

EXPLANATION OF ACCOUNTS	SUBJECT CUSTOMER ACCOUNTS EXPENSES 90100 - 90400
90100	<p>SUPERVISION Includes the costs of general direction and supervision of the meter reading, customer accounting, and collecting activities. Secretarial work, office supplies, and expenses for general supervisory personnel should also be charged to this account. Excludes direct supervision and other expenses of specific activities which should be charged to the appropriate customer account (e.g., 90200 or 90300).</p>
90200	<p>METER READING EXPENSES Includes the costs of reading customer KWH and demand meters.</p> <p>Exceptions are:</p> <ol style="list-style-type: none"> a. Removing, resetting, sealing, locking, or unlocking meters by the Meter Division which should be charged to account 58600, Meter Expenses. b. Meter reading of delinquent accounts, and disconnecting or reconnecting service by collectors should be charged to account 90300, Customer Records and Collection Expenses.
90300	<p>CUSTOMER RECORDS AND COLLECTION EXPENSES Includes the costs of processing customer applications, contracts, orders, credit investigations, bills, accounts, collections, and complaints.</p> <p>Some examples are:</p> <ol style="list-style-type: none"> a. Routine processing of customer initiated orders for service, disconnections, transfers, and meter testing. b. Customer credit investigations and fees paid to credit service bureaus. c. Customer billing and accounting including rental and operation of processing facilities. d. Customer collections including fees or commissions paid to others for customer collections. e. Receiving, recording, and handling customer inquiries, complaints, and requests for investigations. f. Handling and recording customer deposits. g. Maintaining customer line-extensions and advances for construction records. h. Final meter reading of delinquent accounts by collectors. i. First and final meter readings when disconnecting or reconnecting service because of non-payment of bills. j. Cash overages and shortages related to customer collections. <p>Excludes charges for processing customer-initiated inquiries, complaints, and orders for meter tests, services, disconnections, and transfers which should be charged to the appropriate account.</p>
90400	<p>UNCOLLECTIBLE ACCOUNTS This account provides for losses from uncollectible revenues. Concurrent credits are made to account 14401, Accumulated Provision for Uncollectible Accounts - Credit. Excludes charges for actual losses and credits for collection recoveries which should be in account 14401.</p>

HAWAIIAN ELECTRIC COMPANY, INC. ACCOUNTING INFORMATION MANUAL

HAWAIIAN ELECTRIC COMPANY, INC.
CUSTOMER ACCOUNTS EXPENSE
Test Year 2007

VARIANCE Inc/Dec >=\$200K & >=10%

(\$ THOUSANDS)

A	B	C	D	E	F	G	H	I	
Account	RA	Activity	Expense Element	2005 Recorded	2007 Test Year Budget	(F-G) \$ Variance	(G/E) % Vari		
1	901	PEZ	720	451	\$1,010	\$1,251	\$241	24%	a
2	903	PCA	600	501	\$403	\$15	-\$388	-96%	b
3	903	PCH	600	155	\$229	\$0	-\$229	-100%	c
4	903	PCP	614	640	\$1,037	\$1,254	\$217	21%	d
5	903	PEZ	612	451	\$0	\$289	\$289	-	e
6	904	PCD	618	900	\$316	\$1,363	\$1,047	331%	f

Increase due to new ITS Clearing Account allocations set up for 2007 for Software Maintenance & Purchases to ensure they are allocated to expense only code blocks. (see Blane Murakami's e-mail dated 7-20-06).

Decrease due to the Customer Information System phase 1 recorded expense in 2005 is higher then what is budgeted in 2007.

Increase represents the labor true-up and is applied to the recorded labor only. It is the difference between the actual pay to the standard labor rate.

Increase represents the cost of the postal increases.

Increase due to new ITS Clearing Account allocations set up for 2007 for Software Maintenance & Purchases to ensure they are allocated to expense only code blocks. (see Blane Murakami's e-mail dated 7-20-06).

Increase due to Bad Debt expense net write-off lower in 2005 as compared to 2007 budget.

Note: The source documents for the descriptions of RA's , Activities & Expense Elements shown below are in HECO-WP-101(J) for RA's;101(K) for Activity Codes & Descriptions; and 101(N) for Expense Element Codes and Descriptions.

RA	Description
PCA	Customer Service Department - Administrative
PCD	Customer Service Department - Credit
PCH	Customer Service Department - Customer Assistance Center
PCP	Customer Service Department - Payment Process & Support Center
PEZ	Information Technology & Services - ISD Chargeback
Activity	Description
600	Respond to Customer Inquiries & Service Requests
612	Process OCARS (Other Corp Accts Receivable)
614	Process, Verify & Mail Customer Bills
618	Manage Past Due Accounts
720	Improve Business Process
Exp. Ele.	Description
155	Labor True-Up
451	Information System Expense-Production & Development
501	Outside Services - General
640	Freight, Postage and Bulk Mail
900	Financial Statement Items

HAWAIIAN ELECTRIC COMPANY, INC.
CUSTOMER DEPOSITS
(Account 235.01)

	RECORDED					
	2001	2002	2003	2004	2005	2006
JANUARY	3,719,126	4,232,863	4,542,477	5,096,061	5,075,469	5,461,661
FEBRUARY	3,774,112	4,316,470	4,530,123	5,124,279	5,099,965	5,596,777
MARCH	3,843,587	4,339,474	4,564,027	5,164,089	5,094,526	5,741,625
APRIL	3,871,783	4,354,984	4,590,389	5,161,650	5,116,575	5,798,289
MAY	3,906,381	4,321,465	4,616,784	5,139,280	5,148,162	5,828,493
JUNE	3,961,245	4,362,189	4,594,128	5,144,856	5,152,599	5,909,336
JULY	4,004,665	4,395,891	4,575,584	5,090,420	5,139,242	5,950,459
AUGUST	4,102,650	4,402,663	4,693,623	5,125,293	5,143,856	6,009,412
SEPTEMBER	4,136,432	4,420,526	4,812,854	5,124,987	5,179,767	6,045,453 (1)
OCTOBER	4,139,808	4,471,469	5,020,781	5,035,822	5,273,681	6,081,711 (1)
NOVEMBER	4,148,890	4,528,238	5,065,511	5,030,873	5,359,351	6,118,186 (1)
DECEMBER	4,183,110	4,482,910	5,071,972	5,065,653	5,387,270	6,154,880 (1)

Average annual % increase (2001 - 2005)
based on year-end balances 7.197% (2)

ESTIMATED
YEAR-END
BALANCE

2007 6,154,880 X 1.07197 = 6,597,847

(1) Estimate for Sept. - Dec. 2006 based on Aug. (latest recorded) increased by 1/12 per month of 4 year annual average 7.197%.

(2)
$$\frac{2005 \text{ YEAR END BALANCE} - 2001 \text{ YEAR END BALANCE}}{2001 \text{ YEAR END BALANCE}} \div 4 \text{ Years} = \text{Average Annual \% increase}$$

$$\frac{5,387,270 - 4,183,110}{4,183,110} = 28.786\% \div 4 \text{ Years} = 7.197\% \text{ Avg. Annual \% Increase}$$

Hawaiian Electric Company Inc.
REVENUE LAG DAYS

MONTH	1996				1997				1998			
	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D
JAN	46,468	62,906	38.0	38.0	45,197	65,012	36.6	36.6	47,106	62,582	38.4	38.4
FEB	44,766	59,099	38.5	38.2	49,047	63,320	39.0	37.8	44,091	58,514	38.4	38.4
MAR	40,319	63,794	34.7	37.0	48,100	65,064	38.0	37.9	42,227	59,802	37.0	37.9
APR	38,112	55,925	36.2	36.8	46,860	66,025	37.1	37.7	41,856	57,280	37.7	37.9
MAY	44,694	61,206	37.7	37.0	48,169	62,033	39.1	37.9	40,440	54,954	37.9	37.9
JUN	45,237	65,763	36.4	36.9	46,355	64,384	37.4	37.9	41,280	57,792	37.2	37.8
JUL	50,791	67,784	38.3	37.1	48,756	64,911	38.3	37.9	42,700	59,120	37.5	37.7
AUG	48,503	65,615	38.0	37.2	47,869	65,009	37.9	37.9	43,253	60,382	37.3	37.7
SEP	51,092	67,209	38.6	37.4	49,497	69,605	37.1	37.8	45,531	61,343	38.1	37.7
OCT	49,263	66,000	38.2	37.5	49,038	66,785	37.8	37.8	44,568	58,222	38.8	37.8
NOV	50,672	67,935	38.2	37.5	50,479	63,504	39.7	38.0	46,547	62,322	38.2	37.9
DEC	50,688	65,553	39.0	37.7	47,311	62,588	38.5	38.0	46,562	58,501	39.7	38.0
YTD TOTALS	560,605	768,789			576,678	778,240			526,161	710,814		
YTD AVERAGE	46,717	64,066	37.7		48,057	64,853	38.0		43,847	59,235	38.0	

Hawaiian Electric Company Inc.
REVENUE LAG DAYS

1999					2000				
Month	DAILY SALES		LAG DAYS		Month	DAILY SALES		LAG DAYS	
	REC BAL	REVENUES	MONTH	Y-T-D		REC BAL	REVENUES	MONTH	Y-T-D
Jan	45,333	59,043	38.8	38.8	Jan	48,574	67,173	37.5	37.5
Feb	41,281	55,779	38.0	38.4	Feb	45,961	65,899	36.7	37.1
Mar	40,597	53,455	38.6	38.5	Mar	46,264	67,328	36.4	36.9
Apr	38,679	55,248	36.8	38.1	Apr	46,969	67,745	36.6	36.8
May	39,821	57,690	36.5	37.7	May	48,381	70,074	36.5	36.7
Jun	43,733	58,927	38.1	37.8	Jun	49,771	72,643	36.3	36.7
Jul	43,342	60,333	37.3	37.7	Jul	53,288	75,366	37.0	36.7
Aug	44,112	63,451	36.6	37.6	Aug	54,869	78,952	36.6	36.7
Sep	47,946	62,654	38.8	37.7	Sep	56,246	76,972	37.7	36.8
Oct	46,505	64,645	37.4	37.7	Oct	54,791	79,057	36.6	36.7
Nov	48,220	65,287	38.0	37.6	Nov	56,863	77,718	37.7	36.9
Dec	50,911	69,096	37.9	37.7	Dec	59,344	75,279	39.5	37.1
	530,480	725,608				621,321	874,206		
	44,207	60,467	37.7			51,777	72,851	37.1	

Hawaiian Electric Company Inc.
REVENUE LAG DAYS

2001					2002			
Month	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D
Jan	58,323	77,801	38.3	38.3	50,133	66,484	38.4	38.4
Feb	48,918	72,949	35.9	37.1	46,735	61,034	38.8	38.6
Mar	48,758	70,093	36.6	37.0	42,962	61,613	36.7	38.0
Apr	48,521	70,860	36.3	36.8	42,270	66,367	34.9	37.2
May	47,447	71,013	35.8	36.6	45,327	67,154	36.0	36.9
Jun	49,035	72,949	35.9	36.5	48,837	73,422	35.7	36.7
Jul	52,372	77,371	36.1	36.4	51,733	76,198	36.1	36.6
Aug	53,998	78,070	36.5	36.5	51,600	75,815	36.2	36.6
Sep	56,128	81,759	36.4	36.4	53,196	77,522	36.4	36.5
Oct	56,517	77,777	37.6	36.6	55,187	79,002	36.7	36.6
Nov	55,596	72,901	38.7	36.7	58,611	77,134	38.6	36.8
Dec	54,563	78,070	36.7	36.7	57,269	76,889	38.1	36.9
YTD Totals	630,176	901,613			603,860	858,634		
YTD Average	52,515	75,134	36.7		50,322	71,553	36.9	

Hawaiian Electric Company Inc.
REVENUE LAG DAYS

2003					2004			
Month	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D
Jan	59,566	77,216	39.0	39.0	58,219	80,025	37.6	37.6
Feb	52,948	74,068	37.2	38.1	56,388	78,885	37.2	37.4
Mar	52,626	78,274	35.9	37.4	57,410	79,306	37.5	37.5
Apr	53,485	78,437	36.2	37.1	50,871	80,767	34.6	36.7
May	53,870	79,394	36.1	36.9	51,083	80,634	34.8	36.3
Jun	55,368	83,573	35.6	36.7	56,175	85,451	35.5	36.2
Jul	57,306	80,836	37.1	36.7	58,980	87,482	36.0	36.2
Aug	55,352	83,608	35.6	36.6	60,275	89,714	35.9	36.1
Sep	59,162	85,033	36.7	36.6	63,691	93,947	36.1	36.1
Oct	57,362	82,078	36.7	36.6	67,940	94,700	37.3	36.3
Nov	58,100	80,291	37.5	36.7	69,044	93,707	37.9	36.4
Dec	58,641	77,969	38.4	36.8	66,692	91,396	37.7	36.5
	673,786	960,776			716,768	1,036,014		
	56,149	80,065	36.8		59,731	86,334	36.5	

**Hawaiian Electric Company Inc.
REVENUE LAG DAYS**

2005					2006			
Month	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D
Jan	68,644	93,145	37.9	37.9	81,126	111,654	37.6	37.6
Feb	60,762	81,833	38.1	38.0	72,401	107,027	36.1	36.8
Mar	58,862	80,812	37.6	37.9	70,737	105,582	35.9	36.5
Apr	56,407	83,813	36.0	37.4	71,065	107,205	35.7	36.3
May	60,443	90,815	35.7	37.1	75,972	109,051	36.7	36.4
Jun	64,771	100,659	35.1	36.7	78,741	117,696	35.8	36.3
Jul	68,453	99,919	36.3	36.6			#DIV/0!	36.3
Aug	69,187	110,331	34.6	36.3			#DIV/0!	36.3
Sep	71,600	111,474	35.0	36.1			#DIV/0!	36.3
Oct	75,209	114,822	35.4	36.1			#DIV/0!	36.3
Nov	78,934	116,384	36.1	36.1			#DIV/0!	36.3
Dec	80,115	110,046	37.6	36.2			#DIV/0!	36.3
	813,387	1,194,052			450,042	658,215		
	67,782	99,504	36.2		37,504	54,851	36.3	
	HISTORICAL AVERAGE (1996 to 2005)		37.2					

NET WRITE-OFFS		SALES REVENUES		
Mo/Yr	12 Months Ending	Mo/Yr	12 Months Ending	% Write-off *
Sep-96	1,351,144	May-96	727,926.8	0.18562%
Oct-96	1,385,503	Jun-96	733,692.3	0.18884%
Nov-96	1,391,768	Jul-96	741,335.9	0.18774%
Dec-96	1,391,795	Aug-96	743,307.8	0.18724%
Jan-97	1,431,064	Sep-96	746,939.3	0.19159%
Feb-97	1,334,076	Oct-96	749,951.8	0.17789%
Mar-97	1,356,690	Nov-96	755,648.7	0.17954%
Apr-97	1,382,070	Dec-96	768,788.9	0.17977%
May-97	1,369,514	Jan-97	770,894.9	0.17765%
Jun-97	1,396,488	Feb-97	775,115.9	0.18017%
Jul-97	1,259,338	Mar-97	776,385.9	0.16221%
Aug-97	1,282,069	Apr-97	786,485.5	0.16301%
Sep-97	1,353,341	May-97	787,312.7	0.17189%
Oct-97	1,384,048	Jun-97	785,934.2	0.17610%
Nov-97	1,370,725	Jul-97	783,061.5	0.17505%
Dec-97	1,459,809	Aug-97	782,455.2	0.18657%
Jan-98	1,436,960	Sep-97	784,851.1	0.18309%
Feb-98	1,433,201	Oct-97	785,636.7	0.18243%
Mar-98	1,404,239	Nov-97	781,205.1	0.17975%
Apr-98	1,311,608	Dec-97	778,240.8	0.16853%
May-98	1,263,318	Jan-98	775,810.6	0.16284%
Jun-98	1,468,636	Feb-98	771,004.0	0.19048%
Jul-98	1,401,318	Mar-98	765,741.6	0.18300%
Aug-98	1,365,270	Apr-98	756,997.4	0.18035%
Sep-98	1,293,944	May-98	749,919.1	0.17254%
Oct-98	1,266,397	Jun-98	743,326.5	0.17037%
Nov-98	1,226,766	Jul-98	737,535.1	0.16633%
Dec-98	1,111,397	Aug-98	732,908.3	0.15164%
Jan-99	1,073,698	Sep-98	724,646.9	0.14817%
Feb-99	1,063,191	Oct-98	716,083.7	0.14847%
Mar-99	1,047,338	Nov-98	714,901.6	0.14650%
Apr-99	1,028,931	Dec-98	710,814.3	0.14475%
May-99	1,037,296	Jan-99	707,274.7	0.14666%
Jun-99	780,974	Feb-99	704,539.7	0.11085%
Jul-99	777,205	Mar-99	698,193.0	0.11132%
Aug-99	754,389	Apr-99	696,160.9	0.10836%
Sep-99	742,846	May-99	698,896.6	0.10629%
Oct-99	689,311	Jun-99	700,032.0	0.09847%
Nov-99	718,268	Jul-99	701,245.6	0.10243%
Dec-99	717,975	Aug-99	704,314.0	0.10194%
Jan-00	691,699	Sep-99	705,621.9	0.09803%
Feb-00	705,040	Oct-99	712,044.2	0.09902%
Mar-00	695,928	Nov-99	715,009.8	0.09733%

* Formula: net write-offs / sales revenue/1000*100

NET WRITE-OFFS		SALES REVENUES		
Mo/Yr	12 Months Ending	Mo/Yr	12 Months Ending	% Write-off *
Apr-00	699,667	Dec-99	725,604.3	0.09643%
May-00	687,443	Jan-00	733,734.2	0.09369%
Jun-00	668,912	Feb-00	743,853.9	0.08993%
Jul-00	663,323	Mar-00	757,727.2	0.08754%
Aug-00	646,734	Apr-00	770,223.8	0.08397%
Sep-00	655,407	May-00	782,607.8	0.08375%
Oct-00	685,529	Jun-00	796,323.4	0.08609%
Nov-00	707,453	Jul-00	811,356.0	0.08719%
Dec-00	837,709	Aug-00	826,857.1	0.10131%
Jan-01	814,157	Sep-00	841,178.6	0.09679%
Feb-01	764,831	Oct-00	855,590.8	0.08939%
Mar-01	663,387	Nov-00	868,022.3	0.07643%
Apr-01	679,070	Dec-00	874,206.1	0.07768%
May-01	671,006	Jan-01	884,834.8	0.07583%
Jun-01	675,657	Feb-01	891,885.5	0.07576%
Jul-01	686,072	Mar-01	894,649.8	0.07669%
Aug-01	751,423	Apr-01	897,764.7	0.08370%
Sep-01	869,430	May-01	898,703.6	0.09674%
Oct-01	902,087	Jun-01	898,830.1	0.10036%
Nov-01	860,511	Jul-01	900,834.8	0.09552%
Dec-01	774,635	Aug-01	899,953.4	0.08608%
Jan-02	753,661	Sep-01	904,740.1	0.08330%
Feb-02	769,445	Oct-01	903,460.9	0.08517%
Mar-02	809,180	Nov-01	898,643.3	0.09004%
Apr-02	790,002	Dec-01	891,698.6	0.08860%
May-02	1,030,610	Jan-02	880,381.5	0.11706%
Jun-02	1,018,622	Feb-02	868,466.5	0.11729%
Jul-02	931,019	Mar-02	859,986.8	0.10826%
Aug-02	912,549	Apr-02	855,493.9	0.10667%
Sep-02	793,242	May-02	851,635.4	0.09314%
Oct-02	773,313	Jun-02	852,288.1	0.09073%
Nov-02	766,756	Jul-02	851,115.2	0.09009%
Dec-02	764,393	Aug-02	848,860.0	0.09005%
Jan-03	792,559	Sep-02	844,623.1	0.09384%
Feb-03	792,473	Oct-02	845,847.8	0.09369%
Mar-03	831,944	Nov-02	850,081.3	0.09787%
Apr-03	840,975	Dec-02	858,635.7	0.09794%
May-03	683,004	Jan-03	869,367.4	0.07856%
Jun-03	795,584	Feb-03	882,400.9	0.09016%
Jul-03	970,816	Mar-03	899,062.1	0.10798%
Aug-03	952,196	Apr-03	911,131.8	0.10451%
Sep-03	937,554	May-03	923,370.9	0.10154%
Oct-03	958,486	Jun-03	933,521.6	0.10267%
Nov-03	951,452	Jul-03	938,160.0	0.10142%

* Formula: net write-offs / sales revenue/1000*100

NET WRITE-OFFS		SALES REVENUES		
Mo/Yr	12 Months Ending	Mo/Yr	12 Months Ending	% Write-off *
Dec-03	975,434	Aug-03	945,952.4	0.10312%
Jan-04	955,302	Sep-03	953,462.8	0.10019%
Feb-04	962,704	Oct-03	956,538.5	0.10064%
Mar-04	974,837	Nov-03	959,694.7	0.10158%
Apr-04	965,425	Dec-03	960,784.2	0.10048%
May-04	811,993	Jan-04	963,593.2	0.08427%
Jun-04	707,004	Feb-04	968,410.5	0.07301%
Jul-04	588,208	Mar-04	969,442.2	0.06067%
Aug-04	546,681	Apr-04	971,772.5	0.05626%
Sep-04	562,260	May-04	973,013.3	0.05779%
Oct-04	492,445	Jun-04	974,892.1	0.05051%
Nov-04	567,413	Jul-04	981,537.5	0.05781%
Dec-04	534,055	Aug-04	987,643.7	0.05407%
Jan-05	502,903	Sep-04	996,558.0	0.05046%
Feb-05	489,908	Oct-04	1,009,179.8	0.04855%
Mar-05	467,996	Nov-04	1,022,596.2	0.04577%
Apr-05	440,622	Dec-04	1,036,013.4	0.04253%
May-05	510,033	Jan-05	1,049,133.2	0.04861%
Jun-05	422,289	Feb-05	1,052,081.4	0.04014%
Jul-05	429,831	Mar-05	1,053,587.6	0.04080%
Aug-05	474,635	Apr-05	1,056,634.2	0.04492%
Sep-05	441,975	May-05	1,066,815.3	0.04143%
Oct-05	461,227	Jun-05	1,082,022.6	0.04263%
Nov-05	396,040	Jul-05	1,094,459.7	0.03619%
Dec-05	363,838	Aug-05	1,115,076.4	0.03263%
Jan-06	476,683	Sep-05	1,132,603.5	0.04209%
Feb-06	526,614	Oct-05	1,152,725.6	0.04568%
Mar-06	537,946	Nov-05	1,175,402.6	0.04577%
Apr-06	607,739	Dec-05	1,194,052.4	0.05090%
May-06	670,901	Jan-06	1,212,561.8	0.05533%
Jun-06	774,884	Feb-06	1,237,755.6	0.06260%
Jul-06	805,193	Mar-06	1,262,525.3	0.06378%
Aug-06	764,398	Apr-06	1,285,917.3	0.05944%

Sep '96 - Aug '06

105,600,279

104,620,347

0.1009%

* Formula: net write-offs / sales revenue/1000*100

HAWAIIAN ELECTRIC COMPANY, INC.
2007 TEST YEAR

NON-SALES ELECTRIC UTILITY CHARGES

	AT PRESENT RATES			AT PROPOSED RATES		
	# of Transactions	Rate	Revenue \$000s	# of Transactions	Rate	Revenue \$000s
SERVICE ESTABLISHMENT CHARGES						
REGULAR	39,253	\$15.00	\$588.8	39,253	\$20.00	\$785.1
SAME DAY	8,086	\$25.00	\$202.2	8,086	\$45.00	\$363.9
TOTAL, SERVICE ESTB. CHARGES			\$791.0			\$1,149.0
FIELD COLLECTION CHARGES	5,929	\$15.00	\$88.9	15,603 (1)	\$20.00	\$332.2
RETURNED CHECK CHARGES	5,134	\$7.50	\$38.5			
RETURNED PAYMENT CHARGES				5,134	\$22.00	\$112.9

(1) The 15,603 proposed transaction level is based on a 4 year average of 38% of successful attempts to total attempts. The 38% was divided by the 5,929 number of transactions for present rates.

2007 Non-Sales Electric Utility Charges TRANSACTION COUNT

Gen. Led. Acct	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	5 yr. avg. TOTAL	
Field Collection (1)	45001	586	555	523	537	483	472	436	438	472	532	465	430	5,929
Retruned Check (2)	45002	487	367	361	366	380	383	445	446	459	502	453	485	5,134
Service Establishment (Regular) (3)	45103	3,017	2,936	2,936	3,130	3,165	3,480	3,809	3,730	3,661	3,365	3,067	2,958	39,253
Service Establishment (Same day) (4)	45103	773	805	698	658	627	605	586	643	694	705	679	612	8,086
		4,863	4,663	4,518	4,692	4,654	4,940	5,276	5,257	5,285	5,104	4,664	4,486	58,402

- (1) Number of successful field calls
- (2) Number of returned checks
- (3) & (4) Number of transactions

FIELD COLLECTION	2001	2002	2003	2004	2005	5 yr. TOTAL
J	718	726	622	491	373	2,930
F	680	585	621	439	448	2,773
M	834	473	421	439	447	2,614
A	722	600	577	447	341	2,687
M	629	490	535	350	411	2,415
J	708	469	554	280	349	2,360
J	654	553	424	202	349	2,182
A	594	560	486	98	451	2,189
S	651	549	547	226	385	2,358
O	645	618	576	403	416	2,658
N	571	513	529	305	408	2,326
D	481	421	494	382	374	2,152
	7,887	6,557	6,386	4,062	4,752	29,644

RETURN CHECK	2001	2002	2003	2004	2005	5 year TOTAL
J	506	535	456	462	478	2,437
F	362	358	407	367	342	1,836
M	404	312	346	361	383	1,806
A	360	361	415	360	333	1,829
M	389	378	433	357	341	1,898
J	398	384	350	396	388	1,916
J	453	442	495	397	440	2,227
A	471	453	457	397	450	2,228
S	389	490	422	541	451	2,293
O	522	482	453	481	572	2,510
N	495	404	433	449	482	2,263
D	443	484	437	528	535	2,427
	5,192	5,083	5,104	5,096	5,195	25,670

SERVICE ESTABLISHMENT	2001	2002	2003	2004	2005	5 yr. TOTAL	
SVY - Regular \$15.00	J	2,996	2,943	3,157	3,026	2,962	15,084
	F	3,051	2,774	2,902	3,038	2,916	14,681
	M	3,064	3,111	3,083	3,152	3,141	15,551
	A	3,067	3,200	3,039	3,141	3,205	15,652
	M	3,259	3,135	2,973	3,202	3,254	15,823
	J	3,311	3,323	3,420	3,525	3,821	17,400
	J	3,667	3,805	3,701	3,835	4,037	19,045
	A	3,675	3,682	3,718	3,690	3,884	18,649
	S	3,737	3,501	3,600	3,649	3,816	18,303
	O	3,256	3,368	3,333	3,368	3,499	16,824
	N	3,022	3,056	3,130	2,935	3,192	15,335
	D	2,913	2,990	2,969	2,876	3,041	14,789
		39,018	38,888	39,025	39,437	40,768	197,136

SERVICE ESTABLISHMENT	2001	2002	2003	2004	2005	5 yr. TOTAL	
SVS - Same day \$25.00	J	379	185	164	208	221	1,157
	F	392	226	203	190	239	1,250
	M	331	201	180	217	219	1,148
	A	232	222	173	230	235	1,092
	M	204	199	193	219	181	996
	J	218	194	212	237	202	1,063
	J	279	218	206	213	216	1,132
	A	296	205	321	229	237	1,288
	S	323	200	324	212	250	1,309
	O	289	194	311	206	196	1,196
	N	268	242	315	231	194	1,250
	D	261	224	312	188	214	1,199
		3,472	2,510	2,914	2,580	2,604	14,080

RECONNECTION	2001	2002	2003	2004	2005	5 yr. TOTAL	
RCS - Same Day \$25.00	J	758	678	476	444	350	2,706
RCY - Regular \$15.00	F	679	533	530	604	429	2,775
	M	723	403	306	439	471	2,342
	A	522	450	477	433	317	2,199
	M	594	450	461	308	327	2,140
	J	550	330	506	215	361	1,962
	J	489	371	459	180	297	1,796
	A	576	429	438	61	425	1,929
	S	570	430	513	241	408	2,162
	O	532	485	512	431	370	2,330
	N	480	459	501	290	417	2,147
	D	433	195	411	438	386	1,863
		6,906	5,213	5,590	4,084	4,558	26,351

Late Payment Fees vs. Total Bill Revenue

	2000	2001	2002	2003	2004	2005
Late pay fees	\$924,437	\$889,861	\$813,383	\$903,373	\$937,137	\$998,678
Total billed rev	\$874,315,682	\$874,631,814	\$859,328,180	\$960,792,442	\$1,043,266,286	\$1,194,269,885
	0.106%	0.102%	0.095%	0.094%	0.090%	0.084%
Avg '00-'05						0.095%

Source:
Late pay fees - G/L account 45003000 Delinquent Payment
Ellipse
Rev 510 total billed revenue

Hawaiian Electric Company, Inc.
Fuel Price for ECAC Calculations

2007 Test Year - Direct Testimony

Description	(A)	(B)	(C)	(D)	(E)	(F)
	<u>Kahe</u>	<u>Waiau</u>	Central Station <u>Honolulu</u>	<u>Diesel</u>	<u>Total</u>	DG <u>Diesel</u>
1 MBtu Consumed	35,250,991	12,706,261	1,830,272	593,004	50,380,528	235,037
2 Fuel Price (\$/bbl)	65.1012	65.1012	65.1012	99.4609		99.4609
3 Trucking cost per bbl	0.0000	0.0000	3.1010	0.0000		4.4100
4 Inspection Cost per bbl	0.0092	0.0092	0.0092	0.0730		0.0730
5 Fuel Additive Cost per bbl	0.0199	0.0000	0.0000	0.0000		0.0000
6 Heat Content (MBtu/bbl)	6.2	6.2	6.2	5.86		5.86
<u>Fuel Price at Present Rates</u>						
7 Fuel Price (\$/bbl)						
8 Fuel Oil	65.1012	65.1012	65.1012	99.4609		0.0000
9 Trucking	0.0000	0.0000	0.0000	0.0000		0.0000
10 Inspection	0.0092	0.0092	0.0092	0.0730		0.0000
11 Fuel Additive	<u>0.0000</u>	<u>0.0000</u>	<u>0.0000</u>	<u>0.0000</u>		<u>0.0000</u>
12 Fuel Price (\$/bbl)	65.1104	65.1104	65.1104	99.5339		0.0000
13 Fuel Price per MBtu (¢/MBtu)	1,050.17	1,050.17	1,050.17	1,698.53		0.00
<u>Fuel Price at Proposed Rates</u>						
14 Fuel Price (\$/bbl)						
15 Fuel Oil	65.1012	65.1012	65.1012	99.4609		99.4609
16 Trucking	0.0000	0.0000	3.1010	0.0000		4.4100
17 Inspection	0.0092	0.0092	0.0092	0.0730		0.0730
18 Fuel Additive	<u>0.0199</u>	<u>0.0000</u>	<u>0.0000</u>	<u>0.0000</u>		<u>0.0000</u>
19 Fuel Price (\$/bbl)	65.1303	65.1104	68.2114	99.5339		103.9439
20 Fuel Price per MBtu (¢/MBtu)	1,050.49	1,050.17	1,100.18	1,698.53		1,773.79

Line 1: HECO-409, page 2

Line 2: HECO-404, pg 1, col B

Line 3: HECO-405, pg 2, col B

Line 4: HECO-405, pg 3, col B

Line 5: Additive \$/bbl calculations:

$$\text{Additive Expense }^{(1)} \div \text{Kahe bbls consumed }^{(2)} \\ \$113,000 \div 5,685,644 \text{ bbls} = 0.0199$$

(1) HECO-405, pg 1, line 4

(2) HECO-404, pg 1, line 2

Hawaiian Electric Company, Inc.
Determination of Percent of Generation MBTU Mix

**2007 Test Year - Direct Testimony
At Present Rates**

<u>Line</u>	<u>Generation</u>	<u>(A) MBTU</u>	<u>(B) % to Total Generation</u>	<u>Reference</u>
1	Kahe	35,250,991	69.65	HECO-409 page 2
2	Waiiau	12,706,261	25.10	HECO-409 page 2
3	Honolulu	1,830,272	3.62	HECO-409 page 2
4	Diesel	593,004	1.17	HECO-409 page 2
5	DG	235,037	0.46	HECO-409 page 2
6	Total	<u>50,615,565</u>	<u>100.00</u>	HECO-409 page 2

Reference: HECO-WP-934, p.1

HAWAIIAN ELECTRIC COMPANY, INC.
 Composite Cost of Generation

2007 Test Year - Direct Testimony
At Present Rates

<u>Line</u>	<u>GENERATION COMPONENT</u>	
	<u>FUEL PRICES, ¢/mmbtu</u>	
1	Kahe	1,050.17
2	Waiau	1,050.17
3	Honolulu	1,050.17
4	Diesel	1,698.53
5	DG	0.00
	 <u>BTU MIX, %</u>	
6	Kahe	69.65
7	Waiau	25.10
8	Honolulu	3.62
9	Diesel	1.17
10	DG	0.46
		100.00
		100.00
11	COMPOSITE COST OF GENERATION, ¢/mmbtu	1,052.93

Line 11: (Line 1x6 + line 2x7 + line 3x8 + line 4x9 + line 5x10)

Reference:

HECO-WP-934, p. 1, line 13
 HECO-WP-934, p. 2

Hawaiian Electric Company, Inc.
Net System Percent Mix

2007 Test Year - Direct Testimony
At Present Rates

<u>Line</u>	<u>(A)</u> 2007 Norm Energy (Mwh)	<u>(B)</u> % to Total System	<u>Reference</u>
<u>Generation (Mwh)</u>			
1 Kahe	3,449,757		HECO-409 page 2
2 Waiiau	1,095,664		HECO-409 page 2
3 Honolulu	147,729		HECO-409 page 2
4 Diesel	19,120		HECO-409 page 2
5 DG	<u>23,016</u>		HECO-409 page 2
6 Total Generation	<u>4,735,286</u>	58.41	HECO-409 page 2
<u>Purchased Power (Mwh)</u>			
7 AES Hawaii, Inc.	1,539,910		HECO-409 page 3
8 Kalaeloa Partners	1,489,444		HECO-409 page 4
9 HPower	337,504		HECO-409 page 5
10 Tesoro	5,304		HECO-RWP-R504
11 Chevron	<u>589</u>		HECO-RWP-R504
12 Total Purchased Power	<u>3,372,751</u>	<u>41.59</u>	HECO-403, line 6
13 Total Net System	<u><u>8,108,037</u></u>	<u><u>100.00</u></u>	

Hawaiian Electric Company, Inc.
Avoided Energy Cost Payment Rates and Schedule Q

2007 Test Year - Direct Testimony
At Proposed Rates

<u>Avoided Energy Rate - over 100 kW</u>		<u>Source</u>
On-Peak	14.60 ¢/Net Kwh	HECO-WP-934, p. 6
Off-Peak	11.05 ¢/Net Kwh	HECO-WP-934, p. 6.

Schedule Q Payment Rates - Under 100kW

Payment Rate	12.94 ¢/Net Kwh	HECO-WP-934, p. 7.
--------------	-----------------	--------------------

Hawaiian Electric Company, Inc.

DERIVATION OF
AVOIDED ENERGY COST PAYMENT RATES
Avoided Energy Rate - over 100 KW2007 Test Year - Direct Testimony
At Proposed Rates

<u>Line</u>	<u>ON-PEAK</u>	<u>OFF-PEAK</u>	<u>SOURCE</u>
1 Heat Rate	13,382 BTU / NET KWH	9,929 BTU / NET KWH	Docket #4569, HECO-101 Test Year 2007 Composite Fuel Cost.
2 Composite Fuel Cost of Total Generation (Centrl Stn & DG)	1,063.14 ¢ / MMBTU	1,063.14 ¢ / MMBTU	
3 1 MMBTU / 1,000,000 BTU	1,000,000 BTU / MMBTU	1,000,000 BTU / MMBTU	
4 Unadjusted Payment Rate (line 1 x 2) / line 3	14.23 ¢ / NET KWH	10.56 ¢ / NET KWH	
5 O&M Adjustment	<u>0.37</u> ¢ / NET KWH	<u>0.49</u> ¢ / NET KWH	Appendix A, D&O 8298
6 BASE Avoided Energy Payment Rate	<u>14.60</u> ¢ / NET KWH	<u>11.05</u> ¢ / NET KWH	

Reference: Line 2: HECO-WP-936, pg. 7, line 7.

Hawaiian Electric Company, Inc.

DERIVATION OF
 SCHEDULE "Q" PAYMENT RATES
 Schedule "Q" Rate - Under 100 KW

2007 Test Year - Direct Testimony
 At Proposed Rates

Line	ON-PEAK	OFF-PEAK	SOURCE
1 Heat Rate	13,382 BTU / NET KWH	9,929 BTU / NET KWH	Docket #7766
2 Composite Fuel Cost of Total Generation (Centrl Stn & DG)	1,063.14 ¢ / MMBTU	1,063.14 ¢ / MMBTU	Test Year 2007 Composite Fuel Cost.
3 1 MMBTU / 1,000,000 BTU	1,000,000 BTU / MMBTU	1,000,000 BTU / MMBTU	
4 Unadjusted Payment Rate (line 1 x 2) / line 3	14.23 ¢ / NET KWH	10.56 ¢ / NET KWH	
5 Power Factor Adjustment	-0.12 ¢ / NET KWH	-0.28 ¢ / NET KWH	Appendix A, D&O 8298
6 O&M Adjustment	0.37 ¢ / NET KWH	0.49 ¢ / NET KWH	Appendix A, D&O 8298
7 Pre Time-Weighted "Q" Payment Rate (line 4 + line 5 + line 6)	14.48 ¢ / NET KWH	10.77 ¢ / NET KWH	
8 Hour Weighting	x 14/24 HOURS / HOURS	x 10/24 HOURS / HOURS	
9 Time-weighted Peak Time-Related Schedule "Q" Energy Payment Rate (line 7 x 8)	8.45 ¢ / NET KWH	4.49 ¢ / NET KWH	
10 Time-Weighted "Q" ON PEAK Payment Rate	8.45 ¢ / NET KWH		
11 Time-Weighted "Q" OFF PEAK Payment Rate	4.49 ¢ / NET KWH		
12 Schedule "Q" Energy Payment Rate (line 10 + line 11)	12.94 ¢ / NET KWH		
13 Base 1996 Schedule "Q" Energy Payment	3.67 ¢ / NET KWH		Filed January 1, 1996
14 Difference Between 2007 Test Year Direct and Base Sch "Q" Rates (line 12 - line 13)	9.27 ¢ / NET KWH		

Reference: Line 2: HECO-WP-936, pg. 7, line 7.

Hawaiian Electric Company, Inc.
Determination of Percent of Purchased Energy Mix,
Payment Rate (in ¢/kwh) and
Composite Cost of Purchased Energy (in ¢/kwh)

**2007 Test Year - Direct Testimony
At Present and Proposed Rates**

No.	(A) Producer	(B) Gwh Purchased	(C) % to Total PP	(D) Payment Rate (¢/kwh)	(E) Weighted Cost (¢/kwh) [(colF ÷ colB) * colC * 1000]	(F) Purch Pwr Fuel Expense (\$ thous)
1	Kalaeloa					
	Fuel	1,489.4	44.16	9.760		145,372.2
	Additive			<u>0.159</u>		<u>2,374.3</u>
	Total	1,489.4		9.919	4.380	147,746.5
2	AES					
	Fuel	1,539.9	45.65	2.671	1.219	41,125.9
3	HPower					
	On Peak	196.9	5.84	12.753	0.745	25,106.8
	Off Peak	90.6	2.69	9.688	0.261	8,777.8
	On Peak - excess	0.0	0.00	0.000	0.000	0.0
	Off Peak - excess	<u>50.0</u>	1.48	9.687	0.143	<u>4,845.4</u>
	Total	337.5				38,730.0
4	Tesoro					
	On Peak	3.1	0.09	14.600	0.013	451.7
	Off Peak	<u>2.2</u>	0.07	11.050	0.008	<u>244.2</u>
	Total	5.3				695.9
5	Chevron					
	On Peak	0.3	0.01	14.600	0.001	50.2
	Off Peak	<u>0.2</u>	0.01	11.050	0.001	<u>27.1</u>
	Total	0.5				77.3
6	Other	-	-	0.000	0.000	-
7	Total	3,372.7	100.00		6.772	228,375.6
8	Composite Cost of Purchased Energy					6.772 ¢/kwh

Line 1: HECO-WP-501, pg. 1
Line 2: HECO-WP-503, pg. 1
Line 3: HECO-WP-504, pg. 2
Lines 4&5: HECO-504
Line 7, col B: HECO-403, line 6

Hawaiian Electric Company, Inc.
 Determination of Percent of Central Station Generation MBTU Mix

**2007 Test Year - Direct Testimony
 At Proposed Rates**

<u>Line</u>	<u>Central Station Plant</u>	<u>(A) MBTU</u>	<u>(B) % to Total Generation</u>	<u>Reference</u>
1	Kahe	35,250,991	69.97	HECO-409 page 2
2	Waiiau	12,706,261	25.22	HECO-409 page 2
3	Honolulu	<u>1,830,272</u>	<u>3.63</u>	HECO-409 page 2
4	LSFO total	<u>49,787,524</u>	<u>98.82</u>	
5	Diesel	<u>593,004</u>	<u>1.18</u>	HECO-409 page 2
6	Total	<u>50,380,528</u>	<u>100.00</u>	HECO-409 page 2

HAWAIIAN ELECTRIC COMPANY, INC.
 Composite Cost of Central Station Generation

**2007 Test Year - Direct Testimony
 At Proposed Rates**

<u>Line</u>	<u>GENERATION COMPONENT</u> Central Station and Other	
	<u>FUEL PRICES, ¢/mmbtu</u>	
1	Kahe	1,050.49
2	Waiau	1,050.17
3	Honolulu	1,100.18
4	Diesel	1,698.53
	 <u>BTU MIX, %</u>	
5	Kahe	69.97
6	Waiau	25.22
7	Honolulu	3.63
8	Diesel	1.18
		100.00
		100.00
9	COMPOSITE COST OF GENERATION, Central Stn + Other ¢/mmbtu	1,059.86

Line 9: (Line 1x5 + line 2x6 + line 3x7 + line 4x8)

Reference:
 HECO-WP-934, p. 1, line 20
 HECO-WP-936, p. 1

Hawaiian Electric Company, Inc.
Percent of Central Station LSFO and Diesel Kwh Mix

**2007 Test Year - Direct Testimony
At Proposed Rates**

<u>Line</u>	<u>(A) 2007 Norm Energy (Mwh)</u>	<u>(B) Percent of Central Stn Generation</u>	<u>Reference</u>
1 Kahe	3,449,757		HECO-409 page 2
2 Waiiau	1,095,664		HECO-409 page 2
3 Honolulu	147,729		HECO-409 page 2
4 LSFO Total	<u>4,693,150</u>	99.59	
5 Diesel	<u>19,120</u>	<u>0.41</u>	HECO-409 page 2
6 Total	<u>4,712,270</u>	<u>100.00</u>	HECO-409 page 2

Hawaiian Electric Company, Inc.
Determination of Fixed Efficiency Factor or Sales Heat Rate (Mbtu / Kwh Sales)
2007 Test Year - Direct Testimony
At Proposed Rates

<u>Line</u>		<u>Reference</u>
<u>Total Central Station Fuel Sales Heat Rate</u>		
1	Total Central Station Fuel Consumed	50,380,528 Mbtu
		HECO-409 page 2
2	Sales	7,720.8 Gwh
		HECO-403, line 1
3	% of Central Stn to Total System	58.13 Percent
		HECO-403, line 7a
4	Kwh/Gwh Conversion	1,000,000 kwh/gwh
5	Sales Heat Rate [(line 1 ÷ (line 2 x line 3 x line 4))]	0.011225 Mbtu/Kwh Sales
<u>LSFO Sales Heat Rate</u>		
6	LSFO Fuel Consumed	49,787,524 Mbtu
		HECO-409 page 2
7	Sales	7,720.8 Gwh
		HECO-403, line 1
8	% of LSFO Fuel Generation to Total System	57.89 Percent
9	Kwh/Gwh Conversion	1,000,000 kwh/gwh
10	Sales Heat Rate [(line 6 ÷ (line 7 x line 8 x line 9))]	0.011139 Mbtu/Kwh Sales
<u>Diesel Fuel Sales Heat Rate</u>		
11	Diesel Fuel Consumed	593,004 Mbtu
		HECO-409 page 2
12	Sales	7,720.8 Gwh
		HECO-403, line 1
13	% of Diesel Fuel Generation to Total System	0.24 Percent
14	Kwh/Gwh Conversion	1,000,000 kwh/gwh
15	Sales Heat Rate [(line 11 ÷ (line 12 x line 13 x line 14))]	0.032003 Mbtu/Kwh Sales
<u>HECO Other Sales Heat Rate</u>		
16	Total Central Station Fuel Consumed	50,380,528 Mbtu
17	Sales	7,720.8 Gwh
		HECO-403, line 1
18	% of Central Stn to Total System	58.13 Percent
19	Kwh/Gwh Conversion	1,000,000 kwh/gwh
20	Sales Heat Rate [(line 16 ÷ (line 17 x line 18 x line 19))]	0.011225 Mbtu/Kwh Sales

Hawaiian Electric Company, Inc.
Determination of Composite Cost of DG Energy

2007 Test Year - Direct Testimony
At Proposed Rates

	(A)	(B)	(C)	(D)	(E) (colD ÷ colC x 100)	(F) (colD ÷ colB x 100)
			Fuel Consumed	Fuel Expense	Fuel Cost	Fuel Cost
Line	DG Unit Location	Net to System (Kwh)	(Mbtu)	(\$)	(¢/mbtu)	(¢/kwh)
1	Substation DG	23,016,000	235,037	4,169,063	1773.79	18.114
2					0.00	0.000
3					0.00	0.000
4					0.00	0.000
5	Total	23,016,000	235,037	4,169,063	1773.79	18.114

6	Composite DG Fuel Cost	1773.79 ¢/mbtu
---	---------------------------	----------------

7	Composite Cost of DG Energy	18.114 ¢/kwh
---	-----------------------------------	--------------

Col B: HECO-409 page 2
Col C: HECO-409 page 2
Col D: HECO-404 page 2

Hawaiian Electric Company, Inc.
 Determination of Central Station and DG Percent to Total Generation Mbtu Mix

**2007 Test Year - Direct Testimony
 At Proposed Rates**

	(A) 2007 Mbtu Consumed	(B) % to Total Mbtu Consumed	Reference
1 Central Station Generation	50,380,528	99.54	HECO-409 page 2
2 DG	<u>235,037</u>	<u>0.46</u>	HECO-409 page 2
3 Total Generation	<u><u>50,615,565</u></u>	<u><u>100.00</u></u>	

Hawaiian Electric Company, Inc.
Determination of Composite Cost of Total (Central Station and DG) Generation
For Avoided Cost Calculation Purposes

**2007 Test Year - Direct Testimony
At Proposed Rates**

<u>Line</u>	<u>CENTRAL STATION ENERGY COMPONENT</u>	<u>Line</u>	<u>DG ENERGY COMPONENT</u>
1	Composite Cost of Centrl Stn Gen. 1059.86 ¢/Mbtu	4	Composite Cost of DG Generation 1773.79 ¢/Mbtu
2	Percent of Centrl Stn Gen. Btu Mix 99.54 %	5	Percent of DG Gen. Btu Mix (100 - line 3) 0.46 %
3	Weighted Composite Cost of Central Station (line 1 x line 2) 1054.9846 ¢/Mbtu	6	Weighted Composite Cost of DG (line 4 x line 5) 8.1594 ¢/Mbtu
	<u>Line Total Generation Composite Cost</u>		
	Composite Cost of Central Station and DG		
	7 (line 3 + line 6)		1063.14 ¢/Mbtu

Line 1: HECO-WP-936 page 2, line 9
Line 2: HECO-WP-936 page 6, line 1
Line 4: HECO-WP-936 page 5, line 1
Line 5: HECO-WP-936 page 6, line 2

Hawaiian Electric Company, Inc.
Net System Percent Mix

2007 Test Year - Direct Testimony
At Proposed Rates

	(A) 2007 Norm Energy (Gwh)	(B) % to Total System	Reference
<u>Central Station Generation</u>			
LSFO	4,694.4	57.89	
Diesel	19.1	0.24	
12 Tot Central Station Generation	<u>4,713.5</u>	<u>58.13</u>	HECO-403, line 7a
13 DG	23.0	0.28	HECO-403, line 7b
14 Purchase Power	<u>3,372.7</u>	<u>41.59</u>	HECO-403, line 6
15 Total Net System	<u>8,109.2</u>	<u>100.00</u>	HECO-403, line 5

Hawaiian Electric Company, Inc.
DG and Purchased Energy Loss Factor Calculations

2007 Test Year - Direct Testimony
At Proposed Rates

<u>Line</u>		<u>Reference</u>	
1	Net to System (gwh)	8,109.2	HECO-403, line 5
2	Sales (gwh)	7,720.8	HECO-403, line 1
3	DG & Purchase Power Loss Factor	1.050	Line 1 ÷ Line 2

FEBRUARY 10, 2006 ■ BLUE CHIP ECONOMIC INDICATORS ■ 3

2007 Real GDP Consensus Forecast Stays At 3.1%

FEBRUARY 2006 Forecast For 2007 SOURCE:	Percent Change 2007 From 2006 (Year-Over-Year)									Average For 2007			Total Units-2007		2007-
	1 Real GDP (Chained) (2000 \$)	2 GDP Price Index	3 Nominal GDP (Cur. \$)	4 Consumer Price Index	5 Indust. Prod. (Total)	6 Dis. Pers. Income (2000 \$)	7 Personal Cons. Exp. (2000 \$)	8 Non-Res. Fix. Inv. (2000 \$)	9 Corp. Profits (Cur. \$)	10 Treas. Bills 3-mo.	11 Treas. Notes 10-Year	12 Unempl. Rate (Civ.)	13 Housing Starts (Mil.)	14 Auto/Truck Sales (Mil.)	15 Net Exports (2000 \$)
Action Economics	3.8 H	2.3	6.2	2.5	3.6	3.3	3.1	6.4	8.2	5.3	5.6 H	4.5	2.00	17.6	-573.4
National Assn. of Realtors	3.8 H	2.0	5.8	2.0	4.7	4.4	3.6 H	8.0	4.0	4.5	5.1	4.7	1.94	16.2	-617.0
Argus Research Corp.	3.5	3.0 H	6.7 H	3.5 H	2.7	2.2	3.4	5.0	10.5	5.1	4.7	5.0	2.22 H	17.2	-638.0
RBS Greenwich Capital	3.5	2.4	6.0	2.5	3.4	3.3	3.2	7.2	7.5	5.2	5.0	4.9	1.76	17.0	-670.0
J P Morgan Chase	3.4	2.3	5.8	2.3	4.1	3.8	3.4	8.6	5.2	na	na	4.6	1.81	16.4	-700.5
Moody's Investors Service	3.4	2.3	5.8	2.6	4.0	3.2	3.3	5.7	7.6	4.8	4.9	4.4	1.88	17.3	-660.0
Mesirow Financial	3.4	2.1	5.5	2.4	3.3	3.0	3.0	9.1	13.9 H	5.2	5.3	5.2	1.70	16.2	-758.0 L
Macroeconomic Advisers, LLC**	3.4	2.1	5.5	2.4	5.4 H	3.7	3.0	6.0	3.5	4.8	5.0	5.0	1.77	17.0	-588.5
Banc of America Corp.*	3.4	2.0	5.3	2.4	3.4	3.3	3.2	6.9	9.0	4.8	5.2	4.8	1.99	17.8	-637.0
Morgan Stanley	3.3	2.5	5.8	2.2	5.0	5.0 H	3.1	7.6	2.3	4.9	5.2	5.1	1.74	16.8	-636.9
Wayne Hummer Investments LLC*	3.3	2.4	5.8	2.4	3.3	3.3	3.1	7.7	5.8	4.4	4.7	4.8	1.89	17.0	-595.0
Nomura Securities	3.3	2.4	5.7	2.6	3.5	2.7	2.7	6.5	7.4	4.2	4.4	4.8	2.02	17.5	-682.0
National Assn. of Home Builders	3.3	2.0	5.3	2.0	3.3	3.6	2.9	5.0	4.5	4.5	5.0	5.0	1.87	17.1	-600.0
Fannie Mae	3.3	1.9	5.3	2.2	4.1	3.8	3.3	5.5	2.8	4.5	4.5	5.1	1.84	na	-600.4
DaimlerChrysler AG	3.3	1.8	5.2	2.3	3.6	2.2	3.2	5.4	6.0	4.7	4.9	5.2	1.94	na	-647.3
U.S. Trust Co.	3.3	1.8	5.1	2.0	3.0	3.0	3.0	8.0	6.0	3.8 L	4.1 L	4.8	2.00	16.3	-620.0
Wells Capital Management	3.2	2.6	5.9	2.8	3.8	3.5	3.0	8.8	3.9	4.2	4.8	5.0	1.80	16.3	-670.0
Deutsche Bank Securities	3.2	2.1	5.4	2.6	2.8	3.7	2.9	7.1	na	5.1	5.5	5.3	na	na	-717.3
Eaton Corporation	3.2	2.0	5.3	2.7	4.1	3.6	2.5	6.1	6.6	5.5 H	5.2	4.8	1.95	16.9	-659.2
Comerica Bank*	3.2	1.9	5.1	2.1	3.1	3.2	2.9	6.1	7.5	5.2	5.4	4.7	1.76	17.2	-637.5
General Motors Corporation	3.2	1.8	5.0	2.5	5.3	4.1	3.1	4.7	3.4	4.7	5.5	5.2	1.60	na	-587.5
Swiss Re	3.2	1.4 L	4.7	2.0	3.0	2.8	2.9	7.1	7.6	4.7	5.3	4.3 L	1.90	16.8	-645.0
Wachovia	3.1	3.0	6.1	2.7	2.9	3.0	2.9	8.0	7.7	5.3	5.4	4.6	1.85	17.9 H	-705.0
Ezzert Economic Enterprises, Inc.	3.1	2.4	5.5	2.8	3.0	2.7	2.6	7.0	7.5	4.9	5.0	5.0	1.72	16.8	-644.0
Washington Research Group*	3.1	2.2	5.4	2.7	4.6	3.4	2.7	6.5	2.6	4.5	4.8	5.1	1.81	16.9	-612.0
***	3.1	2.0	5.2	2.0	3.0	3.2	2.6	7.2	5.1	4.5	5.3	5.2	1.85	17.4	-622.5
Emerging Points (Micrometrics)	3.0	2.6	5.6	2.5	2.6	2.5	3.4	4.5	-0.6	4.9	5.3	4.9	2.03	16.5	-743.8
Econoclast	3.0	2.3	5.3	2.3	2.7	2.9	2.5	5.5	6.7	4.0	4.5	5.0	1.80	16.1 L	-565.0
Inforum - Univ. of Maryland	3.0	2.1	5.2	2.5	4.4	3.3	2.6	4.8	4.5	4.5	5.0	5.0	1.99	17.1	-576.0
Lehman Brothers	3.0	2.1	5.1	2.3	3.2	4.8	2.6	9.8 H	na	4.7	5.0	5.0	1.85	16.5	-687.6
Moody's Economy.com	2.9	2.6	5.6	2.9	2.2	2.8	3.0	5.3	4.3	4.5	5.3	5.0	1.60 L	16.6	-633.4
Georgia State University*	2.9	2.2	5.1	2.2	3.8	3.1	2.7	4.9	3.5	4.6	5.5	5.2	1.62	16.6	-587.6
ClearView Economics	2.9	2.1	5.0	2.9	3.0	2.6	2.9	7.1	12.6	4.2	4.3	4.7	1.86	17.1	-688.0
National City Corporation	2.9	2.0	5.2	2.4	2.7	3.4	3.3	6.9	-2.0	4.2	5.6 H	4.8	1.83	17.3	-636.6
Ford Motor Company*	2.9	1.8	4.7	2.5	3.5	3.3	2.6	4.9	na	4.5	5.5	5.6 H	1.62	na	-555.2 H
FedEx Corporation	2.8	3.0 H	5.8	3.1	2.8	3.1	3.0	6.1	8.3	4.9	5.6 H	4.8	1.90	16.1 L	-655.0
Naroff Economic Advisors	2.8	2.4	5.2	2.4	2.9	3.0	3.2	5.1	5.6	4.6	5.6 H	4.5	1.78	17.2	-610.0
J.W. Coons Advisors	2.8	2.3	5.1	2.5	2.5	3.2	2.7	4.3	6.2	4.0	4.8	4.9	1.80	17.2	-683.0
Kellner Economic Advisors	2.7	2.4	5.1	2.5	2.6	2.9	2.5	5.5	5.0	4.3	4.4	5.2	1.77	16.5	-625.0
Conference Board*	2.7	2.1	4.8	3.2	3.3	3.0	2.8	5.6	2.0	4.5	4.9	5.4	1.72	16.3	-618.7
Global Insight	2.7	2.0	4.8	1.8	2.2	3.2	2.9	5.7	-0.7	4.6	5.2	4.9	1.81	16.6	-626.0
LaSalle National Bank	2.7	2.0	4.8	1.8	3.5	3.3	2.9	5.7	2.2	5.1	5.4	4.9	1.75	17.8	-626.0
Goldman Sachs & Co.	2.6	2.8	5.5	2.3	3.6	3.5	2.1 L	5.0	1.2	4.0	4.2	5.0	1.81	16.6	-593.9
Standard & Poors Corp.*	2.6	2.0	4.6 L	1.8	2.1	3.1	2.8	1.1 L	-2.7 L	4.6	5.2	5.0	1.80	16.6	-622.6
UBS Warburg	2.5	2.2	4.7	2.6	4.1	3.0	2.8	7.4	na	4.0	4.2	5.0	1.80	na	-661.0
UCLA Business Forecasting Proj.*	2.5	2.1	4.7	1.5 L	2.0 L	3.1	2.9	4.3	0.6	4.3	4.5	5.4	1.60	16.1 L	-597.9
SOM Economics, Inc.	2.2 L	2.5	4.8	3.1	2.4	2.2 L	2.3	3.9	3.5	4.3	4.6	4.8	1.70	17.2	-625.0
2007 Consensus: February Avg.	3.1	2.2	5.3	2.4	3.4	3.2	2.9	6.2	5.0	4.6	5.0	4.9	1.83	16.9	-637.0
Top 10 Avg.	3.4	2.7	6.0	3.0	4.6	4.1	3.3	8.3	9.2	5.2	5.5	5.3	2.00	17.5	-584.7
Bottom 10 Avg.	2.6	1.8	4.8	1.9	2.4	2.6	2.5	4.2	0.5	4.1	4.4	4.6	1.66	16.3	-703.5
January Avg.	3.1	2.1	5.3	2.4	3.3	3.3	3.0	6.2	5.2	4.5	5.0	4.9	1.82	16.9	-636.2
Number Of Forecasts Changed From A Month Ago:															
Down	14	7	17	7	8	12	17	11	12	4	12	9	9	10	25
Same	27	28	21	27	25	25	26	17	18	27	25	27	25	20	11
Up	6	12	9	13	14	10	4	19	13	15	9	11	12	9	11
February Median	3.1	2.1	5.3	2.4	3.3	3.2	2.9	6.1	5.1	4.6	5.0	5.0	1.81	16.9	-633.4
February Diffusion Index	41 %	55 %	41 %	56 %	56 %	48 %	36 %	59 %	51 %	62 %	47 %	52 %	53 %	49 %	35 %

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

BASIC DATA SOURCES: ¹Gross Domestic Product (GDP), chained 2000\$, National Income and Product Accounts (NIPA), Bureau of Economic Analysis (BEA); ²GDP Chained Price Index, NIPA, BEA; ³GDP, current dollars, NIPA, BEA; ⁴Consumer Price Index-All Urban Consumers, Bureau of Labor Statistics (BLS); ⁵Total Industrial Production, Federal Reserve Board (FRB); ⁶Disposable Personal Income, 2000\$, NIPA, BEA; ⁷Personal Consumption Expenditures, 2000\$, NIPA, BEA; ⁸Non-residential Fixed Investment, 2000\$, NIPA, BEA; ⁹Corporate Profits Before Taxes, current dollars, with inventory valuation and capital consumption adjustments, NIPA, BEA; ¹⁰Treasury Bill Rate, 3-month, secondary market, bank discount basis, FRB; ¹¹Treasury note yield, 10-year, constant maturity basis, FRB; ¹²Unemployment Rate, civilian work force, BLS; ¹³Housing Starts, Bureau of Census; ¹⁴Total U.S. Auto and Truck sales (includes imports and all weight classes of trucks), BEA; ¹⁵Net Exports of Goods and Services, 2000\$, NIPA, BEA.

2007 Real GDP Consensus Forecast Slides To 2.7%

AUGUST 2006 Forecast For 2007 SOURCE:	Percent Change 2007 From 2006 (Year-Over-Year)									Average For 2007			- Total Units-2007 -		-2007-
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Real GDP (Chained 2000 \$) Index	GDP Price Index	Nominal GDP (Cur. \$) Index	Consumer Price Index	Indust. Prod. (Total)	Dis. Pers. Income (2000 \$)	Personal Cons. Exp (2000 \$)	Non-Res. Fix. Inv. (2000 \$)	Corp. Profits (Cur. \$)	Treas. Bills 3-mo.	Treas. Notes 10-Year	Unempl. Rate (Civ.)	Housing Starts (Mil.)	Auto & Light Truck Sales (Mil.)	Net Exports (2000 \$)
Argus Research Corp.	3.5 H	3.2 H	6.4	3.4	2.9	3.2	3.3	3.4	11.0	5.1	5.3	4.9	1.95 H	17.2	-626.5
Bear, Stearns & Co., Inc.	3.2	2.9	6.2	3.3	3.7	3.2	3.0	7.9	6.2	5.5	5.8	4.5	1.85	17.5 H	-645.5
Action Economics	3.1	2.6	5.8	3.2	4.1	3.2	3.2	7.8	3.7	5.4	5.7	4.3 L	1.86	16.8	-608.0
Credit Suisse First Boston	3.1	2.4	5.6	2.9	4.0	na	2.9	7.7	5.8	na	na	4.7	na	na	-635.0
National Assn. of Realtors	3.1	2.0	5.1	2.6	3.6	4.3	2.9	8.6	2.0	4.8	5.4	4.8	1.78	16.2	-616.0
DaimlerChrysler AG	3.1	1.8	4.9	2.4	3.6	3.1	3.3	6.0	2.3	4.9	5.2	4.9	1.80	na	-634.5
Mesirow Financial	3.1	1.7	4.9	2.3	4.7	3.8	3.1	9.7	0.7	5.0	5.2	4.9	1.61	16.0	-650.3
U.S. Chamber of Commerce	3.0	3.0	6.0	3.8	3.5	2.3	2.7	6.7	na	5.1	5.5	5.1	1.64	na	-624.5
SOM Economics, Inc.	3.0	2.8	5.9	2.9	2.5	2.6	2.9	6.0	4.0	5.7	5.5	4.5	1.70	16.3	-620.0
Morgan Stanley	3.0	2.8	5.9	2.6	5.4	5.3 H	2.9	7.8	1.0	5.3	5.2	5.0	1.60	16.3	-575.4
Macroeconomic Advisers, LLC**	3.0	2.6	5.6	2.9	4.0	3.5	3.4 H	6.5	3.3	5.0	5.2	5.0	1.71	16.6	-618.0
Prudential Equity Group, LLC	3.0	2.2	5.3	2.3	2.9	2.9	3.1	7.1	5.3	4.7	5.0	5.0	1.80	17.1	-656.5
National Assn. of Home Builders	3.0	2.2	5.3	2.5	3.7	3.3	3.0	5.8	3.5	5.0	5.1	5.1	1.74	16.5	-610.0
National City Corporation	3.0	2.2	5.2	2.2	3.1	3.3	3.1	6.2	2.9	4.9	5.6	5.0	1.76	16.8	-614.4
Fannie Mae	3.0	2.0	5.0	2.5	3.7	3.8	2.8	5.3	0.6	4.8	5.1	5.0	1.79	na	-610.7
Swiss Re	3.0	1.8	4.9	2.5	3.8	3.1	2.8	7.5	5.0	5.1	5.4	4.3 L	1.84	16.0	-616.0
Wells Capital Management	2.9	2.8	5.8	2.9	3.7	3.5	3.0	10.0 H	5.1	5.3	5.3	4.9	1.79	16.2	-673.2
Banc of America Corp.*	2.9	2.8	5.8	3.0	3.8	2.9	2.9	5.7	15.0 H	5.8	5.8	4.8	1.95 H	17.3	-604.0
RBS Greenwich Capital	2.9	2.6	5.6	2.9	3.8	3.5	3.0	7.2	5.5	5.2	5.1	4.8	1.72	16.4	-627.0
Wayne Hummer Investments LLC*	2.9	2.5	5.4	2.7	4.0	3.0	2.7	6.0	3.7	4.9	5.2	4.8	1.71	16.7	-639.0
FedEx Corporation	2.8	3.2 H	6.0	3.6	2.9	3.0	2.9	6.6	8.2	5.5	6.0 H	4.7	1.85	16.0	-640.0
Moody's Economy.com	2.8	3.1	5.9	2.5	2.6	3.7	2.8	7.1	4.9	4.9	5.1	4.8	1.68	16.0	-620.4
Comerica Bank*	2.8	2.7	5.5	2.4	3.3	2.8	2.6	5.0	9.5	5.2	5.4	4.5	1.70	16.9	-650.0
Naroff Economic Advisors	2.8	2.6	5.4	2.7	2.8	2.7	3.0	5.1	5.6	4.9	5.5	4.4	1.72	16.8	-650.0
J P Morgan Chase	2.8	2.5	5.4	2.8	4.0	3.2	2.7	7.1	4.2	na	na	4.5	1.79	16.2	-628.7
Moody's Investors Service	2.8	2.4	5.2	2.9	4.2	2.9	2.7	6.0	7.8	4.8	4.9	4.6	1.88	16.7	-647.0
Inforum - Univ. of Maryland	2.8	2.4	5.2	2.9	3.9	3.0	2.6	5.1	2.5	5.0	5.4	4.8	1.92	16.6	-592.0
Ford Motor Company*	2.8	2.3	5.1	2.4	6.0 H	3.2	2.6	8.9	na	5.3	5.7	5.0	1.53	na	-587.3
Nomura Securities	2.8	2.0	4.8	2.9	2.4	3.7	2.7	5.3	0.2	4.7	4.9	5.0	1.87	16.0	-599.7
Eaton Corporation	2.8	1.9	4.7	2.7	4.1	3.0	2.3	6.4	8.9	5.2	5.6	4.8	1.72	16.5	-670.4
General Motors Corporation	2.8	1.8	4.7	2.8	4.8	4.0	3.1	5.1	-0.3	5.2	5.7	5.2	1.47 L	na	-600.8
Lehman Brothers	2.7	2.7	5.3	3.3	3.9	4.1	2.4	8.4	na	5.5	5.3	4.7	1.60	16.3	-635.7
BMO Capital Markets	2.7	2.5	5.2	2.5	3.2	2.6	2.5	5.6	5.0	4.8	4.9	4.9	1.75	16.3	-586.0
Wachovia	2.6	2.9	5.5	3.1	2.9	2.7	2.6	7.7	10.7	5.3	5.3	4.9	1.72	16.7	-640.0
LaSalle National Bank	2.6	2.3	5.0	2.1	3.5	3.3	2.7	6.4	2.5	5.9 H	5.8	4.8	1.75	16.5	-617.2
Global Insight	2.6	2.3	4.9	2.1	2.3	3.6	2.7	6.5	2.5	5.0	5.3	4.8	1.75	16.5	-617.2
Northern Trust Company	2.6	2.3	4.9	2.6	2.0	na	2.5	5.4	na	4.3	5.1	5.3 H	1.70	16.2	-609.1
Econoclast	2.6	2.1	4.7	2.4	2.8	2.8	2.4	6.8	5.2	4.8	4.7	5.0	1.68	16.4	-615.0
Goldman Sachs & Co.	2.5	2.7	5.2	2.9	4.4	3.0	2.2	5.8	1.3	4.2 L	4.6	5.0	1.62	16.2	-567.3
Standard & Poors Corp.*	2.5	2.3	4.8	2.1	2.2	3.5	2.7	1.1 L	-0.2	5.1	5.6	4.8	1.74	16.5	-619.3
UBS Warburg	2.5	2.2	6.5 H	2.5	3.6	3.1	2.8	7.1	na	4.8	4.3 L	5.0	1.80	na	-623.0
Kellner Economic Advisors	2.4	2.6	5.0	2.8	2.9	2.9	2.5	5.5	4.0	5.0	5.2	5.0	1.69	16.0	-644.0
Georgia State University*	2.4	2.2	4.6	2.3	3.6	3.4	2.5	5.9	2.8	4.7	5.5	5.0	1.61	16.2	-603.1
Eggert Economic Enterprises, Inc.	2.4	2.1	4.7	2.4	2.7	2.6	2.3	6.6	5.0	4.9	5.2	4.9	1.71	16.7	-639.0
Turning Points (Micrometrics)	2.3	2.9	5.2	4.1 H	3.6	na	2.9	4.8	0.9	5.1	5.6	4.8	1.80	16.9	-746.3 L
J.W. Coons Advisors	2.3	2.6	4.9	2.8	1.9	2.6	2.4	4.2	4.8	4.6	5.1	5.1	1.77	16.1	-628.0
DuPont***	2.3	2.5	4.8	2.2	2.5	2.3	2.3	6.6	4.0	4.9	5.1	5.0	1.70	16.5	-610.0
ClearView Economics	2.3	2.4	4.7	3.0	2.9	2.5	2.9	5.9	2.6	4.7	4.9	4.7	1.86	16.6	-650.0
Merrill Lynch Economics	2.3	1.6 L	4.0 L	1.3 L	1.6 L	2.4	2.1	6.1	na	4.2 L	4.7	5.2	1.82	15.7	-597.2
Conference Board*	2.2 L	2.3	4.6	3.4	2.6	3.3	2.6	4.0	2.8	5.0	4.6	5.0	1.71	16.4	-560.1 H
U.S. Trust Co.	2.2 L	2.1	4.4	2.5	1.7	1.6 L	2.0 L	7.3	5.4	4.3	4.5	5.0	1.66	15.5	-600.8
UCLA Business Forecasting Proj.*	2.2 L	2.1	4.4	2.1	2.5	3.3	2.4	5.9	-3.6 L	4.5	4.6	5.0	1.58	16.2	-586.1
2007 Consensus: August Avg.	2.7	2.4	5.2	2.7	3.4	3.2	2.7	6.4	4.2	5.0	5.2	4.9	1.74	16.4	-622.8
Top 10 Avg.	3.1	2.9	6.0	3.4	4.6	4.0	3.1	8.5	8.3	5.5	5.7	5.1	1.87	17.0	-585.2
Bottom 10 Avg.	2.3	1.9	4.6	2.1	2.2	2.4	2.3	4.5	0.3	4.5	4.7	4.5	1.59	16.0	-663.9
July Avg.	2.8	2.3	5.2	2.6	3.2	3.2	2.7	6.5	3.8	5.0	5.2	4.9	1.76	16.7	-646.6
Number Of Forecasts Changed From A Month Ago:															
Down	32	5	22	8	11	27	16	30	16	11	14	10	27	28	6
Same	15	15	11	16	18	14	22	12	15	31	25	29	18	11	8
Up	5	32	19	28	23	8	14	10	15	8	11	13	6	6	38
August Median	2.8	2.4	5.2	2.7	3.6	3.1	2.7	6.3	4.0	5.0	5.2	4.9	1.74	16.4	-619.7
August Diffusion Index	24 %	76 %	47 %	69 %	62 %	31 %	48 %	31 %	49 %	47 %	47 %	53 %	29 %	26 %	81 %

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

BASIC DATA SOURCES: ¹Gross Domestic Product (GDP), chained 2000\$, National Income and Product Accounts (NIPA), Bureau of Economic Analysis (BEA); ²GDP Chained Price Index, NIPA, BEA; ³GDP, current dollars, NIPA, BEA; ⁴Consumer Price Index-All Urban Consumers, Bureau of Labor Statistics (BLS); ⁵Total Industrial Production, Federal Reserve Board (FRB); ⁶Disposable Personal Income, 2000\$, NIPA, BEA; ⁷Personal Consumption Expenditures, 2000\$, NIPA, BEA; ⁸Non-residential Fixed Investment, 2000\$, NIPA, BEA; ⁹Corporate Profits Before Taxes, current dollars, with inventory valuation and capital consumption adjustments, NIPA, BEA; ¹⁰Treasury Bill Rate, 3-month, secondary market, bank discount basis, FRB; ¹¹Treasury note yield, 10-year, constant maturity basis, FRB; ¹²Unemployment Rate, civilian work force, BLS; ¹³Housing Starts, Bureau of Census; ¹⁴Total U.S. Auto and Light Truck sales (includes imports), BEA; ¹⁵Net Exports of Goods and Services, 2000\$, NIPA, BEA.

Hawaiian Electric Company, Inc.								Conversion of Activity Based Management Code Blocks to NARUC Expense Categories							
Information Technology & Services Department															
PEZ Forecast Model for 2007B															
PEZ Actuals Jan- Dec 2005															
RA	Act	Loc	Ind	Project	EE	Monthly 07	Total 2007	Non-NE/ reclass	EFMS-NE	EBus-NE	SW Maint	Add'l clr	Total	Acct Blk	Acct
PEZ	100	PHE	NE	NPSZZZZZ	451	4,725	56,700						56,700	B38	921
	100 Total												-		
PEZ	102	PHE	NE	NPSZZZZZ	451	-	-						-		
	102 Total												-		
PEZ	110	PHE	NE	NPSZZZZZ	451	12,474	149,688						149,688	B37	910
PEZ	110	PHE	NE	NPEZZZZZ	451					54,132			54,132	B37	910
	110 Total												-		
PEZ	112	PHE	NE	NPSZZZZZ	451	14,202	170,424				86,136		256,560	B38	921
	112 Total											17832	17,832	B38	921
PEZ	122	PHE	NE	NPZZZZZ	451	4,100	49,200						49,200	B38	921
	122 Total												-		
PEZ	201	WST	NE	NPYZZZZZ	451	7,069	84,828						84,828	B30	500020
	201 Total												-		
PEZ	240	WST	NE	NPYZZZZZ	451	7,468	89,616	(89,616)					-		
	210 Total												-		
PEZ	211	WST	NC	NPYZZZZZ	451	21,733	260,796	(260,796)					-		
PEZ	211	WST	NC	NPEZZZZZ	451								-		
	211 Total												-		
PEZ	212	KST	NE	NPAVPZZZ	451	610	7,320						7,320	B31	514030
	212 Total												-		
PEZ	220	WST	NE	NPZZZZZ	451	2,369	28,428	(28,428)					-		
	220 Total												-		
PEZ	240	WST	NE	NPZZZZZ	451	21,984	263,808	89,616			132,384		485,808	B30	506020
PEZ	240	WST	NE	NPYZZZZZ	451							27408	27,408	B30	506020
	240 Total												-		
PEZ	242	KST	NE	NPZZZZZ	451	26,656	319,872						319,872	B30	502030
PEZ	242	WST	NE	NPZZZZZ	451								-		
PEZ	242	HST	NE	NPZZZZZ	451								-		
	242 Total												-		
PEZ	245	KST	NE	NPAVPZZZ	451	972	11,664						11,664	B30	502030
	245 Total												-		
PEZ	246	KST	NE	NPAVPZZZ	451	810	9,720						9,720	B30	505030
	246 Total												-		
PEZ	256	WST	NE	NPZZZZZ	451	34,308	411,696				90,912		502,608	B31	514020
PEZ	256	KST	NE	NPZZZZZ	451				4,092				4,092	B31	514020
PEZ	256	HST	NE	NPZZZZZ	451				4,092				4,092	B31	501430
	256 Total											18828	18,828	B31	514020
PEZ	258	KST	NE	NPAVPZZZ	451	1,232	14,784						14,784	B31	512030
	258 Total												-		
PEZ	261	KST	NE	NPAVPZZZ	451	735	8,820						8,820	B31	513030
	261 Total												-		
PEZ	307	OAH	NC	NPBZZZZZ	451	61,614	739,368	(739,368)					-		
PEZ	307	OAH	NC	NPYZZZZZ	451								-		
PEZ	307	OAH	NE	NPAVPZZZ	451						90,912		90,912	B32	566
	307 Total											18828	18,828	B32	566
PEZ	320	OAH	NE	NPAVPZZZ	451	1,812	21,744						21,744	B32	566
	320 Total												-		
PEZ	325	OAH	NC	NPRZZZZZ	451	4,146	49,752	(49,752)					-		

Hawaiian Electric Company, Inc.															
Information Technology & Services Department															
PEZ Forecast Model for 2007B															
PEZ Actuals Jan- Dec 2005															
								Conversion of Activity Based Management Code Blocks to NARUC Expense Categories							
RA	Act	Loc	Ind	Project	EE	Monthly 07	Total 2007	Non-NE/ reclass	EFMS-NE	EBus-NE	SW Maint	Add'l clr	Total	Acct Blk	Acct
				760 Total									-		
PEZ	765	PHE	NE	NPFZZZZZ	451	4,633	55,596						55,596	B38	921
PEZ	765	PHE	NE	NPPZZZZZ	451								-		
				765 Total									-		
PEZ	766	PHE	NE	NPAVP2ZZ	451	1,712	20,544						20,544	B38	921
PEZ	766	PHE	NE	NPAVP6ZZ	451								-		
				766 Total									-		
PEZ	767	PHE	NE	NPFZZZZZ	451	4,473	53,676						53,676	B38	921
				767 Total									-		
PEZ	775	PHE	NE	NPFZZZZZ	451	2,042	24,504						24,504	B38	921
				775 Total									-		
PEZ	776	PHE	NE	NPFZZZZZ	451	5,551	66,612						66,612	B38	921
				776 Total									-		
PEZ	777	PHE	NE	NPAVP2ZZ	451	20,865	250,380				116,436		366,816	B38	921
PEZ	777	PHE	NE	NPAZZZZZ	451							24108	24,108	B38	921
				777 Total									-		
PEZ	778	PHE	NE	NPFZZZZZ	451	7,012	84,144						84,144	B38	926010
				778 Total									-		
PEZ	779	PHE	NE	NPFZZZZZ	451	1,866	22,392	540					22,932	B38	926000
				779 Total									-		
PEZ	780	PHE	NE	NPFZZZZZ	451	45	540	(540)					-		
				780 Total									-		
PEZ	795	PHE	NE	NPFZZZZZ	451	7,528	90,336						90,336	B38	925
				795 Total									-		
PEZ	805	PHE	NE	NPPZZZZZ	451	3,965	47,580						47,580	B38	921
				805 Total									-		
PEZ	807	PHE	NE	NPQCZZZZ	451	7,347	88,164						88,164	B38	921
PEZ	807	PHE	NE	NPAVP1ZZ	451								-		
				807 Total									-		
PEZ	817	PHE	NE	NPAZZZZZ	451	4,217	50,604						50,604	B38	921
				817 Total									-		
PEZ	818	PHE	NE	NPAVP2ZZ	451	34,681	416,172				181,836		598,008	B38	921
PEZ	818	PHE	NE	NPAVP1ZZ	451								-		
PEZ	818	PHE	NE	NPAZZZZZ	451							37644	37,644	B38	921
				818 Total									-		
PEZ	825	PHE	NE	NPKZZZZZ	451	1,347	16,164						16,164	B38	921
				825 Total									-		
PEZ	826	PHE	NE	NPKZZZZZ	451	5,927	71,124						71,124	B38	921
PEZ	826	PHE	NE	NPAVP4ZZ	451								-		
				826 Total									-		
PEZ	827	PHE	NE	NPKZZZZZ	451	2,104	25,248						25,248	B38	921
				827 Total									-		
PEZ	842	PHE	NE	NPVZZZZZ	451	15,614	187,368						187,368	B38	921
PEZ	842	PHE	NE	NPAVP2ZZ	451								-		
				842 Total									-		
PEZ	843	PHE	NE	NPAVP2ZZ	451	14,203	170,436						170,436	B38	921
PEZ	843	PHE	NE	NPEZZZZZ	451								-		
PEZ	843	PHE	NI	P0000340	451								-		
PEZ	843	PHE	NE	NPAZZZZZ	451								-		

Hawaiian Electric Company, Inc.								Conversion of Activity Based Management Code Blocks to NARUC Expense Categories							
Information Technology & Services Department								Non-NE/ reclass	EFMS-NE	EBus-NE	SW Maint	Add'l clr	Total	Acct Blk	Acct
RA	Act	Loc	Ind	Project	EE	Monthly 07	Total 2007								
	843 Total														
PEZ	850	PHE	NE	NPAVPZZZ	451	4,028	48,336								
PEZ	850	PHE	NE	NPJZZZZZ	451										
	850 Total														
PEZ	853	PHE	NC	NPVZZZZZ	451	18,018	216,216	(216,216)							
	853 Total														
PEZ	875	HST	NE	NPJZZZZZ	451	6,645	79,740								
PEZ	875	PHE	NE	NPJZZZZZ	451										
	875 Total														
PEZ	876	PHE	NE	NPJZZZZZ	451	9,995	119,940								
	876 Total														
PEZ	896	PHE	NE	NPEZZZZZ	451	1,048	12,576								
	896 Total														
PEZ	899	PHE	NE	NPKZZZZZ	451	-	-								
	899 Total														
PEZ	907	OAH	NC	NPBZZZZZ	451	1,649	19,788	(19,788)							
PEZ	907	OAH	NC	NPEZZZZZ	451										
	907 Total														
PEZ	916	PHE	NC	NPRZZZZZ	451	3,381	40,572	(40,572)							
	916 Total														
PEZ	926	PDO	NE	NPWZZZZZ	451	2,704	32,448								
PEZ	926	PHE	NE	NPNLZZZZ	451										
	926 Total														
PEZ	928	PHE	NE	NPNLZZZZ	451	4,101	49,212								
	928 Total														
PEZ	931	PHE	NE	NPHZZZZZ	451	6,421	77,052								
	931 Total														
PEZ	932	PHE	NE	NPVZZZZZ	451	2,224	26,688								
	932 Total														
PEZ	933	PHE	NE	NPHZZZZZ	451	14,045	168,540								
	933 Total														
PEZ	940	PHE	NC	NPVZZZZZ	451	4,907	58,884	(58,884)							
PEZ	940	PHE	NC	NPEZZZZZ	451										
	940 Total														
PEZ	950	PHE	NE	NPHZZZZZ	451	2,409	28,908								
PEZ	950	PHE	NE	NPKZZZZZ	451										
	950 Total														
PEZ	951	PHE	NE	NPKZZZZZ	451	3,453	41,436								
	951 Total														
PEZ	953	PHE	NE	NPFZZZZZ	451	1,763	21,156								
	953 Total														
PEZ	960	PHE	NE	NPNCZZZZ	451	7,675	92,100								
	960 Total														
PEZ	965	PHE	NE	NPEZZZZZ	451	28	336								
	965 Total														
PEZ	966	PHE	NE	NPEZZZZZ	451	2,670	32,040								
	966 Total														
PEZ	967	PHE	NE	NPEZZZZZ	451	-	-								
	967 Total														

Hawaiian Electric Company, Inc.																			
Information Technology & Services Department																			
PEZ Forecast Model for 2007B																			
PEZ Actuals Jan- Dec 2005																			
										Conversion of Activity Based Management Code Blocks to NARUC Expense Categories									
	RA	Act	Loc	Ind	Project	EE	'Monthly 07	Total 2007	Non-NE/ reclass	EFMS-NE	Ebus-NE	SW Maint	Add'l clr	Total		Acct Blk	Acct		
							901,495	10,817,940	(3,001,596)	-	-	-	330,252	10,594,572					
														4					
This workpaper is a summary of the ITS Department costs that are allocated to the various NARUC functional accounts. Please refer to HECO-WP-1051 for the detail workpapers supporting this summary.																			

