000	8,380,584											
2	Non-Qualified Plans	145,541	334,671	198,280	294,658	175,451	103,410	184,174	243,032	299,652	369,814											
3	Total	9,362,318	8,642,553	9,205,321	10,034,320	10,793,146	11,485,417	11,123,690	11,167,722	6,707,652	8,750,398											
4	OPEB - FAS 106	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
5	OPEB - Reg Asset Amort ¹	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
6	Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
7	OPEB - Executive Life Only	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Assumptions:																					
	Discount Rate	7.50%	8.00%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%	8.50%
	Asset Return Rate	7.50%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
	Medical Trend	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dental Trend	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Vision Trend	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Actual Returns for Valuation	13.15%	0.58%	9.35%	0.78%	13.48%	23.51%	11.62%	11.27%	8.96%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%	11.27%
	Market Related Value Return	3.17%	4.34%	6.32%	3.42%	8.81%	12.06%	27.58%	10.49%	7.60%	13.06%	10.49%	10.49%	10.49%	10.49%	10.49%	10.49%	10.49%	10.49%	10.49%	10.49%	10.49%
	Market Value Return	0.55%	6.89%	22.00%	-1.67%	25.93%	4.20%	16.16%	-2.77%	26.47%	13.92%	-2.77%	-2.77%	-2.77%	-2.77%	-2.77%	-2.77%	-2.77%	-2.77%	-2.77%	-2.77%	-2.77%
8	Contrib. To Pension Fund	NA	NA	NA	9,739,662	10,617,695	11,382,007	10,939,516	10,924,690	9,058,124	6,971,824											
9	Contrib. To OPEB Funding Vehicles	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

¹ Regulatory asset amortization began in January 1995

Hawaiian Electric Company, Inc.
Pension & OPEB Costs
1987-2005

Line		(k) 1997		(l) 1998		(m) 1999		(n) 2000		(o) 2001		(p) 2002		(q) 2003		(r) 2004		(s) 2005		(t) 2005		
		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Actual		Est.		Actual		
1	Qualified Plan	7,117,179	1,870,595	(1,073,259)	(19,322,692)	(20,465,117)	(15,655,436)	5,894,495	(1,546,921)	4,416,000	4,587,662											
2	Non-Qualified Plans ²	607,686	357,662	319,919	296,534	206,237	228,915	354,937	474,310	430,500	335,962											
3	Total	7,724,865	2,228,257	(753,340)	(19,026,158)	(20,258,880)	(15,426,521)	6,249,432	(1,072,611)	4,846,500	4,923,624											
4	OPEB - FAS 106	14,393,350	9,284,785	3,574,126	1,761,196	2,106,966	4,262,731	6,905,766	6,233,487	7,014,500	7,033,687											
5	OPEB - Reg Asset Amort ¹	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839	1,301,839											
6	Total	15,695,189	10,586,624	4,875,965	3,063,035	3,408,805	5,564,570	8,207,605	7,535,326	8,316,339	8,335,526											
7	OPEB - Executive Life Only	671,152	540,422	518,685	458,422	551,450	637,414	844,050	855,395	886,000	900,225											
	Assumptions:																					
	Discount Rate	7.00%	7.00%	6.50%	7.75%	7.50%	7.25%	6.75%	6.25%	6.00%	6.00%											
	Asset Return Rate	9.00%	10.00%	10.00%	10.00%	10.00%	10.00%	9.00%	9.00%	9.00%	9.00%											
	Medical Trend	6.50%	5.50%	5.00%	6.25%	6.00%	10%-4.75%	9.25%-4.25%	10%-4.25%	10%-4.25%	10%-5%											
	Dental Trend	5.00%	4.00%	3.50%	4.75%	4.50%	4.75%	4.25%	4.25%	4.25%	5.00%											
	Vision Trend	4.00%	3.50%	3.00%	4.25%	4.00%	3.75%	3.25%	3.25%	3.25%	4.00%											
	Actual Returns for Valuation	13.49%	15.03%	25.19%	15.03%	13.45%	-14.69%	2.29%	8.67%													
	Market Related Value Return	14.09%	15.23%	28.31%	11.85%	5.04%	-14.52%	22.89%	2.58%													
	Market Value Return	15.23%	16.38%	30.10%	-3.32%	-10.26%	-13.90%	23.30%	10.13%													
8	Contrib. To Pension Fund	5,876,355	2,206,034	0	0	0	4,927,156	13,394,248	15,186,494	0	0											
9	Contrib. To OPEB Funding Vehicles	15,024,037	10,046,203	4,357,280	2,604,613	2,857,355	4,927,156	7,363,555	6,679,931	7,430,339	7,435,301											

¹ Regulatory asset amortization began in January 1995

² Non-qualified plan expenses removed from test year estimate

ATTACHMENT 8
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Hawaiian Electric Industries, Inc.
1/1/2005 NPPC
No Change in Assumptions from 1/1/2004

Discount Rate: 6.00%
LT Asset Return Rate: 9.00%

	Hecc	Heho	Meco	HEI	Total
Service Cost	15,436,442	3,114,968	3,432,069	722,155	22,705,634
Projected Benefit Obligation	585,183,213	113,467,709	99,124,646	17,041,952	814,817,520
Expected benefit payments	31,685,680	5,357,377	4,104,060	576,213	41,723,330
Gain/Loss Calc					
1. PBO	585,183,213	113,467,709	99,124,646	17,041,952	814,817,520
2. MRV Assets	562,994,283	110,080,016	93,003,773	15,954,156	782,032,228
3. MV Assets	524,207,095	102,496,113	86,596,328	14,855,003	728,154,539
4. Unrecognized Trans	0	0	0	0	0
5. Unrecog. Prior Svc					
a. Prior SC Prior to 1/1/2001	(4,431,740)	(1,136,470)	(930,463)	(162,303)	(6,660,976)
b. Prior SC 1/1/2001-EGTRRA Limits	315,432	89,350	677	49,894	455,453
c. Prior Service Cost @ 1/1/2004	(4,116,308)	(1,047,120)	(929,786)	(112,309)	(6,205,523)
6. (Accrued)/Prepaid	81,085,113	15,889,820	9,177,651	1,745,396	107,897,980
7. (Gain)/Loss based on MRV:(1)-(2)-(4)-(5)+(6)	107,390,351	20,324,633	16,228,310	2,945,501	146,888,795
8. (Gain)/Loss based on MV:(1)-(3)-(4)-(5)+(6)	146,177,539	27,908,536	22,635,755	4,044,654	200,766,484
9. Adj. (Gain)/Loss for amortization: MV method					
a. Adjustment: (3) - (2)	(38,787,188)	(7,583,903)	(6,407,445)	(1,099,153)	(53,877,689)
b. Adjusted (Gain)/Loss: (8)+(9a)	107,390,351	20,324,633	16,228,310	2,945,501	146,888,795
10. Max(PBO,MRV)					814,817,520
11. 10% of (10): .10 X (10)					81,481,752
12. (Gain)/Loss Amort: (Abs(9b) or Abs(7)) - (11)					65,407,043
13. Average Future Amort. Svc.					
a. 1/1/2005 grand total avg. future amort. svc.					13.68
14. Amortization					4,781,217
15. Allocated Amort. (by item (7))	3,495,546	661,565	528,230	95,876	4,781,217
Net Periodic Pension Cost					
1. Service Cost					
a. Service Cost	15,436,442	3,114,968	3,432,069	722,155	22,705,634
b. Admin Expenses	279,000	50,000	45,000	6,000	380,000
c. Interest on a.	926,187	186,898	205,924	43,329	1,362,338
d. Total Service Cost	16,641,629	3,351,866	3,682,993	771,484	24,447,972
2. Interest cost					
a. PBO	585,183,213	113,467,709	99,124,646	17,041,952	814,817,520
b. Exp. Dist.:	31,685,680	5,357,377	4,104,060	576,213	41,723,330
c. Weighted 1/2	15,842,840	2,678,689	2,052,030	288,107	20,861,666
d. Average PBO	569,340,373	110,789,020	97,072,616	16,753,845	793,955,854
e. Discount Rate	6.00%	6.00%	6.00%	6.00%	6.00%
f. Interest Cost	34,160,422	6,647,341	5,824,357	1,005,231	47,637,351
3. Expected Return					
a. MRV Assets	562,994,283	110,080,016	93,003,773	15,954,156	782,032,228
b. Weighted distrib.	15,842,840	2,678,689	2,052,030	288,107	20,861,666
c. Exp contrib	0	0	0	0	0
d. Weighted 1/2	0	0	0	0	0
e. Wgt Admin Exp - 1/2	139,500	25,000	22,500	3,000	190,000
f. Average Assets: (3a)-(3b)+(3d)-(3e)	547,011,943	107,376,327	90,929,243	15,663,049	760,980,562
g. Long-term Rate	9.00%	9.00%	9.00%	9.00%	9.00%
h. Expected Return: (3f)x(3g)	49,231,075	9,663,869	8,183,632	1,409,674	68,488,250
4. Trans Oblig. Amort.	0	0	0	0	0
5. Prior Svc. Cost Amort.					
a. Prior SC Amort. Prior to 1/1/2001	(509,103)	(130,553)	(106,889)	(18,645)	(765,190)
b. Prior SC 1/1/2001-EGTRRA Limits	30,243	8,566	65	4,793	43,667
c. Prior Service Cost @ 1/1/2005	(478,860)	(121,987)	(106,824)	(13,852)	(721,523)
6. (Gain)/Loss Amort.	3,495,546	661,565	528,230	95,876	4,781,217
7. NPPC	4,587,662	874,916	1,745,124	449,065	7,656,767
	53,818,737	10,538,785	9,928,756	1,858,739	
	49,231,075	9,663,869	8,183,632	1,409,674	
	4,390,107	837,240	1,669,975	429,727	
excess contribution from prior years	22,686,247	6,991,225	5,702,050	3,470,964	
current year's contribution	0	0	0	0	

