CA-IR-200

Ref: Capital Budgeting.

Please provide a copy of the listing of capital projects, including estimated expenditures by period, prepared in the spring of 2004 for all process areas that compiled such a list.

HECO Response:

The requested information is provided on pages 2 through 6.

Hawaiian Electric Co., Inc.
2005-2009 Capital Expenditures List
($ in thousands)

Process Area	Grand parent	Project Number	Project Title	Prior Years	2005 Cost	2006 Cost	2007 Cost	2008 Cost	2009 Cost	Future Years	Total 2005-2009	Project Total
CE		BENEFITS04	HR/Benefits/Comp Suite	0	171	0	0	0	0	0	171	171
CE		P0000500	Misc Office Furniture	883	113	113	114	114	114	0	568	1,222
CE		P0000502	Waiau Minor Cap Addns									

Hawaiian Electric Co., Inc.
2005-2009 Capital Expenditures List
($ in thousands)

Process Area	Grand parent	Project Number	Project Title	Prior Years	2005 Cost	2006 Cost	2007 Cost	2008 Cost	2009 Cost	Future Years	Total 2005-2009	Project Total
ED	Y00021	P0000277	New Kuahua Substation	439	4,085	22	0	0	0	0	4,107	4,545
ED	Y00021	P0000278	Makalapa Substation Prot	64	295	0	0	0	0	0	295	359
ED	Y00021	P0000279	Puuloa Substation Prot	9	93	0	0	0	0	0	93	102
ED	Y00021	P0000280	Makalapa-Kuahua FO Line	149	666	0	0	0	0	0	666	815
ED	Y00021	P0000281	Makalapa-Puuloa FO Line	87	603	0	0	0	0	0	603	691
ED	Y00021	P0000282	Kuahua 46kv Ln Reconnect	20	477	0	0	0	0	0	477	497
ED	Y00030	P0000713	Dispatch Center Building	4,062	6,273	1,365	0	0	0	0	7,638	11,700
ED	Y00030	P0000715	Dispatch Boards	5	574	133	0	0	0	0	707	712
ED	Y00030	P0000716	Telecomm Extensions	54	1,043	253	0	0	0	0	1,296	1,349
ED	Y00030	P0000717	EMS Replacement	1,015	3,342	2,122	0	0	0	0	5,464	6,480
ED	Y00030	P0000718	Dispatch Training Simulator	74	142	557	0	0	0	0	699	774
ED	Y00030	P0000793	Field Service/Meter Reading	0	0	14	558	0	0	0	572	573
ED	Y00030	P0000794	Call Center-1st floor	0	0	364	86	0	0	0	450	450
ED	Y00030	P0000795	Parking-C&M,SysOp,&Employee	7	1	61	460	0	0	0	522	528
ED	Y00038	P0000672	Kakaako Makai-Kewalo 25kV DL	774	1,215	0	0	0	0	0	1,215	1,989
ED	Y00038	P0000783	Kakaako Makai-Iwilei 25KV DL	193	162	4,944	2,306	0	0	0	7,412	7,604
ED	Y00039	P0000833	Mamala Substation	1,138	463	0	0	0	0	0	463	1,602
ED	Y00039	P0000834	46kV Fdrs to Mamala Sub	660	3,170	0	0	0	0	0	3,170	3,831
ED	Y00039	P0000835	Comm Links Mamala Sub	111	271	0	0	0	0	0	271	383
ED	Y00040	P0000836	Ford Island Substation	157	3,987	4	0	0	0	0	3,991	4,148
ED	Y00040	P0000837	Makalapa 46kV Brkr Addition	23	499	3	0	0	0	0	502	525
ED	Y00040	P0000838	46kV Fdrs to FI Sub	3,767	11,563	0	0	0	0	0	11,563	15,330
ED	Y00040	P0000839	Comm. Links FI-Maklpa	0	28	593	0	0	0	0	621	620
ED	Y00044	P0000946	KoOlina SS Tsf#1 Install	0	64	199	1,370	0	0	0	1,633	1,633
ED	Y00044	P0000947	KoOlina 46kV Lines	0	53	246	1,605	0	0	0	1,904	1,904
ED	Y00044	P0000948	KoOlina 12kV Lines	0	4	12	34	0	0	0	50	50
ED	Y00045	P0000949	Ocean Point SS Land Purchase	0	0	225	0	0	0	0	225	225
ED	Y00045	P0000950	Ocean Point SS Tsf#1 Install	79	1,523	0	0	0	0	0	1,523	1,602
ED	Y00045	P0000951	Ocean Point 46kV Lines	129	1,696	0	0	0	0	0	1,696	1,825
ED	Y00045	P0000952	Ocean Point 12kV Lines	18	203	0	0	0	0	0	203	221
ED	Y00046	P0000971	HECO UF LS 2005 Distr	0	300	332	366	0	0	0	998	998
ED	Y00046	P0000972	HECO UF LS 2005 Transmission	0	237	262	0	0	0	0	499	499
ED	Y48500	P0000922	Kamoku 46kV UG Alt Phase 1	22,602	2,756	15,604	13	0	0	0	18,373	40,975
ED	Y48500	P0000924	Kamoku 46kV UG Alt Phase 2	285	206	402	3,029	9,607	0	0	13,244	13,529
ES		ENGYPROJ03	Hickam C-17 CHP	102	4,896	0	0	0	0	0	4,896	4,997
ES		ENGYPROJ04	Outrigger Beachwalk CHP	217	104	13,778	0	0	0	0	13,882	14,100
ES		P0000643	Res.WH Load Control Program	2,339	2,527	2,589	802	816	816	0	7,550	9,074
ES		P0000774	Kukui Gardens Conversion	701	6	0	0	0	0	0	6	708
ES		P0000887	Pacific Allied CHP	891	0	0	0	0	0	0	0	891
ES		P0000897	HECO CHP Program	3,229	4,096	5,042	5,168	6,300	5,440	0	26,046	29,275
ES		P0000907	PLC Market Trial	350	0	0	0	0	0	0	0	350
ES		P0000978	Queen's Hospital CHP	104	172	504	19,755	0	0	0	20,431	20,535
ES		P0000979	Kaiser Moanalua CHP	134	309	5,208	0	0	0	0	5,517	5,651
ES		P1510000	Misc OH Svc & Extn (CID)	9,246	2,639	2,670	2,705	2,735	2,735	0	13,484	19,996
ES		P1580000	Minor OH Dist Addn (CID)	5,394	823	833	843	840	840	0	4,179	8,732
ES		P1680000	Tsf & Equip Pur/Svc (CID)	30,922	5,236	5,236	5,237	5,237	5,237	0	26,183	51,868
ES		P1700000	Misc UG Svc & Extn (CID)	[illegible]								

Hawaiian Electric Co., Inc.
2005-2009 Capital Expenditures List
($ in thousands)

Process Area	Grand parent	Project Number	Project Title	Prior Years	2005 Cost	2006 Cost	2007 Cost	2008 Cost	2009 Cost	Future Years	Total 2005-2009	Project Total
PS		P0000217	H9 Cycle Chem Instr.	20	2	2	220	0	0	0	224	244
PS		P0000224	W5 Air Preheater Rotor Rpl	0	0	0	0	1	861	0	862	861
PS		P0000225	W6 Air Preheater Rotor Rpl	0	0	16	828	0	0	0	844	844
PS		P0000238	K6 BFP Rec Ctrl Valves Upg	44	38	0	0	0	0	0	38	82
PS		P0000253	Waiau Sheetpiling Cath Prot	0	0	0	0	0	226	0	226	226
PS		P0000270	H8&9 Boiler Bldg. ReRoof	213	0	0	0	5	148	0	153	366
PS		P0000271	K4 Stormwater Drain Impv	0	214	0	0	0	0	0	214	214
PS		P0000273	Kahe Stormwater Erosion Ctrl	51	143	0	0	0	0	0	143	194
PS		P0000286	H8&9 Turbine Bldg ReRoof	193	0	0	0	5	146	0	151	344
PS		P0000287	Waiau 1&2 Admin Bldg ReRoof	0	0	0	0	5	544	0	549	549
PS		P0000299	W9 Compressor Blade Coating	17	306	0	0	0	0	0	306	323
PS		P0000300	W10 Compr Blade Coating	17	307	0	0	0	0	0	307	325
PS		P0000301	KPP FWH #12 Replacement	0	0	0	0	0	234	0	234	235
PS		P0000314	W7 APH Sootblower Upgrade	0	212	63	0	0	0	0	275	275
PS		P0000315	W7 Air Htr Steam Coils	0	0	0	0	1	157	30	158	188
PS		P0000316	W8 Air Htr Steam Coils	0	0	0	0	1	169	0	170	170
PS		P0000379	PI Data Loggers	106	106	0	0	0	0	0	106	106
PS		P0000442	W4 Soot Blower Upgrade	0	337	0	0	0	0	0	337	337
PS		P0000450	Kahe Motor Part Wash Enclose	18	2	2	2	6	470	0	482	500
PS		P0000451	Kahe Stormwater Berm	126	237	0	0	0	0	0	237	364
PS		P0000453	Waiau Pond Sheetpiling	254	630	0	0	0	0	0	630	883
PS		P0000454	K6 Fan Enclosure	43	585	2	0	0	0	0	587	630
PS		P0000455	W5 and W6 Siding Upgrade	0	0	0	0	4	271	0	275	276
PS		P0000458	Kahe Pond 1A Clean & Lining	12	9	142	0	0	0	0	151	164
PS		P0000460	Waiau 4 ERV Replacement	0	0	70	0	0	0	0	70	70
PS		P0000462	Waiau 7 ERV Replacement	0	6	65	0	0	0	0	71	71
PS		P0000465	K1&2 Service Air Compressors	0	0	226	0	0	0	0	226	226
PS		P0000467	K3&4 Instr Air Compressors	0	0	0	0	3	108	0	111	111
PS		P0000468	K5&6 Instr Air Compressors	0	0	0	0	3	108	0	111	111
PS		P0000471	Kahe 1&2 Siding Replacement	0	0	0	0	1	231	57	232	289
PS		P0000472	Kahe 3&4 Siding Replacement	0	0	0	0	0	241	60	241	301
PS		P0000473	Waiau 7 and 8 Siding Upgrade	0	0	0	0	1	221	11	222	234
PS		P0000477	HPP Chem Clng Ammonia Scrbr	0	0	0	0	1	197	0	198	197
PS		P0000484	WPP FWH #75 Replacement	0	0	0	0	0	373	0	373	373
PS		P0000486	HPP FWH #85 Replacement	0	0	333	0	0	0	0	333	333
PS		P0000487	HPP FWH #82 Replacement	0	0	256	3	0	0	0	259	260
PS		P0000489	W4 Cond Wtrbx Repl	32	354	29	0	0	0	0	383	414
PS		P0000490	H8&9 Emergency Generator	114	5	0	0	0	0	0	5	114
PS		P0000494	KPP FWH #11 Replacement	0	0	0	0	0	240	0	240	240
PS		P0000511	BFP Automated Test	449	150	0	0	0	0	0	150	599
PS		P0000564	W9 DCS Processor Upgrade	5	275	0	0	0	0	0	275	280
PS		P0000565	W10 DCS Processor Upgrade	7	277	0	0	0	0	0	277	284
PS		P0000601	Gen Prot Relay Replacement	655	194	56	0	0	0	0	250	905
PS		P0000609	K2 Blr Access Door Addition	93	2	0	0	0	0	0	2	94
PS		P0000610	K1 Blr Access Door Addition	0	98	0	0	0	0	0	98	98
PS		P0000616	Kahe Parking Lot Addition	62	6	6	7	35	384	0	438	500
PS		P0000619	Kahe Demin/WWTF Smk Detect	0	31	0	0	0	0	0	31	31
PS		P0000620	Kahe Fire Water Storage Tnk2	59	677	0	0	0	0	0	677	735
PS		P0000621	W1 and W2 Office Addition	0	0	0	0	4	2,150	0	2,154	2,154
PS		P0000622	Kahe 13 FWH Replacement	0	0	0	0	3	291	0	294	293
PS		P0000623	K1-4 & K5-6 Fire Main Tie-in	0	120	0	0	0	0	0	120	120
PS		P0000626	W3-8 Cable Rm Smoke Detector	78	11	0	0	0	0	0	11	89
PS		P0000627	W3-8 Swgr Rm Smoke Detector	67	14	0	0	0	0	0	14	81
PS		P0000628	K1-6 Cable Rm Smoke Detector	48	20	0	0	0	0	0	20	48
PS		P0000629	K1-6 Swgr Rm Smoke Detectors	63	24	0	0	0	0	0	24	86
PS		P0000630	K5&6 Intake Conc Oil Barrier	0	119	0	0	0	0	0	119	119
PS		P0000631	Kahe WWTF Sludge Drying Imp	0	0	0	0	1	1,043	0	1,044	1,044
PS		P0000632	K3 Exciter/Regulator Upgrade	2	12	382	59	0	0	0	453	455
PS		P0000635	K1 Elec Brkr Rm Ventilation	0	0	0	0	2	148	0	150	150
PS		P0000636	Waiau Chlorine Dioxide Systm	0	0	107	0	0	0	0	107	107
PS		P0000637	Kahe Chlorine Dioxide System	103	4	0	0	0	0	0	4	107
PS		P0000639	W4 Air Heater Tube Replmnt	0	0	0	0	407	0	0	407	407
PS		P0000640	HNL Demineralizer Upgrade	7	829	224	0	0	0	0	1,053	1,059
PS		P0000641	K6 AEH Limit Switch Upgrd	4	88	0	2	0	0	0	90	94
PS		P0000644	Kahe 14 FWH Replacement	0	0	0	0	1	0	0	1	1
PS		P0000647	Kahe 23FWH Replacement	200	28	0	0	0	0	0	28	228
PS		P0000657	W10 Exhaust Duct Replacement	11	411	0	0	0	0	0	411	421
PS		P0000658	W9 Exhaust Duct Replacement	15	407	0	0	0	0	0	407	421
PS		P0000659	Kahe 25FWH Replacement	322	22	0	0	0	0	0	22	344
PS		P0000660	W1 Maintenance Laydown Area	0	0	0	0	4	140	0	144	144
PS		P0000665	Waiau Parking Lot Addition	34	3	3	4	5	290	0	305	338
PS		P0000667	Kahe Sewer System Upgrade	645	370	0	0	0	0	0	370	1,015
PS		P0000676	K2 Opacity Monitor Upgrade	141	10	0	0	0	0	0	10	141
PS		P0000677	W7/8 Underground Utilities	0	18	246	138	0	0	0	402	402
PS		P0000678	Kahe H2 Gas Dryers	98	178	75	217	0	0	0	470	568
PS		P0000679	Waiau H2 Gas Dryers	0	91	176	252	0	0	0	519	520
PS		P0000680	Waiau Waste Oil Recover	0	90	1	0	0	0	0	91	91

Hawaiian Electric Co., Inc.
2005-2009 Capital Expenditures List
($ in thousands)

Process Area	Grand parent	Project Number	Project Title	Prior Years	2005 Cost	2006 Cost	2007 Cost	2008 Cost	2009 Cost	Future Years	Total 2005-2009	Project Total
PS		P0000681	Kahe1 Condenser Tube Replacement	0	1,361	0	0	0	0	0	1,361	1,361
PS		P0000688	HPP FILTER PRESS	0	0	72	0	0	0	0	72	72
PS		P0000689	W9 Intake Duct Upgrade	17	408	0	0	0	0	0	408	424
PS		P0000691	W10 Intake Duct Upgrade	14	414	0	0	0	0	0	414	428
PS		P0000698	HPP Stormwater Isolation	0	0	29	36	0	0	0	65	65
PS		P0000781	KPP FWH #41 Replacement	9	222	0	0	0	0	0	222	231
PS		P0000782	KPP FWH #42 Replacement	9	229	0	0	0	0	0	229	238
PS		P0000797	W3-W4 Svc Air Compr	0	236	0	0	0	0	0	236	236
PS		P0000798	W6 Svc Air Compr	123	7	0	0	0	0	0	7	130
PS		P0000799	K2 Operator Console Upgrade	185	2	0	0	0	0	0	2	188
PS		P0000800	K1 Operator Console Upgrade	6	187	1	0	0	0	0	188	193
PS		P0000801	W4 Operator Console Upgrade	0	164	1	0	0	0	0	165	165
PS		P0000802	W5 Operator Console Upgrade	0	140	51	0	0	0	0	191	191
PS		P0000803	W3 Operator Console Upgrade	245	26	0	0	0	0	0	26	271
PS		P0000804	W6 Operator Console Upgrade	169	16	0	0	0	0	0	16	185
PS		P0000807	H8 TSI Upgrade	0	5	295	5	0	0	0	305	305
PS		P0000808	K3 Annunciator Replacement	0	8	234	167	0	0	0	409	408
PS		P0000809	K6 Annunciator Replacement	5	348	0	0	0	0	0	348	353
PS		P0000810	W7 Annunciator Replacement	0	32	375	0	0	0	0	407	407
PS		P0000811	W8 Annunciator Replacement	0	0	399	0	0	0	0	399	399
PS		P0000812	K5 Annunciator Replacement	0	0	0	418	9	0	0	427	427
PS		P0000813	K3&4 Control Room AC	0	121	0	0	0	0	0	121	121
PS		P0000814	H8 Volt Reg/Exciter Replace	0	5	344	4	0	0	0	353	353
PS		P0000815	H9 Volt Reg/Exciter Replace	348	17	0	0	0	0	0	17	365
PS		P0000816	W5 Exciter/Regulator Replace	0	96	317	0	0	0	0	413	413
PS		P0000818	W7 Exciter/Regulator Repl	0	56	329	0	0	0	0	385	385
PS		P0000820	K1 Main Xfmr Replacement	6	1,064	1	0	0	0	0	1,065	1,071
PS		P0000821	K1&2 Battery Bank Repl	194	6	0	0	0	0	0	6	200
PS		P0000827	K3 DCS Balance of Plant I/O	0	19	170	30	0	0	0	219	219
PS		P0000829	W4 Main Xfmr Replacement	6	634	65	0	0	0	0	699	705
PS		P0000830	K1 Aux Xfmr Replacement	6	190	1	0	0	0	0	191	198
PS		P0000831	H8 Operator Console Upgrade	0	0	147	1	0	0	0	148	148
PS		P0000853	K2 Excitation System	396	6	0	0	0	0	0	6	403
PS		P0000854	K1 Excitation System	19	422	3	0	0	0	0	425	444
PS		P0000856	W7 Main Transformer	6	16	1,132	0	0	0	0	1,148	1,155
PS		P0000857	W7 Aux Transformer	0	9	185	0	0	0	0	194	193
PS		P0000858	H8 Annunciator Replacement	0	6	368	0	0	0	0	374	374
PS		P0000859	H9 Annunciator Replacement	0	0	1	384	0	0	0	385	386
PS		P0000860	K2 Annunciator Replacement	339	2	0	0	0	0	0	2	342
PS		P0000861	K1 Annunciator Replacement	5	350	0	0	0	0	0	350	355
PS		P0000862	W7 Cond. Refurbishment	1	435	828	0	0	0	0	1,263	1,263
PS		P0000869	K4 Annunciator Replacement	6	411	0	0	0	0	0	411	417
PS		P0000870	H9 Generator Rotor Rewind	851	3	0	0	0	0	0	3	854
PS		P0000871	Kahe 1 Sootblower Controls	25	322	0	0	0	0	0	322	347
PS		P0000872	Kahe 3 Sootblower Controls	0	30	288	0	0	0	0	318	317
PS		P0000874	Kahe 4 Sootblower Controls	211	103	0	0	0	0	0	103	313
PS		P0000875	Honolulu 8 Sootblower Ctrls	0	5	313	0	0	0	0	318	318
PS		P0000876	Honolulu 9 Sootblower Ctrls	0	0	5	318	0	0	0	323	323
PS		P0000890	Kahe 5 Ignitor Atomization	0	0	0	0	287	0	0	287	287
PS		P0000895	H8 Main Xfmr Replacement	0	0	742	1	0	0	0	743	743
PS		P0000899	BP Tank 132 Improvements	0	0	4	646	0	0	0	650	650
PS		P0000900	BP Tank 133 Improvements	0	0	0	4	605	0	0	609	609
PS		P0000931	K5 to CW Basin Pipe Trench	36	455	0	0	0	0	0	455	491
PS		P0000934	Kahe Turbine Drains	85	262	89	0	93	0	0	444	530
PS		P0000935	HPP Turbine Drains	85	0	89	0	0	0	0	89	175
PS		P0000936	Waiau Turbine Drains	85	0	179	91	186	0	0	456	541
PS		P0000943	Honolulu PP Boiler Wash Sump	0	395	0	0	0	0	0	395	395
PS		P0000953	Kahe FWH Press/Temp Instrumentation	33	94	0	0	0	0	0	94	127
PS		P0000954	K2 BFP Rotating Element/Volute	0	303	0	0	0	0	0	303	303
PS		P0000956	Waiau WWTF Chem Feed Mods	5	132	0	0	0	0	0	132	137
PS		P0000957	K1 Main Steam Line Replacement	6	539	3	0	0	0	0	542	548
PS		P0000958	K6 SSH Element Replacement	1,071	416	0	0	0	0	0	416	1,487
PS		P0000959	H9 SSH Element Replacement	0	0	1	1,034	0	0	0	1,035	1,034
PS		P0000962	Waiau 71 Traveling Screen Replacement	0	172	0	0	0	0	0	172	172
PS		P0000968	Process Parameter Monitoring	180	241	243	245	246	249	252	1,224	1,656
PS		P0000980	Honolulu 8 Battery Bank Replacement	0	6	268	0	0	0	0	274	273
PS		P0000981	Kahe 5&6 Breaker Deck Air Conditioning	0	122	0	0	0	0	0	122	122
PS		P0000982	Waiau 3/4 Elevator Upgrade	0	121	0	0	0	0	0	121	121
PS		P0000983	Waiau 5/6 Elevator Upgrade	0	123	0	0	0	0	0	123	123
PS		P0000989	K3&4 Condensate Pumps	9	191	205	0	0	0	0	396	405
PS		P0000993	Kahe/Waiau WWTF PLC Upgrade	0	154	0	0	0	0	0	154	154
PS		P0000994	W8 SSH Element Replacement	0	0	0	0	1	1,665	5	1,666	1,671
PS		P0000995	K4 SSH Element Replacement	0	0	0	1,063	426	0	0	1,489	1,489
PS		P0000996	H8 SSH Element Replacement	0	0	0	0	7	1,034	0	1,041	1,041
PS		P0000999	W3&4 Turbine Roof Drain Piping	0	88	0	0	0	0	0	88	88
PS		P0001000	Kahe Demin Water Tank #54	9	334	92	0	0	0	0	426	434
PS		P0001001	W3 Condenser Retubing	0	0	0	0	1,674	0	0	1,674	1,674

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Process Area	Grand parent	Project Number	Project Title	Prior Years	2005 Cost	2006 Cost	2007 Cost	2008 Cost	2009 Cost	Future Years	Total 2005-2009	Project Total
PS		P7590000	W7 Controls Upgrade	182	1,462	651	0	0	0	0	2,113	2,296
PS		P7650000	W8 Controls Upgrade	32	302	2,211	0	0	0	0	2,513	2,545
PS		P8820000	W4 Exciter Upgrade	13	314	21	0	0	0	0	335	348
PS		P9025000	H PP FO Viscosity Ctrl	0	0	0	40	0	0	0	40	40
PS		P9107000	H9 Boiler Control System	0	0	1	395	0	0	0	396	397
PS		P9454000	K4 Boiler Control Upgrade	1,001	1,861	0	0	0	0	0	1,861	2,862
PS		P9486000	H9 Steam Atomizer Conv	0	0	0	477	0	0	0	477	477
PS		P9537000	K4 Turbine Controls Upgrade	0	0	30	846	174	0	0	1,050	1,051
PS		P9539000	K3 Boiler Control Upgrade	205	222	1,741	491	0	0	0	2,454	2,660
PS		P9541000	K4 Data Acq and Monitor	79	360	0	0	0	0	0	360	439
PS	Y14300	P1429000	Emergency Power Plant	6,372	937	963	953	953	953	0	4,759	9,224
PS	Y18700	P1870000	Power Station Misc	3,085	241	200	140	92	535	1,673	1,208	5,967
PS	Y49000	P4900000	Oahu Unit #1-Barbers Point	919	1,563	2,741	15,380	66,165	40,924	0	126,773	127,691
PS	Y70600	P7060000	Kahe Disc Struct Reinf	671	263	3,881	0	0	0	0	4,144	4,814

CA-IR-201

Ref: Capital Budgeting.