HECO-WP-1050
 DOCKET NO. 2006-0386
 PAGE 6 OF 6

Hawaiian Electric Company, Inc.
ITS Department
2007 Budget Expenses

ITS Department costs are charged to various functional areas of HECO and consist of:

1) Allocated Clearing Account Charges (other wise known as Responsibility Area PEZ charges)

ITS Department costs for core IT functions are charged to a clearing account. Core IT function include the majority of costs in the following divisions: Administrative, Development Services, Infrastructure & Operations, and Customer Care departments. The ITS Costing System distributes charges in the clearing account to various functional areas within HECO.

2) Direct Charges

ITS Department costs for non-core IT functions including Records Management, Printing Services and Mailing Services are directly charged to Operations & Maintenance Expenses in various functional areas. These costs are not processed through the ITS Costing System

Prepared by Blane Murakami, ITS Project Manager

A

Hawaiian Electric Company, Inc.
ITS Department
Allocated Clearing Account Charges via ITS Costing System (PEZ entries)

HECO's core IT costs are allocated to functional area code blocks via the IT Costing System. The allocation entries are coded with the Responsibility Area (RA) code PEZ in HECO's financial system. The following is a general description of the PEZ budgeting methodology. Workpapers A-1 through A-7 show the detail allocation amounts for 2007.

Costs charged to IT Clearing Account (additions)

IT Non-Project and non-capital Project costs are charged to the IT Clearing Account. These costs are coded with Indicator NC (Non-billable clearing). For 2007, the costs charged to IT Clearing Account were estimated to be \$14,834,300, as shown on workpaper A-1. Details of these costs are shown on workpapers B and C.

IT Clearing Account Allocations (reductions)

Charges in the IT Clearing Account are cleared to the following categories:

- 1) HELCO IT Costing System Direct Charges (2007 Estimate - \$293,404)
- 2) MECO IT Costing System Direct Charges (2007 Estimate - \$230,490)
- 3) Intercompany Billings (2007 Estimate - \$576,408)
- 4) EFMS Program Charges (2007 Estimate - \$799,992)
- 5) Ebusiness Program Charges (2007 Estimate - \$521,0004)
- 6) Software Maintenance and Licenses (2007 Estimate - \$1,595,028)
- 7) Other Functional Area Charges (2007 Estimate - \$10,817,974)

Clearing Account Methodology

Clearing amounts to the first 3 items above (HELCO/MECO IT Direct Charges, Intercompany Billings) are directly identified. Workpapers D, and E show the basis for the amounts included in the 2007 budget.

Clearing amounts for items 4 (EFMS Program) and 5 (Ebusiness Program) are estimated by the Program Managers of these IT-Managed programs. Costs are cleared to HECO functional area code blocks benefiting from the services provided by these programs. EFMS and Ebusiness Program costs are shown on workpaper C. Proration percentages used to allocate these costs were identified by Program Managers in prior years and are shown on workpaper F.

Clearing amounts for Item 6 (Software Maintenance and License charges) represent IT costs which are cleared to expense only accounts. Expense account codes with the largest IT clearings in prior years are used to clear these Software Maintenance and License charges. Workpapers H show the determination of these amounts and the accounts used for the clearing. Note that in prior years, Software Maintenance and License Charges were cleared as "Other Functional Area Charges" which are cleared to expense and non-expense account codes.

Clearing amounts for item 7 (Other Functional Area Charges) represent the residual of "Costs Charged to IT Clearing Account" reduced by the first 6 items of "IT Clearing Account Allocation". These costs are prorated to functional area code blocks based on actual 2005 PEZ proration amounts shown on workpaper I.

A

PEZ Workpaper Index

- A - PEZ Allocation Model
- B - Non-Project "NC" Charges
- C - Project "NC" Charges
- D - HELCO and MECO IT Costing System Direct Charges
- E - Intercompany Billable Estimates
- F - EFMS & EBUS Allocation Basis
- G - Software Maintenance and License allocation basis - summary
- H - Software Maintenance and License allocation basis and 2007 charges - detail
- I - Determination of 2007 PEZ proration %'s

A

Hawaiian Electric Company, Inc.
ITS Department
Direct Charges to O&M

ITS Department costs for non-core IT functions, including Records Management, Printing Services and Mailing Services are directly charged to Operations & Maintenance Expenses. These costs are not processed through the ITS Costing System.

The attached workpapers J and J-1 show the assumptions for 2007 Estimates for non-core IT functions. These costs are directly charged to functional area code block in the following areas:

Non-Core IT Function Direct O&M Charges:

- A & G Operation
- Customer Operations

Prepared by Blane Murakami, ITS Project Manager

Hawaiian Electric Company, Inc.
 Information Technology & Services Department
 PEZ Forecast Model for 2007B

RA	Act	Loc	Ind	Project	EE	Proportions	Monthly 07	Total 2007	
Total NC charges									
								10,857,760	
								2,634,040	
								800,000	
								521,000	
								21,500	
							1,236,192	14,834,300	
Less: HELCO IT Costing System direct charge									
							24,450	293,404	
Less: MECO IT Costing System direct charge									
							19,208	230,490	
Subtotal								14,310,406	
Less: InterCompany							48,034	576,408	
Less: EFMS Allocations									
PEZ	211	WST	NC	NPYZZZZZ		10.8%	7,175	86,100	
PEZ	256	KST	NE	NPEZZZZZ		0.5%	341	4,092	
PEZ	256	WST	NE	NPEZZZZZ		0.5%	341	4,092	
PEZ	307	OAH	NC	NPEZZZZZ		19.4%	12,954	155,448	
PEZ	326	OAH	NE	NPEZZZZZ		2.5%	1,697	20,364	
PEZ	408	OAH	NC	NPEZZZZZ		19.4%	12,954	155,448	
PEZ	455	OAH	NC	NPEZZZZZ		5.9%	3,928	47,136	
PEZ	455	OAH	NE	NPEZZZZZ		0.6%	399	4,788	
PEZ	456	OAH	NE	NPEZZZZZ		10.2%	6,794	81,528	
PEZ	600	OAH	NE	NPWZZZZZ		22.4%	14,944	179,328	
PEZ	907	OAH	NC	NPBZZZZZ		3.0%	1,993	23,916	
PEZ	926	PHE	NE	NPEZZZZZ		1.7%	1,108	13,296	
PEZ	931	PHE	NE	NPEZZZZZ		3.1%	2,038	24,456	
Total EFMS							100.0%	66,667	799,992
			NE		41%			331,944	
			NC		59%			468,048	
			Total		100%			799,992	
Less: EBusiness Allocations									
PEZ	110	PHE	NE	NPNEZZZZ		10.4%	4511	54,132	
PEZ	600	OAH	NE	NPNEZZZZ		0.7%	304	3,648	
PEZ	611	OAH	NE	NPNEZZZZ		21.2%	9208	110,496	
PEZ	713	PHE	NE	NPNEZZZZ		9.0%	3908	46,896	
PEZ	730	PHE	NE	NPNEZZZZ		0.0%	0	-	
PEZ	750	PHE	NE	NPNEZZZZ		36.8%	15977	191,724	
EZ	750	PHE	NE	NPNEZZZZ		21.9%	9509	114,108	
EBusiness							100.0%	43,417	521,004
Less: Software Maintenance									

28-1
 28-1
 28-1

50-1

50-2

28

28

A
 B

A

B

Hawaiian Electric Company, Inc.
Information Technology & Services Department
PEZ Forecast Model for 2007B

RA	Act	Loc	Ind	Project	EE	Proportions	Monthly 07	Total 2007
PEZ	112	PHE	NE	NPSZZZZZ		5.4%	7,178	86,136
PEZ	240	WST	NE	NPIZZZZZ		8.3%	11,032	132,384
PEZ	256	WST	NE	NPIZZZZZ		5.7%	7,576	90,912
PEZ	307	OAH	NE	NPBZZZZZ		5.7%	7,576	90,912
PEZ	455	OAH	NE	NPDZZZZZ		20.9%	27,780	333,360
PEZ	612	OAH	NE	NPAZZZZZ		15.0%	19,938	239,256
PEZ	720	PHE	NS	NPCZZZZZ		15.0%	19,938	239,256
PEZ	777	PHE	NE	NPAVP2ZZ		7.3%	9,703	116,436
PEZ	818	PHE	NE	NPAVP2ZZ		11.4%	15,153	181,836
PEZ	933	PHE	NE	NPHZZZZZ		5.3%	7,045	84,540
Total Software Maintenance						100.0%	132,920	1,595,028
Total NC less Dir Chg, Interco, EFMS, EBUS, SW							901,498	10,817,974
PEZ	100	PHE	NE	NPSZZZZZ	451		4,725	56,700
100 Total						0.524%		
PEZ	102	PHE	NE	NPSZZZZZ	451		-	-
102 Total						0.000%		
PEZ	110	PHE	NE	NPSZZZZZ	451		12,474	149,688
PEZ	110	PHE	NE	NPEZZZZZ	451			
110 Total						1.384%		
PEZ	112	PHE	NE	NPSZZZZZ	451		14,202	170,424
112 Total						1.575%		
PEZ	122	PHE	NE	NPIZZZZZ	451		4,100	49,200
122 Total						0.455%		
PEZ	201	WST	NE	NPYZZZZZ	451		7,069	84,828
201 Total						0.784%		
PEZ	240	WST	NE	NPYZZZZZ	451		7,468	89,616
210 Total						0.828%		
PEZ	211	WST	NC	NPYZZZZZ	451		21,733	260,796
PEZ	211	WST	NC	NPEZZZZZ	451			
211 Total						2.411%		
PEZ	212	KST	NE	NPAVP2ZZ	451		610	7,320
212 Total						0.068%		
PEZ	220	WST	NE	NPIZZZZZ	451		2,369	28,428
220 Total						0.263%		
PEZ	240	WST	NE	NPIZZZZZ	451		21,984	263,808
PEZ	240	WST	NE	NPYZZZZZ	451			
240 Total						2.439%		
PEZ	242	KST	NE	NPIZZZZZ	451		26,656	319,872
PEZ	242	WST	NE	NPIZZZZZ	451			
PEZ	242	HST	NE	NPIZZZZZ	451			
242 Total						2.957%		
PEZ	245	KST	NE	NPAVP2ZZ	451		972	11,664
245 Total						0.108%		
PEZ	246	KST	NE	NPAVP2ZZ	451		810	9,720
246 Total						0.090%		
PEZ	256	WST	NE	NPIZZZZZ	451		34,308	411,696
PEZ	256	KST	NE	NPIZZZZZ	451			
PEZ	256	HST	NE	NPIZZZZZ	451			

Hawaiian Electric Company, Inc.

Information Technology & Services Department

PEZ Forecast Model for 2007B

RA	Act	Loc	Ind	Project	EE	Proportions	Monthly 07	Total 2007
				256 Total		3.806%		
PEZ	258	KST	NE	NPAVP2ZZ	451		1,232	14,784
				258 Total		0.137%		
PEZ	261	KST	NE	NPAVP2ZZ	451		735	8,820
				261 Total		0.082%		
PEZ	307	OAH	NC	NPBZZZZZ	451		61,614	739,368
PEZ	307	OAH	NC	NPYZZZZZ	451			
PEZ	307	OAH	NE	NPAVP2ZZ	451			
				307 Total		6.835%		
PEZ	320	OAH	NE	NPAVP2ZZ	451		1,812	21,744
				320 Total		0.201%		
PEZ	325	OAH	NC	NPRZZZZZ	451		4,146	49,752
				325 Total		0.460%		
PEZ	326	OAH	NE	NPRZZZZZ	451		7,820	93,840
				326 Total		0.867%		
PEZ	331	OAH	NE	NPAVP2ZZ	451		211	2,532
				331 Total		0.023%		
PEZ	333	OAH	NC	NPRZZZZZ	451		15,379	184,548
PEZ	333	OAH	NE	NPAVP2ZZ	451			
				333 Total		1.706%		
PEZ	343	OAH	NE	NPAVP2ZZ	451		290	3,480
				343 Total		0.032%		
PEZ	349	OAH	NE	NPAVP2ZZ	451		156	1,872
				349 Total		0.017%		
PEZ	375	OAH	NC	NPRZZZZZ	451		16,260	195,120
				375 Total		1.804%		
PEZ	377	OAH	NE	NPRZZZZZ	451		4,842	58,104
				377 Total		0.537%		
PEZ	408	OAH	NC	NPBZZZZZ	451		38,639	463,668
PEZ	408	OAH	NC	NPEZZZZZ	451	##		
				408 Total		4.286%		
PEZ	420	OAH	NE	NPAVP2ZZ	451		6,035	72,420
				420 Total		0.669%		
PEZ	455	OAH	NE	NPDZZZZZ	451	6.142%	55,369	664,428
PEZ	455	OAH	NC	NPDZZZZZ	451	1.283%	11,567	138,804
				455 Total				
PEZ	456	OAH	NC	NPRZZZZZ	451	1.455%	13,117	157,404
PEZ	456	OAH	NE	NPRZZZZZ	451	0.439%	3,958	47,496
				456 Total				
PEZ	461	OAH	NE	NPAVP2ZZ	451		303	3,636
				461 Total		0.034%		
PEZ	462	OAH	NE	NPAVP2ZZ	451		295	3,540
				462 Total		0.033%		
PEZ	463	OAH	NE	NPAVP2ZZ	451		315	3,780
				463 Total		0.035%		
PEZ	465	OAH	NE	NPWZZZZZ	451		1,380	16,560
				465 Total		0.153%		
PEZ	474	OAH	NE	NPAVP2ZZ	451		502	6,024
				474 Total		0.056%		
PEZ	477	OAH	NE	NPAVP2ZZ	451	##	583	6,996

Hawaiian Electric Company, Inc.

Information Technology & Services Department

PEZ Forecast Model for 2007B

RA	Act	Loc	Ind	Project	EE	Proportions	Monthly 07	Total 2007
				477 Total		0.065%		
PEZ	486	OAH	NE	NPAVP2ZZ	451		161	1,932
				486 Total		0.018%		
PEZ	600	OAH	NC	NPWZZZZZ	451	4.139%	37,311	447,732
PEZ	600	OAH	NE	NPWZZZZZ	451	1.949%	17,574	210,888
PEZ	600	OAH	NE	NPCZZZZZ	451			
PEZ	600	OAH	NE	NPCZZZZZ	452			
				600 Total				
PEZ	603	OAH	NE	NPWZZZZZ	451		5,874	70,488
				603 Total		0.652%		
PEZ	610	OAH	NE	NPCZZZZZ	451		5,007	60,084
				610 Total		0.555%		
PEZ	611	OAH	NE	NPCZZZZZ	451		9,774	117,288
				611 Total		1.084%		
PEZ	612	OAH	NE	NPAZZZZZ	451		-	-
				612 Total		0.000%		
PEZ	614	OAH	NE	NPCZZZZZ	451		686	8,232
				614 Total		0.076%		
PEZ	616	OAH	NE	NPCZZZZZ	451		7,787	93,444
				616 Total		0.864%		
PEZ	700	PHE	NE	NPAVP7ZZ	451		20,332	243,984
PEZ	700	PHE	NE	NPAVP3ZZ	451			
PEZ	700	PHE	NE	NPAPRESI	451			
PEZ	700	PHE	NE	NPASVP9Z	451			
				700 Total		2.255%		
PEZ	701	PHE	NC	NPKZZZZZ	451			
				701 OAH NC NPRZZZZZ	451	0.438%	3,944	47,328
PEZ	701	PHE	NE	NPKZZZZZ	451	0.314%	2,833	33,996
				701 Total				
PEZ	710	PHE	NE	NPSZZZZZ	451	##	6,688	80,256
				710 Total		0.742%		
PEZ	712	PHE	ND	NPYZZZZZ	451		43	516
PEZ	712	PHE	ND	NPSZZZZZ	451			
				712 Total		0.005%		
PEZ	713	PHE	NE	NPEZZZZZ	451		12,734	152,808
				713 Total		1.413%		
PEZ	714	PHE	NE	P0000021	451			
PEZ	714	PHE	NE	P0000022	451			
PEZ	714	PHE	NE	P0000023	451			
PEZ	714	PHE	NE	P0000024	451			
PEZ	714	PHE	NE	P0000025	451			
PEZ	714	PHE	NE	NPEZZZZZ	451			
				714 Total		0.000%		
PEZ	720	PHE	NS	NPCZZZZZ	451		80,191	962,292
PEZ	720	PHE	NE	NPNEZZZZ	451			
				720 Total		8.895%		
PEZ	722	PHE	NE	NPFZZZZZ	451		2,714	32,568
				722 Total		0.301%		
PEZ	730	PPO	NE	NPEZZZZZ	451		2,409	28,908
				730 Total		0.267%		

Hawaiian Electric Company, Inc.

Information Technology & Services Department

PEZ Forecast Model for 2007B

RA	Act	Loc	Ind	Project	EE	Proportions	Monthly 07	Total 2007
PEZ	736	PHE	NE	NPSZZZZZ	451		3,121	37,452
PEZ	736	PHE	NE	P0000035	451			
	736 Total					0.346%		
PEZ	738	PHE	NE	NPNPZZZZ	451	##	5,939	71,268
	738 Total					0.659%		
PEZ	750	PHE	NE	NPQCZZZZ	451		20,642	247,704
	750 Total					2.290%		
PEZ	753	PHE	NE	NPQEZZZZ	451		3,331	39,972
	753 Total					0.369%		
PEZ	760	PHE	NE	NPNAZZZZ	451		4,064	48,768
	760 Total					0.451%		
PEZ	765	PHE	NE	NPFZZZZZ	451		4,633	55,596
PEZ	765	PHE	NE	NPPZZZZZ	451			
	765 Total					0.514%		
PEZ	766	PHE	NE	NPAVP2ZZ	451		1,712	20,544
PEZ	766	PHE	NE	NPAVP6ZZ	451			
	766 Total					0.190%		
PEZ	767	PHE	NE	NPFZZZZZ	451		4,473	53,676
	767 Total					0.496%		
PEZ	775	PHE	NE	NPFZZZZZ	451		2,042	24,504
	775 Total					0.227%		
PEZ	776	PHE	NE	NPFZZZZZ	451		5,551	66,612
	776 Total					0.616%		
PEZ	777	PHE	NE	NPAVP2ZZ	451		20,865	250,380
PEZ	777	PHE	NE	NPAZZZZZ	451			
	777 Total					2.314%		
PEZ	778	PHE	NE	NPFZZZZZ	451		7,012	84,144
	778 Total					0.778%		
PEZ	779	PHE	NE	NPFZZZZZ	451		1,866	22,392
	779 Total					0.207%		
PEZ	780	PHE	NE	NPFZZZZZ	451	##	45	540
	780 Total					0.005%		
PEZ	795	PHE	NE	NPFZZZZZ	451		7,528	90,336
	795 Total					0.835%		
PEZ	805	PHE	NE	NPPZZZZZ	451		3,965	47,580
	805 Total					0.440%		
PEZ	807	PHE	NE	NPQCZZZZ	451		7,347	88,164
PEZ	807	PHE	NE	NPAVP1ZZ	451			
	807 Total					0.815%		
PEZ	817	PHE	NE	NPAZZZZZ	451	#	4,217	50,604
	817 Total					0.468%		
PEZ	818	PHE	NE	NPAVP2ZZ	451		34,681	416,172
PEZ	818	PHE	NE	NPAVP1ZZ	451			
PEZ	818	PHE	NE	NPAZZZZZ	451			
	818 Total					3.847%		
PEZ	825	PHE	NE	NPKZZZZZ	451		1,347	16,164
	825 Total					0.149%		
PEZ	826	PHE	NE	NPKZZZZZ	451		5,927	71,124
PEZ	826	PHE	NE	NPAVP4ZZ	451			
	826 Total					0.657%		

Hawaiian Electric Company, Inc.
Information Technology & Services Department
PEZ Forecast Model for 2007B

RA	Act	Loc	Ind	Project	EE	Proportions	Monthly 07	Total 2007
PEZ	827	PHE	NE	NPKZZZZZ	451		2,104	25,248
	827 Total					0.233%		
PEZ	842	PHE	NE	NPVZZZZZ	451	##	15,614	187,368
PEZ	842	PHE	NE	NPAVP2ZZ	451			
	842 Total					1.732%		
PEZ	843	PHE	NE	NPAVP2ZZ	451		14,203	170,436
PEZ	843	PHE	NE	NPEZZZZZ	451			
PEZ	843	PHE	NI	P0000340	451			
PEZ	843	PHE	NE	NPAZZZZZ	451			
	843 Total					1.575%		
PEZ	850	PHE	NE	NPAVP2ZZ	451		4,028	48,336
PEZ	850	PHE	NE	NPIZZZZZ	451			
	850 Total					0.447%		
PEZ	853	PHE	NC	NPVZZZZZ	451		18,018	216,216
	853 Total					1.999%		
PEZ	875	HST	NE	NPJZZZZZ	451		6,645	79,740
PEZ	875	PHE	NE	NPJZZZZZ	451			
	875 Total					0.737%		
PEZ	876	PHE	NE	NPJZZZZZ	451		9,995	119,940
	876 Total					1.109%		
PEZ	896	PHE	NE	NPEZZZZZ	451	##	1,048	12,576
	896 Total					0.116%		
PEZ	899	PHE	NE	NPKZZZZZ	451		-	-
	899 Total					0.000%		
PEZ	907	OAH	NC	NPBZZZZZ	451		1,649	19,788
PEZ	907	OAH	NC	NPEZZZZZ	451			
	907 Total					0.183%		
PEZ	916	PHE	NC	NPRZZZZZ	451		3,381	40,572
	916 Total					0.375%		
PEZ	926	PDO	NE	NPWZZZZZ	451		2,704	32,448
PEZ	926	PHE	NE	NPNLZZZZ	451			
	926 Total					0.300%		
PEZ	928	PHE	NE	NPNLZZZZ	451		4,101	49,212
	928 Total					0.455%		
PEZ	931	PHE	NE	NPHZZZZZ	451		6,421	77,052
	931 Total					0.712%		
PEZ	932	PHE	NE	NPVZZZZZ	451		2,224	26,688
	932 Total					0.247%		
PEZ	933	PHE	NE	NPHZZZZZ	451		14,045	168,540
	933 Total					1.558%		
PEZ	940	PHE	NC	NPVZZZZZ	451		4,907	58,884
PEZ	940	PHE	NC	NPEZZZZZ	451			
	940 Total					0.544%		
PEZ	950	PHE	NE	NPHZZZZZ	451		2,409	28,908
PEZ	950	PHE	NE	NPKZZZZZ	451			
	950 Total					0.267%		
EZ	951	PHE	NE	NPKZZZZZ	451		3,453	41,436
	951 Total					0.383%		
PEZ	953	PHE	NE	NPFZZZZZ	451		1,763	21,156
	953 Total					0.196%		

Hawaiian Electric Company, Inc.										
Information Technology & Services Department										
PEZ Forecast Model for 2007B										
RA	Act	Loc	Ind	Project	EE	Proportions	Monthly 07	Total 2007		
PEZ	960	PHE	NE	NPNCZZZZ	451	} 81	7,675	92,100		
960 Total							0.851%			
PEZ	965	PHE	NE	NPEZZZZZ	451		28	336		
965 Total							0.003%			
PEZ	966	PHE	NE	NPEZZZZZ	451	}	2,670	32,040		
966 Total							0.296%			
PEZ	967	PHE	NE	NPEZZZZZ	451	}	-	-		
967 Total							0.000%			
Grand Total						100.0%	901,495	10,817,940		
						71.3% NE	642,319	7,755,156		
						28.7% NC	259,176	3,062,784		
								10,817,940		
Total PEZ NE								10,203,132		
Check total to pillar								14,310,384		
Difference: row 24 vs Pillar input total								22		

NC CHARGES - NON-PROJECT BUDGET
 INDICATOR = NC

11:08AM

8/30/2006

» budget manager: PR300 N...

Dept	Expense Categ...	FY07 Upd06 RA
InfoTech	Labor 2B-4	\$4,174,390
	Materials 2B-4	\$299,000
	On-Costs	0
	Other 2B-4	\$2,524,600
	Outside Svcs 2B-4	\$3,857,250
	Transportation 2B-4	\$2,520
		<u>\$10,857,760</u>
		2A-1
		<u>\$10,857,760</u>

--> 4,174,390 - LABOR +
2B-2 x 63.1% - ON-COST %
 2,634,040 - ON-COST \$
2A-1

NC CHARGES - NON INVOICED BUDGET
 INDICATOR : ALL

InfoTech

8/30/2006

» budget manager: PR300 N...

11:06AM

Dept	Expense Categ...	FY07 Upd06 RA
InfoTech	Labor	ⓐ \$5,445,640
	Materials	✓ \$327,700
	On-Costs	ⓐ \$3,471,796
	Other	✓ \$2,746,585
	Outside Svcs	\$4,322,953
	Transportation	\$34,020
		<u>\$16,348,695</u>
		\$16,348,695

CALCULATION OF LABOR ON-COST %

TOTAL ON-COST (A) 3,471,796
 STORES ON-COST ^{BB-3} < 34,540 >
 3,437,256
 LABOR BASE (B) 5,445,640
 LABOR ON-COST % $\frac{3,437,256}{5,445,640} = 63.12\%$
 BB-1

NC CHARGES - NON-PROJECT BUDGET
EXPENSE ELEMENT - 401 STORES
» budget manager: PR300 N...

AF162
11:07AM

8/30/2006

<u>Dept</u>	<u>Expense Categ...</u>	<u>FY07 Upd06 RA</u>
InfoTech	On-Costs	\$34,540
	EE 401 - STORES	\$34,540
		<hr/>
		\$34,540

B-2

NON-PROJECT "NC" CHARGES

Dept	*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE #	Line Item	FY07 Upd06 RA	Expense Categ...
InfoTech	PEA	890	PHE	NC	NPEZZZZZ	150	PEA Enabler (1) dev-new 890	\$121,848	Labor
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	150	PEA Implementor (1) 901 provide IT cust asst	\$43,839	Labor
InfoTech	PEC	901	PHE	NC	NPEZZZZZ	150	PEC FS (1) 901 IT cust asst	\$86,674	Labor
InfoTech	PEC	844	PHE	NC	NPEZZZZZ	150	PEC Implementor (2) 844 prepare contracts-clrg	\$87,214	Labor
InfoTech	PEC	901	PHE	NC	NPEZZZZZ	150	PEC Implementor (6) 901 provide IT cust asst-clrg	\$261,922	Labor
InfoTech	PEC	901	PHE	NC	NPEZZZZZ	150	PEC Implementor 901 vacancies (1)	-\$43,746	Labor
InfoTech	PEC	721	PHE	NC	NPEZZZZZ	150	PEC TC (1 CC Anyl) 721 Dev Meas & Anl Perf	\$61,776	Labor
InfoTech	PEC	844	PHE	NC	NPEZZZZZ	150	PEC TC (1 FVM) 844 prep/mge contracts-clrg	\$61,776	Labor
InfoTech	PEC	701	PHE	NC	NPEZZZZZ	150	PEC TC (1) 701 dev & mg fcst	\$39,348	Labor
InfoTech	PEC	896	PHE	NC	NPEZZZZZ	150	PEC TC (3 Desktop)	\$184,936	Labor
InfoTech	PEC	901	PHE	NC	NPEZZZZZ	150	PEC TC (4 BSC, 2 wk admin) 901 prov it cust assistance-clrg	\$357,936	Labor
InfoTech	PEC	901	PHE	NC	NPEZZZZZ	150	PEC TC 901 vacancies (1)	-\$61,776	Labor
InfoTech	PED	891	PHE	NC	NPEZZZZZ	150	PED Fac Sup (1) 891 develop comp apps-enh	\$86,674	Labor
InfoTech	PED	890	PHE	NC	NPEZZZZZ	150	PED TC (1) 890 develop apps	\$61,776	Labor
InfoTech	PED	891	PHE	NC	NPEZZZZZ	150	PED TC (36) 891 main comp apps-enhanced	\$1,626,253	Labor
InfoTech	PED	891	PHE	NC	NPEZZZZZ	150	PED TC 891 vacancies (1)	-\$61,776	Labor
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	150	PEI BUOC (5) 895 oper & main mainframe	\$229,970	Labor
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	150	PEI Fac Sup (1) 896 oper & main LAN	\$86,674	Labor
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	150	PEI I (1) 896 Oper & Main LAN	\$44,304	Labor
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	150	PEI I (1) 900 op desk top offc telecom	\$39,010	Labor
InfoTech	PEI	906	PHE	NC	NPEZZZZZ	150	PEI TC (1) 906 plan the Sys Telecom	\$61,776	Labor
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	150	PEI TC (4) 895 oper & main mainframe	\$246,712	Labor
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	150	PEI TC (8) 896 oper & main LAN	\$488,440	Labor
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	150	PEI TCS (1) 895 oper & main mainframe	\$62,833	Labor
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	201	IT000004 - Data Center - Materials	\$4,174,390	Labor
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	201	IT000005 - Infrastructure LAN - Materials	\$32,000	Materials
InfoTech	PEI	897	PHE	NC	NPEZZZZZ	201	IT000007 - Desktop Business - Materials	\$40,000	Materials
InfoTech	PEI	898	PHE	NC	NPEZZZZZ	201	IT000008 - Desktop Technical - Materials	\$24,000	Materials
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	201	IT000012 - Department - Materials	\$6,000	Materials
InfoTech	PEI	967	PHE	NC	NPEZZZZZ	201	IT000193 - Copiers/Printers/Fax - Materials	\$30,000	Materials
InfoTech								\$167,000	Materials
InfoTech								\$299,000	Materials

XB-1

XB-1

HECO-WP-1051
DOCKET NO. 2006-086
PAGE 15 OF 35



Dept	*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE #	Line Item	FY07 Upd06 RA	Expense Categ...
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	461	IT000012 - Department - IS Consult	\$63,200	Other
InfoTech	PEA 891	PHE	NC	NC	NPEZZZZZ	461	IT000014 - Consultant - CB Profile - IS Consult	\$1,686,000	Other
InfoTech	PEA 891	PHE	NC	NC	NPEZZZZZ	461	IT000017 - Consultant - Benefils FBF - IS Consult	\$20,000	Other
InfoTech	PEA 891	PHE	NC	NC	NPEZZZZZ	461	IT000124 - 2006 Pln Est 5A - Contractor Supt for CIS	\$20,000	Other
InfoTech	PED 891	PHE	NC	NC	NPEZZZZZ	462	IT000006 - Development - PC SW	\$198,000	Other
InfoTech	PEI 897	PHE	NC	NC	NPEZZZZZ	462	IT000007 - Desktop Business - PC SW - (Rmddy Chg Mgt 05B)	\$8,500	Other
InfoTech	PEA 749	PHE	NC	NC	NPEZZZZZ	520	IT000186 - ML & Travel - ML Travel	\$9,600	Other
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	522	IT000012 - Department - Interislel Trav	\$3,800	Other
InfoTech	PEI 895	PHE	NC	NC	NPEZZZZZ	570	IT000004 - Data Center - OS Svc	\$51,500	Other
InfoTech	PEI 896	PHE	NC	NC	NPEZZZZZ	570	IT000005 - Infrastructure LAN - OS Svc	\$272,000	Other
InfoTech	PEI 900	PHE	NC	NC	NPEZZZZZ	570	IT000009 - PABX Trunk Charges - OS Svc	\$58,000	Other
InfoTech	PEI 900	PHE	NC	NC	NPEZZZZZ	570	IT000010 - Long Distance -Rents	\$6,000	Other
InfoTech	PEI 900	PHE	NC	NC	NPEZZZZZ	570	IT000011 - Infrastructure Comm - Rents	\$8,000	Other
InfoTech	PEI 967	PHE	NC	NC	NPEZZZZZ	570	IT000193 - Copiers/Printers/Fax - Rents	\$120,000	Other
InfoTech	PEI 895	PHE	NC	NC	NPEZZZZZ	501	IT000003 - HEI Internet Charges - OS Svc	\$2,524,600	Other
InfoTech	PEI 895	PHE	NC	NC	NPEZZZZZ	501	IT000004 - Data Center - OS Svc	\$100,000	Outside Svcs
InfoTech	PEI 896	PHE	NC	NC	NPEZZZZZ	501	IT000005 - Infrastructure LAN - OS Svc	\$1,544,050	Outside Svcs
InfoTech	PED 891	PHE	NC	NC	NPEZZZZZ	501	IT000006 - Development - OS Svc	\$596,000	Outside Svcs
InfoTech	PEI 897	PHE	NC	NC	NPEZZZZZ	501	IT000007 - 2006 Pln Est 8A - Remedy Chg Mgt Maintenance	\$186,000	Outside Svcs
InfoTech	PEI 897	PHE	NC	NC	NPEZZZZZ	501	IT000007 - Desktop Business - OS Svc	\$45,000	Outside Svcs
InfoTech	PEI 898	PHE	NC	NC	NPEZZZZZ	501	IT000008 - Desktop Technical - OS Svc	\$706,300	Outside Svcs
InfoTech	PEI 900	PHE	NC	NC	NPEZZZZZ	501	IT000010 - Long Distance - OS Svc	\$290,000	Outside Svcs
InfoTech	PEI 900	PHE	NC	NC	NPEZZZZZ	501	IT000011 - Infrastructure Comm - OS Svc	\$81,900	Outside Svcs
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	501	IT000012 - Consulting for FA - Outsourced	\$30,000	Outside Svcs
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	501	IT000012 - Department - OS Svc	\$48,000	Outside Svcs
InfoTech	PEI 915	PHE	NC	NC	NPEZZZZZ	501	IT000184 - Telecom Equip Main - OS Svc	\$35,000	Outside Svcs
InfoTech	PEA 789	PHE	NC	NC	NPEZZZZZ	501	IT000185 - Training Local External - OS Svc	\$170,000	Outside Svcs
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	301	IT000012 - Department - Vehicles	\$25,000	Outside Svcs
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	301	IT000012 - Department - Vehicles	\$3,857,250	Outside Svcs
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	301	IT000012 - Department - Vehicles	\$2,520	Transportation
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	301	IT000012 - Department - Vehicles	\$2,520	Transportation
InfoTech	PEA 901	PHE	NC	NC	NPEZZZZZ	301	IT000012 - Department - Vehicles	\$10,857,760	Transportation

80-1
80-1

32

NON-PROJECT "C" HOURS

budget manager: PR110H NPUpd - Detail Hrs

HOURS

*R...	*Ac...	*Lo...	*In...	*Proj #	*E...	*Lbr Class	Line Item	FY07 Upd06 RA
PEA	890	PHE	NC	NPEZZ...	150	_E	PEA Enabler (1) dev-new 890	2,400
PEA						_E	ITS CHIEF INFORMATION OFFICER	2,400
PEA	901	PHE	NC	NPEZZ...	150	_I	PEA Implementor (1) 901 provide IT cust asst	1,888
PEA						_I	ITS SECRETARY	1,888
PEC	901	PHE	NC	NPEZZ...	150	_FS	PEC FS (1) 901 IT cust asst	2,084
PEC						_FS	DIRECTOR - CUSTOMER CARE	2,084
PEC	844	PHE	NC	NPEZZ...	150	_I	PEC Implementor (2) 844 prepare contracts-clrg	3,756
PEC	901	PHE	NC	NPEZZ...	150	_I	PEC Implementor (6) 901 provide IT cust asst-clrg	11,280
PEC	901	PHE	NC	NPEZZ...	150	_I	PEC Implementor 901 vacancies (1)	-1,884
PEC						_I	SPECIALISTS	13,152
PEC	701	PHE	NC	NPEZZ...	150	_TC	PEC TC (1) 701 dev & mg fcst	1,200
PEC	721	PHE	NC	NPEZZ...	150	_TC	PEC TC (1 CC Any) 721 Dev Meas & Anl Perf	1,884
PEC	844	PHE	NC	NPEZZ...	150	_TC	PEC TC (1 FVM) 844 prep/mge contracts-clrg	1,884
PEC	896	PHE	NC	NPEZZ...	150	_TC	PEC TC (3 Desktop)	5,640
PEC	901	PHE	NC	NPEZZ...	150	_TC	PEC TC (4 BSC, 2 wk admin) 901 prov it cust assistance-clrg	10,916
PEC	901	PHE	NC	NPEZZ...	150	_TC	PEC TC 901 vacancies (1)	-1,884
PEC						_TC	CONSULTANTS / ANALYSTS	19,640
PED	891	PHE	NC	NPEZZ...	150	_FS	PED Fac Sup (1) 891 develop comp apps-enh	2,084
PED						_FS	DIRECTOR - DEVELOPMENT SERVICES	2,084
PED	890	PHE	NC	NPEZZ...	150	_TC	PED TC (1) 890 develop apps	1,884
PED	891	PHE	NC	NPEZZ...	150	_TC	PED TC (36) 891 main comp apps-enhanced	49,596
PED	891	PHE	NC	NPEZZ...	150	_TC	PED TC 891 vacancies (1)	-1,884
PED						_TC	LEADS/ANALYSTS/SPECIALISTS	49,596
PEI	895	PHE	NC	NPEZZ...	150	_BUOC	PEI BUOC (5) 895 oper & main mainframe	9,456

EMPLOYEES

1

1

1

7

12

1

36

B-5

Non-Project '06' Hours

10/16/2006

budget manager: PR110H NPUpd - Detail Hrs

2:49PM

HOURS

EMPLOYEES

*R...	*Ac...	*Lo...	*In...	*Proj #	*E...	*Lbr Class	Line Item	FY07 Upd06 RA
PEI						_BUOC	OPERATORS	9,456
PEI	896	PHE	NC	NPEZZ...	150	_FS	PEI Fac Sup (1) 896 oper & main LAN	2,084
PEI							DIRECTOR - INFRASTRUCTURE & OPERATIONS	2,084
PEI	896	PHE	NC	NPEZZ...	150	_I	PEI I (1) 896 Oper & Main LAN	1,908
PEI	900	PHE	NC	NPEZZ...	150	_I	PEI I (1) 900 op desk top offc telecom	1,680
PEI							SPECIALIST / COORDINATOR	3,588
PEI	895	PHE	NC	NPEZZ...	150	_TC	PEI TC (4) 895 oper & main mainframe	7,524
PEI	896	PHE	NC	NPEZZ...	150	_TC	PEI TC (8) 896 oper & main LAN	14,896
PEI	906	PHE	NC	NPEZZ...	150	_TC	PEI TC (1) 906 plan the Sys Telecom	1,884
PEI							LEAD / ADMINISTRATOR / ANALYSTS	24,304
PEI	895	PHE	NC	NPEZZ...	150	_TCS	PEI TCS (1) 895 oper & main mainframe	1,888
PEI							SUPERVISOR	1,888
							TOTAL	132,164

5

1

2

13

1

81

B.S

10/13/2006

> budget manager: PR9100-P: Summ...

1:56PM

PROJECT COSTS CHARGED TO CLEARING 'NC'

Project	*RA #	*Act #	*Loc #	*Ind #	*Project #	*EE #	FY07 Update06
EFMS Program	PED	891	PHE	NC	P0000040	501	\$800,000
e-Bus HECOcom Projects-2004	PEP	720	PHE	NC	P0000427	501	\$521,000
Collaborative Communications	PEA	897	PHE	NC	P0000653	201	\$21,500
							<hr/>
							\$1,342,500

26-1
> 8A-1

Hawaiian Electric Company
ITS Department
Application Development/Maintenance Costs
Electric Facilities management Systems (EFMS)
2007 Budget

Description	2007 Budget
Asset Management	
UG Structure Inspection	53,000.00
Fiber Optic Component Addition	46,800.00
Landinfo Phase 2	26,400.00
Streetlight Inspection	27,000.00
Joint Pole Application Interface	24,000.00
Substation Facilities & Drawing Imaging	TBD
DIDS Enhancements/Interfaces	
DIDS - Ellipse Materials Requisition Interface	37,500.00
DIDS - Ellipse Purchase Order Interface	20,000.00
EMS Project Prep Initiatives	
EMS - Transmission Line Fault Locator Interface	TBD
Gtech Enhancements/Interfaces	
Implement new Synergie Extract	10,000.00
Implement new Landbase Refresh Cycle	10,000.00
Project Subtotal	254,700.00
Recurring Annual CADD & AM/FM Maint. & Mods	
CADD - Microstation Training - New Staff Additions	25,000.00
CADD - Projectwise Bentley Consulting - Env Config & Deploy	15,000.00
CADD - Projectwise PM Support - Kevin Yoshino (TYC)	50,000.00
CADD - Bentley ETS Training Program	36,000.00
AMFM - Gtech/Geomedia Maintenance & Enhancements (Intergraph)	98,000.00
AMFM - Gtech Maintenance & Enhancements (Bruce Newfelt, Maintec)	200,000.00
DIDS - Maintenance & Enhancements	50,000.00
DIDS - Test & Treat Maintenance & Enhancements	20,000.00
New Software Purchases	30,000.00
Oracle Licenses for Gnetviewer	30,000.00
Recurring Maintenance	554,000.00

808,700.00

ROUNDED

800,000

HECO IT Costing Estimates for 2007 and 2008

HELCO

DIRECT CHARGES							Estimate	Estimate	
Dist.	Account Code			#	WO #	2007	2008		
HELCO	H9P	700	HEL NE NHAPRES	451		2,076	2,076	Direct Charge	
HELCO	HAA	701	HEL NE NHAZZZZ	451		3,536	3,536	Direct Charge	
HELCO	HAA	818	HEL NE NHAZZZZ	451		3,114	3,114	Direct Charge	
HELCO	HAC	818	HEL NE NHAZZZZ	451		3,865	3,865	Direct Charge	
HELCO	HAK	604	HAK NE NHAZZZZ	451		599	599	Direct Charge	
HELCO	HAP	817	HEL NE NHAZZZZ	451		3,066	3,066	Direct Charge	
HELCO	HDA	420	HED NC NHDZZZZ	451		5,941	5,941	Direct Charge	
HELCO	HDA	965	HED NC NHDZZZZ	451		3,641	3,641	Direct Charge	
HELCO	HDC	603	HAH NE NHDZZZZ	451		24,095	24,095	Direct Charge	
HELCO	HDK	604	HAK NE NHDZZZZ	451		1,233	1,233	Direct Charge	
HELCO	HDR	455	HED NC NHDZZZZ	451		5,142	5,142	Direct Charge	
HELCO	HDR	600	HAH NE NHDZZZZ	451		5,142	5,142	Direct Charge	
HELCO	HGA	211	ANS NS NHGZZZZ	451		4,768	4,768	Direct Charge	
HELCO	HNA	775	HEL NE NHNZZZZ	451		1,681	1,681	Direct Charge	
HELCO	HNL	928	HEL NE NHNZZZZ	451		3,066	3,066	Direct Charge	
HELCO	HCS	112	HEL NE NHCZZZZ	451	CS000024	1,069	1,069	Direct Charge	
HELCO	HCE	750	HEL NE NHCZZZZ	451	CS000101	185	185	Direct Charge	
HELCO	HAW	604	HEL NE NHAZZZZ	451	CS000274	9,896	9,896	Direct Charge	
HELCO	HAK	604	HAK NE NHAZZZZ	451	CS000317	20,367	20,367	Direct Charge	
HELCO	HAS	604	HAH NE NHAZZZZ	451	CS000347	26,591	26,591	Direct Charge	
HELCO	HCB	711	HEL NE H0000004	451	CS000431	668	668	Direct Charge	
HELCO	HES	112	HEL NE NHEZZZZ	451	CS000653	8,348	8,348	Direct Charge	
HELCO	HEE	750	HEL NE NHEZZZZ	451	CS000662	805	805	Direct Charge	
HELCO	HEB	711	HEL NE H0000004	451	CS000665	4,044	4,044	Direct Charge	
HELCO	HCK	604	HAK NE NHCZZZZ	451	CS000762	10,321	10,321	Direct Charge	
HELCO	HCH	604	HAH NE NHCZZZZ	451	CS000811	13,389	13,389	Direct Charge	
HELCO	HCW	604	HAW NE NHCZZZZ	451	CS000844	4,346	4,346	Direct Charge	
HELCO	HWA	408	HED NC NHWZZZZ	451	EE000629	69,901	69,901	Direct Charge	
HELCO	HAC	818	HEL NE NHAZZZZ	451	FI000043	7,624	7,624	Direct Charge	
HELCO	HNP	778	HEL NE NHNZZZZ	451	HR000258	20,995	27,255	Direct Charge	
HELCO	HNP	779	HEL NE NHNZZZZ	451	HR000259	2,542	2,542	Direct Charge	
HELCO	HNP	779	HEL NE NHNZZZZ	451	HR000260	2,866	5,355	Direct Charge	
HELCO	HNP	776	HEL NE NHNZZZZ	451	HR000261	2,419	2,419	Direct Charge	
HELCO	HNP	775	HEL NE NHNZZZZ	451	HR000262	37	37	Direct Charge	
HELCO	HNP	779	HEL NE NHNZZZZ	451	HR000264	907	268	Direct Charge	
HELCO	HNP	780	HEL NE NHNZZZZ	451	HR000293	780	780	Direct Charge	
HELCO	HNP	953	HEL NE NHNZZZZ	451	(New)	1,560	0	Direct Charge	
HELCO	HCI	714	HEL NE H0000002	451	C0000929	1,160	1,160	Direct Charge	
HELCO	HCI	714	HEL NE H0000001	451	C0000939	572	572	Direct Charge	
HELCO	HEI	714	HEL NE H0000002	451	C0011206	7,038	7,038	Direct Charge	
HELCO	HEI	714	HEL NE H0000002	451	C0011214	4,009	4,009	Direct Charge	
TOTAL						293,404	299,954		

BA-1

INTERCOMPANY BILLABLE (ICB) CHARGES							Estimate	Estimate	
Dist.	Account Code			#	WO #	2007	2008		
HECO	PEZ	775	HEL BE NPFZZZZZ		HR000238	304	304	ICB	
TOTAL						304	304		

HECO IT Costing Estimates for 2007 and 2008

MECO

DIRECT CHARGES							Estimate	Estimate		
Dist.	Account Code				#	WO #	2007	2008		
MECO	M9P	700	MAU	NE	NMAZZZZ	451		2,620	2,620	Direct Charge
MECO	MAA	612	MAU	NE	NMAZZZZ	451		1,533	1,533	Direct Charge
MECO	MAA	818	MAU	NE	NMAZZZZ	451		1,504	1,504	Direct Charge
MECO	MAB	612	MAU	NE	NMAZZZZ	451		5,588	5,588	Direct Charge
MECO	MAG	612	MAU	NE	NMAZZZZ	451		3,066	3,066	Direct Charge
MECO	MDA	700	MAU	NC	NMDZZZZ	451		7,919	7,919	Direct Charge
MECO	MDK	620	MAU	NE	NMDZZZZ	451		6,074	6,074	Direct Charge
MECO	MDM	603	MAU	NE	NMDZZZZ	451		8,864	8,864	Direct Charge
MECO	MDR	618	MAU	NE	NMDZZZZ	451		17,793	17,793	Direct Charge
MECO	MGA	899	NST	NC	NMGZZZZ	451		3,521	3,521	Direct Charge
MECO	MSP	778	MAU	NE	NMSZZZZ	451		542	542	Direct Charge
MECO	MWA	901	MAU	NC	NMWZZZZ	451		11,556	11,556	Direct Charge
MECO	MWC	600	MAU	NC	NMWZZZZ	451		3,066	3,066	Direct Charge
MECO	MWP	600	MAU	NC	NMWZZZZ	451		29,066	29,066	Direct Charge
MECO	MWS	600	MAU	NC	NMWZZZZ	451		4,598	4,598	Direct Charge
MECO	MCN	112	MAU	NE	NMCZZZZ	451	CS000027	38,359	38,359	Direct Charge
MECO	MCT	604	MAM	NE	NMCZZZZ	451	CS000043	7,218	7,218	Direct Charge
MECO	MCM	610	MAU	NE	NMCZZZZ	451	CS000096	1,647	1,647	Direct Charge
MECO	MCA	604	MAU	NE	NMCZZZZ	451	CS000153	16,469	16,469	Direct Charge
MECO	MCR	604	MAU	NE	NMCZZZZ	451	CS000158	25,125	25,125	Direct Charge
MECO	MAA	898	MAU	NE	NMAZZZZ	451	FI000014	2,076	2,076	Direct Charge
MECO	MSP	780	MAU	NE	NMSZZZZ	451	HR000054	720	720	Direct Charge
MECO	MSP	779	MAU	NE	NMSZZZZ	451	HR000132	858	268	Direct Charge
MECO	MSP	775	MAU	NE	NMSZZZZ	451	HR000133	37	37	Direct Charge
MECO	MSP	778	MAU	NE	NMSZZZZ	451	HR000135	21,472	27,247	Direct Charge
MECO	MSP	779	MAU	NE	NMSZZZZ	451	HR000144	2,509	2,509	Direct Charge
MECO	MSP	776	MAU	NE	NMSZZZZ	451	HR000199	2,389	2,389	Direct Charge
MECO	MSP	779	MAU	NE	NMSZZZZ	451	HR000232	2,861	5,147	Direct Charge
MECO	MSP	953	MAU	NE	NMSZZZZ	451	(New)	1,440	0	Direct Charge
TOTAL								230,490	236,521	

2A1

INTERCOMPANY BILLABLE (ICB) CHARGES							Estimate	Estimate		
Dist.	Account Code				#	WO #	2007	2008		
HECO	PEZ	775	MAU	BE	NPFZZZZ		HR000240	304	304	ICB
TOTAL								304	304	

ITS Department
EFMS and Ebus Allocations

EFMS Allocations

			Allocation Basis:	
PEZ 211	WST NC	NPYZZZZZ	62,388	10.8%
PEZ 256	KST NE	NPEZZZZZ	2,964	0.5%
PEZ 256	WST NE	NPEZZZZZ	2,964	0.5%
PEZ 307	OAH NC	NPEZZZZZ	112,644	19.4%
PEZ 326	OAH NE	NPEZZZZZ	14,760	2.5%
PEZ 408	OAH NC	NPEZZZZZ	112,644	19.4%
PEZ 455	OAH NC	NPEZZZZZ	34,152	5.9%
PEZ 455	OAH NE	NPEZZZZZ	3,468	0.6%
PEZ 456	OAH NE	NPEZZZZZ	59,076	10.2%
PEZ 600	OAH NE	NPWZZZZZ	129,948	22.4%
PEZ 907	OAH NC	NPBZZZZZ	17,328	3.0%
PEZ 926	PHE NE	NPEZZZZZ	9,636	1.7%
PEZ 931	PHE NE	NPEZZZZZ	17,724	3.1%
EFMS Allocations Total			579,696	100.0%

ZA-1

Ebusiness Allocations

			Allocation Basis:	
PEZ 110	PHE NE	NPNEZZZZ	1,767	10.4%
PEZ 600	OAH NE	NPNEZZZZ	119	0.7%
PEZ 611	OAH NE	NPNEZZZZ	3,607	21.2%
PEZ 713	PHE NE	NPNEZZZZ	1,531	9.0%
PEZ 730	PHE NE	NPNEZZZZ	-	0.0%
PEZ 750	PHE NE	NPNEZZZZ	6,259	36.8%
PEZ 950	PHE NE	NPNEZZZZ	3,725	21.9%
Ebus Allocations Total			17,008	100.0%

ZA-1

ITS Department

Software Allocation based on 2005 Actuals - 8 Largest PEZ NE/NS + 2 additional NE Code Blocks

CodeBlock	NARUC	NARUC Description	Allocation base	Proportion
-----------	-------	-------------------	-----------------	------------

NARUC Expense Categories:

Miscellaneous Transmission Exper	190,913	5.7%
Distribution Expenses Total	702,685	20.9%
Customer Accounts Expenses Total	505,106	15.0%
Customer Records & Collection E	505,106	15.0%
Administrative & General Expense	985,288	29.3%
Power Production Expenses Total	469,910	14.0%
Grand Total	3,359,006	100.0%

Detailed Code Blocks:

PEZ 720 PHE NS NPCZZZZZ	901	Customer Accounts Expenses	505,106	15.0%
PEZ 612 OAH NE NPAZZZZZ	903	Customer Records & Collection E	505,106	15.0%
PEZ 455 OAH NE NPDZZZZZ	588	Distribution Expenses	702,685	20.9%
PEZ 256 WST NE NPIZZZZZ	514020	Power Production Expenses	190,913	5.7%
PEZ 307 OAH NE NPBZZZZZ	566	Miscellaneous Transmission Exper	190,913	5.7%
PEZ 818 PHE NE NPAVP2ZZ	921	Administrative & General Expense	381,808	11.4%
PEZ 240 WST NE NPIZZZZZ	506020	Power Production Expenses	278,997	8.3%
PEZ 777 PHE NE NPAVP2ZZ	921	Administrative & General Expense	244,997	7.3%
PEZ 112 PHE NE NPSZZZZZ	921	Administrative & General Expense	180,240	5.4%
PEZ 933 PHE NE NPHZZZZZ	921	Administrative & General Expense	178,243	5.3%
Subtotal-top 8 PEZ NE/NS code blocks + 2 addi			3,359,006	100.0%

ITS Department 2005 PEZ Actuals
Eight Largest NE Allocation Accounts

	*Act	*Loc	*Ind	*EE				
PEZ	A ##	#	#	*Proj #	#	Net		
PEZ	720	PHE	NS	NPCZZZZZ	451	1,010,211	12.3%	30.1%
PEZ	455	OAH	NE	NPDZZZZZ	451	702,685	8.6%	20.9%
PEZ	256	WST	NE	NPIZZZZZ	451	381,825	4.7%	11.4%
PEZ	818	PHE	NE	NPAVP2ZZ	451	381,808	4.7%	11.4%
PEZ	240	WST	NE	NPIZZZZZ	451	278,997	3.4%	8.3%
PEZ	777	PHE	NE	NPAVP2ZZ	451	244,997	3.0%	7.3%
PEZ	112	PHE	NE	NPSZZZZZ	451	180,240	2.2%	5.4%
PEZ	933	PHE	NE	NPHZZZZZ	451	178,243	2.2%	40.9% 5.3%
PEZ	713	PHE	NE	NPSZZZZZ	451	161,612	2.0%	100%
PEZ	110	PHE	NE	NPSZZZZZ	451	158,311	1.9%	
PEZ	842	PHE	NE	NPVZZZZZ	451	150,713	1.8%	
PEZ	242	KST	NE	NPIZZZZZ	451	141,598	1.7%	
PEZ	600	OAH	NE	NPWZZZZZ	451	132,367	1.6%	
PEZ	843	PHE	NE	NPAVP2ZZ	451	132,096	1.6%	
PEZ	750	PHE	NE	NPQCZZZZ	451	128,196	1.6%	
PEZ	876	PHE	NE	NPJZZZZZ	451	126,851	1.5%	
PEZ	611	OAH	NE	NPCZZZZZ	451	124,041	1.5%	15.3%
PEZ	242	WST	NE	NPIZZZZZ	451	109,700	1.3%	
PEZ	326	OAH	NE	NPRZZZZZ	451	99,243	1.2%	
PEZ	616	OAH	NE	NPCZZZZZ	451	98,826	1.2%	
PEZ	960	PHE	NE	NPNCZZZZ	451	97,398	1.2%	
PEZ	700	PHE	NE	NPASVP7Z	451	97,114	1.2%	
PEZ	795	PHE	NE	NPFZZZZZ	451	95,537	1.2%	
PEZ	600	OAH	NE	NPCZZZZZ	451	90,667	1.1%	
PEZ	201	WST	NE	NPYZZZZZ	451	89,709	1.1%	
PEZ	778	PHE	NE	NPFZZZZZ	451	88,988	1.1%	
PEZ	242	HST	NE	NPIZZZZZ	451	86,996	1.1%	11.6%
PEZ	750	PHE	NE	NPHZZZZZ	451	83,182	1.0%	
PEZ	931	PHE	NE	NPHZZZZZ	451	81,490	1.0%	
PEZ	807	PHE	NE	NPQCZZZZ	451	80,406	1.0%	
PEZ	420	OAH	NE	NPAVP2ZZ	451	76,593	0.9%	
PEZ	603	OAH	NE	NPWZZZZZ	451	74,552	0.9%	
PEZ	776	PHE	NE	NPFZZZZZ	451	70,453	0.9%	
PEZ	738	PHE	NE	NPNPZZZZ	451	64,563	0.8%	
PEZ	610	OAH	NE	NPCZZZZZ	451	63,548	0.8%	
PEZ	100	PHE	NE	NPSZZZZZ	451	59,961	0.7%	
PEZ	818	PHE	NE	NPAZZZZZ	451	58,329	0.7%	
PEZ	767	PHE	NE	NPFZZZZZ	451	56,762	0.7%	
PEZ	377	OAH	NE	NPRZZZZZ	451	55,628	0.7%	
PEZ	928	PHE	NE	NPNLZZZZ	451	52,044	0.6%	
PEZ	122	PHE	NE	NPIZZZZZ	451	52,032	0.6%	
PEZ	307	OAH	NE	NPAVP2ZZ	451	51,673	0.6%	
PEZ	760	PHE	NE	NPNAZZZZ	451	51,575	0.6%	
PEZ	850	PHE	NE	NPAVP2ZZ	451	51,116	0.6%	
PEZ	750	PHE	NE	NPQEZZZZ	451	50,595	0.6%	
PEZ	805	PHE	NE	NPPZZZZZ	451	50,314	0.6%	
PEZ	456	OAH	NE	NPRZZZZZ	451	50,226	0.6%	
PEZ	700	PHE	NE	NPASVP8Z	451	48,306	0.6%	
PEZ	843	PHE	NE	NPAZZZZZ	451	48,150	0.6%	
PEZ	256	KST	NE	NPIZZZZZ	451	46,141	0.6%	
PEZ	875	HST	NE	NPJZZZZZ	451	45,958	0.6%	
PEZ	826	PHE	NE	NPKZZZZZ	451	45,153	0.6%	
PEZ	700	PHE	NE	NPAPRESI	451	44,380	0.5%	
PEZ	765	PHE	NE	NPFZZZZZ	451	43,922	0.5%	
PEZ	711	PHE	NE	NPASVP7Z	451	43,840	0.5%	
PEZ	951	PHE	NE	NPKZZZZZ	451	43,825	0.5%	
PEZ	753	PHE	NE	NPQEZZZZ	451	42,274	0.5%	
PEZ	710	PHE	NE	NPSZZZZZ	451	41,039	0.5%	
PEZ	736	PHE	NE	NPSZZZZZ	451	39,610	0.5%	

*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE #	Net	
PEZ	817	PHE	NE	NPAZZZZZ	451	38,520	0.5%
Z	875	PHE	NE	NPJZZZZZ	451	38,379	0.5%
Z	701	PHE	NE	NPKZZZZZ	451	35,952	0.4%
PEZ	722	PHE	NE	NPFZZZZZ	451	34,448	0.4%
PEZ	966	PHE	NE	NPEZZZZZ	451	33,888	0.4%
PEZ	700	PHE	NE	NPAVP3ZZ	451	31,754	0.4%
PEZ	730	PHE	NE	NPASVP7Z	451	30,579	0.4%
PEZ	950	PHE	NE	NPKZZZZZ	451	30,573	0.4%
PEZ	220	WST	NE	NPIZZZZZ	451	30,064	0.4%
PEZ	826	PHE	NE	NPAVP4ZZ	451	30,064	0.4%
PEZ	932	PHE	NE	NPVZZZZZ	451	28,231	0.3%
PEZ	836	PHE	NE	NPNAZZZZ	451	27,122	0.3%
PEZ	827	PHE	NE	NPKZZZZZ	451	26,698	0.3%
PEZ	775	PHE	NE	NPFZZZZZ	451	25,916	0.3%
PEZ	779	PHE	NE	NPFZZZZZ	451	23,687	0.3%
PEZ	320	OAH	NE	NPAVP2ZZ	451	22,996	0.3%
PEZ	926	PDO	NE	NPDZZZZZ	451	22,839	0.3%
PEZ	953	PHE	NE	NPFZZZZZ	451	22,371	0.3%
PEZ	891	PHE	NE	NPKZZZZZ	451	21,296	0.3%
PEZ	842	PHE	NE	NPAVP2ZZ	451	20,326	0.2%
PEZ	777	PHE	NE	NPAZZZZZ	451	19,800	0.2%
PEZ	465	OAH	NE	NPWZZZZZ	451	17,518	0.2%
PEZ	825	PHE	NE	NPKZZZZZ	451	17,095	0.2%
PEZ	258	KST	NE	NPAVP2ZZ	451	15,635	0.2%
PEZ	815	PHE	NE	NPAZZZZZ	451	15,001	0.2%
PEZ	766	PHE	NE	NPAVP6ZZ	451	13,858	0.2%
PEZ	700	PHE	NE	NPASVP9Z	451	12,840	0.2%
PEZ	700	PHE	NE	NPAVP5ZZ	451	12,840	0.2%
PEZ	807	PHE	NE	NPAVP1ZZ	451	12,840	0.2%
	245	KST	NE	NPAVP2ZZ	451	12,342	0.2%
	926	PHE	NE	NPNLZZZZ	451	11,483	0.1%
PEZ	700	PHE	NE	NPAVP7ZZ	451	10,804	0.1%
PEZ	745	PHE	NE	NPNIZZZZ	451	10,804	0.1%
PEZ	246	KST	NE	NPAVP2ZZ	451	10,286	0.1%
PEZ	765	PHE	NE	NPPZZZZZ	451	9,474	0.1%
PEZ	261	KST	NE	NPAVP2ZZ	451	9,325	0.1%
PEZ	614	OAH	NE	NPCZZZZZ	451	8,710	0.1%
PEZ	766	PHE	NE	NPAVP2ZZ	451	7,864	0.1%
PEZ	212	KST	NE	NPAVP2ZZ	451	7,744	0.1%
PEZ	720	PHE	NE	NPASVP7Z	451	7,495	0.1%
PEZ	256	HST	NE	NPIZZZZZ	451	7,438	0.1%
PEZ	474	OAH	NE	NPAVP2ZZ	451	6,376	0.1%
PEZ	477	OAH	NE	NPAVP2ZZ	451	6,208	0.1%
PEZ	376	OAH	NE	NPRZZZZZ	451	5,822	0.1%
PEZ	765	PHE	NE	NPNAZZZZ	451	5,402	0.1%
PEZ	463	OAH	NE	NPAVP2ZZ	451	3,995	0.0%
PEZ	461	OAH	NE	NPAVP2ZZ	451	3,851	0.0%
PEZ	462	OAH	NE	NPAVP2ZZ	451	3,738	0.0%
PEZ	343	OAH	NE	NPAVP2ZZ	451	3,678	0.0%
PEZ	333	OAH	NE	NPAVP2ZZ	451	2,784	0.0%
PEZ	331	OAH	NE	NPAVP2ZZ	451	2,675	0.0%
PEZ	486	OAH	NE	NPAVP2ZZ	451	2,048	0.0%
PEZ	349	OAH	NE	NPAVP2ZZ	451	1,679	0.0%
PEZ	478	OAH	NE	NPDZZZZZ	451	1,190	0.0%
PEZ	789	PHE	NE	NPVZZZZZ	451	567	0.0%
PEZ	965	PHE	NE	NPEZZZZZ	451	350	0.0%
PEZ	347	OAH	NE	NPDZZZZZ	451	298	0.0%
	891	PHE	NE	NPEZZZZZ	451	(7,994)	-0.1%
						0	
PEZ	Total					8,206,175	100.0%

ITS Department		
2007 Budgets		
Software Maintenance and Purchases		
Summary of estimated 2007 Software Maintenance & Purchases		
Total Software Purchases Indicator = NC, EE = 462	\$ 198,500	Per Pillar Report
Total Software Maintenance Indicator = NC, EE = 501	1,302,485	See List below
Oracle SW Maint added w/Recycle	\$94,050	
2007 Total	\$ 1,595,035	2A-2

PRODUCT	VENDOR	MIMS Supp #	PAID IN 2005
GS (P0000040)			
Axiom software maintenance renewal for GS	Axiom International	1551	\$8,421
1 year lease - Learning Center software for GS	Axiom International	1551	\$13,185
TOTAL GS SOFTWARE MAINTENANCE COSTS			\$21,606
ITS non-prog/non-proj			
Enhancement, Support & Maintenance (ESM) Service for ASG-TMON for CICS/ESA	Allen Systems Group (ASG)	21117	\$6,859
IBM Passport Advantage (annual software maintenance)	CompUSA	2151	\$69,611
Maintenance on software transferred from HEI 1/1/03	Computer Associates	21450	\$132,515
Software Maintenance on Enterprise Software (Abend-AID for CICS; File-AID for MVS; XPEDITER CICS for COBOL; XPEDITER/TSO for COBOL) (paid 12/05)	Compuware Corp.	19999	\$16,516
Code1 Plus Maintenance; Code1 Plus Subscription (monthly updates to postal database).	Group 1	21801	\$18,604
Software maintenance for Enterprise Server (customer #4492227)	IBM	3640	\$403,123
IBM Tivoli OMEGAMON software maintenance	IBM	10725	\$19,499
Software annual maintenance	MacKinney Systems	4374	\$7,090
SyncSort for Z/OS License Renewal: CPU Model IBM 2066-0C1: MSUs:25, System ID: 1B03A	Syncsort, Inc.	23110	\$5,115
Maint. on software (on free licenses due to re-designation)	CDW	22628	\$1,065
NSI DoubletakeStd software maint.	CDW	22628	\$6,088
SonicWall Pro200 (1) telephone/exchange support 24x7 for s/n 00401015D5E7 (replaced 0040100E666C)	CDW	22628	\$447
"Extended Warranty" Maintenance on (10 pairs) Chariot Advanced License, registration# 38703467	Ixia Corp (NetIQ exclusive reseller of Chariot)	22265	\$1,699
Microsoft Enterprise 6 Agreement (MEA)	MSLI, GP	19842	\$58,672
Annual maintenance on HP Open View software (purchased 12/04; renewed 1/06)	Pepperweed Consulting, LLC	24327	\$0
Platinum maintenance support s/n EPS-600	Proginet Corporation	24326	\$7,088
Evault software bundle: 1 year support	RedBridge IT	24458	\$21,999
Security Explorer Maintenance on 3 Licenses (1-24 Server)	ScriptLogic Corp.	25575	\$314
Enterprise Security Reporter (2 Servers)	ScriptLogic Corp.	25575	\$1,273
Annual maintenance on Sunbelt Software Directory Inspector	Software Spectrum	6050	\$111
Product Assurance (vers. Upgr., phone support, price protection) on Winternals Administrator's Pak Enterprise License supporting up to 100 nodes	Winternals Software	21846	\$200
BEA software maint/support	BEA Systems	17536	\$7,438
Batch Job Server email support/maintenance	Camellia Software	1852	\$550
Hostbridge Annual Standard License	HostBridge Technology, Inc.	19207	\$17,500

<u>PRODUCT</u>	<u>VENDOR</u>	<u>MIMS Supp #</u>	<u>PAID IN 2005</u>
Maintenance on Quest software	Quest Software	25015	\$1,128
WinBatch + Compiler (2) 12-months Maintenance	Software Spectrum	6050	\$224
PowerBuilder Enterprise Subscription Renewal (2)	Sybase IAD Subscr Svcs	14002	\$1,344
Express Support for Aeroprise Software	Aeroprise, Inc	24998	\$1,620
GFI software licenses (2) w/ 2-yr maint.	CDW	22628	\$7,718
cMango/Remedy Express Plus Support (Help Desk)	cMango, Inc.	23145	\$11,305
McAfee Active Virus Defense 1 yr support (69% of total for HECO)	Gnome Networking	24609	\$17,255
Microsoft Enterprise 6 Agreement (MEA)	MSLI, GP	19842	\$216,643
Maintenance & Suppt on Advantica software	Advantica, Inc.	6260	\$9,745
SELECT Software Subscription annual maintenance/support	Bentley Systems Inc.	1654	\$87,202
Intergraph annual software maintenance	Intergraph Govt Solutions	16895	\$85,090
Microsoft Enterprise 6 Agreement (MEA)	MSLI, GP	19842	\$38,231
ITS non-prog/non-proj software maintenance costs			\$1,280,879
Total software maint. costs			\$1,302,485

542
102

Determination of 2007 Proration %'s
ITS Department 2005 PEZ Actuals

#	*Act #	*Loc #	*Ind #	*Proj #	*EE #	FY05 Act05\$RA	EFMS	EBUS	Ellipse	Ent Report	Net	
PEZ 100	PHE	NE	NPSZZZZ	451		59,961					59,961	0.524%
PEZ 102	PHE	NE	NPSZZZZ	451		0					0	0.000%
PEZ 110	PHE	NE	NPNEZZZ	451		0					0	0.000%
PEZ 110	PHE	NE	NPSZZZZ	451		239,239		80,928			158,311	1.384%
PEZ 112	PHE	NE	NPSZZZZ	451		180,240					180,240	1.575%
PEZ 122	PHE	NE	NPIZZZZZ	451		52,032					52,032	0.455%
PEZ 201	WST	NE	NPYZZZZ	451		89,709					89,709	0.784%
PEZ 210	WST	NC	NPYZZZZ	451		0					0	0.000%
PEZ 211	WST	NC	NPYZZZZ	451		344,561	68,752				275,809	2.411%
PEZ 212	KST	NE	NPAVP2Z	451		9,491			1,747		7,744	0.068%
PEZ 220	WST	NE	NPIZZZZZ	451		30,064					30,064	0.263%
PEZ 240	WST	NE	NPYZZZZ	451		94,780					94,780	0.828%
PEZ 240	WST	NE	NPIZZZZZ	451		278,997					278,997	2.439%
PEZ 242	HST	NE	NPIZZZZZ	451		86,996					86,996	0.760%
PEZ 242	KST	NE	NPIZZZZZ	451		141,598					141,598	1.238%
PEZ 242	WST	NE	NPIZZZZZ	451		109,700					109,700	0.959%
PEZ 245	KST	NE	NPAVP2Z	451		15,133			2,791		12,342	0.108%
PEZ 246	KST	NE	NPAVP2Z	451		12,607			2,321		10,286	0.090%
PEZ 256	HST	NE	NPIZZZZZ	451		7,438					7,438	0.065%
PEZ 256	KST	NE	NPEZZZZ	451		0					0	0.000%
PEZ 256	KST	NE	NPIZZZZZ	451		49,324	3,183				46,141	0.403%
PEZ 256	WST	NE	NPEZZZZ	451		0					0	0.000%
PFZ 256	WST	NE	NPIZZZZZ	451		385,008	3,183				381,825	3.337%
258	KST	NE	NPAVP2Z	451		19,166			3,531		15,635	0.137%
261	KST	NE	NPAVP2Z	451		11,444			2,119		9,325	0.082%
PEZ 307	OAH	NC	NPBZZZZ	451		765,155					765,155	6.688%
PEZ 307	OAH	NC	NPEZZZZ	451		0					0	0.000%
PEZ 307	OAH	NC	NPYZZZZ	451		88,618	123,499				(34,881)	-0.305%
PEZ 307	OAH	NE	NPAVP2Z	451		51,673					51,673	0.452%
PEZ 320	OAH	NE	NPAVP2Z	451		28,187			5,191		22,996	0.201%
PEZ 325	OAH	NC	NPRZZZZ	451		52,613					52,613	0.460%
PEZ 326	OAH	NE	NPEZZZZ	451		0					0	0.000%
PEZ 326	OAH	NE	NPRZZZZ	451		115,158	15,915				99,243	0.867%
PEZ 331	OAH	NE	NPAVP2Z	451		3,281			606		2,675	0.023%
PEZ 333	OAH	NC	NPRZZZZ	451		192,393					192,393	1.682%
PEZ 333	OAH	NE	NPAVP2Z	451		3,409			625		2,784	0.024%
PEZ 343	OAH	NE	NPAVP2Z	451		4,506			828		3,678	0.032%
PEZ 347	OAH	NE	NPDZZZZ	451		298					298	0.003%
PEZ 349	OAH	NE	NPAVP2Z	451		2,065			386		1,679	0.015%
PEZ 375	OAH	NC	NPRZZZZ	451		206,359					206,359	1.804%
PEZ 376	OAH	NE	NPRZZZZ	451		5,822					5,822	0.051%
PEZ 377	OAH	NE	NPRZZZZ	451		55,628					55,628	0.486%
PEZ 402	OAH	NC	NPBZZZZ	451		100,314					100,314	0.877%
PEZ 408	OAH	NC	NPBZZZZ	451		513,552	123,499				390,053	3.409%
PEZ 408	OAH	NC	NPEZZZZ	451		0					0	0.000%
PEZ 420	OAH	NE	NPAVP2Z	451		93,914			17,321		76,593	0.669%
PEZ 455	OAH	NC	NPBZZZZ	451		60,160	37,559				22,601	0.198%
PEZ 455	OAH	NC	NPDZZZZ	451		124,195					124,195	1.086%
455	OAH	NC	NPEZZZZ	451		0					0	0.000%
455	OAH	NE	NPDZZZZ	451		706,505	3,820				702,685	6.142%
PEZ 455	OAH	NE	NPEZZZZ	451		0					0	0.000%
PEZ 456	OAH	NC	NPRZZZZ	451		166,472					166,472	1.455%
PEZ 456	OAH	NE	NPEZZZZ	451		0					0	0.000%

*Act #	*Loc #	*Ind #	*Proj #	*EE #	FY05 Act05\$RA	EFMS	EBUS	Ellipse	Ent Report	Net	
PEZ 456	OAH	NE	NPRZZZ	451	115,158	64,932				50,226	0.439%
PEZ 461	OAH	NE	NPAVP2Z	451	4,661			810		3,851	0.034%
PEZ 462	OAH	NE	NPAVP2Z	451	4,632			894		3,738	0.033%
PEZ 463	OAH	NE	NPAVP2Z	451	4,912			917		3,995	0.035%
PEZ 465	OAH	NE	NPWZZZ	451	17,518					17,518	0.153%
PEZ 474	OAH	NE	NPAVP2Z	451	7,822			1,446		6,376	0.056%
PEZ 477	OAH	NE	NPAVP2Z	451	7,604			1,396		6,208	0.054%
PEZ 478	OAH	NE	NPDZZZ	451	1,190					1,190	0.010%
PEZ 486	OAH	NE	NPAVP2Z	451	2,514			466		2,048	0.018%
PEZ 600	OAH	NC	NPWZZZ	451	473,510					473,510	4.139%
PEZ 600	OAH	NE	NPCZZZ	451	90,667					90,667	0.792%
PEZ 600	OAH	NE	NPEZZZ	451	0					0	0.000%
PEZ 600	OAH	NE	NPNEZZ	451	0					0	0.000%
PEZ 600	OAH	NE	NPWZZZ	451	280,411	142,597	5,447			132,367	1.157%
PEZ 603	OAH	NE	NPWZZZ	451	74,552					74,552	0.652%
PEZ 610	OAH	NE	NPCZZZ	451	63,548					63,548	0.555%
PEZ 611	OAH	NE	NPCZZZ	451	289,010		164,969			124,041	1.084%
PEZ 611	OAH	NE	NPNEZZ	451	0					0	0.000%
PEZ 612	OAH	NE	NPAZZZ	451	0					0	0.000%
PEZ 614	OAH	NE	NPCZZZ	451	8,710					8,710	0.076%
PEZ 616	OAH	NE	NPCZZZ	451	98,826					98,826	0.864%
PEZ 616	OAH	NE	NPEZZZ	451	0					0	0.000%
PEZ 700	PHE	NE	NPAPRES	451	44,380					44,380	0.388%
PF7 700	PHE	NE	NPASVP7	451	97,114					97,114	0.849%
F 700	PHE	NE	NPASVP8	451	48,306					48,306	0.422%
F 700	PHE	NE	NPASVP9	451	12,840					12,840	0.112%
PEZ 700	PHE	NE	NPAVP3Z	451	31,754					31,754	0.278%
PEZ 700	PHE	NE	NPAVP5Z	451	12,840					12,840	0.112%
PEZ 700	PHE	NE	NPAVP7Z	451	10,804					10,804	0.094%
PEZ 701	OAH	NC	NPRZZZ	451	34,651					34,651	0.303%
PEZ 701	PHE	NC	NPKZZZ	451	15,408					15,408	0.135%
PEZ 701	PHE	NE	NPKZZZ	451	35,952					35,952	0.314%
PEZ 710	PHE	NE	NPSZZZ	451	41,039					41,039	0.359%
PEZ 711	PHE	NE	NPASVP7	451	43,840					43,840	0.383%
PEZ 712	PHE	ND	NPASVP7	451	540					540	0.005%
PEZ 712	PHE	ND	NPYZZZ	451	0					0	0.000%
PEZ 713	PHE	NE	NPEZZZ	451	0					0	0.000%
PEZ 713	PHE	NE	NPNEZZ	451	0					0	0.000%
PEZ 713	PHE	NE	NPSZZZ	451	231,646		70,034			161,612	1.413%
PEZ 714	PHE	NE	NPEZZZ	451	0					0	0.000%
PEZ 714	PHE	NE	NPNEZZ	451	0					0	0.000%
PEZ 720	PHE	NE	NPASVP7	451	7,495					7,495	0.066%
PEZ 720	PHE	NS	NPCZZZ	451	1,010,211					1,010,211	8.830%
PEZ 722	PHE	NE	NPFZZZ	451	34,448					34,448	0.301%
PEZ 730	PHE	NE	NPASVP7	451	30,579					30,579	0.267%
PEZ 730	PPO	NE	NPEZZZ	451	0					0	0.000%
PEZ 736	PHE	NE	NPSZZZ	451	39,610					39,610	0.346%
PEZ 738	PHE	NE	NPNPZZ	451	64,563					64,563	0.564%
PEZ 745	PHE	NE	NPNIZZZ	451	10,804					10,804	0.094%
PF 750	PHE	NE	NPHZZZ	451	253,598		170,416			83,182	0.727%
PEZ 750	PHE	NE	NPNEZZ	451	0					0	0.000%
PEZ 750	PHE	NE	NPQCZZ	451	414,557		286,361			128,196	1.121%
PEZ 750	PHE	NE	NPQEZZ	451	50,595					50,595	0.442%
PEZ 753	PHE	NE	NPQEZZ	451	42,274					42,274	0.369%
PEZ 760	PHE	NE	NPNAZZ	451	51,575					51,575	0.451%
PEZ 765	PHE	NE	NPFZZZ	451	43,922					43,922	0.384%