≤ NPPC less
excess contrib
from prior years

Market Related Value for FAS87 as of 1/1/2005

Gain or Loss 2001

	<u>Actual</u>	<u>Weighted</u>	
(1) Market Value on 12/31/2000	800,623,788		
(2) Contributions	0	0	wgt calculated
(3) Benefit Payments	(31,784,780)	(15,892,390)	0.5000
(4) Admin Expenses	(582,600)	(291,300)	0.5000
(5) Expected Income at 10.0%	78,444,010		
(6) Expected Asset Value	846,700,418		
(7) Market Value on 12/31/2001	687,757,720		
(8) Gain/(Loss) for Year	(158,942,698)		
Actual Return:	(80,498,688)	-10.26% New	
	(81,081,288)	-10.33% Old	

Gain or Loss 2002

	<u>Actual</u>	<u>Weighted</u>	
(1) Market Value on 12/31/2001	687,757,720		
(2) Contributions	0	0	wgt calculated
(3) Benefit Payments	(33,467,894)	(16,733,947)	0.5000
(4) Admin Expenses	(752,103)	(376,052)	0.5000
(5) Expected Income at 10.0%	67,064,772		
(6) Expected Asset Value	720,602,495		
(7) Market Value on 12/31/2002	560,257,888		
(8) Gain/(Loss) for Year	(160,344,607)		
Actual Return:	(93,279,835)	-13.91% New	
	(94,031,938)	-14.01% Old	

Gain or Loss 2003

	<u>Actual</u>	<u>Weighted</u>	
(1) Market Value on 12/31/2002	560,257,888		
(2) Contributions	22,651,446	3,132,267	wgt calculated
(3) Benefit Payments	(35,994,987)	(17,997,494)	0.5000
(4) Admin Expenses	(351,927)	(175,964)	0.5000
(5) Expected Income at 9.0%	49,069,503		
(6) Expected Asset Value	595,631,923		
(7) Market Value on 12/31/2003	673,689,289		
(8) Gain/(Loss) for Year	78,057,366		
Actual Return:	127,126,869	23.32% New	
	126,774,942	23.24% Old	

Gain or Loss 2004

	<u>Actual</u>	<u>Weighted</u>	
(1) Market Value on 12/31/2003	673,689,289		
(2) Contributions	26,380,429	4,758,177	wgt calculated
(3) Benefit Payments	(38,375,936)	(19,187,968)	0.5000
(4) Admin Expenses	(344,366)	(172,183)	0.5000
(5) Expected Income at 9.0%	59,317,858		
(6) Expected Asset Value	720,667,274		
(7) Market Value on 12/31/2004	728,154,539		
(8) Gain/(Loss) for Year	7,487,265		
Actual Return:	66,805,123	10.14% New	
	66,460,757	10.08% Old	

Unrecognized Portion of Gains and Losses

<u>December 31</u>	<u>Gain/(Loss)</u>	<u>Recognized</u>	<u>Unrecognized</u>	<u>Gain/(Loss)</u>
2000	(112,434,917)	100%	0%	0
2001	(158,942,698)	75%	25%	(39,735,675)
2002	(160,344,607)	50%	50%	(80,172,304)
2003	78,057,366	25%	75%	58,543,025
2004	7,487,265	0%	100%	7,487,265
	Unrecognized Gain/(Loss):			(53,877,689)

Adjusted Assets

	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>HEI</u>	<u>TOTAL</u>
(1) Market Value on December 31, 2004	\$524,207,095	\$102,496,113	\$86,596,328	\$14,855,003	\$728,154,539
(2) Unrecognized Gain/(Loss): allocated by (1)	(38,787,188)	(7,583,903)	(6,407,445)	(1,099,153)	(53,877,689)
(3) Market Related Value (1)-(2)	562,994,283	110,080,016	93,003,773	15,954,156	782,032,228
(4) 85% of Mkt Value	445,576,031	87,121,696	73,606,879	12,626,753	618,931,359
(5) 115% of Mkt Value	602,838,159	117,870,530	99,585,777	17,083,253	837,377,719
(6) Adjusted MRV (4) < [(3)] < (5)	562,994,283	110,080,016	93,003,773	15,954,156	782,032,228

A. Source and Testing of Data

Active Participants

Hawaiian Electric Company, Inc. supplied computer files containing information on all active plan participants. The data included names, sex codes, dates of birth and hire, and monthly rates of base pay on January 1, 2005.

Inactive Participants

Hawaiian Electric Company, Inc. supplied computer files containing information on all inactive plan participants. The data for vested terminated former employees included names, sex codes, dates of birth and termination, and monthly accrued benefits. The data for retirees included names, sex codes, dates of birth, retirement dates, status changes, original monthly payment amounts, and COLA amounts.

Review Process

The data was checked for internal consistency and was accepted as reasonable by the actuary. All employees who were participants in the plan on the valuation date were included in the valuation.

B. Comparison with Prior Year

	<u>Valuation Date</u>	
	<u>1/1/2004</u>	<u>1/1/2005</u>
<u>Basic Data</u>		
(1) Number of Covered Employees		
(a) Active Employees	1,891	1,987
(b) Retirees ¹	1,256	1,282
(c) Survivors in Pay Status	147	152
(d) QDRO Alternate Payees	30	30
(e) Prudential Retirees	10	7
(f) Vested Former Employees	274	268
(g) Transferred Employees	5	5
(h) Disabled Employees on LTD	<u>11</u>	<u>9</u>
(i) Total	3,624	3,740
(2) Approximate Covered Annual Payroll	\$124,403,643	\$131,950,104
(3) Total Annual Benefits of Inactive Participants		
(a) Retirees and Survivors ¹	41,695,345	43,907,318
(b) Vested Former Employees	2,273,909	2,166,901
(c) Transferred Employees	155,541	160,539
(d) Disabled	190,685	139,838
<u>Participant Averages</u>		
(4) Averages for Active Employees		
(a) Years of Past Service	14.80	14.02
(b) Attained Age	45.53	45.32
(c) Retirement Age	59.23	59.26
(d) Covered Annual Pay	\$ 65,787	\$ 66,407
(e) Accrued Annual Benefit	17,950	17,476
(f) Projected Annual Benefit at Age 65	95,113	96,707
(5) Retiree Averages ²		
(a) Retirement Age	58.09	58.04
(b) Attained Age	68.20	68.23
(c) Annual Benefit	\$ 31,763	\$ 29,116
<u>Vested Status</u>		
(6) Vested Status of Active Employees		
(a) Number Fully Vested	1,559	1,536
(b) Number Partially Vested	0	0
(c) Number Not Vested	<u>332</u>	<u>451</u>
(d) Total	1,891	1,987

¹ Excluding Prudential retirees.

² Excluding survivors, alternate payees, and Prudential retirees.

C. Basic Data by Participating Company

<u>Basic Data</u>	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>HEI</u>	<u>Total</u>
(1) Number of Covered Employees					
(a) Active Employees	1,348	296	298	45	1,987
(b) Retirees ¹	965	166	140	11	1,282
(c) Survivors	120	15	16	1	152
(d) QDRO Alternate Payees	24	6	0	0	30
(e) Prudential Retirees	7	0	0	0	7
(f) Vested Former Employees	191	31	39	7	268
(g) Transferred Employees	2	0	0	3	5
(h) Disabled on LTD	8	0	1	0	9
(i) Total	2,665	514	494	67	3,740
(2) Approximate Covered Annual Payroll for Active Participants on Valuation Date	\$89,269,682	\$18,533,977	\$19,359,951	\$4,786,494	\$131,950,104
(3) Annual Benefits of Inactive Participants					
(a) Retirees and Survivors ¹	33,671,214	5,540,015	4,340,775	355,314	43,907,318
(b) Vested Former Employees	1,525,718	271,327	329,812	40,044	2,166,901
(c) Transferred Employees	42,363	0	0	118,176	160,539
(d) Disabled	126,824	0	13,014	0	139,838

¹ Excluding Prudential retirees.

Employee Averages

(4) Averages for Active Employees

	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>HEI</u>	<u>Total</u>
(a) Years of Past Service	13.83	14.69	14.44	12.63	14.02
(b) Attained Age	45.11	45.78	45.54	47.00	45.32
(c) Retirement Age	59.28	59.21	59.13	59.69	59.26
(d) Covered Annual Pay	\$66,224	\$62,615	\$64,966	\$106,367	\$66,407
(e) Accrued Annual Benefit	17,289	17,386	17,510	23,458	17,476
(f) Annual Benefit at Age 65	97,897	91,122	95,168	107,986	96,707
(g) Annual Benefit at Age 65 without Maximum Limit	97,897	91,122	95,168	107,986	96,707
(5) Retiree Averages ¹					
(a) Retirement Age	58.11	57.47	58.14	59.24	58.04
(b) Attained Age	68.62	65.29	69.17	65.57	68.23
(c) Annual Benefit	\$29,675	\$28,634	\$26,032	\$26,558	\$29,116

Vested Status

(6) Vested Status of Employees as of 1/1/2005

(a) Number Fully Vested	0	0	0	0	0
(b) Number Not Vested	315	72	58	6	451
(c) Total	1,348	296	298	45	1,987

¹Excluding survivors, alternate payees, and Prudential retirees.

D. Benefit Projections

Set forth below is an exhibit showing for active employees within each employer group the projected amounts of annual benefits commencing at normal retirement age during each of the next five years. These projections are estimates, taking into account the assumed pay increases, and further assume that these participants will remain in service until normal retirement date.