Please provide a copy of the Final Project List of capital projects, including estimated expenditures by period, ultimately approved by the Officers for 2004.

HECO Response:

The 2005-2009 Final Project List of capital projects is provided on pages 2 through 7.

2005-2009 Approved Capital Expenditures Budget

Project #	Project Title	2005	2006	2007	2008	2009
P0000062	Ce-Terminating Trust Esmnts	601,576	76,443	0	0	0
P0000063	Conv Halawa School 138kv	5,000	90,000	0	0	0
P0000089	Pwr Quality Monitor Install	100,371	100,595	100,965	101,882	0
P0000120	Corr (Inc Emg) OH Trsf Rpl	277,565	312,519	316,584	320,141	320,141
P0000121	Corr (Inc Emg) UG Trsf Rpl	210,918	200,967	203,864	206,389	206,389
P0000122	Cor (Inc Emg) Mis Cable Rpl	905,175	908,330	914,943	920,690	920,690
P0000123	Corr (Inc Emg) OH Dist Rpl	696,516	700,635	710,660	719,408	719,408
P0000124	Cor (Inc Emg) OH Subtrn Rpl	422,073	415,757	437,709	441,337	441,337
P0000143	Salt Lake Blvd Widening Ph2	697,487	3,960,000	0	0	0
P0000190	Waikiki Rehab Project 1	283,964	0	0	0	0
P0000191	Waikiki Rehab Project 2	8,572	718,808	868,982	0	0
P0000192	Waikiki Rehabilitation Project 3	0	0	0	1,142,987	0
P0000199	Kahe FWH #34 Replacement	0	0	0	652	321,203
P0000203	Waiau 4 Ignitor Replacement	139,279	0	0	0	0
P0000209	W4 Cycle Chem Instr.	280,196	0	0	0	0
P0000210	W5 Cycle Chem Instr.	31,372	203,298	0	0	0
P0000217	H9 Cycle Chem Instr.	1,791	1,964	220,406	0	0
P0000224	W5 Air Preheater Rotor Rpl	0	0	0	604	856,809
P0000225	W6 Air Preheater Rotor Rpl	0	15,642	827,904	0	0
P0000238	K6 BFP Rec Ctrl Valves Upg	75,713	0	0	0	0
P0000253	Waiau Sheetpiling Cath Prot	0	0	0	424	37
P0000270	H8&9 Boiler Bldg. ReRoof	0	0	0	1,673	147
P0000271	K4 Stormwater Drain Impv	214,983	0	0	0	0
P0000273	Kahe Stormwater Erosion Ctrl	143,247	0	0	0	0
P0000277	New Kuahua Substation	4,115,024	21,562	0	0	0
P0000278	Makalapa Substation Prot	298,689	0	0	0	0
P0000279	Puuloa Substation Prot	94,785	0	0	0	0
P0000280	Makalapa-Kuahua FO Line	673,911	0	0	0	0
P0000281	Makalapa-Puuloa FO Line	611,153	0	0	0	0
P0000282	Kuahua 46kv Ln Reconnect	479,808	0	0	0	0
P0000286	H8&9 Turbine Bldg ReRoof	0	0	0	1,673	147
P0000287	Waiau 1&2 Admin Bldg ReRoof	0	0	0	5,052	443
P0000299	W9 Compressor Blade Coating	305,745	0	0	0	0
P0000300	W10 Compr Blade Coating	307,359	0	0	0	0
P0000301	KPP FWH #12 Replacement	0	0	0	222,529	13,462
P0000302	Waiau FWH #72 Replacement	1,153	0	0	0	0
P0000303	Waiau FWH #82 Replacement	16,020	0	0	0	0
P0000314	W7 APH Sootblower Upgrade	213,472	62,971	0	0	0
P0000315	W7 Air Htr Steam Coils	0	0	0	1,303	157,080
P0000316	W8 Air Htr Steam Coils	0	0	0	1,303	169,176
P0000379	PI Data Loggers	54,556	0	0	0	0
P0000423	Kailua Rd UG Conversion	813,820	0	0	0	0
P0000441	W3 Soot Blower Upgrade	322	353	385	578,346	0
P0000442	W4 Soot Blower Upgrade	339,370	0	0	0	0
P0000450	Kahe Motor Part Wash Enclose	1,608	1,763	1,924	6,315	2,660
P0000451	Kahe Stormwater Berm	237,557	0	0	0	0
P0000453	Waiau Pond Sheetpiling	26,053	636,827	1	0	0
P0000454	K6 Fan Enclosure	454,030	1,566	0	0	0
P0000455	W5 and W6 Siding Upgrade	0	0	0	4,378	384
P0000458	Kahe Pond 1A Clean & Lining	9,427	142,558	0	0	0
P0000460	Waiau 4 ERV Replacement	70,404	0	0	0	0
P0000462	Waiau 7 ERV Replacement	6,180	65,047	0	0	0
P0000465	K1&2 Service Air Compressors	0	226,321	0	0	0
P0000467	K3&4 Instr Air Compressors	0	0	0	2,932	239
P0000468	K5&6 Instr Air Compressors	0	0	0	2,932	239
P0000471	Kahe 1&2 Siding Replacement	0	0	0	842	74

2005-2009 Approved Capital Expenditures Budget

Project #	Project Title	2005	2006	2007	2008	2009
P0000472	Kahe 3&4 Siding Replacement	0	0	0	421	37
P0000473	Waiau 7 and 8 Siding Upgrade	0	0	0	842	74
P0000477	HPP Chem Clng Ammonia Scrbr	0	0	0	652	198,004
P0000484	WPP FWH #75 Replacement	0	0	0	326	340,454
P0000486	HPP FWH #85 Replacement	0	334,763	0	0	0
P0000487	HPP FWH #82 Replacement	0	255,643	3,385	0	0
P0000489	W4 Cond Wtrbx Repl	355,976	28,753	0	0	0
P0000490	H8&9 Emergency Generator	111,558	0	0	0	0
P0000491	K-H#2/Wai-Wah Str 86/25	795,378	0	0	0	0
P0000494	KPP FWH #11 Replacement	0	0	0	222,339	274,712
P0000499	Ward A/C Imprv Phase II	2,890,569	0	0	0	0
P0000500	Misc Office Furniture	113,493	113,945	114,414	114,414	114,414
P0000501	Misc Office Equipment	72,012	72,012	72,012	55,055	55,055
P0000502	Waiau Minor Gen Addns	55,193	55,597	55,997	55,997	55,997
P0000503	Ward Ave Minor Addns	189,313	190,836	192,358	192,358	192,358
P0000504	King St Minor Addns	66,138	66,731	67,610	67,610	67,610
P0000505	Other Minor Gen Plt Addns	41,520	42,050	42,586	42,586	42,586
P0000507	Kam Hy Resurf Waiahole-Cr Ln	26,303	0	0	0	0
P0000508	PM-Makalapa MW Replace	235,512	0	0	0	0
P0000509	PM-Ewa Nui MW Replace	233,730	0	0	0	0
P0000510	Circ Water Temp Monitors	7,443	0	0	0	0
P0000511	BFP Automated Test	150,298	0	0	0	0
P0000530	Ka Iwi 12kV UG, Ph 1 Inc 2	247,074	0	0	0	0
P0000542	Ward Disaster Center	0	0	2,661,280	0	0
P0000543	Ward Fire Sprinkler Sys	185,594	0	0	0	0
P0000553	Waiau Classrooms (F&E)	0	0	143,506	0	0
P0000554	Waiau Classrooms	0	0	379,012	0	0
P0000562	Mokuone 46-12KV Line Ext	11,296	956,000	0	0	0
P0000564	W9 DCS Processor Upgrade	296,964	0	0	0	0
P0000565	W10 DCS Processor Upgrade	299,127	0	0	0	0
P0000571	CIS Replacement	406,562	30,630	0	0	0
P0000575	Nimitz Hwy Rehab-UA #1691	34,700	0	0	0	0
P0000597	Diamond Head Rd OH/UG Imp	205,948	0	0	0	0
P0000601	Gen Prot Relay Replacement	194,454	56,559	0	0	0
P0000609	K2 Blr Access Door Addition	1,761	0	0	0	0
P0000610	K1 Blr Access Door Addition	98,185	0	0	0	0
P0000616	Kahe Parking Lot Addition	5,582	6,122	6,680	34,623	6,857
P0000619	Kahe Demin/WWTF Smk Detect	30,704	0	0	0	0
P0000620	Kahe Fire Water Storage Tnk2	677,291	13	13	14	0
P0000621	W1 and W2 Office Addition	0	0	0	4,378	384
P0000622	Kahe 13 FWH Replacement	0	0	0	2,607	286,929
P0000623	K1-4 & K5-6 Fire Main Tie-in	119,635	0	0	0	0
P0000624	Kahe Tank Farm Fire Main	56,140	0	0	0	0
P0000626	W3-8 Cable Rm Smoke Detector	10,898	0	0	0	0
P0000627	W3-8 Swgr Rm Smoke Detector	14,196	0	0	0	0
P0000629	K1-6 Swgr Rm Smoke Detectors	23,728	0	0	0	0
P0000630	K5&6 Intake Conc Oil Barrier	119,614	0	0	0	0
P0000631	Kahe WWTF Sludge Drying Imp	0	0	0	842	61
P0000632	K3 Exciter/Regulator Upgrade	0	603,689	2,298	0	0
P0000635	K1 Elec Brkr Rm Ventilation	0	0	0	2,132	145,672
P0000636	Waiau Chlorine Dioxide Systm	0	107,198	0	0	0
P0000637	Kahe Chlorine Dioxide System	3,870	0	0	0	0
P0000639	W4 Air Heater Tube Replmnt	0	0	0	407,513	0
P0000640	HNL Demineralizer Upgrade	827,956	230,942	0	0	0
P0000641	K6 AEH Limit Switch Upgrd	92,044	0	0	0	0
P0000644	Kahe 14 FWH Replacement	415,985	0	0	0	0

2005-2009 Approved Capital Expenditures Budget

Project #	Project Title	2005	2006	2007	2008	2009
P0000647	Kahe 23FWH Replacement	26,921	0	0	0	0
P0000652	Misc Mainframe Hardware	182,783	27,528	27,528	27,528	27,528
P0000653	Collaborative Communications	65,376	48,055	36,268	34,001	0
P0000656	W 3&4 CW Sht Pile Upgrade	27,049	194,948	0	0	0
P0000657	W10 Exhaust Duct Replacement	1,218,610	0	0	0	0
P0000658	W9 Exhaust Duct Replacement	1,024,945	0	0	0	0
P0000659	Kahe 25FWH Replacement	32,942	0	0	0	0
P0000660	W1 Maintenance Laydown Area	0	0	0	4,410	386
P0000661	W2 Maintenance Laydown Area	770	0	0	0	0
P0000665	Waiau Parking Lot Addition	3,015	3,307	3,608	4,780	3,614
P0000667	Kahe Sewer System Upgrade	556,392	0	0	0	0
P0000669	Kakaako ID10	26,591	0	0	0	0
P0000672	Kakaako Makai-Kewalo 25kV DL	1,768,125	0	0	0	0
P0000677	W7/8 Underground Utilities	18,334	240,324	135,379	0	0
P0000678	Kahe H2 Gas Dryers	355,521	73,868	346	52,059	0
P0000679	Waiau H2 Gas Dryers	90,280	173,639	253,854	0	0
P0000680	Waiau Waste Oil Recover	86,887	633	0	0	0
P0000681	Kahe1 Condenser Tube Replacement	1,368,405	0	0	0	0
P0000688	HPP FILTER PRESS	0	69,801	0	0	0
P0000689	W9 Intake Duct Upgrade	0	0	0	65	4,904
P0000691	W10 Intake Duct Upgrade	0	0	0	65	5,936
P0000692	CSD Technical Support Prgrm	27,000	27,000	0	0	0
P0000698	HPP Stormwater Isolation	0	29,469	36,426	0	0
P0000699	Fire sprinkler-tsf oil stora	37,040	0	0	0	0
P0000700	Fire sprinkler-whse hi-stora	0	0	115,000	0	0
P0000711	Remote PBXs	1,203,743	0	0	0	0
P0000713	Dispatch Center Building	5,978,598	2,707,838	0	0	0
P0000714	Materials Storage Relocation	0	0	0	0	0
P0000715	Dispatch Boards	578,144	133,750	0	0	0
P0000716	Telecomm Extensions	1,052,700	255,890	0	0	0
P0000717	EMS Replacement	3,216,849	2,525,019	51	0	0
P0000718	Dispatch Training Simulator	144,263	563,590	0	0	0
P0000732	Gen Ctrl Unit WAN Upgrades	174,347	131,880	0	0	0
P0000733	Trns Sub RTU Migration Pgm	646,876	662,158	567,420	0	0
P0000734	RTU Wide Area Network	540,296	0	0	0	0
P0000764	H-1 Widening Waimalu Reloc	98,466	0	0	0	0
P0000774	Kukui Gardens Conversion	6,700	0	0	0	0
P0000781	KPP FWH #41 Replacement	222,064	0	0	0	0
P0000782	KPP FWH #42 Replacement	229,042	0	0	0	0
P0000783	Kakaako Makai-Iwilei 25KV DL	158,388	31,740	5,161,887	2,403,419	0
P0000786	Kahe 1 BW Sump Upgrade	6,082	0	0	0	0
P0000793	Field Service/Meter Reading	0	14,376	558,689	0	0
P0000794	Call Center-1st floor	0	363,783	86,566	0	0
P0000795	Parking-C&M,SysOp,&Employee	592	61,345	459,471	0	0
P0000797	W3-W4 Svc Air Compr	236,334	0	0	0	0
P0000798	W6 Instr Air Compr	7,362	0	0	0	0
P0000799	K2 Operator Console Upgrade	0	1,107	194,258	1,169	0
P0000800	K1 Operator Console Upgrade	187,354	1,125	0	0	0
P0000801	W4 Operator Console Upgrade	164,424	1,110	0	0	0
P0000802	W5 Operator Console Upgrade	140,966	51,113	0	0	0
P0000804	W6 Operator Console Upgrade	2,743	0	0	0	0
P0000805	Kahe Intake Lighting	81,837	0	0	0	0
P0000807	H8 TSI Upgrade	5,468	295,276	5,098	0	0
P0000808	K3 Annunciator Replacement	7,763	234,912	166,684	0	0
P0000809	K6 Annunciator Replacement	367,924	0	0	0	0
P0000810	W7 Annunciator Replacement	30,486	395,697	0	0	0

2005-2009 Approved Capital Expenditures Budget

Project #	Project Title	2005	2006	2007	2008	2009
P0000811	W8 Annunciator Replacement	0	423,188	0	0	0
P0000812	K5 Annunciator Replacement	0	0	38,662	406,088	0
P0000813	K3&4 Control Room AC	120,785	0	0	0	0
P0000814	H8 Volt Reg/Exciter Replace	5,113	344,140	4,171	0	0
P0000815	H9 Volt Reg/Exciter Replace	0	0	361,188	4,260	0
P0000816	W5 Exciter/Regulator Replace	92,720	486,876	0	0	0
P0000817	W6 Exciter/Regulator Replace	0	90,716	491,844	0	0
P0000818	W7 Exciter/Regulator Repl	54,826	322,288	0	0	0
P0000819	W8 Exciter/Regulator Repl	0	576,852	0	0	0
P0000820	K1 Main Xfmr Replacement	1,108,526	900	0	0	0
P0000821	K2 Battery Bank Replacement	2,174	0	0	0	0
P0000826	ITS Renovation	379,513	0	0	0	0
P0000827	K3 DCS Balance of Plant I/O	18,815	170,419	30,131	0	0
P0000828	Outage Management System	33,791	351,364	0	0	0
P0000829	W4 Main Xfmr Replacement	640,036	65,825	0	0	0
P0000830	K1 Aux Xfmr Replacement	219,543	900	0	0	0
P0000831	H8 Operator Console Upgrade	0	147,808	574	0	0
P0000833	Mamala Substation	470,854	0	0	0	0
P0000834	46kV Fdrs to Mamala Sub	278,836	3,000,000	0	0	0
P0000835	Comm Links Mamala Sub	415,341	0	0	0	0
P0000836	Ford Island Substation	4,027,300	3,884	0	0	0
P0000837	Makalapa 46kV Brkr Addition	504,452	3,201	0	0	0
P0000838	46kV Fdrs to FI Sub	12,037,243	3,175,557	0	0	0
P0000839	Comm. Links FI-Maklpa	300,403	0	0	0	0
P0000853	K2 Excitation System	0	13,279	578,728	0	0
P0000854	K1 Excitation System	578,158	0	0	0	0
P0000856	W7 Main Transformer	16,398	1,145,716	0	0	0
P0000857	W7 Aux Transformer	8,872	187,148	0	0	0
P0000858	H8 Annunciator Replacement	5,772	369,825	0	0	0
P0000859	H9 Annunciator Replacement	0	1,103	385,108	0	0
P0000860	K2 Annunciator Replacement	2,430	0	0	0	0
P0000861	K1 Annunciator Replacement	351,328	0	0	0	0
P0000862	W7 Cond. Refurbishment	437,916	834,709	0	0	0
P0000864	Iwi 46 kV Sub Ctrl Hse Upgr	0	1,202,364	196,197	0	0
P0000869	K4 Annunciator Replacement	411,908	0	0	0	0
P0000870	H9 Generator Rotor Rewind	2,893	0	0	0	0
P0000871	Kahe 1 Sootblower Controls	314,028	0	0	0	0
P0000872	Kahe 3 Sootblower Controls	29,538	287,908	0	0	0
P0000874	Kahe 4 Sootblower Controls	281,830	10,633	0	0	0
P0000875	Honolulu 8 Sootblower Ctrls	4,861	313,154	0	0	0
P0000876	Honolulu 9 Sootblower Ctrls	0	4,981	317,307	0	0
P0000887	COGEN: Pacific Allied	888,408	0	0	0	0
P0000890	Kahe 5 Ignitor Atomization	0	0	0	286,771	0
P0000895	H8 Main Xfmr Replacement	0	746,540	1,149	0	0
P0000897	HECO CHP Program	331,218	5,840,617	7,700,778	196,199	3,498,000
P0000899	BP Tank 132 Improvements	0	3,749	645,910	0	0
P0000900	BP Tank 133 Improvements	0	0	3,841	605,330	0
P0000901	Kahe Reclaimed Oil Transfer	64,806	0	0	0	0
P0000917	Village Park - DB Cable Rpl	868,967	0	0	0	0
P0000922	Kamoku 46kV UG Alt Phase 1	3,487,127	14,946,432	962,465	0	0
P0000924	Kamoku 46kV UG Alt Phase 2	71,293	599,009	3,087,841	9,706,670	0
P0000931	K5 to CW Basin Pipe Trench	455,517	0	0	0	0
P0000934	Kahe Turbine Drains	263,599	89,743	0	93,470	0
P0000935	HPP Turbine Drains	0	89,743	0	0	0
P0000936	Waiau Turbine Drains	0	179,487	91,618	186,939	0
P0000939	Waiau CT Separation	504,738	0	0	0	0

2005-2009 Approved Capital Expenditures Budget

Project #	Project Title	2005	2006	2007	2008	2009
P0000940	Pearl Highlands 2nd Fdr	245,212	0	0	0	0
P0000943	Honolulu Boiler Wash sump	389,655	0	0	0	0
P0000946	KoOlina SS Tsf#1 Install	64,605	202,398	1,380,118	0	0
P0000947	KoOlina 46kV lines	54,301	249,325	1,614,678	0	0
P0000948	KoOlina 12kV lines	4,030	12,174	34,662	0	0
P0000949	Ocean Point SS Land Purchase	0	225,000	0	0	0
P0000950	Ocean Point SS Tsf#1 Install	21,418	1,571,876	14,392	0	0
P0000951	Ocean Pointe 46kV Lines	10,579	874,005	863,480	0	0
P0000952	Ocean Pointe 12kV Lines	1,543	207,129	0	0	0
P0000953	Kahe FWH Press/Temp Instr	122,552	0	0	0	0
P0000954	K2 BFP Rotating Elem/Volute	304,655	0	0	0	0
P0000956	Waiau WWTF ChemFeed Mods	132,433	0	0	0	0