*Act #	*Loc #	*Ind #	*Proj #	*EE #	FY05 Act05\$RA	EFMS	EBUS	Ellipse	Ent Report	Net	
PEZ 765	PHE	NE	NPNAZZZ	451	5,402					5,402	0.047%
PEZ 765	PHE	NE	NPPZZZZ	451	9,474					9,474	0.083%
PEZ 766	PHE	NE	NPAVP2Z	451	9,671			1,807		7,864	0.069%
PEZ 766	PHE	NE	NPAVP6Z	451	13,858					13,858	0.121%
PEZ 767	PHE	NE	NPFZZZZ	451	56,762					56,762	0.496%
PEZ 775	PHE	NE	NPFZZZZ	451	25,916					25,916	0.227%
PEZ 776	PHE	NE	NPFZZZZ	451	70,453					70,453	0.616%
PEZ 777	PHE	NE	NPAVP2Z	451	301,479			56,482		244,997	2.141%
PEZ 777	PHE	NE	NPAZZZZ	451	19,800					19,800	0.173%
PEZ 778	PHE	NE	NPFZZZZ	451	88,988					88,988	0.778%
PEZ 779	PHE	NE	NPFZZZZ	451	23,687					23,687	0.207%
PEZ 789	PHE	NE	NPVZZZZ	451	567					567	0.005%
PEZ 795	PHE	NE	NPFZZZZ	451	95,537					95,537	0.835%
PEZ 805	PHE	NE	NPPZZZZ	451	50,314					50,314	0.440%
PEZ 807	PHE	NE	NPAVP1Z	451	12,840					12,840	0.112%
PEZ 807	PHE	NE	NPQCZZZ	451	80,406					80,406	0.703%
PEZ 815	PHE	NE	NPAZZZZ	451	15,001					15,001	0.131%
PEZ 817	PHE	NE	NPAZZZZ	451	38,520					38,520	0.337%
PEZ 818	PHE	NE	NPAVP2Z	451	470,611			88,803		381,808	3.337%
PEZ 818	PHE	NE	NPAZZZZ	451	58,329					58,329	0.510%
PEZ 825	PHE	NE	NPKZZZZ	451	17,095					17,095	0.149%
PEZ 826	PHE	NE	NPAVP4Z	451	30,064					30,064	0.263%
PEZ 826	PHE	NE	NPKZZZZ	451	45,153					45,153	0.395%
PFZ 827	PHE	NE	NPKZZZZ	451	26,698					26,698	0.233%
836	PHE	NE	NPNAZZZ	451	27,122					27,122	0.237%
842	PHE	NE	NPAVP2Z	451	24,914			4,588		20,326	0.178%
PEZ 842	PHE	NE	NPVZZZZ	451	150,713					150,713	1.317%
PEZ 843	PHE	NE	NPAVP2Z	451	161,872			29,776		132,096	1.155%
PEZ 843	PHE	NE	NPAZZZZ	451	48,150					48,150	0.421%
PEZ 850	PHE	NE	NPAVP2Z	451	62,631			11,515		51,116	0.447%
PEZ 853	PHE	NC	NPVZZZZ	451	228,671					228,671	1.999%
PEZ 875	HST	NE	NPJZZZZ	451	45,958					45,958	0.402%
PEZ 875	PHE	NE	NPJZZZZ	451	38,379					38,379	0.335%
PEZ 876	PHE	NE	NPJZZZZ	451	126,851					126,851	1.109%
PEZ 891	PHE	NE	NPEZZZZ	451	186,303				194,297	(7,994)	-0.070%
PEZ 891	PHE	NE	NPKZZZZ	451	21,296					21,296	0.186%
PEZ 896	PHE	NE	NPEZZZZ	451	0					0	0.000%
PEZ 907	OAH	NC	NPBZZZZ	451	40,027	19,098				20,929	0.183%
PEZ 916	PHE	NC	NPRZZZZ	451	42,904					42,904	0.375%
PEZ 926	PDO	NE	NPDZZZZ	451	22,839					22,839	0.200%
PEZ 926	PDO	NE	NPWZZZZ	451	0					0	0.000%
PEZ 926	PHE	NE	NPEZZZZ	451	0					0	0.000%
PEZ 926	PHE	NE	NPNLZZZ	451	22,305	10,822				11,483	0.100%
PEZ 928	PHE	NE	NPNLZZZ	451	52,044					52,044	0.455%
PEZ 931	PHE	NE	NPEZZZZ	451	0					0	0.000%
PEZ 931	PHE	NE	NPHZZZZ	451	101,224	19,734				81,490	0.712%
PEZ 932	PHE	NE	NPVZZZZ	451	28,231					28,231	0.247%
PEZ 933	PHE	NE	NPHZZZZ	451	178,243					178,243	1.558%
PEZ 940	PHE	NC	NPVZZZZ	451	62,281					62,281	0.544%
PEZ 950	PHE	NE	NPHZZZZ	451	0					0	0.000%
PEZ 950	PHE	NE	NPKZZZZ	451	30,573					30,573	0.267%
PEZ 951	PHE	NE	NPKZZZZ	451	43,825					43,825	0.383%
PEZ 953	PHE	NE	NPFZZZZ	451	22,371					22,371	0.196%
PEZ 960	PHE	NE	NPNCZZZ	451	97,398					97,398	0.851%
PEZ 965	PHE	NE	NPEZZZZ	451	350					350	0.003%
PEZ 966	PHE	NE	NPEZZZZ	451	33,888					33,888	0.296%

DIRECT CHARGES TO OIM ("NE")

Dept	*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE #	Line Item	FY07 Upd06 RA	Expense Categ...
InfoTech	PEA	795	PHE	NE	NPFZZZZZ	201	IT00none - Safety Shoes - OS Svc	\$2,000	Materials
InfoTech	PEA							\$2,000	
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	150	PEC BUOC (1) 965 Provide Records Mgmt Svcs	\$45,916	Labor
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	150	PEC IMPL (1) 965 Provide Records Mgmt Svcs	\$43,746	Labor
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	150	PEC TC (1) 965 Provide Records Mgmt Svcs	\$61,776	Labor
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	201	IT000285 - Records Center - Materials	\$5,000	Materials
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	462	IT000285 - Records Center - OS Svc	\$2,200	Other
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	501	IT000285 - 2006 Pln Est 11A & 12A - Rec Mgt Cons & Clerk	\$44,000	Outside Svcs
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	501	IT000285 - Records Center - OS Svc	\$62,500	Outside Svcs
InfoTech	PEC							\$265,139	
InfoTech	PEI	968	PHE	NE	NPEZZZZZ	150	PEI BUOC (1) 968 Prov Word Proc Svcs	\$45,819	Labor
InfoTech	PEI	967	PHE	NE	NPEZZZZZ	150	PEI BUOC (1) 967 Provide Printing Svcs	\$45,819	Labor
InfoTech	PEI	967	PHE	NE	NPEZZZZZ	201	IT000279 - Digital Printing - OS Svc	\$11,200	Materials
InfoTech	PEI	968	PHE	NE	NPEZZZZZ	201	IT000283 - Word Processing - Materials	\$3,000	Materials
InfoTech	PEI	967	PHE	NE	NPEZZZZZ	600	IT000279 - Digital Printing - OS Svc	\$7,512	Other
InfoTech	PEI	967	PHE	NE	NPEZZZZZ	600	IT000xxx Copiers/Printers/Fax - OS Svc	\$106,000	Other
InfoTech	PEI	967	PHE	NE	NPEZZZZZ	600	IT000xxx- Copiers/Printers/Fax - OS Svc	\$40,000	Other
InfoTech	PEI	967	PHE	NE	NPEZZZZZ	501	IT000279 - Digital Printing - OS Svc	\$200	Outside Svcs
InfoTech	PEI							\$259,550	
InfoTech	PEM	614	OAH	NE	NPEZZZZZ	150	PEM BUOC (2) 614 Proc Customer Bills	\$91,346	Labor
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM BUOC (4) 966 Handle & Deliver Mail	\$179,190	Labor
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM BUOC 966 vacancies	-\$45,819	Labor
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM BUTC (1) Handle & Deliver Mail 966	\$54,965	Labor
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM I (1) 966 Handle & Deliver Mail	\$43,839	Labor
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM TCS (1) 966 Handle & Deliver Mail	\$62,833	Labor
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	201	IT000289 - Mail Processing & Delivery - Materials	\$7,500	Materials
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	501	IT000289 - Mail Process&Deliv - OS Svc	\$22,000	Outside Svcs
InfoTech	PEM	614	OAH	NE	NPNEZZZZ	501	IT000291 - Machine Room - OS Svc	\$128,000	Outside Svcs
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	301	IT00none - Mailing Services - Vehicle	\$31,500	Transportation
InfoTech	PEM							\$575,354	
								\$1,102,043	

A&G OPERATIONS

CUSTOMER OPERATIONS

A&G OPERATIONS

DIRECT CHARGE HOURS TO OF M

HOURS EMPLOYEES

*R...	*Ac...	*Lo...	*In...	*Proj #	*E...	*Lbr Class	Line Item	FY07 Upd06 RA
PEC	965	PHE	NE	NPEZZZZZ	150	__BUOC	PEC BUOC (1) 965 Provide Records Mgmt Svcs	1,888
PEC						__BUOC		1,888
PEC	965	PHE	NE	NPEZZZZZ	150	__I	PEC IMPL (1) 965 Provide Records Mgmt Svcs	1,884
PEC						__I		1,884
PEC	965	PHE	NE	NPEZZZZZ	150	__TC	PEC TC (1) 965 Provide Records Mgmt Svcs	1,884
PEC						__TC		1,884
PEI	967	PHE	NE	NPEZZZZZ	150	__BUOC	PEI BUOC (1) 967 Provide Printing Svcs	1,884
PEI	968	PHE	NE	NPEZZZZZ	150	__BUOC	PEI BUOC (1) 968 Prov Word Proc Svcs	1,884
PEI						__BUOC		3,768
PEM	614	OAH	NE	NPEZZZZZ	150	__BUOC	PEM BUOC (2) 614 Proc Customer Bills	3,756
PEM	966	PHE	NE	NPEZZZZZ	150	__BUOC	PEM BUOC (4) 966 Handle & Deliver Mail	7,368
PEM	966	PHE	NE	NPEZZZZZ	150	__BUOC	PEM BUOC 966 vacancies	-1,884
PEM						__BUOC		9,240
PEM	966	PHE	NE	NPEZZZZZ	150	__BUTC	PEM BUTC (1) Handle & Deliver Mail 966	1,896
PEM						__BUTC		1,896
PEM	966	PHE	NE	NPEZZZZZ	150	__I	PEM I (1) 966 Handle & Deliver Mail	1,888
PEM						__I		1,888
PEM	966	PHE	NE	NPEZZZZZ	150	__TCS	PEM TCS (1) 966 Handle & Deliver Mail	1,888
PEM						__TCS		1,888
								<u>24,336</u>

1
1
1
2
5
1
1
1
13

51

HAWAIIAN ELECTRIC COMPANY, INC.
Non-Labor Expenses (\$000's)
2005 vs 2007 Variances Greater Than 10% or \$200,00

Type of Expense	2005 Recorded	* Change * Percent	2007 Test Yr Est
<u>ACCOUNT 924.00 PROPERTY</u>			
PKI951PHENENPKZZZZ 501			
Crime (reclassified from Property 924.00 in 2007 - see below)	0.0	#DIV/0!	67.8
Inland/Ocean Cargo	21.5	2%	21.9
Other Premiums	0.0	#DIV/0!	2.1
Marsh Settlement/Insurer Continuity Credits	-109.5	-100%	0.0
3rd Party Claims -- Write-Offs/Adjusting Expense	295.8	27%	376.7
	<u>207.8</u>	<u>125%</u>	<u>468.5</u>
<u>ACCOUNT 925.02 INJURIES & DAMAGES - PUBLIC</u>			
PKI950PHENENPKZZZZ 502			
Legal Costs (1)	<u>32.1</u>	<u>791%</u>	<u>285.9</u>
PKI950PHENENPKZZZZ 509			
Liability Claims (2)	<u>501.6</u>	<u>47%</u>	<u>737.9</u>
PKI950PHENENPKZZZZ 900			
Premiums (3):			
General Liability	1,037.8	11%	1,151.5
Executive Risk	169.5	15%	194.2
Fiduciary	120.4	32%	158.9
Crime (reclassified to Property 924.00 in 2007 - see above)	75.3	-100%	0.0
Crime (expensed to PKI950PHENENPKZZZZ 501 in 2005)	(68.9)	-100%	0.0
Other Premiums (reclassified to Property 924.00 - see above)	1.9	-100%	0.0
Subtotal	<u>1,336.0</u>	<u>13%</u>	<u>1,504.6</u>
Liability Reserves (4):			
Liability Claims - Reserves	(964.0)	-107%	70.6
Liability Legal - Reserves	(119.3)	-93%	(8.6)
Subtotal	<u>(1,083.3)</u>	<u>-106%</u>	<u>62.0</u>
TOTAL PKI950PHENENPKZZZZ 900	<u>252.7</u>	<u>520%</u>	<u>1,566.6</u>
PKI953PHENENPKZZZZ 530			
Workers' Compensation Losses & Expenses (5)	<u>613.4</u>	<u>117%</u>	<u>1,332.2</u>

Note: A 2005 liability claim settlement resulted in an unanticipated reversal of a \$1M expensed retention. Normally, HECO would have been responsible for the retention amount, but HECO's insurer acknowledged that the payment by HECO's co-defendant/contractor satisfied the self-insured retention requirement.

- (1) 2005 includes (\$106,300) related to the unanticipated reimbursement mentioned in the **Note** above.
- (2) 2007 claim costs include \$165,000 for EPLI claims previously forecasted in NARUC 921. The remaining \$572,900 represents a 14% increase over 2005, which was an abnormally low year. See HECO -1104 for trending calculations.
- (3) Large increases in liability premiums are primarily due to a hardened insurance market. For a complete comparison of liability premiums (including the above charged to expense element 900), see HECO - 1101 page 2 of 6.
- (4) 2005 includes (\$868,000) related to the unanticipated reimbursement mentioned in the **Note** above. For a complete comparison of liability losses, see HECO - 1101 page 3 of 6.
- (5) 2007 Test Year Estimate reflects normalized costs. See HECO T-11, pgs. 21 - 23, for detailed discussion.

**Construction & Maintenance
FIRE RESISTIVE CLOTHING PROGRAM**

HECO-WP-1102
DOCKET NO. 2006-0386
PAGE 1 OF 1

3. Initial allowance

Personal Protective Apparel:

Qty	Item	Unit Cost	Total Cost
5	Shirt	\$40.00	\$200.00
5	Pants	40.00	200.00
1	Rain Jacket	76.00	76.00
1	Rain Pants	52.00	52.00
		Total	
		Allowance	\$528.00

Uniforms:

Qty	Item	Unit Cost	Sr PTM PTM	Aerial Lineman T&D Inspector Const Inspector
5	Shirt	\$44.25	\$221.25	\$221.25
5	Pants	50.00	250.00	250.00
2	Jacket	132.25	264.50	0
1	Rain Jacket	76.00	76.00	76.00
1	Rain Pants	52.00	52.00	52.00
		Total		
		Allowance	\$863.75	\$599.25

Total initial year cost to HECO: \$ 99,392.25

138 employees, Personal Protective Apparel (\$528 ea) = \$72,864.00
 21 employees, Uniforms (\$863.75 ea.) = \$18,138.75
 14 employees, Uniforms (\$599.25 ea.) = \$ 8,389.50

4. Annual replacement allowance (subject to annual review):

Personal Protective Apparel:

Qty	Item	Unit Cost	Total Cost
3	Shirt	\$40.00	\$120.00
2	Pants	\$40.00	\$80.00
		Total	
		Allowance	\$200.00

Uniforms:

Qty	Item	Unit Cost	Sr PTM PTM	Aerial Lineman T&D Inspector Const Inspector
3	Shirt	\$44.25	\$132.75	\$132.75
2	Pants	50.00	100.00	100.00
1	Jacket	132.25	132.25	0
		Total		
		Allowance	\$365.00	\$232.75

Subsequent annual replacement cost to HECO: \$ 38,523.50

138 employees, Personal Protective Apparel (\$200.00 ea) = \$27,600.00
 21 employees, Uniforms (\$365.00 ea) = \$ 7,665.00
 14 employees, Uniforms (\$232.75 ea) = \$ 3,258.50

December 12, 2005

intended 3/20/06

HAWAIIAN ELECTRIC COMPANY, INC.
 WORKERS' COMPENSATION SPECIAL FUND
 ASSESSMENT CALCULATIONS

HECO	2001	2002	2003	2004	2005	2006 Estimate	2007 Estimate
Actual Assessment Paid	\$ 91,636.02	\$ 122,304.10	\$ 94,134.30	\$ 65,872.86	\$ 53,656.88	\$ 59,128.81	\$ 55,827.06
	89.11%	33.47%	-23.03%	-30.02%	-18.54%	10.20%	-5.58%

Estimates are calculated using the average of the 5 previous years' % increases/decreases. Multiplied by the previous year \$ assessments.

Date Prepared: 9/15/2005 WK

Summary of Benefits



SUMMARY OF BENEFITS

FOR EMPLOYEES OF
HAWAIIAN ELECTRIC INDUSTRIES, INC.
HAWAIIAN ELECTRIC COMPANY, INC.
HAWAII ELECTRIC LIGHT COMPANY, INC.
MAUI ELECTRIC COMPANY, LTD.

TABLE OF CONTENTS

INTRODUCTION.....	3
FLEXPLAN	3
COLLECTIVE BARGAINING AGREEMENT (CBA).....	3
ELIGIBILITY AND ENROLLMENT INFORMATION	3
WHAT IS A STATUS CHANGE?.....	4
WHERE TO GET INFORMATION - CAFÉ BEST.....	4
INTRODUCTION	4
HEALTH CARE BENEFITS	4
MEDICAL INSURANCE	5
PRESCRIPTION DRUG COVERAGE	5
OPTICAL INSURANCE.....	5
DENTAL INSURANCE.....	5
THINGS TO CONSIDER WHEN CHOOSING HEALTH CARE COVERAGE.....	5
GROUP TERM LIFE INSURANCE	5
EMPLOYEE GROUP LIFE INSURANCE.....	5
DEPENDENT GROUP LIFE INSURANCE	6
ACCIDENTAL DEATH & DISMEMBERMENT INSURANCE (AD&D).....	6
THINGS TO CONSIDER WHEN CHOOSING LIFE INSURANCE COVERAGE	7
FLEX SPENDING ACCOUNTS	7
HEALTH CARE SPENDING ACCOUNT	7
DEPENDENT CARE SPENDING ACCOUNT	7
THINGS TO CONSIDER WHEN SETTING UP YOUR FLEX SPENDING ACCOUNT	7
DISABILITY BENEFITS	8
SICKNESS LEAVE BENEFITS.....	8
TEMPORARY DISABILITY INSURANCE (TDI) BENEFIT	8
LONG-TERM DISABILITY (LTD) INSURANCE	8
WORKERS COMPENSATION	9
RETIREMENT BENEFITS	9
HEI RETIREMENT PLAN	9
HEI RETIREMENT SAVINGS PLAN	9
POSTRETIREMENT WELFARE PLAN BENEFITS	10
TIME OFF BENEFITS	10
HOLIDAYS	10
VACATION LEAVE	11
BONUS VACATION	11
FAMILY-MEDICAL LEAVE ACT (FMLA) & HAWAII FAMILY LEAVE LAW (HFLL)	11
BEREAVEMENT (FUNERAL) LEAVE	11
JURY DUTY LEAVE.....	12
ADDITIONAL BENEFITS	12
ELECTRIC POWER DISCOUNT (FOR UTILITY COMPANIES EMPLOYEES)	12
BUSINESS ACCIDENTAL DEATH & DISMEMBERMENT(AD&D)INSURANCE	12
EMPLOYEE ASSISTANCE PROGRAM (EAP).....	12
CITY BUS PASS PROGRAM (HECO ONLY).....	12
VOLUNTARY EDUCATIONAL ASSISTANCE PROGRAM	12
ADOPTION EXPENSE REIMBURSEMENT.....	12
PATCH ENHANCED REFERRAL CHILD CARE PROGRAM	12

INTRODUCTION

The Company provides a comprehensive benefits package providing flexibility and valuable protection for you and your family. The benefits program has several features, which allows you personal choice in determining your individual needs:

- FlexPlan Benefits
 - Health Care Benefits
 - Life Insurance Benefits
 - Flex Spending Accounts
- Disability Benefits
- Retirement Benefits
- Time Off Benefits
- Additional Benefits

This guide will provide you with a summary of the benefit features. Review the information in this guide as well as the detailed plan materials provided in your packet for a full description of the benefits and plan provisions. Most benefits are provided through the purchase of insurance and employee assistance contracts. Certain benefits and company policies may be applicable to only certain classes of employees and may vary by company.

FLEXPLAN

FlexPlan is a benefits program that provides flexibility in planning your benefit coverage options based on your personal circumstances - your age, marital status, your spouse's employment, whether or not you have any dependent children, and your budget. FlexPlan allows you to design your own benefits package by choosing among various benefit options to meet your personal needs.

The plan provides various benefit options for:

- Medical / Optical Insurance
- Dental Insurance
- Employee Life Insurance
- Dependent Life Insurance
- Accidental Death & Dismemberment Insurance
- Flex Spending Accounts - Health Care and Dependent Care Spending Accounts

FlexPlan provides you with an allowance called FlexCredits to use toward the purchase of your benefit selections.

- If you elect benefit coverage that costs less than the amount of your FlexCredits, the difference will be returned to you in your paycheck as taxable income.
- If you elect benefit coverage that costs more than the amount of your FlexCredits, you can contribute the difference through payroll deduction on a pre-tax basis.
 - The cost of the Dependent Life Insurance coverage will be deducted on an after-tax basis.

The FlexCredit allowance and benefit option prices are reflected as PAY PERIOD amounts and are applied each Flex pay period. There are 24 pay periods per year.

COLLECTIVE BARGAINING AGREEMENT (CBA)

For bargaining unit employees, benefits are provided via the CBA and the current Benefits Agreement.

ELIGIBILITY AND ENROLLMENT INFORMATION

You are eligible to participate in FlexPlan if you are a regular full-time employee of the Company. Your coverage takes effect on the first of the month coincident with, or following, the date you become a regular full-time employee.

You can enroll your eligible dependents which includes your

- Spouse
- Unmarried dependent children up to age 19, or age 25 if they are full-time students
- Mentally or physically handicapped children who depend on you for support.

Summary of Benefits

Dependent coverage takes effect when your coverage does. Your eligible dependents will be enrolled in the same plans that you select for yourself.

Your initial coverage elections will remain in effect for the rest of the plan year, unless you experience a status change. You will have the opportunity to review and change any of your elections for the next plan year during our annual Open Enrollment period, which is held each November. Enrollment for the following year will be done electronically using Benefits On-Line.

DEFAULT COVERAGE

To enroll, complete and return the FlexPlan Election form within ten days of becoming a regular employee. If a completed election form is not received by the deadline, you will automatically be enrolled in the following coverage:

- HECO Health Plan Hawaii Plus (HMSA) medical option – single coverage
- HDS Major Care dental option – single coverage
- ½-times annual salary life insurance option

WHAT IS A STATUS CHANGE?

If you experience a status change, you must report this change **WITHIN 30 DAYS** in order to make the appropriate adjustments to your benefit coverage. Status changes include the following:

- Birth / adoption / Legal guardianship
- Marriage
- Divorce / Legal separation
- Death
- Spouse's change in employment status
- Dependent attaining maximum age for coverage

WHERE TO GET INFORMATION – CAFÉ BEST

Benefits plan information and web links to the various insurance carriers can be obtained on the Human Resources intranet website called Café BEST. For more information, go to http://intranet/humanresources/default_eol.asp.

HEALTH CARE BENEFITS

Your health care benefits provide quality medical, optical, dental and prescription drug coverage for you and your family.

MEDICAL INSURANCE

FlexPlan offers three medical plan options:

- HECO Health Plan Hawaii Plus – Plan B (HMSA)*
- HECO Preferred Provider Plan – Plan B (HMSA)
- Kaiser Permanente Group HECO Plan

** If you elect HECO Health Plan Hawaii Plus, you must designate a Health Center and a Primary Care Physician (PCP) for yourself and each dependent. After the initial enrollment, to change your PCP or health center, contact HMSA.*

All options cover medical, surgical and hospital services, as well as prescription drugs. Because each option provides benefits and services in a different way, it is important for you to understand how each plan operates and to consider your own medical needs when you are making your medical plan choice.

The enclosed Medical Comparison chart provides a summary of the key features of each plan. Refer to the individual medical plan brochures for details on each plan and a full description of the benefits. Be sure to review the exclusions of each plan carefully.

WAIVING MEDICAL COVERAGE - If you have medical coverage through another source, you may decline medical coverage. You must complete Waiver form to certify your coverage.

PRESCRIPTION DRUG COVERAGE

Medication obtained with a prescription and dispensed by a licensed, participating provider are covered by the HMSA and Kaiser Plans. The plans offer limited mail order services for maintenance prescriptions. Refer to the respective Guide to Benefits brochures.

OPTICAL INSURANCE

If you elect medical coverage, you are automatically enrolled for optical coverage in the VSP (also known as Vision Service Plan). Optical insurance is offered only with the medical plan and cannot be elected separately. Refer to the VSP brochure and informational material for details on the plan.

DENTAL INSURANCE

FlexPlan offers dental plan coverage from Hawaii Dental Service (HDS) – Major Care. Refer to the HDS brochure for details on the plan. If you have dental coverage through another source, you may decline dental coverage. You will be required to certify such other coverage.

THINGS TO CONSIDER WHEN SELECTING YOUR HEALTH CARE PROVIDER

As you look at your health care options, consider:

- Which medical plan best meets your needs in terms of:
 - Services and supplies that are covered
 - Your choice of doctors and medical facilities
 - Convenience of care – Where are the providers located? What are the office hours?
- Whether your health care expenses for you and your family have been low, moderate or high in the last few years. Compare your total expenses with the potential costs associated with FlexPlan.
- If your spouse has benefit coverage elsewhere. If so, you should compare the benefits and costs to determine which plan best cover your needs.
 - Your ability to change your mind.

LIFE INSURANCE BENEFITS

The Company provides financial security for your dependents or other beneficiaries in the event of your death. Coverage for your dependents is also available.

EMPLOYEE GROUP TERM LIFE INSURANCE

FlexPlan provides five levels of life insurance coverage:

1. ½ times annual salary*
2. 1-½ times annual salary
3. 2-½ times annual salary
4. 3-½ times annual salary
5. \$50,000 flat amount

WHAT DETERMINES THE ANNUAL SALARY AMOUNT*? The annual salary is based on your October salary prior to the open enrollment period effective January 1 of the following year. Your group life insurance coverage amount will not change even if your salary changes during the year. The maximum coverage is \$750,000.

IMPUTED INCOME FOR INSURANCE OVER \$50,000 - Under IRS rules, the value of life insurance coverage over \$50,000 will be treated as imputed income to you and is subject to federal taxes. This amount varies based on your age and the coverage amount, and is added to your taxable income. This amount will be reflected on your pay stub.

Summary of Benefits

FLEXCREDITS FOR LIFE INSURANCE - An employee life insurance option must be selected. The company will provide enough FlexCredits for you to purchase life insurance equal to:

- 1-1/2 times your annual salary for bargaining unit employees
- 2 times your annual salary for salaried employees.
- Managers and officers of the company will be provided credits to purchase \$50,000 of life insurance.

BENEFICIARY DESIGNATION - If you die from any cause while you are covered under the employee life insurance plan, your designated beneficiary will receive the amount you have selected in a lump sum. Complete the beneficiary designation form. You may include primary and contingent beneficiaries.

Since the employee life insurance coverage is group term life insurance, should you leave the company, your coverage will stop unless you elect to convert it to an individual policy. Some limitations or restrictions may apply to the life insurance options. A full description of the options, limitations and exclusions can be found in the CIGNA Certificate of Insurance.

DEPENDENT GROUP TERM LIFE INSURANCE

FlexPlan provides two levels of coverage levels for voluntary group dependent term life insurance coverage that will cover your eligible dependents:

- \$10,000 for spouse / \$2,000 for each dependent child
- \$25,000 for spouse / \$2,000 for each dependent child

You are automatically the beneficiary for your dependents' life insurance coverage. If you elect coverage and your spouse or a dependent child dies, you will receive the coverage amount in a lump sum.

Life insurance coverage for your spouse cannot exceed the amount of your own employee life insurance coverage. The cost for dependent life insurance coverage will be deducted on an after-tax basis.

Some limitations or restrictions may apply to the dependent life insurance options. A full description of the options, limitations and exclusions can be found in the CIGNA Certificate of Insurance.

ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE (AD&D)

FlexPlan offers four coverage levels for voluntary AD&D insurance for you and your eligible dependents:

1. 1/2 times annual salary
2. 1-1/2 times annual salary
3. 2-1/2 times annual salary
4. 3-1/2 times annual salary

The AD&D insurance options provide coverage for accidental death, dismemberment, or loss of speech or hearing. The maximum coverage is \$500,000. If you select employee coverage, your coverage amount will be a multiple of your salary. If you select family coverage, your dependents' benefit will be a percentage of your coverage amount as follows:

IF YOUR FAMILY INCLUDES:	THEIR BENEFIT AMOUNT IS:
▪ Spouse only	60% of your benefit amount
▪ Spouse and children	
o Spouse	50% of your benefit amount
o Each child	10% of your benefit amount
▪ Children only (each child)	15% of your benefit amount

Your AD&D benefit is payable in addition to your employee life insurance benefit or benefits from any other coverage. Should you leave the Company, your coverage will stop unless you elect to convert it to an individual policy.

Some limitations or restrictions may apply to the AD&D insurance. A full description of the options, limitations and exclusions can be found in the enclosed Certificate.

Summary of Benefits

THINGS TO CONSIDER WHEN CHOOSING LIFE INSURANCE COVERAGE

As you decide on your life insurance needs, you may want to consider:

- Your financial needs and goals. Compare your financial resources with your obligations and goals, looking at
 - Your current financial obligations relating to your home, living expenses, etc.
 - commitments to raising children, paying for their education, or for providing for elderly parents or relatives
- The cost and benefits of other insurance coverage available to you
- Your ability to change your mind. You can increase your coverage amount by only one coverage level during the Open Enrollment period each year.

FLEX SPENDING ACCOUNTS

The Flex Spending Accounts (or reimbursement accounts) take advantage of current tax laws that give you the opportunity to pay for certain health care or dependent care expenses with pre-tax dollars. **THESE ARE TWO SEPARATE TYPES OF ACCOUNTS AND ARE NOT INTERCHANGEABLE.** Estimate the amount(s) you will spend on unreimbursed (1) health care and/or (2) dependent care expenses for you and your eligible dependents. After determining the amount(s), you will direct the company to deduct a proportional amount on a pre-tax basis from your paycheck each pay period. You must indicate exactly how much you want allocated to either or both accounts. The amount shown on the enrollment form is a per pay period amount. If your spouse also contributes to spending accounts, review the amounts so that you do not exceed the Internal Revenue maximum annual amounts.

Benefit Services of Hawaii (BSH) administers this program and provides quarterly statements to you. Refer to the brochure for details on the plan.

HEALTH CARE SPENDING ACCOUNT

You may elect to reduce your salary by an amount which you estimate you will incur for health care expenses which are not covered by your health plan. Eligible expenses are governed by rules established by the Internal Revenue Service. Review IRS Publication 502 (Medical & Dental Expenses) for a listing of eligible and ineligible expenses.

The maximum salary reduction for the Health Care Spending Account is \$6,000 per Plan Year.

DEPENDENT CARE SPENDING ACCOUNT

You may elect to reduce your salary by an amount that you estimate you will incur for qualified expenses for day care of your dependents claimed on your federal income tax. Review IRS Publication 503 (Child and Dependent Care Expenses) for information regarding child and dependent care expenses and eligibility.

Qualified dependents are:

- Children under the age of 13
- Dependents that becomes physically or mentally incapable of caring for themselves.

Expenses must be incurred to enable you (and your spouse, if you are married) to work.

The MAXIMUM SALARY REDUCTION per Plan Year may not exceed the least of the following:

- \$5,000 for a married couple filing jointly, or a single-parent household
- \$2,500 if you are married but file taxes separately from your spouse
- Your taxable compensation
- Your spouse's earned income, if you are married.

IMPORTANT THINGS TO CONSIDER WHEN SETTING UP YOUR FLEX SPENDING ACCOUNT

- The health care and dependent care spending accounts are two separate accounts, and amounts cannot be interchanged or transferred between accounts.
- Contributions to a Health Care spending account may not be changed or suspended during the year for any reason. Contributions to a Dependent Care spending account cannot be changed or suspended during the year unless you incur a specific family status change.

Summary of Benefits

- The **COMBINED** maximum contribution for both spending accounts cannot exceed \$8,000 per year.
- The **PLAN YEAR** runs from January 1st (or your eligibility date) through December 31st. Reimbursement requests must be for expenses incurred within the Plan Year, regardless of when the services are paid for.
- **REIMBURSEMENT** and **FORFEITURES** - Reimbursement for expenses incurred may be filed up to March 31 of the following year. Any amounts remaining in your account(s) after this date will be forfeited as required by federal tax law.

DISABILITY BENEFITS

Income protection benefits provide the security of an income if a disability keeps you from working include:

- Sickness Leave
- Temporary Disability Insurance (TDI)
- Long-Term Disability Insurance (LTD)
- Workers Compensation
- Long-Term Care Insurance

SICKNESS LEAVE BENEFIT

You are eligible for sick leave benefits for non-occupational illnesses and injuries that render you unable to work according to the following schedule:

YEARS OF SERVICE	SICK LEAVE BENEFIT SCHEDULE
6 months	40 hours full pay in calendar year
1 year	40 hours full pay in calendar year
2 years	80 hours full pay in calendar year
3 years, but less than 7 years	160 hours full pay in calendar year
7 years, but less than 10 years	320 hours full pay in calendar year
10 years and over	480 hours full pay in calendar year

After the first year, sick leave hours are allocated $\frac{1}{2}$ on January 1 and $\frac{1}{2}$ on July 1.

TEMPORARY DISABILITY INSURANCE (TDI) BENEFIT

Based on statutory requirements, TDI benefits are payable at 58% of your average weekly wage up to a maximum weekly benefit amount determined annually by the State Disability Compensation Division. You will begin receiving TDI payments:

- After all accrued company sick leave benefits have been exhausted
- If you do not have any accrued sick leave benefits, after seven consecutive days of disability

Combined coverage under the Sickness Leave Benefits and the State Temporary Disability Insurance Act shall not exceed twenty-six weeks.

LONG-TERM DISABILITY (LTD) INSURANCE BENEFIT

LTD benefits will begin after you have exhausted all of your accrued sick leave, TDI and vacation benefits. Generally, LTD begins after you have been totally disabled for more than 180 days, and continue until you reach age 65, as long as you remain totally disabled under the terms of the plan.

The plan works with other disability benefits for which you qualify to provide a benefit:

- For bargaining unit employees - 60% of base salary, up to the maximum monthly benefit of \$15,000.
- For salaried employees - 65% of base salary, up to a maximum monthly benefit of \$15,000.

Benefits are based on your earnings at the time of disability less any statutory, company and social security benefits. Refer to the Certificate for details about the plan.

Summary of Benefits

WORKERS COMPENSATION

Workers Compensation benefits are available to all employees for injuries arising out of, and in the course of employment. These benefits are provided in accordance with the Hawaii Workers' Compensation Law. Compensation under the statute includes medical and rehabilitation benefits, income and indemnity benefits in cases of disability or death, and allowance for funeral and burial expenses.

LONG-TERM CARE INSURANCE (LTC)

ONLY SALARIED OR NON-BARGAINING EMPLOYEES ARE ELIGIBLE FOR THIS BENEFIT.

The Company will provide salaried employees with LTC insurance and will fund a basic level benefit that will provide \$1,000 per month for up to two years towards the cost of the confinement in a long-term care facility. Supplemental benefits for yourself and coverage for your spouse and other family members will become available at your cost.

WHEN WILL YOU BE ELIGIBLE TO ENROLL? If you are hired on January 1 to June 30, you will be eligible for this coverage on July 1. If you were hired on July 1 to December 31, you will be eligible January 1. You will be notified by your Benefits Office or Human Resources Dept. to attend a LTC meeting to discuss these benefits.

RETIREMENT BENEFITS

Retirement benefits help you provide a comfortable income for retirement. Retirement benefits include:

- Retirement Plan for Employees of Hawaiian Electric Industries, Inc. & Participating Subsidiaries
- Hawaiian Electric Industries Retirement Savings Plan
- Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. & Participating Employers

RETIREMENT PLAN FOR EMPLOYEES OF HAWAIIAN ELECTRIC INDUSTRIES, INC. & PARTICIPATING SUBSIDIARIES

This is a non-contributory defined benefit plan provided by the Company. You will become **100% VESTED AFTER 5 YEARS OF VESTING SERVICE**. This means that should you leave the Company after completing 5 years of vesting service, you will be entitled to receive a pension benefit upon meeting the retirement provisions of the plan. You will become a Participant in this Plan on the day you begin regular, full-time employment with the company.

FOR SALARIED EMPLOYEES

Your monthly normal retirement income (on a single life basis) is computed by multiplying:

- 2.04% times your total years of Credited Service (the product not to exceed 67%), times
- Your average monthly Compensation received during any 36 consecutive month period prior to your termination of employment which would produce the highest monthly average Compensation

FOR BARGAINING UNIT EMPLOYEES

The amount of your monthly benefit has been negotiated between your employer and the IBEW. Your monthly normal retirement income (on a single life basis) is computed by multiplying:

- 1.83% times your total years of Credited Service (the product not to exceed 60%), times
- Your monthly base rate of pay at your date of termination of employment.

Refer to the Summary Plan Description of the Retirement Plan for Employees of Hawaiian Electric Industries, Inc. and Participating Subsidiaries for details.

HAWAIIAN ELECTRIC INDUSTRIES RETIREMENT SAVINGS PLAN (HEIRS) – 401(K) PLAN

The HEIRS plan is a 401(k) plan that provides the employee to voluntarily contribute on a pre-tax basis (Salary reduction) from 1% to 30% of your compensation, up to the annual maximum. For employees who have attained age 50 during the year, and who expect to reach the annual maximum for regular contributions by the end of the year, may make additional "catch-up" contributions. For purposes of determining your eligibility, you are treated as attaining age 50 on January 1 of the year containing your 50th birthday. Participants can contribute up to an additional

Summary of Benefits

1% to 30% of their compensation, up to an annual maximum, as a catch-up contribution. Distributions from other qualified plans may be rolled over into this plan.

Fidelity Investments is the plan's record keeper, service provider and Trustee. All transactions including enrollment, investment mixes, exchanges, loans, withdrawals and distributions are processed directly with them.

YOU ARE ELIGIBLE TO PARTICIPATE in the Plan on the day you become a regular, full-time or part-time employee with the company. Your employment information will be transmitted to Fidelity and they will prepare a personalized enrollment packet which will include information on the plan features and how to enroll in the plan. If you do not receive the enrollment packet within 5 weeks of your eligibility, contact your Benefits Office or Human Resources Dept., or call Fidelity at the number below.

Should you have any questions about your eligibility, contact Fidelity at **1-800-835-5098**. Information is also available on their website at www.401k.com and logging into NetBenefits. Enrollment and rollover instructions will be included in the enrollment packet. Refer to the Summary Plan Description of the HEIRS Plan for details.

POSTRETIREMENT WELFARE BENEFITS

If you retire from the company and you are eligible for a pension benefit under the Retirement plan, you may be eligible for other postretirement welfare benefits. This includes medical coverage (Pre-Medicare (before age 65) and Post-Medicare (post 65), prescription drug, vision, dental and group term life insurance. Refer to the Summary Plan Description for the Postretirement Welfare Benefits Plan for the Employees of Hawaiian Electric Company, Inc. and Participating Employers for details

TIME OFF BENEFITS

Time off benefits provide time off away from work for personal and family activities. Time off benefits includes the following:

- Holidays
- Vacation Leave
- Bonus Vacation
- Family Medical Leave Act (FMLA) and Hawaii Family Leave Law (HFLA)
- Jury Duty Leave
- Bereavement Leave

HOLIDAYS

You are immediately eligible for holiday pay. The following days are observed as holidays:

New Year's Day	Discoverer's Day *
President's Day *	Veteran's Day *
Good Friday *	Thanksgiving Day
Memorial Day	Christmas Eve (half day)
Kamehameha Day *	Christmas Day
Independence Day	New Year's Eve (half day)
Admission Day*	General Election Day (during even years)
Labor Day	

FLOATING HOLIDAYS

ONLY SALARIED OR NON-BARGAINING EMPLOYEES ARE ELIGIBLE TO PARTICIPATE

A floating holiday (noted with asterisks above) is a designated company holiday that a salaried employee voluntarily elects to work in return for a different day off. A salaried employee may choose to work on these holidays in exchange for another day off. Supervisors must approve all floating holiday arrangements in view of company operations and other business considerations.

Summary of Benefits

VACATION LEAVE

You are eligible for vacation benefits in accordance with the following schedule:

YEARS OF SERVICE	VACATION AMOUNT
6 months	40 hours
1 year	40 hours
2 years through 4 years	80 hours
5 years through 14 years	120 hours
15 years through 24 years	160 hours
25 years and over	200 hours

You must complete six months of service before qualifying for vacation benefits. Vacation hours are accrued each pay period.

BONUS VACATION

Bonus vacation is granted to employees who use a limited amount of sick leave over a specified time period. You will earn 1 day of bonus vacation for each year you take less than 40 hours of sick leave in a calendar year. You must complete one year of service before qualifying for the bonus vacation.

FAMILY-MEDICAL LEAVE ACT (FMLA) & HAWAII FAMILY LEAVE LAW (HFL)

FMLA allows for up to 12 weeks of unpaid family or medical leave per year. Leave may be taken:

- to care for a newborn child
- to assist with the placement of an adopted child or foster child
- to attend to your own serious health condition
- to care for a family member with a serious health condition

Generally, you have the right to be returned to the same position or an equivalent position at the conclusion of your leave. Your health coverage will continue for the duration of your leave at the same level of coverage that would have been provided if you had been continuously employed.

You must have been employed (by the same employer) for at least 12 months and performed a minimum of 1,250 hours of service during the 12 month period preceding the first date of the leave. New employees are eligible for up to 4 weeks of leave after 6 consecutive months of service.

UTILITIES EMPLOYEES - Any available accrued paid leave such as vacation must be used prior to going on unpaid FMLA or Hawaii Family Leave Law status. Spouses who are eligible for FMLA and are employed by the same employer may be limited to a combined total of 16 weeks of leave during any 12 month period. Refer to the Family-Medical Leave Act policy for details on the plan.

HEI EMPLOYEES

Hawaiian Electric Industries (HEI) will provide to eligible employees up to 12 weeks of unpaid family or medical leave each calendar year. To be eligible, employees must have been employed by HEI for at least 12 months and have performed a minimum of 1,250 hours of service during the 12-month period before the first date of the leave. Refer to the HEI Family-Medical Leave Act policy for details on the plan.

BEREAVEMENT LEAVE

If a member of your immediate family dies, you are eligible for time off with pay as listed below:

▪ Husband or wife of the employee	40 hours
▪ Child of the employee	40 hours
▪ Father or mother of the employee	24 hours
▪ Father-in-law or mother-in-law of the employee	24 hours
▪ Sister or brother of the employee	16 hours
▪ Grandparents of the employee	16 hours

Summary of Benefits

When the death occurs outside the State of Hawaii, benefits will be paid according to the above schedule. If you do not leave the State of Hawaii, the employee will be given 8 hours time off without loss of compensation if the employee is on a 5/8 schedule, or 10 hours if you are on a 4/10 schedule. You are immediately eligible for bereavement leave.

JURY DUTY LEAVE

Employees serving as jurors before any court or governmental body having the power to summons are allowed full pay for all time lost from work for such duty. You are immediately eligible for jury duty leave.

ADDITIONAL BENEFITS

These benefits include the following:

- Electric Power Discount (Utilities)
- Business Travel Accidental Death & Dismemberment Insurance
- Employee Assistance Program (EAP)
- City Bus Pass Program (HECO only)
- Voluntary Educational Assistance Program
- Adoption Expense Reimbursement
- PATCH Child Care Referral Program

ELECTRIC POWER DISCOUNT – FOR UTILITY COMPANY EMPLOYEES

You are eligible for a 33-1/3% discount off your regular residential electric rate for usage up to 825 kWh per month. Complete the Electric Discount form as provided. Your discount becomes effective on the first of the month coincident with, or following, the date you become a regular full-time employee.

BUSINESS TRAVEL ACCIDENTAL DEATH & DISMEMBERMENT (AD&D) INSURANCE

The company provides business travel AD&D insurance coverage if you are a full-time regular employee. Refer to summary plan description.

EMPLOYEE ASSISTANCE PROGRAM (EAP)

EAP is a confidential short-term counseling service that is designed to provide employees with basic skills and understanding needed to deal with the stress and tension caused by careers and family concerns. EAP provides up to six sessions per employee per year. You are immediately eligible to participate in the Employee Assistance Program. Refer to the EAP brochure for details on the plan.

CITY BUS PASS PROGRAM (HECO only)

To encourage and support HECO employees to use public transportation, the company will provide the cost of a city bus pass. You are immediately eligible for the bus pass reimbursement. Restrictions may apply should you become eligible to receive on-site parking.

VOLUNTARY EDUCATIONAL ASSISTANCE PROGRAM

The VEA program is designed to provide reimbursement for part or all of the cost of education that enhances job performance or is otherwise related to the business of the company. Courses must be taken outside of work hours at the initiative of the employee. You are immediately eligible for the Voluntary Educational Assistance Program. Refer to the VEAP summary plan description for details.

ADOPTION EXPENSE REIMBURSEMENT

The Adoption Expense reimbursement program provides for reimbursement of up to \$2,000 of covered expenses (per child) to employees who legally adopt a child under age 18. Expenses related to assume legal guardianship of one or more children under age 18 are also covered. You are eligible to participate in the Adoption Expense reimbursement program after six months of service.

PATCH CHILD CARE REFERRAL PROGRAM

A program designed to assist in locating, selecting and managing qualified child care providers for your children. This referral service is offered on a shared cost basis. You are immediately eligible for the PATCH Child Care referral program.

**Retirement Plan for
Employees of
Hawaiian Electric Industries, Inc.
and Participating Subsidiaries**

**Valuation as of
January 1, 2006**

INDIVIDUAL INFORMATION ON COMPANIES
OTHER THAN HECO DELETED

WWW.WATSONWYATT.COM

Prepared by

Watson Wyatt Worldwide
737 Bishop Street, Suite 2340
Honolulu, Hawaii 96813
(808) 535-0500

September, 2006

Table of Contents

	<u>Page</u>
Section I. <u>Management Overview</u>	
A. Summary of Valuation Results.....	1
B. Other Highlights	5
Section II. <u>Financial Accounting and Reporting</u>	
A. Requirements and Definitions	8
B. Actuarial Present Value of Accrued Benefits	9
C. Statement of Changes in Accrued Benefits.....	11
Section III. <u>Participant Data</u>	
A. Source and Testing of Data	12
B. Comparison with Prior Year	13
C. Basic Data by Participating Company.....	14
D. Benefit Projections	16
E. Distribution of Employees by Age and Service	17
F. Reconciliation of Participants	21
G. Distribution of Inactive Participants.....	25
Section IV. <u>Plan Assets</u>	
A. Asset Reconciliation.....	28
B. Actuarial Valuation Value of Assets.....	29
C. Investment Experience	31
Section V. <u>Summary of Plan</u>	
A. History of Plan.....	32
B. Summary of Principal Plan Provisions.....	33



	<u>Page</u>
Section VI. <u>Actuarial Methods and Assumptions</u>	
A. Actuarial Cost Method for Funding	37
B. Asset Valuation Method	38
C. Actuarial Assumptions for Funding	39
D. Actuarial Assumptions for Determining Accrued Benefits	41
Section VII. <u>Determination of Contributions</u>	
A. Derivation of Unfunded Actuarial Accrued Liability	42
B. Derivation of Normal Cost	43
C. Determination of the Actuarial Gain or Loss	44
D. Calculation of the Full Funding Limitation	46
E. Calculation of the Deficit Reduction Contribution	49
F. Amortization Schedule	50
G. Funding Standard Account	51
H. Range of Contributions	52
Section VIII. <u>Historic Trends</u>	
A. Data Trends	53
B. Benefits/Expenses vs. Contributions	56
C. Contributions/Pension Cost	57
D. Funded Status of Plan	58
E. Investment Return	59



A. Summary of Valuation Results

Background

This report, prepared at the request of Hawaiian Electric Industries, Inc., presents the results of the actuarial valuation as of January 1, 2006 of the Retirement Plan for Employees of Hawaiian Electric Industries, Inc. and Participating Subsidiaries. Employers participating in the plan are:

- Hawaiian Electric Company, Inc. (HECO)
- Hawaii Electric Light Company, Inc. (HELCO)
- Maui Electric Company, Limited (MECO)
- Hawaiian Electric Industries, Inc. (HEI)

The report is designed to provide to management and to the Pension Investment Committee pertinent information about the status of the plan, to provide the source documentation for determining the minimum required contribution and the maximum tax deductible contribution, and to provide information needed for financial reporting.

Range of Contributions

The contributions were calculated in accordance with provisions of the recently enacted Pension Protection Act of 2006. The maximum tax-deductible contribution and the minimum contribution required to avoid a funding deficiency are shown in this section for the 2005 and the 2006 plan years. In addition to the dollar amounts, the contributions are also shown as a percentage of covered payroll. The maximum tax-deductible contribution is:

	Maximum Deductible Contribution	
	2005	2006
HECO	\$76,324,682 85.50%	\$328,912,998 343.26%



The maximum tax-deductible contributions include one full year's interest which can be deducted even though contributions may be made before the end of the year. The deductible contribution related to other retirement programs such as the Hawaiian Electric Industries Retirement Savings Plan (HEIRS) may be limited if contribution to all plans exceed 25% of compensation. The combined limitation should be analyzed if total contributions exceed 25% of covered compensation.

The minimum contribution required to avoid a funding deficiency is shown below:

	Minimum Required Contribution	
	2005	2006
HECO	\$ 0 0%	\$ 0 0%

The minimum required contribution shown above assumes payment at the end of the year or during the allowable accrual period thereafter.

Section VII provides additional information on the calculation of the minimum required and maximum deductible contributions.



Basic Data Comparison

3

The table below shows a summary of key employee data used in the 2005 and 2006 valuations.

	2005	2006
▪ Total Covered Payroll for Active Participants	\$131,950,104	\$140,047,127
▪ Number of Participants		
(a) Active Participants	1,987	2,064
(b) Retirees and Survivors	1,471	1,520
(c) Vested Former Participants	268	273
(d) Transferred Participants	5	5
(e) Disabled Participants	9	10
▪ Averages for Active Participants		
(a) Years of Past Service	14.02	13.53
(b) Attained Age	45.32	45.15
(c) Annual Pay	66,407	67,852
(d) Annual Retirement Benefit at Age 65	96,707	99,632

A comparison of basic data between two years can often provide insight into reasons why valuation results change from one year to the next.



Valuation Comparison with Prior Year

There were changes in the interest rates used to calculate current liability. For the current liability maximum deductible contribution, the interest rate was increased from 4.59% to 5.19%. For the deficit reduction contribution exemption test, the interest rate was decreased from 6.10% to 5.77%. For all other purposes, the interest rate was decreased from 6.10% to 5.19%. The provision from the Pension Funding Equity Act of 2004 that allowed use of the 30-year Treasury rate to determine maximum deductible contributions has been repealed. The resulting interest rate used to determine the maximum deductible contribution reverts back to the same interest rate as used to determine the current liability for minimum contributions, starting with the plan year beginning in 2006.

Further, the Pension Protection Act of 2006 increased the maximum deductible contribution for plan years beginning in 2006 and 2007 to an amount equal to the excess of 150% of the plan's current liability over the value of plan assets.

Review of Valuation

The minimum contribution requirement is zero this year because the plan is under the full funding limitation. The maximum deductible contribution is equal to \$461,694,248 as of December 31, 2006.

Section VII.C. shows that the plan experienced a loss of \$568,234 during the 2005 plan year. This loss consisted of an asset gain of \$1,274,912 and a liability loss of \$1,843,146:

- Asset gain: As discussed on page 5, the valuation assets return was 8.68% during 2005 whereas 8.5% had been assumed.
- Liability loss: The actuarial liabilities are greater than expected due primarily to mortality losses and early retirements.



B. Other Highlights

5

Investment Return on Assets

The dollar-weighted rate of return on market value of assets was 7.38% for 2005. An alternative value of assets (the actuarial valuation value) is used for determining the plan contributions, which is described in more detail in Section IV.C. The 2005 rate of return on the actuarial valuation value was 8.68%, again calculated on a dollar-weighted basis.

The rates of return over the latest five-year period are shown below:

<u>Plan Year End</u>	<u>Investment Return</u>	
	<u>Market Value</u>	<u>Actuarial Valuation Value</u>
12/31/2005	7.38%	8.68%
12/31/2004	10.13	8.67
12/31/2003	23.30	2.29 ¹
12/31/2002	(13.90)	(14.69)
12/31/2001	(10.26)	13.45
5-Year Average	2.41%	3.18%

Section IV.C. provides additional investment experience.

Funded Status of the Plan

Section II of the report sets forth information on accumulated plan benefits needed for several purposes, including financial reporting. The actuarial present values calculated for this purpose are based on a 5.75% interest assumption, the same discount rate assumption used for financial disclosure under FAS No. 87.

¹ Includes a 19.84% loss due to the change in asset method. The "return" was 22.13% under the prior method.



The following table summarizes the retirement plan's funded status:

(1) Actuarial Present Value of Accrued Benefits (accumulated benefit obligation)	
(a) Retirees	\$451,843,393
(b) Other vested benefits	242,954,265
(c) Non-vested accrued benefits	<u>51,086,776</u>
(d) Total	745,884,434
(2) Actuarial Present Value of Accrued Benefits Recognizing Future Salary Increases (projected benefit obligation)	
(a) Retirees	451,843,393
(b) Other participants	<u>426,985,608</u>
(c) Total	878,829,001
(3) Assets	
(a) Market value as of 1/1/2005	747,265,486
(b) Accrued contributions	<u>0</u>
(c) Total	747,265,486
(4) Funded Status of Plan	
(a) Accumulated benefit obligation: (3) ÷ (1)	100%
(b) Projected benefit obligation: (3) ÷ (2)	85%

Minimum Balance Sheet Liability

FAS No. 87 requires an employer to recognize an additional minimum liability on the balance sheet if the projected benefit obligation exceeds the value of plan assets. The change in liability recognition from ABO to PBO is effective for fiscal years ending after December 15, 2006.



The contribution requirements and other results of the actuarial valuation are based on the participant data described in Section III, the actuarial methods and assumptions shown in Section VI, the principal plan provisions summarized in Section V, and on asset information supplied by HEI.

This report should not be distributed to others outside HEI, its subsidiaries, and its auditors, and should not be relied upon by any other person without prior written consent from Watson Wyatt Worldwide.

In preparing this valuation, we have relied upon information and data provided to us by HEI and other persons or organizations designated by HEI. An audit of the financial and participant data provided was not performed, but we have checked the data for reasonableness as appropriate based on the purpose of the valuation. We have relied on all the information provided, including plan provisions and asset information as complete and accurate.

The valuation summarized in this report involves actuarial calculations that require assumptions about future events. We believe that the assumptions and methods used in this report are reasonable and appropriate for the purposes for which they have been used.

In our opinion, all methods, assumptions and calculations are in accordance with requirements of the Internal Revenue Code and ERISA, and the procedures followed and presentation of results are in conformity with generally accepted actuarial principles and practices. HEI is responsible for the selection of the actuarial cost and asset valuation methods.

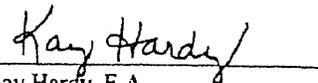
The undersigned consultants of Watson Wyatt Worldwide with actuarial credentials meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. There is no relationship between HEI and Watson Wyatt Worldwide that impacts our objectivity.

We would be pleased to review the report with the Pension Investment Committee and other interested members of management and answer any questions you may have.

Prepared by: WATSON WYATT WORLDWIDE



Leonard Smothermon, A.S.A.
Consulting Actuary



Kay Hardy, E.A.
Actuary



A. Requirements and Definitions

Requirements

The actuarial present values of vested and non-vested plan benefits shown in this section can be used for several purposes:

- They give a measure of the funded status of the plan, based on benefits accrued to the valuation date.
- These amounts may be disclosed on the financial statements of a defined benefit plan in accordance with Financial Accounting Standards No. 35.
- These amounts may be disclosed in the financial statements of the plan sponsor in accordance with Financial Accounting Standards No. 87.

Definitions

The values used in this section have been calculated as summarized below:

- The actuarial present value of accrued benefits is equal to the value of the estimated benefits accrued to the valuation date, determined on an on-going plan basis. For this purpose, base rates of pay supplied by the Company were used to determine accrued benefits for employees covered under a collective bargaining agreement. For non-bargaining employees, the current rates of pay were discounted by the assumed salary increases for determining the average salaries over the past 36 months. The actuarial assumptions used in the calculation are summarized in Section VI.C. and VI.D.
- The actuarial present value of vested benefits includes that portion of the total value in which the participant retains a right as of the valuation date, if, for example, he terminates service on that date.
- The actuarial present value of non-vested benefits is the portion of the total value remaining after subtracting out those benefits which are vested.

Because these values are determined on an on-going plan basis, they would differ from those values which would be determined for a plan termination.

A stylized, bold, black letter 'W' with a diagonal line striking through it from the top right to the bottom left.

B. Actuarial Present Value of Accrued Benefits

Comparison with Prior Year

	<u>2005</u>	<u>2006</u>
(1) Actuarial Present Value of Vested Benefits		
(a) Retirees and Survivors	\$ 421,998,265	\$ 451,843,393
(b) Other Plan Participants	<u>223,825,965</u>	<u>242,954,265</u>
(c) Total	645,824,230	694,797,658
(2) Actuarial Present Value of Non-Vested Benefits	46,555,606	51,086,776
(3) Total Actuarial Present Value of Accrued Benefits: (1) + (2)	692,379,836	745,884,434
(4) Market Value of Assets		
(a) As of January 1	728,154,539	747,265,486
(b) Accrued Contributions	<u>0</u>	<u>0</u>
(c) Total	728,154,539	747,265,486
(5) Funded Ratio of Vested Benefits: (4) + (1)	113%	108%
(6) Funded Ratio of Total Accrued Benefits: (4) + (3)	105%	100%
(7) Interest Rate Used in Determining Actuarial Present Values	6.00%	5.75%



Breakdown by Participating Employer

	<u>HECO</u>
(1) Actuarial Present Value of Vested Benefits	
(a) Retirees and Survivors	\$339,475,003
(b) Other Plan Participants	<u>160,714,876</u>
(c) Total	500,189,879
(2) Actuarial Present Value of Non-Vested Benefits	35,687,208
(3) Total Actuarial Present Value of Accrued Benefits: (1) + (2)	535,877,087
(4) Market Value of Assets	
(a) As of 1/1/2006	535,956,354
(b) Accrued Contributions	<u>0</u>
(c) Total	535,956,354
(5) Funded Ratio of Vested Benefits: (4) ÷ (1)	107%
(6) Funded Ratio of Total Accrued Benefits: (4) ÷ (3)	100%

C. Statement of Changes in Accrued Benefits

	<u>HECO</u>
(1) Actuarial Present Value of Accrued Benefits as of 1/1/2005	\$501,172,662
(2) Increase (Decrease) during 2005 Attributable to	
(a) Plan Amendment	0
(b) Change in Actuarial Assumptions	15,072,666
(c) Benefits Accumulated	21,224,569
(d) Increase for Interest Due to the Decrease in the Discount Period ¹	29,148,131
(e) Benefits Paid	<u>(30,740,941)</u>
(f) Net Increase	34,704,425
(3) Actuarial Present Value of Accrued Benefits as of 1/1/2006: (1) + (2)	535,877,087

¹ Interest on Item (1) for one full year, adjusted for interest on item (2)(e).



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, 2006.

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 reasonableness and 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>Basic Data</u>	<u>Valuation Date</u>	
	<u>1/1/2005</u>	<u>1/1/2008</u>
(1) Number of Covered Participants		
(a) Active Employees	1,987	2,064
(b) Retirees ¹	1,282	1,316
(c) Survivors in Pay Status	152	161
(d) QDRO Alternate Payees	30	36
(e) Prudential Retirees	7	7
(f) Vested Former Employees	268	273
(g) Transferred Employees	5	5
(h) Disabled Employees on LTD	<u>9</u>	<u>10</u>
(i) Total	3,740	3,872
(2) Approximate Covered Annual Payroll	\$131,950,104	\$140,047,127
(3) Total Annual Benefits of Inactive Participants		
(a) Retirees and Survivors ¹	43,907,318	46,310,684
(b) Vested Former Employees	2,166,901	2,498,041
(c) Transferred Employees	160,539	165,787
(d) Disabled	139,838	163,993
<u>Participant Averages</u>		
(4) Averages for Active Employees		
(a) Years of Past Service	14.02	13.53
(b) Attained Age	45.32	45.15
(c) Retirement Age	59.26	59.25
(d) Covered Annual Pay	\$ 66,407	\$ 67,852
(e) Accrued Annual Benefit	17,476	17,336
(f) Projected Annual Benefit at Age 65	96,707	99,632
(5) Retiree Averages ²		
(a) Retirement Age	58.04	58.04
(b) Attained Age	68.23	68.47
(c) Annual Benefit	\$ 29,116	\$ 33,487
<u>Vested Status</u>		
(6) Vested Status of Active Employees		
(a) Number Fully Vested	1,536	1,547
(b) Number Partially Vested	0	0
(c) Number Not Vested	<u>451</u>	<u>517</u>
(d) Total	1,987	2,064

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>
(1) Number of Covered Employees	
(a) Active Employees	1,417
(b) Retirees ¹	983
(c) Survivors	128
(d) QDRO Alternate Payees	29
(e) Prudential Retirees	7
(f) Vested Former Employees	191
(g) Transferred Employees	2
(h) Disabled on LTD	<u>8</u>
(i) Total	2,765
 (2) Approximate Covered Annual Payroll for Active Participants on Valuation Date	 \$95,820,217
 (3) Annual Benefits of Inactive Participants	
(a) Retirees and Survivors ¹	35,145,183
(b) Vested Former Employees	1,729,844
(c) Transferred Employees	43,112
(d) Disabled	128,885

¹ Excluding Prudential retirees.

HECO

Employee Averages

(4) Averages for Active Employees	
(a) Years of Past Service	13.32
(b) Attained Age	44.89
(c) Retirement Age	59.24
(d) Covered Annual Pay	\$67,622
(e) Accrued Annual Benefit	17,105
(f) Annual Benefit at Age 65	101,065
(g) Annual Benefit at Age 65 without Maximum Limit	101,065
(5) Retiree Averages ¹	
(a) Retirement Age	58.14
(b) Attained Age	69.04
(c) Annual Benefit	\$33,994

Vested Status

(6) Vested Status of Employees as of 1/1/2005	
(a) Number Fully Vested	1,048
(b) Number Not Vested	<u>369</u>
(c) Total	1,417

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	2006	21	\$ 770,738
	2007	4	92,869
	2008	12	573,492
	2009	6	269,262
	2010	14	560,388



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	18							18
F	7							7
25-29 M	38	2						40
F	12	1						13
30-34 M	60	13	9	1				83
F	13	11	3					27
35-39 M	50	26	73	19				168
F	16	11	25	4				56
40-44 M	49	22	69	66	19	2		227
F	20	10	28	19	3			80
45-49 M	24	16	42	56	29	18		185
F	17	5	17	34	7	6		86
50-54 M	12	12	28	28	23	31	25	159
F	10	7	5	22	11	10	5	70
55-59 M	15	2	9	14	6	7	47	100
F	5	3	10	6	3	5	11	43
60-64 M	2	5	2	4	3	3	5	24
F	1	1	2	5	1	2	1	13
65&over M	3			3			8	14
F			1		2	1		4
Total M	271	98	232	191	80	61	85	1,018
F	101	49	91	90	27	24	17	399



F. Reconciliation of Participants

HECO					
	Active Employees	Retirees	Vested Term	Transfers Out of Plan	LTD
(1) Participants on 1/1/2005	1,348	1,116	191	2	8
(2) Withdrawals					
(a) Non-Vested Term.	(1)	0	0	0	0
(b) Vested Term.	(8)	0	9	0	(1)
(c) Cash Outs	0	0	0	0	0
(d) Transfers Within Plan	(5)	0	0	0	0
(e) Retirements – Regular	(35)	39	(5)	0	0
(f) Retirements – QDRO	0	1	0	0	0
(g) Deaths – No Benefits	(21)	(28)	(3)	0	0
(h) Deaths – Survivor Benefits	0	(8)	(1)	0	0
(i) LTD	(1)	0	0	0	1
(j) Transfer Out of Plan	0	0	0	0	0
(k) Survivors	0	9	0	0	0
(l) QDRO Alternate Payees	0	5	0	0	0
(m) Data Adjustments	<u>(2)</u>	<u>13</u>	<u>0</u>	<u>0</u>	<u>0</u>
(n) Totals	(73)	31	(0)	0	0
(3) Entrants					
(a) New Entrants	139	0	0	0	0
(b) Transfers Within Plan	1	0	0	0	0
(c) Rehires>Returns	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
(d) Totals	142	0	0	0	0
(4) Participants on 1/1/2006	1,417	1,147	191	2	8



G. Distribution of Inactive Vested Participants

Retired Participants¹

Age Distribution

<u>Age Group</u>	<u>HECO</u>	
	<u>M</u>	<u>F</u>
Up to 40	0	0
40-44	0	1
45-49	1	5
50-54	6	8
55-59	90	47
60-64	200	64
65-69	175	52
70-74	139	39
75-79	101	43
80-84	84	32
85-89	23	20
90 & up	<u>5</u>	<u>5</u>
Totals	824	316

<u>Age Group</u>	<u>HECO</u>
Up to 40	\$ 0
40-44	7,916
45-49	27,582
50-54	255,788
55-59	4,811,095
60-64	9,343,894
65-69	7,345,615
70-74	5,751,005
75-79	4,250,475
80-84	2,727,647
85-89	534,173
90 & up	<u>89,991</u>
Totals	\$35,145,181

¹ Excluding Prudential retirees.

Terminated Vested Participants

<u>Age Group</u>	<u>HECO</u>	
	<u>M</u>	<u>F</u>
Up to 40	10	15
40-44	25	12
45-49	38	9
50-54	25	6
55-59	23	13
60-64	10	5
65 & Over	<u>0</u>	<u>0</u>
Totals	131	60

Age Distribution

<u>Age Group</u>	<u>HECO</u>
Up to 40	\$ 193,677
40-44	384,123
45-49	470,595
50-54	281,062
55-59	324,435
60-64	75,951
65 & Over	<u>0</u>
Totals	\$1,729,843

Transferred Employees

Age Distribution

<u>Age Group</u>	<u>HECO</u>	
	<u>M</u>	<u>F</u>
30-34	0	0
35-39	0	0
40-44	0	0
45-49	0	0
50-54	1	0
55-59	<u>1</u>	<u>0</u>
Totals	2	0

Benefit Distribution

<u>Age Group</u>	<u>HECO</u>
30-34	\$ 0
35-39	0
40-44	0
45-49	0
50-54	23,998
55-59	<u>19,114</u>
Totals	\$43,112

A. Asset Reconciliation

	<u>HECO</u>
(1) Market Value on 1/1/2005	\$524,207,095
(2) Income	
(a) Contributions	6,000,000
(b) Interest, Dividends and Other Income	<u>10,442,303</u>
(c) Total	16,442,303
(3) Disbursements	
(a) Benefit Payments	(30,740,941)
(b) Investment Management/Trustee Fees	(2,026,099)
(c) Administrative Expenses	<u>(251,950)</u>
(d) Total	(33,018,990)
(4) IVF Expense	0
(5) Transfers	(779,580)
(6) Market Appreciation	29,105,327
(7) Adjustments	199
(8) Market Value on 1/1/2006	535,956,354

B. Actuarial Valuation Value of Assets

A separate asset value (called "actuarial valuation value") is developed for purposes of determining the plan contributions. Under Internal Revenue Service regulations, the method must recognize market value and must fall within a 20% corridor around market value. The actuarial valuation value typically differs from market value in order to avoid fluctuations in plan contributions resulting from wide fluctuations in current market value.

The method used to value assets recognizes net gains or losses over a five-year period beginning with plan year 2004: 20% in each of the next five years. The gain or loss for a given year is the difference between the actual market value at the end of the year and the expected market value at the end of the year (based on the beginning of year market value accumulated with an 8.5% return).

Gain or Loss for 2005

(1) Market Value on 12/31/2004	\$ 728,154,539
(2) Contributions	7,500,000
(3) Benefit Payments	(40,308,615)
(4) Administrative Expenses	(351,506)
(5) Expected Income at 8.5%	60,169,165
(6) Expected Market Value on 12/31/2005: (1) + (2) + (3) + (4) + (5)	755,163,583
(7) Actual Market Value on 12/31/2005	747,265,486
(8) Gain/(Loss) for Year: (7) - (6)	(7,898,097)

Unrecognized Portion of Gains and Losses

<u>Year Ended</u> <u>December 31</u>	<u>Gain/(Loss)</u>	<u>Percent</u> <u>Recognized</u>	<u>Percent</u> <u>Unrecognized</u>	<u>Unrecognized</u> <u>Gain/(Loss)</u>
(a)	(b)	(c)	(d)	(b) x (d)
2001	\$ N/A	100%	0%	\$ N/A
2002	N/A	80	20	N/A
2003	N/A	60	40	N/A
2004	10,782,701	40	60	6,469,621
2005	(7,898,097)	20	80	(6,318,478)
Total				151,143





Valuation Assets

	<u>HECO</u>
(1) Market Value on 12/31/2005	\$535,956,354
(2) Unrecognized Gain/(Loss)	108,403
(3) Adjusted Assets: (1) - (2)	535,847,951
(4) Accrued Contributions	0
(5) Total Adjusted Assets: (3) + (4)	535,847,951
(6) Corridor Test:	
• Minimum: .80 x [(1) + (4)]	428,765,084
• Maximum: 1.20 x [(1) + (4)]	643,147,624
(7) Valuation Assets: (5) as adjusted by (6)	535,847,951

C. Investment Experience

The annual rates of return during each of the last 32 years are shown below for market value and the value used to determine the plan contributions (actuarial valuation value). Rates prior to 1985 were determined by the plan's prior actuary. In the calculation of the rates since 1985, the plan's expenses paid directly from the assets were treated as investment losses and are included in the calculation of the net rates. Returns for 1998 and later years are net of investment expenses only (i.e., not administrative expenses). Also shown are the compound rates averaged over various periods.

Plan Year End	Investment Return		Plan Year End	Investment Return	
	Market Value	Actuarial Value		Market Value	Actuarial Value
12/31/2005	7.38%	8.68%	12/31/1985	23.65%	13.77%
12/31/2004	10.13	8.67	12/31/1984	5.06	5.87
12/31/2003	23.30	2.29 ¹	12/31/1983	14.32	15.06
12/31/2002	(13.90)	(14.69)	12/31/1982	20.27	10.60
12/31/2001	(10.26)	13.45	12/31/1981	8.10	11.63
12/31/2000	(3.32)	15.03	12/31/1980	13.61	12.31
12/31/1999	30.10	25.19	12/31/1979	11.91	6.97
12/31/1998	16.38	15.03	12/31/1978	6.47	6.75
12/31/1997	15.23	13.49	12/31/1977	3.42	5.12
12/31/1996	13.92	11.27	12/31/1976	9.18	(1.54)
12/31/1995	26.47	8.96	12/31/1975	14.69	4.83
12/31/1994	(2.77)	11.27	12/31/1974	(7.47)	4.74
12/31/1993	16.16	11.62			
12/31/1992	4.20	23.51 ²			
12/31/1991	25.93	13.48			
12/31/1990	(1.67)	0.78			
12/31/1989	22.00	9.35			
12/31/1988	6.89	0.58			
12/31/1987	0.55	13.15			
12/31/1986	13.78	19.44			

		Market Value	Actuarial Value
Latest:	5-year average	2.41 %	3.18%
	10-year average	8.03	9.36
	15-year average	9.79	10.77
	All years average	9.57	9.32

¹ Includes a loss of 19.84% due to change in asset method. The "return" was 22.13% under the prior method.

² Includes a gain of 16.26% due to change in asset method. The "return" was 7.25% under the prior method.



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.



(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.

A. Actuarial Cost Method

The actuarial cost method used in valuing a defined benefit plan provides for the funding or expensing of retirement plan costs on an orderly basis. It is the actuarial cost method which assigns the costs of the plan to the years of an employee's service during which benefits are to be funded.

The projected unit credit actuarial cost method was used in the valuation. Under this method, the contributions are the sum of (1) an amortization of the unfunded actuarial present value of benefits attributable to past service (the unfunded actuarial accrued liability) and (2) the actuarial present value of benefits attributable to the current year's service (the normal cost).

A participant's benefit attributable to past service is equal to his accrued benefit adjusted to take into account future salary increases, in accordance with the actuarial assumptions. His current service benefit is one year's increment of the projected benefit, again adjusted for future salary increases.

The actuarial assumptions determine the size of the present values described above. The actuarial assumptions used in the valuation are summarized in Section VI.C.

A stylized handwritten signature or set of initials, possibly 'W', located in the bottom right corner of the page.

B. Asset Valuation Method

The asset valuation method determines the value of assets recognized at any valuation date for purposes of determining the range of contributions to the plan. Generally, asset valuation methods tend to smooth wide market fluctuations and, therefore, recognize the growth of assets on a more orderly basis. Under Internal Revenue Service regulation 1.412(c)(2)-1, the asset valuation method must be applied on a consistent basis year to year and must reflect the fair market value of plan assets. Further, the asset valuation method must produce assets which fall within a 20% corridor of the market value of plan assets as of the plan's valuation date.

The asset valuation method recognizes the difference between the actual market value of assets and the expected market value of assets as of the valuation date over a five-year period; 20% in each of the next five years.

This method was adopted effective January 1, 2004.



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, except for the current liability interest rates. 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.

Age	Rates
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.

Age	Rates	
	Males	Females
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: 5.19%
Maximum Deduction: 5.19%



D. Actuarial Assumptions for Determining Accrued Benefits

The actuarial assumptions used in determining the actuarial present value of accrued benefits in Section II of the report are identical with those described in Section VI.C. above except that (1) no future pay increases have been taken into account, and (2) an interest rate of 5.75% instead of 8.5% was used. The 5.75% interest rate is the discount rate used to value liabilities for financial disclosure under FAS No. 87. A retroactive salary increase assumption was applied to current earnings of non-bargaining employees to determine the average 36 months' earnings prior to the valuation date for purposes of estimating accrued benefits.



A. Derivation of Unfunded Actuarial Accrued Liability

The unfunded actuarial accrued liability represents that portion of the value of all future benefits which is assigned to prior years by the actuarial cost method and which is in excess of the actuarial valuation value of assets. The exhibit below shows the determination of the unfunded actuarial accrued liability as of January 1, 2006.

HECO

(1) Actuarial Accrued Liability	
(a) Actives	
(i) Retirement	\$167,658,434
(ii) Vesting	683,962
(iii) Pre-Retirement Death	4,316,995
(b) Retirees	275,279,806
(c) Vested Terminations	2,962,987
(d) Prudential Liabilities	208,465
(e) Long Term Disability	895,027
(f) Transfers Out of Plan	<u>337,272</u>
(g) Total	452,342,948
(2) Valuation Assets	535,847,951
(3) Unfunded Actuarial Accrued Liability:	
(1) - (2)	<u>(83,505,003)</u>

B. Derivation of Normal Cost

The portion of the value of future benefits assigned to the current year's service is called the normal cost. Under the cost method used to value the plan, the normal cost is equal to the actuarial present value of benefits accruing during the current plan year, adjusted to reflect future salary increases. The normal cost as of January 1, 2006 is shown below:

<u>Normal Cost</u>	<u>HECO</u>
(a) Active Employees	
▪ Retirement	\$9,280,832
▪ Vesting	67,141
▪ Pre-Retirement Death	258,983
(b) Disabled Employees	<u>44,153</u>
(c) Subtotal	9,651,109
(d) Administrative Expenses	<u>279,000</u>
(e) Total	9,930,109

C. Determination of the Actuarial Gain or Loss

The plan experience expected to occur as a result of the various actuarial assumptions used in the valuation rarely, if ever, matches the actual plan experience. In most plans, the size of the participant group is too small for the various probabilities used in the actuarial assumptions to provide meaningful results.

The actuarial gain or loss is a measure of the deviation of expected liabilities (determined as if all actuarial assumptions were exactly realized) from those liabilities resulting from actual plan experience.

Under the projected unit credit cost method, the actuarial gain (loss if negative) is determined as the difference between:

- (a) The expected unfunded actuarial accrued liability projected from the prior year's valuation (adjusted for any plan changes or changes in actuarial assumptions), and
- (b) The actual unfunded actuarial accrued liability as of the valuation date.

If the actual unfunded liability is greater than the amount expected, the plan has experienced an actuarial loss. If the actual amount is lower, the plan has experienced an actuarial gain.

The first column shows the calculation of the true actual gain or loss for the year. The second column shows the gain or loss calculated according to IRS rules for the minimum contribution funding standard account (FSA). The second column is different from the first column whenever the actual unfunded actuarial accrued liability is negative.