	Year	Number Attaining Age 65	Annual Benefits First Commencing in Year
HECO			
	2005	19	\$ 724,096
	2006	5	135,697
	2007	6	224,611
	2008	20	870,309
	2009	8	375,716
HELCO			
	2005	1	8,650
	2006	1	25,377
	2007	1	20,474
	2008	1	49,414
	2009	1	59,169
MECO			
	2005	0	0
	2006	1	37,956
	2007	1	52,819
	2008	4	135,006
	2009	5	278,303
HEI			
	2005	3	285,337
	2006	0	0
	2007	1	106,233
	2008	0	0
	2009	0	0

E. Distribution of Active Employees by Age and Service

This section shows a distribution of active employees in five-year age and service groups. Counts are shown separately for male and female employees.

HECO

Age Last Birthday	Completed Years of Past Vesting Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30& Over	
Under 20 M								0
F								0
20-24 M	11							11
F	3							3
25-29 M	22	2						24
F	12	2						14
30-34 M	54	14	14	1				83
F	13	10	6					29
35-39 M	43	20	82	29				174
F	18	16	20	6	1			61
40-44 M	44	17	71	68	13	2		215
F	14	11	32	21	5			83
45-49 M	16	13	40	49	30	16	2	166
F	13	5	14	30	8	4		74
50-54 M	19	8	27	34	15	20	36	159
F	8	5	8	19	10	6	7	63
55-59 M	10	3	9	11	6	7	46	92
F	7	1	7	7	4	3	10	39
60-64 M	7	3	1	8	1	2	15	37
F	1	1	2	1	4			9
65&over M	1			3			6	10
F		1				1		2
Total M	227	80	244	203	65	47	105	971
F	89	52	89	84	32	14	17	377

HELCO

Age Last Birthday	Completed Years of Past Vesting Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30& Over	
Under 20 M								0
F								0
20-24 M	2							2
F								0
25-29 M	6							6
F	3							3
30-34 M	9	3	8					20
F	8	3						11
35-39 M	7	3	14	2				26
F	3	6	3	1				13
40-44 M	11	3	16	8	4			42
F		1	5	1				7
45-49 M	7	3	7	4	4	5	2	32
F	1	1	7	4	1	1		15
50-54 M	5	1	6	15	11	4	15	57
F	3		4	3	3	2	6	21
55-59 M	6			2	6	2	15	31
F	1			1	1	2		5
60-64 M		1					1	2
F				1			1	2
65&over M	1							1
F								0
Total M	54	14	51	31	25	11	33	219
F	19	11	19	11	5	5	7	77

MECO

Age Last Birthday	Completed Years of Past Vesting Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30& Over	
Under 20 M								0
F								0
20-24 M								0
F								0
25-29 M	3	1						4
F	4	1						5
30-34 M	11	7	3					21
F	3	1	1					5
35-39 M	10	14	16					40
F	2	1	4					7
40-44 M	14	5	13	10	1	1		44
F	3	1	5	1				10
45-49 M	3	5	13	7	10	9		47
F	2	4	5	4	3	2		20
50-54 M	2	3	3	10	9	15	6	48
F			2	3	3	3	2	13
55-59 M		2	4		5	2	4	17
F				1	1	3	1	6
60-64 M	1		1		3		3	8
F					3			3
65&over M								0
F								0
Total M	44	37	53	27	28	27	13	229
F	14	8	17	9	10	8	3	69

HEI

Age Last Birthday	Completed Years of Past Vesting Service							Total
	0-4	5-9	10-14	15-19	20-24	25-29	30& Over	
Under 20 M								0
F								0
20-24 M								0
F								0
25-29 M								0
F	2							2
30-34 M								0
F	1							1
35-39 M	2							2
F	1	1	1					3
40-44 M			1					1
F		1	7	3				11
45-49 M			2	1				3
F		3	4	1	1			9
50-54 M			1	1	1			3
F			2	1				3
55-59 M			1					1
F		1		1				2
60-64 M				1				1
F								0
65&over M			1	1			1	3
F								0
Total M	2	0	6	4	1	0	1	14
F	4	6	14	6	1	0	0	31

F. Reconciliation of Participants

HECO

	Active Employees	Retirees	Vested Term	Transfers Out of Plan	LTD
(1) Participants on 1/1/2004	1,273	1,090	195	2	8
(2) Withdrawals					
(a) Non-Vested Term.	(7)	0	0	0	0
(b) Vested Term.	(8)	0	8	0	0
(c) Cash Outs	0	0	0	0	0
(d) Transfers Within Plan	(7)	0	0	0	0
(e) Retirements – Regular	(55)	64	(9)	0	0
(f) Retirements – QDRO	0	0	0	0	0
(g) Deaths - No Benefits	(1)	(39)	0	0	0
(h) Deaths - Survivor Benefits	0	(16)	(3)	0	0
(i) LTD	0	0	0	0	0
(j) Transfer Out of Plan	0	0	0	0	0
(k) Survivors	0	17	2	0	0
(l) QDRO Alternate Payees	0	0	0	0	0
(m) Data Adjustments	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(n) Totals	(76)	26	(2)	0	0
(3) Entrants					
(a) New Entrants	143	0	0	0	0
(b) Transfers Within Plan	5	0	0	0	0
(c) Rehires>Returns	<u>3</u>	<u>0</u>	<u>(2)</u>	<u>0</u>	<u>0</u>
(d) Totals	151	0	(2)	0	0
(4) Participants on 1/1/2005	1,348	1,116	191	2	8

HELCO

	Active Employees	Retirees	Vested Term	Transfers Out of Plan	LTD
(1) Participants on 1/1/2004	283	187	33	0	1
(2) Withdrawals					
(a) Non-Vested Term.	(2)	0	0	0	0
(b) Vested Term.	(3)	0	4	0	(1)
(c) Cash Outs	0	0	(1)	0	0
(d) Transfers Within Plan	(2)	0	0	0	0
(e) Retirements – Regular	(7)	9	(2)	0	0
(f) Retirement - QDROs	0	0	0	0	0
(g) Deaths - No Benefits	0	(10)	(1)	0	0
(h) Deaths - Survivor Benefits	0	(1)	(1)	0	0
(i) LTD	0	0	0	0	0
(j) Transfer Out of Plan	0	0	0	0	0
(k) Survivors	0	2	0	0	0
(l) QDRO Alternate Payees	0	0	0	0	0
(m) Data Adjustments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(n) Totals	(14)	0	(1)	0	(1)
(3) Entrants					
(a) New Entrants	21	0	0	0	0
(b) Transfers Within Plan	5	0	0	0	0
(c) Rehires>Returns	<u>1</u>	<u>0</u>	<u>(1)</u>	<u>0</u>	<u>0</u>
(d) Totals	27	0	(1)	0	0
(4) Participants on 1/1/2005	296	187	31	0	0

MECO

	Active Employees	Retirees	Vested Term	Transfers Out of Plan	LTD
(1) Participants on 1/1/2004	291	156	39	0	2
(2) Withdrawals					
(a) Non-Vested Term.	(3)	0	0	0	0
(b) Vested Term.	(1)	0	3	0	(2)
(c) Cash Outs	0	0	0	0	0
(d) Transfers Within Plan	(4)	0	0	0	0
(e) Retirements – Regular	(3)	4	(1)	0	0
(f) Retirements – QDROs	0	0	0	0	0
(g) Deaths - No Benefits	0	(4)	0	0	0
(h) Deaths - Survivor Benefits	0	(1)	(1)	0	0
(i) LTD	0	0	(1)	0	1
(j) Transfer Out of Plan	0	0	0	0	0
(k) Survivors	0	1	1	0	0
(l) QDRO Alternate Payees	0	0	0	0	0
(m) Data Adjustments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(n) Totals	(11)	0	1	0	(1)
(3) Entrants					
(a) New Entrants	15	0	0	0	0
(b) Transfers Within Plan	2	0	0	0	0
(c) Rehires>Returns	<u>1</u>	<u>0</u>	<u>(1)</u>	<u>0</u>	<u>0</u>
(d) Totals	18	0	(1)	0	0
(4) Participants on 1/1/2005	298	156	39	0	1

HEI

	Active Employees	Retirees	Vested Term	Transfers Out of Plan	LTD
(1) Participants on 1/1/2004	44	10	7	3	0
(2) Withdrawals					
(a) Non-Vested Term.	0	0	0	0	0
(b) Vested Term.	0	0	0	0	0
(c) Cash Outs	0	0	0	0	0
(d) Transfers Within Plan	0	0	0	0	0
(e) Retirements – Regular	(2)	2	0	0	0
(f) Retirements – QDROs	0	0	0	0	0
(g) Deaths - No Benefits	0	0	0	0	0
(h) Deaths - Survivor Benefits	0	0	0	0	0
(i) LTD	0	0	0	0	0
(j) Transfer Out of Plan	0	0	0	0	0
(k) Survivors	0	0	0	0	0
(l) QDRO Alternate Payees	0	0	0	0	0
(m) Data Adjustments	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(n) Totals	(2)	2	0	0	0
(3) Entrants					
(a) New Entrants	2	0	0	0	0
(b) Transfers Within Plan	1	0	0	0	0
(c) Rehires>Returns	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(d) Totals	3	0	0	0	0
(4) Participants on 1/1/2005	45	12	7	3	0

G. Distribution of Inactive Vested Participants

Retired Participants¹

Age Group	HECO		HELCO		MECO		HEI		Totals	
	M	F	M	F	M	F	M	F	M	F
Up to 40	0	0	0	1	0	1	0	0	0	0
40-44	1	1	0	0	0	0	0	0	1	1
45-49	0	3	0	4	0	0	0	0	0	7
50-54	8	12	4	1	7	0	0	0	19	13
55-59	103	53	33	10	17	4	0	2	153	69
60-64	189	56	47	9	22	5	2	2	260	72
65-69	161	45	20	5	25	4	0	2	206	56
70-74	143	38	15	5	17	4	1	1	176	48
75-79	101	42	15	4	17	9	1	0	134	55
80-84	77	29	8	3	8	7	0	1	93	40
85-89	21	17	1	1	3	4	0	0	25	22
90 & up	6	3	1	0	2	0	0	0	9	3
Totals	810	299	144	43	118	38	4	8	1076	388