2005-2009 Approved Capital Expenditures Budget

Project #	Project Title	2005	2006	2007	2008	2009
P1244000	Copiers/Faxes/Printers	193,794	198,198	198,198	198,198	198,198
P1250000	Vehicle Purchases	1,753,722	1,841,039	1,933,532	2,030,428	2,030,428
P1251000	Misc Tel Eqpt NT	6,056	11,011	11,011	33,033	33,033
P1370000	Distr R/W Purch (Blanket)	100,000	100,000	100,000	100,000	100,000
P1373000	46kv R/W Purch (blanket)	100,000	100,000	100,000	100,000	100,000
P1429000	Emergency Power Plant	942,575	968,574	958,151	958,151	958,151
P1470000	Minor Trans Sub Addns	553,895	533,268	443,777	448,448	448,448
P1480000	Minor Dist Sub Addns	631,924	635,958	668,705	632,957	632,957
P1500000	Misc CM Fac-Op & Ctrl (TD)	452,262	247,684	227,402	235,706	235,706
P1505000	Other Misc Comm Fac SOD	116,409	118,738	121,036	125,950	125,950
P1510000	Misc OH Svc & Extn (CID)	2,643,067	2,674,671	2,707,584	2,737,476	2,737,476
P1580000	Minor OH Dist Addn (CID)	822,760	832,712	842,660	838,903	838,903
P1670000	P&I&Test Meters & Mtr Eq	732,052	746,426	766,076	766,076	766,076
P1680000	Tsf & Equip Pur/Svc (CID)	5,270,889	5,261,076	5,251,251	5,241,510	5,241,510
P1690000	Minor T&D Customer Programs	377,332	382,116	388,762	388,762	388,762
P1700000	Misc UG Svc & Extn (CID)	12,959,169	13,144,812	13,330,874	13,525,817	13,525,817
P1789000	Preventive OH Transf Repl	556,508	563,429	570,966	577,572	577,572
P1793000	Preventive UG Transf Repl	784,796	795,220	807,441	817,968	817,968
P1810000	Prev Misc Cable Failure Rpl	3,131,150	3,131,997	3,133,564	3,134,779	3,134,779
P1820000	Minor UG Addns (CID)	1,120,843	1,132,434	1,143,479	1,153,430	1,153,430
P1870000	Power Station Misc	241,967	200,926	140,258	92,187	534,712
P1990000	Minor T&D System Programs	433,031	440,324	447,546	454,482	454,482
P3400000	Prev OH Dist Repl	1,365,079	1,380,010	1,394,523	1,407,321	1,407,321
P3401000	Prev OH Subtrans Repl	1,944,547	1,953,821	1,961,127	1,967,364	1,967,364
P3402000	Prev OH Trans Repl	1,393,822	1,410,938	1,428,374	1,443,411	1,443,411
P4150000	Monitoring Services	49,709	43,364	0	0	0
P4900000	Barbers Point Unit 1 Addition	1,530,813	2,706,982	15,352,643	65,921,111	41,067,362
P7060000	Kahe Disc Struct Reinf	262,284	3,883,247	0	0	0
P7590000	W7 Controls Upgrade	1,467,951	651,214	0	0	0
P7650000	W8 Controls Upgrade	300,801	2,216,378	0	0	0
P8290000	Tripler Wahiawa mwr replace	168,984	0	0	0	0
P8470000	Koolau/Tripler MWR Repl	357,641	0	0	0	0
P8820000	W4 Exciter Upgrade	315,646	21,087	0	0	0
P9025000	H PP FO Viscosity Ctrl	0	0	39,738	0	0
P9028000	Mobile Radio F1/F2 Replace	696,976	0	0	0	0
P9107000	H9 Boiler Control System	0	1,110	395,877	0	0
P9262000	Malae-Koolau MW Replace	474,557	0	0	0	0
P9401000	Kahe Fire Pump Inst	96,455	0	0	0	0
P9454000	K4 Boiler Control Upgrade	2,150,970	0	0	0	0
P9486000	H9 Steam Atomizer Conv	0	0	479,027	0	0
P9511000	Generation Hotline Upgrd	55,474	0	0	0	0
P9537000	K4 Turbine Controls Upgrade	0	29,901	847,101	174,035	0
P9539000	K3 Boiler Control Upgrade	225,614	1,750,984	490,864	1	0
P9541000	K4 Data Acq and Monitor	354,696	0	0	0	0
P9903000	Puuloa Road Widening	381,802	0	0	0	0

CA-IR-202

Ref: Capital Budgeting.

a. Please provide the budgeted and actual program expenditures for each month of 2003 and 2004.

b. Please provide a copy of the budgeted program expenditures for each month of 2005.

HECO Response:

a. The requested information is provided on pages 2 through 9.

b. The requested information is provided on pages 10 through 11.

c.
Expenditures

	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03
itor Install	10,991	10,312	11,560	8,505	74,719	8,144	3,993	0	0	0	0	0
)H Trsf Rpl	22,156	22,156	22,156	22,156	22,156	22,156	22,156	22,156	22,156	22,156	22,156	22,156
JG Trsf Rpl	27,527	27,527	27,527	27,527	27,527	27,527	27,527	27,527	27,527	27,527	27,527	27,527
is Cable Rpl	198,865	198,865	198,865	198,865	198,865	198,865	198,865	198,865	198,865	198,865	198,865	198,865
)H Dist Rpl	122,027	122,027	122,027	122,027	122,027	122,027	122,027	122,027	122,027	122,027	122,027	122,027
H Subtrn Rpl	32,521	32,521	32,521	32,521	32,521	32,521	32,521	32,521	32,521	32,521	32,521	32,521
od Poles	59,279	59,279	59,279	59,279	59,279	59,279	59,279	59,279	59,279	59,279	59,279	59,279
enance	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250
enance	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083
Repl Prog	4,171	5,104	13,128	8,640	0	6,136	3,077	0	0	0	0	0
iture	9,684	9,684	9,684	9,684	9,684	9,684	9,684	9,684	9,684	9,684	9,684	9,684
pment	5,898	5,898	5,898	5,898	5,898	5,898	5,898	5,898	5,898	5,898	5,898	5,898
n Addns	6,156	6,156	6,156	6,156	6,156	6,156	6,156	6,156	6,156	6,156	6,156	6,156
Addns	16,312	16,312	16,312	16,312	16,312	16,312	16,312	16,312	16,312	16,312	16,312	6,312
ldns	6,524	6,524	6,524	6,524	6,524	6,524	6,524	6,524	6,524	6,524	6,524	6,524
Plt Addns	3,356	3,356	3,356	3,356	3,356	3,356	3,356	3,356	3,356	3,356	3,356	3,356
Monitors	583	1,222	4,931	15,262	33,012	9,347	16,375	17,156	1,322	1,322	0	0
Test	19,164	26,398	3,177	19,829	19,908	19,908	26,680	36,030	36,030	16,967	0	7,616
Replacement	7,709	12,930	2,334	10,787	13,326	6,165	6,165	28,407	17,164	7,706	8,851	0
Smoke Detector	0	0	0	0	0	0	2,298	4,596	30,390	28,092	25,794	0
Smoke Detector	0	0	0	0	0	0	2,298	4,596	30,390	28,092	25,794	0
Smoke Detector	0	1,364	2,298	4,596	30,390	29,457	25,794	0	0	0	0	0
moke Detectors	0	682	2,298	4,596	30,390	28,775	25,794	0	0	0	0	0
SWGR Replace	3,167	5,591	1,552	0	0	8,223	59,743	287,691	151	0	0	834
Cable Replace	2,599	6,941	2,063	2,063	173,631	220,945	49,266	48,683	5,495	9,511	8,031	5,684
upport Prgrm	15,000	0	0	0	0	6,000	0	0	7,000	0	0	9,000
Operations	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072
& Equip	66,968	66,968	66,968	66,968	66,968	66,968	66,968	66,968	66,968	66,968	66,968	6,968
S	84,231	84,231	84,231	84,231	84,231	84,231	84,231	84,231	84,231	84,231	84,231	4,231
nredders	0	11,343	11,343	19,283	11,343	11,343	11,343	11,343	11,343	11,343	11,343	0
es	0	0	0	0	0	538,793	244,442	113,430	416,288	297,187	238,203	5,073
	513	513	513	513	513	513	513	513	513	513	513	513
Dist Cable	110,529	110,529	110,529	110,529	110,529	110,529	110,529	110,529	110,529	110,529	110,529	0,529
(Blanket)	0	0	0	0	0	0	0	0	0	0	0	0,000
(blanket)	0	0	0	0	0	0	0	0	0	0	0	0,000
r Plant	72,853	72,841	72,842	72,842	72,841	72,841	72,842	72,841	72,841	72,842	72,841	2,842
Addns	26,070	28,707	36,178	26,388	31,515	38,539	28,562	70,312	50,577	31,076	64,370	8,111
ddns	50,153	59,318	48,850	48,774	52,073	57,889	52,720	49,715	51,959	56,050	49,342	9,663
& Ctrl (TD)	22,345	22,017	22,429	21,939	22,424	22,057	21,851	22,321	22,500	22,061	22,044	2,125
n Fac SOD	1,418	63,207	63,207	1,418	1,418	10,405	1,418	1,418	10,405	1,418	1,418	1,418
xtn (CID)	196,416	196,501	196,493	196,416	196,501	196,493	196,493	196,501	196,493	196,416	196,578	3,493
ldn (CID)	114,455	114,456	114,603	114,455	114,604	114,533	114,603	114,456	114,603	114,603	114,604	4,603
& Mtr Eq	67,400	67,138	67,327	67,412	67,138	67,166	67,336	67,138	67,335	67,471	67,138	7,122
Svc (CID)	303,431	303,436	303,431	303,431	303,436	303,431	303,431	303,436	303,431	303,431	303,436	3,431
mer Programs	32,380	32,489	32,350	32,529	32,558	32,511	32,571	32,529	32,487	32,335	32,691	2,453
xtn (CID)	694,120	693,431	693,257	694,051	693,339	693,201	693,271	693,501	693,889	693,271	2,693,431	3,844
ansf Repl	18,412	18,412	18,412	18,412	18,412	18,412	18,412	18,412	18,412	18,412	18,412	3,412
ansf Repl	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505	9,505
Failure Rpl	203,093	203,093	203,093	203,093	203,093	203,093	203,093	203,093	203,093	203,093	203,093	3,093

Hawaiian Electric Co., Inc.
2003 Budgeted Program Expenditures

Project #	Project Title	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03
P1820000	Minor UG Addns (CID)	127,632	127,483	127,632	127,169	127,635	127,555	127,325	127,558	127,325	127,476	127,328	127,555
P1870000	Power Station Misc	45,478	45,493	45,478	45,478	45,493	45,478	45,342	45,493	45,478	45,478	45,493	45,478
P1990000	Minor T&D System Programs	26,761	26,697	26,697	26,759	26,699	26,697	26,765	26,697	26,697	26,759	26,697	26,702
P3400000	Prev OH Dist Repl	312,547	312,547	312,547	312,547	312,547	312,547	312,547	312,547	312,547	312,547	312,547	312,547
P3401000	Prev OH Subtrans Repl	148,142	148,142	148,142	148,142	148,142	148,142	148,142	148,142	148,142	148,142	148,142	148,142
P3402000	Prev OH Trans Repl	18,911	18,911	18,911	18,911	18,911	18,911	18,911	18,911	18,911	18,911	18,911	18,911
P9544000	FO Tank Level Gauge Upgrade	5,080	184,852	49,224	0	0	0	0	0	0	0	0	0

Hawaiian Electric Co., Inc.
2003 Actual Program Exenditures

Project #	Project Title	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03
P0000089	Pwr Quality Monitor Install	287	146	147	33,130	2,179	6,154	8,839	13,035	1,723	862	614	619
P0000120	Corr (Inc Emg) OH Trsf Rpl	41,821	32,896	30,449	32,546	21,968	25,366	24,893	21,023	36,615	25,958	27,298	32,902
P0000121	Corr (Inc Emg) UG Trsf Rpl	25,951	13,377	13,180	31,141	47,038	20,524	54,475	62,756	47,441	54,241	27,013	94,791
P0000122	Cor (Inc Emg) Mis Cable Rpl	135,824	95,705	204,822	92,297	240,775	247,785	303,862	211,644	258,052	363,844	268,807	532,591
P0000123	Corr (Inc Emg) OH Dist Rpl	216,787	113,232	171,523	216,327	158,428	193,718	195,588	176,717	263,609	137,979	164,803	232,897
P0000124	Cor (Inc Emg) OH Subtrn Rpl	14,093	3,110	6,465	81,068	25,701	89,384	214,219	163,378	77,124	25,975	24,346	34,976
P0000377	Special Use Equip/Laptops	627	4,649	224	0	0	0	0	0	0	-5,501	0	0
P0000445	Trayer Sub Sw Repl Prog	3	4	4	4	990	2,300	443	65	64	918	36	177
P0000498	HECO Employee Cafeteria	0	0	0	0	171	0	0	0	0	0	0	0
P0000500	Misc Office Furniture	14,807	14,322	3,100	9,857	6,413	1,425	1,968	4,286	1,141	539	8,337	1,845
P0000501	Misc Office Equipment	575	1,186	3,694	197	4,772	2,634	31,847	0	0	512	0	18,501
P0000502	Waiau Minor Gen Addns	6,489	-45,262	-17,581	-12	0	0	0	0	0	0	0	0
P0000503	Ward Ave Minor Addns	0	2,063	26,008	3,214	117	1,561	212	213	215	1,970	7,918	66,837
P0000504	King St Minor Addns	1,129	8	8	13,930	4,971	143	144	145	146	875	149	193
P0000505	Other Minor Gen Plt Addns	0	0	0	0	0	0	0	94	331	3	1,736	1,600
P0000510	Circ Water Temp Monitors	1,640	1,046	10,222	4,101	8,659	12,259	1,132	635	10,891	13,738	1,601	882
P0000511	BFP Automated Test	4,096	20,822	17,746	15,940	14,018	19,599	9,608	4,311	19,636	18,339	10,761	4,068
P0000590	PP Security Hardware Upgrade	297	1,459	5,570	62,082	10,403	636	641	489	14	126	4	4
P0000601	Gen Prot Relay Replacement	12,023	11,436	18,610	14,042	15,519	5,435	16,821	14,022	18,929	28,958	25,306	30,213
P0000617	W5-8 Turb Deck Drain Piping	0	0	66	371	1	128,697	0	9,780	0	0	0	0
P0000629	K1-6 Swgr Rm Smoke Detectors	0	0	0	0	701	162	2,646	3,494	2,321	9,929	11,331	1,124
P0000674	Waiau Start-Up SWGR Replace	7,035	16,325	16,165	8,182	7,142	8,165	18,149	320,300	72,988	79,124	6,768	4,101
P0000685	Waiau Start-Up Cable Replace	1,779	4,711	6,765	5,665	13,187	9,995	51,060	124,334	93,538	219,532	79,880	9,648
P0000733	Trns Sub RTU Migration Pgm	0	0	9,406	6,422	24,681	18,218	17,733	10,939	26,312	55,974	35,614	164,623
P0000737	Chlorine Dioxide Systm	0	0	0	0	0	0	0	0	0	178,618	455	57
P1081000	Capitalized Tools & Equip	24,961	29,775	39,688	58,045	132,795	84,290	28,182	61,292	21,255	134,276	192,470	167,395
P1243000	Purchase PCs-ITS	55,355	58,224	8,730	38,859	66,777	11,539	48,561	40,978	-22,496	10,402	76,310	689,432
P1244000	Copiers/Faxes/Shredders	0	0	0	0	0	0	0	0	13,978	10,959	0	186,295
P1250000	Vehicle Purchases	2,379	0	19,667	133,800	494,077	51,051	24,972	392,281	101,240	344,656	51,984	433,372
P1251000	Misc Tel Eqpt NT	0	573	0	0	0	0	0	0	0	0	702	0
P1260000	C&M Recon UG Dist Cable	14,186	6,651	65,483	-29,510	73,034	-5,434	2,599	2,617	2,636	864,181	17,477	366,082
P1370000	Distr R/W Purch (Blanket)	0	82	6,786	2,080	0	578	2,105	3,325	180	0	0	50
P1373000	46kv R/W Purch (blanket)	0	0	14,868	16,698	0	0	100	2,000	305	0	133,355	0
P1429000	Emergency Power Plant	-314,673	-279,020	117,944	35,844	323,976	129,277	49,307	53,274	129,137	525,274	91,993	97,993
P1470000	Minor Trans Sub Addns	67,681	121,502	12,152	87,794	123,206	99,845	199,478	169,915	85,948	65,520	70,697	357,514
P1480000	Minor Dist Sub Addns	25,224	45,872	91,239	158,178	114,047	77,291	76,088	179,922	227,680	186,036	634,460	897,720
P1500000	Misc CM Fac-Op & Ctrl (TD)	21,561	29,429	29,437	56,187	42,357	11,950	25,004	29,734	16,346	194,198	261,096	231,712
P1505000	Other Misc Comm Fac SOD	4,545	685	213	14,470	4,242	7,520	6,413	10,631	3,865	13,662	88,944	23,899
P1510000	Misc OH Svc & Extn (CID)	168,491	126,875	150,866	134,238	141,343	184,552	162,148	155,949	183,583	114,153	105,734	148,252
P1580000	Minor OH Dist Addn (CID)	39,343	49,199	74,857	69,776	82,373	43,057	49,522	73,843	77,452	65,650	23,039	34,548
P1670000	P&I&Test Meters & Mtr Eq	29,759	31,239	25,500	29,335	32,002	23,159	148,622	30,098	74,319	17,001	12,577	174,293
P1680000	Tsf & Equip Pur/Svc (CID)	354,691	342,799	188,442	376,637	339,165	490,715	704,768	280,338	530,673	449,607	433,030	192,964
P1690000	Minor T&D Customer Programs	44,976	21,974	19,275	14,766	2,130	12,196	17,771	18,656	12,453	18,863	55,820	106,442
P1700000	Misc UG Svc & Extn (CID)	701,604	748,507	925,170	747,232	991,286	896,271	822,761	728,639	721,532	660,326	5,447,795	811,433
P1789000	Preventive OH Transf Repl	5,208	17,168	22,977	12,834	22,845	8,709	2,459	2,482	10,000	4,166	4,443	2,207
P1793000	Preventive UG Transf Repl	63,483	71,598	17,518	20,945	19,694	18,105	36,770	18,784	11,179	19,199	20,227	23,019
P1810000	Prev Misc Cable Failure Rpl	66,352	73,793	164,453	219,718	338,334	212,213	120,396	78,803	206,096	-785,499	63,836	57,265
P1820000	Minor UG Addns (CID)	88,432	91,287	127,213	89,251	72,183	65,828	44,320	99,224	96,476	70,969	57,073	108,310
P1870000	Power Station Misc	41,053	3,034	47,454	49,605	25,528	21,865	21,959	8,825	37,092	23,756	15,949	293,197

Hawaiian Electric Co., Inc.
2003 Actual Program Exenditures

Project #	Project Title	Jan-03	Feb-03	Mar-03	Apr-03	May-03	Jun-03	Jul-03	Aug-03	Sep-03	Oct-03	Nov-03	Dec-03
P1990000	Minor T&D System Programs	36,121	50,747	3,072	16,990	29,295	112,519	62,427	56,674	132,270	86,832	23,510	219,971
P1991000	Minor Dist Design UG Addns	682	685	687	692	697	689	694	699	704	709	714	719
P3400000	Prev OH Dist Repl	-1,543,449	197,464	254,294	181,456	246,288	123,791	119,250	-192,868	140,335	454,889	-8,657	-167,855
P3401000	Prev OH Subtrans Repl	-65,476	46,869	96,700	145,967	75,636	71,789	76,589	136,700	136,456	73,285	79,617	77,802
P3402000	Prev OH Trans Repl	112,298	93,562	52,377	39,138	131,235	113,198	73,216	81,415	113,189	113,572	128,146	52,512
P9544000	FO Tank Level Gauge Upgrade	1,781	0	0	0	0	0	0	0	0	683	7,550	7,101

[redacted]

Hawaiian Electric Co., Inc.
2004 Budgeted Program Expenditures

Project #	Project Title	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04
P1810000	Prev Misc Cable Failure Rpl	390,046	396,588	337,701	246,946	274,228	250,480	160,247	362,880	735,778	386,846	296,864	251,930
P1820000	Minor UG Addns (CID)	100,947	100,685	100,915	100,356	100,949	100,915	100,404	100,949	100,652	100,899	100,406	100,915
P1870000	Power Station Misc	23,501	23,501	23,501	23,501	23,439	23,439	23,439	23,439	23,315	23,315	23,315	23,315
P1990000	Minor T&D System Programs	33,080	33,083	33,076	33,081	33,079	33,081	33,082	33,079	33,079	33,079	33,083	33,076
P3400000	Prev OH Dist Repl	131,739	112,732	110,787	93,182	106,089	110,930	93,344	72,190	64,027	71,912	87,964	93,597
P3401000	Prev OH Subtrans Repl	363,714	148,788	137,352	254,556	56,274	102,638	91,565	154,650	160,602	70,740	41,505	280,742
P3402000	Prev OH Trans Repl	162,593	101,488	122,890	144,329	147,230	118,466	73,038	106,889	79,840	149,208	87,433	123,302
P9028000	Mobile Radio F1/F2 Replace	1,714	1,726	1,739	1,751	1,900	13,527	2,013	2,027	38,862	168,032	30,333	31,318
P9544000	FO Tank Level Gauge Upgrade	0	0	0	1	1	1	1	677	4,244	42,060	130,632	52,296

Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04
1,598	632	342	157	158	160	899	352	4,838	585	12,191	28,847
57,587	39,066	72,724	48,134	22,387	33,639	26,274	28,562	22,306	34,377	49,330	21,240
67,775	18,052	11,430	20,243	20,104	27,018	46,864	46,683	67,739	54,918	66,843	67,996
697,253	453,177	07,314	601,575	1,131,915	940,987	775,218	1,033,338	1,069,294	887,668	943,297	330,146
795,576	329,186	14,587	268,156	174,822	163,035	146,577	163,377	163,530	192,448	207,811	123,930
-1,221	7,880	10,908	19,819	29,058	12,128	17,798	13,560	2,944	10,993	104,459	38,340
195	40	36	39	41	549	760	49	1,279	503	663	163
0	0	0	1,090	0	0	0	0	0	0	0	0
2,594	6,762	2,267	12,852	14,745	44,406	10,787	48,763	10,446	33,075	8,159	14,776
104	0	1,999	0	958	9,593	11,035	14,880	119	1,017	6,662	7,624
0	0	0	0	0	0	0	1,928	14	105	483	2,827
1,070	3,722	8,645	6,229	1,579	52,111	11,789	5,108	4,508	1,800	1,448	7,683
147	148	149	150	151	152	2,299	14,948	1,418	617	2,960	11,110
706	392	1,578	1,034	1,690	3,802	21,982	8,660	304	950	915	1,216
830	2,236	8,945	4,093	7,610	12,679	3,744	6,513	14,473	2,223	5,256	13,725
4,537	5,218	5,368	5,439	4,751	15,824	17,109	24,117	16,903	1,640	16,621	10,740
4	1,044	7,016	4,232	59,550	7,955	79	79	19,948	28,775	120	5
25,994	11,665	7,409	5,634	2,131	11,723	16,950	35,062	18,650	38,165	12,354	17,276
226	227	229	230	232	1,232	266	244	246	248	250	251
9,680	0	0	0	0	0	0	0	0	0	0	62,083
340	0	0	1,363	0	0	0	0	0	0	-1,363	0
4,187	4,140	4,169	11,142	4,278	4,309	140	0	0	0	0	0
0	0	0	0	0	0	0	0	0	388	1,390	52,060
108,723	9,058	3,873	54,632	6,050	4,778	131	0	0	0	3,073	0
64,563	56,503	8,579	70,481	96,840	74,392	22,591	93,488	67,007	90,392	108,777	195,189
233	0	940	31	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1,754	12	13	13	13
0	0	440	544	232	317	10,910	-8,962	25	10,975	103	8,367
0	0	0	0	0	0	2,602	22,526	2,059	9,122	24,159	77,191
0	0	0	0	0	0	5,848	13,776	11,934	90,490	3,558	105,177
48,435	58,778	3,306	30,001	32,276	50,323	26,253	154,393	51,813	64,679	222,920	94,408
58,430	4,216	1,071	6,268	18,018	23,449	52,455	309,378	25,093	23,345	134,545	634,752
687	312	950	2,739	0	1,095	6,525	5,732	0	1,021	16,655	235,622
6,889	-5,684	0,172	245,685	104,109	88,523	98,016	173,847	0	249,321	550,107	222,501
0	0	736	0	0	0	1,404	115	0	0	0	0
76,634	10,105	3,610	10,250	10,323	10,396	10,470	925	0	0	0	0
0	0	2,613	14,400	5,125	0	-5	9,128	0	75	0	2,525
0	0	101	1,390	2	0	25	0	3,606	10,955	0	0
-10,493	37,566	5,295	211,141	355,920	-403,025	257,593	197,191	289,955	37,965	232,086	170,135
-18,983	65,499	1,900	109,190	140,877	149,697	212,129	112,399	15,030	36,253	25,909	62,754
382,505	158,214	',244	154,724	101,307	105,043	137,505	186,186	205,168	258,759	178,098	37,348
222,665	59,864	,127	34,536	27,990	23,356	41,609	32,603	35,775	74,505	61,849	49,560
445	466	,628	798	1,034	15,804	5,234	1,376	2,967	6,877	20,558	72,633
170,103	148,333	,512	143,236	155,554	153,682	139,742	109,098	111,649	115,170	115,149	103,682
58,435	62,445	,067	54,623	39,616	132,047	93,749	99,510	131,261	134,898	113,902	98,453
36,720	56,103	,633	30,882	33,667	21,484	14,708	31,668	54,625	30,490	190,759	180,344
427,913	110,128	,404	228,428	189,709	276,035	357,400	569,470	469,983	349,301	552,149	418,172
122,943	33,671	,528	14,452	7,640	20,721	68,265	1,584	1,930	2,686	37,504	22,865
775,090	800,737	,289	712,863	727,004	800,596	877,954	774,357	690,646	906,296	3,658,402	557,667

Hawaiian Electric Co., Inc.
2004 Actual Program Expenditures

Project #	Project Title	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Nov-04	Dec-04
P1789000	Preventive OH Transf Repl	3,632	7,381	4,657	4,662	14,909	16,082	12,416	14,865	8,219	8,500	5,560	2,031
P1793000	Preventive UG Transf Repl	33,968	25,107	24,358	18,949	-57,062	6,643	6,573	14,327	17,484	7,970	8,215	49,483
P1800000	Minor OH To UG Conv (CID)	0	0	0	-11,197	0	0	0	0	0	0	0	0
P1810000	Prev Misc Cable Failure Rpl	35,751	49,185	211,020	31,238	152,510	218,515	116,672	284,086	102,330	220,310	198,082	155,706
P1820000	Minor UG Addns (CID)	84,750	95,684	86,635	119,358	90,494	86,365	97,246	146,973	189,309	131,195	85,252	75,662
P1870000	Power Station Misc	22,006	114,026	34,911	59,706	78,783	115,584	84,474	84,940	30,312	77,281	35,146	56,500
P1990000	Minor T&D System Programs	104,398	-33,783	69,466	111,134	52,258	52,292	60,549	78,430	108,019	68,455	45,441	108,861
P1991000	Minor Dist Design UG Addns	721	726	731	737	742	747	752	758	763	769	774	779
P3400000	Prev OH Dist Repl	137,163	83,932	67,418	53,017	84,836	-81,311	-30,388	11,140	-9,454	65,688	30,504	32,385
P3401000	Prev OH Subtrans Repl	39,077	104,889	143,214	141,525	128,702	33,222	32,989	69,923	42,588	63,075	57,425	80,601
P3402000	Prev OH Trans Repl	3,373	40,344	-37,346	7,639	114,779	46,007	92,846	47,943	83,972	69,423	17,585	23,912
P9544000	FO Tank Level Gauge Upgrade	1,927	0	0	470	0	186	403	0	0	54	1,884	20,637

-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05
858	6,541	7,728	5,407	63,563	5,112	3,163
379	18,537	26,791	20,901	24,979	24,803	23,871
978	17,843	18,162	14,685	14,881	19,133	34,708
632	33,495	62,921	70,078	73,149	78,459	124,589
793	55,952	55,411	48,791	54,580	62,987	67,863
856	43,608	16,615	27,746	52,234	23,029	42,583
458	9,458	9,458	9,458	9,458	9,458	9,458
001	6,001	6,001	6,001	6,001	6,001	6,001
599	4,599	4,599	4,599	4,599	4,599	4,599
776	15,776	15,776	15,776	15,776	15,776	15,776
512	5,512	5,512	5,512	5,512	5,512	5,512
460	3,460	3,460	3,460	3,460	3,460	3,460
0	0	0	0	0	0	1,616
750	4,544	26,197	15,845	18,911	10,264	24,345
536	31,706	28,977	20,023	16,794	12,705	6,960
185	1,485	1,485	1,485	23,280	0	0
0	0	0	0	0	0	0
997	0	0	0	0	0	0
0	0	23,110	619	0	0	0
0	0	0	0	0	0	0
0	0	0	0	0	65,376	0
673	77,023	1,830	15,053	70,788	9,370	1,757
0	0	9,701	1,826	7,320	70,773	0
000	0	0	5,000	0	0	5,000
05	53,511	54,986	53,511	54,986	53,511	54,986
02	27,602	27,602	27,602	27,602	27,602	27,602
0	87,866	0	0	87,866	0	0
69	8,640	22,909	0	5,569	22,909	0
62	20,162	20,042	20,162	20,058	20,180	20,058
0	76,852	84,031	30,906	0	0	0
43	1,143	52,639	16,963	6,712	1,143	51,495
0	0	0	0	0	0	0
67	67,767	67,767	67,767	67,767	67,767	67,767
76	84,876	84,876	84,876	84,876	84,876	84,876
49	16,149	16,149	16,149	16,149	16,149	16,149
0	0	26,426	266,136	529,629	288,488	13,213
05	505	505	505	505	505	505
0	0	0	0	0	0	0
0	0	0	0	0	0	0
48	78,548	78,548	78,548	78,548	78,548	78,548
07	31,031	42,930	51,530	31,964	45,433	71,146
98	50,657	53,145	55,396	52,619	51,528	52,286
83	36,663	36,663	30,745	84,480	30,745	30,745
01	9,701	9,701	9,701	9,701	9,701	9,701
71	220,269	220,270	220,269	220,104	220,267	220,271
30	68,530	68,580	68,580	68,580	68,530	68,580
40	61,040	60,933	61,040	61,040	60,933	61,040
43	439,243	439,243	439,243	439,243	439,243	439,243
43	31,445	31,443	31,445	31,445	31,445	31,443

Oct-05	Nov-05	Dec-05
0	0	0
2,122	20,288	27,754
8,347	15,068	10,950
9,279	72,902	97,975
8,505	55,403	63,342
3,849	37,109	33,210
9,458	9,458	9,458
6,001	6,001	6,001
4,599	4,599	4,599
5,776	15,776	15,776
5,512	5,512	5,512
3,460	3,460	3,460
0	0	0
4,830	2,998	3,439
5,294	5,125	8,080
0	0	0
0	0	0
0	0	0
0	0	0
7,528	0	155,255
0	0	0
6,954	73,482	1,699
0	0	0
0	0	5,000
3,511	54,986	53,511
7,602	27,602	27,602
0	0	0
5,569	3,071	0
0,162	20,162	20,162
0	0	0
5,820	5,569	0
0	0	328,778
7,767	67,767	67,767
4,876	84,876	84,876
6,149	16,149	16,149
0	266,466	363,363
505	505	505
0	0	100,000
0	0	100,000
8,548	78,548	78,548
7,770	37,757	53,685
2,081	52,004	51,704
0,745	30,745	30,745
9,701	9,701	9,701
0,270	220,268	220,271
8,580	68,580	68,580
0,933	61,040	60,933
9,243	439,216	439,243
1,443	31,443	31,445

CA-IR-202
DOCKET NO. 04-0113
PAGE 10 OF 11

Hawaiian Electric Co., Inc.
2005 Budgeted Program Expenditures

Project#	Project Title	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05
P1700000	Misc UG Svc & Extn (CID)	798,111	735,066	816,086	816,123	816,086	807,277	685,690	870,162	942,176	780,258	3,981,284	910,851
P1789000	Preventive OH Transf Repl	46,011	56,657	56,625	45,374	80,860	51,717	41,179	34,049	38,560	34,827	47,981	22,668
P1793000	Preventive UG Transf Repl	75,609	41,431	87,885	62,605	85,999	74,215	70,447	93,453	67,350	50,990	54,997	19,814
P1810000	Prev Misc Cable Failure Rpl	293,552	275,285	234,347	201,611	203,964	226,905	194,231	289,283	481,810	273,467	262,498	194,198
P1820000	Minor UG Addns (CID)	93,469	93,469	93,469	93,273	93,469	93,469	93,273	93,273	93,469	93,469	93,469	93,273
P1870000	Power Station Misc	20,164	20,164	20,164	20,164	20,164	20,164	20,164	20,164	20,164	20,164	20,164	20,164
P1990000	Minor T&D System Programs	36,086	36,086	36,086	36,086	36,086	36,086	36,086	36,086	36,086	36,086	36,086	36,086
P3400000	Prev OH Dist Repl	134,810	128,146	120,475	123,104	158,040	126,178	106,058	87,674	88,965	104,648	94,718	92,261
P3401000	Prev OH Subtrans Repl	156,298	132,952	143,222	165,033	139,516	100,343	172,743	205,845	250,544	220,878	167,176	89,998
P3402000	Prev OH Trans Repl	156,264	76,093	68,738	134,002	141,175	154,428	69,542	110,390	48,425	191,697	93,974	149,094
P9028000	Mobile Radio F1/F2 Replace	59,663	66,026	140,543	55,121	312,938	24,816	20,638	10,306	6,924	0	0	0

CA-IR-203

Ref: Capital Budgeting.

Please provide a copy of the capital budget variance reports prepared for March 2004, June 2004, October 2004 and December 2004.

HECO Response:

Due to the voluminous nature of the information, one copy (pages 2 through 167) will be provided to the Consumer Advocate and the Public Utilities Commission under separate transmittal.

CA-IR-204

Ref: HECO-1803.

Please provide the following information regarding the capital improvement project that was the subject of Docket No. 03-0124.

a. Discuss and describe the impact, if any, of the new phone system upon services being received by HECO from Verizon, and the cost of services received from Verizon that may have changed as a result of installing the new phone system.

b. Discuss and quantify the impact, if any, of the new phone system upon the 2004 and 2005 operating budgets.

HECO Response:

a. The new phone system required HECO to add ISDN PRI (Integrated Services Digital Network Primary Rate Interface) circuits from Verizon for testing and production purposes.

- PRI for Testing VOIP (Voice Over Internet Protocol) Project (591-6420): October 2003 to current
- PRI Circuit (593-5000): November 2003 to August 2004

The new phone system also resulted in a reduction in circuits from Verizon, including:

- 5 Single Line circuits (548-4491): disconnected late December 2004
- 5 Single Line circuits (593-4326): disconnected in August 2004

b. In 2004, the actual impact for the new phone system was $34,682 as detailed below:

Reduction:

- $1,575 – Verizon, Single Line circuits: August 2004 to December 2004
- $20,676 – Verizon, ISDN PRI trunks: September 2004 to December 2004
- $19,708 – Pacific Lightnet, Centrex lines: September 2004 to December 2004

Addition:

- $11,875 – Time Warner ISDN PRI trunks: September 2004 to December 2004

- $64,766 – Time Warner NLAN (Native Local Area Network) service (for both data and voice applications): September 2004 to December 2004

The 2005 operating budget was increased by $403,000 for new phone system trunks, maintenance and data circuits.

CA-IR-205

Ref: AFUDC Accounting.

Please provide the following regarding the Company's AFUDC accounting:

a. Provide the AFUDC rate utilized in each month of 2004.

b. Provide the actual development of the AFUDC rate employed for each month of 2004.

c. Provide the forecasted AFUDC rate forecasted for each month of 2005

d. Provide the underlying development of the AFUDC rate employed for each month of the 2005 forecast.

HECO Response:

a. The afudc rate that was used for each month of 2004 was 0.7115%.

b. The requested information is provided on pages 2 through 3.

c. The forecasted afudc rate for each month of 2005 is 0.7246%.

d. The requested information is provided on pages 2 through 3.

CA-IR-205
DOCKET NO. 04-0113
AFUDC ACCOUNTING

	RECORDED RATE 2004	FORECAST RATE 2005
Average Balances		
Common Equity	**590,550**	**646,672**
Preferred Stock	22,293	22,293
Hybrid Preferred Stock	60,000	30,000
1st Mtge Bonds	0	0
Revenue Bonds (98A)	42,580	42,580
-1988 issue (99B)	30,000	30,000
-1990-A issue (99D)	16,000	16,000
-1990-B (2000)	21,000	21,000
-1990-C '88 (2000)	5,000	5,000
-1990-C '90 (2000)	20,000	20,000
-1992 Series (2003)	40,000	40,000
-1993 Series	50,000	50,000
-1995-A	40,000	40,000
-1996-A	48,000	48,000
-1996-B	14,000	14,000
-1997-A	50,000	50,000
-1999-C	35,000	35,000
- 2002 Series	26,766	34,720
S/T Borrowings	**39,721**	**31,494**
Total Capitalization	1,150,910	1,176,759
Capitalization Ratios		
Common Equity	51.3%	55.0%
Preferred Stock	1.9%	1.9%
Hybrid Preferred Stock	5.2%	2.5%
1st Mtge Bonds	0.0%	0.0%
Revenue Bonds (98A)	3.7%	3.6%
-1988 issue (99B)	2.6%	2.5%
-1990-A issue (99D)	1.4%	1.4%
-1990-B issue (2000)	1.8%	1.8%
-1990-C '88 (2000)	0.4%	0.4%
-1990-C '90 (2000)	1.7%	1.7%
-1992 Series (2003)	3.5%	3.4%
-1993 Series	4.3%	4.2%
-1995-A	3.5%	3.4%
-1996-A	4.2%	4.1%
-1996-B	1.2%	1.2%
-1997-A	4.3%	4.2%
-1999-C	3.0%	3.0%
- 2002 Series	2.3%	3.0%
S/T Borrowings	3.5%	2.7%
Total Capitalization	100.0%	100.0%

CA-IR-205
DOCKET NO. 04-0113
AFUDC ACCOUNTING

	RECORDED RATE 2004	FORECAST RATE 2005
Avg Rate/Req Return		
Common Equity	11.40%	11.40%
Preferred Stock	4.85%	4.85%
Hybrid Preferred Stock	7.68%	6.50%
1st Mtge Bonds	6.13%	6.13%
Revenue Bonds (98A)	4.95%	4.95%
-1988 issue (99B)	5.75%	5.75%
-1990-A issue (99D)	6.15%	6.15%
-1990-B issue (2000)	5.70%	5.70%
-1990-C '88 (2000)	5.70%	5.70%
-1990-C '90 (2000)	5.70%	5.70%
-1992 Series (2003)	5.00%	5.00%
-1993 Series	5.45%	5.45%
-1995-A	6.60%	6.60%
-1996-A	6.20%	6.20%
-1996-B	5.88%	5.88%
-1997-A	5.65%	5.65%
-1999-C	6.20%	6.20%
- 2002 Series	5.10%	5.10%
S/T Borrowings	2.50%	3.00%
Weighted Cost		
Common Equity	5.85%	6.26%
Preferred Stock	0.09%	0.09%
Hybrid Preferred Stock	0.40%	0.17%
1st Mtge Bonds	0.00%	0.00%
Revenue Bonds (98A)	0.18%	0.18%
-1988 issue (99B)	0.15%	0.15%
-1990-A issue (99D)	0.09%	0.08%
-1990-B issue (2000)	0.10%	0.10%
-1990-C '88 (2000)	0.02%	0.02%
-1990-C '90 (2000)	0.10%	0.10%
-1992 Series (2003)	0.17%	0.17%
-1993 Series	0.24%	0.23%
-1995-A	0.23%	0.22%
-1996-A	0.26%	0.25%
-1996-B	0.07%	0.07%
-1997-A	0.25%	0.24%
-1999-A	0.19%	0.18%
- 2002 Series	0.12%	0.15%
S/T Borrowings	0.09%	0.08%
Total Cost	8.5987%	8.7582%
Unadjusted Monthly Cost	0.7166%	0.7299%
Adjusted Monthly Rate	0.7115%	0.7246%
Split: Equity	0.6912	0.7258
Debt	0.3088	0.2742

[redacted]

CA-IR-206

Ref: Kalaeloa-Barbers Point Harbor pipeline discussed at page 10.

a. Please provide the original, as well as all subsequent feasibility studies addressing the need for this investment.

b. Provide any and all updated studies addressing the probable dates and uses for the pipeline [redacted]

HECO Response:

a. A document summarizing the justification for the project is provided on pages 2 and 3 of this response. While the document is dated December 1991, the rationale for the project has not changed. The pipeline continues to be useful in preserving future access to the harbor, and its existence is used in negotiations for fuel contracts with Oahu-base refineries to provide credence to the option of importing fuel oil.

b. There are no updated studies addressing the probable date for the project nor has HECO identified any future date for placing the pipeline into service.

HECO installed the pier piping and hatches to preserve the option to use the Barbers Point Harbor for fuel operations, because not doing so when the pier was constructed may have precluded HECO from doing so in the future.

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DEC 12 1991

INTEROFFICE
CORRESPONDENCE

Hawaiian Electric Company, Inc. An HEI Company

December 10, 1991

To: Wallace Johnston

From: John Stringfellow

Subject: BARBERS POINT PIER PIPELINE

The following summarizes the justification for the pipeline project at Barbers Point Harbor [redacted]

becoming independent of Chevron and gaining free access to the world oil markets provided the needed leverage to gain favorable prices and terms in these negotiations.

5. The potential value of the previously installed piping has now been enhanced by the recent choice of the Barbers Point tank farm as the preferred site for an oil-fired combined cycle power plant. The planned in-service date would be in early 1995. Since this facility may require large quantities of ultra-low sulfur diesel which cannot be produced by local refineries, it may be necessary to complete the pipeline installation and receive shipments of diesel fuel from the U.S. mainland.

CA-IR-207

Ref: Waianae Substation Property.

Please provide the following regarding the Waianae Substation Property proposed to be included in rate base:

a. Copies of the original and all subsequent feasibility studies addressing its acquisition and subsequent retention.

b. Copies of the "latest area review" noted at the top of page 11.

HECO Response:

a. Information regarding the acquisition and subsequent retention of the Waianae Substation property can be found in Docket No. 94-0067, ST-456, Installation of Waianae #1 12.5 MVA Transformer which was the project for the original Waianae Substation.

b. The requested information regarding the review of the load growth in the area is provided on pages 2 through 3 to this response.