The calculation of the actuarial loss occurring during the last plan year is shown below:

	Actual	IRS Rules For FSA
(1) Unfunded Actuarial Accrued Liability as of 1/1/2005	\$ (116,799,560)	\$ N/A
(2) 2005 Normal Cost	13,781,868	N/A
(3) (1) + (2) with Interest to 1/1/2006: [(1) + (2)] x 1.085	(111,774,196)	N/A
(4) 2005 Contribution	7,500,000	N/A



	Actual	IRS Rules For FSA
(5) Interest on (4) to 1/1/2006	\$ 4,085	\$ N/A
(6) Plan Changes	591,399	N/A
(7) Assumption Changes	0	N/A
(8) Method Changes	0	N/A
(9) Expected Unfunded Actuarial Accrued Liability at 1/1/2006: (3) - (4) - (5) + (6) + (7) + (8)	(118,686,882)	(67,420,198)
(10) Actual Unfunded Actuarial Accrued Liability at 1/1/2006:	(118,118,648)	0
(11) Gain (Loss): (9) - (10)	(568,234)	(67,420,198)



D. Calculation of the Full Funding Limitation

Traditional Full Funding Limitation

When the plan's assets grow to a certain level, as compared to the plan's liabilities, the minimum required and maximum deductible contribution to a defined benefit are limited. This limit, the full funding limitation, is described in Sections 412(c)(6) and (7) of the Internal Revenue Code and appears at periodic points over a plan's history. It usually occurs as a result of favorable investment or other favorable plan experience or as a result of reducing the actuarial accrued liability through changes in actuarial cost methods or assumptions.

The full funding limitation is equal to the excess of the actuarial accrued liability and normal cost over the lesser of market value or actuarial valuation of assets. The asset value is offset by the funding standard account credit balance in determining the full funding limitation for the minimum required contribution. Both the minimum required and maximum deductible contributions are restricted to the full funding limitation

When the contributions are restricted by the full funding limitation, the actuarial accrued liability and all existing amortization bases are considered to be fully funded.

The full funding limitation for the minimum required and maximum deductible contributions is determined as follows:

	Minimum Required Contribution	Maximum Deductible Contribution
(1) Actuarial Accrued Liability	\$ 628,995,695	\$ 628,995,695
(2) Normal Cost	14,522,776	14,522,776
(3) Asset Value:		
(a) Market Value	747,265,486	747,265,486
(b) Valuation Value	747,114,343	747,114,343
(c) Funding Standard Account Credit Balance	<u>67,420,198</u>	<u>N/A</u>
(d) Net Value: lesser of (a) or (b) offset by (c)	679,694,145	747,114,343
(4) Full Funding Limitation at 1/1/2006: (1) + (2) - (3), (not less than 0)	0	0
(5) Full Funding Limitation at 12/31/2006: 1.085 x (4)	0	0



RPA '94 Full Funding Limitation Threshold

The Retirement Protection Act of 1994 added another full funding limitation threshold. The full funding limitation will not be less than the excess of 90% of "current liability" over the actuarial value of assets.

The interest rate used in calculating the current liability minimum full funding threshold (in accordance with the extended provisions of the Pension Funding Equity Act of 2004) must fall within a 90% - 100% corridor around the corporate bond weighted average interest rate for the four-year period ending December 31, 2005. A 5.19% interest rate was used for calculating current liability, which falls within the acceptable range of 5.19% to 5.77% for plan years beginning on January 1, 2006. As required, the mortality table used in the calculations is the 1983 Group Annuity Mortality Table (separate rates for males and females).

The full funding limitation is described in Section 412(c)(7) of the Internal Revenue Code. The asset value used for this calculation is the actuarial value of plan assets without the funding standard account credit balance offset.

The RPA '94 full funding limitation threshold had no impact on the 2006 plan year contribution.

(1)	Current Liability at 1/1/2006	
	(a) Actives - Vested Benefits	\$ 252,065,373
	(b) Actives - Non-Vested Benefits	53,814,366
	(c) Retirees and Survivors	474,312,545
	(d) Vested Terminated Participants	<u>8,734,892</u>
	(e) Total	788,927,176
(2)	2006 Accrual	31,320,332
(3)	Expected 2006 Distributions	43,766,805
(4)	Expected Expenses	380,000
(5)	Expected Current Liability at 12/31/2006 1.0519 x [(1) + (2) - (4)] - 1.02595 x (3)	817,516,077
(6)	90% of Current Liability Discounted to 1/1/2006: .90 x (5) + 1.085	678,123,935
(7)	Actuarial Value of Assets (not reduced by credit balance)	747,114,343



(8)	Asset Value at 12/31/2006 (not including contribution): $1.085 \times [(7) - (4)] - 1.0425 \times (3)$	\$ 764,579,868
(9)	Asset Value Discounted to 1/1/2006 (8) + 1.085	704,681,906
(10)	Full Funding Limitation Threshold: (6) - (9) (not less than zero)	0
(11)	Full Funding Limitation Threshold: at 12/31/2006: (10) x 1.085	0

150% Current Liability Deduction

The Pension Protection Act of 2006 increased the maximum deductible contribution allowance from 100% to 150% of current liability less assets for plan years beginning in 2006 and 2007.

The interest rate used in calculating current liability for this purpose is the same as the interest rate used to calculate the RPA '94 full funding limitation current liability. As required, the mortality table used in the calculation is the 1983 Group Annuity Mortality Table (separate rates for males and females).

The maximum deductible contribution is equal to the amount necessary to fund 150% of the current liability projected to the end of year. This amount is \$461,694,248, calculated as shown below:

(12)	150% Current Liability at 12/31/2006:	\$ 1,226,274,116
(13)	Valuation Value of Assets at 12/31/2006: (item (8) above)	764,579,868
(14)	150% Current Liability Deductible Contribution: (12) - (13) (not less than zero)	461,694,248



E. Calculation of the Deficit Reduction Contribution

The Retirement Protection Act of 1994 (RPA '94) requires a potential additional deficit reduction contribution if the current liability (using the highest rate allowable for the plan year) is less than 90% funded. In accordance with the extended provisions of the Pension Funding Equity Act of 2004, a 5.77% interest rate was used in calculating current liability for purposes of this DRC gateway test. As required, the mortality table used in the calculation is the 1983 Group Annuity Mortality Table (separate rates for males and females).

The plan is exempt from this additional contribution because the current liability (using the highest rate allowable for the plan year) is at least 90% funded, as shown below:

(1)	Current Liability at 1/1/2006	
	(a) Actives - Vested Benefits	\$ 229,108,883
	(b) Actives - Non-Vested Benefits	48,900,506
	(c) Retirees and Survivors	451,196,625
	(d) Vested Terminated Participants	<u>7,634,357</u>
	(e) Total	736,840,371
(2)	Valuation Value of Assets at 1/1/2006 (not reduced by credit balance)	747,114,343
(3)	Funded Ratio: (2) ÷ (1)	101.39%



F. Amortization Schedule

The actuarial accrued liability is required to be amortized over varying periods as shown in Column (2) to determine the minimum required contribution and over a 10-year period to determine the maximum deductible contribution. These amortization payments are shown in Columns (6) and (7) below. The remaining unamortized balance of the actuarial accrued liability is required to be determined on two bases: First as though the minimum contribution had always been made (Column (4)) and also in accordance with actual contributions made (Column (5)). Any contributions in excess of the minimum required are separately accounted for as a credit balance, which may be used to reduce future contributions.

	Minimum Amortization		Remaining Amount		Amortization Payment		
	Initial Amount (1)	Initial Years (2)	Remaining Years (3)	Minimum Balance (4)	Actual Balance (5)	Minimum (6)	Maximum (7)
(1) Amortization Charge Bases							
(a) 1/1/2006 Actuarial Loss	\$ 67,420,198	5	5	\$ 67,420,198	N/A	\$ 15,768,606	N/A
(2) Amortization Credit Bases	None						
Totals							
(3) Net Amounts: (1) + (2)				\$ 67,420,198	\$ 0	\$ 15,768,606	\$ 0
(4) Remaining Minimum Unfunded Balance: Column (4)	\$ 67,420,198						
(5) Remaining Actual Balance: Column (5)	0						
(6) Funding Standard Account Credit Balance: (4) - (5)	\$ 67,420,198						

G. Funding Standard Account as of December 31, 2005

The funding standard account has been established under the Employee Retirement Income Security Act of 1974 to account for contributions and interest credits in excess of the minimum funding requirements. Any account balance at the end of the year is available to reduce the otherwise calculated minimum contribution for the next plan year. Charges include the normal cost plus the minimum required amortization of the unfunded accrued liability both with interest. In addition to the credit balance at the end of the previous plan year, credits include company contributions with interest and other amortization credits. The calculation of the current funding standard account balance is shown below.

<u>HECO</u>	
(1) Charges to Funding Standard Account	
(a) Normal Cost	\$9,373,547
(b) Amortization Charges	8,052,787
(c) Interest	<u>1,481,239</u>
(d) Total Charges:	18,907,573
 (2) Credits to Funding Standard Account	
(a) Prior Year's Credit Balance	34,430,470
(b) Company Contributions	6,000,000
(c) Amortization Credits	0
(d) Interest	2,929,858
(e) Full Funding Limit Credit	<u>18,907,573</u>
(f) Total Credits	62,267,901
 (3) Balance in Funding Standard Account at 12/31/2005: (2) - (1)	
	43,360,328

H. Range of Contributions

The range of contributions for the current plan year is shown below. This range includes the maximum amount of contribution allowable as a deduction under Section 404(a)(1) of the Internal Revenue Code and the minimum contribution required under Section 412(b) of the Internal Revenue Code. The maximum deductible contribution includes a full year's interest which may be deducted even though the contribution is paid before the end of the year. The minimum required contribution is shown at both the beginning and end of the plan year. If paid earlier than the end of the year, the minimum contribution would fall between the beginning and year-end values.

HECO

(1) Maximum Deductible Contribution

(a) Normal Cost	\$9,930,109
(b) Amortization Charges	0
(c) Amortization Credits	<u>0</u>
(d) Total	9,930,109
(e) Full Funding Limitation	0
(f) Lesser of (1d) or (1e)	0
(g) 150% Current Liability Deduction	328,912,998
(h) Maximum Deductible Contribution: Greater of (1f) or (1g)	328,912,998

(2) Minimum Required Contribution

(a) Normal Cost	\$9,930,109
(b) Amortization Charges	10,141,352
(c) Amortization Credits	0
(d) Funding Standard Account Credit Balance	(43,360,328)
(e) Full Funding Limit Credit	<u>(20,071,461)</u>
(f) Net (a) + (b) + (c) + (d) + (e)	(43,360,328)
(g) Total on 1/1/2006 (not less than zero)	0
(h) Total on 12/31/2006: 1.085 x (g)	0

HEI RETIREMENT PLAN: Data Trends

	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>
(1) Covered Payroll								
▪ Total	\$63,588,769	\$69,509,129	\$71,952,647	\$75,644,765	\$82,132,343	\$85,425,731	\$91,544,682	\$102,052,930
▪ Average	36,714	38,789	39,383	40,506	41,692	43,188	44,160	47,094
(2) Participants								
▪ Actives	1,732	1,792	1,827	1,868	1,970	1,978	2,073	2,167
▪ Retirees	800	810	845	869	919	961	979	775
(3) Ratio: Retirees to								
▪ Actives	.46	.45	.46	.47	.47	.49	.47	.36
(4) Average Benefits								
▪ Actives (projected to 65)	66,995	70,893	72,405	72,784	74,504	76,779	79,350	84,123
▪ Retirees ¹	12,116	13,002	13,580	14,342	15,432	16,536	16,343	19,217
(5) Other Averages for Actives								
▪ Past Service	15.62	15.41	14.87	14.53	14.23	14.26	13.87	13.67
▪ Age	42.31	42.29	42.06	42.09	42.06	42.20	41.93	41.96
▪ Retirement Age	60.92	60.94	60.93	59.96	59.96	59.95	59.98	59.97
(6) Other Averages for Retirees ¹								
▪ Retirement Age					59.21	59.20	59.25	59.04
▪ Attained Age					68.62	68.79	69.53	66.68
(7) New Retirees ¹								
▪ Number					62	56	45	42
▪ Avg. Ret. Age					58.83	58.80	58.79	58.27

¹ Excluding survivors, alternate payees and Prudential retirees.



HEI RETIREMENT PLAN: Data Trends (cont.)

	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>
(1) Covered Payroll								
▪ Total	\$110,460,897	\$115,300,898	\$119,318,649	\$121,204,476	\$121,945,425	\$116,622,803	\$117,777,250	\$117,822,571
▪ Average	48,554	50,816	52,889	54,547	55,531	56,394	58,508	59,900
(2) Participants								
▪ Actives	2,275	2,269	2,256	2,222	2,196	2,068	2,013	1,967
▪ Retirees	813	871	902	965	1,014	1,100	1,146	1,239
(3) Ratio: Retirees to								
▪ Actives	.36	.38	.40	.43	.46	.53	.57	.63
(4) Average Benefits								
▪ Actives (projected to 65)	88,262	90,505	90,894	78,808	76,144	76,038	78,633	79,318
▪ Retirees ¹	19,624	19,856	20,530	21,240	23,596	23,139	23,764	26,725
(5) Other Averages for Actives								
▪ Past Service	13.26	13.62	13.96	14.24	14.48	14.80	15.15	14.83
▪ Age	41.79	42.30	42.80	43.21	43.65	44.03	44.51	44.63
▪ Retirement Age	59.97	58.92	58.94	58.96	58.99	58.98	59.01	59.09
(6) Other Averages for Retirees ¹								
▪ Retirement Age	58.95	58.87	58.79	58.69	58.62	58.52	58.29	58.30
▪ Attained Age	66.74	67.14	67.36	67.51	67.75	67.60	68.20	67.65
(7) New Retirees ¹								
▪ Number	49	54	60	64	64	102	64	101
▪ Avg. Ret. Age	58.50	57.50	58.53	57.96	58.07	57.90	57.66	57.50

¹ Excluding survivors, alternate payees and Prudential retirees.



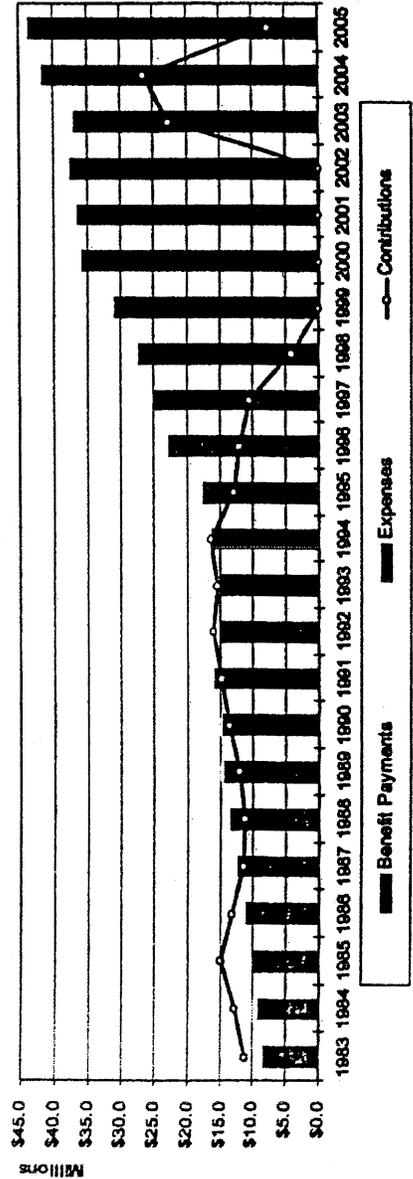
HEI RETIREMENT PLAN: Data Trends (cont.)

	2002	2003	2004	2005	2006
(1) Covered Payroll					
• Total	\$120,895,309	\$123,191,365	\$124,403,643	\$131,950,104	\$140,047,127
• Average	61,483	63,566	65,787	66,407	67,852
(2) Participants					
• Actives	1,966	1,938	1,891	1,987	2,064
• Retirees	1,316	1,372	1,443	1,471	1,520
(3) Ratio: Retirees to					
• Actives	.67	.71	.76	.74	.74
(4) Average Benefits					
• Actives	93,114	83,289	95,113	96,707	99,632
(projected to 65)					
• Retirees ¹	27,081	27,844	31,763	28,116	33,487
(5) Other Averages for					
Actives					
• Past Service	14.72	14.95	14.80	14.02	13.53
• Age	44.80	45.24	45.53	45.32	45.15
• Retirement Age	59.11	59.16	59.23	59.26	59.25
(6) Other Averages for					
Retirees ¹					
• Retirement Age	58.30	58.20	58.09	58.04	58.04
• Attained Age	67.83	68.07	68.20	68.23	68.47
(7) New Retirees ¹					
• Number	77	65	84	79	72
• Avg. Ret. Age	58.37	57.21	57.54	58.83	58.95

¹ Excluding survivors, alternate payees and Prudential retirees.

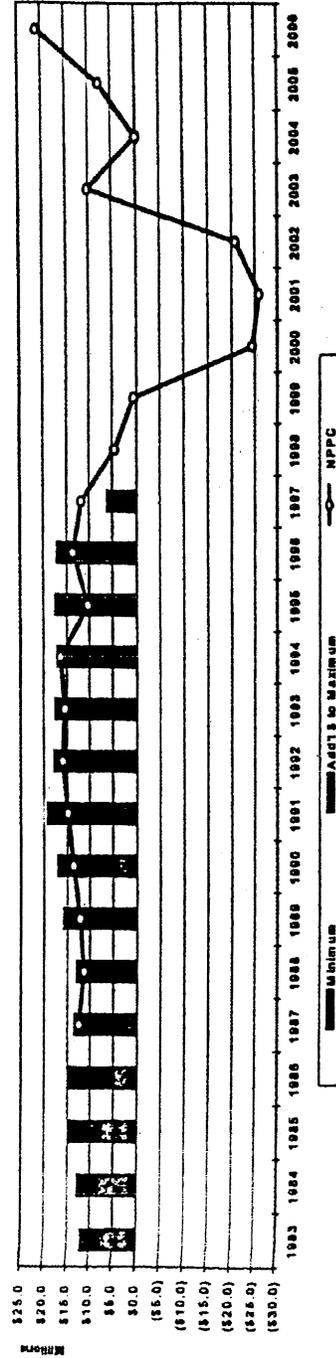
HEI RETIREMENT PLAN: Asset Cashflow - Benefits/Expenses vs. Contributions

Year	Benefit Payments	Expenses	Total Outflow	Contributions
1983	\$7,727,921	\$585,732	\$8,313,653	\$11,216,682
1984	8,425,853	789,984	9,195,837	12,805,408
1985	9,346,239	808,264	10,154,503	14,897,995
1986	9,854,667	1,244,370	11,099,037	13,270,851
1987	10,952,776	1,349,951	12,302,727	11,427,900
1988	11,862,400	1,435,385	13,297,785	11,289,571
1989	13,036,957	1,225,823	14,262,780	12,116,098
1990	14,291,392	286,721	14,578,103	13,624,014
1991	15,511,597	286,566	15,808,163	14,673,223
1992	14,439,555	473,369	14,912,924	15,848,276
1993	14,707,192	286,704	15,005,896	15,392,275
1994	15,844,498	280,706	16,135,204	16,287,071
1995	17,049,667	441,706	17,491,373	12,828,124
1996	18,121,957	3,619,241 (all expenses)	22,741,198	12,079,528
1997	21,146,578	3,874,287	25,020,865	10,471,017
1998	23,214,598	3,949,868	27,164,466	4,096,291
1999	27,101,804	3,774,238	30,876,042	-
2000	30,138,225	5,476,911	35,615,136	-
2001	31,784,780	4,488,786	36,273,566	-
2002	33,467,894	3,980,328	37,448,222	-
2003	33,994,987	2,917,908	36,912,895	22,651,446
2004	38,375,936	3,102,464	41,478,400	28,380,429
2005	40,308,615	3,188,236	43,496,851	7,500,000



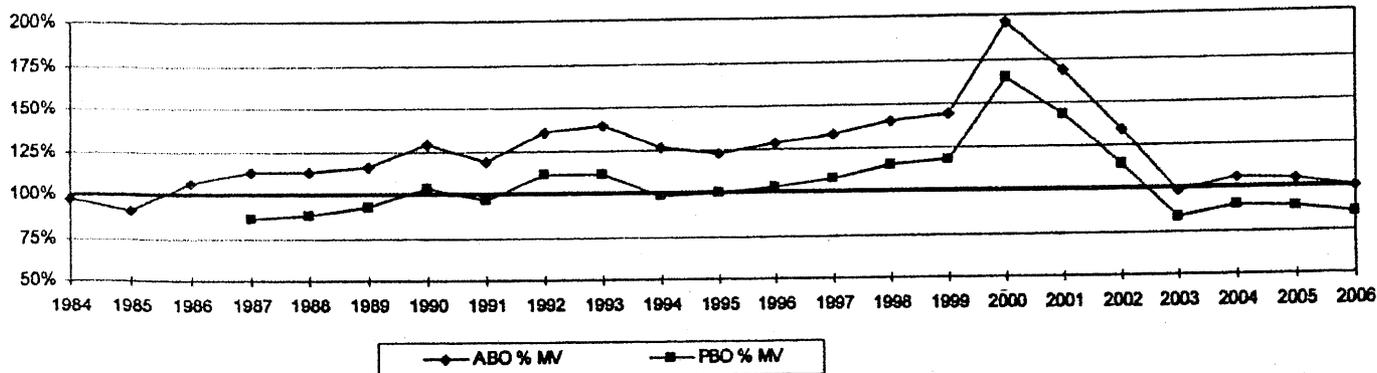
HEI RETIREMENT PLAN: Range of Contributions / Pension Cost

Year	Minimum	% Pay	Traditional Maximum	% Pay	NPPC	% Pay	Funding	NPPC	LTR
1983	\$8,857,469	17.78 %	\$12,074,789	24.23 %			6.50%		
1984	8,943,997	16.40	12,805,408	23.48			6.50		
1985	7,668,465	13.12	14,897,995	25.50			7.50		
1986	5,013,921	7.88	15,046,603	23.66			7.50		
1987	2,359,790	3.39	13,457,144	19.36	\$12,436,173	17.89 %	7.50	7.50 %	7.50%
1988	954,871	1.33	12,902,038	17.93	11,289,571	15.69	7.50	8.00	8.00
1989	2,343,894	3.10	15,737,919	20.80	12,116,098	16.02	7.50	8.50	8.00
1990	4,131,155	5.03	16,960,701	20.65	13,482,767	16.42	7.50	8.50	8.00
1991	2,961,472	3.47	19,118,883	22.98	14,673,223	17.18	7.50	8.50	8.00
1992	98,509	0.11	17,694,286	19.33	15,948,276	17.31	7.50	8.50	8.00
1993	-	0.00	17,465,271	17.11	15,392,275	15.08	7.50	8.50	8.00
1994	-	0.00	16,967,728	15.40	16,297,071	14.75	7.50	8.00	8.00
1995	-	0.00	17,390,075	15.10	10,176,000	8.80	7.50	8.00	9.00
1996	-	0.00	17,032,401	14.30	13,488,828	11.30	7.50	7.00	9.00
1997	-	0.00	6,124,084	5.10	11,711,841	9.70	7.50	7.00	9.00
1998	-	0.00	-	0.00	4,412,296	3.60	8.50	7.00	10.00
1999	-	0.00	-	0.00	486,402	0.40	8.50	6.50	10.00
2000	-	0.00	-	0.00	(24,477,014)	(20.60)	8.50	7.75	10.00
2001	-	0.00	-	0.00	(26,001,019)	(22.07)	8.50	7.50	10.00
2002	-	0.00	-	0.00	(20,874,012)	(17.27)	8.50	7.25	10.00
2003	-	0.00	-	0.00	10,181,389	8.26	8.50	6.75	9.00
2004	-	0.00	-	0.00	(61,928)	(0.05)	8.50	6.25	9.00
2005	-	0.00	-	0.00	7,656,767	5.80	8.50	6.00	9.00
2006	-	0.00	-	0.00	20,963,769	14.97	8.50	5.75	9.00



HEI RETIREMENT PLAN: Funded Status of Plan at January 1

January 1	ABO	% MV	PBO	% MV	MV Assets (Incl. accrued contribution)	Discount Rate
1984	\$135,119,936	97%			\$131,409,160	6.5%
1985	157,874,223	91			143,268,159	7.5
1986	171,367,476	107			182,896,619	7.5
1987	186,610,209	113	\$246,856,364	86%	211,478,855	7.5
1988	188,609,345	113	242,445,900	88	213,101,234	8.0
1989	194,380,013	116	243,894,834	93	226,236,485	8.5
1990	214,398,321	129	267,186,461	103	276,436,920	8.5
1991	231,514,574	119	288,120,866	96	274,375,983	8.5
1992	256,648,112	136	313,812,324	111	348,217,338	8.5
1993	248,083,673	140	310,036,929	112	346,453,246	8.5
1994	321,196,796	126	410,580,447	98	403,548,477	7.0
1995	319,757,290	123	392,916,088	100	393,836,695	8.0
1996	382,811,748	128	476,403,204	103	489,394,709	7.0
1997	409,475,670	133	504,868,667	108	548,584,301	7.0
1998	433,697,661	141	531,279,754	115	610,279,250	7.0
1999	475,336,050	144	582,334,767	118	684,687,066	6.5
2000	437,861,107	196	520,075,908	165	859,274,690	7.75
2001	472,711,553	169	559,317,804	143	800,623,788	7.50
2002	514,105,202	134	605,228,702	114	687,757,720	7.25
2003	571,669,957	98	674,907,195	83	560,257,888	6.75
2004	651,772,869	106	764,492,928	90	690,069,718	6.25
2005	692,379,836	105	814,817,520	89	728,154,539	6.00
2006	745,884,434	100	878,829,001	85	747,265,486	5.75



HEI RETIREMENT PLAN: Investment Return (net of expenses)

Plan Year	Market Value	Actuarial Valuation Value	Market Related Value
1974	-7.47 %	4.74 %	
1975	14.69	4.83	
1976	9.18	-1.54	
1977	3.42	5.12	
1978	6.47	6.75	
1979	11.91	6.97	
1980	13.61	12.31	
1981	8.10	11.63	
1982	20.27	10.60	
1983	14.32	15.06	
1984	5.06	5.87	
1985	23.65	13.77	
1986	13.78	19.44	
1987	0.55	13.15	3.17 %
1988	6.89	0.58	4.34
1989	22.00	9.35	6.32
1990	-1.67	0.78	3.42
1991	25.93	13.48	8.81
1992	4.20	23.51 ¹	12.06
1993	16.16	11.62	27.58 ¹
1994	-2.77	11.27	10.49
1995	26.47	8.96	7.60
1996	13.92	11.27	13.06
1997	15.23	13.49	14.09
1998	16.38	15.03	15.23
1999	30.10	25.19	28.31
2000	-3.32	15.03	11.85
2001	-10.26	13.45	5.04
2002	-13.90	-14.69	-14.52
2003	23.30	2.29 ¹	22.89
2004	10.13	8.67	2.58
2005	7.38	8.68	0.69
Latest 5 Year Average	2.41	3.18	2.65
Latest 10 Year Average	8.03	9.36	9.29
All Years Average	9.57	9.32	9.20

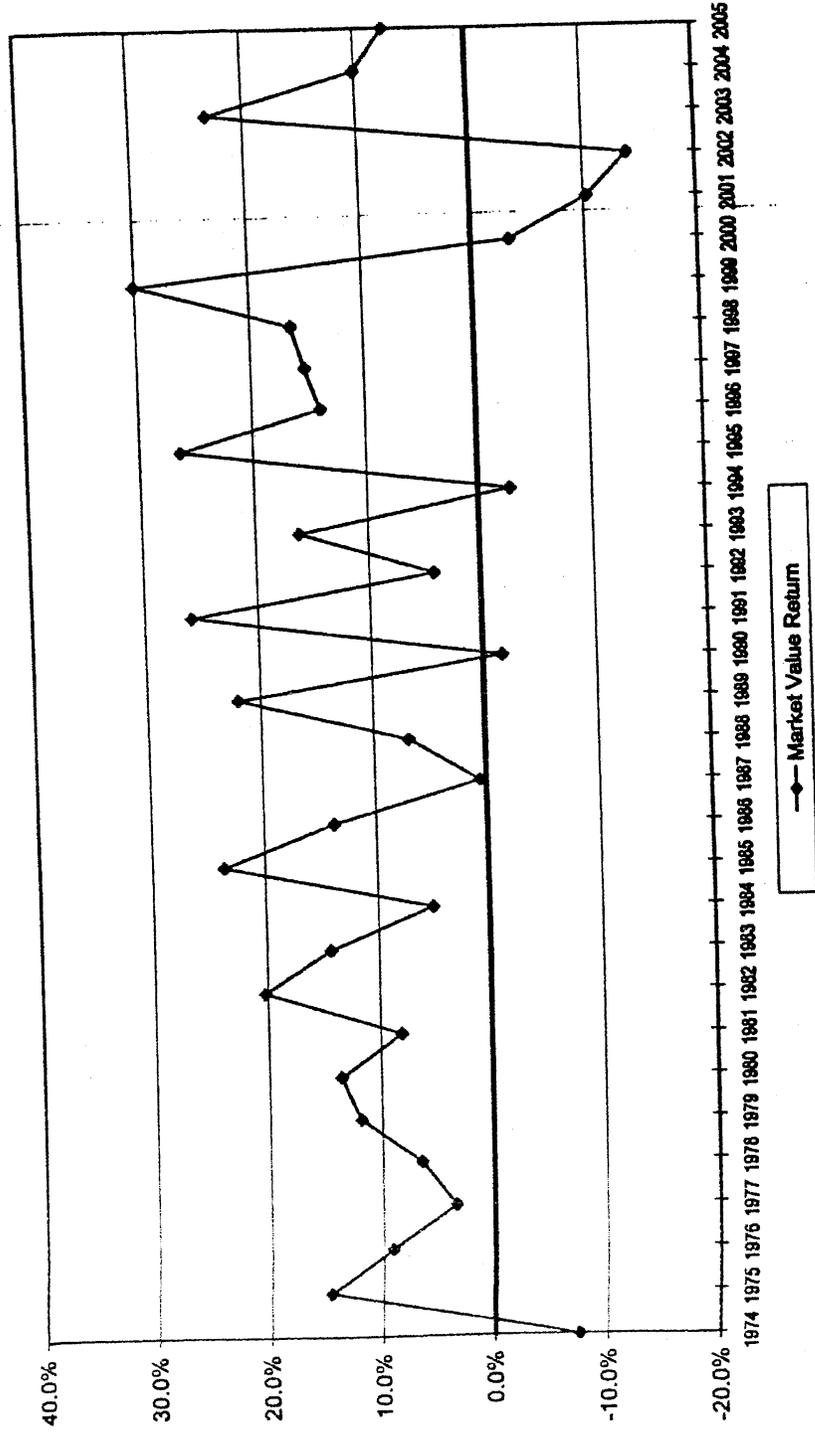
Note: 1998 and later years are net of investment expenses only (i.e., not administrative expenses)

¹ Includes method change





HEI RETIREMENT PLAN: Investment Return (net of expenses)



**Postretirement Welfare
Benefits Plan for Employees of
Hawaiian Electric Company, Inc.
and Participating Employers**

**Valuation as of
January 1, 2006**

INDIVIDUAL INFORMATION ON COMPANIES
OTHER THAN HECO DELETED

WWW.WATSONWYATT.COM

Prepared by:

Watson Wyatt Worldwide
737 Bishop Street, Suite 2340
Honolulu, Hawaii 96813
(808) 535-0500

Table of Contents

Section I.	Executive Summary	1
Section II.	Financial Accounting	4
Section III.	Plan Assets	5
Section IV.	Contributions and Liabilities	9
Section V.	Basic Data.....	11
Section VI.	Summary of Plan.....	14
Section VII.	Actuarial Methods and Assumptions	19



Section I. Executive Summary

Section I: Executive Summary

Background

This report, prepared at the request of Hawaiian Electric Industries, Inc., presents the results of our valuation to determine contributions for the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers.

Employers participating in the plan are:

- Hawaiian Electric Company, Inc. (HECO)
- Hawaii Electric Light Company, Inc. (HELCO)
- Maui Electric Company, Limited (MECO)
- Hawaiian Electric Industries, Inc. (HEI)

The results of the valuation are based on participant data and plan premiums as of January 1, 2006 and trust fund assets as of December 31, 2005.

Funding Postretirement Benefits

The following postretirement benefits are included in the valuation:

- Medical plans
- Vision plan
- Dental plan
- Reimbursement of Medicare Part B premiums
- Group life insurance

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.

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 to 1995. Future health care cost increases after 1995 for nonbargaining employees are funded through the 401(h) account.



A summary of 2006 contributions, both in dollar amounts and as a percentage of covered payroll, is shown below:

Actuarially Determined Contributions

	HECO
BU VEBA Percent of Pay	\$ 0 0.0%
NBU VEBA Percent of Pay	\$3,696,406 3.9%
401(h) Account Percent of Pay	870,497 0.9%
Total Percent of Pay	\$4,566,903 4.8%

Maximum Deductible Contributions

	HECO
BU VEBA ¹	\$ 0
NBU VEBA	3,696,406
401(h) Account ²	870,497
Total	4,566,903

¹ Equal to the unfunded actuarial present value of future benefits per J. Thomas Maloney, plan attorney, in his memo dated August 1, 1996.

² The maximum deductible contribution for the 401(h) account is the lesser of the actuarially determined contribution and the limitation determined from the amount of normal cost contributions to the underlying retirement plan (the "subordination" limit) which HEI is tracking.



Key Employees

Contributions for key employees must be treated as annual additions to defined contribution plans under the contribution limitations of Section 415(c) of the Internal Revenue Code. Contributions for each key employee must be maintained in a separate account and benefits for key employees may be paid only from their own accounts.

The results of this valuation are based on the January 1, 2006 participant data described in Section V, the actuarial methods and assumptions shown in Section VII, the basic plan summarized in Section VI, and the assets in Section III as provided by Hawaiian Electric Industries, Inc.

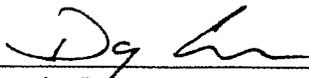
This report should not be distributed to others outside Hawaiian Electric Industries, Inc., Hawaiian Electric Industries, Inc.'s retirement committee, and Hawaiian Electric Industries, Inc.'s auditors and should not be relied upon by any other person without prior written consent from Watson Wyatt Worldwide.

The undersigned consultants of Watson Wyatt Worldwide with actuarial credentials meet the Qualification Standards of American Academy of Actuaries to render the actuarial opinions contained herein. There is no relationship between Hawaiian Electric Industries, Inc. and Watson Wyatt Worldwide that impacts our objectivity.

We would be pleased to review the report with you and answer any questions you may have.

Prepared by:

WATSON WYATT WORLDWIDE



Douglas Lum
Consultant



Leonard Smothermon, A.S.A.
Consulting Actuary



Stephen Carlson, F.S.A.
Actuary



Section II. Financial Accounting

Section II: Financial Accounting under SFAS 106

HECO

- | | | |
|-----|--|--------------------|
| (1) | Accumulated Postretirement Benefit Obligation (APBO) at December 31, 2005: | \$115,069,712 |
| (2) | Changes in Accumulated Postretirement Benefit Obligation: | |
| | a. APBO at January 1, 2005 | \$115,567,245 |
| | b. Plan amendments | 0 |
| | c. Changes in the nature of the plan | 0 |
| | d. Changes in actuarial assumptions | (4,480,687) |
| | e. Benefits earned | 2,901,658 |
| | f. Increase for interest accrual | 6,763,572 |
| | g. Benefits paid | <u>(5,682,076)</u> |
| | h. APBO at December 31, 2005 | 115,069,712 |
| | i. Actuarial (gain)/loss, assumption change | <u>(3,290,518)</u> |
| | j. APBO at January 1, 2006 | 111,779,194 |
- (3) Date of Evaluation of Postretirement Benefit Obligation: The obligation was determined as of January 1, 2005, rolled forward to December 31, 2005, and then recalculated at January 1, 2006.
- (4) Actuarial Cost Method: Projected unit credit – attribute to first full eligibility.
- (5) Accumulated Postretirement Benefit Obligation: The postretirement benefit obligation was determined under Statement of Position 01-2 based on a 5.75% interest rate (6.00% previously).
- (6) Health Care Cost Trend Rate:
- | | | |
|---------|---|---|
| Medical | - | 10% for 2006 grading down to 5% over 5 years (10% for 2005 grading down to 5% previously) |
| Dental | - | 5% |
| Vision | - | 4% |
- If the health care cost trend rates increased by one percentage point in each year, it would increase the obligation as of December 31, 2005 by approximately \$4.3 million.



Section III. Plan Assets

Section III: Plan Assets

Market Value as of January 1, 2006

	<u>HECO</u>
• BU VEBA	\$54,012,567
• NBU VEBA	12,026,240
• 401(h) Account	<u>15,277,406</u>
Total Market Value as of 1/1/2006	\$81,316,213

Valuation Value as of January 1, 2006

	<u>HECO</u>
• BU VEBA	\$53,676,678
• NBU VEBA	11,208,421
• 401(h) Account	<u>15,199,985</u>
Total Valuation Value as of 1/1/2006	\$80,085,084

Historical Return on Plan Assets

<u>Plan Year End</u>	<u>Market Value</u>	<u>Valuation Value</u>
12/31/2005	6.95%	2.02%
12/31/2004	10.66	(2.68)
12/31/2003	25.27	(2.16)
12/31/2002	(15.88)	4.52
12/31/2001	(11.18)	12.02
12/31/2000	(5.63)	19.82
12/31/1999	35.64	11.82
12/31/1998	13.53	10.76
12/31/1997	14.04	8.39
12/31/1996	11.29	7.54
5-Year Average	2.07%	2.61%
All Years Average	7.41	7.00



Determination of Actuarial Valuation Value – BU VEBA

Gain or Loss for 2005

(1)	Market Value on 12/31/2004	
(2)	Contributions	\$ 73,577,288
(3)	Weighted Contributions	3,145,077
(4)	Benefit Payments	1,203,510
(5)	Weighted Benefit Payments	(4,081,779)
(6)	Administrative Expenses	(2,040,890)
(7)	Weighted Administrative Expenses	(21,456)
(8)	Expected Income at 8.5%	(10,728)
(9)	Expected Market Value on 12/31/2005: (1) + (2) + (4) + (6) + (8)	6,181,980
(10)	Actual Market Value on 12/31/2005	78,801,110
(11)	Gain/(Loss) for Year: (10) – (9)	77,554,454
		(1,246,656)

Unrecognized Portion of Gains and Losses

<u>Year Ended</u> <u>December 31</u>	<u>Gain/(Loss)</u>	<u>Percent</u> <u>Gain/(Loss)</u>	<u>Percent</u> <u>Unrecognized</u>	<u>Unrecognized</u> <u>Gain/(Loss)</u>
2002	(15,687,967)	75%	25%	
2003	9,059,881	50	50	\$ (3,921,992)
2004	1,494,663	25	75	4,529,941
2005	(1,246,656)	0	100	1,120,997
				<u>(1,246,656)</u>
Total Unrecognized Gain/(Loss):				\$ 482,290

Valuation Assets

HECO

(1)	Market Value on 12/31/2005	\$ 54,012,567
(2)	Unrecognized Gain/(Loss)	335,889
(3)	Valuation Assets: (1) – (2)	53,676,678



Determination of Actuarial Valuation Value – NBU VEBA

Gain or Loss for 2005

(1)	Market Value on 12/31/2004	\$ 13,224,245
(2)	Contributions	6,034,958
(3)	Weighted Contributions	2,212,863
(4)	Benefit Payments	(2,439,775)
(5)	Weighted Benefit Payments	(1,219,888)
(6)	Administrative Expenses	(120,777)
(7)	Weighted Administrative Expenses	(60,389)
(8)	Expected Income at 4.75%	672,449
(9)	Expected Market Value on 12/31/2005: (1) + (2) + (4) + (6) + (8)	17,371,100
(10)	Actual Market Value on 12/31/2005	17,692,505
(11)	Gain/(Loss) for Year: (10) – (9)	321,405

Unrecognized Portion of Gains and Losses

<u>Year Ended</u> <u>December 31</u>	<u>Gain/(Loss)</u>	<u>Percent</u> <u>Gain/(Loss)</u>	<u>Percent</u> <u>Unrecognized</u>	<u>Unrecognized</u> <u>Gain/(Loss)</u>
2002	(1,215,558)	75%	25%	\$ (303,890)
2003	1,388,411	50	50	694,206
2004	655,226	25	75	491,420
2005	321,405	0	100	321,405
Total Unrecognized Gain/(Loss)				\$ 1,203,141

Valuation Assets

HECO

(1)	Market Value on 12/31/2005	\$12,026,240
(2)	Unrecognized Gain/(Loss)	817,819
(3)	Valuation Assets: (1) – (2)	11,208,421



Determination of Actuarial Valuation Value – 401(h) Account

Gain or Loss for 2005

(1)	Market Value on 12/31/2004	\$ 23,042,976
(2)	Contributions	824,033
(3)	Weighted Contributions	354,840
(4)	Benefit Payments	(1,183,911)
(5)	Weighted Benefit Payments	(591,956)
(6)	Administrative Expenses	(16,933)
(7)	Weighted Administrative Expenses	(8,467)
(8)	Expected Income at 8.5%	1,937,778
(9)	Expected Market Value on 12/31/2005: (1) + (2) + (4) + (6) + (8)	24,603,943
(10)	Actual Market Value on 12/31/2005	24,362,551
(11)	Gain/(Loss) for Year: (10) – (9)	(241,392)

Unrecognized Portion of Gains and Losses

<u>Year Ended</u> <u>December 31</u>	<u>Gain/(Loss)</u>	<u>Percent</u> <u>Gain/(Loss)</u>	<u>Percent</u> <u>Unrecognized</u>	<u>Unrecognized</u> <u>Gain/(Loss)</u>
2002	(4,624,725)	75%	25%	\$ (1,156,181)
2003	2,526,565	50	50	1,263,283
2004	343,667	25	75	257,750
2005	(241,392)	0	100	(241,392)
Total Unrecognized Gain/(Loss):				\$ 123,460

Valuation Assets

HECO

(1)	Market Value on 12/31/2005	\$ 15,277,406
(2)	Unrecognized Gain/(Loss)	77,421
(3)	Adjusted Assets: (1) – (2)	15,199,985
(4)	Accrued Contributions	0
(5)	Valuation Assets: (3) + (4)	15,199,985



Section IV. Contributions and Liabilities

Section IV: Contributions and Liabilities

HECO

Entry Age Normal Cost Method Actuarial Accrued Liability on 1/1/2006

• BU VEBA	\$ 44,318,244
• NBU VEBA	32,116,138
• 401(h) Account	<u>19,583,338</u>
Total	96,017,720

Entry Age Normal Cost Method Normal Cost on 1/1/2006

• BU VEBA	\$ 540,327
• NBU VEBA	822,846
• 401(h) Account	<u>416,586</u>
Total	1,779,759

Administrative Expense Assumption

• BU VEBA	\$ 17,700
• NBU VEBA	14,900
• 401(h) Account	<u>17,600</u>
Total	50,200

Present Value of Future Benefits on 1/1/2006

• BU VEBA	\$ 47,959,502
• NBU VEBA	38,006,353
• 401(h) Account	<u>22,133,174</u>
Total	108,099,029

Valuation Value of Assets on 1/1/2006

• BU VEBA	\$ 53,676,678
• NBU VEBA	11,208,421
• 401(h) Account	<u>15,199,985</u>
Total	80,085,084

Market Value of Assets on 1/1/2006

• BU VEBA	\$ 54,012,567
• NBU VEBA	12,026,240
• 401(h) Account	<u>15,277,406</u>
Total	81,316,213

HECO

Actuarially Determined Contributions

▪ <u>BU VEBA</u>	
Contribution on 1/1/2006	\$ 0
One-half Year's	
Interest at 8.5%	<u>0</u>
Contribution for 2006	0
▪ <u>NBU VEBA</u>	
Contribution on 1/1/2006	\$ 3,610,653
One-half Year's	
Interest at 4.75%	<u>85,753</u>
Contribution for 2006	3,696,406
▪ <u>401(h) Account</u>	
Contribution on 1/1/2006	\$ 802,301
Full Year's	
Interest at 8.5%	<u>68,196</u>
Contribution for 2006	870,497
▪ <u>Total</u>	
	4,566,903

Maximum Deductible Contributions

BU VEBA ¹	\$ 0
NBU VEBA ²	3,696,406
401(h) Account ³	<u>870,497</u>
Total	4,566,903

¹ Equals present value of future benefits minus valuation value of assets.

² Equals actuarially determined contribution.

³ Equals the lesser of the actuarially determined contribution and the limitation determined from the amount of normal cost contributions to the underlying retirement plan (the "subordination" limit), which HEI is tracking.



Section V. Basic Data

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>1/1/2005</u>	<u>1/1/2006</u>
(a) Active Employees		
. BU	1,108	1,139
. NBU	<u>879</u>	<u>925</u>
. Total	1,987	2,064
(b) Retirees	1,283	1,302
(c) Beneficiaries of Deceased Retirees	38	42
(d) Disabled Employees on LTD	<u>9</u>	<u>10</u>
(e) Total	3,317	3,418
(2) Approximate Annual Base Payroll	\$131,950,104	\$140,047,127
(3) Averages for Active Employees		
(a) Years of Past Service	14.02	13.53
(b) Attained Age	45.32	45.15
(c) Retirement Age	59.26	59.25
(4) Retiree Averages		
(a) Retirement Age	58.40	58.30
(b) Attained Age	69.24	69.30





Basic Data by Participating Company as of January 1, 2006

HECO

Basic Data

(1)	Number of Covered Participants	
(a)	Active Employees	
	BU	720
	NBU	<u>697</u>
	Total	1,417
(b)	Retirees	970
(c)	Beneficiaries of Deceased Retirees	31
(d)	Disableds on LTD	<u>8</u>
(e)	Total	2,426
(2)	Approximate Annual Base Payroll	95,820,217
(3)	Averages for Active Employees	
(a)	Years of Past Service	13.32
(b)	Attained Age	44.89
(c)	Retirement Age	59.24
(4)	Retiree Averages	
(a)	Retirement Age	58.16
(b)	Attained Age	69.86

Basic Premium Data (Monthly)

	<u>1/1/2004</u>	<u>1/1/2005</u>	<u>1/1/2006</u>
(1) Medical Plans – Retirees Under 65			
(a) HMSA – Preferred Provider Plan			
- single	\$ 326.95	\$ 342.72	\$ 323.60
- 2 party	654.57	686.23	648.01
(b) HMSA – Health Plan Hawaii Plus			
- single	438.10	463.84	448.91
- 2 party	877.19	928.81	899.00
(c) Kaiser			
- single	373.05	450.53	464.52
- 2 party	746.10	900.06	930.04
(2) Senior Plans (per capita) – 65 and Over			
(a) HMSA 65C+	86.50	92.00	89.90
(b) Kaiser Senior	98.02	97.60	122.52
(3) Dental Plan (composite)	59.02	63.65	65.93
(4) Vision Plan (composite)	12.50	10.38	10.85
(5) Senior Drug Plan (per capita)	292.17	129.31	109.43



Section VI. Summary of Plan

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%



- (b) Benefits
The plan provides medical coverage for eligible retirees, their eligible spouses, and unmarried dependent children under age 19. Several alternative plans are available. Upon attainment of age 65, the plan provides a Medicare supplement.

Benefits for retirees continue for their lifetimes. Benefits for eligible dependents or spouses continue for two years following the death of the retiree.
- (2) Vision Benefits
 - (a) Eligibility
Same as (1)(a) above.
 - (b) Benefits
The plan provides vision coverage for eligible retirees, their eligible spouses, and unmarried dependent children under the age of 19 (currently Vision Service Plan).

Benefits for retirees continue for their lifetimes. Benefits for eligible dependents or spouses continue for two years following the death of the retiree.
- (3) Dental Benefits
 - (a) Eligibility
Same as (1)(a) above.
 - (b) Benefits
The plan provides dental coverage for eligible retirees, their eligible spouses, and unmarried dependent children under the age of 19 (currently through Hawaii Dental Service).

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



(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

(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. 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.

(b) Benefits

The plan provides drug coverage for eligible retirees and their eligible spouses (currently through HMSA).

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.



Section VII. Actuarial Methods and Assumptions

Section VII: Actuarial Methods and Assumptions

Actuarial Cost Method

The actuarial cost method used in valuing a benefit plan provides for the funding or expensing of benefit plan costs on an orderly basis. It is the actuarial cost method, which assigns the costs of the plan to the years of an employee's service during which benefits are to be funded.

The entry age normal (level dollar) actuarial cost method was used in the valuation. Under this method, the contributions are the sum of (1) the actuarial present value of benefits attributable to the current year's service (the normal cost) and (2) an amortization of the unfunded actuarial present value of benefits attributable to past service (the unfunded actuarial accrued liability).

A participant's current service benefit is the amount resulting from an even spreading of his benefits over his service, calculated from his plan entry date. His benefit attributable to past service is equal to an accumulation of his current service benefits for all years since entry into the plan.

Asset Valuation Method

The asset valuation method determines the value of assets recognized at any valuation date for purposes of determining the range of contributions to the plan. Generally, asset valuation methods tend to smooth wide market fluctuations and, therefore, recognize the growth of assets on a more orderly basis.

The asset valuation method recognizes the difference between the actual market value of assets and the expected market value of assets as of the valuation date over a five-year period; 0% in the first year and 25% in each of the next four years

Assumptions Related to Plan Benefits

Development of Baseline Health Care Costs

Claims costs were based on a weighted average of 2004, 2005, and 2006 composite premiums (with trending applied to prior years) to estimate net 2006 claims costs. The annual claims costs developed for the 2006 plan year are:

HMSA: The 2006 claims cost was \$7,788 (family composite) under age 65 and \$1,188 (per capita) over age 65.

The claims costs below age 65 were age related because claims normally increase as participants age. We assumed increases of 1.5% per year below age

45 and 4% per year from age 45 to age 65 (does not include medical trend) for HMSA benefits where premiums are not community rated. Premiums are community rated above age 65, and thus were not age rated.

The resulting claims costs at age 65 are:

2006 HMSA Claims Cost at Age 65		
	Current Retirees	Current Actives*
Before Medicare Eligibility (family composite)	\$9,451	\$9,640
After Medicare Eligibility (per capita)	1,188	1,188

* The plan provides benefits only after retirement. The higher cost for actives is due to their pattern of medical plan elections and the marital status assumption.

Kaiser: The 2006 claims cost was \$5,652 (single) or \$11,784 (family composite) before age 65 and \$1,188 (per capita) for age 65 and over, based on 2006 composite community rated premiums.

Dental: The 2006 claims cost was \$792 (composite).

Vision: The 2006 claims cost was \$132 (composite).

Health Care Cost Trend Rates

Assumed rates by which health care costs are expected to increase annually:

Medical: 10.0% for 2006, grading down to 5% over 5 years.

Dental: 5.0% per year

Vision: 4.0% per year

Medicare Part D Subsidies

Federal subsidies provided under Medicare Part D are treated as negative benefit payments, reducing both the normal cost and the actuarial accrued liability. Subsidies are assumed to be available for years 2006-2016. The average annual subsidy is assumed to be \$553 per retiree for 2006, increasing in future years according to the assumed medical trend rates.

Other Actuarial Assumptions

(1) Interest Rate:	BU VEBA	8.50%
	NBU VEBA	4.75%
	401(h) Account	8.50%

The 4.75% interest rate used for the Non-Bargaining group VEBA reflects investment return after taxes.

(2) Salary Increases:

Not applicable.

(3) Mortality:

The 1983 Group Annuity Mortality Table with separate rates for males and females.

(4) Withdrawal:

The following schedule shows representative rates at selected ages.

Age	Rates	
	Males	Females
20	7.4%	6.3%
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	0.4
55 and over	0.0	0.0

(5) Retirement Age:

The following schedule shows the assumed rates of retirement.

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) Marital Status: 79% of male participants and 66% of female participants are assumed to be married, with female spouses three years younger than male spouses.
- (7) Administrative Expenses (not including investment-related expenses)
- | | |
|----------------|-------------------|
| BU VEBA | \$25,000 per year |
| NBU VEBA | 25,000 per year |
| 401(h) Account | 25,000 per year |





BENEFIT AGREEMENT

by and between

HAWAIIAN ELECTRIC COMPANY, INC.

HAWAII ELECTRIC LIGHT COMPANY, INC.

MAUI ELECTRIC COMPANY, LTD.

and

LOCAL 1260

of the

**INTERNATIONAL BROTHERHOOD
OF ELECTRICAL WORKERS
AFL-CIO**

1998 - 2007

Honolulu, Hawaii

Effective Date: November 1, 2003

Terminates: October 31, 2007

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1 Duration.....	1
2 Medical Plan.....	2
3 Drug Plan.....	7
4 Vision Plan.....	10
5 Dental Plan.....	11
6 Retirement Plan.....	12
7 Group Life Insurance Plan.....	13
8 Long Term Disability Plan.....	14
9 Accident Insurance.....	15
10 FlexPlan.....	16

BENEFIT AGREEMENT

THIS BENEFIT AGREEMENT by and between **Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc., and Maui Electric Company, Ltd., Hawaii Corporations**, hereinafter called the "**Companies**", and **LOCAL UNION 1260 of the International Brotherhood of Electrical Workers, AFL-CIO**, hereinafter called the "**Union**".

WITNESSETH:

SECTION 1

DURATION

This agreement is effective November 1, 2003 and shall remain in effect until October 31, 2007. It shall be deemed renewed from year to year unless either party, not less than sixty days nor more than seventy-five days prior to the expiration date, gives notice to the other party of its desire to amend or terminate the agreement.

In the event such notice is given, and only in such event, negotiations for a new agreement shall commence within ten days after the date on which the other party received such notice.

SECTION 2

MEDICAL PLANS

Medical plans will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefit Plan. The Companies will provide regular full-time employees, their spouses, and unmarried dependent children under the age of 19 or under the age of 25, if full-time students, medical plan coverage under one of the following plans ("medical plans"), subject to the membership requirements of the Collective Bargaining Agreement:

Medical plans prior to January 1, 2005, are provided in the Benefit Agreement effective November 1, 1998, to October 31, 2000, as amended effective November 1, 2000, through October 31, 2003.

Effective January 1, 2005:

- (1) HMSA Preferred Provider Plan ("PPP") with coverage at 90% of eligible charges with \$50 per person/\$150 per family annual deductible*, \$2,500 per person/\$7,500 per family calendar year maximum out-of-pocket limit, and \$1,000,000 maximum lifetime benefit.
- (2) HMSA Health Plan Hawaii Plus Plan ("HPH Plus") with \$12.00 per visit co-payment, and \$1,500 per person/\$4,500 per family calendar year maximum out-of-pocket limit with no lifetime maximum.
- (3) Kaiser Permanente Group Plan E ("Kaiser") with \$12.00 per visit co-payment, \$12.00 per dept. per day lab/x-ray services co-payment and \$1,500 per person/\$4,500 per family calendar year maximum out-of-pocket limit with no lifetime maximum.

Effective January 1, 2006:

- (1) HMSA PPP with coverage at 90% or eligible charges with \$100 per person/\$300 per family annual deductible*, \$2,500 per person/\$7,500 per family calendar year maximum out-of-pocket limit, and \$1,000,000 maximum lifetime benefit.
- (2) HMSA HPH Plus with \$15.00 per visit co-payment, \$50.00 per hospital admission co-payment and \$1,500 per person/\$4,500 per family calendar year maximum out-of-pocket limit with no lifetime maximum.

- (3) Kaiser with \$15.00 per visit co-payment, \$15.00 per dept. per day lab/x-ray services co-payment, \$50.00 per hospital admission co-payment and \$1,500 per person/\$4,500 per family calendar year maximum out-of-pocket limit with no lifetime maximum.

Effective January 1, 2007:

- (1) HMSA PPP with coverage at 80% of eligible charges with \$100 annual deductible* for other services only, \$3,000 per person/\$9,000 per family calendar year maximum out-of-pocket limit, and \$1,000,000 maximum lifetime benefit.
- (2) HMSA HPH Plus with \$18.00 per visit co-payment, \$50.00 per hospital admission co-payment and \$1,750 per person/\$5,250 per family calendar year maximum out-of-pocket limit, with no lifetime maximum.
- (3) Kaiser with \$18.00 per visit co-payment \$18.00 per dept. per day lab/x-ray services co-payment, \$50.00 per hospital admission co-payment and \$1,750 per person/\$5,250 per family calendar year maximum out-of-pocket limit with no lifetime maximum.

Effective January 1, 2008:

- (1) HMSA PPP – same as prior year.
- (2) HMSA HPH Plus with \$20.00 per visit co-payment, \$100 per hospital admission co-payment and \$1,750 per person/\$5,250 per family calendar year maximum out-of-pocket limit with no lifetime maximum.
- (3) Kaiser with \$20.00 per visit co-payment, \$20.00 per dept. per day lab/x-ray services co-payment, \$100 per hospital admission co-payment and \$1,750 per person/\$5,250 per family calendar year maximum out-of-pocket limit with no lifetime maximum.

* Deductible does not apply to well-child care and preventive services such as PSA, pap smear and mammography.

Plan provisions are included in the Summary Plan Description and HMSA and Kaiser brochures.

An employee will be eligible for coverage on the first of the month coincident with or following the date he/she becomes a regular full-time employee.

The Companies will provide probationary employees, their spouses, and unmarried dependent children under the age of 19 or under the age of 25, if full-time students, coverage under the HMSA HPH Plus ((2) above).

A probationary employee will be eligible for coverage on the first of the month coincident with or following the employee's hire date. Probationary employees electing coverage are required to contribute the following amounts as applicable:

<u>Coverage</u>	<u>Monthly Contribution</u>			
	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Single	\$12.00	\$13.00	\$14.00	\$15.00
Single Parent	24.00	26.00	28.00	30.00
Couple	36.00	39.00	42.00	45.00
Family	48.00	52.00	56.00	60.00

Upon retirement, medical plan coverage will be provided under the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers. Regular full-time employees who terminate due to retirement after qualifying for a pension benefit under the Retirement Plan (Section 6), their eligible spouses and eligible dependents will be provided coverage in one of the medical plans listed above ((1),(2),(3)). Spouses are eligible for coverage by the health plans provided the spouse does not have comparable coverage available from his/her employer or former employer. At the time the eligible retiree and his/her eligible spouse reach Medicare age, medical plan coverage will be provided by one of the following Medicare supplement plans:

- (4) HMSA 65-C Plus Plan
- (5) Kaiser Senior Advantage Plan

The Companies will reimburse the eligible retiree and eligible spouse each up to \$24.80 a month for Medicare Part B premiums paid by the retiree and spouse.

Upon the death of an eligible employee or eligible retiree, coverage under the medical plans ((1),(2),(3),(4),(5)) for eligible dependents will continue for two years.

Upon retirement, the Companies will contribute towards health plan (medical/drug, dental and vision) premiums for eligible employees, their eligible spouses and eligible dependents based on the employee's years of service at retirement as follows:

<u>Yrs. of Service at Retirement</u>	<u>Co. Contribution % of Health Plan Premium</u>
0 - 5	0%
6 - 9	25%
10 - 14	50%
15 - 19	75%
20+	100%

Table 1

The Companies' contribution for eligible employees who had at least 11 years of service as of December 31, 1993, will be 100% of health plan premiums.

For eligible employees who were hired prior to January 1, 1999, and who retire on or after January 1, 1999, the Companies' annual contribution towards health plan premiums upon retirement will be based on Table 1 above, subject to the following maximum annual limits:

	<u>Maximum Annual Co. Contribution</u>
Retiree, spouse & dependents (Not covered by Medicare)	\$15,000 (medical/drug, dental, vision)
Single retiree or single spouse (Not covered by Medicare)	\$ 7,500 (medical/drug, dental, vision)
Single retiree or spouse (Covered by Medicare)	\$ 3,000 (medical)

Table 1A

For eligible employees who are hired on or after January 1, 1999, and subsequently retire, the Companies' annual contribution towards health plan premiums upon retirement will be based on the following table and maximum annual limits:

	<u>Co. Contribution % of Health Plan Premium</u>	<u>Maximum Annual Company Contribution</u>
Retiree, spouse & dependents (Not covered by Medicare)	50%	\$10,000 (medical/drug, dental, vision)
Single retiree or single spouse (Not covered by Medicare)	50%	\$5,000 (medical/drug, dental, vision)
Single retiree or spouse (Covered by Medicare)	100%	\$ 2,500 (medical/drug)

Table 2

SECTION 3

DRUG PLAN

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

Drug riders prior to January 1, 2005, are provided in the Benefit Agreement effective November 1, 1998, to October 31, 2000, as amended effective November 1, 2000, through October 31, 2003.

Plan provisions are included in the Summary Plan Description and HMSA and Kaiser brochures.

The drug rider for the HMSA PPP and HPH Plus medical plans will be the HMSA Point of Service drug rider (171) modified as follows:

Effective January 1, 2005, to provide pre-paid co-payments of \$7.00 for generic, \$14.00 for preferred brand name, and 20% of eligible charge for non-preferred brand name drugs. \$14.00 for generic and \$28.00 for brand name drugs through mail order (90 day supply);

Effective January 1, 2006, to provide pre-paid co-payments of \$10.00 for generic, \$20.00 for preferred brand name, and 25% of eligible charge for non-preferred brand name drugs. \$20.00 for generic and \$40.00 for brand name drugs through mail order (90 day supply);

Effective January 1, 2007 and January 1, 2008, to provide pre-paid co-payments of \$12.00 for generic, \$24.00 for preferred brand name, and 30% of eligible charge for non-preferred brand name drugs. \$24.00 for generic and \$48.00 for brand name drugs through mail order (90 day supply).

The drug rider for the Kaiser Plan will provide pre-paid co-payments as follows:

Effective January 1, 2005 to provide pre-paid co-payments of \$10.00 and \$20.00 through mail order (90 day supply);

Effective January 1, 2006 to provide pre-paid co-payments of \$12.00 and \$24.00 through mail order (90 day supply);

Effective January 1, 2007 and January 1, 2008 to provide pre-paid co-payments of \$14.00 and \$28.00 through mail order (90 day supply).

Upon retirement, drug coverage will be provided under the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers. Employees, their spouses and dependents that are covered under a medical plan upon retirement, will be covered under the appropriate drug plan (HMSA, Kaiser), until Medicare age.

Upon the death of an eligible employee or eligible retiree, coverage under the drug rider for eligible dependents will continue for two years or until Medicare age, if earlier.

Upon retirement, the Companies will contribute towards the drug premium for eligible employees as outlined in Section 2, Medical Plans.

Eligible employees who were hired prior to January 1, 1999, and who retire on or after January 1, 1999, and their eligible spouses will receive coverage under a post-Medicare drug plan when each becomes eligible for Medicare and enrolls in a Medicare supplement plan ((4)(5), Section 2).

The post-Medicare drug plan for employees who retired from January 1, 1999, through December 31, 2003 will provide for pre-paid co-payments of \$5.00 for generic and \$10.00 for name brand drugs for up to a 30-day supply, and pre-paid co-payments of \$8.00 for generic and \$16.00 for name brand drugs only through mail order for a 90-day supply.

The post-Medicare drug plan for employees who retire on or after January 1, 2004, will be the same as the plans described above for regular full-time employees on the dates specified above.

The Companies will contribute towards the post-Medicare drug plan premium based on the following table according to the employee's years of service at retirement and maximum annual limits:

<u>Yrs. of Service at Retirement</u>	<u>Co. Contribution % of Premium</u>	<u>Annual Maximum Company Contribution Per Person</u>
0 - 5	0	0
6 - 9	25%	\$ 400
10 - 14	50%	\$ 800
15 - 19	75%	\$1,200
20+	100%	\$1,600

Table 3

For eligible employees who are hired on or after January 1, 1999, and subsequently retire, the Companies' annual contribution towards the post-Medicare drug plan premium upon retirement will be as indicated in Table 2, Section 2, Medical Plans.

SECTION 4

VISION PLAN

Vision Plan coverage will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefits Plan. The Companies will provide regular full-time employees, their spouses and unmarried dependent children under the age of 19 or under the age of 25, if full-time students, that are covered under a medical plan, coverage under the vision plan.

Plan provisions are included in the Summary Plan Description and Vision Service Plan ("VSP") brochure.

Effective January 1, 2005, vision plan benefits will be under the VSP Enhanced Plan B with one frame allowance every 24 months and a frame allowance upgrade to \$95 retail.

Upon retirement, vision plan coverage will be provided under the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers. Employees, their spouses and dependents that qualify for medical plan coverage upon retirement will be covered under the vision plan.

Upon the death of an eligible employee or eligible retiree, coverage under the vision plan for eligible dependents will continue for two years.

Upon retirement, the Companies will contribute towards the vision plan premiums for eligible employees as outlined in Section 2, Medical Plans.

For eligible employees who were hired prior to January 1, 1999, and who retire on or after January 1, 1999, and their eligible spouses, coverage under the vision plan will terminate when each reaches Medicare age.

Coverage for eligible dependents of employees who retire on or after January 1, 1999, will continue for two years or until Medicare age, if earlier, following the death of the eligible retiree.

SECTION 5

DENTAL PLAN

Dental Plan coverage will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefits Plan. The Companies will provide regular full-time employees, their spouses, and unmarried dependent children under the age of 19 or under the age of 25, if full-time students, dental plan coverage, subject to the membership requirements of the Collective Bargaining Agreement.

Dental plans prior to January 1, 2005, are provided in the Benefit Agreement effective November 1, 1998, to October 31, 2000, as amended effective November 1, 2000, through October 31, 2003.

Effective January 1, 2005, the Companies will provide one dental plan, the Hawaii Dental Service ("HDS") Association Major Care Plan.

Plan provisions are included in the Summary Plan Description and HDS brochure.

An employee will be eligible for coverage on the first of the month coincident with or following the date he/she becomes a regular full-time employee.

Upon retirement, dental plan coverage will be provided under the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers. Employees who terminate due to retirement after qualifying for a pension benefit under the Retirement Plan (Section 6), their eligible spouses and eligible dependents will be provided coverage under the dental plan.

Upon the death of an eligible employee or eligible retiree, coverage under the dental plan for eligible dependents will continue for two years.

Upon retirement, the Companies will contribute towards the dental plan premiums for eligible employees as outlined in Section 2, Medical Plans.

For eligible employees who were hired prior to January 1, 1999, and who retire on or after January 1, 1999, and their eligible spouses, coverage under the dental plan will terminate when each reaches Medicare age. Coverage for eligible dependents of employees who retire on or after January 1, 1999, will continue for two years or until Medicare age, if earlier, following the death of the eligible retiree.

SECTION 6
RETIREMENT PLAN

Regular full-time employees are eligible to participate in the Retirement Plan for Employees of Hawaiian Electric Industries, Inc. and Participating Subsidiaries ("Retirement Plan"). Plan provisions are included in the Summary Plan Description.

Effective January 1, 1999, the Retirement Plan will be amended as follows:

- (1) Participants who retire from active employment on or after January 1, 1999, will have an option to take up to \$50,000 of their accrued retirement benefits in a lump sum at retirement.
- (2) Effective for participants who retire on or after January 1, 1999, the "Pop Up" contingent annuitant option will be eliminated.
- (3) Effective January 1, 1999, a pre-retirement survivor benefit will be available for unmarried participants who are vested and die prior to receiving retirement benefits.

Regular full-time employees are eligible to participate in the Hawaiian Electric Industries Retirement Savings (hereinafter "HEIRS") 401(k) Plan effective January 1, 1989. Plan provisions are included in the Summary Plan Description.

SECTION 7

GROUP LIFE INSURANCE PLAN

Group life insurance benefits will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefits Plan. Regular full-time employees will be provided group life insurance coverage options as follows:

\$50,000

½ times annual pay

1½ times annual pay

2½ times annual pay

3½ times annual pay

Life insurance coverage for dependents will be available as an option provided employees pay the full premium.

An employee will be eligible for coverage on the first of the month coincident with or following the date he/she becomes a regular full-time employee.

Upon retirement, group life insurance benefits will be provided under the Postretirement Welfare Benefits Plan for Employees of Hawaiian Electric Company, Inc. and Participating Employers. Eligible retirees will be provided group life insurance coverage of \$20,000.

Plan provisions are included in the Summary Plan Description and Group Life Insurance certificate.

SECTION 8

LONG TERM DISABILITY PLAN

Long Term Disability benefits will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefits Plan. Regular full-time employees will be covered under an insured Long Term Disability Plan ("LTD Plan").

Plan provisions are included in the Summary Plan Description and Long Term Disability certificate.

An employee will be eligible for coverage on the first of the month following six months of service as a regular full-time employee.

The LTD Plan generally provides eligible employees who are totally disabled (the first 24 months from their own job, thereafter from any job within the companies) with benefits of 60% of their straight time pay or 60% of the prevailing Lineman Thereafter rate, whichever is less. Payments begin after sickness and vacation benefits and temporary disability (TDI) benefits, as provided in the Collective Bargaining Agreement, are exhausted. LTD payments are offset by other income such as Social Security, Worker's Compensation, pension and any company-provided wage or benefit payments received by the employee.

Benefits are payable as long as the employee remains totally disabled 1) until the attainment of his/her 65th birthday, if disabled before age 60, 2) for 54 months, if disabled between ages 60-64, 3) for 30 months, if disabled between ages 65-70, 4) for 18 months, if disabled after age 70, but before age 75, or 5) for 12 months, if disabled at age 75 or over.

SECTION 9

ACCIDENT INSURANCE

Business Travel Accidental Death & Dismemberment insurance coverage will be provided under the Hawaiian Electric Industries, Inc. Welfare Benefits plan. Regular full-time employees will be covered under a Business Travel Accident Policy which provides \$75,000 of accidental death and dismemberment coverage while they are away from their home base on company business.

The policy will also provide \$200,000 of death benefits while traveling by helicopter as passengers on company business anywhere in Hawaii.

SECTION 10

FLEXPLAN

Employees are eligible to participate in the Hawaiian Electric Industries, Inc. FlexPlan ("FlexPlan") effective the first of the month coincident with or following the date he/she becomes a regular full-time employee.

1. FlexPlan will include as primary benefit options medical/drug, dental, and vision plans (collectively "health plans" as described in Sections 2, 3, 4, and 5), and employee group life insurance (as described in Section 7). Secondary benefit options under FlexPlan will include dependent life and accidental death and dismemberment insurance plans.
 - a. Flex Credits
 - 1) The Companies will provide Flex Credits for group life insurance in an amount equal to the premiums for coverage of $1\frac{1}{2}$ x annual base pay for each employee.
 - 2) Flex credits for the health plans will be \$67.54 per pay period for 24 pay periods.
 - b. Flex Prices
 - 1) Flex prices for group life insurance will be in an amount equal to the premiums for the coverage selected by each employee.
 - 2) Flex prices prior to January 1, 2005, are provided in the Benefits Agreement effective November 1, 1998, to October 31, 2000, as amended effective November 1, 2000, through October 31, 2003.

- 3) For January 1, 2005 to December 31, 2008, Flex Prices for health plans will be determined by the Companies provided employee contributions for health plans will be limited to the following:

	<u>Pay Period</u>	<u>Annual Amount</u>
<u>January 1, 2005</u>		
Single	\$ 6.00	\$ 144.00
Single Parent	\$12.00	\$ 288.00
Couple	\$18.00	\$ 432.00
Family	\$24.00	\$ 576.00
<u>January 1, 2006</u>		
Single	\$ 6.50	\$ 156.00
Single Parent	\$13.00	\$ 312.00
Couple	\$19.50	\$ 468.00
Family	\$26.00	\$ 624.00
<u>January 1, 2007</u>		
Single	\$ 7.00	\$ 168.00
Single Parent	\$14.00	\$ 336.00
Couple	\$21.00	\$ 504.00
Family	\$28.00	\$ 672.00
<u>January 1, 2008</u>		
Single	\$ 7.50	\$ 180.00
Single Parent	\$15.00	\$ 360.00
Couple	\$22.50	\$ 540.00
Family	\$30.00	\$ 720.00

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

2. An eligible employee may choose the medical (including drug and vision) and dental care plan and the level of coverage (employee only or including eligible dependents), during the open enrollment period in accordance with the rules of the FlexPlan.
3. Other than during an open enrollment period, changes to the choice of plan, level of coverage and spending accounts can only be made when a change in family status occurs in accordance with the rules of the FlexPlan.
4. FlexPlan participants are eligible to participate in the Hawaiian Electric Industries, Inc. Health Care Reimbursement Plan and Dependent Care Reimbursement Plan ("Spending Accounts").
5. The Companies will use HMSA, Kaiser, HDS, and VSP as providers for health care plans. Any substitutions or deletions of these providers, or plan design changes to stabilize rates will be made by mutual consent of the Companies and the Union. The Companies may introduce new providers upon at least sixty days notice to the Union, prior to any notice to employees.
6. The Companies will comply with tax laws that currently affect or may affect the operation of FlexPlan or Spending Accounts.
7. Should any Federal law place restrictions or limitations on FlexPlan or Spending Accounts after the effective date of this agreement that have an adverse effect on the Companies or employees, the Companies and the Union mutually agree to negotiate a comparable plan as soon as practicable, given the effective date of such Federal law.
8. Active employee costs and claims experience for insurance plans will be kept separate from the retiree cost and claims experience.

IN WITNESS WHEREOF the parties hereto, through their duly authorized representatives, have executed this agreement effective November 1, 2003.

HAWAIIAN ELECTRIC COMPANY, INC.
HAWAII ELECTRIC LIGHT
COMPANY, INC.
MAUI ELECTRIC COMPANY, LTD.

LOCAL UNION 1260 of the
INTERNATIONAL BROTHERHOOD OF
ELECTRICAL WORKERS

By/s/ Michael H. McInerney

By/s/ Patricia Uychara Wong

By/s/ Warren H.W. Lee

By/s/ Aaron K. Fujinaka

By/s/ Harold K. Kageura

By/s/ Teri Y. Kam

By/s/ Lori Ann K.K.K. Nagata

By/s/ Rhea R.L. Nakaya

By/s/ Julie K. Price

By/s/ Scott W.H. Seu

By/s/ Ernest T. Shiraki

By/s/ Eileen S. Wachi

By/s/ Harry H.K. Kameenui

By/s/ Roy S. Franco

By/s/ John B. Jumalon

By/s/ Shamus Evans

By/s/ Annie Freitas

By/s/ Keola N. Jimeno

By/s/ John Kaalekahi

By/s/ Miles Y. Nakasone

By/s/ Patrick J. O'Toole

By/s/ Scott A. Robertson

By/s/ Loren M. Taguchi

By/s/ Alvin H. Vierra

- 1 9. Unless approved by the Safety Committee, helicopters will be used only for line
2 inspections, transporting personnel and transporting material.
3
- 4 10. Union shop stewards and officers will be entitled to one hour pay at a straight time rate
5 each month for the purpose of attending shop stewards' meetings.
6
- 7 11. It is the policy of the Company and the Union not to discriminate against any employee
8 because of race, religion, ancestral origin, color, religion, sex, national origin, age, marital
9 status, arrest and court record, sexual orientation, disability, military service, or other
10 grounds protected under applicable State and Federal laws.
11
- 12 12. Discounts to Employees - The Company will continue the present practice of granting
13 discounts to employees and pensioners on electric light and power. The employee's
14 electric light and power discount will be equal to one third of the employee's monthly KWH
15 usage up to a cap of 275 KWH. This KWH cap is equal to one third of 825 KWH, which is
16 the average 1994 usage of Schedule E (Employee) customers. This discount is
17 transferable between companies. The discount shall be calculated at the prevailing
18 Schedule E rate for the island on which the employee resides.
19
- 20 13. Personal Tools Required by Employees for Certain Jobs - The employee is expected to
21 own certain tools required by the particular craft. Lists are printed separately indicating
22 minimum tool requirements in the craft classifications.
23
- 24 14. Self-Improvement Courses - An employee who successfully completes a self-improvement
25 course that had prior approval by the Company will be reimbursed for one-half of the
26 tuition cost for a course that is indirectly related to the employee's present job. The
27 Company will reimburse the employee 100% for courses that are directly job related.
28
- 29 15. Before an employee is to be assigned to work outside of the State of Hawaii, the Company
30 and the Union will negotiate the terms and conditions that will apply to such assignment.
31
- 32 16. When contracting or employing temporary help, management will authorize overtime as
33 follows:
34
- 35 (a) During periods that work traditionally performed by the Company is being either
36 contracted or performed by a temporary employee, an employee who would have
37 normally performed the work will be scheduled for not less than six days per week,
38 two weeks out of three.
39
- 40 (b) It is not the intention of the Company to expand the present areas being
41 contracted.
42
- 43 17. Height Differential - For all work performed on metal towers, wood poles, or structures
44 within a substation or switching station, when an employee is working on a circuit where at
45 least one wire of this circuit is seventy feet or more above ground at the structure or for all
46 other work performed at heights of seventy feet or more above a landing on poles, towers,
47 structures, smoke stacks or from a bosun chair or suspended steel cage, a \$12.00 per day
48 height differential will be paid.
49
- 50 On overtime work the pay will be computed on the employee's base rate plus \$1.50 per
51 hour.