Benefit Distribution

Age Group	HECO		HELCO		MECO		HEI		Totals	
	M	F	M	F	M	F	M	F	M	F
Up to 40	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
40-44	31,367	0	11,253	0	12,461	0	0	0	23,714	0
45-49	16,289	0	26,157	0	0	0	0	0	31,367	0
50-54	470,949	0	104,867	0	144,606	0	0	0	42,446	0
55-59	5,359,089	0	1,433,203	0	737,321	0	0	0	720,422	0
60-64	8,736,612	0	1,853,812	0	906,799	0	67,566	0	7,597,179	0
65-69	6,334,965	0	806,060	0	959,334	0	140,954	0	11,638,177	0
70-74	5,773,818	0	503,528	0	645,915	0	53,932	0	8,154,291	0
75-79	4,020,368	0	534,220	0	627,932	0	63,280	0	6,986,541	0
80-84	2,437,444	0	237,881	0	231,972	0	2,031	0	5,184,551	0
85-89	416,095	0	17,502	0	53,291	0	27,551	0	2,934,848	0
90 & up	74,218	0	11,532	0	21,144	0	0	0	486,888	0
Totals	\$ 33,671,214	\$ 0	\$ 5,540,015	\$ 0	\$ 4,340,775	\$ 0	\$ 355,314	\$ 0	\$ 43,907,318	\$ 0

¹ Excluding retirees for whom death benefits were not purchased from Prudential.

Terminated Vested Participants

Age Group	Age Distribution				Totals	
	HECO		MECO		M	F
	M	F	M	F		
Up to 40	10	15	0	1	13	16
40-44	27	11	8	2	38	16
45-49	38	8	12	3	54	16
50-54	25	9	7	2	42	14
55-59	20	11	3	0	28	12
60-64	11	4	1	1	12	5
65 & Over	2	0	0	0	2	0
Totals	133	58	31	8	189	79

Benefit Distribution

Age Group	HECO		MECO		HEI		Totals	
	M	F	M	F	M	F		
Up to 40	\$ 168,111	\$ 22,093	\$ 9,029	\$ 0	\$ 0	\$ 0	\$ 199,233	
40-44	329,207	37,636	87,845	0	0	0	454,688	
45-49	428,089	45,411	136,509	3,801	3,801	3,810	613,810	
50-54	308,695	106,790	72,255	18,492	18,492	18,492	506,232	
55-59	168,302	59,397	22,957	13,245	13,245	13,245	263,901	
60-64	117,046	0	1,217	4,506	4,506	4,506	122,769	
65 & Over	6,268	0	0	0	0	0	6,268	
Totals	\$1,525,718	\$271,327	\$329,812	\$40,044	\$40,044	\$40,044	\$2,166,901	

Transferred Employees

Age Group	Age Distribution						Totals	
	HECO		HELCO		MECO		HEI	
	M	F	M	F	M	F	M	F
30-34	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	1	1
50-54	1	0	0	0	0	0	1	0
55-59	1	0	0	0	0	0	0	1
Totals	2	0	0	0	0	0	1	3

Benefit Distribution

Age Group	Benefit Distribution				Totals	
	HECO		HELCO		HEI	
	M	F	M	F	M	F
30-34	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
35-39	0	0	0	0	0	0
40-44	0	0	0	0	27,960	27,960
45-49	0	0	0	0	25,512	25,512
50-54	23,286	0	0	0	64,704	87,990
55-59	19,077	0	0	0	19,077	19,077
Totals	\$42,363	\$ 0	\$ 0	\$ 0	\$118,176	\$160,539

A. History of Plan

The Retirement Plan for Employees of Hawaiian Electric Company, Inc., Not Represented by Collective Bargaining Agreements and the Retirement Plan for Employees of Hawaiian Electric Company, Inc., Represented by Collective Bargaining Agreements were adopted by Hawaiian Electric Company, Inc. effective January 1, 1941. Benefits under the plans were funded through Prudential Group Annuity Contract No. GA-199. Effective January 1, 1947, Hilo Electric Light Company, Ltd. established a retirement plan for its employees. Benefits under that plan were funded through Prudential Group Insurance Contract No. GA-219. Maui Electric Company, Ltd. adopted a retirement plan for its employees on August 1, 1954. Benefits under that plan were funded through John Hancock Group Annuity Contract No. 367 GAC.

Effective December 28, 1967, Maui Electric Company, Ltd. entered into an agreement with First Hawaiian Bank to administer the trust as part of the Maui Electric Company, Ltd. Pension Plan. As of December 1, 1971, the separate non-bargaining and bargaining unit retirement plans of Hawaiian Electric Company, Inc. were merged and coverage was extended to include employees of Hilo Electric Light Company, Inc. and Maui Electric Company, Inc. The name of the merged plan was amended effective July 1, 1983 and was thereafter called the Retirement Plan for Employees of Hawaiian Electric Industries, Inc. and Participating Subsidiaries.

The plan was restated effective January 1, 1989 to include, among other changes, a five-year vesting schedule. Molokai Electric Company, Ltd. Pension Plan was merged into the plan effective December 31, 1989.

The plan was again restated effective January 1, 1994 to reflect various prior amendments made to the plan and certain amendments required by changes in the laws regulating the plan.

The plan was amended effective January 1, 1999 to provide a partial lump sum optional form of distribution and to extend death benefits to single employees. A summary of the principal provisions of the plan is included in the next section.

The plan was again restated effective January 1, 1998 to reflect amendments required by changes in the laws regulating the plan.

B. Summary of Principal Plan Provisions

- (1) Effective Date: January 1, 1941. Latest amendment negotiated August 15, 1998. Latest amendment adopted March 14, 2003.
- (2) Eligibility: Employees of Hawaiian Electric Industries, Inc. and the controlled group to which participation is extended shall participate upon commencement of employment (regular employment for union employees).
- (3) Compensation: Base pay including salary reduction contributions to the 401(k) plan, Section 125 plan, and Section 132(f) plan, but not including overtime or premium pay, bonuses or contributions to any other plan. Compensation shall be limited to the level prescribed in Section 401(a)(17) of the Internal Revenue Code.
- (4) Final Average Compensation: The average monthly full-time rate of Compensation paid to an employee during the 36-consecutive months of his last ten years of employment, which produce the highest such average.
- For part-time employees, monthly pays are multiplied by a "full-time equivalent" ratio.
- (5) Vesting Service: The elapsed period of service from hire to termination. For participants who sever employment and are reemployed within a twelve-month period, Vesting Service will also include such period of severance.
- (6) Credited Service: The elapsed period of service from participation to termination. Union employees receive Credited Service for the initial probationary period once they become participants. Active Participants that retire or die on or after age 55 will receive additional Credited Service for any sick leave not used in the last 3 years of Vesting Service, up to a maximum of 12 weeks for each such year of Vesting Service.
- Participants incurring a long-term disability shall be granted Credited Service for the period of such disability prior to the commencement of the distribution of accrued benefits.

(7) Normal Retirement:

(a) Eligibility Date

First day of the month in which the participant attains age 65 if born on the 1st through 15th of the month. First day of the next following month if the participant was born after the 15th. The day following the last day of employment (after attaining age 65) with 30 days advance written notice from the participant.

(b) Monthly Benefit

(i) Participants represented by IBEW Unit 8

The lesser of (A) 1.83% times the participant's final rate of pay (converted to a monthly rate) times Credited Service or (B) 60% of such final rate of pay.

(ii) Participants not represented by IBEW Unit 8

The lesser of (A) 2.04% times Final Average Compensation times Credited Service or (B) 67% of Final Average Compensation.

(8) Early Retirement:

(a) Eligibility Date

First day of the month not more than 10 years prior to a participant's normal retirement date with at least 5 years of Vesting Service or after attainment of age 50 with at least 5 years of Vesting Service and 65 points (i.e., age plus Vesting Service is at least 65).

(b) Monthly Benefit

The benefit calculated as in (7)(b) above, reduced to reflect earlier commencement in accordance with the following schedule (interpolated to the nearest month):

<u>Age</u>	<u>Percentage Payable</u>
60+	100%
59	99
58	98
57	97
56	96
55	95
54	90
53	85
52	80
51	75
50	70

In determining the applicable percentage, a participant's actual age shall be increased by one full year for each full year of Vesting Service in excess of 33 years.

(9) Postponed Retirement:

If a participant remains in service after his normal retirement date, his retirement benefit will be calculated as of such late retirement date and shall begin on the first day of the month following his last day of employment. However, with 30 days advance written notice from the participant, benefits shall begin on the day following the last day of employment.

(10) Vesting:

If a participant terminates service prior to meeting the eligibility requirements for early retirement, he will receive a percentage of his normal retirement benefit, calculated as in (7)(b) above, depending on his Vesting Service in accordance with the following schedule:

<u>Years of Vesting Service</u>	<u>Percentage</u>
Less than 5	0 %
5 and over	100

Benefits may commence upon satisfaction of the Early Retirement eligibility requirements in (8)(a) above. Benefits commencing prior to normal retirement date shall be actuarially reduced.

(11) Death Benefit for Vested Participants:

(a) Eligibility

Death of a participant with vested benefits, with death occurring prior to the commencement of benefits.

(b) Monthly Benefit

The beneficiary will receive a lifetime pension commencing on the date the participant would have been first eligible to retire, equal to the amount to which the beneficiary would have been entitled had the participant (A) terminated employment on the day of death, (in the case of an employee who dies while actively employed), (B) survived to his earliest retirement age, (C) retired on such earliest retirement date with a 50% joint and survivor annuity, (D) and then died.