BASE YEAR..... 2004
Based on Actual 2003 data

5% Overload

Condition		Makaha	Mauka (SB)	MAKAHA 1	MakVal	Mauka	MAKAHA 2	Mik 1	Mik 2	MIKILUA 1	Mik 3	Mik 4	MIKILUA 2	Kahe	Barb Pt	Kahe 1
Emergency Ratings (KVA)		12117	12117	15242	12117	12117	15242	11987	12851	15242	12851	12851	15242	12851	12851	15242
Normal Ratings (KVA)		10216	10216	14375	10216	10216	13000	10367	11123	14840	11123	11123	11500	11123	11123	13375
Conductor Type		750 3/dct	750 3/dct		750 3/dct	750 3/dct		4/0 BC	336 AAC		336 AAC	336 AAC		336 AAC	336 AAC	
Emergency Ratings (AMPS)		561	561		561	561		555	595		595	595		595	595	
Normal Ratings (AMPS)		473	473		473	473		480	515		515	515		515	515	
Norm Loads (KVA)		7535	0	7535	1012	10512	11524	8664	0	8664	4712	3924	8636	5690	4140	9830
Growth Rate		1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
MAKAHA 1 TSF. FAILS**:																
1. V.5097	1000	-1000		-1000												
Transfer to Waiatua-Kaena Circuit		6535		6535												
2. Open RCL 8180, Close RCL 8159 (AT)	2096	-2096		-2096		2096	2096									
		4439		4439		12608	13620									
3. Open 1500, Close 7485	3490					-3490	-3490	3490		3490						
						9118	10130	12154		12154						
4. Close 2233	4439	-4439		-4439	4439		4439									
		0		0	5451	9118	14569	12154		12154						
% OVERLOAD					0.0	0.0	0.0	1.4		0.0						
YEAR OF PREDICTED OVERLOAD					2085	2033	2009	2003		2027						
YEAR OF PREDICTED 5% OVERLOAD					2090	2038	2014	2008		2032						

MAKAHA CIRCUIT FAILURE (STEPS 1-4)

Condition (w/ RCL)		Makaha	Mauka (SB)	MAKAHA 1	MakVal	Mauka	MAKAHA 2	Mik 1	Mik 2	MIKILUA 1	Mik 3	Mik 4	MIKILUA 2	Kahe	Barb Pt	Kahe 1
Emergency Ratings (KVA)		12117	12117	15242	12117	12117	15242	11987	12851	15242	12851	12851	15242	12851	12851	15242
Normal Ratings (KVA)		10216	10216	14375	10216	10216	13000	10367	11123	14840	11123	11123	11500	11123	11123	13375
Norm Loads (KVA)		7535	0	7535	1012	10512	11524	8664	0	8664	4712	3924	8636	5690	4140	9830
MAKAHA 2 TSF. FAILS:																
1. Open 1500, Close 7485	3490	-3490		-3490				3490		3490						
		4045		4045				12154		12154						
2. Open RCL 8160, Close RCL 8159 (AT)	7169	7169		7169		-7169	-7169									
		11214		11214		3343	4355									
3. Close bkr 1696	3343		3343	3343		-3343	-3343									
			3343	14557		0	1012									
4. Close 2233	1012	1012		1012	-1012		-1012									
		12226	3343	15569	0		0	12154		12154						
% OVERLOAD		0.9	0.0	2.1				1.4		0.0						
YEAR OF PREDICTED OVERLOAD		2004	2134	2002				2003		2027						
YEAR OF PREDICTED 5% OVERLOAD		2008	2139	2007				2008		2032						

MAUKA CIRCUIT FAILURE (STEP 1-3). VALLEY CIRCUIT FAILURE (STEP 4).

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PAGE 2 OF 3

MIKILUA 1	Mik 3	Mik 4	MIKILUA 2	Kahe	Barb Pt	Kahe 1
15242	12851	12851	15242	12851	12851	15242
14840			11500			13375
8664	4712	3924	8636	5690	4140	9830
-528		528	528			
8136		4452	9164			
-1772						
6364						
-6364		6364	6364			
0		10816	15528			
		0.0	1.9			
		2022	2003			
		2027	2008			

MIKILUA 1	Mik 3	Mik 4	MIKILUA 2	Kahe	Barb Pt	Kahe 1
15242	12851	12851	15242	12851	12851	15242
14840			11500			13375
8664	4712	3924	8636	5690	4140	9830
87		-87	-87			
8751		3837	8549			
	-2907		-2907	2907		2907
	1805		5641	8597		12737
1805	-1805		-1805			
10556	0		3837			
-1772						
8784						
3837		-3837	-3837			
12621		0	0	8597		12737
0.0				0.0		0.0
2023				2045		2023
2028				2050		2027

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CA-IR-208

Ref: Underground cost sharing projects discussed beginning at page 7.

Please provide the following regarding the cost of any underground projects installed during the period 2000 to date, or forecasted to close to plant in service during 2005, for which the Company agreed to invest more in plant/construction expenditures than that required pursuant to Rules 13 and 14:

a. the project number and description;

b. the total cost of project;

c. HECO's investment in the project;

d. the other parties' contributions to the project;

e. the amount of HECO's investment in the project above that required by Rule 13 or 14;

f. a description of the primary reason, or reasons for which HECO agreed to invest more in the project than is required by the Company's Rule 13 or 14;

g. a description of neighborhood, community or other organization promoting the underground versus overhead installation; and

h. the areas, neighborhoods, municipalities, communities, etc primarily benefiting from the aesthetics of installing the facility underground.

HECO Response:

a. The requested information is provided under columns (a) and (b) on page 2.

b. The estimated capital costs are provided under column (c) on page 2.

c. HECO's estimated cost share is provided under column (d) on page 2.

d. The requested information is provided under column (f) on page 2.

e. The requested information is provided under column (e) on page 2.

f. The requested information is provided under column (g) on page 3.

g. The requested information is provided under column (h) on page 3.

h. The requested information is provided under column (i) on page 3.

	(f)
's investment bove that e 13 or 14, ty Ordinance	The other parties' contribution to the project
311	146,797
68	56,736
65	813,820
00	556,800
26	355,879
0	21,733
72	261,156
00	300,000
00	10,976 (G)
'A	N/A
23	55,423 (G)
00	5,648 (G)
00	10,987 (G)
0	27,743 (G)
5	374,000
6	34,425

st year plant additions.

nfrastructure

(g)	(h)	(i)
don of the primary reason, or reasons h HECO agreed to invest more in the an is required by the Company's Rule 13 or 14	**Description of neighborhood, community or other organization promoting the underground versus overhead installation**	**Areas, neighborhoods, municipalities, communities, etc., primarily benefiting from the aesthetics of installing the facility underground**
ised UG policy (80/10/10 cost sharing). pplication in Docket No. 01-0189.	City and County of Honolulu	Salt Lake
ised UG policy (community initiated lso, see Transmittal No. 01-02, filed 01.	The L'Orange Place Association wanted to underground utilities along the street	The homeowners in L'Orange Place
ised UG policy (work share). Also, see in Docket No. 03-0036.	City and County of Honolulu; Kailua Visioning Team	Kailua
Agreement, see Application in Docket 1.	City and County of Honolulu	Keeaumoku Street
ised UG policy (80/10/10 cost sharing). pplication in Docket No. 04-0130.	State Department of Land and Natural Resources	Hawaii Kai/Waimanalo
linance of Honolulu 14-22.5. Also, see in Docket No. 04-0274.	City and County of Honolulu	Waikiki
ised UG policy (work share)	City and County of Honolulu	Kaimuki
sed UG policy (work share)	Victoria Ward Ltd.	Ala Moana
sed UG policy (community initiated	Portion of Black Point Road homeowners	4095, 4096, 4105, 4106,4109 Black Pt Rd
s since decided to not go forth with the	N/A	N/A
ed UG policy (community initiated	BYU via Hawaii Reserves, Inc.	BYU, Laie
ed UG policy (community initiated	The owner/builder is improving the homes in 1424 Gulick Ave.	The homeowners in 1424 Gulick Avenue
ed UG policy (community initiated	The owner of one of the lots is driving the undergrounding of the overhead lines.	The homeowners in 2509 Pali Highway
ed UG policy (community initiated	The developer, who is an owner of one of the lots, is promoting all underground utilities	The homeowners in 45-540 Mahinui Rd.
greement, see Application in Docket	Castle & Cooke Homes Hawaii, Inc.	Makakilo
ed UG policy (work share)	Victoria Ward Ltd.	Kakaako

CA-IR-209

Ref: Underground cost sharing projects discussed beginning at page 7.

Please provide copies of any studies addressing the expected incremental costs (i.e., locating and repairing lines, etc.) and/or expected savings (i.e., avoided wind damage, avoided termite repairs, etc.) resulting from the underground versus overhead installation of lines.

HECO Response:

HECO does not have any study that specifically addresses the expected incremental costs (i.e., locating and repairing lines, etc.) and/or expected savings (i.e., avoided wind damage, avoided termite repairs, etc.) resulting from the underground versus overhead installation of lines. However, we do have copies of studies that touch upon the broader issue of cost and benefit between an overhead versus underground line.

In 2004, the Edison Electric Institute (EEI) conducted a study entitled "Out of Sight, Out of Mind?" that studies the costs and benefits of undergrounding overhead power lines (see pages 3 to 23). This report provides a summary overview of previously completed studies (in the US and abroad) and examines historical performance data for underground and overhead lines to evaluate the benefits and costs of placing more existing overhead electrical distribution lines underground. This report is voluminous and copyrighted. One copy each will be provided to the Consumer Advocate and the Commission under separate transmittal under the "fair use" exception to the copyright laws. Any copies made of the report is subject to copyright laws.

In 2000, HECO hired a consultant, Power Engineers, to conduct a study entitled "Life Cycle Cost for Overhead Versus Underground Subtransmission and Distribution Systems" (see pages 24 to 96). The purpose of this study was to provide HECO with projected life cycle costs (initial capital costs plus operation and maintenance costs) for various scenarios, which would then provide HECO a cost tool to be used when assessing the advantages and disadvantages of

overhead versus underground construction of subtransmission and distribution systems. Since the report is voluminous, one copy each will be provided to the Consumer Advocate and Commission under separate transmittal.

Due to the voluminous nature of the information, one copy (pages 3 to 96) will be provided to the Consumer Advocate and the Public Utilities Commission under separate transmittal.

CA-IR-210

Ref: HECO-WP-1907 (Lead lag study support).

Please provide copies of the purchased power contract excerpts, revenue tax statutes, withholding tax statutes, and 401K contribution schedules that support the various expense payment lags that were not developed vis-à-vis sampling of transactions.

HECO Response:

See attached copies of:

1. Amendment No. 2 to Purchased Power Contract between Hawaiian Electric Co. Inc ("HECO") and City and County of Honolulu dated April 8, 1991, Docket No. 6983. (See pages 3 and 4 of this response.)
2. Excerpts from the Power Purchase Agreement between Kalaeloa Partners, L.P. and HECO, dated October 14, 1988, Docket No. 6378, filed with the PUC on December 28, 1988. (See pages 5 to 8 of this response.)
3. Excerpts from the Power Purchase Agreement between AES Barbers Point, Inc. and HECO dated March 25, 1988, Docket No. 6177, filed with the PUC on June 1, 1988. (See pages 9 to 12 of this response.)
4. Letter dated May 27, 1992 confirming modification to Section 6.1 (Monthly Invoice), and Section 6.2 (Payment) of Article VI (Billing and Payment) of the Power Purchase Agreement between AES and HECO, dated March 25, 1988. (See pages 13 and 14 of this response.)
5. Excerpts of the Public Service Company Tax Law (Hawaii Revised Statutes "HRS" Chapter 239) relating to payment installments and payment due date. (See pages 15 and 16 of this response.)
6. Excerpt on the Franchise Tax (HRS Chapter 240) relating to payment due date. (See

page 17 of this response.)

7. Excerpt on the PUC Fee (HRS Chapter 269-30) relating to payment due date. (See page 18 of this response.)

8. Excerpt from the Employer's Tax Guide re: State Withholding Taxes. (See page 19 of this response.)

9. Copy of Letter from the State of Hawaii, Department of Taxation dated January 3, 2005 re: Hawaii withholding requirements. (See page 20 of this response.)

10. Excerpt relating to "Next-Day Deposit Rule" for the Federal Withholding Tax. (See page 21 of this response.)

11. Excerpt from IRS website re: payment of 401K contributions. (See page 22 of this response.)

HPower

REFUSE F[illegible]

CONTRACT NO. C 06931 (B)

Amendment No. 2 to "Purchase Power Contract Between Hawaiian Electric Co., Inc. and City and County of Honolulu Dated March 10, 1986"

By mutual agreement, sections 2(c) and 2(d) of the subject Contract are replaced by sections 2(c), 2(d), 2(e), and 2(f) of this Amendment No. 2 to reflect a modification of the deadlines for billing and payment for energy and capacity received by Hawaiian Electric Company.

(c) By the fifth working day (i.e. excluding Saturdays, Sundays and legal holidays of either the federal government or the Hawaii state government) of each calendar month, the Company shall provide the Seller or its designated agent with the appropriate data for the Seller to compute the energy charge for electricity delivered to the Company in the preceding calendar month as determined in accordance with this Contract.

(d) By the tenth working day of each calendar month, the Seller shall submit to the Company an invoice that contains (1) an energy charge for energy purchased by the Company in the preceding month; (2) a capacity charge for the available capacity in the preceding month; and (3) the metering charge as set forth in Section 5 of this Contract. Each invoice shall include the Seller's backup data for the computation of the capacity charge.

(e) By the twentieth working day of each calendar month (but no later than the last working day of that month if there are less than twenty working days in that month), the Company shall make payment on such invoice, or provide to the Seller an itemized statement of its objections to all or any portion of such invoice and pay any undisputed amount.

(f) Notwithstanding all or any portion of such invoice in dispute, any payment not made to the Seller after the twentieth working day of each calendar month (or the last working day of that month if there are less than twenty working days in that month), shall accrue interest at the maximum rate allowed by law until the outstanding interest and invoiced amounts are paid in full. Partial payments shall be applied first to outstanding but unpaid interest and then to outstanding but unpaid invoice amounts.

This Amendment shall become effective on the Effective Date of the Firm Capacity Amendment to Purchase Power Contract Dated March 10, 1986, dated April 8, 1991.

This Amendment covers billing and payment dates only and is in no way intended to affect the pricing mechanisms established in the Contract.

HAWAIIAN ELECTRIC COMPANY, INC. ("Company")

By _____ 4/28/92
Its Vice President Date

By _____ 4.28.92
Its Vice President Date

CITY AND COUNTY OF HONOLULU ("Seller")

By _____ JUN 0 4 1992
Its Director of Finance Date

By _____ MAY 2 7 1992
R-Y Its Director-Chief Engineer, Department of Public Works Date

APPROVED AS TO FORM AND LEGALITY

_____
Deputy Corporation Counsel

Docket No. 6378
Date filed with PUC - December 28, 1988

POWER PURCHASE AGREEMENT

between

KALAELOA PARTNERS, L.P.

and

HAWAIIAN ELECTRIC COMPANY, INC.

EXHIBIT "A"

Kalaeloa
Contract

If, after the In-Service Date, action of a court, public authority or other governmental body, despite KALAELOA's best efforts to oppose such requirement, requires an additional investment in the Facility accumulating to FIVE HUNDRED THOUSAND DOLLARS ($500,000) in unrecovered additional investment, KALAELOA [redacted] in writing that HECO seek approval through

By the fifth (5th) working day of each Calendar Month, HECO shall hand deliver to KALAELOA in Honolulu a computed Energy Charge and the appropriate backup data for electricity delivered to HECO in the preceding Calendar Month as determined in accordance with this Agreement.

By the tenth (10th) working day of each Calendar Month, KALAELOA shall submit to HECO a Monthly Invoice that contains:

(A) an Energy Charge for the preceding month using estimated fuel costs;

(B) an estimated Capacity Charge for the current month adjusted in accordance with Attachment W, if appropriate,

KALAELOA to HECO for any preceding months; and

(C) any fuel adjustment charges from preceding months computed in accordance with Attachment U.

such premium or payment against the amounts thereafter due KALAELOA pursuant to this Section 6.2.

6.3 Adjustments

In the event adjustments are required to correct inaccuracies in Monthly Invoices, the party requesting adjustment shall use the method described in Section 3.2F(4), if applicable, to determine the correct measurements, and shall recompute the amounts due during the period of the inaccuracy. The difference between the amount paid and that recomputed shall be paid, or repaid, with interest at the average daily Prime Rate at the Bank of Hawaii for the period, or objected to by the party responsible for such payment within thirty (30) days following its receipt of such request. All claims for adjustments shall be waived for any deliveries of electricity made more than thirty six (36) months preceding the date of any such request.

6.4 Other Payments

Any amounts due from either party under this Agreement other than monthly Energy Charges and Capacity Charges, including, without limitation, repayment by KALAELOA of amounts advanced by HECO pursuant to Section 3.1(G)(2) shall be paid or objected to within thirty (30) days following receipt from either party of an itemized invoice from the other party setting forth, in reasonable detail, the basis for such invoice. Thereafter, interest shall be due on such amounts at the average daily Prime Rate at the Bank of Hawaii for the period until the amount due is paid.

ARTICLE VII - DEFAULT

7.1 Events of Default

A. Default by KALAELOA

The occurrence of any of the following events at any time during the Term of this Agreement, unless excused by Section 15.2, shall constitute an "Event of Default" by KALAELOA; provided, however, that KALAELOA does not hereby waive any defenses available to it under law or equity in connection with an asserted Event of Default.

(1) KALAELOA shall fail

Docket No. 6177
Date filed with PUC - June 1, 1988

CONFIDENTIAL

POWER PURCHASE AGREEMENT

BETWEEN

AES BARBERS POINT, INC.

and

HAWAIIAN ELECTRIC COMPANY, INC.

AES

sixty-two (62) percent of the kilowatthours furnished to HECO by AES-BP for the applicable payment period shall be credited to AES-BP at the rate of 0.2 cents (1987$) per kilovarhour. The energy payment adjustment for reactive power shall apply regardless of the rate schedule under which HECO furnishes electricity to AES-BP. If such schedule has a power factor clause, the provision of this Agreement shall supersede the application of such clause in the rate schedule.

The total Energy Charge (including reactive power charges) shall be adjusted every six months (on January 1 and July 1) at one-hundred (100) percent of the change in the Gross National Product Implicit Price Deflator ("GNPIPD") as illustrated in Exhibit 5.

B. Capacity Charge.

The Capacity Charge to be paid by HECO to AES-BP during the full Term of this Agreement shall be at a fixed rate of $0.044 per kilowatthour for each hour in which the capacity is available. To determine the available capacity, the Committed Capacity of the Facility will be multiplied by the hours in the prior month, and then any outage and/or derated hours occurring during the prior month (other than those excluded pursuant to Sections 3.2B(3) and 4.2) times the capacity value of the outage and/or derating (in kilowatts) will be subtracted. The available capacity in kilowatthours for the month in question shall then be multiplied by the rate to obtain the monthly capacity payment due to AES-BP as illustrated in Exhibit 6.

5.2 Availability Bonus

[redacted]

month an invoice (Monthly Invoice) for the Capacity and Energy Charges to be paid to AES-BP for the preceding Calendar Month. Each Monthly Invoice shall include (i) AES-BP's backup data for the computation of the Capacity Charge and (ii) the balance in the Memo Account provided for in Section 3B of the Guarantee as determined from the most recent quarterly financial statements of AES-BP and the Guarantor available as of the date of such Monthly Invoice; provided, however, that such balance need not be shown if AES-BP has provided a letter of credit or bond in full substitution for the Guarantee in accordance with Article XXII. Unless and until HECO designates a different address, the Monthly Invoice shall be hand delivered to:

Hawaiian Electric Company, Inc.
820 Ward Avenue
Honolulu, Hawaii 96814
Attention: Purchased Power Administrator

6.2 Payment

By the twentieth working day of each month, HECO shall pay such monthly Capacity Charge and monthly Energy Charge as computed in Article V, or provide to AES-BP an itemized statement of its objections to all or any portion of such Monthly Invoice and pay any undisputed amount.

If HECO has paid an insurance premium pursuant to Section 13.1E(2) or if any other payment owed by AES-BP to HECO is past due, HECO may offset such premium or payment against the amounts thereafter due AES-BP pursuant to this Section 6.2.

6.3 Adjustments

In the event adjustments are required to correct inaccuracies in Monthly Invoices, the party requesting adjustment shall use the method described in Section 3.2E(4), if applicable, to determine the correct measurements, and shall recompute the amounts due during the period of the inaccuracy. The difference between the amount paid and that recomputed for each Monthly Invoice affected shall be paid, or repaid, with interest from the date that such Monthly Invoice was payable until the date that such recomputed amount is paid at the average daily Prime Rate at the Bank of Hawaii for the period, or objected to by the party responsible for such payment within thirty (30) days following its receipt of such request. All claims for adjustments shall be waived for any deliveries of electricity made more than thirty six (36) months preceding the date of any such request.

6.4 Other Payments

Any amounts due from either party under this Agreement other than monthly Energy and Capacity Charges shall be paid or objected to within

thirty (30) days following receipt from either party of an itemized invoice from the other party setting forth, in reasonable detail, the basis for such invoice.

ARTICLE VII - DEFAULT

7.1 Events of Default

A Default by AES-BP.

[redacted]

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

May 27, 1992

Mr. Daniel J. Rothaupt
AES Barbers Point, Inc.
91-086 Kaomi Loop
Ewa Beach, HI 96707

Dear Mr. Rothaupt:

This letter will confirm our agreement to modify Section 6.1 (Monthly Invoice), and Section 6.2 (Payment) of Article VI (Billing and Payment) of the Power Purchase Agreement ("Agreement") between AES Barbers Point, Inc. ("AES-BP") and Hawaiian Electric Company, Inc. ("HECO"), dated March 25, 1988.

AES-BP and HECO agree to amend the first sentence of Section 6.1 as follows, to reflect AES-BP, rather than HECO, as computing the Energy Charge; and to clarify the term "legal holidays":

> "By the fifth working day (i.e. excluding Saturdays, Sundays and legal holidays of either the federal government or the Hawaii state government) of each Calendar Month, HECO shall provide AES-BP with the appropriate data for AES-BP to compute the Energy Charge for electricity delivered to HECO in the preceding Calendar Month as determined in accordance with this Agreement."

AES-BP and HECO agree to amend the first sentence of Section 6.2 as follows, to account for the case of a month with less than twenty working days:

> "By the twentieth working day of each month (but no later than the last working day of that month if there are less than twenty working days in that month), HECO shall pay such monthly Capacity Charge and monthly Energy Charge as computed in Article V, or provide to AES-BP an itemized statement of its objections to all or any portion of such Monthly Invoice and pay any undisputed amount."

Please signify your acceptance of this agreement by your signature below and return one signed original for our files.

Sincerely,

Edward Y. Hirata
Vice President, Planning

T. Michael May
Senior Vice President

AGREED:

AES Barbers Point, Inc.