UTILITIES 2007 Active Premium Basis -- 5-Year Average

		2002	2003	%	2004	%	2005	%	2006	%	2007	%	5 Year
		Amount	Amount	Change	Amount	Change	Amount	Change	Amount	Change	Amount	Change	Average
PPP	Single	189.12	195.83	3.55%	207.65	6.04%	208.46	0.39%	202.74	-2.74%	210.41	3.78%	2.16%
	Single Parent	379.54	387.13	2.00%	405.67	4.79%	417.76	2.98%	407.41	-2.48%	422.22	3.64%	2.15%
	Couple	456.71	465.78	1.99%	488.05	4.78%	502.72	3.01%	490.27	-2.48%	508.10	3.64%	2.16%
	Family	493.27	502.54	1.88%	526.15	4.70%	542.86	3.18%	529.50	-2.46%	548.71	3.63%	2.15%
HPH Plus	Single	212.45	220.12	3.61%	232.15	5.47%	237.19	2.17%	232.89	-1.81%	249.77	7.25%	3.29%
	Single Parent	408.60	418.68	2.47%	437.50	4.50%	456.20	4.27%	449.17	-1.54%	482.46	7.41%	3.38%
	Couple	491.69	503.76	2.45%	526.37	4.49%	548.96	4.29%	540.52	-1.54%	580.58	7.41%	3.38%
	Family	534.63	547.10	2.33%	571.11	4.39%	596.88	4.51%	587.86	-1.51%	631.55	7.43%	3.39%
Kaiser	Single	195.72	234.14	19.63%	286.96	22.56%	249.01	-13.22%	258.07	3.64%	253.31	-1.84%	5.29%
	Single Parent	463.27	449.55	-2.96%	550.96	22.56%	478.10	-13.22%	495.50	3.64%	486.35	-1.85%	0.98%
	Couple	488.52	540.86	10.71%	662.88	22.56%	575.22	-13.22%	596.14	3.64%	585.15	-1.84%	3.68%
	Family	535.88	590.03	10.10%	723.14	22.56%	627.51	-13.22%	650.34	3.64%	638.34	-1.85%	3.56%
Vision	Single	7.23	5.85	-19.09%	5.85	0.00%	4.86	-16.92%	5.08	4.53%	5.08	0.00%	-6.82%
	2-Party	11.79	11.70	-0.76%	11.70	0.00%	9.71	-17.01%	10.15	4.53%	10.15	0.00%	-2.95%
	Family	16.81	16.97	0.95%	16.97	0.00%	14.09	-16.97%	14.73	4.54%	14.73	0.00%	-2.61%
Maj-HDS	Single	27.99	28.69	2.50%	29.44	2.61%	31.21	6.01%	32.32	3.56%	31.29	-3.19%	2.25%
	Couple	55.97	57.37	2.50%	58.86	2.60%	62.39	6.00%	64.63	3.59%	62.56	-3.20%	2.25%
	Family	80.11	82.11	2.50%	84.24	2.59%	89.29	5.99%	92.48	3.57%	89.52	-3.20%	2.25%

UTILITIES 2007 Active Premium Basis -- 5-Year Average

		2002	2003	%	2004	%	2005	%	2006	%	2007	%	5 Year
		Amount	Amount	Change	Amount	Change	Amount	Change	Amount	Change	Amount	Change	Average
Group Life	Basic	0.14	0.149	6.43%	0.149	0.00%	0.220	47.65%	0.205	-6.82%	0.205	0.00%	7.93%
	Supplemental												
	0-29	0.059	0.059	0.00%	0.059	0.00%	0.059	0.00%	0.064	8.47%	0.064	0.00%	1.64%
	30-34	0.066	0.066	0.00%	0.066	0.00%	0.066	0.00%	0.072	9.09%	0.072	0.00%	1.76%
	35-39	0.110	0.110	0.00%	0.110	0.00%	0.110	0.00%	0.119	8.18%	0.119	0.00%	1.59%
	40-44	0.146	0.146	0.00%	0.146	0.00%	0.146	0.00%	0.159	8.90%	0.159	0.00%	1.72%
	45-49	0.212	0.212	0.00%	0.212	0.00%	0.212	0.00%	0.230	8.49%	0.230	0.00%	1.64%
	50-54	0.372	0.372	0.00%	0.372	0.00%	0.372	0.00%	0.404	8.60%	0.404	0.00%	1.66%
	55-59	0.599	0.599	0.00%	0.599	0.00%	0.599	0.00%	0.651	8.68%	0.651	0.00%	1.68%
	60-64	1.013	1.013	0.00%	1.013	0.00%	1.013	0.00%	1.100	8.59%	1.100	0.00%	1.66%
	65 & +	1.899	1.899	0.00%	1.899	0.00%	1.899	0.00%	2.062	8.58%	2.062	0.00%	1.66%
Dep Life	\$10,000	2.23	2.230	0.00%	2.230	0.00%	2.230	0.00%	2.230	0.00%	2.230	0.00%	0.00%
	\$25,000	5.87	5.870	0.00%	5.870	0.00%	5.870	0.00%	5.870	0.00%	5.870	0.00%	0.00%
AD&D	Single	0.035	0.035	0.00%	0.035	0.00%	0.035	0.00%	0.035	0.00%	0.035	0.00%	0.00%
	Family	0.058	0.058	0.00%	0.058	0.00%	0.058	0.00%	0.058	0.00%	0.058	0.00%	0.00%
LTD	per \$100		0.42		0.42	0.00%							
	BU						0.42		0.38	-9.52%	0.37	-2.63%	-6.14% *
	NBU						0.59		0.53	-10.17%	0.48	-9.43%	-9.80% *

* 2-yr average

HECO-WP-1255
DOCKET NO. 2006-0386
PAGE 2 OF 2



TABLE 6 - Percentage Pay Adjustments by Industry (Projected Budget, 7/1/06 to 6/30/07)

Projected, 7/1/06 - 6/30/07	Executive		Exempt		⁽¹⁾ O&T Non-Union		⁽¹⁾ O&T Union		⁽²⁾ P&S Non-Union		⁽²⁾ P&S Union		All Groups		Pay Structure	
	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean	Median	Mean
All Industries	3.5	3.8	3.5	3.8	3.5	3.8	3.5	4.1	3.0	3.6	3.0	3.0	3.3	3.8	3.0	3.8
Trade																
Wholesale	3.0	2.2	3.0	2.9	3.0	3.3	*	*	3.3	3.8	*	*	3.0	3.1	*	*
Retail	3.0	2.4	3.0	2.4	3.0	3.0	*	*	3.3	3.4	*	*	0.0	3.0	*	*
Services																
Health Care	3.0	3.7	4.0	4.2	4.0	4.1	5.0	5.0	3.0	3.5	3.0	3.5	4.0	4.0	3.3	4.1
Hotels	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Social Services	3.5	3.8	3.0	3.5	3.0	3.0	*	*	3.0	3.2	*	*	3.0	3.6	3.0	4.1
Other Services	3.2	4.1	3.3	3.8	3.0	3.8	*	*	3.0	3.8	2.0	2.3	3.0	3.9	3.8	4.6
Finance / Banking	3.9	4.1	3.8	4.3	3.8	4.0	*	*	*	*	*	*	3.8	4.1	3.0	3.6
Real Estate & Insurance	4.0	3.5	3.6	3.9	3.9	3.8	*	*	3.0	3.5	*	*	3.7	3.7	4.0	3.7
Utilities, Communications, & Transportation	4.0	4.5	4.0	4.8	4.0	4.6	*	*	*	*	3.0	2.6	3.5	4.2	*	*
Agriculture	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Manufacturing	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Construction	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Public Sector	3.8	3.1	4.0	4.0	3.8	4.5	4.1	5.0	4.3	4.6	4.4	4.6	4.0	4.1	3.5	3.7
Other	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

⁽¹⁾O&T: Office & Technical (Non-Exempt)

⁽²⁾P&S: Production & Service (Non-Exempt)

*Insufficient data

Table 2: SALARY INCREASE BUDGETS 2006 and 2007
Number of Companies: 441

Type of Business	2006 Actual				Estimated for 2007			
	Number of Companies*	Median	Middle 50% Range		Number of Companies*	Median	Middle 50% Range	
			Low	High			Low	High
ALL INDUSTRIES								
Nonexempt	428	3.5%	3.3%	4.0%	392	3.5%	3.5%	4.0%
Exempt	439	3.5	3.3	4.0	401	3.5	3.5	4.0
Executive	414	3.6	3.5	4.0	379	3.8	3.5	4.0
COMMERCIAL BANKING								
Nonexempt	23	3.5	3.0	3.8	21	3.5	3.0	4.0
Exempt	23	3.5	3.0	3.8	21	3.5	3.3	4.0
Executive	23	3.5	3.0	3.8	21	3.8	3.0	4.0
DIVERSIFIED FINANCIAL SERVICES								
Nonexempt	28	3.7	3.5	4.0	27	4.0	3.5	4.1
Exempt	29	3.7	3.5	4.0	28	3.9	3.5	4.4
Executive	28	3.7	3.5	4.5	27	3.8	3.5	4.5
DIVERSIFIED SERVICES								
Nonexempt	43	3.5	3.5	4.0	42	3.6	3.5	4.0
Exempt	44	3.5	3.5	4.0	43	3.5	3.5	4.0
Executive	43	3.8	3.5	4.0	42	3.7	3.5	4.0
INSURANCE								
Nonexempt	36	3.8	3.5	4.0	29	3.9	3.5	4.0
Exempt	37	3.9	3.6	4.0	30	3.9	3.5	4.0
Executive	34	3.8	3.5	4.0	28	4.0	3.5	4.0
MANUFACTURING								
Nonexempt	208	3.5	3.2	4.0	188	3.5	3.5	4.0
Exempt	212	3.5	3.3	4.0	191	3.7	3.5	4.0
Executive	198	3.7	3.4	4.0	179	3.8	3.5	4.0
TRADE								
Nonexempt	41	3.5	3.0	3.7	40	3.5	3.0	4.0
Exempt	42	3.5	3.0	3.8	41	3.5	3.0	3.9
Executive	41	3.5	3.0	4.0	40	3.6	3.1	4.0
UTILITIES								
Nonexempt	38	3.5	3.1	3.6	36	3.5	3.5	3.7
Exempt	39	3.5	3.3	3.8	37	3.5	3.5	3.8
Executive	34	3.5	3.5	4.5	32	3.6	3.5	4.5

* Other industry groups are included in totals but not shown separately because of small samples. Data collected April - May 2006.

Source: News Release, "Salary Increases Will Stay Below 4 Percent for Fourth Consecutive Year", June 22, 2006

The Conference Board



HO'OKINA AWARDS PROGRAM

OBJECTIVES

- Reward individual contributions and behavioral measures in the workplace that support our business objectives
- Promote corporate citizenship serving others (not personal), developing community relationships that help us meet our organization's long-term objectives.

"Pride compels you to do your best at all times. It pushes you to accomplish more than others expect of you - to accomplish what you expect of yourself. Taking pride in your work means taking pride in yourself."

Contact Carol Hannigan at (808) 543-4657 with any Questions/Comments.

Last Updated on 09/22/2005



[\[Up \]](#) [\[Objectives \]](#) [\[Eligibility \]](#) [\[Criteria \]](#) [\[Nomination Process \]](#) [\[Awards \]](#) [\[Program Cor](#)



HO'OKINA AWARDS PROGRAM



CRITERIA

HO'OKINA CRITERIA <i>(During the award calendar year)</i>	AWARD MEASURE
<ol style="list-style-type: none"> 1. <i>Disciplinary or Corrective Actions for infractions during the award calendar year *(See Note A)</i> 2. <i>Work-related Industrial Accidents, Illnesses, or Injuries *(See Note B)</i> 3. <i>Preventable vehicle incidents *(See Note C)</i> 	<ol style="list-style-type: none"> 1. <i>None</i> 2. <i>No lost time and no medical attention</i> 3. <i>None</i>
<i>Internal & External Customer Complaints *(See Note D)</i>	<i>None</i>
<p><i>Corporate Citizenship Activity related to Company Business</i></p> <p><i>Voluntary physical participation in any eligible Company-sponsored or eligible citizenship activity, only if it is done outside of normal work hours, and for which an employee is not paid or compensated. *(See Note E)</i></p> <p><i>NOTE: To receive appropriate credit for any eligible activity <u>outside</u> of those sponsored by the Company, each employee must provide written validation from the organization to their supervisor by 12/31 of the award calendar year. No exceptions will be made for late submissions.</i></p> <p><i>* No exceptions will be made for late submissions.</i></p>	<p><i>At least two (2) eligible Corporate Citizenship activities.</i></p> <p><i>NOTE: They may be a combination of eligible Company-sponsored or eligible outside Corporate Citizenship activities.</i></p>

**See notes below for clarification of criteria.*

2005 HO'OKINA AWARD CRITERIA DEFINED

For purposes of the Ho'okina Awards Program, the following are the definitions for the established criteria:

(A) Disciplinary Action - any written Verbal Warning discipline for violations of Company policies, Company standard of conduct, behavior, or performance issued to an employee as part of the Company's Progressive Discipline Policy during the award calendar year.

(B) Lost Time Claim - a work-related injury or illness claim that restricts an employee from attendance at work during the award calendar year, and for which an employee is compensated with industrial injury pay.

Medical Attention Claim - a work-related injury or illness claim which does not restrict an employee from attendance at work during the award calendar year, but which requires medical treatment under a workers' compensation claim.

(C) Preventable Vehicle Incident - one involving a company vehicle during the award calendar year, which after investigation, has been determined to be "preventable" under Company policy.

(D) Verified Customer Complaint - all complaints, from either internal or external customers, will be investigated and assessment made by Supervisors and Managers on validity and appropriate action. All complaints during the award calendar year that resulted in disciplinary action of a written Verbal Warning and above, as defined under our Company's Progressive Discipline policy.

(E) Corporate Citizenship Activity - use of personal time for voluntary physical participation in any eligible Company-sponsored or eligible citizenship activity, only if it is done **outside** of normal work hours, and for which an employee is not paid or compensated. Examples are provided below.

Ho'okina is a corporate program that rewards corporate citizenship in support of our business objectives. It does not reward all the "personal" community service events that our employees participate in. The Company encourages employees to continue to volunteer for such individually meaningful causes.

The Company recognizes that making the time to volunteer can be difficult. It is the intent of the Ho'okina program to recognize the "extra" effort it takes to donate personal time to

participate in two (2) citizenship activities throughout the calendar year that provide a business advantage to the Company. No minimum "hours" of volunteer service are required to be eligible. Criteria are measured by the "number" of eligible Company-sponsored activities, or "number" of eligible organizations an employee volunteers with.

Company-sponsored activities also continue to be open to family and friends, to promote citizenship as a unified effort that benefits business, and the community as a whole. In addition, employees may be recognized for their demonstration of "Corporate Citizenship" under the Workforce Excellence Skills (WES) criteria on their annual Performance Development System (PDS) evaluations.

NOTE:

Donations of cash, canned or commercially prepared products for resale, and participation in the coordinating and selling of these products on company time will continue to be excluded for Corporate Citizenship credit.

Industrial Relations will track employee participation for all Company-sponsored events. Employees are welcome to contact Carol Hannigan in Industrial Relations for clarification of eligible activities outside the Company: ph. 543-4657 or carol.hannigan@heco.com.

2005 Corporate Citizenship Activity Exception:

1. All blood donations for the Hawaii Blood Bank will count as a Company-sponsored activity. An employee will not earn more community service credits by donating more than one time. The Blood Bank of Hawaii tracks all blood donations, including those given on personal time outside of Company drives. When making a donation employees should advise the Blood Bank to credit our Company for the donation.
2. The Ho'okina Award Program will recognize exceptional volunteer support by giving credit for Corporate Citizenship Activity to those who give a substantial donation of personal time (not during regular work hours)

Criteria

Page 4 of 4

to create handmade goods (food or craft items) for resale (and not for personal profit), and **ONLY** if they are specifically, and entirely, for HECO's Aloha United Way, MECO's Maui United Way and HELCO's Hawaii Island United Way fundraising activities.

Fundraising Activity Coordinators will be responsible for timely submitting to the Ho'okina Program Administrator, a description of each participant's role in the fundraiser. The Program Administrator will validate if extent of participation is deemed eligible under the established Corporate Citizenship Activity criteria.

HECO:

Carol Hannigan (CP15-PA)

ph. 543-4657
carol.hannigan@heco.com

HELCO:

Norman Kawabata (NP)

ph. 969-0275
norman.kawabata@helcohi.com

MECO:

Barbara Kikuchi (SA)

ph. 872-3263
barbara.kikuchi@mauielectric.com

Contact Carol Hannigan at (808) 543-4657 with any Questions/Comments.

Last Updated on 09/22/2005

Benefits - R0012131 Phase 2, Stage 2

May 2008	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08
Beg bal						0	32,578	313,993	480,984	633,275	791,561	932,154
ND	947,000					32,356	279,266	163,700	147,958	152,869	134,214	36,638
Rate	0	0	0	0	0	32,356	311,844	477,692	628,941	786,144	925,775	968,792
AFUDC	28,466	0	0	0	0	223	2,149	3,291	4,333	5,417	6,379	6,675
							2,372					26,095
	975,466 total to amort											

6,774

Monthly amortization starting in June 2008

forecast	2006	0.6850% Act 795	21%	1,395
forecast	2007	0.6890% Act 776	40%	2,689
forecast	2008	0.6860% Act 766	40%	2,689

6,774

Hawaiian Electric Company, Inc.
Plant Roll-Forward and Book Depreciation & Amortization
Test Year 2007 (\$ in Thousands)

	Estimated Plant a/o 12/31/2006	Est 2006 Depr & Amort	Estimated Plant a/o 12/31/2007	TY 2007 Depr & Amort
Production				
Beginning Balance	\$ 529,205		\$ 556,413	
Add: Additions	27,951		34,773	
Less: Retirements	742		620	
Ending Balance	556,413	\$ 9,026	590,566	\$ 9,473
Transmission				
Beginning Balance	550,827		577,878	
Add: Additions	28,069		10,468	
Less: Retirements	1,018		1,068	
Ending Balance	577,878	16,362	587,278	17,165
Distribution				
Beginning Balance	1,052,098		1,106,508	
Add: Additions	58,682		51,358	
Less: Retirements	4,272		4,492	
Ending Balance	1,106,508	45,278	1,153,373	47,620
General (Excl LH Improvements)				
Beginning Balance	139,610		172,568	
Add: Additions	35,992		13,860	
Less: Retirements	3,034		6,318	
Ending Balance	172,568	8,545	180,109	10,491
Vehicles				
Beginning Balance	24,924		24,054	
Add: Additions	722		3,872	
Less: Retirements	1,592		1,537	
Ending Balance	24,054	1,812	26,389	1,749
ARO Assets (Distribution)				
Beginning Balance	20		19	
Add: Additions	-		-	
Less: Retirements	1		1	
Ending Balance	19		18	
Total - Excl. Land				
Beginning Balance	2,296,683		2,437,440	
Add: Additions	151,416		114,330	
Less: Retirements	10,659		14,036	
Ending Balance	2,437,440	81,022	2,537,734	86,498
Land (Incl LH Improvements)				
Beginning Balance	32,560		33,112	
Add: Additions	552		376	
Less: Retirements	-		-	
Ending Balance	33,112	37	33,488	
Total - Incl Land				
Beginning Balance	2,329,243		2,470,551	
Add: Additions	151,968		114,706	
Less: Retirements	10,659		14,036	
Ending Balance	\$ 2,470,551		\$ 2,571,222	
Additional Depreciation & Amortization -				
Net Unrecovered Amortization - Note (2)		3,298		3,298
Total Depreciation & Amortization		<u>\$ 84,357</u>		<u>\$ 89,795</u>
Accumulated Depreciation Summary				
Beginning Balance	\$ 1,050,583		\$ 1,118,804	
Add: Depreciation	84,357		89,795	
Add: Estimated Salvage per HECO-WP-1303	219		217	
Less: Retirements per HECO-WP-1303	10,659		14,036	
Less: Removal Costs per HECO-WP-1303	5,696		5,992	
Ending Balance	<u>\$ 1,118,804</u>		<u>\$ 1,188,788</u>	

Note: Numbers may not total exactly due to rounding.

Note (1): Details provided on pages 2 and 3.

Note (2): Amount represents the annual amount for a five-year recovery of net unrecovered amortization as approved by the Commission in Decision and Order No. 21331, Docket No. 02-0391, dated September 3, 2004.

Hawaiian Electric Company, Inc.
Plant Roll-Forward and Book Depreciation
Test Year 2007 (\$ in Thousands)

	[A] Note (1) 2000 Depr Study Rates	[B] Estimated Depreciable Plant a/o 12/31/2006	[A] x Beg Bal [B] Est 2006 Depr	[C] Estimated Depreciable Plant a/o 12/31/2007	[A] x Beg Bal [C] TY 2007 Depr
Production					
Beginning Balance		\$ 524,617		\$ 552,102	
Add: Additions		27,951		34,773	
Less: Retirements		466		490	
Ending Balance	0.016767	552,102	\$ 8,796	586,384	\$ 9,257
Transmission					
Beginning Balance		550,827		577,878	
Add: Additions		28,069		10,468	
Less: Retirements		1,018		1,068	
Ending Balance	0.029704	577,878	16,362	587,278	17,165
Distribution					
Beginning Balance		1,052,098		1,106,508	
Add: Additions		58,682		51,358	
Less: Retirements		4,272		4,492	
Ending Balance	0.043036	1,106,508	45,278	1,153,373	47,620
General (Excl LH Improvements)					
Beginning Balance		107,993		135,601	
Add: Additions		29,225		10,110	
Less: Retirements		1,617		2,030	
Ending Balance	0.053695	135,601	5,799	143,682	7,281
Vehicles					
Beginning Balance		24,924		24,054	
Add: Additions		722		3,872	
Less: Retirements		1,592		1,537	
Ending Balance	0.072700	24,054	1,812	26,389	1,749
Total - Excl. Land					
Beginning Balance		2,260,458		2,396,143	
Add: Additions		144,649		110,581	
Less: Retirements		8,964		9,617	
Ending Balance		2,396,143	78,047	2,497,106	83,072
Land (Incl. LH Improvements)					
Beginning Balance		32,560		33,112	
Add: Additions		552		376	
Less: Retirements		-		-	
Ending Balance		33,112	37	33,488	-
Total - Incl Land					
Beginning Balance		2,293,018		2,429,254	
Add: Additions		145,200		110,957	
Less: Retirements		8,964		9,617	
Ending Balance		\$ 2,429,254		\$ 2,530,594	
Total Depreciation			<u>\$ 78,084</u>		<u>\$ 83,072</u>

Note: Numbers may not total exactly due to rounding.

Note (1): See HECO-WP-1305 for derivation of the composite rates.

Hawaiian Electric Company, Inc.
Plant Roll-Forward and Book Amortization
Test Year 2007 (\$ in Thousands)

	[A] Note (1) 2000 Depr Study Rates	[B] Estimated Amortizable Plant a/o 12/31/2006	[A] x Beg Bal [B] Est 2006 Amort	[C] Estimated Amortizable Plant a/o 12/31/2007	[A] x Beg Bal [C] TY 2007 Amort
Production					
Beginning Balance		\$ 4,588		\$ 4,312	
Add: Additions		-		-	
Less: Retirements		276		129	
Ending Balance	0.050000	4,312	\$ 229	4,182	\$ 216
General					
Beginning Balance		31,617		36,967	
Add: Additions		6,767		3,749	
Less: Retirements		1,418		4,289	
Ending Balance	0.086843	36,967	2,746	36,427	3,210
Total					
Beginning Balance		36,205		41,278	
Add: Additions		6,767		3,749	
Less: Retirements		1,694		4,418	
Ending Balance		\$ 41,278	2,975	\$ 40,610	3,426
Additional Amortization - Net Unrecovered Amortization					
			<u>3,298</u>		<u>3,298</u>
Total Amortization			<u>\$ 6,273</u>		<u>\$ 6,723</u>

Note: Numbers may not total exactly due to rounding.

Note (1): See HECO-WP-1305 for derivation of the composite rates.

Hawaiian Electric Company, Inc.
Amortization of CIAC
Test Year 2007 (\$ in Thousands)

	Recorded 2005	Estimated 2006	Test Year Estimate 2007
Amortization through 2004	\$ 7,484	\$ 7,413	\$ 7,307
<u>Amortization of 2005 Vintage</u>			
Receipts	\$ 19,339		
Plus: Transfers from Cust Adv	110		
Base for Amortization	<u>\$ 19,449</u>		
Divided by 30	30		
Subtotal	<u>\$ 648</u>	648	648
<u>Amortization of 2006 Vintage</u>			
Receipts	\$ 18,363		
Plus: Transfers from Cust Adv	23		
Base for Amortization	<u>\$ 18,386</u>		
Divided by 30	30		
Subtotal	<u>\$ 613</u>		<u>613</u>
Annual Amortization of CIAC	<u>\$ 8,061</u>	<u>\$ 8,568</u>	

Hawaiian Electric Company, Inc.
Projected Retirements, Cost of Removal and Gross Salvage for Depreciable Plant
Recorded 2001 to 2005 (\$ in Thousands)

	Recorded 2001	Recorded 2002	Recorded 2003	Recorded 2004	Recorded 2005	Total Recorded
Depr. Plant Balances - Beginning of the Year [a]						
Production	\$ 421,338	\$ 427,508	\$ 443,528	\$ 457,074	\$ 516,558	\$ 2,266,006
Transmission	487,011	497,639	522,153	526,540	539,592	2,572,935
Distribution	824,760	881,189	913,623	947,610	998,044	4,565,226
General	111,059	114,917	121,084	130,099	125,796	602,955
Vehicles	22,994	24,044	24,575	24,542	24,402	120,557
Total	\$ 1,867,161	\$ 1,945,296	\$ 2,024,963	\$ 2,085,865	\$ 2,204,392	\$ 10,127,678

Retirements [b]						
Production	\$ (4)	\$ 253	\$ 292	\$ 437	\$ 1,033	\$ 2,011
Transmission	516	361	2,213	859	805	4,754
Distribution	3,310	3,290	3,209	4,560	4,166	18,535
General	3,115	1,472	1,864	1,783	793	9,026
Vehicles	1,296	1,315	2,087	2,009	994	7,701
Total	\$ 8,233	\$ 6,691	\$ 9,665	\$ 9,647	\$ 7,792	\$ 42,027

Percentages of Book Retirements to Beginning Plant Balances [b] / [a]						
Production	(0.000010)	0.000592	0.000659	0.000956	0.002001	0.000888
Transmission	0.001060	0.000726	0.004238	0.001631	0.001493	0.001848
Distribution	0.004014	0.003734	0.003512	0.004812	0.004174	0.004060
General	0.028044	0.012806	0.015397	0.013702	0.006301	0.014969
Vehicles	0.056357	0.054683	0.084910	0.081864	0.040752	0.063877

Cost of Removal [c]						
Production	\$ 80	\$ 78	\$ 614	\$ 343	\$ 640	\$ 1,756
Transmission	411	977	694	896	953	3,931
Distribution	5,045	2,457	2,787	3,406	5,539	19,234
General	-	5	(56)	128	7	83
Vehicles	-	-	2	-	-	2
Total	\$ 5,536	\$ 3,517	\$ 4,041	\$ 4,773	\$ 7,138	\$ 25,006

Percentages of Removal Cost to Retirements [c] / [b]						
Production	(18.723896)	0.309804	2.101125	0.784371	0.619564	0.872923
Transmission	0.796784	2.704210	0.313670	1.043709	1.182786	0.826833
Distribution	1.523929	0.746926	0.868474	0.746919	1.329621	1.037696
General	0.000000	0.003185	(0.030194)	0.071772	0.008406	0.009196
Vehicles	0.000000	0.000000	0.001024	0.000000	0.000000	0.000278

Gross Salvage [d]						
Production	\$ 1	\$ -	\$ 6	\$ -	\$ -	\$ 8
Transmission	-	-	-	-	-	-
Distribution	36	7	12	69	85	209
General	-	24	8	-	-	32
Vehicles	96	127	270	209	85	788
Total	\$ 133	\$ 158	\$ 297	\$ 279	\$ 170	\$ 1,038

Percentages of Gross Salvage to Retirements [d] / [b]						
Production	(0.335903)	0.000000	0.020752	0.000000	0.000000	0.003732
Transmission	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Distribution	0.010735	0.002202	0.003808	0.015239	0.020398	0.011301
General	0.000000	0.016473	0.004364	0.000000	0.000000	0.003587
Vehicles	0.074400	0.096561	0.129487	0.104185	0.085772	0.102349

Hawaiian Electric Company, Inc.
Projected Retirements, Cost of Removal and Gross Salvage for Depreciable Plant
Estimated 2006 to 2007 (\$ in Thousands)

	Estimated 2006	Test Year Estimate 2007
Depr Plant Balance- Beginning of the Year		
Production	\$ 524,617	\$ 552,102
Transmission	550,827	577,878
Distribution	1,052,098	1,106,508
General	107,993	135,601
Vehicles	24,924	24,054
Total	\$ 2,260,458	\$ 2,396,143

Retirements		
Production	\$ 468	\$ 490
Transmission	1,018	1,068
Distribution	4,272	4,492
General	1,617	2,030
Vehicles	1,592	1,536
Total	\$ 8,966	\$ 9,617

Cost of Removal		
Production	\$ 407	\$ 428
Transmission	842	883
Distribution	4,433	4,662
General	15	19
Vehicles	0	0
Total	\$ 5,696	\$ 5,992

Gross Salvage		
Production	\$ 2	\$ 2
Transmission	0	0
Distribution	48	51
General	6	7
Vehicles	163	157
Total	\$ 219	\$ 217

Hawaiian Electric Company, Inc.
Estimated Accrual for Regulatory Liability to Recover Future Net Salvage
2006 and Test Year 2007 (\$ in Thousands)

Account Number	[A] 12/31/05 Recorded Plant Balances	[B] Net Salvage Rate per D&O No. 21331	[C]=[A]x[B] 2006 Estimated COR Accrual	[D]= Subtotal[C]/ Subtotal[A] Weighted Avg COR Accrual Rate	[E] 12/31/06 Est Plant Balances WP-1301 pg.2	[F]=[D]/[E] TY 2007 Estimated COR Accrual
311.00	\$ 87,612	0.00200	\$ 175			
312.00	250,322	0.00206	516			
314.00	118,508	0.00194	230			
315.00	27,706	0.00195	54			
316.00	22,163	0.00209	46			
341.00	1,139	0.00085	1			
342.00	1,427	0.00096	1			
343.00	7,371	0.00085	6			
344.00	5,379	0.00091	5			
345.00	2,701	0.00100	3			
346.00	290	0.00067	0			
Production	<u>524,617</u>		<u>1,038</u>	0.00198	\$ 552,102	\$ 1,092
350.10	9,585	0.00000	-			
352.00	40,240	0.00385	155			
353.00	198,419	0.00490	972			
354.00	17,404	0.00600	104			
355.00	141,968	0.01042	1,479			
356.00	77,425	0.02286	1,770			
357.00	26,435	0.00167	44			
358.00	36,947	0.00400	148			
359.00	2,404	0.00000	-			
Transmission	<u>550,826</u>		<u>4,673</u>	0.00848	577,878	4,902
360.10	289	0.00000	-			
361.00	21,680	0.00500	108			
362.00	114,935	0.00851	978			
364.00	95,065	0.01250	1,188			
365.00	86,314	0.03125	2,697			
366.00	196,384	0.00500	982			
367.00	220,261	0.02250	4,956			
368.00	119,268	0.01111	1,325			
369.10	36,339	0.03750	1,363			
369.20	136,703	0.02100	2,871			
370.00	24,861	0.00000	-			
Distribution	<u>1,052,098</u>		<u>16,468</u>	0.01565	1,106,508	17,320
390.00	30,453	0.01111	338			
394.00	1,507	(0.00067)	(1)			
395.00	153	0.00000	-			
397.00	73,950	0.00417	308			
398.00	1,930	0.00227	4			
General	<u>107,993</u>		<u>650</u>	0.00602	135,601	816
392.00	24,924	(0.00357)	(89)			
Vehicles	<u>24,924</u>		<u>874</u>	0.03506	24,054	843
Grand Total	<u>\$ 2,260,458</u>		<u>\$ 23,703</u>		<u>\$ 2,396,143</u>	<u>\$ 24,974</u>

Hawaiian Electric Company, Inc.
Calculation of 2000 Depreciation Study Rates Weighted for Depreciable Asset Balance
(\$ in Thousands)

Account	Depreciable Assets a/o 1/1/06	Straight-Line Remaining-Life Rates	Deprciation Accrual Year 2006
311	\$ 87,612	0.019270 *	\$ 1,688
312	250,322	0.017140 *	4,291
314	118,508	0.013620 *	1,614
315	27,706	0.017370 *	481
316	22,163	0.023370 *	518
Tot - Steam	506,311	0.016970	8,592
341	1,139	0.008900 *	10
342	1,427	0.015690 *	22
343	7,371	0.008760 *	65
344	5,379	0.011310 *	61
345	2,701	0.017760 *	48
346	290	-0.006400 *	(2)
Tot - Gas Turbine	18,306	0.011146	204
Tot - Production	524,617	0.016767	8,796
3501	9,585	0.009000 *	86
352	40,240	0.024000 *	966
353	198,419	0.025600 *	5,080
354	17,404	0.025700 *	447
355	141,968	0.030900 *	4,387
356	77,425	0.051900 *	4,018
357	26,435	0.017000 *	449
358	36,947	0.024100 *	890
359	2,404	0.015800 *	38
Tot - Transmission	550,826	0.029704	16,362
3601	289	0.020500 *	6
361	21,680	0.033500 *	726
362	114,935	0.029900 *	3,437
364	95,065	0.032900 *	3,128
365	86,314	0.065400 *	5,645
366	196,384	0.022200 *	4,320
367	220,261	0.054500 *	12,004
368	119,268	0.060500 *	7,216
369.1	36,339	0.072600 *	2,638
369.2	136,703	0.039500 *	5,400
370	24,861	0.030500 *	758
Tot - Distribution	1,052,098	0.043036	45,278
Tot - T & D	1,602,924		61,640
390	30,453	0.040900 *	1,246
394	1,507	0.036700 *	55
395	153	0.034500 *	5
397	73,950	0.059400 *	4,393
398	1,930	0.051800 *	100
Tot - General	107,993	0.053695	5,799
Sub-Total	2,235,534		76,235
3902 (King)	6,180	0.000000	-
3902 (CPP)	755	0.049190	37
3902 (Hon Cl)	7	0.000000	-
Tot- LH Improvements	6,942		37
392	24,924	0.072700 *	1,812
Utility Total	\$ 2,267,400	0.034438	\$ 78,084

Note: Numbers may not total exactly due to rounding.

* Agreed to D&O No. 21331, dated September 3, 2004 Docket No. 02-0391 Attachment C.

Hawaiian Electric Company, Inc.
Calculation of 2000 Amortizable Rates Weighted for Amortizable Plant Balance
(\$ in Thousands)

Account	[A] Amortizable Assets a/o 1/1/06	[B] Amortization Rates (%) Note (1)	[A]x[B] Amortization Accrual Year 2006
316 - Steam	\$ 4,588	0.050000 *	\$ 229
346 - Other Production	-	0.050000 *	-
Tot - Production	<u>4,588</u>	0.050001	<u>229</u>
3911	8,530	0.142860 *	1,219
3912	2,126	0.083340 *	177
3913	7,124	0.066670 *	475
393	819	0.040000 *	33
394	9,794	0.066700 *	653
395	1,558	0.066700 *	104
396	313	0.055560 *	17
398	1,353	0.050000 *	68
Tot - General	<u>31,617</u>	0.086843	<u>2,746</u>
Utility Total	<u>\$ 36,205</u>	0.082175	<u>\$ 2,975</u>

Note: Numbers may not total exactly due to rounding.

* Agreed to D&O No. 21331, dated September 3, 2004 Docket No. 02-0391 Attachment D.

Dept	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07
Comp & Ben	15	15	15	15	15	15	15	15	15	15	15	15
Ind Rel	9	9	9	9	9	9	9	9	9	9	9	9
SSF	47	47	47	47	47	47	47	47	47	47	47	47
VP-Corp Exc	2	2	2	2	2	2	2	2	2	2	2	2
WFSD	17	17	17	17	17	17	17	17	17	17	17	17
	90											
Corp Comm	10	10	10	10	10	10	10	10	10	10	10	10
VP-Corp Rel	2	2	2	2	2	2	2	2	2	2	2	2
	12											
CustTechAp	10	10	10	10	10	10	10	10	10	10	10	10
Engy Svcs	26	26	26	26	26	26	26	26	26	26	26	26
Fcst&Res	12	12	12	12	12	12	12	12	12	12	12	12
IRP	6	6	6	6	6	6	6	6	6	6	6	6
Mktg Svcs	12	12	12	12	12	12	12	12	12	12	12	12
VP-Cust Sol	2	2	2	2	2	2	2	2	2	2	2	2
	68											
C&M	220	220	220	220	220	220	220	220	220	220	220	220
Engineering	85	85	85	85	85	85	85	85	85	85	85	85
Supp Svcs	85	85	85	85	85	85	85	85	85	85	85	85
Sys Op	117	117	117	117	117	117	117	117	117	117	117	117
VP-En Del	2	2	2	2	2	2	2	2	2	2	2	2
	509											
CID	53	53	53	53	53	54	54	54	54	53	53	53
Engy Proj	9	9	9	9	9	9	9	9	9	9	9	9
SVP-EnSol	4	4	4	4	4	4	4	4	4	4	4	4
Tech	3	3	3	3	3	3	3	3	3	3	3	3
	69	69	69	69	69	70	70	70	70	69	69	69
Financial VP	3	3	3	3	3	3	3	3	3	3	3	3
Gen Acctg	26	26	26	26	26	26	26	26	26	26	26	26
InfoTech	94	94	94	94	94	94	94	94	94	94	94	94
MAFS	22	22	22	22	22	22	22	22	22	22	22	22
RiskMgt	9	9	9	9	9	9	9	9	9	9	9	9
	154											
Legal	16	16	16	16	16	16	16	16	16	16	16	16
VPGen	2	2	2	2	2	2	2	2	2	2	2	2
	18											
Ed & Cons Aff	8	8	8	8	8	8	8	8	8	8	8	8
Reg Affairs	8	8	8	8	8	8	15	15	15	15	15	15
VP-Gov & Com	7	7	7	7	7	7	7	7	7	7	7	7
	23	23	23	23	23	23	30	30	30	30	30	30
Cust Svc	134	134	134	134	134	134	134	134	134	134	134	134
SVP-Oper	3	3	3	3	3	3	3	3	3	3	3	3
	137											
CorpAudComp	12	12	12	12	12	12	12	12	12	12	12	12
President	5	5	5	5	5	5	5	5	5	5	5	5
	17											
Gov Rel	3	3	3	3	3	3	3	3	3	3	3	3
SVP-Pub Aff	2	2	2	2	2	2	2	2	2	2	2	2
	5											
Environ	24	24	24	24	24	24	24	24	24	24	24	24
Production	383	383	383	383	383	383	383	383	383	383	383	383
PwrSup Eng	46	46	46	46	46	46	46	46	46	46	46	46
VP-Pwr Sup	2	2	2	2	2	2	2	2	2	2	2	2
	455											
VP-SpecProj	2	2	2	2	2	2	2	2	2	2	2	2
	2											
	1559	1559	1559	1559	1559	1560	1567	1567	1567	1566	1566	1566

Hawaiian Electric Company, Inc.
2007 Test Year Average Calculation

Dept	Jan-07	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Total	Test Year Average
Comp & Ben	15	15	15	15	15	15	15	15	15	15	15	15	15	195	15
Ind Rel	9	9	9	9	9	9	9	9	9	9	9	9	9	117	9
SSF	47	47	47	47	47	47	47	47	47	47	47	47	47	611	47
VP-Corp Exc	2	2	2	2	2	2	2	2	2	2	2	2	2	26	2
WFSD	17	17	17	17	17	17	17	17	17	17	17	17	17	221	17
	90	90	90	90	90	90	90	90	90	90	90	90	90	1170	90
Corp Comm	10	10	10	10	10	10	10	10	10	10	10	10	10	130	10
VP-Corp Rel	2	2	2	2	2	2	2	2	2	2	2	2	2	26	2
	12	12	12	12	12	12	12	12	12	12	12	12	12	156	12
CustTechAp	10	10	10	10	10	10	10	10	10	10	10	10	10	130	10
Engy Svcs*	26	26	26	26	26	26	26	26	26	26	26	26	26		
Less: DSM	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	221	17
Fcst&Res*	12	12	12	12	12	12	12	12	12	12	12	12	12		
Less: DSM	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	130	10
IRP	6	6	6	6	6	6	6	6	6	6	6	6	6	78	6
Mktg Svcs	12	12	12	12	12	12	12	12	12	12	12	12	12	156	12
VP-Cust Sol	2	2	2	2	2	2	2	2	2	2	2	2	2	26	2
	57	57	57	57	57	57	57	57	57	57	57	57	57	741	57
C&M	220	220	220	220	220	220	220	220	220	220	220	220	220	2860	220
Engineering	85	85	85	85	85	85	85	85	85	85	85	85	85	1105	85
Supp Svcs	85	85	85	85	85	85	85	85	85	85	85	85	85	1105	85
Sys Op	117	117	117	117	117	117	117	117	117	117	117	117	117	1521	117
VP-En Del	2	2	2	2	2	2	2	2	2	2	2	2	2	26	2
	509	509	509	509	509	509	509	509	509	509	509	509	509	6617	509
CID	53	53	53	53	53	53	54	54	54	54	53	53	53	693	53
Engy Proj	9	9	9	9	9	9	9	9	9	9	9	9	9	117	9
SVP-EnSol	4	4	4	4	4	4	4	4	4	4	4	4	4	52	4
Tech	3	3	3	3	3	3	3	3	3	3	3	3	3	39	3
	69	69	69	69	69	69	70	70	70	70	69	69	69	901	69
Financial VP	3	3	3	3	3	3	3	3	3	3	3	3	3	39	3
Gen Acctg	26	26	26	26	26	26	26	26	26	26	26	26	26	338	26
InfoTech	94	94	94	94	94	94	94	94	94	94	94	94	94	1222	94
MAFS	22	22	22	22	22	22	22	22	22	22	22	22	22	286	22
RiskMgt	9	9	9	9	9	9	9	9	9	9	9	9	9	117	9
	154	154	154	154	154	154	154	154	154	154	154	154	154	2002	154
Legal	16	16	16	16	16	16	16	16	16	16	16	16	16	208	16
VPGen	2	2	2	2	2	2	2	2	2	2	2	2	2	26	2
	18	18	18	18	18	18	18	18	18	18	18	18	18	234	18
Ed & Cons Aff	8	8	8	8	8	8	8	8	8	8	8	8	8	104	8
Reg Affairs	8	8	8	8	8	8	8	15	15	15	15	15	15	146	11
VP-Gov & Com	7	7	7	7	7	7	7	7	7	7	7	7	7	91	7
	23	23	23	23	23	23	23	30	30	30	30	30	30	341	26
Cust Svc	134	134	134	134	134	134	134	134	134	134	134	134	134		
Adjustment	-7	-7	-7	-3	-3	-3	-1	-1	-1	-1	-1	-1	-1	1705	131
SVP-Oper	3	3	3	3	3	3	3	3	3	3	3	3	3	39	3
	130	130	130	134	134	134	136	136	136	136	136	136	136	1744	134
CorpAudComp	12	12	12	12	12	12	12	12	12	12	12	12	12	156	12
President	5	5	5	5	5	5	5	5	5	5	5	5	5	65	5
	17	17	17	17	17	17	17	17	17	17	17	17	17	221	17
Gov Rel	3	3	3	3	3	3	3	3	3	3	3	3	3	39	3
SVP-Pub Aff	2	2	2	2	2	2	2	2	2	3	2	2	2	27	2
	5	5	5	5	5	5	5	5	5	6	5	5	5	66	5
Environ	24	24	24	24	24	24	24	24	24	24	24	24	24	312	24
Production	383	383	383	383	383	383	383	383	383	383	383	383	383	4979	383
PwrSup Eng	46	46	46	46	46	46	46	46	46	46	46	46	46	598	46
VP-Pwr Sup	2	2	2	2	2	2	2	2	2	2	2	2	2	26	2
	455	455	455	455	455	455	455	455	455	455	455	455	455	5915	455
VP-SpecProj	2	2	2	2	2	2	2	2	2	2	2	2	2	26	2
	2	2	2	2	2	2	2	2	2	2	2	2	2	26	2
	1541	1541	1541	1545	1545	1545	1548	1555	1555	1556	1554	1554	1554	20134	1548

*Excludes 11 employees covered under the DSM adjustment surcharge and reflects Customer Service's revised 2007 staffing plan.

Hawaiian Electric Company, Inc.
Tax Rates

	<u>2007</u>
Franchise Royalty Tax Rate	2.5000%
Public Service Company Tax Rate	5.8850%
Public utility Commission Fees Rate	0.5000%
State Income Tax Rate (Effective)	6.0150%
Federal Income Tax Rate (Effective)	32.8947%

Hawaiian Electric Company, Inc.
Payroll Taxes Charged to Operations
For Test Year 2007

<u>Summary of Payroll Taxes Charged to Operations</u>	<u>2007 Test Year</u>
1 FICA	6,325
2 Federal Unemployment Taxes	61
3 State Unemployment Taxes	43
4 Total Payroll Taxes Charged to Operations	6,429

<u>Allocation of Payroll Taxes Based on Labor Dollars Charged</u>	<u>Test Year Payroll Taxes</u>
5 Capital	1,123
6 Operations	6,429
7 Others	1,358
Total Payroll Taxes	8,910

<u>Breakdown of Payroll Taxes</u>	<u>Total Payroll Taxes (HECO-WP-1501)</u>	<u>Calculated Percentages</u>	<u>Payroll Taxes Charged to Operations</u>
8 FICA	9,026	98.39%	6,325
9 FUTA	87	0.95%	61
10 SUTA	61	0.66%	43
11 Total Payroll Taxes	9,174	100.0%	6,429

Hawaiian Electric Company, Inc.
Payroll Taxes Charged to Operations
For Test Year 2007

FICA

	<u>Pay Date</u>	<u>Est Gross Pay</u>	<u>Effective Rate</u>	<u>Total FICA</u>
1	1/10/2007	2,315,435	7.50%	173,758
2	1/24/2007	4,630,870	7.50%	347,517
3	2/7/2007	4,671,696	7.50%	350,581
4	2/21/2007	4,835,000	7.50%	362,836
5	3/6/2007	4,810,910	7.50%	361,028
6	3/20/2007	4,714,550	7.50%	353,797
7	4/3/2007	4,714,550	7.49%	353,254
8	4/17/2007	4,844,760	7.49%	363,010
9	5/1/2007	4,844,760	7.49%	363,010
10	5/15/2007	4,741,089	7.49%	355,242
11	5/30/2007	4,729,570	7.49%	354,379
12	6/12/2007	4,813,828	7.49%	360,693
13	6/26/2007	4,870,000	7.49%	364,902
14	7/10/2007	4,798,410	7.36%	353,027
15	7/24/2007	4,726,820	7.36%	347,760
16	8/7/2007	4,699,862	7.36%	345,776
17	8/21/2007	4,636,960	7.36%	341,149
18	9/4/2007	4,636,960	7.36%	341,149
19	9/18/2007	4,911,000	7.36%	361,310
20	10/2/2007	4,911,000	6.70%	328,980
21	10/16/2007	4,546,960	6.70%	304,594
22	10/30/2007	4,546,960	6.70%	304,594
23	11/13/2007	4,716,136	6.70%	315,927
24	11/27/2007	4,788,640	6.70%	320,784
25	12/11/2007	4,924,320	6.70%	329,873
26	12/25/2007	5,060,000	6.70%	338,962
27	1/8/2008	3,036,000	7.50%	227,832
28		<u>124,477,046</u>		<u>9,025,724</u>

2005 Form 941			
<u>Pay Date</u>	<u>FICA</u>	<u>Gross Pay</u>	<u>Eff Rate</u>
Quarter 1	1,920,319	25,589,245	7.50%
Quarter 2	2,111,813	28,182,708	7.49%
Quarter 3	1,799,870	24,466,020	7.36%
Quarter 4	1,970,195	29,410,948	6.70%

Rounded
9,026

Federal Unemployment Taxes

	<u>Rate</u>	<u>\$ Max</u>	<u>No. Employees at Year End</u>	<u>FUTA Tax</u>
29	0.8%	7,000	1,554	87,024

State Unemployment Taxes

	<u>Rate</u>	<u>\$ Max</u>	<u>No. Employees at Year End</u>	<u>SUTA Tax</u>
30	0.11%	35,700	1,554	61,026

31 Total Payroll Taxes (Line 28 + Line 29 + Line 30) 9,174

HAWAIIAN ELECTRIC COMPANY, INC.
CALCULATION OF COMPOSITE EFFECTIVE INCOME TAX RATES
FEDERAL AND STATE

COMPOSITE FEDERAL AND STATE EFFECTIVE INCOME TAX RATE

Federal Effective Income Tax Rate	32.8947368%
State Effective Income Tax Rate	6.0150376%
	<u>38.9097744%</u>

CALCULATION OF EFFECTIVE RATES

Assumptions: ST = State Income Tax Expense
FT = Federal Income Tax Expense
Pre-Tax Income = \$1.00
State Statutory Income Tax Rate = 6.4% *
Federal Statutory Income Tax Rate = 35% **

Calculation of State Effective Income Tax Rate

$$\begin{aligned}\text{State Income Tax Expense} &= \text{Statutory Rate} \times (\text{Pre-Tax Income} - \text{State Income Tax Expense}) \\ \text{ST} &= .064 \times (1 - \text{ST}) \\ \text{ST} &= .064 - .064(\text{ST}) \\ 1.064(\text{ST}) &= .064 \\ \text{ST} &= .060150376 \text{ or } 6.0150376\% \text{ of Pre-Tax Income}\end{aligned}$$

Calculation of Federal Effective Income Tax Rate

$$\begin{aligned}\text{Federal Income Tax Expense} &= \text{Statutory Rate} \times (\text{Pre-Tax Income} - \text{State Income Tax Expense}) \\ \text{FT} &= .35 \times (1 - \text{ST}) \\ \text{FT} &= .35 \times (1 - .060150376) \\ \text{FT} &= .35 - .0210526316 \\ \text{FT} &= .328947368 \text{ or } 32.8947368\% \text{ of Pre-Tax Income}\end{aligned}$$

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

** The Revenue Reconciliation Act of 1993 changed the federal tax rate for tax years beginning on or after January 1, 1993.

48

HAWAIIAN ELECTRIC CO., INC.
CALCULATION OF INTEREST EXPENSE FOR
USE IN INCOME TAX EXPENSE CALCULATION
FOR TEST YEAR 2007

Interest Expense on Long-Term Debt	29,267,000
Interest Expense on Short-Term Debt (A)	1,948,550
Interest Expense on Hybrid Securities	2,059,000
Less: AFUDC Debt (B)	(2,688,018)
NET INTEREST EXPENSE	<u><u>30,586,532</u></u>

(A) Average Short-Term Debt \$38,971,000 x 5.0% = \$1,948,550 (Per HECO-1901)

(B) AFUDC Debt Computation:

AFUDC Expenditures	8,750,058
Ratio of Debt to Total	<u>30.72%</u>
	<u><u>2,688,018</u></u>

HAWAIIAN ELECTRIC CO., INC.
NON-DEDUCTIBLE MEALS AND ENTERTAINMENT
FOR TEST YEAR 2007

Meals & Entertainment Expense (1)	162,000
Less: Deductible Portion (50%)	(81,000)
Non-Deductible Meals & Entertainment Adjustment	<u>81,000</u>

NOTE (1) From Forecasted Meals & Entertainment (cost type 521),
Management Accounting

HAWAIIAN ELECTRIC CO., INC.
Calculation of Qualified Production Activity Income (QPAI)
For 2005

	<u>12/31/05</u>	<u>Allocated To Generation</u>	
Electric Sales Revenue	1,201,156,469.2	534,972,415.6	(C) See note (1).
Other Operating Revenue	3,062,948.7		
	<u>1,204,219,417.9</u>	<u>534,972,415.6</u>	
Power production expense-Fuel	(420,521,200.8)	(420,521,200.8)	
Power production expense-Purchased Power	(339,119,841.7) (A)		
Power production expense-Production	(57,128,520.5)	(57,128,520.5)	
Transmission expense	(7,831,357.0)	-	
Distribution expense	(23,041,630.0)	-	
Customer accounts expense	(11,148,829.0)	-	
Customer service	(12,289,069.3)	-	
A & G expense	(58,402,077.0)	(43,964,717.2)	Allocation based on note (2) below.
Total O&M expense	<u>(929,482,525.3)</u>	<u>(521,614,438.5)</u>	
Depreciation expense	(77,928,013.0)	-	
Amort of State ITC		-	
Taxes other than income taxes	(112,081,626.0)	(46,609,353.5)	HECO-WP-1502, page 5
Income taxes	(26,143,576.0)	-	
Miscellaneous	3,717,212.0	2,798,293.9	Allocation based on note (2) below.
Other operating expense	<u>(212,436,003.0)</u>	<u>(43,811,059.6)</u>	
Net utility operating income	<u>62,300,889.5</u>		
Tax Adjustments:			
Interest	(32,231,017.4)	(24,263,307.7)	Allocation based on note (2) below.
Estimated Current State ITC on Production Assets		756,218.5	See note (4) below.
Estimated State Tax Depreciation on Production Assets		<u>(11,839,863.0)</u>	See note (3) below.
State Pretax Income		(65,800,034.7)	(D)
Less: State Tax Deduction		<u>3,954,913.6</u>	(D) * 6.0150376% state tax rate
State Taxable Income		(61,845,121.2)	
Add: Federal State Tax Depreciation Difference		<u>(383,333.4)</u>	See note (3) below.
Estimated taxable income for generation activity for 2005		<u>(62,228,454.5)</u>	
Estimated Domestic Production Activities Deduction (3%)		<u>(1,866,854)</u>	
Estimated Federal Tax Effect at 35%		<u>(653,399)</u>	

NOTES:

(1) Calculation of Revenue Attributable to Purchased Power:

Power Production Expense-Purchased Power	339,119,841.7	(A)
Revenue Tax Gross Up	<u>108.885%</u>	
Purchased Power Revenue Grossed Up	<u>369,250,639.7</u>	(B)

Production Sales Net of Purchased Power Revenues

Total Production Sales	904,223,055.25	Allocation based on note (2) below.
Less: Production Sales Revenues Related to Purchased Power	<u>(369,250,639.67)</u>	(B)
Production Sales Revenue, Net of Purchased Power Revenue	<u>534,972,415.58</u>	(C)

(2) Allocation based on current cost of service workpapers as adjusted for purchased power revenues.

Production Sales / Electric Sales Revenue	
Production Cost of Service Percentage Calculated	75.2794%

(3) 2005 State Tax Depreciation of Production Assets	(11,839,863)
2005 Federal Tax Depreciation of Production Assets	<u>(12,223,196)</u>
Federal State Depreciation Adjustment	<u>(383,333)</u>

(4) 2005 State Tax Additions per Tax Depreciation	
Schedule Related to Production Assets	18,905,463
State ITC Rate	4%
2005 State ITC Related to Production Assets	<u>756,219</u>

HAWAIIAN ELECTRIC CO., INC.
Public Service Company (PSC) Tax, Public Utility Commission (PUC) Fees,
and Franchise Royalty Tax for Qualified Production Activity Income
For 2005

<u>PSC Tax Calculation</u>	<u>12/31/05</u>	<u>References</u>
Electric Sales Revenue	534,972,416	HECO-WP-1502, page 4
PSC Tax Rate	<u>5.885%</u>	HECO-WP-1501, page 1
PSC Taxes	<u><u>31,483,127</u></u>	
<u>PUC Fee Calculation</u>	<u>12/31/05</u>	<u>References</u>
Electric Sales Revenue	534,972,416	HECO-WP-1502, page 4
PUC Fees Rate	<u>0.5%</u>	HECO-WP-1501, page 1
PUC Fees	<u><u>2,674,862</u></u>	
<u>Franchise Royalty Tax Calculation</u>	<u>12/31/05</u>	<u>References</u>
Electric Sales Revenue	534,972,416	HECO-WP-1502, page 4
Less: Bad Debt Deduction	<u>(36,917,826)</u>	
Franchise Royalty Tax Base	498,054,590	
Franchise Royalty Tax Rate	<u>2.5%</u>	HECO-WP-1501, page 1
Franchise Royalty Taxes	<u><u>12,451,365</u></u>	
Total Taxes Other Than Revenue	<u><u>46,609,353</u></u>	

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

LIAB (DR)CR	Actual 12-31-02	Actual 2003	Actual 12-31-03	Actual 2004	Actual 12-31-04	Actual 2005	Actual 12-31-05
28310 State ITC	(7,228,864.18)	(147,639.77)	(7,376,503.95)	(826,950.68)	(8,203,454.63)	(519,941.87)	(8,723,396.50)
28311 Unearned Lease	(108,097.71)	2,264.82	(105,832.89)	99,030.07	(6,802.82)	1,232.05	(5,570.77)
28312 Accrued Vacation	929,025.51	166,488.02	1,095,513.53	(2,081.21)	1,093,432.32	(13,516.83)	1,079,915.49
28313 Uncollectible Acct	(537,658.79)	(40,999.86)	(578,658.65)	377,856.49	(200,802.16)	36,388.48	(164,413.68)
28314 Directors Def Comp	(11,974.15)	9,721.00	(2,253.15)	14,851.30	12,598.15	(43,298.12)	(30,699.97)
28315 Computer Conv	8,721.00	0.00	8,721.00	(8,721.00)	0.00	-	0.00
28317 Discounted Work Comp	(924,194.10)	188,991.78	(735,202.32)	(44,878.66)	(780,080.98)	62,740.46	(717,340.52)
28319 Cap to Construction	23,987,282.88	1,752,698.12	25,739,981.00	86,243.05	25,826,224.05	1,500,583.12	27,326,807.17
28320 Gain HIRI Sub/misc	(161.00)	0.00	(161.00)	161.00	0.00	-	0.00
28321 Pension	16,900,849.58	1,208,791.34	18,109,640.92	6,721,377.32	24,831,018.24	2,306,272.71	27,137,290.95
28322 Sec 189 Interest	(3,388.68)	0.00	(3,388.68)	3,388.68	0.00	-	0.00
28323 Excess Benefit Plan	28,638.12	4,411.51	33,049.63	(63,371.64)	(30,322.01)	(427,523.46)	(457,845.47)
28324 Nonop Deferred Gain	1,475.68	0.00	1,475.68	43.53	1,519.21	(1,519.21)	0.00
28326 Def Exec Comp	(143,960.86)	0.00	(143,960.86)	87,445.84	(56,515.02)	2,592.47	(53,922.55)
28327 Software	(148,804.67)	(93,906.99)	(242,711.66)	305,484.01	62,772.35	(291,804.52)	(229,032.17)
28328 G/L ACRS Retirements	4,889,853.71	1,255,645.16	6,145,498.87	(212,265.74)	5,933,233.13	595,668.94	6,528,902.07
28329 Series U Exp (Bonds)	218,187.74	(46,568.05)	171,619.69	(170,731.48)	888.21	-	888.21
28330 EICP	(359,411.41)	20,450.38	(338,961.03)	344,677.48	5,716.45	(16,093.70)	(10,377.25)
28331 CIAC	(15,496,504.04)	1,582,917.43	(13,913,586.61)	1,102,021.10	(12,811,565.51)	(1,240,261.25)	(14,051,826.76)
28332 Customer Advances	(240,421.29)	(44,360.53)	(284,781.82)	(13,510.68)	(298,292.50)	(29,542.00)	(327,834.50)
28333 Capitalized Interest	(14,109,893.14)	62,838.88	(14,047,054.26)	(2,027,539.49)	(16,074,593.75)	1,548,401.29	(14,526,192.46)
28335 Connection Fees	8,425.27	0.00	8,425.27	7,594.58	16,019.85	-	16,019.85
28336 Nondeductible Interest	13,237.68	(117,047.47)	(103,809.79)	(80,729.49)	(184,539.28)	293,190.79	108,651.51
28337 Supplemental Benefits -SERP	(99,338.08)	(55,148.03)	(154,486.11)	(79,748.16)	(234,234.27)	(294,489.68)	(528,723.95)
28338 Nondeductible Vacation	(1,059,752.00)	0.00	(1,059,752.00)	(24,444.31)	(1,084,196.31)	-	(1,084,196.31)
28339 System Devel Cost	178,118.00	0.00	178,118.00	(178,118.00)	0.00	-	0.00
28340 LTIP	107,232.31	35,397.54	142,629.85	(267,156.03)	(124,526.18)	(8,880.78)	(133,406.96)
28341 Waipahu Baseyard Int	(108,655.95)	0.00	(108,655.95)	(3,205.60)	(111,861.55)	-	(111,861.55)
28342 1990 Rate Case Exp	(96.00)	0.00	(96.00)	96.00	0.00	-	0.00
28345 Ross Cap Legal Fees	(1,021.00)	0.00	(1,021.00)	1,021.00	0.00	-	0.00
28346 Ser V Redmp Premium	25,524.49	(20,384.21)	5,140.28	6,744.91	11,885.19	(11,885.19)	0.00
28347 Waiuu Water Well Pmts	(461,769.41)	28,028.72	(433,740.69)	4,607.93	(429,132.76)	19,792.72	(409,340.04)
28348 Nonutil Bad Debt	329,141.43	0.00	329,141.43	(321,094.14)	8,047.29	-	8,047.29
28349 Cap Corp Logo	163.24	0.00	163.24	72.14	235.38	(235.38)	0.00
28350 Loss Adj Exp	87,341.02	141,400.00	228,741.02	(228,741.02)	0.00	-	0.00
28400 92 Rate Case	1,357.45	0.00	1,357.45	(1,357.45)	0.00	-	0.00
28401 Genl/Auto (& Accidents)	(287,970.30)	47,697.37	(240,272.93)	(312,029.12)	(552,302.05)	230,592.10	(321,709.95)
28402 Ser Q Redmp Premium	(31,502.56)	0.00	(31,502.56)	31,502.56	0.00	-	0.00
28403 CWIP Debt Transition	570,722.63	(20,889.47)	549,833.16	(20,889.47)	528,943.69	(20,891.47)	508,052.22
28404 CWIP Equity Trans	1,794,330.33	(76,252.30)	1,718,078.03	(76,248.30)	1,641,829.73	(76,251.30)	1,565,578.43
28405 Iolani Ct Plaza Sale	80,008.96	(21,309.79)	58,699.17	(154,321.43)	(95,622.26)	21,037.45	(74,584.81)
28406 Kaonohi Sale	37,751.68	0.00	37,751.68	0.00	37,751.68	-	37,751.68
28407 FAS 109 Flow Through	3,586,178.21	(275,858.23)	3,310,319.98	(275,858.23)	3,034,461.75	(275,858.23)	2,758,603.52
28408 Plant Transition	19,890,781.74	(864,819.41)	19,025,962.33	(864,819.41)	18,161,142.92	(864,819.41)	17,296,323.51
28409 CWIP Equity Net	12,592,883.02	838,008.29	13,430,891.31	1,321,410.90	14,752,302.21	892,193.34	15,644,495.55
28410 CWIP Equity Grossup	8,017,129.79	533,746.93	8,550,876.72	841,638.41	9,392,515.13	647,927.16	10,040,442.29
28411 CWIP Debt	6,566,370.05	362,697.75	6,929,067.80	574,622.37	7,503,690.17	304,150.28	7,807,840.45
28412 General/Auto Liability - Legal	(87,659.73)	37,236.84	(50,422.89)	(21,254.69)	(71,677.58)	38,717.11	(32,960.47)
28413 Post Retirement Ben	(889,761.79)	(82,973.57)	(972,735.36)	(521,071.49)	(1,493,806.85)	1,604,898.19	111,091.34
28414 Reg Liab Federal ITC	(4,107,587.39)	549,202.77	(3,558,384.62)	525,807.21	(3,032,577.41)	487,494.42	(2,545,082.99)
28417 Series R & T Exp (Bonds)	(23,563.11)	(15,305.92)	(38,869.03)	38,869.03	0.00	-	0.00
28418 IRP & DSM Costs	340,316.17	56,976.17	397,292.34	(187,628.16)	209,664.18	(80,604.83)	129,059.35
28419 Reg Liab Excess 283	(522,240.12)	18,947.37	(503,292.75)	18,947.37	(484,345.38)	18,947.37	(465,398.01)
28420 Reg Liab Deficit 283	(36,846.78)	12,730.26	(24,116.52)	12,730.26	(11,386.26)	12,350.00	963.74
28421 UFAMS Costs	(3,440.86)	0.00	(3,440.86)	3,440.86	0.00	-	0.00
28422 Miscellaneous	(1,960,025.59)	(236,960.00)	(2,196,985.59)	2,168,473.99	(28,511.60)	-	(28,511.60)
28424 Access Costs	(12,289.94)	0.00	(12,289.94)	12,289.94	0.00	-	0.00
28426 WMS Dev Costs	0.00	0.00	0.00	0.00	0.00	-	0.00
28427 Prepaid Expenses	228,159.49	422,424.89	650,584.38	(70,012.04)	580,572.34	(15,231.46)	565,340.88
28428 94 Rate Case Costs	(238.95)	0.00	(238.95)	238.95	0.00	-	0.00
28429 95 Rate Case Costs	(0.46)	0.00	(0.46)	0.46	0.00	-	0.00
28430 FMB X Premium	437,316.11	(21,918.75)	415,397.36	(154,201.75)	261,195.61	(21,918.75)	239,276.86
28431 EV Demo Costs	0.00	0.00	0.00	0.00	0.00	-	0.00
28432 Coal Gasif Costs	(61,649.00)	65,594.00	3,945.00	(3,945.00)	0.00	-	0.00
28433 Def PTI Costs	(126,806.78)	0.00	(126,806.78)	126,806.78	0.00	-	0.00
28434 EEO Claims	(18,303.82)	4,741.27	(13,562.55)	(51,577.02)	(65,139.57)	(42,333.50)	(107,473.07)
28435 Differential	1,142,194.99	126,616.86	1,268,811.85	(332,442.86)	936,368.99	79,756.30	1,016,125.29
28436 TIP	28,613.23	8,678.94	37,292.17	(207,771.16)	(170,478.99)	(27,828.47)	(198,307.46)
28437 HACO A	(9,502.00)	8,764.00	(738.00)	(2,193.00)	(2,931.00)	2,931.00	0.00
28438 BONY Rev	(2,594.00)	1,247.00	(1,347.00)	(3,428.00)	(4,775.00)	4,775.00	0.00
28439 GAQS Tel	(1,452.00)	1,451.00	(1.00)	1.00	0.00	-	0.00
28440 Kalaeloa	(377,798.00)	72,982.00	(304,816.00)	(19,349.00)	(324,165.00)	142,665.62	(181,499.38)
28441 Sun Power	(9,019.91)	0.00	(9,019.91)	9,597.00	577.09	-	577.09
28442 Overhaul	(198,935.00)	0.00	(198,935.00)	0.00	(198,935.00)	123,943.67	(74,991.33)
28443 EV Tax Credit	(1.00)	0.00	(1.00)	1.00	0.00	-	0.00

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
FEDERAL

LIAB (DR)CR	Actual 12-31-02	Actual 2003	Actual 12-31-03	Actual 2004	Actual 12-31-04	Actual 2005	Actual 12-31-05
28444 FMB S Premium	(7,993.53)	0.00	(7,993.53)	7,993.53	0.00	-	0.00
28445 HMSA Reserve	0.23	0.00	0.23	(0.23)	0.00	-	0.00
28500 Sec. 481(a) Adjustment	1,292,004.00	0.00	1,292,004.00	(1,292,004.00)	0.00	-	0.00
28502 Sec. 481(a) Adjustment - Depr	0.00	0.00	0.00	0.00	0.00	-	0.00
28504 Barbers Point	57,895.92	46,862.50	104,758.42	(128,877.36)	(24,118.94)	24,118.94	0.00
28506 Substation land - Makiki	(62,953.66)	37,771.34	(25,182.32)	25,182.32	0.00	-	0.00
28508 Substation land - Wilder	(13,763.54)	8,898.01	(4,865.53)	4,865.53	0.00	209.00	209.00
28510 Substation land - Liliupuna	(15,372.89)	6,832.11	(8,540.78)	6,832.11	(1,708.67)	1,708.67	0.00
28512 Revenue Bond Cost Amort	831,884.89	337,556.54	1,169,441.43	(119,324.38)	1,050,117.05	186,384.78	1,236,501.83
28514 APPRISE Software	1,425,388.62	(1,548,725.10)	(123,336.48)	123,336.48	0.00	-	0.00
28516 Honolulu Harbor Reserve	(280,046.29)	(33,652.95)	(313,699.24)	25,949.00	(287,750.24)	48,005.00	(239,745.24)
28518 D&T Fee Accrual	(54,551.00)	(27,189.14)	(81,740.14)	81,740.46	0.32	(0.32)	0.00
28520 Deferred Comp - restricted stock	(3,173.00)	25,818.42	22,645.42	(11,806.58)	10,838.84	1,518.75	12,357.59
28522 Knapp lawsuit	0.00	(15,575.66)	(15,575.66)	2,418.06	(13,157.60)	6,578.95	(6,578.65)
28524 Software (E-business only)	0.00	0.00	0.00	46,173.65	46,173.65	(23,646.14)	22,527.51
28526 Emissions Fees	0.00	0.00	0.00	(285,315.17)	(285,315.17)	(28,358.22)	(313,673.39)
28528 Substation land - Kuliouou	0.00	0.00	0.00	(59,777.31)	(59,777.31)	11,737.43	(48,039.88)
28530 AES Hawaii PPA	0.00	0.00	0.00	(50,866.72)	(50,866.72)	2,879.28	(47,987.44)
28532 CIS Project Costs	0.00	0.00	0.00	(103,162.49)	(103,162.49)	(8,437.50)	(111,599.99)
28534 CT-9 reserve	0.00	0.00	0.00	0.00	0.00	-	0.00
28536 Substation land - Queen Emma	0.00	0.00	0.00	0.00	0.00	(376,061.08)	(376,061.08)
28538 Rate Case - TY 2005	0.00	0.00	0.00	0.00	0.00	222,272.28	222,272.28
28540 Kalaeleo PPA	0.00	0.00	0.00	0.00	0.00	(70,078.09)	(70,078.09)
28542 QUIPS amortization						569,248.38	569,248.38
28544 OPEB Exec Life						(2,650,482.48)	(2,650,482.48)
28546 Percentage Repairs Allowance						1,295,258.00	1,295,258.00
28548 Capitalized Interest (D&T)						3,849,215.00	3,849,215.00
28550 E-Business hardware						9,645.18	9,645.18
28552 Fleming K-1							
28554 Substation Land - Palolo							
28556 Substation Land - Waianae							
28558 Aiea Park Place							
28560 State renewable energy credit							
28562 Software - OMS							
28564 Software - HR Suites							
OCI - NQ Pension	(46,524.34)	(50,164.00)	(96,688.34)	(51,627.00)	(148,315.34)	133,395.00	(14,920.34)
TOTAL ACCOUNT 283	56,336,971.37	6,235,878.13	62,572,849.50	5,237,139.51	67,809,989.01	9,859,623.44	77,669,612.45
ACCOUNT 282 DEPR	55,261,728.58	(697,562.06)	54,564,166.52	5,001,295.59	59,565,462.11	1,769,318.13	61,334,780.24
TOTAL FEDERAL DEFERRED TAX LIABILITY (before rate case adjustments)	111,598,699.95	5,538,316.07	117,137,016.02	10,238,435.10	127,375,451.12	11,628,941.57	139,004,392.69
TOTAL ACCOUNT 283	56,336,971.37	6,235,878.13	62,572,849.50	5,237,139.51	67,809,989.01	9,859,623.44	77,669,612.45
Less Rate Case Adjustments:							
28312 Accrued Vacation	929,025.51	166,488.02	1,095,513.53	(2,081.21)	1,093,432.32	(13,516.83)	1,079,915.49
28313 Uncollectible Account	(537,658.79)	(40,999.86)	(578,658.65)	377,856.49	(200,802.16)	36,388.48	(164,413.68)
28314 Directors Def Comp	(11,974.15)	9,721.00	(2,253.15)	14,851.30	12,598.15	(43,298.12)	(30,699.97)
28315 Computer Conversion Costs	8,721.00	0.00	8,721.00	(8,721.00)	0.00	0.00	0.00
28317 Discounted Work Comp	(924,194.10)	188,991.78	(735,202.32)	(44,878.66)	(780,080.98)	62,740.46	(717,340.52)
28320 Gain HIRI Sub/misc	(161.00)	0.00	(161.00)	161.00	0.00	0.00	0.00
28323 Excess Benefit Plan	28,638.12	4,411.51	33,049.63	(63,371.64)	(30,322.01)	(427,523.46)	(457,845.47)
28324 Nonop Deferred Gain	1,475.68	0.00	1,475.68	43.53	1,519.21	(1,519.21)	0.00
28326 Def Exec Comp (Def LTIP)	(143,960.86)	0.00	(143,960.86)	87,445.84	(56,515.02)	2,592.47	(53,922.55)
28330 EICP	(359,411.41)	20,450.38	(338,961.03)	344,677.48	5,716.45	(16,093.70)	(10,377.25)
28336 Nondeductible Interest	13,237.68	(117,047.47)	(103,809.79)	(80,729.49)	(184,539.28)	293,190.79	108,651.51
28337 Supplemental Benefits -SERP	(99,338.08)	(55,148.03)	(154,486.11)	(79,748.16)	(234,234.27)	(294,489.68)	(528,723.95)
28338 Nondeductible Vacation	(1,059,752.00)	0.00	(1,059,752.00)	(24,444.31)	(1,084,196.31)	0.00	(1,084,196.31)
28340 LTIP	107,232.31	35,397.54	142,629.85	(267,156.03)	(124,526.18)	(8,880.78)	(133,406.96)
28341 Waipahu Baseyard Int	(108,655.95)	0.00	(108,655.95)	(3,205.60)	(111,861.55)	0.00	(111,861.55)
28342 1990 Rate Case Exp	(96.00)	0.00	(96.00)	96.00	0.00	0.00	0.00
28345 Ross Cap Legal Fees	(1,021.00)	0.00	(1,021.00)	1,021.00	0.00	0.00	0.00
28347 Waiuku Water Well Pmts	(461,769.41)	28,028.72	(433,740.69)	4,607.93	(429,132.76)	19,792.72	(409,340.04)
28348 Nonutil Bad Debt	329,141.43	0.00	329,141.43	(321,094.14)	8,047.29	0.00	8,047.29
28349 Cap Corp Logo	163.24	0.00	163.24	72.14	235.38	(235.38)	0.00
28350 Outage Loss Adj Exp	87,341.02	141,400.00	228,741.02	(228,741.02)	0.00	0.00	0.00
28400 92 Rate Case	1,357.45	0.00	1,357.45	(1,357.45)	0.00	0.00	0.00
28401 Genl/Auto (& Accidents)	(287,970.30)	47,697.37	(240,272.93)	(312,029.12)	(552,302.05)	230,592.10	(321,709.95)
28412 Genl/Auto Legal	(87,659.73)	37,236.84	(50,422.89)	(21,254.69)	(71,677.58)	38,717.11	(32,960.47)
28434 EEO Claims	(18,303.82)	4,741.27	(13,562.55)	(51,577.02)	(65,139.57)	(42,333.50)	(107,473.07)
28436 TIP	28,613.23	8,678.94	37,292.17	(207,771.16)	(170,478.99)	(27,828.47)	(198,307.46)

HAWAIIAN ELECTRIC CO., INC.
 DEFERRED INCOME TAXES
 FEDERAL

LIAB (DR)CR	Actual 12-31-02	Actual 2003	Actual 12-31-03	Actual 2004	Actual 12-31-04	Actual 2005	Actual 12-31-05
28520 Deferred Comp - restricted stock	(3,173.00)	25,818.42	22,645.42	(11,806.58)	10,838.84	1,518.75	12,357.59
28538 Rate Case - TY 2005	0.00	0.00	0.00	0.00	0.00	222,272.28	222,272.28
28544 OPEB Exec Life						(2,650,482.48)	(2,650,482.48)
28550 E-Business hardware						9,645.18	9,645.18
OCI - NQ Pension	(46,524.34)	(50,164.00)	(96,688.34)	(51,627.00)	(148,315.34)	133,395.00	(14,920.34)
AFUDC in CWIP	4,260,450.47	701,863.28	4,962,313.75	120,532.24	5,082,845.99	824,455.98	5,907,301.97
TCI in CWIP	(3,511,120.21)	(523,064.31)	(4,034,184.52)	378,605.87	(3,655,578.65)	(437,866.59)	(4,093,445.24)
FED DEFD TAX LIABILITY - OTHER	58,204,318.38	5,601,376.73	63,805,695.11	5,688,762.97	69,494,458.08	11,948,390.32	81,442,848.40
FED DEFD TAX LIAB - ACCEL DEPR	55,261,728.58	(697,562.06)	54,564,166.52	5,001,295.59	59,565,462.11	1,769,318.13	61,334,780.24
TOTAL FEDERAL DEFERRED TAX LIABILITY (after rate case adjustments)	113,466,046.96	4,903,814.67	118,369,861.63	10,690,058.56	129,059,920.19	13,717,708.45	142,777,628.64

NOTE: The effects of FIN 48 are not included in this workpaper.