For single participants that die prior to earliest retirement age, the designated beneficiary will receive a lump sum payment.

(12) Adjustment to Retirement
Income:

- (i) For retirements or deaths following 10/31/1979
and prior to 11/1/1981

Pensions are increased by 2.5% of the amount payable to a retiree or a surviving spouse or contingent annuitant of a retiree or active participant, calculated as of the date of retirement, for each 2-year period following the participant's date of retirement.

- (ii) For retirement or deaths on or after 11/1/1981

The same as (i) above except that the percentage shall be 3% instead of 2.5%.

(13) Form of Benefit:

- (a) Normal

Reduced 50% joint and survivor annuity if married.
Single life annuity if single.

- (b) Optional

Full or partial lump sum payout option up to \$50,000.
33-1/3%, 50%, 66-2/3% or 100% contingent annuitant options, single life annuity option and the social security adjustment option. Options are actuarially equivalent to a single-life annuity.

C. Actuarial Assumptions for Funding

The actuarial assumptions determine the value of benefits expected to be paid under the plan. The assumptions take into account probabilities for determining how many and at what time employees will become eligible for benefits, the size of the benefits expected to be paid under the plan, how long benefits will be paid, and the current value of future benefits.

The actuarial assumptions used in the current valuation are the same as those used last year. These assumptions are shown below:

- (1) Mortality: The 1983 Group Annuity Mortality Table male and female rates.
- (2) Interest Rate: 8.5% per year net of investment expenses.
- (3) Salary Increases: The following schedule shows representative rates at selected ages.

<u>Age</u>	<u>Rates</u>
20	17.29%
25	13.17
30	10.24
35	8.15
40	6.67
45	5.61
50	4.86
55	4.32
60	3.94
65	3.67

- (4) Withdrawal: The following schedule shows representative rates at selected ages.

<u>Age</u>	<u>Rates</u>	
	<u>Males</u>	<u>Females</u>
20	7.4%	6.2%
25	4.9	3.7
30	3.4	2.5
35	2.4	1.7
40	1.3	1.2
45	0.7	0.7
50	0.0	0.3
55 and over	0.0	0.0

(5) Retirement Age:

The assumed rates of retirement are shown below:

Age	Rate
Below 50	0%
50	2
51	2
52	2
53	2
54	4
55	15
56	15
57	15
58	15
59	15
60	15
61	15
62	30
63	25
64	30
65	50
66	50
67	50
68 and over	100

(6) Maximum Benefits:

It is assumed that the maximum benefit and pay limits currently in effect will not increase.

(7) Pre-Retirement Death Benefit:

100% of participants are assumed to have beneficiaries of the opposite sex, with females three years younger than males.

(8) Expenses:

\$380,000

(9) Former Employees:

It is assumed that former employees who are not actively employed on the valuation date will not be rehired.

(10) Lump Sum Option:

It is assumed that 20% of retiring participants will elect the maximum allowable lump sum payment.

Mortality table: as required under pension law for lump sum distributions.

(11) Current Liability

Interest Rates:

Minimum Funding: 6.10%

Maximum Deduction: 4.59%

HEI FAS 106

DISCOUNT:	6.00%	MED TR:	10.0-->5.0%
Assets:BU/401(h):	9.00%	VIS TR:	4.00%
Assets:ElecDisc:	5.50%	DEN TR:	5.00%
Assets:NBVEBA:	5.00%		

01/01/2005 Net Periodic Postretirement Benefit Cost

	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>SUBTOTAL</u>	<u>HEI</u>	<u>TOTAL</u>
Electric Discount						
Service Cost	263,052	76,618	59,880	399,550	0	399,550
Interest Cost	436,995	139,482	100,867	677,344	0	677,344
Exp Asset Return	958	2,600	1,695	5,253	0	5,253
Amort of Trans Oblig	126,644	31,849	27,688	186,181	0	186,181
Amort of Prior Svc Cost	0	0	0	0	0	0
Amort of (Gain)/Loss	<u>17,570</u>	<u>30,441</u>	<u>8,162</u>	<u>56,173</u>	<u>0</u>	<u>56,173</u>
NPPBC	843,303	275,790	194,902	1,313,995	0	1,313,995
Executive Life Ins						
Service Cost	131,233	21,395	6,153	158,781	14,144	172,925
Interest Cost	440,427	46,402	47,182	534,011	105,544	639,555
Exp Asset Return	14,580	958	0	15,538	0	15,538
Amort of Trans Oblig	343,145	41,287	42,228	426,660	8,453	435,113
Amort of Prior Svc Cost	0	0	0	0	0	0
Amort of (Gain)/Loss	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>27,025</u>	<u>27,025</u>
NPPBC	900,225	108,126	95,563	1,103,914	155,166	1,259,080
BU VEBA						
Service Cost	1,444,925	451,689	485,398	2,382,012	0	2,382,012
Interest Cost	3,575,015	1,047,521	786,939	5,409,475	0	5,409,475
Exp Asset Return	4,845,108	1,086,784	996,143	6,928,035	0	6,928,035
Amort of Trans Oblig	1,117,592	210,291	159,768	1,487,651	0	1,487,651
Amort of Prior Svc Cost	0	0	0	0	0	0
Amort of (Gain)/Loss	<u>32,757</u>	<u>0</u>	<u>0</u>	<u>32,757</u>	<u>0</u>	<u>32,757</u>
NPPBC	1,325,181	622,717	435,962	2,383,860	0	2,383,860
NBU VEBA						
Service Cost	868,306	111,207	94,639	1,074,152	61,014	1,135,166
Interest Cost	1,738,389	264,685	287,981	2,291,055	78,438	2,369,493
Exp Asset Return	467,796	94,422	92,872	655,090	42,843	697,933
Amort of Trans Oblig	812,998	89,590	126,474	1,029,062	0	1,029,062
Amort of Prior Svc Cost	0	0	0	0	0	0
Amort of (Gain)/Loss	<u>78,214</u>	<u>129,313</u>	<u>55,979</u>	<u>263,506</u>	<u>21,194</u>	<u>284,700</u>
NPPBC	3,030,111	500,373	472,201	4,002,685	117,803	4,120,488
401(h) Account						
Service Cost	876,900	107,586	99,445	1,083,931	71,297	1,155,228
Interest Cost	1,445,680	218,874	241,593	1,906,147	78,938	1,985,085
Exp Asset Return	1,387,713	417,008	295,239	2,099,960	106,457	2,206,417
Amort of Trans Oblig	0	0	0	0	0	0
Amort of Prior Svc Cost	0	0	0	0	0	0
Amort of (Gain)/Loss	<u>0</u>	<u>31,757</u>	<u>10,315</u>	<u>42,072</u>	<u>0</u>	<u>42,072</u>
NPPBC	934,867	(58,791)	56,114	932,190	43,778	975,968
Total						
Service Cost	3,584,416	768,495	745,515	5,098,426	146,455	5,244,881
Interest Cost	7,636,506	1,716,964	1,464,562	10,818,032	262,920	11,080,952
Exp Asset Return	6,716,155	1,601,772	1,385,949	9,703,876	149,300	9,853,176
Amort of Trans Oblig	2,400,379	373,017	356,158	3,129,554	8,453	3,138,007
Amort of Prior Svc Cost	0	0	0	0	0	0
Amort of (Gain)/Loss	<u>128,541</u>	<u>191,511</u>	<u>74,456</u>	<u>394,508</u>	<u>48,219</u>	<u>442,727</u>
NPPBC	7,033,687	1,448,215	1,254,742	9,736,644	316,747	10,053,391

HEI OPEB PLANS
Electric Discount Trust
1/1/2005
Market Related Value for FAS106 - 15% MV Corridor

Expected asset return: 5.50%

Gain or Loss - Prior Year

	<u>Actual</u>	<u>Weighted</u>	
(1) Market Value on 1/1 PY	61,844		
(2) Contributions	500,000	291,000	actual
(3) Benefit Payments	(475,164)	(237,582)	0.5000
(4) Admin Expenses	(358)	(179)	0.5000
(5) Expected Income	6,330		
(6) Expected Asset Value	92,652		
(7) Market Value on 12/31 PY	83,490		
(8) Gain/(Loss) for Year	(9,162)		
Actual Return:	(2,832)	-2.46%	

Unrecognized Portion of Gains and Losses

<u>December 31</u>	<u>Gain/(Loss)</u>	<u>Recognized</u>	<u>Unrecognized</u>	<u>Gain/(Loss)</u>
2001	(14,879)	75%	25%	(3,720)
2002	(19,449)	50%	50%	(9,725)
2003	7,113	25%	75%	5,335
2004	(9,162)	0%	100%	(9,162)
	Unrecognized Gain/(Loss):			(17,272)

Adjusted Assets

	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>HEI</u>	<u>TOTAL</u>
(0) Market Value 1/1 PY	16,790	27,912	17,142	0	61,844
contributions	325,000	100,000	75,000	0	500,000
distributions	(325,172)	(89,263)	(60,729)	0	(475,164)
expenses	(164)	(109)	(85)	0	(358)
transfers	1,910	2,603	(4,513)	0	0
(1) Market Value 1/1 CY	15,462	41,125	26,903	0	83,490
(2) Unrecognized Gain/(Loss)	(3,198)	(8,508)	(5,566)	0	(17,272)
(3) Market Related Value (1)-(2)	18,660	49,633	32,469	0	100,762
(4) 85% of Mkt Value	13,143	34,956	22,868	0	70,967
(5) 115% of Mkt Value	17,781	47,294	30,938	0	96,013
(6) Adjusted MRV (4) < [(3)] < (5)	17,781	47,294	30,938	0	96,013