Daniel J. Rothaupt
Vice President

Date: 6/8/92

CHAPTER 239
PUBLIC SERVICE COMPANY TAX LAW

Part I. General Provisions

Section	
239-1	Tax levy, in general
239-2	Definitions
239-3	Repealed
239-4	Returns
239-4.5	Segregation of gross income, etc., on records and in returns of telecommunications businesses
239-5	Public utilities, generally
239-5.5	Surcharge amounts exempt
239-6	Airlines, certain carriers
239-6.5	Tax credit for lifeline telephone service subsidy
239-7	Assessments; payments; chapter 235 applicable
239-8	Allocation and apportionment
239-9	Time of application of tax and other provisions
239-10	Disposition of revenues
239-11	Exemption of certain contract carriers
239-12	Call centers; exemption; engaging in business; definitions
239-13	Exemption for public Internet data centers

Part II. Sourcing of Mobile Telecommunications Services Income

239-21	Application
239-22	Definitions
239-23	Mobile telecommunications definitions
239-24	Effect of customer's failure to provide its place of primary use; effect of aggregation or segregation of charges
239-25	Nonseverability

Cross Reference

Tax Information Release No. 89-10, "Taxability of Gross Receipts Derived by Helicopter Tour Operators"
Tax Information Release No. 97-4, "Application of the Business Entity Classification Rules Under the 'Check-the-box' Regulations to the Hawaii Income Tax and Other Taxes"

Law Journals and Reviews

Hawaii's General Excise Tax Law: A Comprehensive Review of the Decisions. II HBJ No. 13, at pg. 1.

PART I. GENERAL PROVISIONS

§239-1 Tax levy, in general. There shall be levied and assessed upon each public service company a tax in the manner provided by this chapter. [L 1932 2d, c 43, §1; am L 1933, c 183, §2; RL 1935, §2140; RL 1945, §5671; RL 1955, §126-1; am L Sp 1957, c 1, §9(a); am L 1963, c 147, §2(b); HRS §239-1]

Case Notes

Cited: 34 H. 324

§239-2 Definitions. As used in this chapter unless otherwise required by the context:

"Carrier" means a person who engages in transportation, and does not include a person such as freight forwarder or tour packager who provides transportation by contracting with others, except to the extent that such person oneself engages in transportation.

"Contract carrier" means a person other than a public utility or taxicab which, under contracts or agreements, engages in the transportation of persons or property for compensation, by land, water, or air.

customer of the contractor as an identifiable element of the contracting or service provided by the contractor and does not constitute overhead as defined in section 237-1.

The department shall have the authority to implement the tax rate changes in paragraphs (1) through (7) by prescribing tax forms and instructions that require tax reporting and payment by deduction, allocation, or any other method to determine tax liability with due regard to the tax rate changes.

For purposes of this subsection, "contractor" has the same meaning as defined in section 237-6.

(e) Notwithstanding subsections (a) through (d), beginning on October 1, 2001, the tax under this chapter shall not apply to airlines, motor carriers, common carriers by water, and contract carriers other than motor carriers; provided that the gross income received on or after October 1, 2001, by these carriers shall be subject to the tax imposed under chapter 237. For the taxable year in which October 1, 2001 occurs, the tax imposed and due under this chapter for the affected carriers shall be abated in an amount equal to:

(1) The tax imposed on the first day of the taxpayer's taxable year in which October 1, 2001 occurs;
(2) Divided by the number of months in the taxpayer's affected taxable year; and
(3) Multiplied by the number of months in the taxpayer's taxable year remaining after September 30, 2001. [L 1963, c 147, §2(f); am L 1965, c 155, §18; Supp, §126-5.1; HRS §239-6; am L 1968, c 59, §3; am L 1970, c 180, §22; am L 2000, c 198, §15; am L Sp 2001 3d, c 9, §4]

Note

2000 amendment effective January 1, 2001; conditions on amendment. L 2000, c 198, §17(2).

Gross income received on or after October 1, 2001, by transportation service providers shall be subject to the tax imposed under chapter 237. L Sp 2001 3d, c 9, §6.

Cross Reference

Tax Information Release No. 98-7, "Change in Accounting Period from Calendar to Fiscal Year for Public Service Companies"

Case Notes

Federal law preempts gross receipts tax on air transportation or carriage of persons in air commerce. 464 U.S. 7.

Commissions retained by airline's travel agents are includible in airline's gross income for purposes of imposing tax. 56 H. 626, 547 P.2d 586.

Section does not burden commerce unduly, and is not preempted by federal law. 65 H. 1, 647 P.2d 263.

Federal Aviation Act did not preempt state's power, under this section, to tax gross receipts attributable to the ground transportation portion of air packages that common carrier transported interisland and/or between Hawaii and the mainland. 88 H. 336, 966 P.2d 648.

[§239-6.5] Tax credit for lifeline telephone service subsidy. A telephone public utility subject to this chapter that has been authorized to establish lifeline telephone service rates by the public utilities commission shall be allowed a tax credit, equal to the lifeline telephone service costs incurred by the utility, to be applied against the utility's tax imposed by this chapter. The amount of this credit shall be determined and certified annually by the public utilities commission. The tax liability for a telephone public utility claiming the credit shall be calculated in the manner prescribed in section 239-5; provided that the amount of tax due from the utility shall be net of the lifeline service credit. [L 1986, c 116, §2]

CHAPTER 240
PUBLIC UTILITIES; FRANCHISE TAX

Section
240-1 Electric light and power companies, tax on
240-1.5 Surcharge amounts exempt
240-2 Books, papers, etc.

§240-1 Electric light and power companies, tax on. Every person operating in the State an electric light or power business as a public utility, whose franchise does not provide for the payment to the county in which the public utility operates of a tax, or a tax of less than two and one-half per cent, based upon the gross receipts of such person from all electric light or power furnished to consumers during each calendar year, shall file with the director of finance of the county in which the public utility operates, within one month after the expiration of each calendar year, a detailed statement showing all gross receipts from all electric light or power furnished to consumers during the preceding calendar year. Such person shall, at the same time pay to the director of finance, for and on behalf of such county, in addition to any and all other payments required to be made by law, two and one-half per cent of the gross receipts; or, if such person's franchise provides for a tax of less than two and one-half per cent of the gross proceeds, the difference between the tax required under such franchise and two and one-half per cent of the gross receipts, of such person from all electric light or power furnished to consumers during the preceding calendar year. [L 1937, c 105, pt of §1; RL 1945, pt of

PUC Fee

§269-30 Finances; public utility fee. (a) Sections 607-5 to 607-9 shall apply to the public utilities commission and each commissioner, as well as to the supreme and circuit courts, and all costs and fees paid or collected pursuant to this section shall be deposited with the director of finance to the credit of the public utilities commission special fund established under section 269-33.

(b) There also shall be paid to the commission in each of the months [redacted] December of each year, by each public utility subject to

DEC 2 6 2002

State of Hawaii —Department of Taxation
Supplemental Insert to Booklet A (Rev. 2001), Employer's Tax Guide

Issued November 2002

In the interest of cost savings, this insert is provided to amend only those portions of Booklet A that required revision. There are no changes in the individual income tax rates and brackets.

Page 5, When to File, fifth, sixth, and seventh items shall be replaced by:

By the **10th day** of each calendar month:
File Form HW-14 and pay the tax by electronic funds transfer for the preceding monthly period if your annual total withholding liability exceeds $100,000. See section 15, "Filing the Withholding Tax Return".

By the **15th day** of each calendar month (unless you are permitted to file returns on a quarterly basis):
File Form HW-14 along with the appropriate tax payment voucher (Form VP-1W if you are using a preprinted form from your withholding booklet, or Form VP-1 if you are not using a preprinted form) and remittance for the preceding monthly period. See section 15, "Filing the Withholding Tax Return".

By the **15th day** of April, July, October, and January (if you are permitted to file returns on a quarterly basis):
File Form HW-14 along with the appropriate tax payment voucher (Form VP-1W if you are using a preprinted form from your withholding booklet, or Form VP-1 if you are not using a preprinted form) and remittance for the preceding quarterly period. See section 15, "Filing the Withholding Tax Return".

Page 5, Electronic Funds Transfer (EFT), last sentence shall be replaced by:
For more information on paying taxes by EFT, contact your district tax office for a copy of Tax Information Release Nos. 95-6 and 99-1, and Department of Taxation Announcement No. 2002-4.

Page 6, section 4, subsection (e) shall be replaced by:
(e) Form HW-14 — File the Withholding Tax Return, Form HW-14 along with the appropriate tax payment voucher (Form VP-1W if you are using a preprinted form from your withholding booklet, or Form VP-1 if you are not using a preprinted form) and remittance, if any. See section 15.

Page 8, section 9, subsection (a) is replaced by:
(a) Wages for services performed in the State. However, withholding is not required on such wages if all the following conditions are met:
— The employee establishes that the employee is a nonresident in the manner explained in section 12,
— The employee is performing services in the State for an aggregate of not more than 60

LINDA LINGLE
GOVERNOR

JAMES R. AIONA JR.
LT. GOVERNOR

STATE OF HAWAII
DEPARTMENT OF TAXATION

KURT KAWAFUCHI
DIRECTOR OF TAXATION

MARIE C. LADERTA
DEPUTY DIRECTOR

Date: January 3, 2005
FEIN: 99-0040500
Hawaii Tax ID: W20268992-01

HAWAIIAN ELECTRIC CO INC
PO BOX 2750
HONOLULU, HI 96840-0001

Dear Taxpayer:

IMPORTANT – Act 113, Session Laws of Hawaii 2004, made significant changes to Hawaii withholding requirements that affect you.

Effective for payroll periods beginning on or after December 31, 2004, the following now apply:

1. Employers whose annual withholding tax liability exceeds $40,000 are now required to remit their withholding tax liability by Electronic Funds Transfer (EFT).
2. EFT payments are to be paid on a semiweekly schedule (i.e., on or before the following Wednesday if wages were paid on the immediately preceding Wednesday, Thursday, or Friday; or on or before the following Friday if wages paid on the immediately preceding Saturday, Sunday, Monday, or Tuesday).
3. All monthly withholding returns (Form HW-14) are now due on the 15th day of the calendar month following the month for which the taxes had been withheld (the 10th day due date has been repealed).
4. To document the EFT tax payments made, a federal Schedule B (From 941) (using Hawaii dates and amounts) is to be completed on a quarterly basis and attached to your March, June, September, and December monthly Form HW-14.

If you are not registered to pay via EFT, please complete Form EFT-1, Authorization for Electronic Funds Transfer, and submit it to the Department's EFT Unit. Note, if payment is not remitted via EFT, a 2% penalty will be assessed on the tax liability reported on the return for failure to pay by EFT.

Form EFT-1 can be obtained by calling our Forms by Fax/Mail service at 808-587-7572 or toll-free at 1-800-222-7572. The form is also available on the Department's website at www.state.hi.us/tax.

For additional information, see Tax Information Release No. 2004-01, RE: Act 113, Session Laws of Hawaii 2004, Relating to Income Tax Withholding.

[redacted] Taxpayer Services Branch

Federal withholding

Summary of Steps To Determine Your Deposit Schedule

1. Identify your lookback period (see Table 1).
2. Add the total taxes (line 11 of Form 941) you reported during the lookback period.
3. Determine if you are a monthly or semiweekly schedule depositor.

If the total taxes you reported in the lookback period were . . .	Then you are a . . .
$50,000 or less	Monthly Schedule Depositor
More than $50,000	Semiweekly Schedule Depositor

Example of Monthly and Semiweekly Schedules

Rose Co. reported Form 941 taxes as follows:

2004 Lookback Period		2005 Lookback Period	
3rd Quarter 2002	$12,000	3rd Quarter 2003	$12,000
4th Quarter 2002	$12,000	4th Quarter 2003	$12,000
1st Quarter 2003	$12,000	1st Quarter 2004	$12,000
2nd Quarter 2003	$12,000	2nd Quarter 2004	$15,000
	$48,000		$51,000

Rose Co. is a monthly schedule depositor for 2004 because its tax liability for the four quarters in its lookback period (third quarter 2002 through second quarter 2003) was not more than $50,000. However, for 2005, Rose Co. is a semiweekly schedule depositor because the total taxes exceeded $50,000 for the four quarters in its lookback period (third quarter 2003 through second quarter 2004).

Deposits on Banking Days Only

If a deposit is required to be made on a day that is not a banking day, the deposit is considered timely if it is made by the close of the next banking day. In addition to federal and state bank holidays, Saturdays and Sundays are treated as nonbanking days. For example, if a deposit is required to be made on a Friday and Friday is not a

Application of Monthly and Semiweekly Schedules

The terms "monthly schedule depositor" and "semiweekly schedule depositor" do not refer to how often your business pays its employees or even how often you are required to make deposits. The terms identify which set of deposit rules that you must follow when an employment tax liability arises. The deposit rules are based on the dates when wages are paid (for example, cash basis); not on when tax liabilities are accrued for accounting purposes.

Monthly schedule example. Spruce Co. is a monthly schedule depositor with seasonal employees. It paid wages each Friday. During March it paid wages but did not pay any wages during April. Under the monthly deposit schedule, Spruce Co. must deposit the combined tax liabilities for the four March paydays by April 15. Spruce Co. does not have a deposit requirement for April (due by May 15) because no wages were paid and, therefore, it did not have a tax liability for April.

Semiweekly schedule example. Green, Inc., which has a semiweekly deposit schedule, pays wages once each month on the last day of the month. Although Green, Inc. has a semiweekly deposit schedule, it will deposit just once a month because it pays wages only once a month. The deposit, however, will be made under the semiweekly deposit schedule as follows: Green, Inc.'s tax liability for the April 29, 2005 (Friday) payday must be deposited by May 4, 2005 (Wednesday). Under the semiweekly deposit schedule, liabilities for wages paid on Wednesday through Friday must be deposited by the following Wednesday.

$100,000 Next-Day Deposit Rule

If you accumulate a tax liability (reduced by any advance EIC payments) of $100,000 or more on any day during a deposit period, you must deposit the tax by the next banking day, whether you are a monthly or semiweekly schedule depositor.

For purposes of the $100,000 rule, do not continue accumulating a tax liability after the end of a deposit period. For example, if a semiweekly schedule depositor has accumulated a liability of $95,000 on a Tuesday (of a Saturday-through-Tuesday deposit period) and accumulated a $10,000 liability on Wednesday, the $100,000 next-day deposit rule does not apply. Thus, $95,000 must be deposited by Friday and $10,000 must be deposited by the following Wednesday.

How long does a participant have to wait to become a member of a pension plan and to become vested in their benefits?

Generally, a plan may require a person to reach age 21 to be eligible to participate in the plan and to have a year of service. Vesting means the employee has earned a non-forfeitable right to benefits funded by employer contributions. Employees always have a non-forfeitable right to their own contributions.

Beginning in 2002, there are two basic vesting schedules. Under the three-year schedule, workers are 100% vested after three years of service under the plan. The six-year graduated schedule allows workers to become 20% vested after two years and to vest at a rate of 20% each year thereafter until they are 100% vested after six years of service. Plans may have faster vesting schedules.

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What protections do the fiduciary rules of ERISA provide?

ERISA protects plans from mismanagement and misuse of assets through its fiduciary provisions. ERISA defines a fiduciary as anyone who exercises discretionary control or authority over plan management or plan assets, anyone with discretionary authority or responsibility for the administration of a plan, or anyone who provides investment advice to a plan for compensation or has any authority or responsibility to do so. Plan fiduciaries include, for example, plan trustees, plan administrators, and members of a plan's investment committee.

The primary responsibility of fiduciaries is to run the plan solely in the interest of participants and beneficiaries and for the exclusive purpose of providing benefits and paying plan expenses. Fiduciaries must act prudently and must diversify the plan's investments in order to minimize the risk of large losses. In addition, they must follow the terms of plan documents to the extent that the plan terms are consistent with ERISA. They also must avoid conflicts on behalf of the plan that benefit parties related to the plan, such as other fiduciaries, service providers, or the plan sponsor.

Fiduciaries who do not follow these principles of conduct may be personally liable to restore any losses to the plan, or to restore any profits made through improper use of plan assets. Courts may take whatever action is appropriate against fiduciaries who breach their duties under ERISA including their removal.

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When must employers deposit withheld employee contributions into a 401 (k) plan or other pension plan?

Employers must transmit employee contributions to pension plans as soon as they can reasonably be segregated from the employer's general assets, but not later than the 15th business day of the month immediately after the month in which the contributions either were withheld or received by the employer.

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Can a pension be attached for family support?

In general, pension benefits cannot be taken away from a participant by people to whom

CA-IR-211

Ref: HECO-WP-1907 (Lead lag study support).

a. Are the Public Service Company (pursuant to Chapter 239) taxes paid each month assessed upon the immediately-preceding month's gross utility revenues received or simply one-twelfth of the annual assessment that was based upon the prior year's annual gross utility revenues received?

b. If the conclusion is that the PSC taxes paid each month are based upon the immediately preceding month's gross utility revenues received, please specifically note the statutory language relied upon.

c. If the conclusion is that the PSC taxes paid each month are based on one-twelfth of the annual assessment that was based upon the prior year's annual gross utility revenues received, please explain why the lead-lag study assumes an average payment lag from the end of the service period of approximately ten days.

HECO Response:

a. The Public Service Company taxes are paid each month based on one-twelfth of the annual assessment based upon the prior year's annual gross utility revenues received.

b. See response a.

c. The test year revenue taxes are based on the test year revenues rather than on prior year's actual revenues, consistent with numerous past rate case decisions (i.e. Decision and Order (D&O) No. 11893 filed on 10/2/92 in Docket No. 6999; D&O No. 13762 filed on 2/10/95 in Docket No. 7764; D&O No. 14412 filed on 12/11/95 in Docket No. 7766). In Docket No. 7766 (HECO's 1995 Test Year Rate Case), D&O No. 14412, the Commission reaffirmed its holding in D&O No. 13762 (Docket No. 7764) that for ratemaking purposes, revenues and other expenses are normalized for the test year, and revenue taxes are calculated on current test year revenues, rather than on prior years' actual revenues. This avoids the mismatching of test year revenues and expenses. Further, the taxes paid in any given year, are for the right to do business in that year.

CA-IR-212

Ref: HECO-WP-1907 (Lead lag study support).

Please provide the following regarding the Public Service Company (PSC) taxes for the period January 2003 to date: the PSC taxes charged to NARUC expense account 408:

a. the gross revenues upon which PSC taxes charged to expense (being requested in subpart (a) of this information request) were assessed;

b. the month that the revenues upon which the PSC taxes charged to NARUC expense account no. 408 (being requested in response to subpart (a) of this information request) were billed to customers; and

c. the PSC taxes accounts payable balance for each month.

HECO Response:

a. Refer to Column A of the attached exhibit on page 2 to this response.

b. The monthly revenues, upon which the PSC taxes charged to NARUC expense account no. 408 (being requested in response to subpart (a) of this information request) are calculated, are recorded revenues which include billed revenues and estimated unbilled revenues for the calendar month. Billed revenues represent revenues that have been billed to the customers in that calendar month and include revenues from electricity consumed over both the current and previous calendar months. Unbilled revenues represent the Company's best estimate of revenues from electricity sales during the month that have not yet been billed to the customers. Recorded revenues thus represent the estimated revenues from electricity sold for that calendar month. Therefore, revenues upon which the PSC taxes are calculated are billed to the customers in both the current calendar month and the following calendar month.

c. Refer to Column C of the attached exhibit on page 2 to this response.

Public Service Company (PSC) Taxes
($'s)

	(A) Taxable Base	(B) = (A) x 5.885% Current Year PSC Tax Expense Acct #408020	(C) PSC Tax Accrual Acct #236310
2003 Jan	75,805,031	4,461,126	20,393,411
Feb	70,917,920	4,173,520	20,202,929
Mar	80,626,147	4,744,849	20,561,435
Apr	80,453,170	4,734,669	20,910,461
May	83,916,442	4,938,483	21,546,863
Jun	80,647,602	4,746,111	22,162,871
Jul	83,176,407	4,894,932	22,917,551
Aug	85,675,938	5,042,029	23,819,327
Sep	80,704,993	4,749,489	24,428,564
Oct	84,549,092	4,975,714	25,264,026
Nov	77,843,349	4,581,081	25,704,855
Dec	78,448,328	4,616,684	26,181,288
2004 Jan	79,289,100	4,666,164	26,707,199
Feb	77,088,938	4,536,684	27,103,631
Mar	80,843,423	4,757,635	27,721,015
Apr	80,131,399	4,715,733	28,194,009
May	86,211,346	5,073,538	28,254,842
Jun	84,474,020	4,971,296	28,213,433
Jul	89,386,977	5,260,424	28,461,152
Aug	93,438,662	5,498,865	28,947,312
Sep	93,630,320	5,510,144	29,444,751
Oct	97,300,574	5,726,139	30,158,188
Nov	94,367,029	5,553,500	30,698,983
Dec	96,478,857	5,677,781	31,364,058
2005 Jan	87,384,984	5,142,606	31,493,960

CA-IR-213

Ref: HECO-WP-1907 (Lead lag study support – Non labor O&M expense payment lag).

Certain transactions in the non-labor O&M expense lag sample were paid vis-à-vis an employee "purchasing card" (e.g., transaction No. 19). Please provide the following regarding such "purchasing card" arrangements:

a. describe which employees are issued such cards;
b. describe the events, arrangements or conditions that establish the criteria for use and issuance of such cards; and
c. provide copies of any authoritative document or controlling contract that describes the payment patterns for use of such cards.

HECO Response:

a. Purchasing cards are issued to employees at the discretion of Department Managers.

b. The Purchasing Card is a Company credit card based system used to purchase low-value and/or urgently needed non-stock items, and to pay for repetitive, low-value monthly utility services such as cellular phones and pagers. The purpose of the Purchasing Card program is to establish a more efficient, cost-effective method of purchasing and paying for small dollar

Commerical Card Services *fax* 312 732 1485
Mail Code IL1-0199
1 Bank One Plaza
Chicago, IL 60670-0199

COPY

BANK ONE

September 18, 2001

Ms. Ann Doo
Hawaiian Electric Company
P.O. Box 2750
Honolulu, HI 96840-0001

Dear Ms. Doo:

We are writing in connection with the Purchasing Card Agreement (the "Agreement"), dated as of March 15, 1996 between Bank One, NA, formerly known as The First National Bank of Chicago (the "Bank"), a national banking association and Hawaiian Electric Company, Inc., a Hawaii corporation (the "Corporation").

Subject to the terms and conditions of the Agreement, the Corporation and the Bank, by the signatures of their authorized officers below, agree to amend the following as of the date above:

1. Delete the first sentence in paragraph 3.A and insert in place thereof, the following:

   "Issue Cards to employees and/or agents of the Corporation or in the name of a department (which may be used by any member of such department) designated by an Authorized Signer ("Cardmembers")."