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
FEDERAL

LIAB (DR)CR	Estimate 2006	Estimate 12-31-06	Estimate 2007	Estimate 12-31-07
28310 State JTC	(824,550.02)	(9,547,946.52)	(457,607.05)	(10,005,553.57)
28311 Unearned Lease	1,190.43	(4,380.34)	1,154.49	(3,225.85)
28312 Accrued Vacation	135,560.94	1,215,476.43	63,848.94	1,279,325.37
28313 Uncollectible Acct	(23,816.00)	(188,229.68)	0.00	(188,229.68)
28314 Directors Def Comp	772.37	(29,927.60)	657.90	(29,269.70)
28315 Computer Conv	0.00	0.00	0.00	0.00
28317 Discounted Work Comp	(5,217.00)	(722,557.52)	0.00	(722,557.52)
28319 Cap to Construction	1,816,016.07	29,142,823.24	1,923,694.67	31,066,517.91
28320 Gain HIRI Sub/misc	0.00	0.00	0.00	0.00
28321 Pension	(4,683,108.57)	22,454,182.38	(5,930,585.46)	16,523,596.92
28322 Sec 189 Interest	0.00	0.00	0.00	0.00
28323 Excess Benefit Plan	(11,564.14)	(469,409.61)	(4,523.59)	(473,933.20)
28324 Nonop Deferred Gain	0.00	0.00	0.00	0.00
28326 Def Exec Comp	0.00	(53,922.55)	0.00	(53,922.55)
28327 Software	52,895.71	(176,136.46)	(200,930.76)	(377,067.22)
28328 G/L ACRS Retirements	256,505.97	6,785,408.04	328,947.00	7,114,355.04
28329 Series U Exp (Bonds)	(888.21)	(0.00)	0.00	(0.00)
28330 EICP	(264,337.00)	(274,714.25)	0.00	(274,714.25)
28331 CIAC	(545,158.21)	(14,596,984.97)	1,431,042.87	(13,165,942.10)
28332 Customer Advances	8,448.00	(319,386.50)	0.00	(319,386.50)
28333 Capitalized Interest	(695,650.87)	(15,221,843.33)	(1,077,626.71)	(16,299,470.04)
28335 Connection Fees	0.00	16,019.85	0.00	16,019.85
28336 Nondeductible Interest	0.00	108,651.51	0.00	108,651.51
28337 Supplemental Benefits -SERP	(80,710.05)	(609,434.00)	(64,786.46)	(674,220.46)
28338 Nondeductible Vacation	0.00	(1,084,196.31)	0.00	(1,084,196.31)
28339 System Devel Cost	0.00	0.00	0.00	0.00
28340 LTIP	0.00	(133,406.96)	0.00	(133,406.96)
28341 Waipahu Baseyard Int	0.00	(111,861.55)	0.00	(111,861.55)
28342 1990 Rate Case Exp	0.00	0.00	0.00	0.00
28345 Ross Cap Legal Fees	0.00	0.00	0.00	0.00
28346 Ser V Redmp Premium	0.00	0.00	0.00	0.00
28347 Waiau Water Well Pmts	21,242.70	(388,097.34)	21,242.70	(366,854.64)
28348 Nonutil Bad Debt	0.00	8,047.29	0.00	8,047.29
28349 Cap Corp Logo	0.00	0.00	0.00	0.00
28350 Loss Adj Exp	0.00	0.00	0.00	0.00
28400 92 Rate Case	0.00	0.00	0.00	0.00
28401 Genl/Auto (& Accidents)	46,711.00	(274,998.95)	0.00	(274,998.95)
28402 Ser Q Redmp Premium	0.00	0.00	0.00	0.00
28403 CWIP Debt Transition	(20,889.45)	487,162.77	(20,891.10)	466,271.67
28404 CWIP Equity Trans	(73,137.41)	1,492,441.02	(63,797.96)	1,428,643.06
28405 Iolani Ct Plaza Sale	(80,469.77)	(155,054.58)	45,308.42	(109,746.16)
28406 Kaonohi Sale	0.00	37,751.68	0.00	37,751.68
28407 FAS 109 Flow Through	(275,857.92)	2,482,745.60	(275,857.92)	2,206,887.68
28408 Plant Transition	(864,818.44)	16,431,505.07	(864,818.44)	15,566,686.63
28409 CWIP Equity Net	732,323.85	16,376,819.40	1,512,311.46	17,889,130.86
28410 CWIP Equity Grossup	386,765.16	10,427,207.45	963,226.22	11,390,433.67
28411 CWIP Debt	306,963.09	8,114,803.54	638,546.66	8,753,350.20
28412 General/Auto Liability - Legal	526.00	(32,434.47)	0.00	(32,434.47)
28413 Post Retirement Ben	(110,204.44)	886.90	(101,222.97)	(100,336.07)
28414 Reg Liab Federal JTC	455,906.40	(2,089,176.59)	411,582.43	(1,677,594.16)
28417 Series R & T Exp (Bonds)	0.00	0.00	0.00	0.00
28418 JRP & DSM Costs	112,572.57	241,631.92	135,393.98	377,025.90
28419 Reg Liab Excess 283	18,947.35	(446,450.66)	18,947.35	(427,503.31)
28420 Reg Liab Deficit 283	(963.74)	0.00	0.00	0.00
28421 UFAMS Costs	0.00	0.00	0.00	0.00
28422 Miscellaneous	0.00	(28,511.60)	0.00	(28,511.60)
28424 Access Costs	0.00	0.00	0.00	0.00
28426 WMS Dev Costs	0.00	0.00	0.00	0.00
28427 Prepaid Expenses	0.00	565,340.88	0.00	565,340.88
28428 94 Rate Case Costs	0.00	0.00	0.00	0.00
28429 95 Rate Case Costs	0.00	0.00	0.00	0.00
28430 FMB X Premium	(21,918.73)	217,358.13	(21,918.73)	195,439.40
28431 EV Demo Costs	0.00	0.00	0.00	0.00
28432 Coal Gasif Costs	0.00	0.00	0.00	0.00
28433 Def PTJ Costs	0.00	0.00	0.00	0.00
28434 EEO Claims	0.00	(107,473.07)	0.00	(107,473.07)
28435 Differential	(72,363.12)	943,762.17	(72,363.12)	871,399.05
28436 TIP	0.00	(198,307.46)	0.00	(198,307.46)
28437 HACO A	0.00	0.00	0.00	0.00
28438 BONY Rev	0.00	0.00	0.00	0.00
28439 GAQS Tel	0.00	0.00	0.00	0.00
28440 Kalaeloa	15,153.83	(166,345.55)	15,153.83	(151,191.72)
28441 Sun Power	0.00	577.09	0.00	577.09
28442 Overhaul	11,355.07	(63,636.26)	11,357.62	(52,278.64)
28443 EV Tax Credit	0.00	0.00	0.00	0.00

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
FEDERAL

LIAB (DR)CR	Estimate 2006	Estimate 12-31-06	Estimate 2007	Estimate 12-31-07
28444 FMB S Premium	0.00	0.00	0.00	0.00
28445 HMSA Reserve	0.00	0.00	0.00	0.00
28500 Sec. 481(a) Adjustment	0.00	0.00	0.00	0.00
28502 Sec. 481(a) Adjustment - Depr	0.00	0.00	0.00	0.00
28504 Barbers Point	0.00	0.00	0.00	0.00
28506 Substation land - Makiki	0.00	0.00	0.00	0.00
28508 Substation land - Wilder	(209.00)	0.00	0.00	0.00
28510 Substation land - Lilipuna	0.00	0.00	0.00	0.00
28512 Revenue Bond Cost Amort	(135,414.87)	1,101,086.96	(135,414.87)	965,672.09
28514 APPRISE Software	0.00	0.00	0.00	0.00
28516 Honolulu Harbor Reserve	47,261.00	(192,484.24)	0.00	(192,484.24)
28518 D&T Fcc Accrual	0.00	0.00	0.00	0.00
28520 Deferred Comp - restricted stock	49,489.94	61,847.53	29,593.49	91,441.02
28522 Knapp lawsuit	3,289.00	(3,289.65)	0.00	(3,289.65)
28524 Software (E-business only)	(22,527.51)	0.00	0.00	0.00
28526 Emissions Fees	(11,598.34)	(325,271.73)	0.00	(325,271.73)
28528 Substation land - Kuliouou	12,980.14	(35,059.74)	13,134.14	(21,925.60)
28530 AES Hawaii PPA	2,879.27	(45,108.17)	2,879.27	(42,228.90)
28532 CIS Project Costs	(182,118.66)	(293,718.65)	0.00	(293,718.65)
28534 CT-9 reserve	0.00	0.00	0.00	0.00
28536 Substation land - Queen Emma	83,071.50	(292,989.58)	92,096.50	(200,893.08)
28538 Rate Case - TY 2005	(71,948.28)	150,324.00	(85,899.22)	64,424.78
28540 Kalaeloa PPA	(1,135.75)	(71,213.84)	7,630.25	(63,583.59)
28542 QUIPS amortization	(25,761.60)	543,486.78	(25,761.60)	517,725.18
28544 OPEB Exec Life	(248,271.76)	(2,898,754.24)	(271,052.33)	(3,169,806.57)
28546 Percentage Repairs Allowance	327,724.97	1,622,982.97	(121,722.11)	1,501,260.86
28548 Capitalized Interest (D&T)	404,916.87	4,254,131.87	(322,258.94)	3,931,872.93
28550 E-Business hardware	20,919.11	30,564.29	1,677.67	32,241.96
28552 Fleming K-1	(333.00)	(333.00)	0.00	(333.00)
28554 Substation Land - Palolo	(13,774.00)	(13,774.00)	2,899.67	(10,874.33)
28556 Substation Land - Waianae	(34,148.32)	(34,148.32)	7,317.43	(26,830.89)
28558 Aiea Park Place	0.00	0.00	(38,579.89)	(38,579.89)
28560 State renewable energy credit	0.00	0.00	(164,473.50)	(164,473.50)
28562 Software - OMS	0.00	0.00	437,146.22	437,146.22
28564 Software - HR Suites	0.00	0.00	115,404.48	115,404.48
OCI - NQ Pension	157.00	(14,763.34)	0.00	(14,763.34)
TOTAL ACCOUNT 283	(4,070,318.87)	73,599,293.58	(2,089,897.07)	71,509,396.51
ACCOUNT 282 DEPR	(2,120,299.10)	59,214,481.14	(3,527,130.52)	55,687,350.62
TOTAL FEDERAL DEFERRED TAX LIABILITY (before rate case adjustments)	(6,190,617.97)	132,813,774.72	(5,617,027.59)	127,196,747.13
TOTAL ACCOUNT 283	(4,070,318.87)	73,599,293.58	(2,089,897.07)	71,509,396.51
Less Rate Case Adjustments:				
28312 Accrued Vacation	135,560.94	1,215,476.43	63,848.94	1,279,325.37
28313 Uncollectible Account	(23,816.00)	(188,229.68)	0.00	(188,229.68)
28314 Directors Def Comp	772.37	(29,927.60)	657.90	(29,269.70)
28315 Computer Conversion Costs	0.00	0.00	0.00	0.00
28317 Discounted Work Comp	(5,217.00)	(722,557.52)	0.00	(722,557.52)
28320 Gain HIRI Sub/misc	0.00	0.00	0.00	0.00
28323 Excess Benefit Plan	(11,564.14)	(469,409.61)	(4,523.59)	(473,933.20)
28324 Nonop Deferred Gain	0.00	0.00	0.00	0.00
28326 Def Exec Comp (Def LTIP)	0.00	(53,922.55)	0.00	(53,922.55)
28330 EICP	(264,337.00)	(274,714.25)	0.00	(274,714.25)
28336 Nondeductible Interest	0.00	108,651.51	0.00	108,651.51
28337 Supplemental Benefits -SERP	(80,710.05)	(609,434.00)	(64,786.46)	(674,220.46)
28338 Nondeductible Vacation	0.00	(1,084,196.31)	0.00	(1,084,196.31)
28340 LTIP	0.00	(133,406.96)	0.00	(133,406.96)
28341 Waipahu Baseyard Int	0.00	(111,861.55)	0.00	(111,861.55)
28342 1990 Rate Case Exp	0.00	0.00	0.00	0.00
28345 Ross Cap Legal Fees	0.00	0.00	0.00	0.00
28347 Waiau Water Well Pmts	21,242.70	(388,097.34)	21,242.70	(366,854.64)
28348 Nonutil Bad Debt	0.00	8,047.29	0.00	8,047.29
28349 Cap Corp Logo	0.00	0.00	0.00	0.00
28350 Outage Loss Adj Exp	0.00	0.00	0.00	0.00
28400 92 Rate Case	0.00	0.00	0.00	0.00
28401 Genl/Auto (& Accidents)	46,711.00	(274,998.95)	0.00	(274,998.95)
28412 Genl/Auto Legal	526.00	(32,434.47)	0.00	(32,434.47)
28434 EEO Claims	0.00	(107,473.07)	0.00	(107,473.07)
28436 TIP	0.00	(198,307.46)	0.00	(198,307.46)

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
FEDERAL

LIAB (DR)CR	Estimate 2006	Estimate 12-31-06	Estimate 2007	Estimate 12-31-07
28520 Deferred Comp - restricted stock	49,489.94	61,847.53	29,593.49	91,441.02
28538 Rate Case - TY 2005	(71,948.28)	150,324.00	(85,899.22)	64,424.78
28544 OPEB Exec Life	(248,271.76)	(2,898,754.24)	(271,052.33)	(3,169,806.57)
28550 E-Business hardware	20,919.11	30,564.29	1,677.67	32,241.96
OCI - NQ Pension	157.00	(14,763.34)	0.00	(14,763.34)
AFUDC in CWIP	(830,754.33)	5,076,547.64	637,918.69	5,714,466.33
TCI in CWIP	564,282.26	(3,529,162.98)	(509,968.51)	(4,039,131.49)
FED DEF'D TAX LIABILITY - OTHER	(3,373,361.63)	78,069,486.77	(1,908,606.35)	76,160,880.42
FED DEF'D TAX LIAB - ACCEL DEPR	(2,120,299.10)	59,214,481.14	(3,527,130.52)	55,687,350.62
TOTAL FEDERAL DEFERRED TAX LIABILITY (after rate case adjustments)	(5,493,660.73)	137,283,967.91	(5,435,736.87)	131,848,231.04

NOTE: The effects of FIN 48 are not
included in this workpaper.

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
STATE

LIAB (DR)CR	Actual 12-31-02	Actual 2003	Actual 12-31-03	Actual 2004	Actual 12-31-04	Actual 2005	Actual 12-31-05
28310 State ITC	(978.33)	1,000.00	21.67	(1,489,256.71)	(1,489,235.04)	(103,601.21)	(1,592,836.25)
28311 Unearned Lease	(1,869.05)	414.14	(1,454.91)	288.77	(1,166.14)	225.29	(940.85)
28312 Accrued Vacation	175,100.12	2,216.96	177,317.08	(380.97)	176,936.11	(2,471.77)	174,464.34
28313 Uncollectible Acct	(96,599.04)	(5,052.11)	(101,651.15)	69,571.26	(32,079.89)	6,654.61	(25,425.28)
28314 Directors Def Comp	444.24	(667.43)	(223.19)	(2,230.34)	(2,453.53)	(2,258.15)	(4,711.68)
28315 Computer Conv.	(25,651.00)	0.00	(25,651.00)	25,651.00	0.00	0.00	0.00
28317 Discounted Work Comp	(173,343.47)	34,558.50	(138,784.97)	(3,857.64)	(142,642.61)	11,472.54	(131,170.07)
28319 Cap to Construction	4,130,503.59	320,493.37	4,450,996.96	279,603.49	4,730,600.45	274,392.30	5,004,992.75
28320 Gain HIRI Sub/misc	(18.00)	0.00	(18.00)	18.00	0.00	0.00	0.00
28321 Pension	3,101,050.46	221,036.45	3,322,086.91	1,221,540.66	4,543,627.57	418,595.97	4,962,223.54
28322 Sec 189 Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28323 Excess Benefit Plan	7,052.26	131.43	7,183.69	(10,312.02)	(3,128.33)	(76,064.56)	(79,192.89)
28324 Nonop Deferred Gain	277.79	0.00	277.79	0.00	277.79	(277.79)	0.00
28326 Def Exec Comp	(24,620.41)	0.00	(24,620.41)	14,286.32	(10,334.09)	472.87	(9,861.22)
28327 Software	66,619.60	(56,616.59)	10,003.01	2,049.47	12,052.48	(73,994.78)	(61,942.30)
28328 G/L ACRS Retirements	887,697.66	229,603.68	1,117,301.34	(44,810.06)	1,072,491.28	108,922.12	1,181,413.40
28329 Series U Exp (Bonds)	8,065.83	(8,515.30)	(449.47)	611.88	162.41	0.00	162.41
28330 EICP	(64,763.53)	(13,151.93)	(77,915.46)	78,960.75	1,045.29	(2,943.29)	(1,898.00)
28331 CIAC	(3,028,850.48)	281,099.23	(2,747,751.25)	186,918.03	(2,560,833.22)	(216,878.35)	(2,777,711.57)
28332 Customer Advances	(48,678.68)	(8,111.64)	(56,790.32)	2,908.00	(53,882.32)	(5,401.00)	(59,283.32)
28333 Capitalized Interest	(2,622,377.74)	(59,909.34)	(2,682,287.08)	(371,100.96)	(3,053,388.04)	281,119.64	(2,772,268.40)
28335 Connection Fees	7,626.14	0.00	7,626.14	818.00	8,444.14	0.00	8,444.14
28336 Nondeductible Interest	954.62	(21,402.97)	(20,448.35)	(13,295.82)	(33,744.17)	53,612.03	19,867.86
28337 Supplemental Benefits -SERP	(18,164.92)	69,241.20	51,076.28	(97,027.10)	(45,950.82)	(43,377.64)	(89,328.46)
28338 Nondeductible Vacation	(195,605.00)	0.00	(195,605.00)	0.00	(195,605.00)	0.00	(195,605.00)
28339 System Devel Cost	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28340 LTIP	19,051.55	6,472.69	25,524.24	(48,294.63)	(22,770.39)	(1,624.06)	(24,394.45)
28341 Waipahu Baseyard Int	(20,452.91)	0.00	(20,452.91)	0.00	(20,452.91)	0.00	(20,452.91)
28342 1990 Rate Case Exp	(0.48)	0.00	(0.48)	0.48	0.00	0.00	0.00
28345 Ross Cap Legal Fees	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28346 Ser V Redmp Premium	5,901.96	(3,727.40)	2,174.56	0.49	2,175.05	(2,175.05)	0.00
28347 Waiuu Water Well Pmts	(76,393.58)	4,285.38	(72,108.20)	(7,845.62)	(79,953.82)	3,884.38	(76,069.44)
28348 Nonutil Bad Debt	60,054.69	0.00	60,054.69	(58,737.00)	1,317.69	0.00	1,317.69
28349 Cap Corp Logo	460.09	0.00	460.09	240.00	700.09	(700.09)	0.00
28350 Loss Adj Exp	15,265.52	0.00	15,265.52	(15,265.52)	0.00	0.00	0.00
28400 92 Rate Case	340.20	0.00	340.20	(340.20)	0.00	0.00	0.00
28401 Genl/Auto (& Accidents)	(53,232.33)	8,721.80	(44,510.53)	(56,481.36)	(100,991.89)	42,165.41	(58,826.48)
28402 Ser Q Redmp Premium	(4,829.08)	0.00	(4,829.08)	4,829.08	0.00	0.00	0.00
28403 CWIP Debt Transition	104,362.48	(3,819.79)	100,542.69	(3,819.79)	96,722.90	(3,819.79)	92,903.11
28404 CWIP Equity Trans	328,106.40	(13,943.28)	314,163.12	(13,942.28)	300,220.84	(13,943.28)	286,277.56
28405 Iolani Ct Plaza Sale	3,276.37	(4,711.32)	(1,434.95)	(6,315.76)	(7,750.71)	6,540.86	(1,209.85)
28406 Kaonohi Sale	6,942.61	0.00	6,942.61	0.00	6,942.61	0.00	6,942.61
28407 FAS 109 Flow Through	655,712.70	(50,442.65)	605,270.05	(50,442.65)	554,827.40	(50,442.65)	504,384.75
28408 Plant Transition	3,637,199.18	(158,138.41)	3,479,060.77	(158,138.41)	3,320,922.36	(158,138.41)	3,162,783.95
28409 CWIP Equity Net	2,302,689.45	153,235.80	2,455,925.25	241,629.42	2,697,554.67	163,143.93	2,860,698.60
28410 CWIP Equity Grossup	1,465,982.70	97,599.43	1,563,582.13	153,899.59	1,717,481.72	118,478.11	1,835,959.83
28411 CWIP Debt	1,204,244.88	66,321.86	1,270,566.74	105,073.51	1,375,640.25	55,615.87	1,431,256.12
28412 General/Auto Liability - Legal	(16,277.18)	6,809.02	(9,468.16)	(3,638.55)	(13,106.71)	7,079.70	(6,027.01)
28413 Post Retirement Ben	(164,514.17)	(14,497.39)	(179,011.56)	(96,557.04)	(275,568.60)	278,345.80	2,777.20
28414 Reg Liab Federal ITC	(751,937.33)	100,425.65	(651,511.68)	96,147.28	(555,364.40)	89,141.52	(466,222.88)
28417 Series R & T Exp (Bonds)	(3,547.72)	(2,798.80)	(6,346.52)	6,346.52	0.00	0.00	0.00
28418 IRP & DSM Costs	68,297.55	10,418.50	78,716.05	(40,356.56)	38,359.49	(14,792.21)	23,567.28
28419 Reg Liab Excess 283	(96,135.28)	3,464.66	(92,670.62)	3,464.66	(89,205.96)	3,464.66	(85,741.30)
28420 Reg Liab Deficit 283	(6,344.98)	2,327.82	(4,017.16)	2,327.82	(1,689.34)	2,258.29	568.95
28421 UFAMS Costs	(642.43)	0.00	(642.43)	642.43	0.00	0.00	0.00
28422 Miscellaneous	10,697.44	(60,312.00)	(49,614.56)	50,225.59	611.03	0.00	611.03
28424 Access Costs	0.04	0.00	0.04	(0.04)	0.00	0.00	0.00
28426 WMS Dev Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28427 Prepaid Expenses	43,825.12	(2,082.00)	41,743.12	64,418.05	106,161.17	(2,785.18)	103,375.99
28428 94 Rate Case Costs	(43.53)	0.00	(43.53)	43.53	0.00	0.00	0.00
28429 95 Rate Case Costs	(0.21)	0.00	(0.21)	0.21	0.00	0.00	0.00
28430 FMB X Premium	79,966.59	(4,008.00)	75,958.59	(28,196.00)	47,762.59	(4,008.00)	43,754.59
28431 EV Demo Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28432 Coal Gasif Costs	(11,273.00)	0.00	(11,273.00)	11,273.00	0.00	0.00	0.00
28433 Def PTI Costs	(23,187.48)	0.00	(23,187.48)	23,187.48	0.00	0.00	0.00
28434 EEO Claims	(3,348.06)	866.97	(2,481.09)	(9,430.08)	(11,911.17)	(7,740.98)	(19,652.15)
28435 Differential	208,857.91	23,152.80	232,010.71	(60,789.85)	171,220.86	(3,909.43)	167,311.43
28436 TIP	5,231.50	1,587.01	6,818.51	(42,292.98)	(35,474.47)	(5,089.22)	(40,563.69)
28437 HACO A	0.00	0.00	0.00	(588.00)	(588.00)	588.00	0.00
28438 BONY Rev	0.00	0.00	0.00	74.00	74.00	(122.74)	(48.74)
28439 GAQS Tel	0.00	0.00	0.00	178.00	178.00	0.00	178.00
28440 Kalaieoa	0.00	1,486.00	1,486.00	(19,375.00)	(17,889.00)	22,167.79	4,278.79
28441 Sun Power	(1,649.28)	0.00	(1,649.28)	0.00	(1,649.28)	0.00	(1,649.28)
28442 Overhaul	(36,377.00)	0.00	(36,377.00)	0.00	(36,377.00)	22,663.88	(13,713.12)
28443 EV Tax Credit	0.00	74.00	74.00	0.00	74.00	0.00	74.00
28444 FMB S Premium	(1,461.75)	0.00	(1,461.75)	1,461.75	0.00	0.00	0.00
28445 HMSA Reserve	0.16	0.00	0.16	(0.16)	0.00	0.00	0.00

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
STATE

LIAB (DR)CR	Actual 12-31-02	Actual 2003	Actual 12-31-03	Actual 2004	Actual 12-31-04	Actual 2005	Actual 12-31-05
28500 Sec. 481(a) Adjustment	236,253.00	0.00	236,253.00	(236,253.00)	0.00	0.00	0.00
28502 Sec. 481(a) Adjustment - Depr	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28504 Barbers Point	10,586.80	8,569.14	19,155.94	(23,566.23)	(4,410.29)	4,410.29	0.00
28506 Substation land - Makiki	(10,935.24)	6,906.76	(4,028.48)	4,028.48	0.00	0.00	0.00
28508 Substation land - Wilder	892.93	993.08	1,886.01	(1,886.01)	0.00	(596.00)	(596.00)
28510 Substation land - Lilipuna	(2,810.70)	1,249.30	(1,561.40)	1,249.30	(312.10)	312.10	0.00
28512 Revenue Bond Cost Amort	152,115.48	61,724.63	213,840.11	(21,819.32)	192,020.79	34,081.79	226,102.58
28514 APPRISE Software	260,842.63	(283,397.10)	(22,554.47)	22,554.47	0.00	0.00	0.00
28516 Honolulu Harbor Reserve	(51,208.55)	(6,153.68)	(57,362.23)	4,745.00	(52,617.23)	8,778.00	(43,839.23)
28518 D&T Fee Accrual	(9,975.00)	(4,971.73)	(14,946.73)	14,946.83	0.10	(0.10)	0.00
28520 Deferred Comp - restricted stock	(580.00)	4,721.08	4,141.08	(2,158.92)	1,982.16	277.71	2,259.87
28522 Knapp lawsuit	0.00	(2,848.12)	(2,848.12)	442.06	(2,406.06)	1,203.01	(1,203.05)
28524 Software (E-business only)	0.00	0.00	0.00	9,413.97	9,413.97	(4,382.16)	5,031.81
28526 Emissions Fees	0.00	0.00	0.00	(52,172.18)	(52,172.18)	(5,185.50)	(57,357.68)
28528 Substation land - Kuliouou	0.00	0.00	0.00	(10,930.71)	(10,930.71)	6,507.67	(4,423.04)
28530 AES Hawaii PPA	0.00	0.00	0.00	(9,301.50)	(9,301.50)	526.50	(8,775.00)
28532 CIS Project Costs	0.00	0.00	0.00	(18,863.89)	(18,863.89)	(1,542.86)	(20,406.75)
28534 CT-9 reserve	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28536 Substation land - Queen Emma	0.00	0.00	0.00	0.00	0.00	(68,765.45)	(68,765.45)
28538 Rate Case - TY 2005	0.00	0.00	0.00	0.00	0.00	40,644.21	40,644.21
28540 Kalaeloa PPA	0.00	0.00	0.00	0.00	0.00	(12,813.88)	(12,813.88)
28542 QUIPS amortization						104,091.30	104,091.30
28544 OPEB Exec Life						(484,657.38)	(484,657.38)
28546 Percentage Repairs Allowance						236,847.00	236,847.00
28548 Capitalized Interest (D&T)						724,104.00	724,104.00
28550 E-Business hardware						2,276.20	2,276.20
28552 Fleming K-1							0.00
28554 Substation Land - Palolo							
28556 Substation Land - Waianae							
28558 Aiea Park Place							
28560 State renewable energy credit							
28562 Software - OMS							
28564 Software - HR Suites							
OCI - NQ Pension	(8,507.31)	(9,173.00)	(17,680.31)	(9,440.00)	(27,120.31)	24,392.00	(2,728.31)
TOTAL ACCOUNT 283	11,615,366.01	932,756.36	12,548,122.37	(433,442.23)	12,114,680.14	1,784,954.39	13,899,634.53
ACCOUNT 282 DEPR	8,588,460.68	(678,186.27)	7,910,274.41	(880,865.71)	7,029,408.70	161,259.95	7,190,668.65
TOTAL STATE DEFERRED TAX LIABILITY (before rate case adjustments)	20,203,826.69	254,570.09	20,458,396.78	(1,314,307.94)	19,144,088.84	1,946,214.34	21,090,303.18
TOTAL ACCOUNT 283	11,615,366.01	932,756.36	12,548,122.37	(433,442.23)	12,114,680.14	1,784,954.39	13,899,634.53
Less Rate Case Adjustments:							
28312 Accrued Vacation	175,100.12	2,216.96	177,317.08	(380.97)	176,936.11	(2,471.77)	174,464.34
28313 Uncollectible Account	(96,599.04)	(5,052.11)	(101,651.15)	69,571.26	(32,079.89)	6,654.61	(25,425.28)
28314 Directors Def Comp	444.24	(667.43)	(223.19)	(2,230.34)	(2,453.53)	(2,258.15)	(4,711.68)
28315 Computer Conversion Costs	(25,651.00)	0.00	(25,651.00)	25,651.00	0.00	0.00	0.00
28317 Discounted Work Comp	(173,343.47)	34,558.50	(138,784.97)	(3,857.64)	(142,642.61)	11,472.54	(131,170.07)
28320 Gain HIRI Sub/misc	(18.00)	0.00	(18.00)	18.00	0.00	0.00	0.00
28323 Excess Benefit Plan	7,052.26	131.43	7,183.69	(10,312.02)	(3,128.33)	(76,064.56)	(79,192.89)
28324 Nonop Deferred Gain	277.79	0.00	277.79	0.00	277.79	(277.79)	0.00
28326 Def Exec Comp (Def LTIP)	(24,620.41)	0.00	(24,620.41)	14,286.32	(10,334.09)	472.87	(9,861.22)
28330 EICP	(64,763.53)	(13,151.93)	(77,915.46)	78,960.75	1,045.29	(2,943.29)	(1,898.00)
28336 Nondeductible Interest	954.62	(21,402.97)	(20,448.35)	(13,295.82)	(33,744.17)	53,612.03	19,867.86
28337 Supplemental Benefits -SERP	(18,164.92)	69,241.20	51,076.28	(97,027.10)	(45,950.82)	(43,377.64)	(89,328.46)
28338 Nondeductible Vacation	(195,605.00)	0.00	(195,605.00)	0.00	(195,605.00)	0.00	(195,605.00)
28340 LTIP	19,051.55	6,472.69	25,524.24	(48,294.63)	(22,770.39)	(1,624.06)	(24,394.45)
28341 Waipahu Baseyard Int	(20,452.91)	0.00	(20,452.91)	0.00	(20,452.91)	0.00	(20,452.91)
28342 1990 Rate Case Exp	(0.48)	0.00	(0.48)	0.48	0.00	0.00	0.00
28345 Ross Cap Legal Fees	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28347 Waiau Water Well Prmts	(76,393.58)	4,285.38	(72,108.20)	(7,845.62)	(79,953.82)	3,884.38	(76,069.44)
28348 Nonutil Bad Debt	60,054.69	0.00	60,054.69	(58,737.00)	1,317.69	0.00	1,317.69
28349 Cap Corp Logo	460.09	0.00	460.09	240.00	700.09	(700.09)	0.00
28350 Outage Loss Adj Exp	15,265.52	0.00	15,265.52	(15,265.52)	0.00	0.00	0.00
28400 92 Rate Case	340.20	0.00	340.20	(340.20)	0.00	0.00	0.00
28401 Genl/Auto (& Accidents)	(53,232.33)	8,721.80	(44,510.53)	(56,481.36)	(100,991.89)	42,165.41	(58,826.48)
28412 Genl/Auto Legal	(16,277.18)	6,809.02	(9,468.16)	(3,638.55)	(13,106.71)	7,079.70	(6,027.01)
28434 EEO Claims	(3,348.06)	866.97	(2,481.09)	(9,430.08)	(11,911.17)	(7,740.98)	(19,652.15)
28436 TIP	5,231.50	1,587.01	6,818.51	(42,292.98)	(35,474.47)	(5,089.22)	(40,563.69)
28520 Deferred Comp - restricted stock	(580.00)	4,721.08	4,141.08	(2,158.92)	1,982.16	277.71	2,259.87
28538 Rate Case - TY 2005	0.00	0.00	0.00	0.00	0.00	40,644.21	40,644.21
28544 OPEB Exec Life						(484,657.38)	(484,657.38)
28550 E-Business hardware						2,276.20	2,276.20
OCI - NQ Pension	(8,507.31)	(9,173.00)	(17,680.31)	(9,440.00)	(27,120.31)	24,392.00	(2,728.31)

HAWAIIAN ELECTRIC CO., INC.
 DEFERRED INCOME TAXES
 STATE

LIAB (DR)CR

	Actual 12-31-02	Actual 2003	Actual 12-31-03	Actual 2004	Actual 12-31-04	Actual 2005	Actual 12-31-05
AFUDC in CWIP	779,049.80	128,340.06	907,389.86	22,040.07	929,429.93	150,756.89	1,080,186.82
TCI in CWIP	(642,030.12)	(95,645.55)	(737,675.67)	69,230.43	(668,445.24)	(80,066.62)	(748,511.86)
STATE DEF'D TAX LIABILITY - OTHER	11,971,670.97	809,897.25	12,781,568.22	(332,411.79)	12,449,156.43	2,148,537.39	14,597,693.82
STATE DEF'D TAX LIAB - ACCEL DEPR	8,588,460.68	(678,186.27)	7,910,274.41	(880,865.71)	7,029,408.70	161,259.95	7,190,668.65
TOTAL STATE DEFERRED TAX LIABILITY (after rate case adjustments)	20,560,131.65	131,710.98	20,691,842.63	(1,213,277.50)	19,478,565.13	2,309,797.34	21,788,362.47

NOTE: The effects of FIN 48 are not included in this workpaper.

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
STATE

LIAB (DR)/CR	Estimate 2006	Estimate 12-31-06	Estimate 2007	Estimate 12-31-07
28310 State ITC	(136,695.93)	(1,729,532.18)	(83,676.29)	(1,813,208.47)
28311 Unearned Lease	217.86	(722.99)	211.11	(511.88)
28312 Accrued Vacation	24,788.18	199,252.52	11,675.18	210,927.70
28313 Uncollectible Acct	(4,355.00)	(29,780.28)	0.00	(29,780.28)
28314 Directors Def Comp	141.23	(4,570.45)	120.30	(4,450.15)
28315 Computer Conv	0.00	0.00	0.00	0.00
28317 Discounted Work Comp	(954.00)	(132,124.07)	0.00	(132,124.07)
28319 Cap to Construction	329,518.33	5,334,511.08	351,918.21	5,686,429.29
28320 Gain HIRI Sub/misc	0.00	0.00	0.00	0.00
28321 Pension	(856,335.46)	4,105,888.08	(1,084,444.35)	3,021,443.73
28322 Sec 189 Interest	0.00	0.00	0.00	0.00
28323 Excess Benefit Plan	314.42	(78,878.47)	(827.17)	(79,705.64)
28324 Nonop Deferred Gain	0.00	0.00	0.00	0.00
28326 Def Exec Comp	0.00	(9,861.22)	0.00	(9,861.22)
28327 Software	28,164.76	(33,777.54)	(29,558.08)	(63,335.62)
28328 GL ACRS Retirements	49,254.63	1,230,668.03	60,150.00	1,290,818.03
28329 Series U Exp (Bonds)	(162.41)	0.00	0.00	0.00
28330 EICP	(48,336.00)	(50,234.00)	0.00	(50,234.00)
28331 CIAC	(96,793.08)	(2,874,504.65)	264,350.59	(2,610,154.06)
28332 Customer Advances	1,544.00	(57,739.32)	0.00	(57,739.32)
28333 Capitalized Interest	(243,218.08)	(3,015,486.48)	(189,620.41)	(3,205,106.89)
28335 Connection Fees	0.00	8,444.14	0.00	8,444.14
28336 Nondeductible Interest	0.00	19,867.86	0.00	19,867.86
28337 Supplemental Benefits -SERP	(11,826.39)	(101,154.85)	(11,846.61)	(113,001.46)
28338 Nondeductible Vacation	0.00	(195,605.00)	0.00	(195,605.00)
28339 System Devel Cost	0.00	0.00	0.00	0.00
28340 LTIP	0.00	(24,394.45)	0.00	(24,394.45)
28341 Waipahu Baseyard Int	0.00	(20,452.91)	0.00	(20,452.91)
28342 1990 Rate Case Exp	0.00	0.00	0.00	0.00
28345 Ross Cap Legal Fees	0.00	0.00	0.00	0.00
28346 Ser V Redmp Premium	0.00	0.00	0.00	0.00
28347 Waiau Water Well Pmts	4,285.36	(71,784.08)	3,884.36	(67,899.72)
28348 Nonutil Bad Debt	0.00	1,317.69	0.00	1,317.69
28349 Cap Corp Logo	0.00	0.00	0.00	0.00
28350 Loss Adj Exp	0.00	0.00	0.00	0.00
28400 92 Rate Case	0.00	0.00	0.00	0.00
28401 Gen/Auto (& Accidents)	8,541.00	(50,285.48)	0.00	(50,285.48)
28402 Ser Q Redmp Premium	0.00	0.00	0.00	0.00
28403 CWIP Debt Transition	(3,819.77)	89,083.34	(3,820.07)	85,263.27
28404 CWIP Equity Trans	(13,373.63)	272,903.93	(11,665.85)	261,238.08
28405 Iolani Ct Plaza Sale	(11,572.04)	(12,781.89)	8,284.93	(4,496.96)
28406 Kaonohi Sale	0.00	6,942.61	0.00	6,942.61
28407 FAS 109 Flow Through	(50,442.34)	453,942.41	(50,442.34)	403,500.07
28408 Plant Transition	(158,137.41)	3,004,646.54	(158,137.41)	2,846,509.13
28409 CWIP Equity Net	133,909.96	2,994,608.56	276,535.54	3,271,144.10
28410 CWIP Equity Grossup	70,722.34	1,906,682.17	176,131.89	2,082,814.06
28411 CWIP Debt	56,129.84	1,487,385.96	116,762.21	1,604,148.17
28412 General/Auto Liability - Legal	96.00	(5,931.01)	0.00	(5,931.01)
28413 Post Retirement Ben	(22,580.26)	(19,803.06)	(18,509.25)	(38,312.31)
28414 Reg Liab Federal ITC	83,365.31	(382,857.57)	75,260.40	(307,597.17)
28417 Series R & T Exp (Bonds)	0.00	0.00	0.00	0.00
28418 IRP & DSM Costs	20,747.79	44,315.07	24,889.40	69,204.47
28419 Reg Liab Excess 283	3,464.64	(82,276.66)	3,464.64	(78,812.02)
28420 Reg Liab Deficit 283	(568.95)	0.00	0.00	0.00
28421 UFAMS Costs	0.00	0.00	0.00	0.00
28422 Miscellaneous	0.00	611.03	0.00	611.03
28424 Access Costs	0.00	0.00	0.00	0.00
28426 WMS Dev Costs	0.00	0.00	0.00	0.00
28427 Prepaid Expenses	0.00	103,375.99	0.00	103,375.99
28428 94 Rate Case Costs	0.00	0.00	0.00	0.00
28429 95 Rate Case Costs	0.00	0.00	0.00	0.00
28430 FMB X Premium	(4,007.97)	39,746.62	(4,007.97)	35,738.65
28431 EV Demo Costs	0.00	0.00	0.00	0.00
28432 Coal Gasif Costs	0.00	0.00	0.00	0.00
28433 Def PTI Costs	0.00	0.00	0.00	0.00
28434 EEO Claims	0.00	(19,652.15)	0.00	(19,652.15)
28435 Differential	4,148.96	171,460.39	(13,232.04)	158,228.35
28436 TIP	4,042.00	(36,521.69)	0.00	(36,521.69)
28437 HACO A	0.00	0.00	0.00	0.00
28438 BONY Rev	(25.26)	(74.00)	0.00	(74.00)
28439 GAQS Tel	(178.00)	0.00	0.00	0.00
28440 Kalaeloa	5,541.97	9,820.76	2,770.97	12,591.73
28441 Sun Power	1,649.00	(0.28)	0.00	(0.28)
28442 Overhaul	2,076.35	(11,636.77)	2,076.81	(9,559.96)
28443 EV Tax Credit	0.00	74.00	0.00	74.00
28444 FMB S Premium	0.00	0.00	0.00	0.00
28445 HMSA Reserve	0.00	0.00	0.00	0.00

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
STATE

LIAB (DR)CR	Estimate 2006	Estimate 12-31-06	Estimate 2007	Estimate 12-31-07
28500 Sec. 481(a) Adjustment	0.00	0.00	0.00	0.00
28502 Sec. 481(a) Adjustment - Depr	0.00	0.00	0.00	0.00
28504 Barbers Point	0.00	0.00	0.00	0.00
28506 Substation land - Makiki	0.00	0.00	0.00	0.00
28508 Substation land - Wilder	596.00	0.00	0.00	0.00
28510 Substation land - Lilipuna	0.00	0.00	0.00	0.00
28512 Revenue Bond Cost Amort	(24,761.45)	201,341.13	(24,761.45)	176,579.68
28514 APPRISE Software	22,551.00	22,551.00	0.00	22,551.00
28516 Honolulu Harbor Reserve	8,641.00	(35,198.23)	0.00	(35,198.23)
28518 D&T Fee Accrual	0.00	0.00	0.00	0.00
28520 Deferred Comp - restricted stock	9,049.54	11,309.41	5,411.35	16,720.76
28522 Knapp lawsuit	602.00	(601.05)	0.00	(601.05)
28524 Software (E-business only)	(5,031.81)	0.00	0.00	0.00
28526 Emissions Fees	(2,120.83)	(59,478.51)	0.00	(59,478.51)
28528 Substation land - Kuliouou	1,445.66	(2,977.38)	2,401.66	(575.72)
28530 AES Hawaii PPA	526.49	(8,248.51)	526.49	(7,722.02)
28532 CIS Project Costs	(33,301.34)	(53,708.09)	0.00	(53,708.09)
28534 CT-9 reserve	0.00	0.00	0.00	0.00
28536 Substation land - Queen Emma	42,627.42	(26,138.03)	16,840.42	(9,297.61)
28538 Rate Case - TY 2005	(13,156.19)	27,488.02	(15,707.21)	11,780.81
28540 Kalaheo PPA	(207.76)	(13,021.64)	1,395.24	(11,626.40)
28542 QUIPS amortization	(4,710.67)	99,380.63	(4,710.67)	94,669.96
28544 OPEB Exec Life	(45,398.03)	(530,055.41)	(49,563.60)	(579,619.01)
28546 Percentage Repairs Allowance	163,694.98	400,541.98	(30,040.83)	370,501.15
28548 Capitalized Interest (D&T)	104,706.44	828,810.44	(62,744.98)	766,065.46
28550 E-Business hardware	5,072.14	7,348.34	607.55	7,955.89
28552 Fleming K-1	(61.00)	(61.00)	1,726.64	1,665.64
28554 Substation Land - Palolo	(2,518.66)	(2,518.66)	530.22	(1,988.44)
28556 Substation Land - Waianae	(6,244.23)	(6,244.23)	1,338.04	(4,906.19)
28558 Aiea Park Place	0.00	0.00	(7,054.57)	(7,054.57)
28560 State renewable energy credit	0.00	0.00	(30,075.00)	(30,075.00)
28562 Software - OMS	0.00	0.00	79,934.90	79,934.90
28564 Software - HR Suites	0.00	0.00	21,102.42	21,102.42
OCI - NQ Pension	29.00	(2,699.31)	0.00	(2,699.31)
TOTAL ACCOUNT 283	(608,688.35)	13,290,946.18	(374,144.68)	12,916,801.50
ACCOUNT 282 DEPR	(409,111.70)	6,781,556.95	(404,238.25)	6,377,318.70
TOTAL STATE DEFERRED TAX LIABILITY (before rate case adjustments)	(1,017,800.05)	20,072,503.13	(778,382.93)	19,294,120.20
TOTAL ACCOUNT 283	(608,688.35)	13,290,946.18	(374,144.68)	12,916,801.50
<u>Less Rate Case Adjustments:</u>				
28312 Accrued Vacation	24,788.18	199,252.52	11,675.18	210,927.70
28313 Uncollectible Account	(4,355.00)	(29,780.28)	0.00	(29,780.28)
28314 Directors Def Comp	141.23	(4,570.45)	120.30	(4,450.15)
28315 Computer Conversion Costs	0.00	0.00	0.00	0.00
28317 Discounted Work Comp	(954.00)	(132,124.07)	0.00	(132,124.07)
28320 Gain HIRI Sub/misc	0.00	0.00	0.00	0.00
28323 Excess Benefit Plan	314.42	(78,878.47)	(827.17)	(79,705.64)
28324 Nonop Deferred Gain	0.00	0.00	0.00	0.00
28326 Def Exec Comp (Def LTIP)	0.00	(9,861.22)	0.00	(9,861.22)
28330 EICP	(48,336.00)	(50,234.00)	0.00	(50,234.00)
28336 Nondeductible Interest	0.00	19,867.86	0.00	19,867.86
28337 Supplemental Benefits -SERP	(11,826.39)	(101,154.85)	(11,846.61)	(113,001.46)
28338 Nondeductible Vacation	0.00	(195,605.00)	0.00	(195,605.00)
28340 LTIP	0.00	(24,394.45)	0.00	(24,394.45)
28341 Waipahu Baseyard Int	0.00	(20,452.91)	0.00	(20,452.91)
28342 1990 Rate Case Exp	0.00	0.00	0.00	0.00
28345 Ross Cap Legal Fees	0.00	0.00	0.00	0.00
28347 Waiiau Water Well Pmts	4,285.36	(71,784.08)	3,884.36	(67,899.72)
28348 Nonutil Bad Debt	0.00	1,317.69	0.00	1,317.69
28349 Cap Corp Logo	0.00	0.00	0.00	0.00
28350 Outage Loss Adj Exp	0.00	0.00	0.00	0.00
28400 92 Rate Case	0.00	0.00	0.00	0.00
28401 Genl/Auto (& Accidents)	8,541.00	(50,285.48)	0.00	(50,285.48)
28412 Genl/Auto Legal	96.00	(5,931.01)	0.00	(5,931.01)
28434 EEO Claims	0.00	(19,652.15)	0.00	(19,652.15)
28436 TIP	4,042.00	(36,521.69)	0.00	(36,521.69)
28520 Deferred Comp - restricted stock	9,049.54	11,309.41	5,411.35	16,720.76
28538 Rate Case - TY 2005	(13,156.19)	27,488.02	(15,707.21)	11,780.81
28544 OPEB Exec Life	(45,398.03)	(530,055.41)	(49,563.60)	(579,619.01)
28550 E-Business hardware	5,072.14	7,348.34	607.55	7,955.89
OCI - NQ Pension	29.00	(2,699.31)	0.00	(2,699.31)

HAWAIIAN ELECTRIC CO., INC.
DEFERRED INCOME TAXES
STATE

LIAB (DR)CR	Estimate 2006	Estimate 12-31-06	Estimate 2007	Estimate 12-31-07
AFUDC in CWIP	(151,908.58)	928,278.24	116,647.39	1,044,925.63
TCI in CWIP	103,182.51	(645,329.35)	(93,250.91)	(738,580.26)
STATE DEFD TAX LIABILITY - OTHER	(492,295.54)	14,105,398.28	(341,295.31)	13,764,102.97
STATE DEFD TAX LIAB - ACCEL DEPR	(409,111.70)	6,781,556.95	(404,238.25)	6,377,318.70
TOTAL STATE DEFERRED TAX LIABILITY (after rate case adjustments)	(901,407.24)	20,886,955.23	(745,533.56)	20,141,421.67

NOTE: The effects of FIN 48 are not included in this workpaper.

HAWAIIAN ELECTRIC CO., INC.
FIN 48

<u>Possible Estimated Outcome</u>	<u>Individual Probability of Occurring (%)</u>	<u>Cumulative Probability of Occurring (%)</u>
\$100	5	5
80	25	30
60	25	55
50	20	75
40	10	85
20	10	95
0	5	100

Source: Paragraph 21 of Appendix A of FIN 48

**HAWAIIAN ELECTRIC CO., INC.
ACCUMULATED DEFERRED FEDERAL ITC
FOR TEST YEAR 2007**

	<u>2007</u>	<u>References</u>
Annual Amortization of 1971 Revenue Act ITC	764,222	HECO-1503
Multiplied by Gross-up Factor (1/(1-tax rate) 1/(1-.389097744)	1.636923	
Total Amortization of Unamortized ITC and Regulatory Liability	<u>1,250,973</u>	
Less: Amortization of Unamortized ITC	<u>764,222</u>	
Amortization of Regulatory Liability	<u>486,751</u>	HECO-1506

LINDA LINGLE
GOVERNOR

JAMES R. AJONA, JR.
LT GOVERNOR



KURT KAWAFUCHI
DIRECTOR OF TAXATION

SANDRA L. YAHIRO
DEPUTY DIRECTOR

STATE OF HAWAII
DEPARTMENT OF TAXATION
P.O. BOX 259
HONOLULU, HAWAII 96809

PHONE NO: (808) 587-1510
FAX NO: (808) 587-1560

September 8, 2006

DEPARTMENT OF TAXATION ANNOUNCEMENT 2006-15

RE: General Excise Tax (GET) and County Surcharge Tax (CST) Visibly Passed on to Customers

Beginning January 1, 2007, as a result of the City & County of Honolulu's decision to enact a surcharge on the GET described in Section 237-8.6, Hawaii Revised Statutes, the total rate of tax assessed on transactions subject to the surcharge and GET is 4.5% of the transaction's gross proceeds. This Announcement supplements Tax Facts 96-1, where relevant, ONLY as a discussion of the new amount that sellers may visibly pass on to customers in transactions subject to the CST. Other announcements will be released within the coming months regarding other aspects of the CST law.

The GET is levied on the gross receipts of a business. On the customer's bill, however, the tax is expressed as a percent of the price. Because gross receipts are defined to include any tax that the business passes on to the customer, the tax rate expressed as a percent of the price is greater than the statutory tax rate on gross receipts. With the county surcharge tax, the new statutory tax rate on gross receipts for sales on Oahu is 4.5%.

The 4.5% tax on gross receipts translates into a maximum visible pass on tax rate of 4.712% when expressed as a percent of the price and limited to six decimal places. Gross Receipts consist of two parts; (1) Tax = 4.5% of Gross Receipts, and (2) Price = 95.5% of Gross Receipts. The tax as a percent of the price is $4.5\% \div 95.5\% = 0.047120$ or 4.712%.

A seller is prohibited, as a matter of consumer protection law, from visibly collecting more than the amount actually owed. With the addition of the CST, a seller may pass on the following amounts:

- (1) **Nothing**—The seller may choose not to pass on their GET expense to customers; or
- (2) **4.5%**— The seller may choose to pass on to customers 4.5% of the cost to cover their GET and CST expense; or
- (3) **4.712%**—The seller may choose to pass on to customers 4.712% of the cost to cover the optimum amount of GET and CST expense.

EXAMPLE — In a transaction where the revenue is \$1,000 and the GET/CST pass on rate is 4.712% (0.04712), \$47.12 is the amount passed on to the customer. \$1,047.12 is then the amount of gross revenue subject to the GET and CST on Oahu. At the 4% state tax rate (0.04), \$41.88 is paid to

the state on \$1,047.12. At the 0.05% county surcharge tax rate (0.005), \$5.24 is paid to Honolulu County on \$1,047.12. The total of the taxes owed to the state and county is \$47.12 and equals to the amount of tax that was passed on to the customer. Thus, 4.712% is the optimum maximum rate that may be passed on to customers.

For a more detailed discussion on the GET, including the reasons why a seller cannot pass on greater tax than owed, please see Tax Facts 96-1.

For more information on this Announcement, please contact the Rules Office at 808-587-1577.



KURT KAWAFUCHI
Director of Taxation

HAWAIIAN ELECTRIC COMPANY, INC.
CALCULATION OF GENERAL EXCISE TAX RATES

Statutory Rate = 4.5%
Grossed Up Statutory Rate = 4.712%

General Excise Tax = Statutory Rate / (1 - Statutory Rate)
= .045 / (1 - .045)
= .045 / .955
= 0.04712

Hawaiian Electric Company, Inc.

2006 PLANT ADDITIONS - PROJECTS

Project Title	Expenditures						Total
	Project to Date Recorded	2006	2007	2008	2009	2010	
	12/31/05						
H9 CW MOV Replacement	0	178,931	2,471	0	0	0	181,402
Waiau FWH 84 Replacement	0	25,836	0	0	0	0	25,836
Mamala Phase 2-Hickam	0	863,192	0	0	0	0	863,192
H8 Blr Elec Warm Sys	677,590	41,701	0	0	0	0	719,291
Waiau WW Oil Detectors	62,863	37,615	0	0	0	0	100,478
Waiau 4 Ignitor Replacement	93,866	120,036	0	0	0	0	213,902
W8 BFP Rec Ctrl Valves Upg	143,858	26,149	0	0	0	0	170,007
K5&6 Service Air Compressors	187,521	0	0	0	0	0	187,521
H8&9 Emergency Generator	7,861	139,903	0	0	0	0	147,764
PM-Makalapa MW Replace	127,120	82,476	0	0	0	0	209,596
PM-Ewa Nui MW Replace	130,301	161,740	0	0	0	0	292,041
Ka Iwi 12kV UG, Ph 1 Inc 2	174,961	143,706	0	0	0	0	318,667
Ward Guard House	0	122,495	0	0	0	0	122,495
W7&8 Boiler Wash Sump Pump	113,023	71,432	0	0	0	0	184,455
Waiau Chlorine Dioxide System	0	373,012	2,685	0	0	0	375,697
Kahe Chlorine Dioxide System	0	383,969	0	0	0	0	383,969
HNL Demineralizer Upgrade	0	1,131,669	0	0	0	0	1,131,669
W2 Maintenance Laydown Area	6,553	14,905	0	0	0	0	21,458
Kahe 1 BW Sump Upgrade	158,219	39,197	0	0	0	0	197,416
K5/6 Lube water pump	34,789	55,540	0	0	0	0	90,329
Kahe 2 BW Sump Upgrade	98,659	62,788	0	0	0	0	161,447
Kahe 3 BW Sump Upgrade	176,157	89,005	0	0	0	0	265,162
Kahe 4 BW Sump Upgrade	121,381	46,915	0	0	0	0	168,296
Kahe 5 BW Sump Upgrade	127,415	46,617	0	0	0	0	174,032
Kahe 6 BW Sump Upgrade	96,889	51,842	0	0	0	0	148,731
W6 Instr Air Compr	10,625	135,622	0	0	0	0	146,247
Kahe Intake Lighting	0	72,008	71,359	0	0	0	143,367
K3&4 Control Room AC	0	267,757	0	0	0	0	267,757
C&M Renovation	722,915	4,882	0	0	0	0	727,797
King Downspout Replcmt	84,113	-75,000	0	0	0	0	9,113
Kahe Reclaimed Oil Transfer	276,977	41,543	0	0	0	0	318,520
Loop Feed Protection Tsf	81,984	2,790	0	0	0	0	84,774
Beretania North V4259 Repl	0	94,057	0	0	0	0	94,057
Waiau WWTF ChemFeed Mods	0	179,397	0	0	0	0	179,397
W71 TVL SCREEN REPL	0	219,270	0	0	0	0	219,270
K5/6 Brkr Deck AC	0	258,753	0	0	0	0	258,753
Waiau 5/6 Elevator Upgrade	7,487	261,322	0	0	0	0	268,809
TWO-Way radio upgrade	55,202	29,298	0	0	0	0	84,500
W3&4 Turb Roof Drain Piping	94,462	206,884	0	0	0	0	301,346
Ward Ave Turnstile Gate	0	29,404	0	0	0	0	29,404
HPP Perimeter Fence	47,758	-9	0	0	0	0	47,749
Sign for Ward Ave	72,083	0	0	0	0	0	72,083
Wahiawa-Waialua #2 P23X-P33	48,001	571,855	0	0	0	0	619,856
Lurline/Mariposa Cable Repl	660,650	460,532	0	0	0	0	1,121,182
HECO Vault 15 Relocate	267,835	733,404	0	0	0	0	1,001,239
Mokapu 3 TSF Installation	29,157	902,883	0	0	0	0	932,040
Customer Solutions Consoliddn	240,264	0	0	0	0	0	240,264
DSM Expansion	144,389	0	0	0	0	0	144,389
Kahe Lightning Protection	2,320	16,792	0	0	0	0	19,112
W3 HSFD Fan Motor Replace	142,394	0	0	0	0	0	142,394
Waiawa4 Ckt Extension	143,290	6,515	0	0	0	0	149,805
Air Heater Rotor Stop Alarm	95,172	-69,179	0	0	0	0	25,993
Manoa Sub 4 kV Upgrade	9,091	343,127	0	0	0	0	352,218
W8 Aux Xfmr Replacement	183,733	17,090	0	0	0	0	200,823

Totals may not add due to rounding

Hawaiian Electric Company, Inc.

2006 PLANT ADDITIONS - PROJECTS

Project Title	Expenditures						Total
	<u>Project to Date Recorded</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	
	<u>12/31/05</u>						
Ko Olina Parcel 50 46/12kV	26,053	139,618	0	0	0	0	165,671
Waiau-Makalapa #2 NCI Repl	95,829	195	0	0	0	0	96,024
EAI Phase 2-Reliability	0	58,290	0	0	0	0	58,290
EAI Phase 3 -QA	0	80,440	0	0	0	0	80,440
ITS Relocation to Pauahi	677,705	0	0	0	0	0	677,705
K32 Tvl Screen	0	222,882	0	0	0	0	222,882
W9 Bentley-Nevada Upgrade	200,972	2,414	0	0	0	0	203,386
W10 Bentley-Nevada Upgrade	114,494	99,580	0	0	0	0	214,074
Waiau 3 Blowoff Tank	7,755	94,099	0	0	0	0	101,854
Waiau 4 Blowoff Tank	3,579	95,756	0	0	0	0	99,335
Ward AC Space Planning	212,024	0	0	0	0	0	212,024
AED Upgrade Project	0	290,509	0	0	0	0	290,509
Second Spare 8% 10MVA Tsf	0	403,968	0	0	0	0	403,968
Alakawa St 11.5kV UG Reloc	70,184	82,440	0	0	0	0	152,624
Waiau-Koolau #1 Line Repl	77,162	1,717,656	0	0	0	0	1,794,818
Spare 15kV Switchgear	460	397,464	0	0	0	0	397,924
K6 FD Fan Motor Replacement	138	118,577	0	0	0	0	118,715
Waiau Solar FS Upgrade	0	58,710	281,185	0	0	0	339,895
W8 HP/IP Blade Replacement	278,937	16,596	0	0	0	0	295,533
Enterprise Reporting (BI)	9,706	0	0	0	0	0	9,706
Shared UNIX Infrastructure	0	2,864,267	0	0	0	0	2,864,267
A/C Upgrade at Data Center	0	474,313	0	0	0	0	474,313
Waiau Unit 6 FWH W64 Replace	0	146,636	189,951	0	0	0	336,587
W6 Heater Drip Pump Replace	0	138,882	0	0	0	0	138,882
W5 Heater Drip Pump Replace	0	138,027	0	0	0	0	138,027
Kalaeloa Pole Yard DG	0	1,603,240	2,196	0	0	0	1,605,436
CEIP - Substation DG	0	1,257,854	0	0	0	0	1,257,854
Kahe Rolloff Area	0	18,726	0	0	0	0	18,726
Net Energy Metering	0	884	16,364	18,260	20,577	23,478	79,563
Tripler Wahiawa mwr replace	424,241	351,632	0	0	0	0	775,873
Koolau/Tripler MWR Repl	510,786	463,403	0	0	0	0	974,189
450MHZZ Radio Replacement	126,446	3,083	0	0	0	0	129,529
Generation Hotline Upgrd	46,040	186,012	2	0	0	0	232,054
Waiau Feedwater Heater 85 Replacem	0	585,634	0	0	0	0	585,634
Waikiki Rehab Project 1	306,906	624,713	0	0	0	0	931,619
Makalapa Substation Prot	496,976	256,917	0	0	0	0	753,893
Purchase Spare 20/33 MVA Tsf	678,525	0	0	0	0	0	678,525
Dispatch Center Building	12,057,061	1,346,014	0	0	0	0	13,403,075
Telecomm Extensions	1,520,804	1,293,116	0	0	0	0	2,813,920
EMS Replacement	3,852,135	1,710,837	56	0	0	0	5,563,028
Dispatch Training Simulator	133,690	142,647	0	0	0	0	276,337
Ford Island Substation	4,261,932	1,864,040	10,000	0	0	0	6,135,972
46kV Fdrs to FI Sub	14,780,841	2,618,013	0	0	0	0	17,398,854
Comm. Links FI-Maklpa	153,630	266,119	0	0	0	0	419,749
Ocean Point SS Land Purchase	0	225,000	0	0	0	0	225,000
Ocean Point SS Tsf#1 Install	54,583	1,668,694	0	0	0	0	1,723,277
Ocean Pointe 46kV Lines	60,630	1,011,989	757,087	0	0	0	1,829,706
Ocean Pointe 12kV Lines	3,989	252,787	0	0	0	0	256,776
Palehua East B 46kV UG PH1	29,688	545,090	0	0	0	0	574,778
HMSA Keeamoku Conversion	205	98,388	0	0	0	0	98,593
K2 Cycle Chem Instr.	493,125	18,090	0	0	0	0	511,215
W9 Compressor Wash	210,802	26,901	0	0	0	0	237,703
Waiau CT Separation	786,404	151,532	0	0	0	0	937,936
W10 Compressor Wash	79,592	34,743	0	0	0	0	114,335

Totals may not add due to rounding

Hawaiian Electric Company, Inc.

2006 PLANT ADDITIONS - PROJECTS

Project Title	Expenditures						Total
	Project to Date Recorded 12/31/05	2006	2007	2008	2009	2010	
W10 DCS Processor Upgrade	450,430	275,172	0	0	0	0	725,602
W10 Exhaust Duct Replacement	457,011	545,446	0	0	0	0	1,002,457
K6 AEH Limit Switch Upgrd	39,266	8	0	0	0	0	39,274
K4 Boiler Control Upgrade	2,007,550	1,856,715	87,190	0	0	0	3,951,455
K4 Data Acq and Monitor	335,268	545,515	0	0	0	0	880,783
W4 Cycle Chem Instr.	241,539	348,579	0	0	0	0	590,118
W4 Operator Console Upgrade	201,098	198,529	0	0	0	0	399,627
W4 Main Xfmr Replacement	749,092	381,129	0	0	0	0	1,130,221
W4 Exciter Upgrade	123,983	1,034,501	772	0	0	0	1,159,256
Kam Hy-Kokololio Bridge Temp	30,359	294,618	0	0	0	0	324,977
Honouliuli Reservoir 12kV Line	41	62,352	0	0	0	0	62,393
K4 BFP Automated Test	0	24,729	0	0	0	0	24,729
W4 BFP Automated Test	0	70,745	0	0	0	0	70,745
K2 Generator Protective Relay	0	45,000	0	0	0	0	45,000
W4 Generator Protective Relay	0	61,664	0	0	0	0	61,664
W10 Generator Protective Relay	0	41,679	0	0	0	0	41,679
K4 Hydrogen Gas Dryer	0	115,348	0	0	0	0	115,348
W4 Hydrogen Gas Dryer	0	99,599	0	0	0	0	99,599
W4 Turbine Drains	0	165,175	2,551	0	0	0	167,726
W8 Turbine Drains	0	260,671	0	0	0	0	260,671
K4 Process Parameter Monitoring	0	33,728	1,476	0	0	0	35,204
W4 Process Parameter Monitoring	0	146,929	0	0	0	0	146,929
Tank #11 Level Gauge Upgrade	0	43,606	0	0	0	0	43,606
Tank #12 Level Gauge Upgrade	0	43,082	0	0	0	0	43,082
Tank #14 Level Gauge Upgrade	0	42,833	0	0	0	0	42,833
K4 Air Heater Rotor Stop Alarm	0	35,978	0	0	0	0	35,978
Kahe FWH 43 Press/Temp Instr	0	42,377	0	0	0	0	42,377
Kahe FWH 44 Press/Temp Instr	0	42,900	0	0	0	0	42,900
Kahe FWH 45 Press/Temp Instr	0	45,591	0	0	0	0	45,591
Ko Olina Sub Land	71,523	0	0	0	0	0	71,523
	53,510,117	42,193,283	1,425,345	18,260	20,577	23,478	97,191,060

From 2005 (HECO-WP-1601, page 8)	5,926,809
2007 Plant Additions	-1,425,345
2008 Plant Additions	-18,260
2009 Plant Additions	-20,577
2010 Plant Additions	-23,478

Total projects \$101,630,209

To HECO-1601, page 1

101,630,209

Hawaiian Electric Company, Inc.

2007 PLANT ADDITIONS - PROJECTS

<u>Project Title</u>	<u>Expenditures</u>				
	<u>Project to Date Recorded</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>Total</u>
	<u>12/31/05</u>				
Customer DG	0	27,000	390,000	0	417,000
H9 Attemperator Block Valve	39,758	23,894	0	0	63,652
Waiiau 7 Sootblower Ctls Upg	140,590	0	135,367	0	275,957
W5 Cycle Chem Instr.	66,463	0	247,758	1,361	315,582
W7 APH Sootblower Upgrade	0	0	98,017	0	98,017
Intl Savings & Loan Vault	91,979	0	318,534	0	410,513
Waiiau 7 ERV Replacement	0	0	78,346	0	78,346
K1&2 Service Air Compressors	0	0	225,730	0	225,730
WSC Privatization	1,345,801	241,797	80,829	0	1,668,427
WPP FWH #75 Replacement	0	516,609	100,000	0	616,609
Waiiau WW Pond Closure	46,613	4,614	312,739	0	363,966
Ward Disaster Center	0	0	210,959	0	210,959
Ward Fire Sprinkler Sys	0	0	801,541	0	801,541
Kahe 13 FWH Replacement	0	231,613	388,703	0	620,316
K3 Exciter/Regulator Upgrade	0	89,079	563,962	0	653,041
Kahe 14 FWH Replacement	0	372,691	121,364	0	494,055
W 3&4 CW Sht Pile Upgrade	66,706	51,917	578,854	0	697,477
W7/8 Underground Utilities	0	47,891	931,575	4,402	983,868
Waiiau Waste Oil Recover	0	5,476	73,650	0	79,126
Fire sprinkler-whse hi-stora	0	0	115,000	0	115,000
W3-W4 Svc Air Compr	0	0	251,593	0	251,593
W5 Operator Console Upgrade	0	0	317,260	646	317,906
K3 Annunciator Replacement	0	121,541	593,056	0	714,597
W7 Annunciator Replacement	0	1,615	719,166	0	720,781
H9 Volt Reg/Exciter Replace	0	764,113	73,248	0	837,361
W5 Exciter/Regulator Replace	0	0	635,711	0	635,711
W7 Exciter/Regulator Repl	0	390,710	149,740	0	540,450
ITS Renovation	0	0	383,643	5,000	388,643
K3 DCS Balance of Plant I/O	0	57,588	183,140	1,697	242,425
Outage Management System	8,055	276,275	131,969	0	416,299
W7 Main Transformer	0	11,991	1,169,592	0	1,181,583
W7 Aux Transformer	0	7,046	208,882	0	215,928
W7 Cond. Refurbishment	28,243	39,044	1,344,615	153,068	1,564,970
H9 Generator Rotor Rewind	17,971	510,544	460,706	0	989,221
Honolulu Boiler Wash sump	0	86,544	352,093	0	438,637
K2 BFP Rotating Elem/Volute	0	0	307,155	0	307,155
H9 SSH Element Replacement	0	635,250	1,343	0	636,593
Waiiau 3/4 Elevator Upgrade	0	93,873	140,811	0	234,684
Waiiau-Makalapa FO Replacemen	18,741	290,334	325,582	0	634,657
Kahe WWTF PLC Upgrade	879	37	76,084	0	77,000
King St CCTV Cameras	0	0	135,407	0	135,407
HR/Benefits/Comp Suite	0	145,745	3,033	0	148,778
Ft DeRussy Vault Load Relief	3,877	230,757	199,058	0	433,692
Kakaako ID 12	73,943	295,888	1,206,135	8,098	1,584,064
Auahi Street 12kV OH to UG	10,593	2,215	173,112	0	185,920

Totals may not add due to rounding

Hawaiian Electric Company, Inc.

2007 PLANT ADDITIONS - PROJECTS

<u>Project Title</u>	<u>Expenditures</u>				
	<u>Project</u>				
	<u>to Date</u>				
	<u>Recorded</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>Total</u>
	<u>12/31/05</u>				
Upper Kipapa Sound Lev Reduc	0	138,287	188,369	0	326,656
Wahiawa 46Kv Ln-Schofield	0	41,000	189,000	0	230,000
Waiau Chem Lab	0	523	380,956	0	381,479
HECO PV Ward Project	0	190,000	3,310,000	0	3,500,000
Kahuku CACTF Line Relo & Svc	17,904	185,249	119,989	0	323,142
Honolulu #94 Feedwater Htr	0	491,360	1,932	0	493,292
Kahe #64 Feedwater Htr	0	0	350,516	0	350,516
Waiau #83 Feedwater Htr	0	435,704	1,932	0	437,636
Honolulu 9 Oxygen Analyzer	0	57,304	0	0	57,304
150 Feet Aerial Platform Trk	0	0	990,549	0	990,549
Waiau Chem Lab Elec Upgrade	0	0	48,496	0	48,496
Waiau-Ewa Nui OPGW Repl	0	399,388	786,715	0	1,186,103
Temp Proj TPanalal09_	0	37,223	170,951	0	208,174
Waiau FWH 84 Replacement	0	532,965	28,463	0	561,428
CLASS LOAD STUDY	0	0	139,967	0	139,967
Kuilima Sub DG	0	918,982	1,334,000	0	2,252,982
Archer Sub Chiller Change	0	0	1,498,375	0	1,498,375
Mililani Mauka Offsite Ph 16	0	41,363	364,976	0	406,339
Malae-Koolau MW Replace	0	0	591,361	0	591,361
Honolulu Spur	106,554	2,950	31,496	0	141,000
K3 Boiler Control Upgrade	460,365	284,796	2,452,276	50,653	3,248,090
Waiau Feedwater Heater 52 Replaceme	0	30,910	210,767	0	241,677
Ward A/C Sys Op & Bsment	0	0	189,530	0	189,530
Materials Storage Relocation	123,418	1,305	21,331	0	146,054
Field Service/Meter Reading	0	39,729	615,130	0	654,859
Call Center-1st floor	1,330	831,792	245,324	0	1,078,446
Parking-C&M,SysOp,&Employee	0	19,819	535,131	0	554,950
Mamala Substation	505,754	194,917	2,162,981	5,346	2,868,998
46kV Fdrs to Mamala Sub	134,185	11,853	658,035	3,000,000	3,804,073
Comm Links Mamala Sub	103,543	43,383	412,411	0	559,337
KoOlina SS Tsf#1 Install	33,032	76,103	1,594,716	0	1,703,851
KoOlina 46kV lines	156,521	1,751,016	1,160,106	0	3,067,643
KoOlina 12kV lines	7,465	11,756	36,696	0	55,917
Puuloa Rd Widening - UG	123,969	23,381	292,583	0	439,933
Palehua East B 46kV UG PH2	0	0	309,045	0	309,045
W9 DCS Processor Upgrade	188,507	9,934	158,559	0	357,000
K1 Blr Access Door Addition	0	54,401	127,476	0	181,877
K1 Operator Console Upgrade	0	262,487	68,973	0	331,460
K1 Excitation System	0	458,977	187,949	0	646,926
K1 MS Replacement	4,093	986,886	3,357	0	994,336
K1 Battery Bank Replacement	0	125,852	0	0	125,852
Kam Hy-Kokololio Bridge Perm	0	3,022	132,863	0	135,885
Air Quality Monitoring Stns	0	23,765	705,821	0	729,586
K1 BFP Automated Test	0	29,414	9,154	0	38,568
K1 Generator Protective Relay	0	47,816	0	0	47,816

Totals may not add due to rounding

Hawaiian Electric Company, Inc.

2007 PLANT ADDITIONS - PROJECTS

<u>Project Title</u>	<u>Expenditures</u>				<u>Total</u>
	<u>Project to Date Recorded 12/31/05</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	
K3 Generator Protective Relay	0	3,598	49,899	0	53,497
K1 Hydrogen Gas Dryer	0	85,022	19,749	0	104,771
K3 Hydrogen Gas Dryer	0	70,628	93,217	0	163,845
W5 Hydrogen Gas Dryer	0	0	98,736	0	98,736
W7 Hydrogen Gas Dryer	0	0	99,241	0	99,241
K1 Turbine Drains	0	87,234	0	0	87,234
K3 Turbine Drains	0	0	85,409	0	85,409
W5 Turbine Drains	0	0	100,243	0	100,243
W7 Turbine Drains	0	0	90,192	0	90,192
K1 Process Parameter Monitoring	0	19,942	42,360	791	63,093
K3 Process Parameter Monitoring	0	34,641	29,695	400	64,736
W7 Process Parameter Monitoring	0	0	105,889	0	105,889
K3 Condensate Pump	0	0	208,174	0	208,174
K4 Condensate Pump	0	0	208,174	0	208,174
K3 Air Heater Rotor Stop Alarm	0	9,417	17,565	0	26,982
W7 Air Heater Rotor Stop Alarm	0	11,486	17,599	0	29,085
H9 Air Heater Rotor Stop Alarm	0	12,588	15,570	0	28,158
Kahe FWH 11 Press/Temp Instr	0	33,321	3,606	0	36,927
Kahe FWH 12 Press/Temp Instr	0	33,256	3,606	0	36,862
Kahe FWH 13 Press/Temp Instr	0	32,995	3,606	0	36,601
Kahe FWH 15 Press/Temp Instr	0	33,321	3,606	0	36,927
Kahe FWH 31 Press/Temp Instr	0	0	35,877	0	35,877
Kahe FWH 32 Press/Temp Instr	0	0	35,877	0	35,877
Kahe FWH 33 Press/Temp Instr	0	0	35,877	0	35,877
Kahe FWH 35 Press/Temp Instr	0	0	35,877	0	35,877
	<u>3,926,852</u>	<u>14,836,752</u>	<u>39,572,963</u>	<u>3,231,462</u>	<u>61,568,029</u>

From 2005 (HECO-WP-1601, page 8)	758,466
From 2006 (HECO-WP-1601, page 3)	1,425,345
2008 Plant Additions	-3,231,462

Total Projects \$60,520,378

To HECO-1601, page 1

60,520,378

Hawaiian Electric Company, Inc.

2006 and 2007 PLANT ADDITIONS

Stragglng Costs for Projects with 2005 Plant Addition Dates

<u>Grand</u> <u>parent</u>	<u>Project #</u>	<u>Project Title</u>	<u>Expenditures</u> <u>2006</u>	<u>Expenditures</u> <u>2007</u>
	P0000078	K5 Boiler Controls Upgrade	11,153	0
	P0000143	Salt Lake Blvd Widening Ph2	3,203,365	0
	P0000233	W7&8 Service Air Compressor	22,338	0
	P0000449	Kahe Electronic Parts Store	-8,124	0
	P0000452	Waiau Electric Parts Store	8,124	0
	P0000485	WPP FWH #35 Replacement	4,189	0
	P0000491	K-H#2/Wai-Wah Str 86/25	17,968	0
	P0000507	Kam Hy Resurf Waiahole-Cr Ln	26,303	0
	P0000611	Kaneohe Bay Dr Improvements	68,708	0
	P0000633	K4 Exciter/Regulator Upgrade	10,173	0
	P0000646	Kahe 24FWH Replacement	6,867	0
	P0000664	W3 UPS Installation	1,211	0
	P0000667	Kahe Sewer System Upgrade	164	0
	P0000669	Kakaako ID10	23	0
	P0000690	W5 Annunciator Upgrade	20,062	0
	P0000764	H-1 Widening Waimalu Reloc	0	98,466
	P0000803	W3 Operator Console Upgrade	1,211	0
	P0000832	W3 Main Xfmr Replacement	2,090	0
	P0000842	Security/Wahiawa Sub	349	0
	P0000843	Security/Iwilei Sub	349	0
	P0000911	Palehua East A 46kV Reloc	-4,536	0
	P0000917	Village Park - DB Cable Rpl	167,981	0
	P0000933	K2 to CW Basin Pipe Trench	16,180	0
	P0001017	King-Elevator	-465,877	0
	P0001019	Structure 22 Wailupe #2 Repl	1,497	0
	P0001024	Kahe 52 Traveling Screen	6,936	0
	P0001030	H8&9 Roof Drain Piping	68	0
	P0001031	K6 Flame Scanner Det Replace	399	0
	P0001039	Purch Spare 8%, 10MVA Tsf	43	0
	P0001068	Replace EW 8%, 10 MVA Tsf	-2,194	0
	P0001087	Replace CEIP Multimode Fiber	90,457	0
	P0001144	Helemano - Substation DG	322,754	0
	P0001145	Ewa Nui - Substation DG	159,098	0
	P0001146	Iwilei Tank Farm DG	148,732	0
	P9904000	H1 WIDENING AIEA	87,132	0
Y00021	P0000277	New Kuahua Substation	406,586	0
Y00021	P0000279	Puuloa Substation Prot	138	0
Y00021	P0000280	Makalapa-Kuahua FO Line	35,882	0
Y00021	P0000281	Makalapa-Puuloa FO Line	20,432	0
Y00021	P0000282	Kuahua 46kv Ln Reconnect	228	0
Y00023	P0000499	Ward A/C Imprv Phase II	524,762	0
Y00027	P0000562	Mokuone 46-12KV Line Ext	454,910	660,000

Hawaiian Electric Company, Inc.

2006 and 2007 PLANT ADDITIONS

Stragglng Costs for Projects with 2005 Plant Addition Dates

<u>Grand</u> <u>parent</u>	<u>Project #</u>	<u>Project Title</u>	<u>Expenditures</u> <u>2006</u>	<u>Expenditures</u> <u>2007</u>
Y00027	P0000563	Mokuone 46-12KV Substation 1	2,416	0
Y00029	P0000711	Remote PBXs	32,991	0
Y00029	P0001035	King/CPP PBX Replacement	2,544	0
Y00030	P0000715	Dispatch Boards	260,841	0
Y00032	P0000064	Waiiau Fuel Pipeline Project	43,693	0
Y00040	P0000837	Makalapa 46kV Brkr Addition	38,490	0
Y00051	P0000211	W6 Cycle Chem Instr.	12,716	0
Y00051	P0000682	W6 Annunciator Upgrade	19,733	0
Y00051	P0000804	W6 Operator Console Upgrade	1,211	0
Y00052	P0000609	K2 Blr Access Door Addition	63	0
Y00052	P0000647	Kahe 23FWH Replacement	7,964	0
Y00052	P0000659	Kahe 25FWH Replacement	5,455	0
Y00052	P0000676	K2 Opacity Monitor Upgrade	1,199	0
Y00052	P0000821	K2 Battery Bank Replacement	242	0
Y00052	P0000860	K2 Annunciator Replacement	14,393	0
Y00053	P0000658	W9 Exhaust Duct Replacement	5,872	0
Y00055	P0000454	K6 Fan Enclosure	76,656	0
Y00055	P0000958	K6 SSH Element Replacement	1,950	0
Y00063	P0001032	Honouliuli Reserv 46kV Reloc	-437	0
Y66400	P6640000	New Interchange Improv	30,686	0
			<u>\$5,926,809</u>	<u>\$758,466</u>

To HECO-WP-1601, page 3 To HECO-WP-1601, page 6

Hawaiian Electric Company, Inc.

PLANT ADDITIONS - PROGRAMS

<u>Project #</u>	<u>Project Title</u>	<u>2006</u>	<u>2007</u>
P0000062	Ce-Terminating Trust Esmnts	233,776	41,239
P0000063	Conv Halawa School 138kv	90,000	0
P0000089	Pwr Quality Monitor Install	1,754	0
P0000120	Corr (Inc Emg) OH Trsf Rpl	465,812	426,543
P0000121	Corr (Inc Emg) UG Trsf Rpl	473,936	455,525
P0000122	Cor (Inc Emg) Mis Cable Rpl	4,935,867	4,295,970
P0000123	Corr (Inc Emg) OH Dist Rpl	2,457,922	2,230,788
P0000124	Cor (Inc Emg) OH Subtrn Rpl	506,040	391,957
P0000445	Trayer Sub Sw Repl Prog	97,878	0
P0000500	Misc Office Furniture	147,030	142,491
P0000501	Misc Office Equipment	21,540	72,293
P0000502	Waiau Minor Gen Addns	49,074	42,219
P0000503	Ward Ave Minor Addns	193,331	104,937
P0000504	King St Minor Addns	52,676	159,965
P0000505	Other Minor Gen Plt Addns	45,616	79,984
P0000510	Circ Water Temp Monitors	4,653	0
P0000511	BFP Automated Test	17,449	0
P0000590	PP Security Hardware Upgrade	69,424	0
P0000601	Gen Prot Relay Replacement	-53,672	0
P0000652	Misc Mainframe Hardware	5,829	27,635
P0000653	Collaborative Communications	11,289	51,021
P0000678	Kahe H2 Gas Dryers	27,308	0
P0000692	CSD Technical Support Prgm	49,686	27,000
P0000733	Trns Sub RTU Migration Pgm	255,536	572,045
P0000934	Kahe Turbine Drains	-1,868	0
P0000936	Waiau Turbine Drains	-88,265	0
P0000953	Kahe FWH Press/Temp Instr	329	0
P0000968	Process Parameter Monitoring	21,912	0
P0001014	Security CCTV System	105,493	103,126
P0001069	Baseyards PR2 - Phy Security	363,948	165,637
P0001070	MEVA-PR1 Physical Security	93,736	283,842
P1081000	Capitalized Tools & Equip	961,102	875,424
P1243000	Purchase PCs-ITS	623,603	911,955
P1244000	Copiers/Faxes/Printers	80,079	198,972
P1250000	Vehicle Purchases	721,804	2,881,635
P1251000	Misc Tel Eqpt NT	10,739	22,108
P1370000	Distr R/W Purch (Blanket)	39,168	70,000
P1373000	46kv R/W Purch (blanket)	117,155	35,000
P1429000	Misc PowerPlant Additions	2,078,318	1,756,109
P1470000	Minor Trans Sub Addns	858,339	392,236
P1480000	Minor Dist Sub Addns	938,230	580,379
P1500000	Misc CM Fac-Op & Ctrl (TD)	254,590	197,150
P1505000	Other Misc Comm Fac SOD	104,440	103,070
P1510000	Misc OH Svc & Extn (CID)	1,814,772	1,682,512
P1580000	Minor OH Dist Addn (CID)	1,658,455	1,963,393

Hawaiian Electric Company, Inc.

PLANT ADDITIONS - PROGRAMS

<u>Project #</u>	<u>Project Title</u>	<u>2006</u>	<u>2007</u>
P1670000	P&I&Test Meters & Mtr Eq	1,452,879	1,403,180
P1680000	Tsf & Equip Pur (CID)	4,183,781	6,751,407
P1690000	Minor T&D Customer Programs	246,280	415,095
P1700000	Misc UG Svc & Extn (CID)	13,286,956	12,154,891
P1789000	Preventive OH Transf Repl	222,926	230,233
P1793000	Preventive UG Transf Repl	445,995	244,672
P1810000	Prev Misc Cable Failure Rpl	795,810	2,909,190
P1820000	Minor UG Addns (CID)	1,689,627	2,012,348
P1870000	Power Station Misc	230,236	145,069
P1990000	Minor T&D System Programs	1,102,270	1,005,112
P3400000	Prev OH Dist Repl	2,224,285	2,487,272
P3401000	Prev OH Subtrans Repl	1,446,140	2,143,007
P3402000	Prev OH Trans Repl	928,377	633,713
P4150000	Monitoring Services	42,209	33,124
P9028000	Mobile Radio F1/F2 Replace	552,235	273,379
P9544000	FO Tank Level Gauge Upgrade	55,592	0
		<u>\$49,821,431</u>	<u>\$54,185,852</u>

To HECO-1601, page 1

**Hawaiian Electric Company, Inc.
Contributions in Aid of Construction**

	<u>2006</u>	<u>2007</u>	<u>Reference</u>
Cash CIAC:			
Customer Installations	\$ 3,776,488	\$ 3,958,359	HECO-WP-1608, page 2
Energy Delivery	8,270,000	2,190,000	HECO-WP-1608, page 3
	<u>\$ 12,046,488</u>	<u>\$ 6,148,359</u>	
In-Kind CIAC	<u>\$ 6,317,002</u>	<u>\$ 4,010,622</u>	HECO-WP-1608, page 4

Hawaiian Electric Company, Inc.
CASH CONTRIBUTIONS-IN-AID-OF-CONSTRUCTION
Customer Installations

PROJ #	DESCRIPTION	2006	2007
P1510	Minor OH	\$ 48,208	\$ 49,802
P1580	Misc OH Addn	\$ 135,352	\$ 103,294
P1700	Minor UG	\$ 3,386,024	\$ 3,656,006
P1820	Misc UG Addn	\$ 206,904	\$ 149,257
	TTL CASH CIAC	\$ 3,776,488	\$ 3,958,359

Totals may not add due to rounding.

Hawaiian Electric Company, Inc.
ENERGY DELIVERY PROJECTS
Contributions in Aid of Construction

CASH		(\$ Thousands)	2006	2007
Project#	Description		Estimate	Estimate
Y00040	Ford Island Substation (P0000836-P0000838) (Letter)		4,823	0
P0000143	Salt Lake Blvd Widening, Ph. 2 (UA#SO-156)		1,500	0
P0000507	Kam Hwy Resurf, Waiahole to Crchg Lion (UA#1616)		0	1,330
P0000530	Ka Iwi Scenic Shoreline Impvmt, Ph 1, Incr 2 (UA)		0	122
P0000598	Kahekili Hwy Lighting Impvts (UA#1739)		51	0
P0000575	Nimitz Hwy Rehab (UA#1691)		71	0
P0000672	Kakaako Makai-Kewalo 25kV (VWL) (Letter)		0	0
P0000834	Mamala Sub 46kV Feeders (Air Force) (Letter)		0	0
P0000951	Ocean Pointe 46kV Lines (Letter)		100	0
P0001037	Puuloa Rd Widening, UG (UA#1487R)		0	387
P0001076	Kam Hwy Kokololio Bridge Perm (UA#1823)		0	231
P0001122	Kahuku CACTF Line Reloc & Svc (Letter)		14	0
P1690000	Minor T&D Customer Programs (incl UA #1893)		205	120
P6640000	New Interchange Improvements (UA#1384)		110	0
P9904000	H1 Widening Aiea (UA#1430)		77	0
P0001268	Capitol Place - Relocate Vault 920 (Letter)		162	0
P0001306	Mililani Mauka Offsite Ph.16 (Letter)		279	0
P0001319	Mamala Phase 2 - Hickam (Letter)		878	0
	TOTALS		8,270	2,190

Totals may not add due to rounding.