HEI OPEB PLANS
Executive Life Insurance (Prudential)
1/1/2005

<u>Market Value</u>	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>HEI</u>	<u>TOTAL</u>
Retirees Covered	9	1	0	0	10
Total Coverage	487,000	32,000	0	0	519,000
					282,503
Market Value	265,085	17,418	0	0	282,503

HEI OPEB PLANS

BU VEBA

1/1/2005

Market Related Value for FAS106 - 15% MV Corridor

Expected asset return: 9.00%

Gain or Loss - Prior Year

	<u>Actual</u>	<u>Weighted</u>	
(1) Market Value on 1/1 PY	67,996,838		
(2) Contributions	2,354,999	1,305,926	actual
(3) Benefit Payments	(3,973,852)	(1,986,926)	0.5000
(4) Admin Expenses	(16,505)	(8,253)	0.5000
(5) Expected Income	6,057,683		
(6) Expected Asset Value	72,419,163		
(7) Market Value on 12/31 PY	73,577,288		
(8) Gain/(Loss) for Year	1,158,125		
Actual Return:	7,215,808	10.72%	

Unrecognized Portion of Gains and Losses

<u>December 31</u>	<u>Gain/(Loss)</u>	<u>Recognized</u>	<u>Unrecognized</u>	<u>Gain/(Loss)</u>
2001	(16,126,275)	75%	25%	(4,031,569)
2002	(16,632,327)	50%	50%	(8,316,164)
2003	8,795,983	25%	75%	6,596,987
2004	1,158,125	0%	100%	1,158,125
	Unrecognized Gain/(Loss):			(4,592,621)

Adjusted Assets

	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>HEI</u>	<u>TOTAL</u>
(0) Market Value 1/1 PY	48,568,400	10,183,572	9,244,866	0	67,996,838
contributions	1,161,737	682,245	511,017	0	2,354,999
distributions	(2,822,946)	(718,904)	(432,002)	0	(3,973,852)
expenses	(11,782)	(2,459)	(2,264)	0	(16,505)
transfers	(45,869)	73,979	(28,110)	0	0
(1) Market Value 1/1 CY	51,975,586	11,305,025	10,296,677	0	73,577,288
(2) Unrecognized Gain/(Loss)	(3,244,265)	(705,648)	(642,708)	0	(4,592,621)
(3) Market Related Value (1)-(2)	55,219,851	12,010,673	10,939,385	0	78,169,909
(4) 85% of Mkt Value	44,179,248	9,609,271	8,752,175	0	62,540,694
(5) 115% of Mkt Value	59,771,924	13,000,779	11,841,179	0	84,613,882
(6) Adjusted MRV (4) < [(3)] < (5)	55,219,851	12,010,673	10,939,385	0	78,169,909

HEI OPEB PLANS

NBU VEBA

1/1/2005

Market Related Value for FAS106 - 15% MV Corridor

Expected asset return: 5.00%

Gain or Loss - Prior Year

	<u>Actual</u>	<u>Weighted</u>	
(1) Market Value on 1/1 PY	9,551,580		
(2) Contributions	5,116,549	1,895,839	actual
(3) Benefit Payments	(2,512,155)	(1,256,078)	0.5000
(4) Admin Expenses	(69,396)	(34,698)	0.5000
(5) Expected Income	507,832		
(6) Expected Asset Value	12,594,410		
(7) Market Value on 12/31 PY	13,224,245		
(8) Gain/(Loss) for Year	629,835		
Actual Return:	1,137,667	11.20%	

Unrecognized Portion of Gains and Losses

<u>December 31</u>	<u>Gain/(Loss)</u>	<u>Recognized</u>	<u>Unrecognized</u>	<u>Gain/(Loss)</u>
2001	(575,785)	75%	25%	(143,946)
2002	(1,257,278)	50%	50%	(628,639)
2003	1,372,909	25%	75%	1,029,682
2004	629,835	0%	100%	629,835
	Unrecognized Gain/(Loss):			886,932

Adjusted Assets

	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>HEI</u>	<u>TOTAL</u>
(0) Market Value 1/1 PY	5,927,995	1,525,519	1,369,747	728,319	9,551,580
contributions	4,004,378	475,011	558,070	79,090	5,116,549
distributions	(1,916,177)	(287,738)	(270,481)	(37,759)	(2,512,155)
expenses	(43,713)	(10,719)	(9,811)	(5,153)	(69,396)
transfers	(4,549)	387	(7,897)	12,059	0
(1) Market Value 1/1 CY	8,694,421	1,872,354	1,799,426	858,044	13,224,245
(2) Unrecognized Gain/(Loss)	583,123	125,576	120,685	57,548	886,932
(3) Market Related Value (1)-(2)	8,111,298	1,746,778	1,678,741	800,496	12,337,313
(4) 85% of Mkt Value	7,390,258	1,591,501	1,529,512	729,337	11,240,608
(5) 115% of Mkt Value	9,998,584	2,153,207	2,069,340	986,751	15,207,882
(6) Adjusted MRV (4) < [(3)] < (5)	8,111,298	1,746,778	1,678,741	800,496	12,337,313

HEI OPEB PLANS

401(h) Account

1/1/2005

Market Related Value for FAS106 - 15% MV Corridor

Expected asset return: 9.00%

Gain or Loss - Prior Year

	Actual	Weighted	
(1) Market Value on 1/1 PY	20,578,390		
(2) Contributions	1,378,479	434,222	actual
(3) Benefit Payments	(985,899)	(492,950)	0.5000
(4) Admin Expenses	(15,187)	(7,594)	0.5000
(5) Expected Income	1,846,086		
(6) Expected Asset Value	22,801,869		
(7) Market Value on 12/31 PY	23,042,976		
(8) Gain/(Loss) for Year	241,107		
Actual Return:	2,087,193	10.18%	

Unrecognized Portion of Gains and Losses

December 31	Gain/(Loss)	Recognized	Unrecognized	Gain/(Loss)
2001	(4,751,695)	75%	25%	(1,187,924)
2002	(4,934,268)	50%	50%	(2,467,134)
2003	2,441,447	25%	75%	1,831,085
2004	241,107	0%	100%	241,107
	Unrecognized Gain/(Loss):			(1,582,866)

Adjusted Assets

	HECO	HELCO	MECO	HEI	TOTAL
(0) Market Value 1/1 PY	12,718,542	4,003,225	2,894,062	962,561	20,578,390
contributions	1,188,816	72,427	73,075	44,161	1,378,479
distributions	(770,016)	(89,396)	(116,142)	(10,345)	(985,899)
expenses	(9,363)	(2,964)	(2,132)	(728)	(15,187)
transfers	(8,701)	714	(12,482)	20,469	0
(1) Market Value 1/1 CY	14,416,006	4,386,451	3,124,193	1,116,326	23,042,976
(2) Unrecognized Gain/(Loss)	(990,262)	(301,314)	(214,607)	(76,683)	(1,582,866)
(3) Market Related Value (1)-(2)	15,406,268	4,687,765	3,338,800	1,193,009	24,625,842
(4) 85% of Mkt Value	12,253,605	3,728,483	2,655,564	948,877	19,586,529
(5) 115% of Mkt Value	16,578,407	5,044,419	3,592,822	1,283,775	26,499,423
(6) Adjusted MRV (4) < [(3)] < (5)	15,406,268	4,687,765	3,338,800	1,193,009	24,625,842

Section V: Basic Data

Source of Data

The participant data used in the calculations was supplied by Hawaiian Electric Company, Inc. Included were computer files providing the active data and a retiree file showing plan coverages and other relevant information. Hawaiian Electric Company also provided premium information for the various health benefits.

Basic Participant Data

A summary of the basic participant data is shown below.

(1) Number of Covered Employees	<u>1/1/2004</u>	<u>1/1/2005</u>
(a) Active Employees		
• BU	1,095	1,108
• NBU	<u>796</u>	<u>879</u>
• Total	1,891	1,981
(b) Retirees	1,253	1,283
(c) Beneficiaries of Deceased Retirees	16	38
(d) Disabled Employees on LTD	<u>11</u>	<u>9</u>
(e) Total	3,171	3,317
(2) Approximate Annual Base Payroll	\$124,403,643	\$131,950,104
(3) Averages for Active Employees		
(a) Years of Past Service	14.80	14.02
(b) Attained Age	45.53	45.32
(c) Retirement Age	59.23	59.26
(4) Retiree Averages		
(a) Retirement Age	58.44	58.40
(b) Attained Age	69.21	69.24

Basic Data by Participating Company as of January 1, 2005

	<u>HECO</u>	<u>HELCO</u>	<u>MECO</u>	<u>HEI</u>	<u>Total</u>
(1) Number of Covered Participants					
(a) Active Employees					
BU	690	210	208	0	1,108
NBU	<u>658</u>	<u>86</u>	<u>90</u>	<u>45</u>	<u>879</u>
Total	1,348	296	298	45	1,987
(b) Retirees	966	170	137	10	1,283
(c) Beneficiaries of Deceased Retirees	28	3	7	0	38
(d) Disableds on LTD	<u>8</u>	<u>0</u>	<u>1</u>	<u>0</u>	<u>9</u>
(e) Total	2,350	469	443	55	3,317
(2) Approximate Annual Base Payroll	\$89,269,682	\$18,533,977	\$19,359,951	\$4,786,494	\$131,950,104
(3) Averages for Active Employees					
(a) Years of Past Service	13.83	14.69	14.44	12.63	14.02
(b) Attained Age	45.11	45.78	45.54	47.00	45.32
(c) Retirement Age	59.28	59.21	59.13	59.69	59.26
(4) Retiree Averages					
(a) Retirement Age	58.22	57.97	60.10	58.83	58.40
(b) Attained Age	69.63	67.03	69.61	64.53	69.24

Basic Premium Data (Monthly)

	<u>1/1/2003</u>	<u>1/1/2004</u>	<u>1/1/2005</u>
(1) Medical Plans – Retirees Under 65			
(a) HMSA – Preferred Provider Plan			
– single	\$ 314.49	\$ 326.95	\$ 342.72
– 2 party	629.71	654.57	686.23
(b) HMSA – Health Plan Hawaii Plus			
– single	428.38	438.10	463.84
– 2 party	857.82	877.19	928.81
(c) Kaiser			
– single	321.16	373.05	450.53
– 2 party	642.32	746.10	900.06
(2) Senior Plans (per capita) – 65 and Over			
(a) HMSA 65C+	81.50	86.50	92.00
(b) Kaiser Senior	84.68	98.02	97.60
(3) Dental Plan (composite)	55.78	59.02	63.65
(4) Vision Plan (composite)	12.50	12.50	10.38
(5) Senior Drug Plan (per capita)	249.93	292.17	129.31

Section VI: Summary of Plan Benefits

(1) Medical Benefits

(a) Eligibility

Retirement after attaining age 50 with 5 years of service and 65 points (points equals age plus service) or attainment of age 55 with 5 years of service. Beginning January 1, 1994, the plan provides the following percentage of the medical plan premiums described below for the retiree and spouse, to the extent the spouse does not have comparable coverage available from a former employer, based upon the retiree's years of service at retirement:

<u>Years of Service</u>	<u>Percentage</u>
Less than 6	0%
6 - 9	25
10 - 14	50
15 - 19	75
20 and Over	100

Employees with at least 11 years of service as of December 31, 1993 shall be grandfathered at 100%.