2. Delete the second sentence in paragraph 4.D and insert in place thereof, the following:

   "If the Corporation is liable to the Bank for such transaction pursuant to this Agreement, the Bank will assist the Corporation in attempting to obtain reimbursement from the Merchant; provided, however, that the Corporation understands that by authorizing the Bank to issue cards in the name of a department rather than a Cardmember's name, it is waiving certain dispute rights with respect to such department cards where a Cardmember's name is required."

It is understood and agreed that the terms and conditions of the Agreement shall continue in full force and effect, except as concerns the amendments contained herein.

Bank One, NA (formerly known as
The First National Bank of Chicago)

By: _____
Eileen P. Gardner
Assistant Vice President

Acknowledged and Agreed:

Hawaiian Electric Company, Inc.

By: _____
Name: Ernest T. Shiraki
Title: Controller

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PURCHASING CARD AGREEMENT

This Agreement is entered into this 15th day of March, 1996, between The First National Bank of Chicago ("FNBC"), a national banking association, and Hawaiian Electric Company, Inc., an Hawaii corporation (the "Corporation").

1. *Purchasing Card System.* Subject to the terms of this Agreement, FNBC and the Corporation hereby agree that commencing on the date of this Agreement the Corporation shall participate in the Purchasing Card System (the "System") described in the Purchasing Card Manual (the "Manual"), a copy of which Manual is attached to this Agreement as Exhibit A. Data processing services for the System will be provided by Total System Services, Inc. ("TSYS"). Information processing services for the System will be provided by ProCard Inc.

2. *Conditions Precedent.* Prior to the commencement of any service rendered by FNBC pursuant to this Agreement, the Corporation shall furnish to FNBC resolutions of the Board of Directors of the Corporation specifying the officers of the Corporation (each an "Authorized Officer") authorized to execute and deliver this Agreement and any related agreements and documents, certified by the Corporation's Secretary or Assistant Secretary (and, if such resolutions do not specify by name such Authorized Officers, a certificate of the Corporation's Secretary or Assistant Secretary certifying the incumbency of the persons holding such offices) and such other documents evidencing the Corporation's authority to enter into this Agreement as FNBC or its counsel shall reasonably request. An Authorized Officer shall provide FNBC with a completed Signature Authorization form in the form set forth in the Manual, designating each person (each an "Authorized Signer") authorized by the Corporation to give instructions to FNBC as to (1) officers, employees and agents authorized to use procurement cards and the corresponding accounts and account numbers (collectively, the "Cards") pursuant to the System and (2) limits and reporting structures applicable to use of such Cards. FNBC may rely upon such Signature Authorization form and upon the instructions of any Authorized Signer until such time as FNBC shall have received written notice to the contrary from an Authorized Officer.

3. *Obligations of FNBC.* In connection with the Corporation's participation in the System, FNBC shall:

A. Issue Cards to employees and/or agents of the Corporation ("Cardmembers") designated by an Authorized Signer. The Cards are non-transferable, non-assignable and shall remain the property of FNBC.

B. Authorize extensions of credit in an amount not exceeding $200,000 (Two Hundred Thousand Dollars) per Cycle (the "Cycle Spending Limit"); provided, that in no event shall FNBC be required to Authorize extensions of credit in excess of the amount reflected on the System as "open to buy". Payments made by the Corporation do not replenish the Cycle Spending Limit. "Cycle" shall mean the monthly period ending on the same day each month, or, if that day is a Saturday, Sunday or TSYS holiday, the prior business day. "Authorize" or "Authorization" shall mean the approval of a purchase transaction for which a MasterCard merchant (the "Merchant") has requested authorization, in accordance with the purchase limits (the "Purchase Limits") specified by an Authorized Signer. The Purchase Limits and any changes to the Purchase Limits must be specified on the forms set forth in the Manual. No change shall be effective until entered into the System and given effect by TSYS. The Manual describes in detail the operation of the System and the limitations on the various Purchase Limits which can be selected by the Corporation and the Corporation expressly agrees that it has reviewed and understands the operation of the System and the limitations on the Purchase Limits as set forth in the Manual.

C. Provide the Corporation with the reports and the daily transactions data (the "Daily Data File") as described in the Manual or provide the Corporation with equivalent information by such method as the parties hereto may otherwise agree.

4. *Obligations of the Corporation.* In connection with the Corporation's participation in the System, the Corporation shall:

A. Designate at least ten (10) Cardmembers, specify Purchase Limits for the Cardmembers, and notify FNBC of any changes in the Cardmembers or in the Purchase Limits applicable to Cardmembers using the forms set forth in the Manual.

B. Pay FNBC the amount of all transactions made by Cardmembers using the Cards (i) which are Authorized in accordance with the Purchase Limits or (ii) for which Authorization is not required by the MasterCard system or (iii) with respect to which the Corporation or a Cardmember derived a benefit from the transaction except for charges waived under the MasterCoverage® Liability Protection Program. The Purchase Limits shall be deemed to have been followed when Authorization occurs at a Merchant classified on the MasterCard system as having a merchant classification code included in a Cardmember's Merchant Category Code (as described in the Manual) even if the merchant classification code has been incorrectly assigned. The Corporation understands that Cardmembers will be able to use the Cards for, and the Corporation will be liable for, certain transactions where Authorization is not required by the MasterCard system (e.g., transactions which are under the floor limit set for the Merchant) and that such transactions may exceed or violate the Purchase Limits specified by the Corporation. The Corporation understands that if the TSYS Authorization system is not working, all transactions will be declined Authorization.

C. Make payment monthly for all transactions and the related transaction fees and other fees appearing in the Daily Data File during a Cycle within seven days of the Cycle date, or if such day is a FNBC holiday, the next business day (the "Payment Date"). The Corporation shall make payment by wire transfer or Automated Clearinghouse transfer to an account designated by FNBC or by check to the address specified by FNBC. If all or any portion of a payment owed by the Corporation is not received by FNBC by the Payment

H. Upon request provide FNBC with copies of its annual reports, Form 10-K filings and 10-Q filings within fifteen (15) days after such information is made publicly available.

I. Use the Cards established pursuant to this Agreement only for normal procurement purchases and establish reasonable procedures to assure that Cards are not used for cash advances or for transactions with Merchants located outside the United States; provided, that if the Cards are so used, FNBC may still charge the Corporation for all such transactions.

5. *Representations and Warranties of the Corporation*. As of the date hereof, and the date of each transaction hereunder, the Corporation represents and warrants to FNBC that:

A. The Corporation is duly incorporated, validly existing and in good standing under the laws of its jurisdiction of incorporation and has all requisite authority to conduct its business in each jurisdiction in which its business is conducted.

B. The Corporation has the corporate power and authority and legal right to execute and deliver this Agreement and to perform its obligations hereunder. The execution and delivery by the Corporation of this Agreement and the performance of its obligations hereunder have been duly authorized by proper corporate proceedings, and this Agreement constitutes the legal, valid and binding obligation of the Corporation enforceable against the Corporation in accordance with its terms.

C. To the best of its knowledge, neither the execution and delivery by the Corporation of this Agreement, nor the consummation of the transactions herein contemplated, nor compliance with the provisions hereof will violate any law, rule, regulation, order, writ, judgment, injunction, decree or award binding on the Corporation or the Corporation's articles of incorporation or by-laws or the provisions of any indenture, instrument or agreement to which the Corporation is a party or is subject, or by which it, or its property, is bound, or conflict with or constitute a default thereunder. No order, consent, approval, license, authorization, or validation of, or filing, recording or registration with, or exemption by, any governmental or public body or authority, or any subdivision thereof, is required to authorize, or is required in connection with the execution, delivery and performance of, or the legality, validity, binding effect or enforceability of, this Agreement.

D. No information furnished by the Corporation to FNBC in connection with this Agreement contained any material misstatement of fact or omitted to state a material fact or any fact necessary to make the statements contained therein not misleading.

6. *Fees*. The Corporation agrees to pay the fees and charges set by FNBC from time to time. The fees initially applicable are specified in Exhibit B attached hereto.

7. *Termination*. This Agreement may be terminated by FNBC at any time for any reason and FNBC may refuse to allow further transactions or revoke any or all of the Cards at any time and for any reason. The Corporation may also terminate this Agreement and/or cancel any or all of the Cards at any time. In the event this Agreement terminates for any reason, the Corporation shall immediately pay all amounts owing under this Agreement, without set-off or deduction, and return to FNBC all Cards furnished to Cardmembers. The Corporation shall be liable as provided in this Agreement for any charges made through use of the Cards. Sections 4.B, 4.C, 4.D, 4.E, 4.F, 4.G, 4.I, 6, 7, 8, 10, 11.C, 11.D, 11.E, 11.G and 11.K shall survive the termination of this Agreement. In the event collection is initiated by FNBC, the Corporation shall be liable for payments of reasonable attorneys' fees, including but not limited to in-house counsel fees incurred by FNBC.

8. *Limitation of Liability*. Neither FNBC nor any of its directors, officers, agents or employees shall be liable to the Corporation for any action taken or omitted to be taken by it or them hereunder or under or in connection herewith or therewith except for its or their own gross negligence or willful misconduct. In no event shall FNBC or its directors, officers, agents or employees be liable for consequential damages, even if FNBC or its directors, officers, agents or employees have been advised of the possibility of such damages. Neither FNBC nor its directors, officers, agents or employees shall have any fiduciary responsibilities to the Corporation nor does FNBC or any of them undertake any responsibility to the Corporation to review or inform the Corporation of any matter

in connection with any phase of the Corporation's business or operations.

9. *Notices*. All notices and other communications required or permitted to be given under this Agreement shall be in writing (except as otherwise provided in the Manual) and shall be effective on the earlier of the date on which such notice is actually received by the party to which addressed or three days after such notice has been deposited in the United States mail, postage prepaid, at the address set forth below:

For FNBC: The First National Bank of Chicago
One First National Plaza
Chicago, Illinois 60670-0199
Attn: Cynthia P. Meyer

Copy to: FCC National Bank
2500 Westfield Drive
Elgin, Illinois 60123
Attn: Purchasing Card B-3

For the Corporation: Hawaiian Electric Company, Inc.
900 Richards Street
Honolulu, Hawaii 96813
Attn: Ernest Shiraki
Controller

10. *Data Processing*.

A. Data processing services for the System shall be provided by TSYS and the fees for such services are included in the fees set forth in Section 6 of this Agreement. In the event that TSYS refuses or is unable to provide such services at any time, FNBC's obligation to provide services pursuant to this Agreement shall immediately terminate at the option of FNBC. FNBC is hereby authorized to provide transaction data from the System to MasterCard and ProCard, Inc.

B. During the course of this Agreement it will be appropriate and necessary for FNBC, ProCard, Inc. and TSYS to have access to certain confidential business information ("Information"), particularly purchase transactions information, the identity, telephone numbers or mailing address of any Authorized Signer or Cardmember. Accordingly, FNBC agrees and before release of any information to MasterCard, ProCard, Inc. and TSYS FNBC will get their agreement agrees to consider this Information as confidential, and to take all reasonable precautions to prevent disclosure of said Information to third parties, and not to use said Information without the Corporation's consent. This confidentiality agreement shall extend to any information FNBC, ProCard, Inc. and TSYS may learn, observe or otherwise obtain concerning the Corporation incidental to the performance during the course of this agreement. This agreement shall not prevent FNBC from disclosing any such Information to its regulatory authorities or pursuant to subpeona for other legal process.

11. *Miscellaneous*.

A. If any provision in this Agreement is held to be inoperative, unenforceable, or invalid such provision shall be inoperative, unenforceable, or invalid without affecting the remaining provisions, and to this end the provisions of this Agreement are declared to be severable.

B. The terms and provisions of this Agreement shall be binding upon and inure to the benefit of the Corporation and FNBC and their respective successors and assigns. This Agreement, or any of the rights hereunder, may not be assigned by either party without the prior written consent of the other party except that FNBC may assign its rights hereunder to any wholly-owned subsidiary of FNBC without the prior written consent of the Corporation. The Corporation shall give written notice of the existence of this Agreement to any

transfer or assignment of same and shall immediately provide FNBC with a copy of such notice. In no event shall the Corporation be relieved of liability to FNBC arising hereunder unless and until a purchaser, transferee, assignee or other successor in interest to the Corporation's business shall expressly assume such liability in writing and FNBC accepts such assumption of liability in writing, which acceptance by FNBC shall be solely within FNBC's discretion.

C. FNBC shall not be held responsible for any act, failure, event or circumstance addressed herein if such act, failure, event, or circumstance is caused by conditions beyond its reasonable control.

D. This Agreement and the Manual embody the entire agreement and understanding between the Corporation and FNBC and supersede all prior agreements and understandings between the Corporation and FNBC relating to the subject matter thereof. All representations and warranties of the Corporation contained in this Agreement shall survive the execution of this Agreement and consummation of the transactions contemplated hereunder.

E. No delay or omission of FNBC to exercise any right under this Agreement shall impair such right or be construed to be a waiver of any default or an acquiescence therein, and the authorization of transactions notwithstanding the existence of a Default shall not constitute any waiver or acquiescence. Any single or partial exercise of any such right shall not preclude other or further exercise thereof or the exercise of any other right, and no waiver, amendment or other variation of the terms, conditions or provisions of the Agreement whatsoever shall be valid unless in writing signed by FNBC, and then only to the extent in such writing specifically set forth. All remedies contained in this Agreement or by law afforded shall be cumulative and all shall be available to FNBC until the Corporation's obligations under this Agreement have been paid in full.

F. Anything contained in this Agreement to the contrary notwithstanding, FNBC shall not be obligated to extend credit to the Corporation in violation of any limitation or prohibition provided by any applicable statute or regulation.

G. Any taxes (excluding federal income taxes on the overall net income of FNBC) or other similar assessments or charges payable or ruled payable by any governmental authority in respect of the Agreement or the transactions contemplated hereunder shall be paid by the Corporation together with interest and penalties, if any.

H. Section headings in this Agreement are for convenience of reference only, and shall not govern the interpretation of any of the provisions of the Agreement.

I. Corporation shall notify FNBC in writing of any address change within twenty (20) days after the change becomes effective.

J. If a purchase or cash advance is made in a foreign currency, it will be converted by MasterCard International into U.S. Dollars. MasterCard International will use the Conversion Procedures published from time to time to its members and effective at the time the transaction is processed. Currently, those Conversion Procedures provide that the currency conversion rate to be used is either a wholesale market rate or a government-mandated rate, increased by one percent. The currency conversion rate in effect on the processing date may differ from the rate in effect on the transaction date or the posting date. The currency conversion rate used may be the same as, greater than or less than the amount that would be calculated by conversion through a financial institution in the country in which the purchase or cash advance occurred. The Corporation understands that FNBC does not determine the currency conversion rate which is used and does not receive any portion of the currency conversion rate.

K. Payments under this Agreement shall be made in U.S. dollars.

L. This Agreement may be signed in one or more counterparts, each of which shall be an original, with the same effect as if the signatures were upon the same Agreement. This Agreement shall become effective when each of the parties hereto shall have signed a counterpart hereof.

M. FNBC may change the fees and charges payable by the Corporation and/or the terms of this Agreement at any time provided FNBC notifies the Corporation at least thirty (30) days prior to the effective date of the change. Changes can apply to all outstanding unpaid indebtedness and to any future transactions made using a Card.

N. CHOICE OF LAW AND JURISDICTION. THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE INTERNAL LAWS (AND NOT THE LAW OF CONFLICTS) OF THE STATE OF ILLINOIS, BUT GIVING EFFECT TO FEDERAL LAWS APPLICABLE TO NATIONAL BANKS. THE CORPORATION HEREBY IRREVOCABLY SUBMITS TO THE NON-EXCLUSIVE JURISDICTION OF ANY UNITED STATES FEDERAL OR ILLINOIS STATE COURT SITTING IN ILLINOIS IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT, AND THE CORPORATION HEREBY IRREVOCABLY AGREES THAT ALL CLAIMS IN RESPECT OF SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN ANY SUCH COURT. THE CORPORATION HEREBY WAIVES ANY RIGHT TO A JURY TRIAL IN ANY ACTION ARISING HEREUNDER.

[redacted] HAWAIIAN ELECTRIC COMPANY, INC.

[redacted]

By Cynthia P. Meyer
Name CYNTHIA P. MEYER
Title VICE PRESIDENT

By Paul Oyer
Name Paul Oyer
Title Financial V.P. & Treasurer

By Ernest T. Shiraki
Name Ernest T. Shiraki
Title Controller

incorp.con

CA-IR-214

Ref: HECO-WP-1907 (Lead lag study support – Income Tax Payment Lag.

Mr. Lon Okada explained that the federal/state income tax payment lag is driven by the Company's ability to deduct the PSC tax for a given tax year in the first quarter of the "tax" year. For any given income tax year, please provide the following regarding the PSC tax deduction:

a. the period during which the PSC tax is accrued;

b. the period/method of accruing the PSC tax on the Company's financial statement books for which the tax deduction is being taken; and

c. the date(s) the PSC tax is actually paid.

HECO Response:

a. PSC tax is accrued in the same year for which an income tax deduction is taken. However, the amount of PSC taxes accrued for the year will differ from the [redacted]

CA-IR-215

Ref: HECO-WP-1907 (Lead lag study support – Non labor O&M expense payment lag).

Please provide the following regarding any "reserves" or "provisions" for self-insurance:

a. a descriptive itemization for each self-insurance reserve;

b. the monthly reserve balance for the period January 2002 to-date; and

c. the forecasted 2005 reserve balance by month.

HECO Response:

a. The Company's reserve accounts include the following:

   1. General & Auto Liability (Account #25320000) – the reserves for the estimated future payment of claims brought against the Company by outside parties.

   2. Legal Fees for General & Auto Liability (Account #25321000) – the reserves for the estimated future payment of legal fees by the Company in defense of claims made by outside parties.

   3. Workers' Compensation (Account #25322000) – the reserves for the estimated future payment of medical and indemnity benefits and legal costs for known Workers' Compensation claims.

   4. EEO Liability (Account #25323000) – the reserves for the estimated future payments of attorney fees and potential settlements for known discrimination claims.

b. See attached for monthly reserve balances for the period January 2002 to-date.

c. The Company does not forecast monthly reserve balances. However, for the General and Auto Liability Reserves, and its related legal fee reserves, please refer to HECO-1404, page 1, for the 2005 Test Year annual estimates.

Monthly Reserve Balances ($'s)

Account #	General/Auto Liability 25320000	Legal - Gen/Auto Liab 25321000	Worker's Comp 25322000	EEO Liability 25323000
2002 Jan	383,500	177,100	3,471,205	146,242
Feb	403,000	184,000	3,509,551	145,784
Mar	397,800	190,000	3,448,381	139,681
Apr	592,700	206,100	3,369,635	75,347
May	689,700	206,100	3,424,823	71,531
Jun	707,000	164,100	3,187,532	51,216
Jul	797,000	248,900	3,417,965	50,112
Aug	797,000	195,700	3,448,971	45,459
Sep	855,000	277,800	3,489,487	45,459
Oct	850,000	257,200	3,422,614	44,263
Nov	900,000	241,000	3,442,769	51,978
Dec	885,000	270,600	3,011,318	51,359
2003 Jan	895,000	261,900	3,196,386	102,630
Feb	970,000	257,300	3,196,386	107,630
Mar	980,000	367,000	2,989,781	51,637
Apr	985,000	290,700	2,989,781	47,679
May	1,015,000	299,900	3,024,463	47,679
Jun	830,000	147,700	2,866,112	31,762
Jul	525,000	152,600	2,866,112	15,514
Aug	500,000	71,300	2,896,112	13,549
Sep	590,000	67,800	2,787,520	11,637
Oct	640,000	73,200	2,904,474	29,892
Nov	710,000	72,400	2,766,771	26,945
Dec	740,000	157,400	2,436,783	36,945
2004 Jan	765,000	144,300	2,538,185	33,063
Feb	775,000	129,000	2,538,185	34,565
Mar	775,000	155,300	2,393,248	44,565
Apr	795,000	199,500	2,352,180	86,020
May	830,000	227,300	2,505,866	136,020
Jun	859,000	192,400	2,735,997	134,510
Jul	784,000	196,700	2,735,997	122,814
Aug	1,249,000	176,800	2,857,498	110,426
Sep	1,399,000	166,000	2,654,455	100,756
Oct	1,174,000	167,700	2,541,368	150,756
Nov	1,569,000	152,600	2,519,069	198,047
Dec	1,679,000	217,900	2,371,449	198,025
2005 Jan	1,709,000	206,700	2,441,499	193,519

CA-IR-216

Ref: HECO-WP-1907 (Lead lag study support – Non labor O&M expense payment lag).

Please provide the following regarding any "prepayment" account:

a. a descriptive itemization for each prepayment subaccount;
b. the monthly prepayment balance for the period January 2002 to 2005 to-date; and
c. the forecasted 2005 prepayment balances by month.

HECO Response:

a. See page 2 of this response for a list and description of the Company's prepayment accounts.

b. See page 3 of this response for monthly prepayment balance for the period January 2002 to 2005 to-date.

c. The Company does not forecast prepayment balances.

Prepaid Accounts

GL Code		Description
16600000	Prepaid - others	Deloitte and Touche tax services
16601000	Prepaid rent	King Street lease rent with Kamehameha Schools Bishop Estate
16608000	Prepaid Keyman insurance	Keyman insurance premiums
16609000	Prepaid Maintenance fees	Prepaid IT software, licenses, maintenance, training contracts
16610000	Prepaid Airline Coupons	Unused airline credits
16612000	Prepaid Emission fees [1]	Annual fees paid to State of Hawaii Dept of Health
166030 (inter NARUC)	Prepaid EPRI Dues	Annual membership fees to Electric Power Research Institute
16604000	Prepaid Insurance - Property	Annual premium
16604100	Prepaid Insurance - General Liability	Annual premium
16604200	Prepaid Insurance - Dishonesty & Robbery	Annual premium
16604300	Prepaid Insurance - Boiler & Machinery	Annual premium
16604400	Prepaid Insurance - Excess work comp/travel	Annual premium
16604500	Prepaid Insurance - Directors and Officers	Annual premium

[1] Due to a change in accounting treatment as of June 2003, Emission fees are no longer recorded to this Prepaid account.