HAWAIIAN ELECTRIC COMPANY, INC.
In-Kind CIAC

Project #	Project	2006	2007
P0000143	Salt Lake Blvd Widening Ph2	\$2,700,000	-
P0000507	Kam Hy Resurf Waiahole-Cr Ln	\$26,303	-
P0000530	Ka Iwi 12kV UG, Ph 1 Inc 2	\$130,884	-
P0000611	Kaneohe Bay Dr Improvements	\$68,708	-
P0000764	H-1 Widening Waimalu Reloc	-	\$98,466
P0000834	46kV Fdrs to Mamala Sub	-	-
P0000951	Ocean Pointe 46kV Lines	-	\$757,087
P0001034	Kakaako ID 11	-	-
P0001037	Puuloa Rd Widening - UG	-	\$93,469
P0001045	Palehua East B 46kV UG PH1	\$274,000	-
P0001046	Palehua East B 46kV UG PH2	-	\$100,000
P0001072	Kakaako ID 12	-	\$475,610
P0001076	Kam Hy-Kokololio Bridge Perm	-	\$2,300
P0001081	Auahi Street 12kV OH to UG	\$34,425	-
P0001156	Alakawa St 11.5kV UG Reloc	\$54,285	-
P0001268	Temp Proj TPanala09_	-	\$25,000
P0001306	Mililani Mauka Offsite Ph 16	-	\$137,270
P1690000	Minor T&D Customer Programs	\$4,998	\$21,420
P1700000	Misc UG Svc & Extn (CID)	\$2,936,267	\$2,300,000
P9904000	H1 WIDENING AIEA	\$87,132	-
		<u>6,317,002</u>	<u>4,010,622</u>

Hawaiian Electric Company, Inc.
Customer Advances

	<u>Receipts</u>	<u>Refunds</u>	<u>Transfers</u>
2006:			
Update (from page 2)	\$ 50,000	\$ 575,100	\$ 24,000
Less: GET	\$ 2,000	\$ 23,000	\$ 960
Net	<u>\$ 48,000</u>	<u>\$ 552,100</u>	<u>\$ 23,040</u>
2007:			
Forecast (from page 2)	\$ 80,000	\$ 90,000	\$ 295,000
Less: GET	\$ 3,200	\$ 3,599	\$ 11,798
Net	<u>\$ 76,800</u>	<u>\$ 86,401</u>	<u>\$ 283,202</u>

**Hawaiian Electric Company, Inc.
Customer Advances**

	<u>Receipts</u>	<u>Refunds</u>	<u>Transfers</u>
2006:			
March 2006 year-to-date	\$ 10,700		
Annualize	\$ 42,800		
2006 Receipts - Rounded	<u>\$ 50,000</u>		
2006 Refunds		<u>\$ 575,100</u>	
1996 Customer Advances balance			\$ 8,339
Various years: Other projects identified not to be eligible for refund			<u>\$ 15,889</u>
Sub-total			\$ 24,228
Transfer to CIAC Factor			<u>100%</u>
			<u>\$ 24,228</u>
2006 Transfers - Rounded			<u>\$ 24,000</u>
2007:			
2001 Recorded	\$ 282,432	\$ 422,920	
2002 Recorded	\$ 192,578	\$ 255,019	
2003 Recorded	\$ 42,286	\$ 27,544	
2004 Recorded	\$ 128,459	\$ 4,130	
2005 Recorded	\$ 38,095	\$ -	
2006 Update	<u>\$ 50,000</u>	<u>\$ 575,100</u>	
	\$ 733,850	\$ 1,284,713	
Less: Adjustment *	<u>\$ (275,000)</u>	<u>\$ (758,000)</u>	
Net	\$ 458,850	\$ 526,713	
2001-2006 Six-Year Average Economy Factor	\$ 76,475 (b)	\$ 87,786 (a)	
	105.00%		
	<u>\$ 80,299</u>		
2007 Receipts - Rounded *	<u>\$ 80,000</u>	\$ 80,000	
2001-2006 Refunds/Receipts Ratio (a)/(b)		<u>114.8%</u>	
		\$ 91,832	
2007 Refunds - Rounded		<u>\$ 90,000</u>	
1997 Customer Advances balance (adjusted for 2006 estimated refunds)			\$ 327,060
Transfer to CIAC Factor			<u>90%</u>
			<u>\$ 294,354</u>
2007 Transfers - Rounded			<u>\$ 295,000</u>

* Normalization adjustment to exclude unusually large receipts received.

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

	<u>Original Cost</u>	<u>Accum Deprec</u>	<u>Removal Reg Liability</u>	<u>Acc. Retire. Obligation</u>	<u>Net Plant In Service</u>	<u>HECO Reference</u>
Recorded Balances - 12/31/05	2,329,243	(903,329)	(147,150)	(103)	1,278,661	
ESTIMATED CHANGES in 2006:						
Net Plant Additions	151,452				151,452	1601
Reclassify ICS system ¹	516				516	
Cost of Removal			5,696		5,696	1309
Salvage			(219)		(219)	1309
Depreciation Accrual		(84,358)			(84,358)	1308
Deprec Accrual Reclass related to Cost of Removal ²		23,703	(23,703)		0	WP-1304
Accretion of ARO			6	(6)	0	
ARO Retirements	(1)	1	(8)	8	0	
Retirements ³	(10,658)	10,658			0	1309
Estimated Balances - 12/31/06	<u>2,470,552</u>	<u>(953,325)</u>	<u>(165,378)</u>	<u>(101)</u>	<u>1,351,748</u>	
ESTIMATED CHANGES in 2007:						
Net Plant Additions	114,706				114,706	1601
Cost of Removal			5,992		5,992	1309
Salvage			(217)		(217)	1309
Depreciation Accrual		(89,797)			(89,797)	1308
Deprec Accrual Reclass related to Cost of Removal ²		24,974	(24,974)		0	WP-1304
Accretion of ARO			6	(6)	0	
ARO Retirements	(1)	1	(8)	8	0	
Retirements ³	(14,035)	14,035			0	1309
Estimated Balances - 12/31/07	<u>2,571,222</u>	<u>(1,004,112)</u>	<u>(184,579)</u>	<u>(99)</u>	<u>1,382,432</u>	
AVERAGE 2007 BALANCE					<u>1,367,090</u>	

NOTE: Totals may not add exactly due to rounding.

¹ Represents the net book value of certain assets in the Interisland Communication System ("ICS") reclassified to utility property from non-utility property. While ICS is no longer being used, certain of the assets are now being utilized for utility purposes.

² Represents the amount of removal costs that has been included in the depreciation expense that will be reclassified as a liability for financial statement purposes.

³ Original cost of estimated retirements for the respective year.

Hawaiian Electric Company, Inc.
**Estimate of Materials & Supplies Inventory Adjustment
for Goods Received but not yet Paid for by the Company**
(\$ in thousands)

	Production Inventory	Transmission & Distribution Inventory	Total Materials & Supplies Inventory
2007 ADDITIONS to Materials & Supplies Inventory Account (WP-1703 p. 2)	\$ 5,816	\$ 8,910	\$ 14,726 (a)
Average Daily Additions to Inventory	\$ 15.93	\$ 24.41	\$ 40.35 (b)=(a)/365
Materials & Supplies Inventory Payment Lag Days (WP-1703 p. 3)	19.5	19.5	19.5 (c)
Estimate of Materials & Supplies Inventory Not Yet Paid For	<u>\$ 311</u>	<u>\$ 476</u>	<u>\$ 787 (b)*(c)</u>

NOTE: Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.
Inventory Additions for 2007
(\$ in thousands)

<u>Production Inventory</u>		<u>HECO Reference</u>
Ending Balance 12/31/06	\$ 6,381	605
Plus: Additions	5,816	
Less: Issues	<u>(5,311)</u>	605
Ending Balance 12/31/07	<u>\$ 6,886</u>	605
<u>Transmission & Distribution Inventory</u>		
Ending Balance 12/31/06	\$ 6,333	703
Plus: Additions	8,910	
Less: Issues	<u>(8,304)</u>	703
Ending Balance 12/31/07	<u>\$ 6,939</u>	703

NOTE: Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.
Materials & Supplies Inventory Payment Lag
Random Sample of 20 Transactions

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\HECO Mat&Supp-Exh&Wrkpr.xls]P
Source: Original documents; Info per Ellipse. As presented in HECO-WP-1907, Docket No. 04-0113

VENDOR	CHECK NUMBER	DATE RECEIVED MATERIAL	PAYMENT DATE	(X1)	DATE CHECK CLEARED	(X2)	(WI)	(X1+X2) * WI
				PAYMENT LAG (DAYS)		CHECK CLEARING LAG (DAYS)	INVOICE AMOUNT (\$)	DOLLAR DAYS
1 J H Baxter & Co.	58897	1/31/03	2/4/03	3.5	2/7/03	3.0	832	5,408
2 Industrial Hardware Hawaii, Inc.	578894	2/12/03	3/13/03	28.5	3/14/03	1.0	64	1,884
3 Gaspro Inc.	578525	2/13/03	3/6/03	20.5	3/7/03	1.0	1,041	22,372
4 Construction Materials	579197	2/19/03	3/20/03	28.5	3/27/03	7.0	383	13,587
5 Gaspro Inc.	579053	2/27/03	3/18/03	18.5	3/19/03	1.0	107	2,083
6 Ferguson Enterprises, Inc.	578887	3/4/03	3/13/03	8.5	3/20/03	7.0	10	152
7 Safety Systems Hawaii Inc.	582174	3/25/03	5/28/03	63.5	5/30/03	2.0	614	40,218
8 Newmark International Inc.	59227	3/25/03	3/27/03	1.5	4/1/03	5.0	19,136	124,384
9 Wesco Distribution, Inc.	59535	4/21/03	5/20/03	28.5	5/21/03	1.0	2,120	62,526
10 Graphic Controls Corp	583920	6/26/03	7/3/03	6.5	7/10/03	7.0	166	2,239
11 Graphic Controls Corp	586679	8/29/03	9/4/03	5.5	9/9/03	5.0	300	3,153
12 Wesco Distribution, Inc.	60409	9/9/03	10/7/03	27.5	10/9/03	2.0	10,660	314,470
13 GE Supply Hawaii, Inc.	60427	9/12/03	10/9/03	26.5	10/10/03	1.0	2,747	75,534
14 A.L. Kilgo Company, Inc.	588258	9/16/03	10/9/03	22.5	10/15/03	6.0	209	5,967
15 Gaspro Inc.	60672	10/16/03	11/18/03	32.5	11/19/03	1.0	2,955	98,999
16 Graybar Electric Co., Inc.	590340	10/29/03	11/28/03	29.5	12/2/03	4.0	2,912	97,552
17 A.L. Kilgo Company, Inc.	593557	12/4/03	2/12/04	69.5	2/18/04	6.0	48	3,603
18 Gerald P. Teixeira	591264	12/12/03	12/18/03	5.5	12/22/03	4.0	707	6,713
19 Gerald P. Teixeira	591264	12/12/03	12/18/03	5.5	12/22/03	4.0	294	2,794
20 Hach Company	591864	12/17/03	1/2/04	15.5	1/8/04	6.0	171	3,679
							45,474	887,317

Materials & Supplies Inventory Payment Lag

19.5 days

Hawaiian Electric Company, Inc.
Working Cash Study
Fuel Payment Lag

File: S:_Company\Regulatory Affairs\HECO TY 2007 Rate Case\HECO 07 Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Fuel.xls\Fuel
Source: Per Supporting Worksheets.

	Test Year Expense (\$ 000's)	% of Total	Payment Lag Days	Check Clearing Lag Days	Total Payment Lag Days	Weighted Average
	Note A		HECO-WP-1706, p. 2-7	Note B		
Chevron	\$334,421	62%	19	0	19	12 days
Tesoro	\$202,412	38%	13	0	13	5 days
	<u>\$536,833</u>	<u>100%</u>				

Fuel Payment Lag	17 days
-------------------------	----------------

NOTE: Totals may not add exactly due to rounding.

Note A: Payments for test year per Generation Planning Division. See HECO T-4.

Note B: Chevron paid by automated clearinghouse (ACH) debit transfer. No check clearing lag.
Tesoro paid by wire transfer. No check clearing lag.

Hawaiian Electric Company, Inc.
Working Cash Study
Fuel Payment Lag

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASH\Exhibits & workpapers\Fue
Source: Fuel deliveries per Fuels Resources Division and payment terms per contract.
2005 actuals per invoices and wire records from Treasury Division.

Actual 2005 payments

CHEVRON	SERVICE PERIOD (Delivery dates)		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE	PAYMENT LAG (DAYS)
	BEGIN	END			TO PAY DATE (DAYS)	
	12/22/04	12/22/04	0.5	1/20/2005	28.5	29.0
	1/10/05	1/10/05	0.5	1/31/05	20.5	21.0
	1/10/05	1/10/05	0.5	1/31/05	20.5	21.0
	1/10/05	1/10/05	0.5	1/31/05	20.5	21.0
	1/10/05	1/10/05	0.5	1/31/05	20.5	21.0
	1/20/05	1/20/05	0.5	2/10/05	20.5	21.0
	1/20/05	1/20/05	0.5	2/10/05	20.5	21.0
	1/17/05	1/17/05	0.5	2/10/05	23.5	24.0
	1/26/05	1/26/05	0.5	2/22/05	26.5	27.0
	1/26/05	1/26/05	0.5	2/22/05	26.5	27.0
	1/26/05	1/26/05	0.5	2/22/05	26.5	27.0
	2/9/05	2/9/05	0.5	2/22/05	12.5	13.0
	2/9/05	2/9/05	0.5	2/22/05	12.5	13.0
	2/9/05	2/9/05	0.5	2/22/05	12.5	13.0
	2/9/05	2/9/05	0.5	2/22/05	12.5	13.0
	2/9/05	2/9/05	0.5	2/22/05	12.5	13.0
	2/9/05	2/9/05	0.5	2/22/05	12.5	13.0
	2/8/05	2/8/05	0.5	2/22/05	13.5	14.0
	2/8/05	2/8/05	0.5	2/22/05	13.5	14.0
	2/8/05	2/8/05	0.5	2/22/05	13.5	14.0
	2/9/05	2/9/05	0.5	2/28/05	18.5	19.0
	2/14/05	2/14/05	0.5	3/10/05	23.5	24.0
	2/14/05	2/14/05	0.5	3/10/05	23.5	24.0
	2/14/05	2/14/05	0.5	3/10/05	23.5	24.0
	2/26/05	2/26/05	0.5	3/21/05	22.5	23.0
	2/26/05	2/26/05	0.5	3/21/05	22.5	23.0
	2/26/05	2/26/05	0.5	3/21/05	22.5	23.0
	3/8/05	3/8/05	0.5	3/21/05	12.5	13.0
	3/17/05	3/17/05	0.5	3/31/05	13.5	14.0
	3/15/05	3/15/05	0.5	4/11/05	26.5	27.0
	3/27/05	3/27/05	0.5	4/20/05	23.5	24.0
	3/27/05	3/27/05	0.5	4/20/05	23.5	24.0

SERVICE PERIOD (Delivery dates)

CHEVRON	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)
	3/25/05	3/25/05	0.5	4/20/05	25.5	26.0
	4/3/05	4/3/05	0.5	4/20/05	16.5	17.0
	4/7/05	4/7/05	0.5	4/29/05	21.5	22.0
	4/10/05	4/10/05	0.5	4/29/05	18.5	19.0
	4/22/05	4/22/05	0.5	5/10/05	17.5	18.0
	5/2/05	5/2/05	0.5	5/20/05	17.5	18.0
	5/11/05	5/11/05	0.5	5/31/05	19.5	20.0
	5/11/05	5/11/05	0.5	5/31/05	19.5	20.0
	5/14/05	5/14/05	0.5	5/31/05	16.5	17.0
	5/10/05	5/10/05	0.5	6/9/05	29.5	30.0
	5/18/05	5/18/05	0.5	6/9/05	21.5	22.0
	5/24/05	5/24/05	0.5	6/9/05	15.5	16.0
	6/1/05	6/1/05	0.5	6/20/05	18.5	19.0
	6/1/05	6/1/05	0.5	6/20/05	18.5	19.0
	6/2/05	6/2/05	0.5	6/20/05	17.5	18.0
	6/3/05	6/3/05	0.5	6/30/05	26.5	27.0
	6/9/05	6/9/05	0.5	6/30/05	20.5	21.0
	6/15/05	6/15/05	0.5	6/30/05	14.5	15.0
	6/15/05	6/15/05	0.5	6/30/05	14.5	15.0
	6/15/05	6/15/05	0.5	6/30/05	14.5	15.0
	6/20/05	6/20/05	0.5	7/11/05	20.5	21.0
	6/27/05	6/27/05	0.5	7/11/05	13.5	14.0
	6/19/05	6/19/05	0.5	7/11/05	21.5	22.0
	6/27/05	6/27/05	0.5	7/20/05	22.5	23.0
	7/7/05	7/7/05	0.5	7/20/05	12.5	13.0
	7/7/05	7/7/05	0.5	7/20/05	12.5	13.0
	7/5/05	7/5/05	0.5	7/20/05	14.5	15.0
	7/19/05	7/19/05	0.5	8/1/05	12.5	13.0
	7/17/05	7/17/05	0.5	8/10/05	23.5	24.0
	7/21/05	7/21/05	0.5	8/10/05	19.5	20.0
	7/25/05	7/25/05	0.5	8/10/05	15.5	16.0
	7/23/05	7/23/05	0.5	8/18/05	25.5	26.0
	7/23/05	7/23/05	0.5	8/18/05	25.5	26.0
	7/27/05	7/27/05	0.5	8/18/05	21.5	22.0
	7/29/05	7/29/05	0.5	8/18/05	19.5	20.0
	7/29/05	7/29/05	0.5	8/18/05	19.5	20.0
	7/30/05	7/30/05	0.5	8/18/05	18.5	19.0

SERVICE PERIOD (Delivery dates)

CHEVRON	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY (DAYS)	PAYMENT LAG (DAYS)
	8/1/05	8/1/05	0.5	8/18/05	16.5	17.0
	8/2/05	8/2/05	0.5	8/18/05	15.5	16.0
	8/3/05	8/3/05	0.5	8/18/05	14.5	15.0
	8/3/05	8/3/05	0.5	8/18/05	14.5	15.0
	8/4/05	8/4/05	0.5	8/18/05	13.5	14.0
	8/5/05	8/5/05	0.5	8/18/05	12.5	13.0
	8/6/05	8/6/05	0.5	8/18/05	11.5	12.0
	8/7/05	8/7/05	0.5	8/18/05	10.5	11.0
	8/5/05	8/5/05	0.5	8/18/05	12.5	13.0
	8/5/05	8/5/05	0.5	8/18/05	12.5	13.0
	8/9/05	8/9/05	0.5	8/31/05	21.5	22.0
	8/10/05	8/10/05	0.5	8/31/05	20.5	21.0
	8/11/05	8/11/05	0.5	8/31/05	19.5	20.0
	8/12/05	8/12/05	0.5	8/31/05	18.5	19.0
	8/18/05	8/18/05	0.5	8/31/05	12.5	13.0
	8/18/05	8/18/05	0.5	8/31/05	12.5	13.0
	8/11/05	8/11/05	0.5	8/31/05	19.5	20.0
	8/10/05	8/10/05	0.5	8/31/05	20.5	21.0
	8/17/05	8/17/05	0.5	8/31/05	13.5	14.0
	8/26/05	8/26/05	0.5	9/9/05	13.5	14.0
	8/22/05	8/22/05	0.5	9/9/05	17.5	18.0
	8/16/05	8/16/05	0.5	9/9/05	23.5	24.0
	8/17/05	8/17/05	0.5	9/9/05	22.5	23.0
	8/18/05	8/18/05	0.5	9/9/05	21.5	22.0
	8/20/05	8/20/05	0.5	9/9/05	19.5	20.0
	8/23/05	8/23/05	0.5	9/9/05	16.5	17.0
	8/24/05	8/24/05	0.5	9/9/05	15.5	16.0
	8/25/05	8/25/05	0.5	9/9/05	14.5	15.0
	8/26/05	8/26/05	0.5	9/9/05	13.5	14.0
	8/29/05	8/29/05	0.5	9/9/05	10.5	11.0
	8/29/05	8/29/05	0.5	9/9/05	10.5	11.0
	9/1/05	9/1/05	0.5	9/20/05	18.5	19.0
	9/7/05	9/7/05	0.5	9/20/05	12.5	13.0
	9/10/05	9/10/05	0.5	9/30/05	19.5	20.0
	9/15/05	9/15/05	0.5	9/30/05	14.5	15.0
	9/15/05	9/15/05	0.5	9/30/05	14.5	15.0
	9/12/05	9/12/05	0.5	9/30/05	17.5	18.0
	9/22/05	9/22/05	0.5	10/11/05	18.5	19.0
	9/27/05	9/27/05	0.5	10/20/05	22.5	23.0
	9/27/05	9/27/05	0.5	10/20/05	22.5	23.0
	9/29/05	9/29/05	0.5	10/20/05	20.5	21.0
	9/28/05	9/28/05	0.5	11/10/05	42.5	43.0

SERVICE PERIOD (Delivery dates)

CHEVRON	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)
	10/3/05	10/3/05	0.5	10/20/05	16.5	17.0
	10/15/05	10/15/05	0.5	10/31/05	15.5	16.0
	10/20/05	10/20/05	0.5	11/10/05	20.5	21.0
	10/24/05	10/24/05	0.5	11/10/05	16.5	17.0
	10/19/05	10/19/05	0.5	11/10/05	21.5	22.0
	10/27/05	10/27/05	0.5	11/21/05	24.5	25.0
	10/27/05	10/27/05	0.5	11/21/05	24.5	25.0
	10/29/05	10/29/05	0.5	11/21/05	22.5	23.0
	11/4/05	11/4/05	0.5	11/21/05	16.5	17.0
	11/9/05	11/9/05	0.5	11/21/05	11.5	12.0
	11/7/05	11/7/05	0.5	11/21/05	13.5	14.0
	11/8/05	11/8/05	0.5	11/21/05	12.5	13.0
	11/11/05	11/11/05	0.5	11/30/05	18.5	19.0
	11/14/05	11/14/05	0.5	11/30/05	15.5	16.0
	11/16/05	11/16/05	0.5	11/30/05	13.5	14.0
	11/17/05	11/17/05	0.5	11/30/05	12.5	13.0
	11/15/05	11/15/05	0.5	11/30/05	14.5	15.0
	11/21/05	11/21/05	0.5	12/9/05	17.5	18.0
	11/30/05	11/30/05	0.5	12/20/05	19.5	20.0
	11/27/05	11/27/05	0.5	12/20/05	22.5	23.0
	11/11/05	11/11/05	0.5	12/20/05	38.5	39.0
	12/5/05	12/5/05	0.5	12/20/05	14.5	15.0
	12/7/05	12/7/05	0.5	12/20/05	12.5	13.0
	12/10/05	12/10/05	0.5	12/30/05	19.5	20.0
	12/14/05	12/14/05	0.5	12/30/05	15.5	16.0

CHEVRON Payment Lag

18.9

Actual 2005 payments

TESORO	SERVICE PERIOD (Delivery Dates)		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE	PAYMENT LAG (DAYS)
	BEGIN	END			TO PAY DATE (DAYS)	
	12/23/04	12/23/04	0.5	1/6/05	13.5	14.0
	12/24/04	12/24/04	0.5	1/12/05	18.5	19.0
	12/24/04	12/24/04	0.5	1/12/05	18.5	19.0
	12/30/04	12/30/04	0.5	1/13/05	13.5	14.0
	1/15/05	1/15/05	0.5	1/27/05	11.5	12.0
	1/22/05	1/22/05	0.5	2/7/05	15.5	16.0
	1/22/05	1/22/05	0.5	2/7/05	15.5	16.0
	2/10/05	2/10/05	0.5	2/22/05	11.5	12.0
	2/20/05	2/20/05	0.5	3/9/05	16.5	17.0
	2/20/05	2/20/05	0.5	3/9/05	16.5	17.0
	3/2/05	3/2/05	0.5	3/15/05	12.5	13.0
	3/17/05	3/17/05	0.5	3/31/05	13.5	14.0
	3/29/05	3/29/05	0.5	4/8/05	9.5	10.0
	3/29/05	3/29/05	0.5	4/8/05	9.5	10.0
	4/1/05	4/1/05	0.5	4/15/05	13.5	14.0
	4/12/05	4/12/05	0.5	4/22/05	9.5	10.0
	4/19/05	4/19/05	0.5	5/5/05	15.5	16.0
	4/19/05	4/19/05	0.5	5/5/05	15.5	16.0
	5/5/05	5/5/05	0.5	5/18/05	12.5	13.0
	5/26/05	5/26/05	0.5	6/7/05	11.5	12.0
	6/1/05	6/1/05	0.5	6/13/05	11.5	12.0
	6/1/05	6/1/05	0.5	6/13/05	11.5	12.0
	6/15/05	6/15/05	0.5	6/27/05	11.5	12.0
	6/25/05	6/25/05	0.5	7/7/05	11.5	12.0
	6/30/05	6/30/05	0.5	7/13/05	12.5	13.0
	7/5/05	7/5/05	0.5	7/15/05	9.5	10.0
	7/5/05	7/5/05	0.5	7/15/05	9.5	10.0
	7/12/05	7/12/05	0.5	7/22/05	9.5	10.0
	7/20/05	7/20/05	0.5	8/1/05	11.5	12.0
	7/27/05	7/27/05	0.5	8/9/05	12.5	13.0
	8/1/05	8/1/05	0.5	8/12/05	10.5	11.0
	8/2/05	8/2/05	0.5	8/15/05	12.5	13.0
	8/2/05	8/2/05	0.5	8/15/05	12.5	13.0
	8/14/05	8/14/05	0.5	8/26/05	11.5	12.0
	8/19/05	8/19/05	0.5	8/31/05	11.5	12.0
	8/28/05	8/28/05	0.5	9/9/05	11.5	12.0
	9/3/05	9/3/05	0.5	9/15/05	11.5	12.0

Actual 2005 payments

SERVICE PERIOD (Delivery Dates)

TESORO	SERVICE PERIOD (Delivery Dates)		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE	PAYMENT LAG (DAYS)
	BEGIN	END			TO PAY DATE	
	9/4/05	9/4/05	0.5	9/15/05	10.5	11.0
	9/4/05	9/4/05	0.5	9/15/05	10.5	11.0
	9/12/05	9/12/05	0.5	9/22/05	9.5	10.0
	9/14/05	9/14/05	0.5	9/27/05	12.5	13.0
	9/25/05	9/25/05	0.5	10/6/05	10.5	11.0
	9/25/05	9/25/05	0.5	10/7/05	11.5	12.0
	10/8/05	10/8/05	0.5	10/21/05	12.5	13.0
	10/11/05	10/11/05	0.5	10/24/05	12.5	13.0
	10/19/05	10/19/05	0.5	10/31/05	11.5	12.0
	10/25/05	10/25/05	0.5	11/7/05	12.5	13.0
	10/25/05	10/25/05	0.5	11/7/05	12.5	13.0
	11/6/05	11/6/05	0.5	11/18/05	11.5	12.0
	11/8/05	11/8/05	0.5	11/21/05	12.5	13.0
	11/14/05	11/14/05	0.5	11/25/05	10.5	11.0
	11/20/05	11/20/05	0.5	12/2/05	11.5	12.0
	11/21/05	11/21/05	0.5	12/8/05	16.5	17.0
	12/2/05	12/2/05	0.5	12/14/05	11.5	12.0
	12/7/05	12/07/05	0.5	12/20/05	12.5	13.0
	12/12/05	12/12/05	0.5	12/22/05	9.5	10.0

TESORO Payment Lag

12.8

Hawaiian Electric Company, Inc.
Working Cash Study

Calculation of the Composite O&M Labor Lag Days

File: S:\Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07\Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\{Labor O&M.xls\SUM-O&MLab
Source: Per Supporting Worksheets

O&M Labor Item	Payment	% of Total	Payment	Check	Total	Weighted
	Amount for		Lag Days	Clearing Lag	Payment	
	2005 (\$)		Lag Days	Days	Lag Days	Average
	Note A		Note B	Note C		
Net pay by Checks	4,856,165	4.73%	9.7	7.3	16.9	1 days
Net pay by Direct Deposit	52,525,472	51.19%	9.7	0.0	9.7	5 days
Federal income tax withholdings	13,446,407	13.11%	10.7	0.0	10.7	1 days
State income tax withholdings	6,091,934	5.94%	16.5	0.0	16.5	1 days
Employee FICA withholdings	7,800,992	7.60%	10.7	0.0	10.7	1 days
HEIRS & HEIRS Loans	11,245,098	10.96%	14.6	0.0	14.6	2 days
Credit Union Shares & Loans	6,636,106	6.47%	9.7	0.0	9.7	1 days
Total	102,602,175	100.00%				

O&M Labor Payment Lag	11 days
----------------------------------	----------------

NOTE: Totals may not add exactly due to rounding.

Sources & References:

Note A: 2005 expense amounts per Cost Accounting.

Note B: Payment Lags	HECO-WP- 1706, Page No.
Net pay by Checks	9
Net pay by Direct Deposit	10
Federal income tax withholdings	11
State income tax withholdings	12
Employee FICA withholdings	13
HEIRS & HEIRS Loans	14
Credit Union Shares & Loans	15

Note C: Check Clearing Lag	HECO-WP- 1706, Page No.
Net pay by Checks	16-31
Net pay by Direct Deposit	0 days
Federal income tax withholdings	0 days (payment wired to bank)
State income tax withholdings	0 days (payment wired to bank)
Employee FICA withholdings	0 days (payment wired to bank)
HEIRS & HEIRS Loans	0 days (direct deposit to account)

Hawaiian Electric Company, Inc.
Working Cash Study
O&M Labor - Net Payroll Payment Lag (Checks)

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Labor O&M.xls\SUM-O&M
Source: 2005 Pay schedule

2005 CHECKS ISSUED

PAY PERIOD		(X)	(Y)	(X) * (Y)			
BEGIN	END	AVE PAY PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	NET CHECK AMOUNT	DOLLAR DAYS
12/27/04	1/9/05	7.0	1/12/05	2.5	9.5	100	950
1/10/05	1/23/05	7.0	1/26/05	2.5	9.5	100	950
1/24/05	2/6/05	7.0	2/9/05	2.5	9.5	100	950
2/7/05	2/20/05	7.0	2/24/05	3.5	10.5	100	1,050
2/21/05	3/6/05	7.0	3/9/05	2.5	9.5	100	950
3/7/05	3/20/05	7.0	3/23/05	2.5	9.5	100	950
3/21/05	4/3/05	7.0	4/6/05	2.5	9.5	100	950
4/4/05	4/17/05	7.0	4/20/05	2.5	9.5	100	950
4/18/05	5/1/05	7.0	5/4/05	2.5	9.5	100	950
5/2/05	5/15/05	7.0	5/18/05	2.5	9.5	100	950
5/16/05	5/29/05	7.0	6/2/05	3.5	10.5	100	1,050
5/30/05	6/12/05	7.0	6/15/05	2.5	9.5	100	950
6/13/05	6/26/05	7.0	6/29/05	2.5	9.5	100	950
6/27/05	7/10/05	7.0	7/13/05	2.5	9.5	100	950
7/11/05	7/24/05	7.0	7/27/05	2.5	9.5	100	950
7/25/05	8/7/05	7.0	8/10/05	2.5	9.5	100	950
8/8/05	8/21/05	7.0	8/24/05	2.5	9.5	100	950
8/22/05	9/4/05	7.0	9/8/05	3.5	10.5	100	1,050
9/5/05	9/18/05	7.0	9/21/05	2.5	9.5	100	950
9/19/05	10/2/05	7.0	10/5/05	2.5	9.5	100	950
10/3/05	10/16/05	7.0	10/19/05	2.5	9.5	100	950
10/17/05	10/30/05	7.0	11/2/05	2.5	9.5	100	950
10/31/05	11/13/05	7.0	11/16/05	2.5	9.5	100	950
11/14/05	11/27/05	7.0	11/30/05	2.5	9.5	100	950
11/28/05	12/11/05	7.0	12/14/05	2.5	9.5	100	950
12/12/05	12/25/05	7.0	12/29/05	3.5	10.5	100	1,050
						2,600	25,100

Net Payroll Payment Lag Days for Checks

9.7

Hawaiian Electric Company, Inc.
Working Cash Study
O&M Labor - Net Payroll Payment Lag (Direct Deposit)

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\[Labor O&M.xls]SUM-O&MLat
Source: 2005 pay schedule. Checks direct deposited on pay date.

2005 DIRECT DEPOSIT

PAY PERIOD		(X)	(Y)	(X) * (Y)			
BEGIN	END	AVE PAY PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	NET CHECK AMOUNT	DOLLAR DAYS
12/27/04	1/9/05	7.0	1/12/05	2.5	9.5	100	950
1/10/05	1/23/05	7.0	1/26/05	2.5	9.5	100	950
1/24/05	2/6/05	7.0	2/9/05	2.5	9.5	100	950
2/7/05	2/20/05	7.0	2/24/05	3.5	10.5	100	1,050
2/21/05	3/6/05	7.0	3/9/05	2.5	9.5	100	950
3/7/05	3/20/05	7.0	3/23/05	2.5	9.5	100	950
3/21/05	4/3/05	7.0	4/6/05	2.5	9.5	100	950
4/4/05	4/17/05	7.0	4/20/05	2.5	9.5	100	950
4/18/05	5/1/05	7.0	5/4/05	2.5	9.5	100	950
5/2/05	5/15/05	7.0	5/18/05	2.5	9.5	100	950
5/16/05	5/29/05	7.0	6/2/05	3.5	10.5	100	1,050
5/30/05	6/12/05	7.0	6/15/05	2.5	9.5	100	950
6/13/05	6/26/05	7.0	6/29/05	2.5	9.5	100	950
6/27/05	7/10/05	7.0	7/13/05	2.5	9.5	100	950
7/11/05	7/24/05	7.0	7/27/05	2.5	9.5	100	950
7/25/05	8/7/05	7.0	8/10/05	2.5	9.5	100	950
8/8/05	8/21/05	7.0	8/24/05	2.5	9.5	100	950
8/22/05	9/4/05	7.0	9/8/05	3.5	10.5	100	1,050
9/5/05	9/18/05	7.0	9/21/05	2.5	9.5	100	950
9/19/05	10/2/05	7.0	10/5/05	2.5	9.5	100	950
10/3/05	10/16/05	7.0	10/19/05	2.5	9.5	100	950
10/17/05	10/30/05	7.0	11/2/05	2.5	9.5	100	950
10/31/05	11/13/05	7.0	11/16/05	2.5	9.5	100	950
11/14/05	11/27/05	7.0	11/30/05	2.5	9.5	100	950
11/28/05	12/11/05	7.0	12/14/05	2.5	9.5	100	950
12/12/05	12/25/05	7.0	12/29/05	3.5	10.5	100	1,050
						2,600	25,100

Net Payroll Payment Lag Days for Direct Deposits

9.7

Hawaiian Electric Company, Inc.
Working Cash Study

O&M Labor - Federal Withholding Taxes (FWT)

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07\Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Labor O&M.xls\SUM-O&M
Source: 2005 pay schedule. FWT paid the day after pay date.

FWT for 2005

SERVICE PERIOD		(X)	(Y)	(X) * (Y)			
BEGIN	END	AVE PAY PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	AMOUNT	DOLLAR DAYS
12/27/04	1/9/05	7.0	1/13/05	3.5	10.5	100	1,050
1/10/05	1/23/05	7.0	1/27/05	3.5	10.5	100	1,050
1/24/05	2/6/05	7.0	2/10/05	3.5	10.5	100	1,050
2/7/05	2/20/05	7.0	2/25/05	4.5	11.5	100	1,150
2/21/05	3/6/05	7.0	3/10/05	3.5	10.5	100	1,050
3/7/05	3/20/05	7.0	3/24/05	3.5	10.5	100	1,050
3/21/05	4/3/05	7.0	4/7/05	3.5	10.5	100	1,050
4/4/05	4/17/05	7.0	4/21/05	3.5	10.5	100	1,050
4/18/05	5/1/05	7.0	5/5/05	3.5	10.5	100	1,050
5/2/05	5/15/05	7.0	5/19/05	3.5	10.5	100	1,050
5/16/05	5/29/05	7.0	6/3/05	4.5	11.5	100	1,150
5/30/05	6/12/05	7.0	6/16/05	3.5	10.5	100	1,050
6/13/05	6/26/05	7.0	6/30/05	3.5	10.5	100	1,050
6/27/05	7/10/05	7.0	7/14/05	3.5	10.5	100	1,050
7/11/05	7/24/05	7.0	7/28/05	3.5	10.5	100	1,050
7/25/05	8/7/05	7.0	8/11/05	3.5	10.5	100	1,050
8/8/05	8/21/05	7.0	8/25/05	3.5	10.5	100	1,050
8/22/05	9/4/05	7.0	9/9/05	4.5	11.5	100	1,150
9/5/05	9/18/05	7.0	9/22/05	3.5	10.5	100	1,050
9/19/05	10/2/05	7.0	10/6/05	3.5	10.5	100	1,050
10/3/05	10/16/05	7.0	10/20/05	3.5	10.5	100	1,050
10/17/05	10/30/05	7.0	11/3/05	3.5	10.5	100	1,050
10/31/05	11/13/05	7.0	11/17/05	3.5	10.5	100	1,050
11/14/05	11/27/05	7.0	12/1/05	3.5	10.5	100	1,050
11/28/05	12/11/05	7.0	12/15/05	3.5	10.5	100	1,050
12/12/05	12/25/05	7.0	12/30/05	4.5	11.5	100	1,150
						2,600	27,700

Federal Withholdings Payment Lag Days

10.7

Hawaiian Electric Company, Inc.
Working Cash Study
O&M Labor - State Withholding Taxes (SWT)

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Labor O&M.xls\SUM-O&M
Source: 2005 pay schedule. SWT paid the following Wednesday after pay date.

SWT for 2005

SERVICE PERIOD			(X)	(Y)	(X) * (Y)		
BEGIN	END	AVE PAY PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	AMOUNT	DOLLAR DAYS
12/27/04	1/9/05	7.0	1/19/05	9.5	16.5	100	1,650
1/10/05	1/23/05	7.0	2/2/05	9.5	16.5	100	1,650
1/24/05	2/6/05	7.0	2/16/05	9.5	16.5	100	1,650
2/7/05	2/20/05	7.0	3/2/05	9.5	16.5	100	1,650
2/21/05	3/6/05	7.0	3/16/05	9.5	16.5	100	1,650
3/7/05	3/20/05	7.0	3/30/05	9.5	16.5	100	1,650
3/21/05	4/3/05	7.0	4/13/05	9.5	16.5	100	1,650
4/4/05	4/17/05	7.0	4/27/05	9.5	16.5	100	1,650
4/18/05	5/1/05	7.0	5/11/05	9.5	16.5	100	1,650
5/2/05	5/15/05	7.0	5/25/05	9.5	16.5	100	1,650
5/16/05	5/29/05	7.0	6/8/05	9.5	16.5	100	1,650
5/30/05	6/12/05	7.0	6/22/05	9.5	16.5	100	1,650
6/13/05	6/26/05	7.0	7/6/05	9.5	16.5	100	1,650
6/27/05	7/10/05	7.0	7/20/05	9.5	16.5	100	1,650
7/11/05	7/24/05	7.0	8/3/05	9.5	16.5	100	1,650
7/25/05	8/7/05	7.0	8/17/05	9.5	16.5	100	1,650
8/8/05	8/21/05	7.0	8/31/05	9.5	16.5	100	1,650
8/22/05	9/4/05	7.0	9/14/05	9.5	16.5	100	1,650
9/5/05	9/18/05	7.0	9/28/05	9.5	16.5	100	1,650
9/19/05	10/2/05	7.0	10/12/05	9.5	16.5	100	1,650
10/3/05	10/16/05	7.0	10/26/05	9.5	16.5	100	1,650
10/17/05	10/30/05	7.0	11/9/05	9.5	16.5	100	1,650
10/31/05	11/13/05	7.0	11/23/05	9.5	16.5	100	1,650
11/14/05	11/27/05	7.0	12/7/05	9.5	16.5	100	1,650
11/28/05	12/11/05	7.0	12/21/05	9.5	16.5	100	1,650
12/12/05	12/25/05	7.0	1/4/06	9.5	16.5	100	1,650
						<u>2,600</u>	<u>42,900</u>

State Withholdings Payment Lag Days

16.5

Hawaiian Electric Company, Inc.
Working Cash Study
O&M Labor - Employee FICA

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHNE\Exhibits & workpapers\Labor O&M.xls\SUM-O&M
Source: 2005 pay schedule. FICA paid the day after pay date.

FICA for 2005

SERVICE PERIOD		(X)	(Y)	(X) * (Y)			
BEGIN	END	AVE PAY PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	AMOUNT	DOLLAR DAYS
12/27/04	1/9/05	7.0	1/13/05	3.5	10.5	100	1,050
1/10/05	1/23/05	7.0	1/27/05	3.5	10.5	100	1,050
1/24/05	2/6/05	7.0	2/10/05	3.5	10.5	100	1,050
2/7/05	2/20/05	7.0	2/25/05	4.5	11.5	100	1,150
2/21/05	3/6/05	7.0	3/10/05	3.5	10.5	100	1,050
3/7/05	3/20/05	7.0	3/24/05	3.5	10.5	100	1,050
3/21/05	4/3/05	7.0	4/7/05	3.5	10.5	100	1,050
4/4/05	4/17/05	7.0	4/21/05	3.5	10.5	100	1,050
4/18/05	5/1/05	7.0	5/5/05	3.5	10.5	100	1,050
5/2/05	5/15/05	7.0	5/19/05	3.5	10.5	100	1,050
5/16/05	5/29/05	7.0	6/3/05	4.5	11.5	100	1,150
5/30/05	6/12/05	7.0	6/16/05	3.5	10.5	100	1,050
6/13/05	6/26/05	7.0	6/30/05	3.5	10.5	100	1,050
6/27/05	7/10/05	7.0	7/14/05	3.5	10.5	100	1,050
7/11/05	7/24/05	7.0	7/28/05	3.5	10.5	100	1,050
7/25/05	8/7/05	7.0	8/11/05	3.5	10.5	100	1,050
8/8/05	8/21/05	7.0	8/25/05	3.5	10.5	100	1,050
8/22/05	9/4/05	7.0	9/9/05	4.5	11.5	100	1,150
9/5/05	9/18/05	7.0	9/22/05	3.5	10.5	100	1,050
9/19/05	10/2/05	7.0	10/6/05	3.5	10.5	100	1,050
10/3/05	10/16/05	7.0	10/20/05	3.5	10.5	100	1,050
10/17/05	10/30/05	7.0	11/3/05	3.5	10.5	100	1,050
10/31/05	11/13/05	7.0	11/17/05	3.5	10.5	100	1,050
11/14/05	11/27/05	7.0	12/1/05	3.5	10.5	100	1,050
11/28/05	12/11/05	7.0	12/15/05	3.5	10.5	100	1,050
12/12/05	12/25/05	7.0	12/30/05	4.5	11.5	100	1,150
						2,600	27,700

Employee FICA Payment Lag Days

10.7

Hawaiian Electric Company, Inc.
Working Cash Study
O&M Labor - HEIRS and HEIRS Loans

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\[Labor O&M.xls]SUM-O&M
Source: 2005 pay schedule. HEIRS paid the following Monday after pay date.

HEIRS & HEIRS Loan Deductions for 2005

SERVICE PERIOD		(X)	(Y)	(X) * (Y)			
BEGIN	END	AVE PAY PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	AMOUNT	DOLLAR DAYS
12/27/04	1/9/05	7.0	1/17/05	7.5	14.5	100	1,450
1/10/05	1/23/05	7.0	1/31/05	7.5	14.5	100	1,450
1/24/05	2/6/05	7.0	2/14/05	7.5	14.5	100	1,450
2/7/05	2/20/05	7.0	2/28/05	7.5	14.5	100	1,450
2/21/05	3/6/05	7.0	3/14/05	7.5	14.5	100	1,450
3/7/05	3/20/05	7.0	3/29/05	8.5	15.5	100	1,550
3/21/05	4/3/05	7.0	4/11/05	7.5	14.5	100	1,450
4/4/05	4/17/05	7.0	4/25/05	7.5	14.5	100	1,450
4/18/05	5/1/05	7.0	5/9/05	7.5	14.5	100	1,450
5/2/05	5/15/05	7.0	5/23/05	7.5	14.5	100	1,450
5/16/05	5/29/05	7.0	6/6/05	7.5	14.5	100	1,450
5/30/05	6/12/05	7.0	6/20/05	7.5	14.5	100	1,450
6/13/05	6/26/05	7.0	7/5/05	8.5	15.5	100	1,550
6/27/05	7/10/05	7.0	7/18/05	7.5	14.5	100	1,450
7/11/05	7/24/05	7.0	8/1/05	7.5	14.5	100	1,450
7/25/05	8/7/05	7.0	8/15/05	7.5	14.5	100	1,450
8/8/05	8/21/05	7.0	8/29/05	7.5	14.5	100	1,450
8/22/05	9/4/05	7.0	9/12/05	7.5	14.5	100	1,450
9/5/05	9/18/05	7.0	9/26/05	7.5	14.5	100	1,450
9/19/05	10/2/05	7.0	10/11/05	8.5	15.5	100	1,550
10/3/05	10/16/05	7.0	10/24/05	7.5	14.5	100	1,450
10/17/05	10/30/05	7.0	11/7/05	7.5	14.5	100	1,450
10/31/05	11/13/05	7.0	11/21/05	7.5	14.5	100	1,450
11/14/05	11/27/05	7.0	12/5/05	7.5	14.5	100	1,450
11/28/05	12/11/05	7.0	12/19/05	7.5	14.5	100	1,450
12/12/05	12/25/05	7.0	1/2/06	7.5	14.5	100	1,450
						2,600	38,000

HEIRS & HEIRS Loans Payment Lag Days

14.6

Hawaiian Electric Company, Inc.
Working Cash Study

O&M Labor - Credit Union Shares & Loans

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Labor O&M.xls\SUM-O&M
Source: 2005 pay schedule. Credit union paid on pay date.

Credit Union Shares & Loans Deductions for 2005

SERVICE PERIOD			(X)	(Y)	(X) * (Y)		
BEGIN	END	AVE PAY PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	AMOUNT	DOLLAR DAYS
12/27/04	1/9/05	7.0	1/12/05	2.5	9.5	100	950
1/10/05	1/23/05	7.0	1/26/05	2.5	9.5	100	950
1/24/05	2/6/05	7.0	2/9/05	2.5	9.5	100	950
2/7/05	2/20/05	7.0	2/24/05	3.5	10.5	100	1,050
2/21/05	3/6/05	7.0	3/9/05	2.5	9.5	100	950
3/7/05	3/20/05	7.0	3/23/05	2.5	9.5	100	950
3/21/05	4/3/05	7.0	4/6/05	2.5	9.5	100	950
4/4/05	4/17/05	7.0	4/20/05	2.5	9.5	100	950
4/18/05	5/1/05	7.0	5/4/05	2.5	9.5	100	950
5/2/05	5/15/05	7.0	5/18/05	2.5	9.5	100	950
5/16/05	5/29/05	7.0	6/2/05	3.5	10.5	100	1,050
5/30/05	6/12/05	7.0	6/15/05	2.5	9.5	100	950
6/13/05	6/26/05	7.0	6/29/05	2.5	9.5	100	950
6/27/05	7/10/05	7.0	7/13/05	2.5	9.5	100	950
7/11/05	7/24/05	7.0	7/27/05	2.5	9.5	100	950
7/25/05	8/7/05	7.0	8/10/05	2.5	9.5	100	950
8/8/05	8/21/05	7.0	8/24/05	2.5	9.5	100	950
8/22/05	9/4/05	7.0	9/8/05	3.5	10.5	100	1,050
9/5/05	9/18/05	7.0	9/21/05	2.5	9.5	100	950
9/19/05	10/2/05	7.0	10/5/05	2.5	9.5	100	950
10/3/05	10/16/05	7.0	10/19/05	2.5	9.5	100	950
10/17/05	10/30/05	7.0	11/2/05	2.5	9.5	100	950
10/31/05	11/13/05	7.0	11/16/05	2.5	9.5	100	950
11/14/05	11/27/05	7.0	11/30/05	2.5	9.5	100	950
11/28/05	12/11/05	7.0	12/14/05	2.5	9.5	100	950
12/12/05	12/25/05	7.0	12/29/05	3.5	10.5	100	1,050
						<u>2,600</u>	<u>25,100</u>

Credit Union Shares & Loans Payment Lag Days

9.7

Hawaiian Electric Company, Inc.
Working Cash Study
Check Clearing Lag for Net Payroll paid by Checks

File: SA_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Labor O&M.xls\SUM-
Source: Eric Horio, ITS

2005 Payroll Checks Issued

	(X)	(Y)	(X) * (Y)	
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	
			DOLLAR DAYS	
01/12/2005	01/12/2005	0.0	18,263	0
01/12/2005	01/13/2005	1.0	60,152	60,152
01/12/2005	01/14/2005	2.0	27,917	55,834
01/12/2005	01/18/2005	6.0	20,763	124,576
01/12/2005	01/19/2005	7.0	20,544	143,806
01/12/2005	01/20/2005	8.0	1,775	14,203
01/12/2005	01/21/2005	9.0	5,135	46,219
01/12/2005	01/24/2005	12.0	3,778	45,342
01/12/2005	01/25/2005	13.0	1,507	19,593
01/12/2005	01/26/2005	14.0	17	243
01/12/2005	01/27/2005	15.0	11,267	169,002
01/12/2005	01/31/2005	19.0	1,746	33,170
01/12/2005	02/01/2005	20.0	2,959	59,170
01/12/2005	02/03/2005	22.0	1,425	31,340
01/12/2005	02/04/2005	23.0	4,474	102,906
01/12/2005	02/07/2005	26.0	142	3,686
01/12/2005	02/10/2005	29.0	138	3,988
01/12/2005	02/16/2005	35.0	131	4,582
01/12/2005	02/18/2005	37.0	184	6,812
01/12/2005	02/23/2005	42.0	184	7,733
01/12/2005	02/24/2005	43.0	1,236	53,127
01/12/2005	02/25/2005	44.0	4,753	209,130
01/12/2005	03/10/2005	57.0	2,034	115,929
01/12/2005	03/14/2005	61.0	142	8,648
01/12/2005	04/04/2005	82.0	893	73,223
01/26/2005	01/26/2005	0.0	12,518	0
01/26/2005	01/27/2005	1.0	51,261	51,261
01/26/2005	01/28/2005	2.0	35,453	70,907
01/26/2005	01/31/2005	5.0	26,810	134,049
01/26/2005	02/01/2005	6.0	11,480	68,879
01/26/2005	02/02/2005	7.0	7,853	54,968
01/26/2005	02/03/2005	8.0	2,073	16,587
01/26/2005	02/04/2005	9.0	3,094	27,842
01/26/2005	02/07/2005	12.0	1,221	14,646
01/26/2005	02/08/2005	13.0	131	1,702
01/26/2005	02/10/2005	15.0	1,260	18,896
01/26/2005	02/15/2005	20.0	163	3,260
01/26/2005	02/18/2005	23.0	944	21,720

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
01/26/2005	02/23/2005	28.0	686	19,194
01/26/2005	03/02/2005	35.0	152	5,335
01/26/2005	03/10/2005	43.0	1,922	82,665
01/26/2005	03/11/2005	44.0	2,799	123,173
01/26/2005	03/14/2005	47.0	1,368	64,299
01/26/2005	03/15/2005	48.0	3,532	169,545
01/26/2005	03/23/2005	56.0	131	7,332
02/09/2005	02/09/2005	0.0	16,942	0
02/09/2005	02/10/2005	1.0	62,306	62,306
02/09/2005	02/11/2005	2.0	28,480	56,960
02/09/2005	02/14/2005	5.0	22,619	113,095
02/09/2005	02/15/2005	6.0	15,005	90,032
02/09/2005	02/16/2005	7.0	1,772	12,405
02/09/2005	02/17/2005	8.0	3,026	24,209
02/09/2005	02/18/2005	9.0	1,470	13,233
02/09/2005	02/22/2005	13.0	2,399	31,187
02/09/2005	02/23/2005	14.0	1,828	25,598
02/09/2005	02/24/2005	15.0	1,662	24,924
02/09/2005	02/28/2005	19.0	2,392	45,447
02/09/2005	03/01/2005	20.0	2,176	43,528
02/09/2005	03/02/2005	21.0	1,765	37,060
02/09/2005	03/08/2005	27.0	1,157	31,249
02/09/2005	03/10/2005	29.0	2,034	58,982
02/09/2005	03/18/2005	37.0	2,304	85,231
02/09/2005	03/23/2005	42.0	1,417	59,508
02/09/2005	03/25/2005	44.0	2,534	111,477
02/09/2005	04/01/2005	51.0	1,546	78,864
02/09/2005	04/04/2005	54.0	894	48,298
02/09/2005	05/31/2005	111.0	4,408	489,317
02/24/2005	02/24/2005	0.0	16,870	0
02/24/2005	02/25/2005	1.0	49,314	49,314
02/24/2005	02/28/2005	4.0	48,000	192,001
02/24/2005	03/01/2005	5.0	18,666	93,328
02/24/2005	03/02/2005	6.0	12,897	77,383
02/24/2005	03/03/2005	7.0	2,871	20,094
02/24/2005	03/04/2005	8.0	3,893	31,142
02/24/2005	03/07/2005	11.0	279	3,070
02/24/2005	03/08/2005	12.0	2,834	34,004
02/24/2005	03/09/2005	13.0	152	1,982
02/24/2005	03/10/2005	14.0	4,000	56,004
02/24/2005	03/11/2005	15.0	425	6,377
02/24/2005	03/14/2005	18.0	1,825	32,847
02/24/2005	03/15/2005	19.0	1,221	23,197
02/24/2005	03/18/2005	22.0	2,339	51,449
02/24/2005	03/23/2005	27.0	2,992	80,782

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
02/24/2005	03/24/2005	28.0	269	7,521
02/24/2005	04/01/2005	36.0	1,368	49,250
02/24/2005	04/08/2005	43.0	3,849	165,489
02/24/2005	04/18/2005	53.0	857	45,410
02/24/2005	05/31/2005	96.0	3,914	375,732
03/09/2005	03/09/2005	0.0	8,553	0
03/09/2005	03/10/2005	1.0	54,902	54,902
03/09/2005	03/11/2005	2.0	36,103	72,207
03/09/2005	03/14/2005	5.0	19,279	96,395
03/09/2005	03/15/2005	6.0	20,772	124,632
03/09/2005	03/16/2005	7.0	4,247	29,726
03/09/2005	03/17/2005	8.0	6,889	55,116
03/09/2005	03/18/2005	9.0	4,681	42,128
03/09/2005	03/21/2005	12.0	1,728	20,737
03/09/2005	03/22/2005	13.0	2,392	31,099
03/09/2005	03/23/2005	14.0	3,513	49,186
03/09/2005	03/24/2005	15.0	142	2,127
03/09/2005	04/05/2005	27.0	167	4,515
03/09/2005	04/11/2005	33.0	2,566	84,672
03/09/2005	04/13/2005	35.0	49	1,726
03/09/2005	04/15/2005	37.0	131	4,844
03/09/2005	04/18/2005	40.0	250	9,984
03/09/2005	04/22/2005	44.0	4,446	195,623
03/09/2005	04/28/2005	50.0	844	42,181
03/09/2005	05/20/2005	72.0	142	10,207
03/09/2005	05/31/2005	83.0	4,939	409,917
03/23/2005	03/23/2005	0.0	14,278	0
03/23/2005	03/24/2005	1.0	61,937	61,937
03/23/2005	03/25/2005	2.0	24,539	49,078
03/23/2005	03/28/2005	5.0	10,725	53,623
03/23/2005	03/29/2005	6.0	12,044	72,263
03/23/2005	03/30/2005	7.0	6,016	42,112
03/23/2005	03/31/2005	8.0	7,753	62,025
03/23/2005	04/01/2005	9.0	3,666	32,996
03/23/2005	04/04/2005	12.0	4,098	49,181
03/23/2005	04/05/2005	13.0	3,011	39,149
03/23/2005	04/06/2005	14.0	4,455	62,365
03/23/2005	04/07/2005	15.0	1,884	28,253
03/23/2005	04/08/2005	16.0	2,649	42,380
03/23/2005	04/11/2005	19.0	5,706	108,423
03/23/2005	04/12/2005	20.0	1,392	27,832
03/23/2005	04/13/2005	21.0	372	7,821
03/23/2005	04/14/2005	22.0	343	7,552
03/23/2005	04/15/2005	23.0	641	14,734
03/23/2005	04/18/2005	26.0	322	8,366

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
03/23/2005	04/19/2005	27.0	1,733	46,790
03/23/2005	04/25/2005	33.0	142	4,678
03/23/2005	04/27/2005	35.0	180	6,296
03/23/2005	04/28/2005	36.0	809	29,134
03/23/2005	05/02/2005	40.0	180	7,196
03/23/2005	05/04/2005	42.0	319	13,391
03/23/2005	05/06/2005	44.0	1,975	86,914
03/23/2005	05/13/2005	51.0	1,405	71,657
03/23/2005	07/01/2005	100.0	4,803	480,286
04/06/2005	04/06/2005	0.0	12,262	0
04/06/2005	04/07/2005	1.0	62,706	62,706
04/06/2005	04/08/2005	2.0	39,199	78,398
04/06/2005	04/11/2005	5.0	30,276	151,382
04/06/2005	04/12/2005	6.0	9,542	57,249
04/06/2005	04/13/2005	7.0	3,405	23,832
04/06/2005	04/14/2005	8.0	2,841	22,729
04/06/2005	04/15/2005	9.0	887	7,981
04/06/2005	04/18/2005	12.0	1,155	13,861
04/06/2005	04/19/2005	13.0	5,264	68,427
04/06/2005	04/20/2005	14.0	873	12,226
04/06/2005	04/21/2005	15.0	322	4,826
04/06/2005	04/22/2005	16.0	1,343	21,485
04/06/2005	04/25/2005	19.0	3,419	64,954
04/06/2005	04/27/2005	21.0	306	6,432
04/06/2005	04/29/2005	23.0	2,621	60,289
04/06/2005	05/02/2005	26.0	372	9,684
04/06/2005	05/13/2005	37.0	840	31,098
04/06/2005	05/17/2005	41.0	116	4,745
04/06/2005	05/27/2005	51.0	2,662	135,738
04/06/2005	05/31/2005	55.0	1,496	82,273
04/06/2005	06/06/2005	61.0	1,462	89,172
04/06/2005	06/21/2005	76.0	155	11,745
04/06/2005	07/01/2005	86.0	5,036	433,134
04/20/2005	04/20/2005	0.0	11,062	0
04/20/2005	04/21/2005	1.0	55,114	55,114
04/20/2005	04/22/2005	2.0	32,906	65,813
04/20/2005	04/25/2005	5.0	11,929	59,643
04/20/2005	04/26/2005	6.0	28,724	172,347
04/20/2005	04/27/2005	7.0	3,235	22,648
04/20/2005	04/28/2005	8.0	2,722	21,778
04/20/2005	04/29/2005	9.0	4,243	38,183
04/20/2005	05/02/2005	12.0	1,206	14,469
04/20/2005	05/03/2005	13.0	6,096	79,250
04/20/2005	05/04/2005	14.0	499	6,984
04/20/2005	05/05/2005	15.0	167	2,508

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
04/20/2005	05/06/2005	16.0	360	5,756
04/20/2005	05/09/2005	19.0	2,544	48,342
04/20/2005	05/10/2005	20.0	180	3,598
04/20/2005	05/11/2005	21.0	167	3,511
04/20/2005	05/12/2005	22.0	372	8,194
04/20/2005	05/18/2005	28.0	367	10,272
04/20/2005	05/26/2005	36.0	863	31,052
04/20/2005	05/27/2005	37.0	1,725	63,825
04/20/2005	05/31/2005	41.0	1,166	47,790
04/20/2005	06/01/2005	42.0	165	6,930
04/20/2005	06/06/2005	47.0	1,486	69,858
04/20/2005	06/07/2005	48.0	180	8,635
04/20/2005	06/17/2005	58.0	2,453	142,262
04/20/2005	06/21/2005	62.0	1,274	78,957
04/20/2005	07/01/2005	72.0	4,811	346,372
05/04/2005	05/04/2005	0.0	17,616	0
05/04/2005	05/05/2005	1.0	52,150	52,150
05/04/2005	05/06/2005	2.0	30,326	60,652
05/04/2005	05/09/2005	5.0	15,252	76,261
05/04/2005	05/10/2005	6.0	15,370	92,223
05/04/2005	05/11/2005	7.0	4,347	30,432
05/04/2005	05/12/2005	8.0	5,630	45,044
05/04/2005	05/13/2005	9.0	3,057	27,512
05/04/2005	05/16/2005	12.0	2,255	27,054
05/04/2005	05/17/2005	13.0	4,872	63,338
05/04/2005	05/18/2005	14.0	2,184	30,574
05/04/2005	05/19/2005	15.0	2,012	30,184
05/04/2005	05/23/2005	19.0	654	12,417
05/04/2005	05/24/2005	20.0	1,671	33,417
05/04/2005	05/26/2005	22.0	372	8,194
05/04/2005	05/27/2005	23.0	1,425	32,775
05/04/2005	05/31/2005	27.0	1,220	32,929
05/04/2005	06/01/2005	28.0	360	10,074
05/04/2005	06/02/2005	29.0	321	9,319
05/04/2005	06/03/2005	30.0	180	5,397
05/04/2005	06/06/2005	33.0	155	5,100
05/04/2005	06/09/2005	36.0	193	6,932
05/04/2005	06/14/2005	41.0	89	3,629
05/04/2005	06/15/2005	42.0	155	6,491
05/04/2005	06/17/2005	44.0	2,808	123,557
05/04/2005	06/21/2005	48.0	1,161	55,738
05/04/2005	06/24/2005	51.0	1,253	63,916
05/04/2005	07/01/2005	58.0	5,036	292,114
05/04/2005	07/08/2005	65.0	1,343	87,315
05/04/2005	07/11/2005	68.0	180	12,233

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
05/04/2005	07/14/2005	71.0	180	12,772
05/18/2005	05/18/2005	0.0	17,920	0
05/18/2005	05/19/2005	1.0	50,759	50,759
05/18/2005	05/20/2005	2.0	26,609	53,218
05/18/2005	05/23/2005	5.0	27,078	135,389
05/18/2005	05/24/2005	6.0	16,560	99,359
05/18/2005	05/25/2005	7.0	8,285	57,997
05/18/2005	05/26/2005	8.0	882	7,056
05/18/2005	05/27/2005	9.0	5,235	47,115
05/18/2005	05/31/2005	13.0	2,055	26,718
05/18/2005	06/01/2005	14.0	4,521	63,292
05/18/2005	06/02/2005	15.0	707	10,602
05/18/2005	06/03/2005	16.0	180	2,878
05/18/2005	06/06/2005	19.0	3,057	58,086
05/18/2005	06/07/2005	20.0	319	6,377
05/18/2005	06/14/2005	27.0	155	4,173
05/18/2005	06/21/2005	34.0	1,621	55,113
05/18/2005	06/24/2005	37.0	1,825	67,528
05/18/2005	06/29/2005	42.0	484	20,341
05/18/2005	07/01/2005	44.0	5,038	221,684
05/18/2005	07/08/2005	51.0	2,206	112,485
05/18/2005	07/15/2005	58.0	1,618	93,828
06/02/2005	06/02/2005	0.0	24,065	0
06/02/2005	06/03/2005	1.0	71,582	71,582
06/02/2005	06/06/2005	4.0	53,412	213,650
06/02/2005	06/07/2005	5.0	17,716	88,581
06/02/2005	06/08/2005	6.0	10,080	60,483
06/02/2005	06/09/2005	7.0	3,998	27,987
06/02/2005	06/10/2005	8.0	527	4,216
06/02/2005	06/13/2005	11.0	941	10,349
06/02/2005	06/14/2005	12.0	4,566	54,797
06/02/2005	06/15/2005	13.0	1,112	14,455
06/02/2005	06/16/2005	14.0	1,020	14,286
06/02/2005	06/20/2005	18.0	167	3,010
06/02/2005	06/21/2005	19.0	2,194	41,682
06/02/2005	06/22/2005	20.0	1,683	33,660
06/02/2005	06/23/2005	21.0	331	6,959
06/02/2005	06/24/2005	22.0	217	4,763
06/02/2005	06/27/2005	25.0	474	11,838
06/02/2005	06/28/2005	26.0	1,930	50,175
06/02/2005	07/01/2005	29.0	5,319	154,264
06/02/2005	07/05/2005	33.0	1,252	41,307
06/02/2005	07/06/2005	34.0	484	16,467
06/02/2005	07/08/2005	36.0	2,672	96,174
06/02/2005	07/11/2005	39.0	343	13,388

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
06/02/2005	07/13/2005	41.0	193	7,895
06/02/2005	07/19/2005	47.0	193	9,050
06/02/2005	07/22/2005	50.0	2,205	110,270
06/02/2005	07/28/2005	56.0	180	10,074
06/02/2005	08/01/2005	60.0	1,544	92,645
06/02/2005	08/08/2005	67.0	1,490	99,838
06/15/2005	06/15/2005	0.0	15,744	0
06/15/2005	06/16/2005	1.0	50,566	50,566
06/15/2005	06/17/2005	2.0	39,732	79,463
06/15/2005	06/20/2005	5.0	23,197	115,985
06/15/2005	06/21/2005	6.0	25,991	155,947
06/15/2005	06/22/2005	7.0	3,653	25,568
06/15/2005	06/23/2005	8.0	2,115	16,920
06/15/2005	06/24/2005	9.0	4,476	40,284
06/15/2005	06/27/2005	12.0	2,505	30,060
06/15/2005	06/28/2005	13.0	3,363	43,723
06/15/2005	06/29/2005	14.0	2,389	33,449
06/15/2005	06/30/2005	15.0	894	13,404
06/15/2005	07/01/2005	16.0	5,165	82,647
06/15/2005	07/05/2005	20.0	3,296	65,924
06/15/2005	07/06/2005	21.0	1,024	21,504
06/15/2005	07/07/2005	22.0	2,838	62,438
06/15/2005	07/08/2005	23.0	1,655	38,062
06/15/2005	07/12/2005	27.0	180	4,857
06/15/2005	07/13/2005	28.0	180	5,037
06/15/2005	07/18/2005	33.0	2,060	67,995
06/15/2005	07/19/2005	34.0	180	6,116
06/15/2005	07/29/2005	44.0	2,239	98,508
06/15/2005	08/01/2005	47.0	1,565	73,547
06/15/2005	08/05/2005	51.0	1,420	72,402
06/15/2005	08/08/2005	54.0	853	46,054
06/29/2005	06/29/2005	0.0	20,730	0
06/29/2005	06/30/2005	1.0	55,843	55,843
06/29/2005	07/01/2005	2.0	45,261	90,522
06/29/2005	07/05/2005	6.0	19,089	114,536
06/29/2005	07/06/2005	7.0	12,125	84,878
06/29/2005	07/07/2005	8.0	12,944	103,552
06/29/2005	07/08/2005	9.0	3,011	27,102
06/29/2005	07/11/2005	12.0	745	8,939
06/29/2005	07/12/2005	13.0	1,995	25,937
06/29/2005	07/13/2005	14.0	1,841	25,781
06/29/2005	07/14/2005	15.0	1,737	26,061
06/29/2005	07/15/2005	16.0	1,609	25,738
06/29/2005	07/18/2005	19.0	3,459	65,717
06/29/2005	07/19/2005	20.0	2,358	47,155

	(X)	(Y)	(X) * (Y)	
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	
			DOLLAR DAYS	
06/29/2005	07/20/2005	21.0	270	5,676
06/29/2005	07/21/2005	22.0	714	15,702
06/29/2005	07/27/2005	28.0	167	4,682
06/29/2005	08/01/2005	33.0	1,466	48,370
06/29/2005	08/03/2005	35.0	167	5,852
06/29/2005	08/04/2005	36.0	360	12,952
06/29/2005	08/05/2005	37.0	1,425	52,720
06/29/2005	08/09/2005	41.0	167	6,856
06/29/2005	08/12/2005	44.0	1,905	83,805
06/29/2005	08/24/2005	56.0	737	41,279
06/29/2005	09/09/2005	72.0	4,862	350,032
07/13/2005	07/13/2005	0.0	17,696	0
07/13/2005	07/14/2005	1.0	50,101	50,101
07/13/2005	07/15/2005	2.0	47,757	95,514
07/13/2005	07/18/2005	5.0	25,174	125,868
07/13/2005	07/19/2005	6.0	14,414	86,481
07/13/2005	07/20/2005	7.0	4,158	29,105
07/13/2005	07/21/2005	8.0	7,468	59,744
07/13/2005	07/22/2005	9.0	1,546	13,914
07/13/2005	07/25/2005	12.0	2,672	32,064
07/13/2005	07/26/2005	13.0	2,168	28,189
07/13/2005	07/27/2005	14.0	3,045	42,623
07/13/2005	07/28/2005	15.0	599	8,982
07/13/2005	08/01/2005	19.0	3,338	63,420
07/13/2005	08/02/2005	20.0	520	10,397
07/13/2005	08/05/2005	23.0	167	3,846
07/13/2005	08/08/2005	26.0	1,539	40,009
07/13/2005	08/09/2005	27.0	527	14,228
07/13/2005	08/11/2005	29.0	155	4,482
07/13/2005	08/12/2005	30.0	167	5,016
07/13/2005	08/18/2005	36.0	226	8,149
07/13/2005	08/19/2005	37.0	331	12,261
07/13/2005	08/22/2005	40.0	2,173	86,923
07/13/2005	08/23/2005	41.0	167	6,856
07/13/2005	08/24/2005	42.0	853	35,821
07/13/2005	08/26/2005	44.0	1,897	83,484
07/13/2005	09/06/2005	55.0	1,771	97,409
07/13/2005	09/07/2005	56.0	167	9,364
07/13/2005	09/09/2005	58.0	4,957	287,504
07/13/2005	10/11/2005	90.0	59	5,324
07/27/2005	07/27/2005	0.0	12,739	0
07/27/2005	07/28/2005	1.0	59,206	59,206
07/27/2005	07/29/2005	2.0	14,991	29,981
07/27/2005	08/01/2005	5.0	39,767	198,836
07/27/2005	08/02/2005	6.0	12,444	74,662

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
07/27/2005	08/03/2005	7.0	8,030	56,207
07/27/2005	08/04/2005	8.0	2,532	20,253
07/27/2005	08/05/2005	9.0	3,598	32,386
07/27/2005	08/08/2005	12.0	4,780	57,364
07/27/2005	08/09/2005	13.0	446	5,799
07/27/2005	08/10/2005	14.0	749	10,489
07/27/2005	08/11/2005	15.0	2,394	35,907
07/27/2005	08/12/2005	16.0	1,030	16,476
07/27/2005	08/15/2005	19.0	2,816	53,503
07/27/2005	08/17/2005	21.0	575	12,081
07/27/2005	08/19/2005	23.0	496	11,409
07/27/2005	08/22/2005	26.0	1,966	51,107
07/27/2005	08/31/2005	35.0	1,018	35,622
07/27/2005	09/01/2005	36.0	331	11,930
07/27/2005	09/06/2005	41.0	1,788	73,303
07/27/2005	09/07/2005	42.0	1,605	67,401
07/27/2005	09/09/2005	44.0	6,722	295,775
07/27/2005	09/16/2005	51.0	1,098	56,005
07/27/2005	09/19/2005	54.0	757	40,855
08/10/2005	08/10/2005	0.0	13,434	0
08/10/2005	08/11/2005	1.0	54,568	54,568
08/10/2005	08/12/2005	2.0	32,260	64,520
08/10/2005	08/15/2005	5.0	34,531	172,654
08/10/2005	08/16/2005	6.0	17,213	103,280
08/10/2005	08/17/2005	7.0	5,532	38,723
08/10/2005	08/18/2005	8.0	3,885	31,082
08/10/2005	08/19/2005	9.0	588	5,292
08/10/2005	08/22/2005	12.0	3,716	44,591
08/10/2005	08/23/2005	13.0	730	9,492
08/10/2005	08/24/2005	14.0	782	10,941
08/10/2005	08/26/2005	16.0	892	14,265
08/10/2005	08/29/2005	19.0	3,582	68,052
08/10/2005	08/30/2005	20.0	1,600	31,991
08/10/2005	08/31/2005	21.0	319	6,696
08/10/2005	09/01/2005	22.0	628	13,818
08/10/2005	09/06/2005	27.0	1,616	43,638
08/10/2005	09/08/2005	29.0	532	15,429
08/10/2005	09/16/2005	37.0	1,391	51,464
08/10/2005	09/19/2005	40.0	167	6,688
08/10/2005	09/20/2005	41.0	142	5,813
08/10/2005	09/23/2005	44.0	3,998	175,908
08/10/2005	09/26/2005	47.0	1,949	91,590
08/10/2005	09/27/2005	48.0	436	20,919
08/10/2005	10/12/2005	63.0	5,252	330,851
08/10/2005	10/14/2005	65.0	167	10,869

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
08/10/2005	10/25/2005	76.0	423	32,134
08/24/2005	08/24/2005	0.0	11,892	0
08/24/2005	08/25/2005	1.0	73,938	73,938
08/24/2005	08/26/2005	2.0	24,351	48,701
08/24/2005	08/29/2005	5.0	31,605	158,026
08/24/2005	08/30/2005	6.0	11,479	68,872
08/24/2005	08/31/2005	7.0	6,861	48,029
08/24/2005	09/01/2005	8.0	2,324	18,594
08/24/2005	09/02/2005	9.0	2,745	24,703
08/24/2005	09/06/2005	13.0	3,588	46,645
08/24/2005	09/07/2005	14.0	1,248	17,476
08/24/2005	09/08/2005	15.0	473	7,101
08/24/2005	09/09/2005	16.0	833	13,330
08/24/2005	09/12/2005	19.0	334	6,354
08/24/2005	09/13/2005	20.0	496	9,921
08/24/2005	09/14/2005	21.0	2,336	49,050
08/24/2005	09/15/2005	22.0	1,953	42,966
08/24/2005	09/16/2005	23.0	1,628	37,447
08/24/2005	09/22/2005	29.0	167	4,849
08/24/2005	09/23/2005	30.0	1,425	42,746
08/24/2005	09/26/2005	33.0	1,837	60,623
08/24/2005	09/28/2005	35.0	836	29,273
08/24/2005	09/29/2005	36.0	167	6,020
08/24/2005	10/03/2005	40.0	2,799	111,973
08/24/2005	10/06/2005	43.0	167	7,190
08/24/2005	10/07/2005	44.0	2,282	100,402
08/24/2005	10/12/2005	49.0	4,816	235,999
08/24/2005	10/21/2005	58.0	167	9,698
08/24/2005	11/09/2005	77.0	180	13,852
08/24/2005	12/14/2005	112.0	236	26,481
09/08/2005	09/08/2005	0.0	21,903	0
09/08/2005	09/09/2005	1.0	46,850	46,850
09/08/2005	09/12/2005	4.0	46,090	184,362
09/08/2005	09/13/2005	5.0	15,289	76,446
09/08/2005	09/14/2005	6.0	6,565	39,388
09/08/2005	09/15/2005	7.0	5,501	38,504
09/08/2005	09/16/2005	8.0	3,151	25,205
09/08/2005	09/19/2005	11.0	3,973	43,708
09/08/2005	09/20/2005	12.0	4,157	49,879
09/08/2005	09/21/2005	13.0	510	6,625
09/08/2005	09/22/2005	14.0	1,787	25,022
09/08/2005	09/23/2005	15.0	155	2,318
09/08/2005	09/26/2005	18.0	1,475	26,551
09/08/2005	09/27/2005	19.0	1,095	20,813
09/08/2005	09/28/2005	20.0	1,317	26,344

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
09/08/2005	09/29/2005	21.0	461	9,678
09/08/2005	09/30/2005	22.0	167	3,679
09/08/2005	10/03/2005	25.0	3,035	75,876
09/08/2005	10/04/2005	26.0	193	5,007
09/08/2005	10/05/2005	27.0	1,195	32,265
09/08/2005	10/07/2005	29.0	1,412	40,960
09/08/2005	10/12/2005	34.0	5,583	189,822
09/08/2005	10/14/2005	36.0	155	5,563
09/08/2005	10/17/2005	39.0	520	20,261
09/08/2005	10/21/2005	43.0	1,504	64,665
09/08/2005	10/28/2005	50.0	648	32,392
09/08/2005	11/14/2005	67.0	693	46,422
09/08/2005	11/17/2005	70.0	1,506	105,399
09/08/2005	12/21/2005	104.0	167	17,390
09/21/2005	09/21/2005	0.0	9,193	0
09/21/2005	09/22/2005	1.0	59,222	59,222
09/21/2005	09/23/2005	2.0	23,710	47,420
09/21/2005	09/26/2005	5.0	21,043	105,216
09/21/2005	09/27/2005	6.0	19,324	115,945
09/21/2005	09/28/2005	7.0	4,463	31,241
09/21/2005	09/29/2005	8.0	4,332	34,659
09/21/2005	09/30/2005	9.0	3,307	29,764
09/21/2005	10/03/2005	12.0	5,303	63,634
09/21/2005	10/04/2005	13.0	694	9,024
09/21/2005	10/05/2005	14.0	656	9,179
09/21/2005	10/06/2005	15.0	1,446	21,684
09/21/2005	10/07/2005	16.0	367	5,870
09/21/2005	10/11/2005	20.0	520	10,390
09/21/2005	10/12/2005	21.0	306	6,432
09/21/2005	10/13/2005	22.0	523	11,510
09/21/2005	10/14/2005	23.0	3,503	80,558
09/21/2005	10/17/2005	26.0	167	4,347
09/21/2005	10/18/2005	27.0	1,121	30,274
09/21/2005	10/20/2005	29.0	226	6,564
09/21/2005	10/24/2005	33.0	1,554	51,298
09/21/2005	10/26/2005	35.0	226	7,923
09/21/2005	10/28/2005	37.0	1,127	41,710
09/21/2005	11/01/2005	41.0	167	6,856
09/21/2005	11/04/2005	44.0	1,375	60,479
09/21/2005	11/14/2005	54.0	743	40,098
09/21/2005	11/17/2005	57.0	1,639	93,419
09/21/2005	12/06/2005	76.0	4,807	365,362
10/05/2005	10/05/2005	0.0	17,123	0
10/05/2005	10/06/2005	1.0	53,272	53,272
10/05/2005	10/07/2005	2.0	37,588	75,177

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
10/05/2005	10/11/2005	6.0	14,511	87,067
10/05/2005	10/12/2005	7.0	13,821	96,746
10/05/2005	10/13/2005	8.0	2,949	23,594
10/05/2005	10/14/2005	9.0	5,698	51,285
10/05/2005	10/17/2005	12.0	2,770	33,243
10/05/2005	10/18/2005	13.0	1,854	24,098
10/05/2005	10/19/2005	14.0	5,407	75,698
10/05/2005	10/20/2005	15.0	616	9,233
10/05/2005	10/21/2005	16.0	2,171	34,735
10/05/2005	10/24/2005	19.0	1,766	33,550
10/05/2005	10/25/2005	20.0	469	9,377
10/05/2005	10/26/2005	21.0	385	8,088
10/05/2005	10/27/2005	22.0	168	3,702
10/05/2005	10/28/2005	23.0	1,222	28,098
10/05/2005	10/31/2005	26.0	319	8,290
10/05/2005	11/01/2005	27.0	2,676	72,248
10/05/2005	11/03/2005	29.0	205	5,952
10/05/2005	11/08/2005	34.0	155	5,254
10/05/2005	11/09/2005	35.0	334	11,705
10/05/2005	11/14/2005	40.0	736	29,453
10/05/2005	11/16/2005	42.0	1,612	67,693
10/05/2005	11/17/2005	43.0	2,570	110,526
10/05/2005	11/18/2005	44.0	4,509	198,378
10/05/2005	12/06/2005	62.0	5,473	339,322
10/05/2005	03/01/2006	147.0	167	24,580
10/19/2005	10/19/2005	0.0	19,278	0
10/19/2005	10/20/2005	1.0	60,412	60,412
10/19/2005	10/21/2005	2.0	21,576	43,153
10/19/2005	10/24/2005	5.0	28,309	141,543
10/19/2005	10/25/2005	6.0	3,712	22,269
10/19/2005	10/26/2005	7.0	5,278	36,943
10/19/2005	10/27/2005	8.0	1,680	13,440
10/19/2005	10/28/2005	9.0	10,764	96,875
10/19/2005	10/31/2005	12.0	4,129	49,550
10/19/2005	11/01/2005	13.0	6,759	87,872
10/19/2005	11/02/2005	14.0	3,169	44,364
10/19/2005	11/03/2005	15.0	1,006	15,085
10/19/2005	11/04/2005	16.0	167	2,675
10/19/2005	11/07/2005	19.0	1,057	20,079
10/19/2005	11/08/2005	20.0	334	6,688
10/19/2005	11/09/2005	21.0	2,668	56,026
10/19/2005	11/15/2005	27.0	103	2,773
10/19/2005	11/17/2005	29.0	782	22,675
10/19/2005	11/21/2005	33.0	167	5,518
10/19/2005	11/23/2005	35.0	89	3,098

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
10/19/2005	11/25/2005	37.0	1,652	61,130
10/19/2005	11/29/2005	41.0	824	33,802
10/19/2005	11/30/2005	42.0	367	15,408
10/19/2005	12/02/2005	44.0	1,676	73,724
10/19/2005	12/05/2005	47.0	1,277	60,001
10/19/2005	12/06/2005	48.0	5,186	248,932
11/02/2005	11/02/2005	0.0	25,749	0
11/02/2005	11/03/2005	1.0	59,949	59,949
11/02/2005	11/04/2005	2.0	38,012	76,025
11/02/2005	11/07/2005	5.0	21,005	105,024
11/02/2005	11/08/2005	6.0	15,904	95,426
11/02/2005	11/09/2005	7.0	14,557	101,899
11/02/2005	11/10/2005	8.0	2,235	17,879
11/02/2005	11/14/2005	12.0	6,106	73,269
11/02/2005	11/15/2005	13.0	4,892	63,592
11/02/2005	11/16/2005	14.0	1,908	26,714
11/02/2005	11/17/2005	15.0	2,823	42,346
11/02/2005	11/18/2005	16.0	2,597	41,560
11/02/2005	11/21/2005	19.0	707	13,431
11/02/2005	11/22/2005	20.0	334	6,688
11/02/2005	11/23/2005	21.0	193	4,044
11/02/2005	11/25/2005	23.0	1,704	39,202
11/02/2005	11/28/2005	26.0	155	4,018
11/02/2005	12/02/2005	30.0	2,941	88,226
11/02/2005	12/06/2005	34.0	309	10,505
11/02/2005	12/09/2005	37.0	1,104	40,864
11/02/2005	12/12/2005	40.0	3,217	128,682
11/02/2005	12/16/2005	44.0	2,046	90,024
11/02/2005	12/21/2005	49.0	167	8,193
11/02/2005	12/23/2005	51.0	252	12,838
11/02/2005	01/27/2006	86.0	5,754	494,827
11/16/2005	11/16/2005	0.0	21,432	0
11/16/2005	11/17/2005	1.0	49,982	49,982
11/16/2005	11/18/2005	2.0	40,689	81,378
11/16/2005	11/21/2005	5.0	10,706	53,532
11/16/2005	11/22/2005	6.0	16,118	96,709
11/16/2005	11/23/2005	7.0	5,378	37,646
11/16/2005	11/25/2005	9.0	4,072	36,649
11/16/2005	11/28/2005	12.0	6,118	73,421
11/16/2005	11/29/2005	13.0	1,145	14,885
11/16/2005	11/30/2005	14.0	6,265	87,707
11/16/2005	12/01/2005	15.0	7,099	106,478
11/16/2005	12/02/2005	16.0	4,906	78,504
11/16/2005	12/05/2005	19.0	1,887	35,847
11/16/2005	12/06/2005	20.0	821	16,412

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
11/16/2005	12/07/2005	21.0	167	3,511
11/16/2005	12/08/2005	22.0	2,896	63,717
11/16/2005	12/09/2005	23.0	1,862	42,825
11/16/2005	12/12/2005	26.0	1,790	46,545
11/16/2005	12/13/2005	27.0	142	3,828
11/16/2005	12/19/2005	33.0	167	5,518
11/16/2005	12/21/2005	35.0	167	5,852
11/16/2005	12/22/2005	36.0	473	17,042
11/16/2005	12/27/2005	41.0	155	6,336
11/16/2005	12/30/2005	44.0	1,133	49,842
11/16/2005	01/09/2006	54.0	1,781	96,155
11/16/2005	01/27/2006	72.0	5,409	389,426
11/16/2005	02/27/2006	103.0	167	17,223
11/30/2005	11/30/2005	0.0	22,985	0
11/30/2005	12/01/2005	1.0	61,230	61,230
11/30/2005	12/02/2005	2.0	40,687	81,374
11/30/2005	12/05/2005	5.0	21,227	106,136
11/30/2005	12/06/2005	6.0	13,282	79,693
11/30/2005	12/07/2005	7.0	1,286	9,004
11/30/2005	12/08/2005	8.0	5,939	47,515
11/30/2005	12/09/2005	9.0	3,174	28,566
11/30/2005	12/12/2005	12.0	4,642	55,698
11/30/2005	12/13/2005	13.0	783	10,175
11/30/2005	12/14/2005	14.0	1,599	22,388
11/30/2005	12/15/2005	15.0	839	12,580
11/30/2005	12/16/2005	16.0	446	7,138
11/30/2005	12/19/2005	19.0	372	7,077
11/30/2005	12/20/2005	20.0	243	4,861
11/30/2005	12/21/2005	21.0	975	20,481
11/30/2005	12/22/2005	22.0	155	3,400
11/30/2005	12/23/2005	23.0	281	6,468
11/30/2005	12/27/2005	27.0	3,259	87,994
11/30/2005	12/29/2005	29.0	116	3,356
11/30/2005	12/30/2005	30.0	1,145	34,340
11/30/2005	01/04/2006	35.0	167	5,852
11/30/2005	01/09/2006	40.0	1,656	66,252
11/30/2005	01/13/2006	44.0	1,621	71,317
11/30/2005	01/18/2006	49.0	319	15,623
11/30/2005	01/23/2006	54.0	1,092	58,957
11/30/2005	01/27/2006	58.0	5,580	323,650
12/14/2005	12/14/2005	0.0	15,854	0
12/14/2005	12/15/2005	1.0	67,221	67,221
12/14/2005	12/16/2005	2.0	41,977	83,954
12/14/2005	12/19/2005	5.0	19,492	97,458
12/14/2005	12/20/2005	6.0	14,600	87,602

		(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED	DOLLAR DAYS
12/14/2005	12/21/2005	7.0	3,154	22,077
12/14/2005	12/22/2005	8.0	1,758	14,065
12/14/2005	12/23/2005	9.0	1,659	14,933
12/14/2005	12/27/2005	13.0	6,840	88,922
12/14/2005	12/28/2005	14.0	2,924	40,939
12/14/2005	12/29/2005	15.0	1,548	23,216
12/14/2005	12/30/2005	16.0	1,269	20,308
12/14/2005	01/03/2006	20.0	547	10,935
12/14/2005	01/04/2006	21.0	167	3,511
12/14/2005	01/05/2006	22.0	601	13,214
12/14/2005	01/06/2006	23.0	2,698	62,053
12/14/2005	01/09/2006	26.0	1,604	41,694
12/14/2005	01/10/2006	27.0	180	4,857
12/14/2005	01/11/2006	28.0	167	4,682
12/14/2005	01/13/2006	30.0	180	5,397
12/14/2005	01/17/2006	34.0	320	10,874
12/14/2005	01/20/2006	37.0	1,833	67,832
12/14/2005	01/23/2006	40.0	906	36,242
12/14/2005	01/24/2006	41.0	322	13,192
12/14/2005	01/25/2006	42.0	195	8,190
12/14/2005	01/27/2006	44.0	5,188	228,290
12/14/2005	01/31/2006	48.0	319	15,304
12/14/2005	02/01/2006	49.0	167	8,193
12/14/2005	02/15/2006	63.0	89	5,576
12/29/2005	12/29/2005	0.0	13,021	0
12/29/2005	12/30/2005	1.0	62,869	62,869
12/29/2005	01/03/2006	5.0	42,958	214,788
12/29/2005	01/04/2006	6.0	13,186	79,114
12/29/2005	01/05/2006	7.0	11,357	79,496
12/29/2005	01/06/2006	8.0	11,061	88,492
12/29/2005	01/09/2006	11.0	6,817	74,987
12/29/2005	01/10/2006	12.0	2,430	29,160
12/29/2005	01/11/2006	13.0	2,506	32,574
12/29/2005	01/12/2006	14.0	1,045	14,627
12/29/2005	01/13/2006	15.0	155	2,318
12/29/2005	01/17/2006	19.0	459	8,712
12/29/2005	01/18/2006	20.0	296	5,919
12/29/2005	01/23/2006	25.0	5,805	145,128
12/29/2005	01/24/2006	26.0	155	4,018
12/29/2005	01/26/2006	28.0	155	4,327
12/29/2005	02/01/2006	34.0	155	5,254
12/29/2005	02/03/2006	36.0	1,906	68,617
12/29/2005	02/07/2006	40.0	155	6,182
12/29/2005	02/15/2006	48.0	167	8,026
12/29/2005	02/21/2006	54.0	5,523	298,229

	(X)	(Y)	(X) * (Y)
PAYMENT DATE	DATE CHECK CLEARS BANK	PAYMENT DATE TO CLEAR DATE (DAYS)	PAYROLL CHECKS AMOUNT CLEARED
			DOLLAR DAYS
12/29/2005	02/22/2006	55.0	319
12/29/2005	02/27/2006	60.0	1,344
12/29/2005	03/10/2006	71.0	155

4,841,854	35,123,538
-----------	------------

Payroll Check Clearing Lag

7.25

Hawaiian Electric Company, Inc.
Working Cash Study
O&M Non-Labor Payment Lag

File:

S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHNE\Exhibits & workpapers\Per Supporting Worksheets

Source:

	Test Year Expense (\$000's)	% of Total	Total Payment Lag Days	Weighted Average
	Note A		HECO-WP-17xx, p. 29-32	
Pension ¹	\$13,161	11%	0	days
OPEB ²	\$5,449	5%	0	days
Emission Fees ³	\$838	1%	306	2 days
EPRI Dues ⁴	\$1,608	1%	-7	days
Other Non-Labor O&M ⁵	\$97,033	82%	30	25 days
	<u>\$118,090</u>	<u>100%</u>		

O&M Non-Labor Payment Lag	27 days
--------------------------------------	----------------

NOTE: Totals may not add exactly due to rounding.