For retirements between 1/1/92 and 12/31/93, the following percentages apply:

<u>Years of Service</u>	<u>Percentage</u>
Less than 5	0%
6 - 10	50
11 and Over	100

The percentage for retirements prior to 1/1/92 is 100%.

For employees hired after 12/31/98, the following percentages apply:

<u>Years of Service</u>	<u>Pre-Medicare Percentage</u>	<u>Post-Medicare Percentage</u>
N/A	50%	100%

(4) Maximum Company Contributions

For employees retiring after 12/31/1998, aggregate Company-paid premium amounts associated with benefits (1), (2), and (3), will be limited to the following maximum annual amounts:

	Maximum Annual Company-Paid Premiums	
	Hired Before 1/1/1999	Hired After 12/31/1998
<u>Under 65</u>		
▪ Retiree, Spouse, and Dependents	\$ 15,000	\$10,000
▪ Single Retiree or Single Spouse	7,500	5,000
<u>Over 65</u>		
▪ Retiree and Spouse (per individual)	3,000	2,500*

* Includes drug

(5) Drug Benefits

For employees retiring after 12/31/1998, dental and vision coverages terminate upon eligibility for Medicare and are replaced by drug coverage with the following limits:

Years of Service	Company-Paid Percent of Premium	Maximum Company-Paid Premium*
Less than 6	0 %	\$ 0
6 – 9	25	400
10 – 14	50	800
15 – 19	75	1,200
20 and over	100	1,600

*Applies to employee and spouse separately.

For employees hired after 12/31/1998, the maximum shown in (4) above applies to the combined medical and drug premiums.

Benefits for retirees continue for their lifetimes. Benefits for eligible spouses continue for two years following the death of the retiree.

(6) Group Life Insurance

- (a) Eligibility Retirement after attainment of age 50 with 5 years of service and 65 points or after attainment of age 55 with 5 years of service.
- (b) Benefits A benefit of \$20,000 (\$15,000 for retirement between 11/1/1981 and 12/31/1993, \$10,000 for retirement between 11/1/1977 and 10/31/1981, and smaller amounts for retirement prior to 11/1/1977) is paid to the retiree's beneficiary upon the retiree's death. Spouses and dependents are not covered under the life insurance program.

(7) Medicare Part B Premiums

- (a) Eligibility Retirement after attainment of age 50 with 5 years of service and 65 points or after attainment of age 55 with 5 years of service.
- (b) Benefits The plan reimburses the eligible retiree and his eligible spouse in an amount up to \$24.80 per month, per individual, for Medicare Part B premiums.

Benefits for retirees start at age 65 (or at retirement, if later) and continue for their lifetimes. Benefits for spouses start at the spouses' age 65 and continue for two years following the death of the retiree.

Benefits Included in VEBAs and 401(h) Account

The benefits provided by the plan are funded through three vehicles: a VEBA for bargaining unit employees, a VEBA for nonbargaining (or "merit") employees, and a 401(h) account, which is a separate account in the Retirement Plan for Employees of Hawaiian Electric Industries, Inc. and Participating Subsidiaries.

Because the 401(h) account funding limits are rather low (limited to one third of the retirement plan normal cost), the benefits are funded through the VEBAs to the extent possible. The benefits which cannot be funded through the VEBAs are then funded through the 401(h) account.

Generally, deductible contributions to VEBAs are limited to current health care costs (not including future increases in benefits due to health care cost trending). However there are no such limits for bargained VEBAs. Thus, the full postretirement benefits for bargaining employees, including future health care cost increases, are included in the bargaining VEBA. The VEBA for nonbargaining employees includes life insurance and health care benefits based on current benefit costs. Therefore, the future benefit increases above current costs for nonbargaining employees are funded through the 401(h) account.

Hawaiian Electric Co., Inc.
Projected FlexPlan & Premium Expense

CREDITS	PRICES		Enrollment as of Jan-05	Emp No.	Amount	CR - PR
Basic	2,423,335					
Life	560,351					
Total	2,983,686					
	778 PHE NE NPFZZZZZ 900	HealthLink [†]				
		Single	0.0%	0.0	0	
		S. Parent	0.0%	0.0	0	
		Couple	0.0%	0.0	0	
		Family	0.0%	0.0	0	
		PPP				
		Single	8.8%	131.6	210,602	
		S. Parent	2.6%	38.9	65,809	
		Couple	8.3%	124.1	230,707	
		Family	20.7%	309.5	612,736	
		HPH Plus				
		Single	10.6%	158.5	253,651	
		S. Parent	3.2%	47.8	80,866	
		Couple	6.9%	103.2	191,853	
		Family	20.3%	303.5	600,857	
		SUBTOTAL HMSA			2,247,081	
		Kaiser				
		Single	3.7%	55.3	88,498	
		S. Parent	0.6%	9.0	15,226	
		Couple	2.9%	43.4	80,682	
		Family	5.5%	82.2	162,736	
					347,142	
		Vision				
		Single	23.1%	345.3	22,790	
		Couple	18.1%	270.6	19,483	
		Family	52.9%	790.9	56,945	
					99,218	2,693,441 778 PHE NE NPFZZZZZ 900
		Preventive [†]				
		Single	0.0%	0.0	0	
		Couple	0.0%	0.0	0	
		Family	0.0%	0.0	0	
		Major Care				
		Single	23.1%	345.3	34,060	
		Couple	18.8%	281.1	34,272	
		Family	55.1%	823.7	119,601	
		SUBTOTAL DENTAL			187,933	778 PHE NE NPFZZZZZ 900
		Basic Life			457,421	
		Supplemental Life			572,478	
		SUBTOTAL LIFE INSURANCE			1,029,899	778 PHE NE NPFZZZZZ 900
		Dependent Life			49,127	778 PHE NE NPFZZZZZ 900
		AD&D			143,843	778 PHE NE NPFZZZZZ 900
		Total Prices			4,104,243	(1,120,557)

[†] discontinued effective 1/1/2005

Hawaiian Electric Co., Inc.
Calculation of Group Life Insurance - BASIC
2005

Average Salary for	January	2004	Enrollment	MERIT	BU	TOTAL
				73,284	57,595	
				x 1.0000		
				<u>73,284</u>		
			Salary/Wage Adjustment	x 1.0000	x 1.0000	
				<u>73,284</u>	<u>57,595</u>	
			Insurance Allowance	x 2.0	x 1.5	
			Projected No. of Merit and BU Employees	x 733	x 762	
			Projected Total Basic Coverage	<u>107,434,344</u>	<u>65,831,085</u>	
			Annual Premium	x 0.00264	x 0.00264	
			2005 Projected Basic Group Life Expense	<u>283,627</u>	<u>173,794</u>	457,421

Supplemental 572,478

778 PHE NE NPFZZZZZ 509 1,029,899

Group Life	
Basic	457,421
Supplemental	<u>572,478</u>
	<u>1,029,899</u>

Dependent Life 49,127

Accidental Death 143,843

Total 1,222,869

No. of Merit Employees	49%
No. of BU Employees	51%

Hawaiian Electric Co., Inc.
Calculation of Group Life Insurance - SUPPLEMENTAL
2005

2 1/2 Coverage

Age	2005 Enrolled Merit Avg Salary	2005 Enrolled Barg Avg Wage	Proj. No. of Merit Employees	Proj. No. of BU Employees	2005 Projected Coverage	Annual Premium	2005 Supplemental Premium	TOTAL
0 - 29	73,284	57,595	2	2	261,758	0.00071	186	
30 - 34	73,284	57,595	6	6	785,274	0.00079	620	
35 - 39	73,284	57,595	10	11	1,366,385	0.00132	1,804	
40 - 44	73,284	57,595	22	23	2,936,933	0.00175	5,140	
45 - 49	73,284	57,595	25	26	3,329,570	0.00254	8,457	
50 - 54	73,284	57,595	20	21	2,675,175	0.00446	11,931	
55 - 59	73,284	57,595	18	18	2,355,822	0.00719	16,938	
60 - 64	73,284	57,595	12	13	1,628,143	0.01216	19,798	
65/+	73,284	57,595	3	3	392,637	0.02279	8,948	73,822