Note A

¹ Pension expense estimate based on 2007 Pension Accrual of \$18,029k (per HECO-1203) x 73% (based on 2005 % of Employee Benefits charged to O&M expense).

² OPEB expense estimate based on 2007 OPEB expense of \$7,465k (per HECO-1201) x 73% (based on 2005 % of Employee Benefits charged to O&M expense).

³ Emission Fees per HECO T-6.

⁴ EPRI Dues per HECO-1304

⁵ Other Non-Labor O&M = Total O&M Non-Labor expense of \$118,090k, less other items noted above.

Hawaiian Electric Company, Inc.
Working Cash Study
Emission Fees Payment Lag

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\{Non-Labor O&M.xls}Summary
Source: 2005 Emission fee payments per Ellipse

Hawaii State Dept of Health

SERVICE PERIOD				(X1)	(X2)	(X1) + (X2)				
CHECK NUMBER	INVOICE NUMBER	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	DATE CHECK CLEARED	CHECK CLEARING LAG (DAYS)	TOTAL PAYMENT LAG DAYS
64905	3292005	1/1/04	12/31/04	183.0	4/7/05	96.5	279.5	5/3/05	26.0	305.5
64906	3292005	1/1/04	12/31/04	183.0	4/7/05	96.5	279.5	5/3/05	26.0	305.5
Emission Fees Payment Lag							279.5		26.0	305.5

Working Cash Study

EPRI Dues

File: S:\Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Non-Labor O&M.xls\Summary
Source: 2005 EPRI payments per Ellipse

EPRI Dues are paid QUARTERLY.

CHECK NUMBER	INVOICE NUMBER	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	(X1)	DATE CHECK CLEARED	(X2)	(X1) + (X2)
		BEGIN	END				PAYMENT LAG (DAYS)		CHECK CLEARING LAG (DAYS)	TOTAL PAYMENT LAG DAYS
64565	EP00247206	1/1/05	3/31/05	45.0	3/1/05	(30.5)	14.5	3/8/05	7.0	21.5
64977	EP00251819	4/1/05	6/30/05	45.5	4/19/05	(72.5)	(27.0)	4/26/05	7.0	(20.0)
65858	EP00259776	7/1/05	9/30/05	46.0	7/28/05	(64.5)	(18.5)	8/2/05	5.0	(13.5)
66618	EP00266237	10/1/05	12/31/05	46.0	10/27/05	(65.5)	(19.5)	11/1/05	5.0	(14.5)
EPRI Dues Payment Lag							(12.6)		6.0	(6.6)

Hawaiian Electric Company, Inc.
Working Cash Study
Other Non-Labor O&M Payment Lag

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Non-Labor O&M.
Source: HECO-WP-1907, Docket No. 04-0113, HECO 2005 test year

VENDOR	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	DATE CHECK CLEARED	TOTAL LAG (DAYS)	INVOICE AMOUNT (\$)	DOLLAR DAYS
	BEGIN	END					
1 Kaman Industrial Tech Corp	8/4/03	8/4/03	0.5	8/20/03	16.0	150	2,407
2 Graybar Electric Co.	9/19/03	9/19/03	0.5	10/14/03	25.0	127	3,170
3 Issue Stock Code #000578305	6/3/03	6/3/03	0.5	6/3/03	0.0	20	0
4 Kele & Associates	3/20/03	3/20/03	0.5	4/17/03	28.0	399	11,182
5 Boise Office*In	7/25/03	7/25/03	0.5	8/14/03	20.0	336	6,725
6 Diversified Energy Svcs Inc.	3/31/03	4/27/03	14.0	5/9/03	25.5	2,139	54,556
7 Issue Stock Code #000223966	12/30/03	12/30/03	0.5	12/30/03	0.0	625	0
8 EPRI Solutions Inc.	1/30/03	1/30/03	0.5	3/3/03	32.0	55,000	1,760,000
9 Issue Stock Code #000380840	4/21/03	4/21/03	0.5	4/21/03	0.0	2	0
10 David John M.D., Inc.	9/16/03	9/16/03	0.5	10/27/03	41.0	95	3,909
11 Atlas Sales Co., Inc.-Kapolei	4/23/03	5/20/03	14.0	6/30/03	54.5	2,047	111,554
12 Process Controls, Inc.	9/2/03	9/2/03	0.5	10/7/03	35.0	1	51
13 Issue Stock Code #000268045	1/22/03	1/22/03	0.5	1/22/03	0.0	140	0
14 Schuler Homes Inc.	12/16/03	12/16/03	0.5	1/23/04	38.0	80	3,040
15 Hawaii Dental Service	10/1/03	10/31/03	15.5	10/10/03	(6.0)	35,782	(214,694)
16 Modern Key Shop Inc.	4/1/03	4/1/03	0.5	5/8/03	37.0	366	13,534
17 Castle & Cooke Homes	7/23/03	7/23/03	0.5	8/22/03	30.0	270	8,100
18 Issue Stock Code #000373225	6/2/03	6/2/03	0.5	6/2/03	0.0	62	0
19 Diamond Head Sprinklers	2/3/03	2/3/03	0.5	2/14/03	11.0	48	526
20 Issue Stock Code #000586784	8/23/03	8/23/03	0.5	8/23/03	0.0	9	0
21 Board of Water Supply	12/10/02	1/10/03	16.0	2/10/03	46.5	12,268	570,454
22 Valve Service & Supply Inc.	10/10/03	10/10/03	0.5	11/17/03	38.0	805	30,588
23 Giordano's Painting, Inc.	2/15/03	4/16/03	30.5	5/16/03	60.0	16,200	972,000
24 Issue Stock Code #000115402	1/30/03	1/30/03	0.5	1/30/03	0.0	636	0
25 Issue Stock Code #000224543	4/11/03	4/11/03	0.5	4/11/03	0.0	195	0
26 AT&T WS	9/29/03	9/29/03	0.5	10/14/03	15.0	100	1,502
27 Issue Stock Code #000227066	3/7/03	3/7/03	0.5	3/7/03	0.0	1	0
28 Kuakini Radiology Group	8/22/03	8/22/03	0.5	10/10/03	49.0	295	14,436
29 T. Michael May (Emp Reimb)	3/12/03	3/13/03	1.0	4/24/03	42.5	17	723
30 Issue Stock Code #000124602	3/21/03	3/21/03	0.5	3/21/03	0.0	96	0
31 Altres Staffing Inc.	9/8/03	9/12/03	2.5	9/26/03	16.0	302	4,831
32 Castle & Cooke Homes	12/9/03	12/9/03	0.5	1/16/04	38.0	270	10,260
33 Issue Stock Code #000574135	6/2/03	6/2/03	0.5	6/2/03	0.0	55	0
34 Schuler Homes Inc.	10/16/03	10/16/03	0.5	11/25/03	40.0	750	30,000
35 The Babcock & Wilcox Co.	1/30/03	1/30/03	0.5	3/17/03	46.0	63	2,884
36 Issue Stock Code #000366906	11/10/03	11/10/03	0.5	11/10/03	0.0	11	0
37 Goodsill Anderson Quinn Stifel	3/5/03	3/31/03	13.5	7/2/03	106.0	2,500	264,989
Piper Rudnick LLP	3/19/03	3/31/03	6.5	7/9/03	106.0	2,075	219,929
Piper Rudnick LLP	4/1/03	4/30/03	15.0	7/9/03	84.5	5,154	435,479
Cades Schutte LLP	4/17/03	4/17/03	0.5	6/16/03	60.0	64	3,828
38 W.W. Grainger, Inc.	6/25/03	6/25/03	0.5	7/28/03	33.0	24	804
39 Issue Stock Code #000370007	5/19/03	5/19/03	0.5	5/19/03	0.0	201	0
40 Sun Industries, Inc.	8/1/03	8/31/03	15.5	9/26/03	41.0	36	1,456
41 Craig Wireless Honolulu	3/1/03	3/31/03	15.5	3/14/03	(2.0)	60	(121)
42 Pioneer Electric Inc.	2/7/03	2/7/03	0.5	2/14/03	7.0	102	711
43 Samuel M. Nakata	2/6/03	2/6/03	0.5	2/24/03	18.0	40	720
44 Crane Nuclear, Inc.	10/6/03	10/6/03	0.5	11/4/03	29.0	33	965

VENDOR	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	DATE CHECK CLEARED	TOTAL LAG (DAYS)	INVOICE AMOUNT (\$)	DOLLAR DAYS
	BEGIN	END					
45 Issue Stock Code #000251884	4/29/03	4/29/03	0.5	4/29/03	0.0	24	0
46 Schuman Auto - Cambell	3/31/03	3/31/03	0.5	4/14/03	14.0	23	316
47 Sun Industries, Inc.	1/1/03	1/31/03	15.5	4/4/03	78.0	18	1,385
48 Sun Industries, Inc.	3/13/03	3/13/03	0.5	5/16/03	64.0	490	31,333
49 Maguire Bearing Co.	1/24/03	1/24/03	0.5	2/14/03	21.0	50	1,058
50 Atlas Sales Co., Inc.-Kapolei	9/11/03	10/8/03	14.0	10/10/03	15.5	69	1,066
51 Rolloffs Hawaii, Inc.	9/1/03	9/30/03	15.0	10/27/03	41.5	1,480	61,407
52 Board of Water Supply	5/7/03	7/10/03	32.5	7/29/03	51.0	4	189
53 Board of Water Supply	1/29/03	4/3/03	32.5	5/14/03	73.0	57	4,149
54 Edison Electric Institute	6/1/03	6/4/03	2.0	3/13/03	(81.5)	1,050	(85,575)
55 Mail-Well Envelope	9/23/03	9/23/03	0.5	11/6/03	44.0	91	3,993
56 Roy's Fishing Supply	1/29/03	1/29/03	0.5	2/14/03	16.0	31	493
57 Robert M. McCulloch	6/24/03	6/24/03	0.5	7/8/03	14.0	50	700
58 Issue Stock Code #000341685	11/15/03	11/15/03	0.5	11/15/03	0.0	385	0
59 Issue Stock Code #000595447	2/11/03	2/11/03	0.5	2/11/03	0.0	115	0
60 Issue Stock Code #000228908	7/23/03	7/23/03	0.5	7/23/03	0.0	3	0
61 BEI Hawaii	10/29/03	10/29/03	0.5	11/24/03	26.0	6,774	176,132
62 Diamond Power International	10/6/03	10/6/03	0.5	11/21/03	46.0	12,090	556,140
63 Issue Stock Code #000227066	1/18/03	1/18/03	0.5	1/18/03	0.0	2	0
64 Issue Stock Code #000596965	3/20/03	3/20/03	0.5	3/20/03	0.0	19	0
65 Precision Machinery	7/15/03	7/15/03	0.5	8/14/03	30.0	188	5,655
66 The Cookie Corner	11/17/03	11/17/03	0.5	12/12/03	25.0	14	359
67 HI Trading Ltd	10/17/03	10/17/03	0.5	11/14/03	28.0	174	4,861
68 Issue Stock Code #000373761	2/18/03	2/18/03	0.5	2/18/03	0.0	13	0
69 Allied Security Fence	1/28/03	1/28/03	0.5	2/14/03	17.0	227	3,862
70 Issue Stock Code #000373183	7/24/03	7/24/03	0.5	7/24/03	0.0	93	0
71 Chevron	4/1/03	4/1/03	0.5	4/14/03	13.0	29	374
72 Staffing Solutions of Hawaii.Com	1/13/03	1/17/03	2.5	2/14/03	30.0	881	26,425
73 Issue Stock Code #000266163	9/22/03	9/22/03	0.5	9/22/03	0.0	42	0
74 AT & T Honolulu	4/25/03	4/25/03	0.5	5/14/03	19.0	26	495
75 Sinaloa Hawaiian Tortillas	7/1/03	7/1/03	0.5	8/15/03	45.0	742	33,373
76 Hiro Makino, M.D.	10/22/03	10/22/03	0.5	12/3/03	42.0	61	2,559
77 Issue Stock Code #000595009	7/28/03	7/28/03	0.5	7/28/03	0.0	71	0
78 Issue Stock Code #000573006	7/21/03	7/21/03	0.5	7/21/03	0.0	31	0
79 Issue Stock Code #000221366	4/10/03	4/10/03	0.5	4/10/03	0.0	117	0
80 Ikaika Masonry & Utilities	4/8/03	4/8/03	0.5	5/15/03	37.0	309	11,429
81 Valenti Brothers Graphics, Ltd.	9/12/03	9/12/03	0.5	9/16/03	4.0	2,500	10,000
82 Longs Drug Stores	7/11/03	7/11/03	0.5	8/14/03	34.0	43	1,469
83 Robert Moran	1/20/03	1/20/03	0.5	1/28/03	8.0	40	320
84 Gaspro Honolulu	5/27/03	5/27/03	0.5	6/13/03	17.0	70	1,195
85 Beylik Drilling Inc.	1/20/03	1/20/03	0.5	2/19/03	30.0	92	2,750
86 Boise Office*In	11/28/03	11/28/03	0.5	12/12/03	14.0	336	4,708
87 Issue Stock Code #000224022	12/18/03	12/18/03	0.5	12/18/03	0.0	2,174	0
88 H M Florals and Crafts	9/8/03	9/8/03	0.5	9/12/03	4.0	36	145
89 Issue Stock Code #000226985	2/24/03	2/24/03	0.5	2/24/03	0.0	4	0
90 Issue Stock Code #000572081	9/9/03	9/9/03	0.5	9/9/03	0.0	6	0
91 Issue Stock Code #000155747	10/23/03	10/23/03	0.5	10/23/03	0.0	38	0
92 Issue Stock Code #000155747	5/30/03	5/30/03	0.5	5/30/03	0.0	32	0
93 Issue Stock Code #000247700	1/8/03	1/8/03	0.5	1/8/03	0.0	14	0
						<u>171,278</u>	<u>5,193,261</u>

Hawaiian Electric Company, Inc.
Working Cash Study
Purchased Power Payment Lag

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Revenue Tariff
Source: Per Supporting Worksheets.

	Test Year		Payment	Check	Total	
	Expense (\$000's)	% of Total	Lag Days	Clearing Lag Days	Payment Lag Days	Weighted Average
	Note A		HECO-WP-1706, p. 38-41	HECO-WP-1706, p. 41-42 & Note B		
H-Power (Energy & Capacity)	\$45,607	12%	44	14	58	7 days
Kalaeloa (Fuel and O&M)	\$168,426	44%	36	0	36	16 days
Kalaeloa (Capacity)	\$32,719	8%	5	0	5	days
AES (Fuel, O&M, & Capacity)	\$137,394	36%	44	0	44	16 days
AES (Bonus)	\$1,189	0%	214	0	214	1 days
Chevron	\$77	0%	37	22	59	days
Tesoro	\$696	0%	43	16	59	days
	<u>\$386,108</u>	<u>100%</u>				

Purchased Power Payment Lag	39 days
------------------------------------	----------------

NOTE: Totals may not add exactly due to rounding.

Note A: Payments for the test year per the Power Purchase Division. See HECO T-5.

Note B: Payments to Kalaeloa and AES are made by wire transfer.

Working Cash Study

Purchase Power Payments to H-Power, Kalaeloa & AES

File: S:\Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASH\Exhibits & workpapers\Revenue Taxes.xls]S
Source: HECO-WP-1907, Docket No. 04-0113, HECO 2005 test year. Payment dates per contract terms.

VENDOR	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)
	BEGIN	END				
H-Power (Energy & Capacity Payment)	1/1/05	1/31/05	15.5	2/28/05	27.5	43.0
	2/1/05	2/28/05	14.0	3/29/05	28.5	42.5
	3/1/05	3/31/05	15.5	4/28/05	27.5	43.0
	4/1/05	4/30/05	15.0	5/27/05	26.5	41.5
	5/1/05	5/31/05	15.5	6/29/05	28.5	44.0
	6/1/05	6/30/05	15.0	7/29/05	28.5	43.5
	7/1/05	7/31/05	15.5	8/29/05	28.5	44.0
	8/1/05	8/31/05	15.5	9/29/05	28.5	44.0
	9/1/05	9/30/05	15.0	10/31/05	30.5	45.5
	10/1/05	10/31/05	15.5	11/30/05	29.5	45.0
	11/1/05	11/30/05	15.0	12/29/05	28.5	43.5
	12/1/05	12/31/05	15.5	1/31/06	30.5	46.0
	H-Power Payment Lag					

SERVICE PERIOD						
	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)
Kalaeloa (Fuel and O&M Payment)	1/1/05	1/31/05	15.5	2/22/05	21.5	37.0
	2/1/05	2/28/05	14.0	3/21/05	20.5	34.5
	3/1/05	3/31/05	15.5	4/21/05	20.5	36.0
	4/1/05	4/30/05	15.0	5/20/05	19.5	34.5
	5/1/05	5/31/05	15.5	6/21/05	20.5	36.0
	6/1/05	6/30/05	15.0	7/22/05	21.5	36.5
	7/1/05	7/31/05	15.5	8/18/05	17.5	33.0
	8/1/05	8/31/05	15.5	9/22/05	21.5	37.0
	9/1/05	9/30/05	15.0	10/21/05	20.5	35.5
	10/1/05	10/31/05	15.5	11/21/05	20.5	36.0
	11/1/05	11/30/05	15.0	12/21/05	20.5	35.5
	12/1/05	12/31/05	15.5	1/23/06	22.5	38.0
	Kalaeloa Payment Lag for Fuel and O&M					

SERVICE PERIOD						
	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)
Kalaeloa (Capacity Payment)	1/1/05	1/31/05	15.5	1/21/05	(10.5)	5.0
	2/1/05	2/28/05	14.0	2/22/05	(6.5)	7.5
	3/1/05	3/31/05	15.5	3/21/05	(10.5)	5.0
	4/1/05	4/30/05	15.0	4/21/05	(9.5)	5.5
	5/1/05	5/31/05	15.5	5/20/05	(11.5)	4.0
	6/1/05	6/30/05	15.0	6/21/05	(9.5)	5.5
	7/1/05	7/31/05	15.5	7/22/05	(9.5)	6.0
	8/1/05	8/31/05	15.5	8/18/05	(13.5)	2.0
	9/1/05	9/30/05	15.0	9/22/05	(8.5)	6.5
	10/1/05	10/31/05	15.5	10/21/05	(10.5)	5.0
	11/1/05	11/30/05	15.0	11/21/05	(9.5)	5.5
	12/1/05	12/31/05	15.5	12/21/05	(10.5)	5.0
	Kalaeloa Capacity Payment Lag					

SERVICE PERIOD

	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)
AES (Fuel, Fixed and Variable O&M, & Capacity Payment)	1/1/05	1/31/05	15.5	2/28/05	27.5	43.0
	2/1/05	2/28/05	14.0	3/29/05	28.5	42.5
	3/1/05	3/31/05	15.5	4/28/05	27.5	43.0
	4/1/05	4/30/05	15.0	5/27/05	26.5	41.5
	5/1/05	5/31/05	15.5	6/29/05	28.5	44.0
	6/1/05	6/30/05	15.0	7/29/05	28.5	43.5
	7/1/05	7/31/05	15.5	8/29/05	28.5	44.0
	8/1/05	8/31/05	15.5	9/29/05	28.5	44.0
	9/1/05	9/30/05	15.0	10/31/05	30.5	45.5
	10/1/05	10/31/05	15.5	11/30/05	29.5	45.0
	11/1/05	11/30/05	15.0	12/29/05	28.5	43.5
	12/1/05	12/31/05	15.5	1/31/06	30.5	46.0
AES Payment Lag (excluding Bonus Payment)						43.8

SERVICE PERIOD

	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)
AES (Bonus Payment)	10/1/04	9/30/05	182.5	11/1/05	31.5	214.0
AES Bonus Payment Lag						214.0

Hawaiian Electric Company, Inc.
Working Cash Study
Purchase Power Payments to Small Vendors - 2003

File: S:\Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\{Purchased Power.xls}\Sm Vendors
Source: HECO-WP-1907, Docket No. 04-0113, HECO 2005 test year. Actual 2003 payments.

VENDOR	CHECK NUMBER	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	DATE CHECK CLEARED	CHECK CLEARING LAG (DAYS)
		BEGIN	END						
Chevron #001984	59527	4/1/03	4/30/03	15.0	5/20/03	19.5	34.5	6/16/03	27.0
	59708	5/1/03	5/31/03	15.5	6/24/03	23.5	39.0	7/11/03	17.0

Chevron Payment Lag 36.8

Chevron Check Clearing Lag 22.0

VENDOR	CHECK NUMBER	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	DATE CHECK CLEARED	CHECK CLEARING LAG (DAYS)
		BEGIN	END						
Tesoro #001677	59018	1/1/03	1/31/03	15.5	2/27/03	26.5	42.0	3/11/03	12.0
	59204	2/1/03	2/28/03	14.0	3/27/03	26.5	40.5	4/7/03	11.0
	59385	3/1/03	3/31/03	15.5	4/29/03	28.5	44.0	5/12/03	13.0
	59574	4/1/03	4/30/03	15.0	5/29/03	28.5	43.5	6/10/03	12.0
	59726	5/1/03	5/31/03	15.5	6/26/03	25.5	41.0	7/14/03	18.0
	59945	6/1/03	6/30/03	15.0	7/29/03	28.5	43.5	8/15/03	17.0
	60156	7/1/03	7/31/03	15.5	8/28/03	27.5	43.0	9/17/03	20.0
	60357	8/1/03	8/31/03	15.5	9/30/03	29.5	45.0	10/24/03	24.0
	60552	9/1/03	9/30/03	15.0	10/30/03	29.5	44.5	11/12/03	13.0
	60775	10/1/03	10/31/03	15.5	11/28/03	27.5	43.0	12/15/03	17.0
	61061	11/1/03	11/30/03	15.0	12/30/03	29.5	44.5	1/21/04	22.0
	61321	12/1/03	12/31/03	15.5	1/29/04	28.5	44.0	2/11/04	13.0

Tesoro Payment Lag 43.2

Tesoro Check Clearing Lag 16.0

Hawaiian Electric Company, Inc.
Working Cash Study

H-Power Check Clearing Lag - Payments for 2003

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Revenue Taxes.xls]Sum
Source: HECO-WP-1907, Docket No. 04-0113, HECO 2005 test year. Actual 2003 payments.

H-Power (#002042)	PAYMENT	DATE CHECK	CHECK
	DATE	CLEARED	CLEARING LAG (DAYS)
January	2/13/03	3/4/03	19.0
February	3/18/03	4/4/03	17.0
March	4/22/03	5/1/03	9.0
April	5/15/03	6/2/03	18.0
May	6/17/03	7/2/03	15.0
June	7/17/03	8/1/03	15.0
July	8/21/03	9/2/03	12.0
August	9/16/03	10/2/03	16.0
September	10/21/03	10/31/03	10.0
October	11/25/03	12/3/03	8.0
November	12/18/03	12/31/03	13.0
December	1/20/04	2/2/04	13.0
H-Power Check Clearing Lag			13.8

Hawaiian Electric Company, Inc.
Working Cash Study
Revenue Tax Payment Lag

File: SA_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASH\Exhibits & workpapers\Revenue T
Source: Per Supporting Worksheets

	Effective Rate	% of Total	Total Payment Lag Days	Weighted Average
			HECO-WP-1706, p. 44, 45	
Public Service Company Tax	5.885%	66%	15	10 days
Franchise Royalty Tax	2.500%	28%	214	60 days
Public Utility Commission Fees	0.500%	6%	112	6 days
	<u>8.885%</u>	<u>100%</u>		

Revenue Tax Payment Lag	76 days
--------------------------------	----------------

NOTE: Totals may not add exactly due to rounding.

References:

Tax Rates: Current Revenue Tax rates

Hawaiian Electric Company
Working Cash Study
Revenue Tax Payment Lag

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Revenue Taxes.xls Summary
Source: 2005 Payments. Information per Ellipse.

PUBLIC SERICE COMPANY (PSC) TAX

CITY & COUNTY of HONOLULU	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	AVG SERVICE DATE	DATE CHECK CLEARED	CHECK CLEARING LAG (DAYS)	TOTAL LAG DAYS	(A)	(B)	(A) X (B)
	BEGIN	END						INVOICE (\$)	DOLLAR DAYS	
PSC Tax - January	1/1/05	1/31/05	15.5	1/16/05	1/12/05	-4.5	11.0	1,605,599	17,661,589	
PSC Tax - February	2/1/05	2/28/05	14.0	2/15/05	2/15/05	0.0	14.0	1,605,599	22,478,386	
PSC Tax - March	3/1/05	3/31/05	15.5	3/16/05	3/14/05	-2.5	13.0	1,605,599	20,872,787	
PSC Tax - April	4/1/05	4/30/05	15.0	4/16/05	4/13/05	-3.0	12.0	1,605,599	19,267,188	
PSC Tax - May	5/1/05	5/31/05	15.5	5/16/05	5/12/05	-4.5	11.0	1,643,614	18,079,754	
PSC Tax - June	6/1/05	6/30/05	15.0	6/16/05	6/14/05	-2.0	13.0	1,643,614	21,366,982	
PSC Tax - July	7/1/05	7/31/05	15.5	7/16/05	7/13/05	-3.5	12.0	1,643,614	19,723,368	
PSC Tax - August	8/1/05	8/31/05	15.5	8/16/05	8/12/05	-4.5	11.0	1,643,614	18,079,754	
PSC Tax - September	9/1/05	9/30/05	15.0	9/16/05	9/13/05	-3.0	12.0	1,643,614	19,723,368	
PSC Tax - October	10/1/05	10/31/05	15.5	10/16/05	10/14/05	-2.5	13.0	1,643,614	21,366,982	
PSC Tax - November	11/1/05	11/30/05	15.0	11/16/05	11/15/05	-1.0	14.0	1,643,614	23,010,596	
PSC Tax - December	12/1/05	12/31/05	15.5	12/16/05	12/13/05	-3.5	12.0	1,643,614	19,723,368	
								<u>19,571,308</u>	<u>241,354,122</u>	

PSC Tax Check Clearing Lag for C&C of Honolulu 12.3

Hawaii State Tax Collector	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	AVG SERVICE DATE	DATE CHECK CLEARED	CHECK CLEARING LAG (DAYS)	TOTAL LAG DAYS	(A)	(B)	(A) X (B)
	BEGIN	END						INVOICE (\$)	DOLLAR DAYS	
PSC Tax - January	1/1/05	1/31/05	15.5	1/16/05	1/13/05	-3.5	12.0	3,407,106	40,885,272	
PSC Tax - February	2/1/05	2/28/05	14.0	2/15/05	2/22/05	7.0	21.0	3,407,106	71,549,226	
PSC Tax - March	3/1/05	3/31/05	15.5	3/16/05	3/15/05	-1.5	14.0	3,407,106	47,699,484	
PSC Tax - April	4/1/05	4/30/05	15.0	4/16/05	4/19/05	3.0	18.0	3,407,106	61,327,908	
PSC Tax - May	5/1/05	5/31/05	15.5	5/16/05	5/17/05	0.5	16.0	3,487,776	55,804,416	
PSC Tax - June	6/1/05	6/30/05	15.0	6/16/05	6/15/05	-1.0	14.0	3,487,776	48,828,864	
PSC Tax - July	7/1/05	7/31/05	15.5	7/16/05	7/15/05	-1.5	14.0	3,487,776	48,828,864	
PSC Tax - August	8/1/05	8/31/05	15.5	8/16/05	8/17/05	0.5	16.0	3,487,776	55,804,416	
PSC Tax - September	9/1/05	9/30/05	15.0	9/16/05	9/15/05	-1.0	14.0	3,487,776	48,828,864	
PSC Tax - October	10/1/05	10/31/05	15.5	10/16/05	10/20/05	3.5	19.0	3,487,776	66,267,744	
PSC Tax - November	11/1/05	11/30/05	15.0	11/16/05	11/18/05	2.0	17.0	3,487,776	59,292,192	
PSC Tax - December	12/1/05	12/31/05	15.5	12/16/05	12/16/05	-0.5	15.0	3,487,776	52,316,640	
								<u>41,530,632</u>	<u>657,433,890</u>	

PSC Tax Check Clearing Lag for Hawaii State Tax 15.8

61,101,940 898,788,012

Total PSC Tax Check Clearing Lag 14.7

Hawaiian Electric Company, Inc.
Working Cash Study
Revenue Tax Payment Lag

File: S:\Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07\Direct Testimonies\07HECO T-17 G. OHASH\Exhibits & workpapers\Revenue Taxes.xls\Summary
Source: 2005 Payments. Information per Ellipse.

FRANCHISE ROYALTY TAX

Payment due January 31 of year following. Payments made by check.

VENDOR	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	DATE CHECK CLEARED	CHECK CLEARING LAG (DAYS)	TOTAL LAG (DAYS)
	BEGIN	END							
Franchise Royalty Tax	1/1/05	12/31/05	182.5	1/31/06	30.5	213.0	2/1/06	1.00	214.00

PUBLIC UTILITY COMMISSION (PUC) FEES

Installments due on or before July 31 and December 31. Payments made by check.

VENDOR	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	DATE CHECK CLEARED	CHECK CLEARING LAG (DAYS)	TOTAL LAG (DAYS)	(A)	(B)	(A) X (B)
	BEGIN	END								INVOICE (\$)	DOLLAR DAYS	
PUC Fee	1/1/05	6/30/05	90.5	8/1/05	31.5	122.0	8/5/05	4.00	126.00	2,595,665	327,053,790	
PUC Fee	7/1/05	12/31/05	92.0	12/13/05	-18.5	73.5	1/6/06	24.00	97.50	2,595,665	253,077,338	
										<u>5,191,330</u>	<u>580,131,128</u>	

Public Utility Commission Fees Payment Lag

Hawaiian Electric Company, Inc.
Working Cash Study

Income Tax Payment Lag

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Revenue
Source: Per Supporting Worksheets.

2007 Test Year

	Effective Rate	% of Total	Payment Lag Days	Check Clearing Lag Days	Total Payment Lag Days	Weighted Average
			HECO-WP-1706, p. 47, 48	Note A		
Federal	32.895%	85%	38	0	38	32 days
State	6.015%	15%	50	0	50	8 days
	<u>38.910%</u>	<u>100%</u>				

Income Tax Payment Lag	40 days
-------------------------------	----------------

NOTE: Totals may not add exactly due to rounding.

References:

Tax Rates: Current State and Federal Tax Rates.

Note A: Payments wired to HEI's General Fund Account. Clears same day. Zero check clearing lag.

Hawaiian Electric Company, Inc.
Working Cash Study
Federal Corporate Income Tax Payment Lag

File: S:_Company\Regulatory\Affairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Revenue Taxes.xls\Summary
Source: HEI Corporate Taxes Dept; Federal Income Tax Law

2007 Test Year

SERVICE PERIOD								
INSTALLMENT	BEGIN	END	AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	TOTAL PAYMENT LAG (DAYS)	% OF TOTAL ANNUAL TAXES TO BE PAID	WEIGHTED AVERAGE
1st	1/1/07	12/31/07	182.5	4/16/07	-259.5	-77.0	25%	(19.3)
2nd	1/1/07	12/31/07	182.5	6/15/07	-199.5	-17.0	25%	(4.3)
3rd	1/1/07	12/31/07	182.5	9/17/07	-105.5	77.0	25%	19.3
4th	1/1/07	12/31/07	182.5	12/17/07	-14.5	168.0	25%	42.0
							100%	

Federal Income Tax Payment Lag	37.8
---------------------------------------	-------------

Hawaiian Electric Company, Inc.
Working Cash Study
State Corporate Income Tax Payment Lag

File: S:_Company\RegulatoryAffairs\HECO TY 2007 Rate Case\HECO 07Direct Testimonies\07HECO T-17 G. OHASHI\Exhibits & workpapers\Revenue Taxes.xls\Summary

Source: HEI Corporate Taxes Dept; State Income Tax Law

2007 Test Year

INSTALLMENT	SERVICE PERIOD		AVE SERVICE PERIOD (DAYS)	PAYMENT DATE	END DATE TO PAY DATE (DAYS)	PAYMENT LAG (DAYS)	% OF TOTAL ANNUAL TAXES TO BE PAID	WEIGHTED AVERAGE
	BEGIN	END						
1st	1/1/07	12/31/07	182.5	4/20/07	-255.5	-73.0	25%	(18.3)
2nd	1/1/07	12/31/07	182.5	6/20/07	-194.5	-12.0	25%	(3.0)
3rd	1/1/07	12/31/07	182.5	9/20/07	-102.5	80.0	25%	20.0
4th	1/1/07	12/31/07	182.5	1/21/08	20.5	203.0	25%	50.8
							100%	49.5

State Income Tax Payment Lag	49.5
-------------------------------------	-------------

**Witness HECO T-18
Has No Workpapers**

Hawaiian Electric Company, Inc.

Short-Term Borrowings
2005 Recorded

<u>Account Description</u>	<u>General Ledger Account</u>	<u>12/31/05 Balance</u>
Notes Payable - MECO	233020	\$ 5,250,000
Commercial Paper	231010	136,164,954
Total Notes Payable		<u>\$ 141,414,954</u>
Total Notes Receivable - HELCO	145020	<u>\$ (49,700,000)</u>
Total Short-Term Borrowings as of December 31, 2005, net		<u><u>\$ 91,714,954</u></u>

Hawaiian Electric Company, Inc.

Revenue Bonds
Summary of Unamortized Balances

		(A)	(B)	(C)
		12/31/05	12/31/06	12/31/07
<u>Unamortized Costs</u>	<u>WP Reference</u>	<u>Unamortized Balance</u>	<u>Unamortized Balance</u>	<u>Unamortized Balance</u>
Issuance and Redemption	WP-1903 p.3	\$ 14,523,319	\$ 13,478,375	\$ 14,763,943
Investment Income Differential	WP-1903 p.5	4,017,775	3,799,856	3,581,938
Issuance Discount	WP-1903 p.6	<u>2,483,627</u>	<u>2,350,761</u>	<u>2,217,895</u>
Total		<u>\$ 21,024,721</u>	<u>\$ 19,628,992</u>	<u>\$ 20,563,776</u>
Test Year 2007 Average = [Total(B)+Total(C)]/2				<u>\$ 20,096,384</u>

Totals may not add due to rounding

Hawaiian Electric Company, Inc.

Revenue Bonds
Summary of 2007 Annual Amortizations

Series (Refunded Issue)	(A) =	(B) =	(C) =	(D) =
	WP-1903, p.3	WP-1903, p.5	WP-1903, p.7	(A)+(B)+(C)
	Issuance and Redemption	Investment Income Differential	Discount	Total
1993	\$ 44,604	\$ 10,665	\$ 33,651	\$ 88,919
1996A	39,893	2,018	37,422	79,333
1996B	5,801	549	1,661	8,010
1997A	44,058	17,037	-	61,095
Refunding 1998A	54,247	-	-	54,247
(1982)	45,762	35,977	-	81,739
(1987)	116,739	1,200	-	117,939
Subtotal	216,748	37,177	-	253,925
Refunding 1999B	39,627	-	17,953	57,580
(1988)	17,243	-	-	17,243
(1988 Conv)	43,030	-	-	43,030
Subtotal	99,900	-	17,953	117,853
1999C	37,330	26,168	-	63,498
Refunding 1999D	20,830	-	-	20,830
(1990A)	29,573	(1,162)	-	28,411
Subtotal	50,403	(1,162)	-	49,241
Refunding 2000	59,427	-	5,847	65,274
(1990B)	36,597	(399)	-	36,198
(1990C)	51,386	27,660	-	79,046
Subtotal	147,410	27,261	5,847	180,518
2002A	58,939	50,664	10,548	120,151
Refunding 2003B	78,137	-	-	78,137
(1992)	70,239	46,261	-	116,500
Subtotal	148,376	46,261	-	194,637
Refunding 2005A	82,056	-	-	82,056
(1995A)	48,914	1,281	25,784	75,979
Subtotal	130,970	1,281	25,784	158,035
New Issue - 2007	66,000	-	-	66,000
Total	\$ 1,090,432	\$ 217,919	\$ 132,866	\$ 1,441,217

Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Revenue Bonds
Schedule of Issuing Expenses (Includes Amortization Differential)

Series (Refunded Issue)	(A)	(B)	(C)	(D)= (B)-(C)	(E)	(F) = (D)-(E)
	2005 Annual Amortization	12/31/05 Unamortized Balance	2006 Annual Amortization	12/31/06 Unamortized Balance	2007 Annual Amortization	12/31/07 Unamortized Balance
1993	\$ 44,604	\$ 795,436	\$ 44,604	\$ 750,832	\$ 44,604	\$ 706,228
1996A	39,893	811,163	39,893	771,270	39,893	731,377
1996B	17,184	131,763	16,235	115,528	5,801	109,727
1997A	54,136	371,180	54,136	317,044	44,058	272,986
Refunding 1998A (1982)	54,247	339,046	54,247	284,799	54,247	230,552
(1987)	45,762	286,013	45,762	240,251	45,762	194,489
	116,739	729,617	116,739	612,878	116,739	496,139
Subtotal	216,748	1,354,676	216,748	1,137,928	216,748	921,180
Refunding 1999B (1988)	39,627	511,849	39,627	472,222	39,627	432,595
(1988 Conv)	17,243	778,529	17,243	718,256	17,243	657,983
	43,030	(incl. above)	43,030	(incl. above)	43,030	(incl. above)
Subtotal	99,900	1,290,378	99,900	1,190,478	99,900	1,090,578
1999C	37,330	889,709	37,330	852,379	37,330	815,049
Refunding 1999D (1990A)	20,830	291,624	20,830	270,794	20,830	249,964
	29,573	414,023	29,573	384,450	29,573	354,877
Subtotal	50,403	705,647	50,403	655,244	50,403	604,841
Refunding 2000 (1990B)	59,427	861,694	59,427	802,267	59,427	742,840
(1990C)	36,597	530,659	36,597	494,062	36,597	457,465
	51,386	766,504	51,386	715,118	51,386	663,732
Subtotal	147,410	2,158,857	147,410	2,011,447	147,410	1,864,037
2002A	50,746	1,571,705	58,939	1,512,766	58,939	1,453,827
Refunding 2003B (1992)	78,137	1,321,817	78,137	1,243,680	78,137	1,165,543
	70,239	1,188,224	70,239	1,117,985	70,239	1,047,746
Subtotal	148,376	2,510,041	148,376	2,361,665	148,376	2,213,289
Refunding 2005A (1995A)	-	1,003,407	82,056	921,351	82,056	839,295
	47,240	929,357	48,914	880,443	48,914	831,529
Subtotal	47,240	1,932,764	130,970	1,801,794	130,970	1,670,824
New Issue - 2007 *	-	-	-	-	66,000	2,310,000
Total	\$ 953,970	\$ 14,523,319	\$ 1,044,944	\$ 13,478,375	\$ 1,090,432	\$ 14,763,943

Refer to WP-1903, p. 4 for calculation of issuance costs amortization.

Hawaiian Electric Company, Inc.

Revenue Bond Issuance in 2007
Schedule of Issuance Costs

<u>New Revenue Bond Issuance:</u>	<u>Estimated Amt of Issue (\$)</u>	<u>% of Total Issue by Company</u>	<u>(A) Assumed Sale Date</u>	<u>(B) Assumed Maturity Date</u>	<u>(C) = (B)-(A) Years to Maturity</u>	<u>(D) = (C) x 12 Months to Maturity</u>
HECO	100,000,000	62.50%	3/1/2007	3/1/2037	30	360
HELCO	40,000,000	25.00%	3/1/2007	3/1/2037	30	360
MECO	20,000,000	12.50%	3/1/2007	3/1/2037	30	360
Total	<u>160,000,000</u>	<u>100.00%</u>				

Total Estimated Issuance Cost: \$ 3,802,000 (Per Amended Application, Docket No. 05-0330, Exhibit B, page 1, filed with the Commission on October 27,2006.)

HECO's allocation of Est Issuance Cost: \$ 2,376,000 a (Total Estimated Issuance Cost x HECO's % of Total Issuance)

HECO's Est Monthly Amortization: \$ 6,600 b = a/(D)

of Months in 2007 : 10 c

2007 Annual Amortization: \$ 66,000 d = b x c

Unamortized Balance as of 12/31/07: \$ 2,310,000 e = a - d

Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Revenue Bonds
Schedule of Investment Income Differential

Series (Refunded Issue)	(A)	(B)	(C)	(D) = (B)-(C)	(E)	(F) = (D)-(E)
	2005 Annual Amortization	12/31/05 Unamortized Balance	2006 Annual Amortization	12/31/06 Unamortized Balance	2007 Annual Amortization	12/31/07 Unamortized Balance
1993	\$ 10,665	\$ 190,183	\$ 10,665	\$ 179,518	\$ 10,665	\$ 168,854
1996A	2,018	41,037	2,018	39,019	2,018	37,000
1996B	549	11,476	549	10,927	549	10,379
1997A	17,037	370,553	17,037	353,516	17,037	336,479
Refunding 1998A (1982)	-	-	-	-	-	-
(1987)	35,977	224,858	35,977	188,881	35,977	152,903
	1,200	7,500	1,200	6,300	1,200	5,100
Refunding 1999B (1988)	-	-	-	-	-	-
(1988 Conv)	-	-	-	-	-	-
1999C	26,168	623,681	26,168	597,513	26,168	571,344
Refunding 1999D (1990A)	-	-	-	-	-	-
	(1,162)	(16,268)	(1,162)	(15,106)	(1,162)	(13,944)
Refunding 2000 (1990B)	-	-	-	-	-	-
(1990C)	(399)	(5,791)	(399)	(5,392)	(399)	(4,992)
	27,660	412,601	27,660	384,941	27,660	357,280
2002A	42,745	1,351,033	50,664	1,300,369	50,664	1,249,705
Refunding 2003B (1992)	-	-	-	-	-	-
	46,261	782,576	46,261	736,315	46,261	690,055
Refunding 2005A (1995A)	-	-	-	-	-	-
	1,281	24,336	1,281	23,055	1,281	21,774
New Issue - 2007	-	-	-	-	-	-
Total	<u>\$ 210,000</u>	<u>\$ 4,017,775</u>	<u>\$ 217,919</u>	<u>\$ 3,799,856</u>	<u>\$ 217,919</u>	<u>\$ 3,581,938</u>

Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Revenue Bonds
Schedule of Issuance Discount

	(A)	(B)	(C)	(D) = (B)-(C)	(E)	(F) = (D)-(E)
Series (Refunded Issue)	2005 Annual Amortization	12/31/05 Unamortized Balance	2006 Annual Amortization	12/31/06 Unamortized Balance	2007 Annual Amortization	12/31/07 Unamortized Balance
1993	\$ 33,651	\$ 600,102	\$ 33,651	\$ 566,451	\$ 33,651	\$ 532,801
1996A	37,422	760,916	37,422	723,494	37,422	686,072
1996B	1,661	34,739	1,661	33,078	1,661	31,417
1997A	-	-	-	-	-	-
Refunding 1998A (1982)	-	-	-	-	-	-
(1987)	-	-	-	-	-	-
Refunding 1999B (1988)	17,953	231,899	17,953	213,946	17,953	195,992
(1988 Conv)	-	-	-	-	-	-
1999C	-	-	-	-	-	-
Refunding 1999D (1990A)	-	-	-	-	-	-
Refunding 2000 (1990B)	5,847	84,788	5,847	78,941	5,847	73,093
(1990C)	-	-	-	-	-	-
2002A	9,082	281,290	10,548	270,742	10,548	260,194
Refunding 2003B (1992)	-	-	-	-	-	-
Subtotal	<u>105,616</u>	<u>1,993,734</u>	<u>107,082</u>	<u>1,886,652</u>	<u>107,082</u>	<u>1,779,569</u>
Refunding 2005A (1995A)	- 25,784	- 489,893	- 25,784	- 464,109	- 25,784	- 438,325
New Issue - 2007	-	-	-	-	-	-
Total	<u>\$ 131,400</u>	<u>\$ 2,483,627</u>	<u>\$ 132,866</u>	<u>\$ 2,350,761</u>	<u>\$ 132,866</u>	<u>\$ 2,217,895</u>

Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Revenue Bonds
General Ledger Accounting Codes

Series (Refunded Issue)	Issuance and Redemption Unamortized Costs	Issuance and Redemption Amortization Costs	Investment Income Differential Unamortized Costs	Investment Income Differential Amortization Costs	Discount Unamortized Costs	Discount Amortization Costs
1993	18130000/04	42812000	25338000/04	40303009	18150000/04	42812000
1996A	18132000/04	42814000	25340000/04	40303011	18152000/04	42814000
1996B	18133000/04	42815000	25341000/04	40303012	18153000/04	42815000
1997A	18134000/04	42816000	25342000/04	40303013	n/a	n/a
Refunding 1998A (1982)	18135000/04 18671P00/04	42817000 42802000	n/a 18675000/04	n/a 40303001	n/a n/a	n/a n/a
(1987)	18671R00/04	42804000	18675020/24	40303001	n/a	n/a
Refunding 1999B (1988)	18138000/04 18671Y00/04 18675030/34	42820000 42805000	n/a n/a	n/a n/a	18156000/04 n/a	42820000 n/a
(1988 Conv)	n/a	42806000	n/a	n/a	n/a	n/a
1999C	18136000/04	42821000	25344000/04	40303014	n/a	n/a
Refunding 1999D (1990A)	18139000/04 18671Z00/04	42822000 42807000	n/a 18675040/44	n/a 40303005	n/a n/a	n/a n/a
Refunding 2000 (1990B)	18140000/04 18671200/04 18675060/64	42823000 42808000	n/a 18675050/54	n/a 40303006	18157000/04 n/a	42823000 n/a
(1990C)	18671300/04 18675080/84	42809000	18675070/74	40303007	n/a	n/a
2002A	18141000/04	42824000	25345000/04	40303015	18158000/04	42824000
Refunding 2003B (1992)	18142000/04 18671400/04 18675100/04	42826000 42810000	n/a 18675090/94	n/a 40303008	n/a n/a	n/a n/a
Refunding 2005A (1995A)	18144300/04 18671410/14	42827000 42813000	n/a 18675110/14	n/a 40303010	n/a 18671420/24	n/a 42813000

Hawaiian Electric Company, Inc.

Redeemed First Mortgage Bonds
Schedule of Unamortized Costs *

	(A)	(B)	(C)	(D) = (B)-(C)	(E)	(F) = (D)-(E)
Redeemed First Mortgage Bond	2005 Annual Amortization	12/31/05 Unamortized Balance	2006 Annual Amortization	12/31/06 Unamortized Balance	2007 Annual Amortization	12/31/07 Unamortized Balance
Series X	66,633	727,404	66,633	660,771	66,633	594,138
Total	<u>\$ 66,633</u>	<u>\$ 727,404</u>	<u>\$ 66,633</u>	<u>\$ 660,771</u>	<u>\$ 66,633</u>	<u>\$ 594,138</u>
Test Year 2007 Average = [Total(D)+Total(F)]/2						<u>\$ 627,455</u>

* Unamortized costs include issuance costs, redemption costs and/or issuance discounts.
These costs are recorded in the following accounts:

Series	Unamortized Costs	Amortization Costs
Series X	18671000/04	42801000

Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Syndicated Credit Facility (SCF) Issuance Costs
Test Year 2007 Estimate

SCF Estimated Issuance Costs:

(Per Docket No. 2006-0360, Exhibit A, page 1)

Up-front Lenders' Fee	\$	131,250	
Arrangement Fee		75,000	
Legal Fees & Expenses		85,000	
Miscellaneous		9,500	
Total SCF Issuance Costs	\$	300,750	(A)

HECO's allocation (%) - Note (1) 57% (B)

HECO's share of SCF Issuance Costs: \$ 171,857 (C) = (A) x (B)

Amortization Period in Months - Note (2) 60 (D)

HECO's Est Monthly Amortization: \$ 2,864 (E) = (C)/(D)

of Months in 2006 (beg. Apr '06): 9 (F)

2006 Est Annual Amortization: \$ 25,779 (G) = (E) x (F)

Est Unamortized Balance as of 12/31/06: \$ 146,079 (H) = (C) - (G)

of Months in 2007: 12 (I)

2007 Est Annual Amortization: \$ 34,371 (J) = (E) x (I)

Est Unamortized Balance as of 12/31/07: \$ 111,707 (K) = (H) - (J)

Test Year 2007 Average = [Total (H) + (K)] / 2 128,893

Note:

- (1) HECO's allocation % is based on HECO's Board-approved short-term borrowing level as a percentage of the total Board-approved short-term borrowing levels of HECO, HELCO, and MECO, amounting to \$120 million, \$70 million, and \$20 million, respectively. Note: Board approved as of April 3, 2006.
- (2) On August 30, 2006, HECO filed an application with the Commission for approval of the SCF for a five-year term ending March 31, 2011. Commission approval of the five-year SCF will automatically extend HECO's current 364-day SCF ending on March 29, 2007 (see Docket No. 2006-0360). As such, HECO proposes to amortize the SCF issuance costs over a 5-year period (equivalent to the 5-year term of the SCF agreement, subject to Commission approval).

Hawaiian Electric Company, Inc.

Hybrid Securities
Schedule of Net Proceeds

	(A)	(B)	(C) = (A)-(B)	(D)	(E) = (C)-(D)
	12/31/05		12/31/06		12/31/07
Hybrid	Net	2006	Net	2007	Net
	Proceeds	Activity	Proceeds	Activity	Proceeds
Series 2004	31,546,400	-	31,546,400	-	31,546,400
Investment in Capital Trust III *	(1,546,400)	-	(1,546,400)	-	(1,546,400)
Total	\$ 30,000,000	\$ -	\$ 30,000,000	\$ -	\$ 30,000,000
Test Year 2007 Series 2004 Average = [(C)+(E)]/2					\$ 31,546,400
Test Year 2007 Investment in Capital Trust III Average = [(C)+(E)]/2					\$ (1,546,400)

* Represents HECO's common stock investment in HECO Capital Trusts (Trusts), unconsolidated subsidiaries of HECO. The purpose of the Trusts, among other things, are to issue Trust securities and to invest the proceeds of the trust securities and common stock securities in Junior Subordinated Deferrable Interest Debentures, issued by HECO and its subsidiaries.

Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Hybrid Securities
Schedule of Issuance Costs

	(A)	(B)	(C)	(D)=(B)-(C)	(E)	(F)=(D)-(E)
Hybrid	2005 Annual Amortization	12/31/05 Unamortized Balance	2006 Annual Amortization	12/31/06 Unamortized Balance	2007 Annual Amortization	12/31/07 Unamortized Balance
Series 1997 *	\$ 40,416	\$ 858,829	\$ 40,416	\$ 818,413	\$ 40,416	\$ 777,997
Series 1998 *	37,899	871,685	37,899	833,786	37,899	795,887
Series 2004	<u>31,099</u>	<u>877,245</u>	<u>31,099</u>	<u>846,146</u>	<u>31,099</u>	<u>815,047</u>
Total	<u>\$ 109,414</u>	<u>\$ 2,607,759</u>	<u>\$ 109,414</u>	<u>\$ 2,498,345</u>	<u>\$ 109,414</u>	<u>\$ 2,388,931</u>
Test Year 2007 Average = [Total(D)+Total(F)]/2						<u>\$ 2,443,638</u>

* In April 2004, HECO redeemed both Series and subsequently, reclassified the unamortized issuance costs of Series 1997 and 1998 to general ledger accounts 18671500/18671504 and 18671600/18671604, respectively. Further, beginning April 2004, the amortization of the Series 1997 and 1998 unamortized issuance costs are recorded in general ledger accounts 428QUID1 and 428QUID2, respectively.

Hawaiian Electric Company, Inc.

Preferred Stock
Schedule of Issuance and Redemption Costs

		(A)	(B)	(C)	(D)=(B)-(C)	(E)	(F)=(D)-(E)
Preferred Stock	Unamortized Balance G/L Account	2005 Annual Amortization	12/31/05 Unamortized Balance	2006 Annual Amortization	12/31/06 Unamortized Balance	2007 Annual Amortization	12/31/07 Unamortized Balance
<u>Perpetual *:</u>							
Series C	21423000	\$ -	\$ 70,404	\$ -	\$ 70,404	\$ -	\$ 70,404
Series D	21424000	-	55,071	-	55,071	-	55,071
Series E	21425000	-	183,556	-	183,556	-	183,556
Series H	21428000	-	59,679	-	59,679	-	59,679
Series I	21429000	-	64,701	-	64,701	-	64,701
Series J	21430000	-	49,654	-	49,654	-	49,654
Series K	21431000	-	39,755	-	39,755	-	39,755
Subtotal		-	522,820	-	522,820	-	522,820
<u>Redeemed:</u>							
Series M **	18674M00	7,110	163,538	7,110	156,428	7,110	149,318
Series Q **	18674Q00	28,154	647,554	28,154	619,400	28,154	591,246
Series R **	18674R00	19,821	455,883	19,821	436,062	19,821	416,241
Subtotal		55,085	1,266,975	55,085	1,211,890	55,085	1,156,805
		<u>\$ 55,085</u>	<u>\$ 1,789,795</u>	<u>\$ 55,085</u>	<u>\$ 1,734,710</u>	<u>\$ 55,085</u>	<u>\$ 1,679,625</u>
Test Year 2007 Average = [Total(D)+Total(F)]/2							<u>\$ 1,707,168</u>

* Represents preferred stock not subject to mandatory redemption. As such, issuance costs are not amortized.

** Amortization expense recorded to G/L Account Code #42501000.

Totals may not add exactly due to rounding.

Hawaiian Electric Company, Inc.

Common Equity
2005 Recorded

Account Description	G/L Account	12/31/05 Balance
Common Stock Issued	20100000	\$ 85,387,140
Premium on Capital Stock	20700000	303,135,446
Misc Paid in Capital	211	(27,707)
Capital Stock Expense - Common	21401000	(3,526,923)
Preferred Stock Expense	2143	(394,693)
Net Income for Common	n/a	72,801,994
Retained Earnings	216	632,778,884
Dividends, net	43800000	(50,895,000)
Common Stock Equity of HECO		\$ 1,039,259,141
Investment in Subsidiary - MECO	12301000	\$ (194,190,117)
Investment in Subsidiary - HELCO	12302000	(189,407,208)
Investment in Subsidiary - RHI	12306000	(117,916)
Investment in Subsidiaries *		\$ (383,715,241)
Common Equity as of December 31, 2005		\$ 655,543,900

* Does not include \$1,546,400 of equity investment in the HECO Capital Trust III (Capital Trust) subsidiary. The investment in the Capital Trust is offset against HECO's Hybrid securities which were purchased by the Capital Trust. Refer to WP-1904, p.1 for the adjustment to the Hybrid securities.

Hawaiian Electric Company, Inc.

Common Equity Restoration
2005 Recorded

	<u>G/L</u> <u>Account</u>	<u>12/31/05 Balance</u>
Unamortized Issuance Costs - Preferred Stock *	2143	<u>522,820</u>
Total Common Equity Restoration		<u>\$ 522,820</u>

* For financial statement purposes, the unamortized issuance costs of the outstanding preferred stock is shown as a reduction to common equity. For ratemaking purposes, however, these cost are shown as a deduction to preferred stock rather than common equity since these costs relate to preferred stock. Refer to WP-1905, p.1 and HECO-1905.

Hawaiian Electric Company, Inc.
Test Year 2007

Income Statement

NO Rate Increase & WITH Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>
Operating Income	24,058	2302
AFUDC	4,994	1907
Annual Debt Requirement:		
Short-term Debt (\$38,971 x 5.0%)	1,949	1902
Long-term Debt	29,267	1903
Hybrid	2,059	1904
Total Annual Debt Requirement	<u>33,275</u>	
Net Income	<u>(4,223)</u>	
Annual requirement on Preferred Stock	1,135	1905
Net Income for Common	<u><u>(5,358)</u></u>	

Hawaiian Electric Company, Inc.
Test Year 2007

Funds from Operations Interest Coverage
NO Rate Increase & WITH Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>
Operating Income	24,058	2302
Depreciation	79,736	2302
Deferred Income Taxes	(6,181)	WP-2302, p. 12
Amortization of State ITC	(1,321)	2302
State Capital Goods Excise Credit & PV Tax Credit	3,212	WP-2302, p. 12
Interest on OBS Debt - Purchased Power Commitments ¹	14,987	WP-1913, p. 11
Interest on OBS Debt - Operating Leases ¹	1,042	Per calculation from Budgets Division
Total	115,533	A
Total Debt Requirement (ST, LT & Hybrids)	33,275	WP-1913, p. 1
Interest on OBS Debt - Purchased Power Commitments ¹	14,987	WP-1913, p. 11
Interest on OBS Debt - Operating Leases ¹	1,042	Per calculation from Budgets Division
	49,304	B
Fund from Operations Interest Coverage (A)/(B)	2.34	x

¹ Interest on off-balance sheet (OBS) debt is not reflected in the book numbers.

Interest on the OBS debt related to purchased power commitments and operating leases represents the interest expense that the Company would have incurred if the debt equivalent related to purchased power commitments and operating leases were reflected as a debt obligation on the Company's balance sheet.

Hawaiian Electric Company, Inc.
Test Year 2007

Funds from Operations / Average Total Debt
NO Rate Increase & WITH Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>	
Operating Income	24,058	2302	
Depreciation	79,736	2302	
Depreciation adjustment for Operating Leases	3,265	Per calculation from Budgets Division	
Deferred Income Taxes	(6,181)	WP-2302, p. 12	
Amortization of State ITC	(1,321)	2302	
State Capital Goods Excise Credit & PV Tax Credit	3,212	WP-2302, p. 12	
Interest Expense:			
Short-term interest	(1,949)	1902	
Long-term interest	(27,667)	1903	
Hybrid interest	(2,051)	1904	
Total Interest Expense	<u>(31,667)</u>		
 Total	 <u><u>71,102</u></u> A		
Average Debt:			
Short-term Debt	38,971	1902	
Long-term Debt ¹	499,747	1903 & WP-1903, p.6	
Hybrid ²	31,546	1904	
OBS Debt (30%) - Purch Pwr Commitments ³	256,891	WP-1913, p. 11	
OBS Debt - Operating Leases ³	17,361	Per calculation from Budgets Division	
Average Total Debt	<u><u>844,516</u></u> B		
 FFO to Ave Total Debt Ratio (A)/(B)	 <table border="1" style="margin-left: auto; margin-right: auto;"><tr><td style="text-align: center;">0.08</td></tr></table>	0.08	
0.08			

¹ Net of unamortized discount on outstanding revenue bonds.

² Excludes unamortized costs.

³ Off-balance sheet (OBS) debt is not reflected in the book numbers. Represents the imputed debt of the Company's purchased power commitments and operating leases.

Hawaiian Electric Company, Inc.
Test Year 2007

Total Debt / Total Capital

NO Rate Increase & WITH Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>
<u>Capitalization Balances at Year-End:</u>		
Total Debt:		
Short-term Debt	0	1902
Long-term Debt ¹	549,800	1903 & WP-1903, p.6
Hybrid Securities ²	31,546	1904
Total Debt	581,346	
OBS Debt (30%) - Purch Pwr Commitments ³	249,778	WP-1913, p. 11
OBS Debt - Operating Leases ³	15,361	Per calculation from Budgets Division
Revised Total Debt	846,485 A	
Preferred Stock ²	22,293	1905
Common Stock	710,438	1906
Total Capital	1,579,216 B	
 Total Debt / Total Capital Ratio (A)/(B)	 0.54	

¹ Net of unamortized discount on outstanding revenue bonds.

² Excludes unamortized costs.

³ Off-balance sheet (OBS) debt is not reflected in the book numbers. Represents the imputed debt of the Company's purchased power commitments and operating leases.

Hawaiian Electric Company, Inc.
Test Year 2007

Total Debt / Total Capital

NO Rate Increase & WITHOUT Purchased Power Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>
<u>Capitalization Balances at Year-End:</u>		
Total Debt:		
Short-term Debt	0	1902
Long-term Debt ¹	549,800	1903 & WP-1903, p.6
Hybrid Securities ²	31,546	1904
Total Debt	581,346	
 OBS Debt (30%) - Purch Pwr Commitments ³	 0	
 OBS Debt - Operating Leases ³	 15,361	 Per calculation from Budgets Division
 Revised Total Debt	 596,707	 A
 Preferred Stock ²	 22,293	 1905
Common Stock	710,438	1906
 Total Capital	 1,329,438	 B
 Total Debt / Total Capital Ratio (A)/(B)	 0.45	

¹ Net of unamortized discount on outstanding revenue bonds.

² Excludes unamortized costs.

³ Off-balance sheet (OBS) debt is not reflected in the book numbers. Represents the imputed debt of the Company's purchased power commitments and operating leases.

Hawaiian Electric Company, Inc.
Test Year 2007

Income Statement

WITH Rate Increase & WITH Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>
Operating Income	108,317	2302
AFUDC	4,994	1907
Annual Debt Requirement:		
Short-term Debt (\$38,971 x 5.0%)	1,949	1902
Long-term Debt	29,267	1903
Hybrid	2,059	1904
Total Annual Debt Requirement	<u>33,275</u>	
Net Income	<u>80,036</u>	
Annual requirement on Preferred Stock	1,135	1905
Net Income for Common	<u><u>78,901</u></u>	

Hawaiian Electric Company, Inc.
Test Year 2007

Funds from Operations Interest Coverage
WITH Rate Increase & WITH Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>
Operating Income	108,317	2302
Depreciation	79,736	2302
Deferred Income Taxes	(6,181)	WP-2302, p. 12
Amortization of State ITC	(1,321)	2302
State Capital Goods Excise Credit & PV Tax Credit	3,212	WP-2302, p. 12
Interest on OBS Debt - Purchased Power Commitments ¹	14,987	WP-1913, p. 11
Interest on OBS Debt - Operating Leases ¹	1,042	Per calculation from Budgets Division
Total	199,792	A
Total Debt Requirement (ST, LT & Hybrids)	33,275	WP-1913, p. 1
Interest on OBS Debt - Purchased Power Commitments ¹	14,987	WP-1913, p. 11
Interest on OBS Debt - Operating Leases ¹	1,042	Per calculation from Budgets Division
	49,304	B
Fund from Operations Interest Coverage (A)/(B)	4.05	x

¹ Interest on off-balance sheet (OBS) debt is not reflected in the book numbers.

Interest on the OBS debt related to purchased power commitments and operating leases represents the interest expense that the Company would have incurred if the debt equivalent related to purchased power commitments and operating leases were reflected as a debt obligation on the Company's balance sheet.

Hawaiian Electric Company, Inc.
Test Year 2007

Funds from Operations / Average Total Debt
WITH Rate Increase & WITH Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>	
Operating Income	108,317	2302	
Depreciation	79,736	2302	
Depreciation adjustment for Operating Leases	3,265	Per calculation from Budgets Division	
Deferred Income Taxes	(6,181)	WP-2302, p. 12	
Amortization of State ITC	(1,321)	2302	
State Capital Goods Excise Credit & PV Tax Credit	3,212	WP-2302, p. 12	
Interest Expense:			
Short-term interest	(1,949)	1902	
Long-term interest	(27,667)	1903	
Hybrid interest	(2,051)	1904	
Total Interest Expense	<u>(31,667)</u>		
 Total	 <u><u>155,361</u></u> A		
Average Debt:			
Short-term Debt	38,971	1902	
Long-term Debt ¹	499,747	1903 & WP-1903, p.6	
Hybrid ²	31,546	1904	
OBS Debt (30%) - Purch Pwr Commitments ³	256,891	WP-1913, p. 11	
OBS Debt - Operating Leases ³	17,361	Per calculation from Budgets Division	
Average Total Debt	<u><u>844,516</u></u> B		
 FFO to Ave Total Debt Ratio (A)/(B)	 <table border="1" style="display: inline-table; border-collapse: collapse;"><tr><td style="text-align: center; padding: 2px 10px;">0.18</td></tr></table>	0.18	
0.18			

¹ Net of unamortized discount on outstanding revenue bonds.

² Excludes unamortized costs.

³ Off-balance sheet (OBS) debt is not reflected in the book numbers. Represents the imputed debt of the Company's purchased power commitments and operating leases.

Hawaiian Electric Company, Inc.
Test Year 2007

Total Debt / Total Capital
WITH Rate Increase & WITH Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>
<u>Capitalization Balances at Year-End:</u>		
Total Debt:		
Short-term Debt	0	1902
Long-term Debt ¹	549,800	1903 & WP-1903, p.6
Hybrid Securities ²	31,546	1904
Total Debt	581,346	
OBS Debt (30%) - Purch Pwr Commitments ³	249,778	WP-1913, p. 11
OBS Debt - Operating Leases ³	15,361	Per calculation from Budgets Division
Revised Total Debt	846,485 A	
Preferred Stock ²	22,293	1905
Common Stock	710,438	1906
Total Capital	1,579,216 B	
Total Debt / Total Capital Ratio (A)/(B)	0.54	

¹ Net of unamortized discount on outstanding revenue bonds.

² Excludes unamortized costs.

³ Off-balance sheet (OBS) debt is not reflected in the book numbers. Represents the imputed debt of the Company's purchased power commitments and operating leases.

Hawaiian Electric Company, Inc.
Test Year 2007

Total Debt / Total Capital

WITH Rate Increase & WITHOUT Purchased Power Debt Equivalent
Based on 11.25% Earned Return on Common Equity

	<u>\$ in thousands</u>	<u>HECO Reference</u>
<u>Capitalization Balances at Year-End:</u>		
Total Debt:		
Short-term Debt	0	1902
Long-term Debt ¹	549,800	1903 & WP-1903, p.6
Hybrid Securities ²	31,546	1904
Total Debt	581,346	
 OBS Debt (30%) - Purch Pwr Commitments ³	 0	
 OBS Debt - Operating Leases ³	 15,361	 Per calculation from Budgets Division
Revised Total Debt	596,707	A
 Preferred Stock ²	 22,293	 1905
Common Stock	710,438	1906
 Total Capital	1,329,438	 B
 Total Debt / Total Capital Ratio (A)/(B)	 0.45	

¹ Net of unamortized discount on outstanding revenue bonds.

² Excludes unamortized costs.

³ Off-balance sheet (OBS) debt is not reflected in the book numbers. Represents the imputed debt of the Company's purchased power commitments and operating leases.

Hawaiian Electric Company, Inc.
2007 Purchase Power Credit Impact Using the Standard & Poors Method
Debt Equivalent (\$000)

	A	B	C	D
	Debt Equivalent			
	Beginning of <u>Year 2007</u>	End of <u>Year 2007</u>	<u>Average</u>	Interest Equivalent <u>(B x 6%)</u>
AES	179,791	172,655	176,223	10,359
Kalaeloa	70,368	64,567	67,467	3,874
H Power	13,844	12,557	13,200	753
Total	264,003	249,778	256,891	14,987

S&P Risk Factor of 30%
Interest Equivalent at 6%

AES

Credit Impact Using the Standard & Poors Method
(\$000's)

S&P Risk Factor of	30%
Interest Equivalent at	6%
Annual Capacity Payment for non-major maint years ¹	59,100
Monthly Capacity Payment for non-major maint years ²	4,925
Annual Capacity Payment for major maint years ¹	56,318
Monthly Capacity Payment for major maint years ²	4,693
End Month of Capacity Payments	Aug-22

		A	B	C = A x B
		Present Value		
		Remaining Pmts	Risk Factor	Debt Equivalent
Balance at	1/1/2007	599,304	30%	179,791
	1/1/2008	575,515	30%	172,655

¹ Based on 4.4095 cents per available kwh and a firm capacity commitment of 180,000kW.
Assumes 85% availability on non-major maintenance years, and 81% availability in years
of major maintenance.

² Monthly payments made in arrears; calculated at the beginning of the next month.

Kalaeloa

Credit Impact Using the Standard & Poors Method
(\$000's)

S&P Risk Factor of 30%
Interest Equivalent at 6%

Annual Capacity Payment ¹ 32,719
Monthly Capacity Payment ² 2,727
End Month of Capacity Payments May-16

		A	B	C = A x B
		Present Value		Debt
		Remaining Pmts	Risk Factor	Equivalent
Balance at	1/1/2007	234,559	30%	70,368
	1/1/2008	215,224	30%	64,567

¹ Based on \$164.35 per kW for the first 180,000kW of capacity, and \$112 per kW for all kW of capacity above 180,000 kW (up to a maximum of 28 MW).

² Monthly payments made at the beginning of the month.

H Power

Credit Impact Using the Standard & Poors Method
(\$000's)

S&P Risk Factor of 30%
Interest Equivalent at 6%

Annual Capacity Payment ¹ 6,944
Monthly Capacity Payment ² 579
End Month of Capacity Payments Jul-15

		A	B	C = A x B
		Present Value	Risk Factor	Debt
		Remaining Pmts		Equivalent
Balance at	1/1/2007	46,147	30%	13,844
	1/1/2008	41,855	30%	12,557

¹ Based on 4.89 cents per kwh for 46 MW capacity during on-peak hours at 90% availability.

² Monthly payments made in arrears.