3 1/2 Coverage

Age	2005 Enrolled Merit Avg Salary	2005 Enrolled Barg Avg Wage	Proj. No. of Merit Employees	Proj. No. of BU Employees	2005 Projected Coverage	Annual Premium	2005 Supplemental Premium	TOTAL
0 - 29	73,284	57,595	12	13	3,256,286	0.00071	2,312	
30 - 34	73,284	57,595	37	39	9,915,426	0.00079	7,833	
35 - 39	73,284	57,595	105	109	27,945,350	0.00132	36,888	
40 - 44	73,284	57,595	144	149	38,269,102	0.00175	66,971	
45 - 49	73,284	57,595	130	135	34,604,490	0.00254	87,895	
50 - 54	73,284	57,595	109	114	29,107,572	0.00446	129,820	
55 - 59	73,284	57,595	60	63	16,051,050	0.00719	115,407	
60 - 64	73,284	57,595	12	13	3,256,286	0.01216	39,596	
65/+	73,284	57,595	2	2	523,516	0.02279	11,931	498,653

Hawaiian Electric Co., Inc.
Calculation of Group Life Insurance - SUPPLEMENTAL
for \$50,000 coverage
2005

\$50,000 Coverage									
Age	2005 Merit Avg Coverage	2005 Enrolled BU Avg. Covera	Proj. No. of Merit Employees	Proj. No. of BU Employees	2005 Projected Coverage	Annual Premium	2005 Supplemental Premium	TOTAL	
0 - 29	147	244	0	0	0	0.00071	0	0	
30 - 34	147	244	1	1	391	0.00079	0	0	
35 - 39	147	244	0	0	0	0.00132	0	0	
40 - 44	147	244	1	1	391	0.00175	0	1	
45 - 49	147	244	1	2	635	0.00254	0	2	
50 - 54	147	244	0	0	0	0.00446	0	0	
55 - 59	147	244	0	0	0	0.00719	0	0	
60 - 64	147	244	0	0	0	0.01216	0	0	
65/+	147	244	0	0	0	0.02279	0	0	3
TOTAL								3	

No. of Merit Employees 49%
 No. of BU Employees 51%

Hawaiian Electric Co., Inc.
Calculation of Dependent Life Insurance
2005

Plan	Participation as of Jan-05	No. of Emp Enrolled	Annual Rate	TOTAL
10K	5.90%	88	\$26.76	2,355
25K	44.40%	664	\$70.44	<u>46,772</u>
				49,127

778 PHE NE NPFZZZZZ 509 49,127

Hawaiian Electric Co., Inc.

**Calculation of Accidental Death & Dismemberment
2005**

	MERIT	BU	TOTAL
Average Single Coverage	176,138	167,652	
	x 1.0000		
	<u>176,138</u>		
Salary/Wage Adjustment	x 1.0000	x 1.0000	
	<u>176,138</u>	<u>167,652</u>	
Projected No. of Merit and BU Employees ¹	x 733	x 762	
	<u>129,109,154</u>	<u>127,750,824</u>	
Average Merit plus BU Single Coverage			171,813
Participation Annual Single Rate			x 429
			<u>x 0.00042</u>
Single Coverage Premium			30,957
Average Family Coverage	217,552	191,500	
	x 1.0000		
	<u>217,552</u>		
Salary/Wage Adjustment	x 1.0000	x 1.0000	
	<u>217,552</u>	<u>191,500</u>	
Projected No. of Merit and BU Employees ¹	x 733	x 762	
	<u>159,465,616</u>	<u>145,923,000</u>	
Average Merit plus BU Family Coverage			204,273
Participation Annual Family Rate			x 794
			<u>x 0.000696</u>
Family Coverage Premium			112,886
			TOTAL 143,843

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Note:

¹ No. of Merit Employees 49%
No. of BU Employees 51%

2004
 Non-Flex Employer Cost (net of employee contributions)

Provider	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
HMSA	10,302.97	13,065.34	13,242.63	16,352.69	14,717.58	13,013.25	15,102.86	13,409.29	17,036.67	11,866.42	11,932.41	15,726.64	165,768.75
Kaiser	1,612.72	1,612.72	1,538.72	1,538.72	1,538.72	1,538.72	1,538.72	907.84	907.84	907.84	907.84	276.96	14,827.36
HDS	1,039.26	1,376.22	1,207.74	1,315.18	1,035.20	1,035.20	866.72	807.86	1,043.30	866.72	866.72	807.86	12,267.98
VSP	202.43	270.31	236.37	281.43	201.85	201.85	167.91	156.21	203.01	167.91	167.91	156.21	2,413.40
Life	167.92	125.32	117.02	133.26	80.82	80.82	118.02	118.02	250.13	68.77	68.77	68.77	1,397.64
Dep Life	-	-	-	13.98	-	-	-	-	5.87	-	-	-	19.85
ADD	-	-	-	-	-	-	-	-	64.06	13.74	13.74	13.74	105.28
	13,325.30	16,449.91	16,342.48	19,635.26	17,574.17	15,869.84	17,794.23	15,399.22	19,510.88	13,891.40	13,957.39	17,050.18	196,800.26

Attachment 9

HAWAIIAN ELECTRIC COMPANY, INC.
ADMINISTRATIVE AND GENERAL EXPENSES
(\$ Thousands)

	RECORDED					FORECAST		Normalization/ Adjustment	Test year 2005	Adjustments	Revised Test year 2005	Note
	2000	2001	2002	2003	2004	2004	2005					
ADMINISTRATIVE												
920 A&G Expense - Labor	15,198	13,000	14,082	14,593	15,185	13,388	15,061	(1,136)	13,925		13,925	
921 A&G Expense - Non labor	12,635	13,684	8,805	9,831	12,539	12,593	11,814	(236)	11,578	(296)	11,282	1
922 A&G Expenses Transferred	(2,144)	(2,337)	(1,757)	(1,965)	(1,833)	(2,408)	(2,174)	(29)	(2,203)	15	(2,188)	
Total Administrative	25,889	24,347	21,130	22,459	25,891	23,573	24,701	(1,401)	23,300	(281)	23,019	
OUTSIDE SERVICES												
923010 Outside Services - Legal	147	201	52	38	15	144	154		154		154	
923020 Outside Services - Other	1,077	1,565	1,251	731	872	990	2,974	(2,076)	898	381	1,279	2
Total Outside Services	1,224	1,766	1,303	769	887	1,134	3,128	(2,076)	1,052	381	1,433	
INSURANCE												
924 Property Insurance	851	1,144	1,774	2,356	3,088	2,469	2,495	(67)	2,428		2,428	
925 Injuries & Damages - Employees	3,949	6,170	5,459	4,919	6,762	5,795	6,230	(194)	6,036		6,036	
Total Insurance	4,800	7,314	7,233	7,275	9,850	8,264	8,725	(261)	8,464	0	8,464	
EMPLOYEE BENEFITS												
926000 Employee Pensions and Benefits	(15,242)	(15,939)	(9,388)	15,199	7,398	8,795	14,101	(630)	13,271	335	13,606	3
926010 Employee Benefits - Flex Credits	6,466	6,679	7,550	7,044	8,244	8,755	9,805	6	9,811	50	9,861	3
926020 Employee Benefits Transfer	2,263	2,511	697	(6,543)	(4,446)	(5,454)	(7,239)		(7,239)	(121)	(7,360)	
Total Employee Benefits	(6,513)	(6,749)	(1,141)	15,700	11,196	12,096	16,667	(624)	15,843	264	16,107	
MISCELLANEOUS												
928 Regulatory Commission Expenses	0	0	0	0	0	0	0	95	95	129	224	4
9301 Inst. or Goodwill Advertising Expense	104	98	96	93	76	93	73	0	73		73	
9302 Miscellaneous General Expenses	2,508	2,330	3,503	3,842	2,803	3,441	3,318	1	3,319	(97)	3,222	5
931 Rents Expense - A&G	1,378	1,428	1,398	1,524	1,544	1,468	1,557		1,557	(172)	1,385	6
932 Admin and General Maintenance	974	838	684	496	505	446	740		740		740	
Total Miscellaneous	4,964	4,694	5,681	5,955	4,928	5,448	5,688	96	5,784	(140)	5,644	
TOTAL ADMINISTRATIVE & GENERAL EXPENSES	30,364	31,372	34,206	52,158	52,752	50,515	58,909	(4,466)	54,443	224	54,667	

Notes	Reference	Amount	
1	921 Remove HR/Suites Amortization	CA-IR-352	-184
1	921 Increase HEI charges	CA-IR-419	99
1	921 Decrease HEI charges in account 184120*	CA-IR-419	-17
1	921 Decrease charges in account 184120 related to new phone system*	CA-IR-625	-194
2	923020 Increase audit fees	CA-IR-424	381
3	926000 Qualified Pension Plan	CA-IR-340	239
3	926000 Other Postretirement Benefits	CA-IR-340	311
3	926000 Long-Term Disability Benefits	CA-IR-345	-86
3	926000 Other Benefits/Administration	CA-IR-346	-74
3	926000 Long term care	Updated premium	2
3	926010 Flex Credits Less Prices	HECO-1508 (Revised 6/13/05)	168
3	926010 Group Medical Plan	CA-IR-348	-319
3	926010 Group Dental Plan	CA-IR-349	39
3	926010 Group Vision Plan	CA-IR-350	-5
3	926010 Group Life Insurance Plan	HECO-1513 (Revised 6/13/05)	112
3	926010 Other/Administration	Updated premiums for Non-Flex participants	55
3	926000 PEN 005 HEI 401(k) adm expenses from CA-IR-419 p 4	HECO T-1 p 25	-5
3	926000 Adj for inc. in HEI charges and delete EICP adm costs	CA-IR-419	-52
4	928 Increase of Regulatory Commission Expense	CA-IR-258	129
5	9302 Adjustment for EPRI Tailored Collaboration	CA-IR-536	-97
6	931 Decrease amortization of leased property	CA-IR-260	-174
6	931 Increase HEI charges	CA-IR-419	2