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PAGE 3 OF 3

(REVISED 5-6-05)

Monthly RECORDED Balances ($'s)

	Prepaid - others	Prepaid rent	Prepaid Keyman Insurance	Prepaid Maint Fees	Prepaid Airline Coupons	Prepaid Emission Fees	Prepaid EPRI Dues	Prepaid Insur - Prop	Prepaid Insur- Genl Liab	Prepaid Insur - Dishnesty/Rob	Prepaid Insur - Boiler	Prepaid Insur - Work Comp/TVL	Prepaid Insur - Dir & Off
Account #	16600000	16601000	16608000	16609000	16610000	16612000	166030 (inter NARUC)	16604000	16604100	16604200	16604300	16604400	16604500
2002 Jan	0	269,096	59,434	506,644	34,693	(56,427)	(121,376)	460,314	187,756	0	196,231	0	0
Feb	0	201,822	87,722	455,590	33,086	(112,855)	(242,752)	394,555	140,817	0	181,684	0	0
Mar	0	134,548	75,791	409,871	32,543	0	36,549	328,796	93,878	0	151,404	0	0
Apr	0	67,274	88,581	633,659	29,858	0	267,117	263,037	46,939	0	121,123	0	0
May	0	403,643	76,650	551,408	33,689	0	145,741	197,278	0	0	90,842	0	0
Jun	0	336,369	64,718	469,158	25,532	0	24,365	131,518	619,146	0	60,562	119,740	0
Jul	0	269,096	96,413	386,907	30,821	0	269,011	65,759	562,860	0	30,281	109,913	0
Aug	0	201,822	84,481	304,657	38,085	0	133,557	0	506,574	0	15,734	98,922	0
Sep	918,743	134,548	72,550	225,223	24,060	0	12,181	1,338,802	450,288	0	506,525	87,930	0
Oct	918,743	67,274	60,619	226,107	26,699	0	242,750	1,217,093	394,002	0	459,046	76,939	0
Nov	918,743	0	48,688	163,438	20,839	0	121,374	1,095,384	337,716	0	411,568	65,948	0
Dec	918,743	336,369	71,365	471,697	26,471	0	0	973,674	281,430	0	364,090	54,956	0
2003 Jan	943,743	269,096	59,434	402,210	22,443	(60,560)	(127,601)	855,720	225,144	0	316,612	43,965	0
Feb	943,743	201,822	87,722	330,645	18,145	(121,120)	165	757,173	173,968	0	284,101	32,974	0
Mar	918,743	134,548	75,791	621,531	9,953	(181,680)	(2,016)	630,977	115,978	9,607	236,751	21,983	0
Apr	918,743	67,274	88,581	1,145,261	11,865	502,988	240,286	504,782	57989.4	9,607	189,401	10,991	0
May	918,743	403,643	76,650	1,039,915	13,786	440,114	139,546	378,586	0	9,607	142,051	2,952	0
Jun	918,743	336,370	108,344	934,569	15,846	0	24,967	252,391	664,217	9,607	94,701	150,358	0
Jul	925,480	269,096	96,413	829,223	7,908	0	267,269	126,195	688,276	9,607	47,350	136,689	0
Aug	925,480	201,822	84,481	723,877	4,550	0	139,876	0	619,448	9,607	17,672	123,020	0
Sep	918,743	134,548	72,550	618,531	4,025	0	12,483	1,197,839	550,621	9,607	444,733	109,351	0
Oct	918,743	67,274	60,619	572,720	2,030	0	254,785	1,121,663	481,793	9,607	404,564	95,682	0
Nov	918,743	403,644	48,688	484,844	1,670	0	127,393	1,009,497	412,965	9,607	362,340	82,013	0
Dec	918,743	336,369	71,365	804,632	1,670	0	0	897,331	344,138	9,607	320,117	68,344	0
2004 Jan	918,743	269,096	59,434	662,685	1,670	0	249,096	785,164	275,310	0	277,893	54,676	0
Feb	918,743	201,822	87,722	828,038	1,185	0	161,117	672,998	206,483	12,452	253,341	41,007	162,847
Mar	918,743	134,548	75,791	1,001,211	1,185	0	41,818	560,832	137,655	15,989	211,118	27,338	151,444
Apr	918,743	67,274	88,581	991,638	1,185	0	282,768	448,665	68,828	15,989	168,894	13,669	136,299
May	918,743	403,643	76,650	876,802	1,043	0	155,324	336,499	0	15,989	126,671	0	121,155
Jun	918,743	336,369	108,344	1,061,568	1,043	0	27,879	224,333	896,179	15,989	84,447	144,148	106,011
Jul	919,395	269,095	96,413	939,044	1,043	0	268,829	112,166	839,288	15,989	42,224	136,969	90,886
Aug	919,395	201,822	84,481	817,375	1,043	0	141,384	(0)	755,359	15,989	0	123,272	75,722
Sep	919,395	134,548	72,550	695,707	1,043	0	13,939	1,649,813	671,431	15,989	(42,223)	109,575	60,577
Oct	919,395	67,274	60,619	574,039	1,043	0	254,889	1,601,072	587,502	15,989	(61,308)	95,878	45,433
Nov	919,395	0	48,688	482,839	1,043	0	127,445	1,027,050	503,573	15,989	374,749	82,181	30,289
Dec	919,395	**(67,274)**	71,365	772,652	1,043	0	(0)	912,934	419,644	15,989	331,093	68,484	15,144
2005 Jan	919,396	(134,548)	59,434	639,251	1,043	0	(127,445)	798,817	335,715	2,090	305,592	54,788	0

ances ($'s)

d - ts	Prepaid rent	Prepaid Keyman Insurance	Prepaid Maint Fees	Prepaid Airline Coupons	Prepaid Emission Fees	Prepaid EPRI Dues	Prepaid Insur - Prop	Prepaid Insur- Genl Liab	Prepaid Insur - Dishnesty/Rob	Prepaid Insur - Boiler	Prepaid Insur - Work Comp	Prepaid Insur - Dir & Off
000	16601000	16608000	16609000	16610000	16612000	166030 (inter NARUC)	16604000	16604100	16604200	16604300	16604400	16604500
0	269,096	59,434	506,644	34,693	(56,427)	(121,376)	460,314	187,756	0	19	0	0
0	201,822	87,722	455,590	33,086	(112,855)	(242,752)	394,555	140,817	0	4	0	0
0	134,548	75,791	409,871	32,543	0	36,549	328,796	93,878	0	,404	0	0
0	67,274	88,581	633,659	29,858	0	267,117	263,037	46,939	0	121,123	0	0
0	403,643	76,650	551,408	33,689	0	145,741	197,278	0	0	90,842	0	0
0	336,369	64,718	469,158	25,532	0	24,365	131,518	619,146	0	60,562	119,740	0
0	269,096	96,413	386,907	30,821	0	269,011	65,759	562,860	0	30,281	109,913	0
0	201,822	84,481	304,657	38,085	0	133,557	0	506,57	0	15,734	98,922	0
,743	134,548	72,550	225,223	24,060	0	12,181	1,338,802	45	0	506,525	87,930	0
,743	67,274	60,619	226,107	26,699	0	242,750	1,217,093	02	0	459,046	76,939	0
,743	0	48,688	163,438	20,839	0	121,374	1,095,384	7,716	0	411,568	65,948	0
,743	336,369	71,365	471,697	26,471	0	0	973,6	281,430	0	364,090	54,956	0
,743	269,096	59,434	402,210	22,443	(60,560)	(127,601)	8	225,144	0	316,612	43,965	0
743	201,822	87,722	330,645	18,145	(121,120)	165	73	173,968	0	284,101	32,974	0
743	134,548	75,791	621,531	9,953	(181,680)	(2,016	030,977	115,978	9,607	236,751	21,983	0
743	67,274	88,581	1,145,261	11,865	502,988	240	504,782	57989.4	9,607	189,401	10,991	0
743	403,643	76,650	1,039,915	13,786	440,114		378,586	0	9,607	142,051	2,952	0
743	336,370	108,344	934,569	15,846	0	,967	252,391	664,217	9,607	94,701	150,358	0
480	269,096	96,413	829,223	7,908	0	267,269	126,195	688,276	9,607	47,350	136,689	0
480	201,822	84,481	723,877	4,550		139,876	0	619,448	9,607	17,672	123,020	0
743	134,548	72,550	618,531	4,025	0	12,483	1,197,839	550,621	9,607	444,733	109,351	0
743	67,274	60,619	572,720	2,030	0	254,785	1,121,663	481,793	9,607	404,564	95,682	0
743	403,644	48,688	484,844	1,6	0	127,393	1,009,497	412,965	9,607	362,340	82,013	0
743	336,369	71,365	804,632		0	0	897,331	344,138	9,607	320,117	68,344	0
743	269,096	59,434	662,685	670	0	249,096	785,164	275,310	0	277,893	54,676	0
743	201,822	87,722	828,038	1,185	0	161,117	672,998	206,483	12,452	253,341	41,007	162,847
743	134,548	75,791	1,001	1,185	0	41,818	560,832	137,655	15,989	211,118	27,338	151,444
743	67,274	88,581		1,185	0	282,768	448,665	68,828	15,989	168,894	13,669	136,299
743	403,643	76,650	6,802	1,043	0	155,324	336,499	0	15,989	126,671	0	121,155
743	336,369	108,34	1,061,568	1,043	0	27,879	224,333	896,179	15,989	84,447	144,148	106,011
495	269,095	9	939,044	1,043	0	268,829	112,166	839,288	15,989	42,224	136,969	90,886
495	201,822	81	817,375	1,043	0	141,384	(0)	755,359	15,989	0	123,272	75,722
495	134,548	72,550	695,707	1,043	0	13,939	1,649,813	671,431	15,989	(42,223)	109,575	60,577
495	67,27	60,619	574,039	1,043	0	254,889	1,601,072	587,502	15,989	(61,308)	95,878	45,433
495		48,688	482,839	1,043	0	127,445	1,027,050	503,573	15,989	374,749	82,181	30,289
495	,274	71,365	772,652	1,043	0	(0)	912,934	419,644	15,989	331,093	68,484	15,144
496	(134,548)	59,434	639,251	1,043	0	(127,445)	798,817	335,715	2,090	305,592	54,788	0

CA-IR-217

Ref: T-22, Page 6, Lines 14 – 25.

Please state whether the Company's embedded cost of service methodology and procedures are the same as were employed by HECO in its most recent general rate case proceeding and describe any changes in methodology or procedures that have been employed, together with an explanation for the changes that were made.

HECO Response:

The Company's embedded cost of service methodology and procedures are the same as were employed by HECO in its last general rate case proceeding, Docket No. 7766, except that the Company's cost of service study program employed in Docket No. 7766 was based on the mainframe-based Interactive Financial Planning System (IFPS), and the Company's cost of service study program employed in this instant docket is based on the PC-based Microsoft EXCEL. The Company eliminated the mainframe-based IFPS in the late 1990's when it converted to PC-based system.

CA-IR-218

Ref: T-22, Page 11, Line 16.

According to the witness, "HECO prepares both methods in its cost-of-service study for this proceeding, using the recorded distribution plant data for 1985-2003."

a. Please provide complete copies of all electronic spreadsheet files associated with, and supportive of, the minimum size system and the minimum intercept approaches.

b. In addition, please indicate which specific values were adopted from each study to apply to individual Distribution Plant accounts and explain the basis for acceptance/rejection of each calculated study result under the two methods.

HECO Response:

a. Please see HECO response to CA-IR-100 for the requested information. Also, please see HECO-WP-2202, pages 149-172. The analysis is run in SAS system and is not available in electronic spreadsheet file format. SAS is a statistical software.

b. The specific values adopted and applied to the individual distribution plant accounts are summarized in HECO-WP-2202, pages 147-148. The values from the minimum size system method were adopted and used in the Company's embedded cost of service study, as the minimum intercept method resulted in negative intercept values which are not reasonable since the intercept values represent the plant costs at a no-load situation based on the minimum intercept method's premise. Even when customers are not using kW or kWh, the Company incurs costs connecting customers to the system, and maintaining and operating the distribution plant facilities.

CA-IR-219

Ref: T-22, Page 10, Line 15.

According to the witness, "[t]he distribution lines and transformers are assigned to demand and customer components, since the size and costs of these facilities are dependent not only on the customers' load, but also on the type and location of the customers." Please respond to the following:

a. State whether HECO has performed or acquired any study of distribution poles, lines and transformers that evaluates whether such facilities and related costs are caused by or vary directly in correlation with the number of customers being served.

b. If your response to subpart (a) of this information request is affirmative, please provide complete copies of all documentation associated with your response.

c. Please explain if/how the economics of HECO's Rule 13 line extension policy have been considered in attributing some portion of distribution poles, lines and transformers to a customer classification.

d. Describe how distribution poles, lines and transformers can be treated as positively correlated to and properly allocated based upon the number of customers served, given HECO service to specific individual customers that may be:

   1. Rate Schedule R service to single-family homes in newly constructed subdivisions;

   2. Rate Schedule R service to single-family homes built upon existing lots where no new distribution pole line construction is required;

   3. Rate Schedule R service to multi-family condominium projects with much higher densities than items 1 and 2;

   4. Rate Schedule J service to master metered condominium projects containing the same number of units and requiring the same pole line extension as item 3; and

   5. Rate Schedule PP service to a large commercial customer located in a location remote from existing distribution facilities.

e. Explain each reason why the Company's Marginal Cost Study, at HECO-WP-2217, page 85, includes only meters and services (and related O&M) as customer-related costs, while the Company's embedded study expands the facilities and costs presumed to be customer-related to also include a portion of the cost for distribution poles, lines and transformers.

HECO Response:

a. HECO's classification of the distribution plant Accounts 364 through 368 as demand-related

and customer-related follows the NARUC Electric Utility Cost Allocation Manual dated January 1992, and is the same method used in prior rate cases and approved by the Commission, such as in HECO's Docket No. 6998, Test-year 1992, and approved in PUC Decision and Order No. 11699 issued on June 30, 1992 (see pages 161-174). These distribution plant accounts are facilities required to connect customers to the system. These facilities and their associated costs are directly related to the customer's load as well as to the number and location of customers. For instance, the length of conductors and number of poles required to connect a customer to the system is a function of both the customer's load to be served as well as the location of the customer as stated in HECO's response to CA-IR-299, parts c and d. HECO determines the costs of these facilities required to connect a customer to the system based on both the customer's load and its location.

b. See HECO response to part a. above. A copy of the relevant pages of the NARUC Electric Utility Cost Allocation Manual is provided as pages 4 to 9 of this response.

c. HECO's Rule 13 specifies the requirements and conditions for the extension of lines necessary to furnish service and connect customers to the system. It specifies the facilities that are installed by the Company, the determination of customer advance and customer contribution, refunds, and special facilities. Rule 13 does not specify what portion of the line extension cost is customer-related and what portion is demand-related.

d. See HECO response to part a. above. The embedded cost-of-service study allocates the utility's total cost of providing service to the different rate classes, and provides a systematic method of determining each class's share of the Company's total cost of providing service.

It does not provide an allocation of each class's cost of service to the various sub-groups or specific individual customers within the class. Additionally, the rate components in each

rate schedule such as the customer charge, demand charge, and energy charge are designed to apply to all customers within the class.

e. As noted in HECO T-22, page 2, lines 1-12, while both marginal cost and the embedded cost studies reflect the costs of providing service, the procedure or method and emphasis of each

ELECTRIC UTILITY COST ALLOCATION MANUAL

NATIONAL ASSOCIATION OF REGULATORY UTILITY COMMISSIONERS

January, 1992

From this breakdown it can be seen that each distribution account must be analyzed before it can be assigned to the appropriate functional category. Also, these accounts must be classified as demand-related, customer-related, or both. Some utilities assign distribution to customer-related expenses. Variations in the demands of various customer groups are used to develop the weighting factors for allocating costs to the appropriate group.

II. DEMAND AND CUSTOMER CLASSIFICATIONS 0F DISTRIBUTION PLANT ACCOUNTS

When the utility installs distribution plant to provide service to a customer and to meet the individual customer's peak demand requirements, the utility must classify distribution plant data separately into demand- and customer-related costs.

Classifying distribution plant as a demand cost assigns investment of that plant to a customer or group of customers based upon its contribution to some total peak load. The reason is that costs are incurred to serve area load, rather than a specific number of customers.

Distribution substations costs (which include Accounts 360 -Land and Land Rights, 361 - Structures and Improvements, and 362 -Station Equipment), are normally classified as demand-related. This classification is adopted because substations are normally built to serve a particular load and their size is not affected by the number of customers to be served.

Distribution plant Accounts 364 through 370 involve demand and customer costs. The customer component of distribution facilities is that portion of costs which varies with the number of customers. Thus, the number of poles, conductors, transformers, services, and meters are directly related to the number of customers on the utility's system. As shown in Table 6-1, each primary plant account can be separately classified into a demand and customer component. Two methods are used to determine the demand and customer components of distribution facilities. They are, the minimum-size-of-facilities method, and the minimum-intercept cost (zero-intercept or positive-intercept cost, as applicable) of facilities.

A. The Minimum-Size Method

Classifying distribution plant with the minimum-size method assumes that a minimum size distribution system can be built to serve the minimum loading requirements of the customer. The minimum-size method involves determining the minimum size pole, conductor, cable, transformer, and service that is currently installed by the utility. Normally, the average book cost for each piece of equipment determines

the price of all installed units. Once determined for each primary plant account, the minimum size distribution system is classified as customer-related costs. The demand-related costs for each account are the difference between the total investment in the account and customer-related costs. Comparative studies between the minimum-size and other methods show that it generally produces a larger customer component than the zero-intercept method (to be discussed). The following describes the methodologies for determining the minimum size for distribution plant Accounts 364, 365, 366, 367, 368, and 369.

1. **Account 364 - Poles, Towers, and Fixtures**

   - Determine the average installed book cost of the minimum height pole currently being installed.
   - Multiply the average book cost by the number of poles to find the customer component. Balance of plant account is the demand component.

2. **Account 365 - Overhead Conductors and Devices**

   - Determine minimum size conductor currently being installed.
   - Multiply average installed book cost per mile of minimum size conductor by the number of circuit miles to determine the customer component. Balance of plant account is demand component. (Note: two conductors in minimum system.)

3. **Accounts 366 and 367 - Underground Conduits, Conductors, and Devices**

   - Determine minimum size cable currently being installed.
   - Multiply average installed book cost per mile of minimum size cable by the circuit miles to determine the customer component. Balance of plant Account 367 is demand component. (Note: one cable with ground sheath is minimum system.) Account 366 conduit is assigned, basedon ratio of cable account.
   - Multiply average installed book cost of minimum size transformer by number of transformers in plant account to determine the customer component. Balance of plant account is demand component.

4. **Account 368 - Line Transformers**

   - Determine minimum size transformer currently being installed.

- Multiply average installed book cost of minimum size transformer by number of transformers in plant account to determine the customer component.

5. Account 369 - Services

- Determine minimum size and average length of services currently being installed.
- Estimate cost of minimum size service and multiply by number of services to get customer component.
- If overhead and underground services are booked separately, they should be handled separately. Most companies do not book service by

- Balance of pole investment is assigned to demand component.

- Total account dollars are assigned based on ratio of pole investment. (Transformer platforms in Account 364 are all demand-related. They should be removed before determining the account ratio of customer- and demand-related costs, and then they should be added to the demand portion of Account 364.)

2. Account 365 - Overhead Conductors and Devices

- If accounts are divided between primary and secondary voltages, develop a customer component separately for each. The total investment is assigned to primary and secondary; then the customer component is developed for each. Since conductors generally are of many types and sizes, select those sizes and types which represent the bulk of the investment in this account, if appropriate.

- When developing the customer component, consider only the investment in conductors, and not such devices as circuit breakers, insulators, switches, etc. The investment in these devices will be assigned later between the customer and demand component, based on the conductor assignment.

  - Determine the feet, investment, and average installed book cost per foot for distribution conductors by size and type.

  - Determine minimum intercept of conductor cost per foot using cost per foot by size and type of conductor weighted by feet or investment in each category, and developing a cost for the utility's minimum size conductor.

  - Multiply minimum intercept cost by the total number of circuit feet times 2. (Note that circuit feet, not conductor feet, are used to get customer component.)

  - Balance of conductor investment is assigned to demand.

  - Total primary or secondary dollars in the account, including devices, are assigned to customer and demand components based on conductor investment ratio.

3. Accounts 366 and 367 - Underground Conduits, Conductors, and Devices

- The customer demand component ratio is developed for conductors and applied to conduits. Underground conductors are generally booked by type and size of conductor for both one-conductor (1/c) cable and three-conductor (3/c) cables. If conductors are booked by voltage, as between primary and secondary, a customer component is

developed for each. If network and URD investments are segregated, a customer component must be developed for each.

- The conductor sizes and types for the customer component derivation are restricted to I/c cable. Since there are generally many types and sizes of I/c cable, select those sizes and types which represent the bulk of the investment, when appropriate.
  - Determine the feet, investment, and average installed book cost per foot for I/c cables by size and type of cable.
  - Determine minimum intercept of cable cost per foot using cost per foot by size and type of cable weighted by feet of investment in each category.
  - Multiply minimum intercept cost by the total number of circuit feet (I/c cable with sheath is considered a circuit) to get customer component.
  - Balance of cable investment is assigned to demand.
  - Total dollars in Accounts 366 and 367 are assigned to customer and demand components based on conductor investment ratio.

4. Account 368 - Line Transformers

- The line transformer account covers all sizes and voltages for single- and three-phase transformers. Only single-phase sizes up to and including 50 KVA should be used in developing the customer components. Where more than one primary distribution voltage is used, it may be appropriate to use the transformer price from one or two predominant, selected voltages.
  - Determine the number, investment, and average installed book cost per transformer by size and type (voltage).
  - Determine zero intercept of transformer cost using cost per transformer by type, weighted by number for each category.
  - Multiply zero intercept cost by total number of line transform-

CA-IR-220

Ref: T-22, Page 10, Line 2.

Please confirm and respond to the following information regarding HECO's embedded cost of service allocation study.

a. All non-fuel production O&M expenses are classified as demand-related.

b. No study has been performed by, or for HECO to determine whether some portion of non-fuel production O&M expenses are, instead, costs that tend to vary with the amount of energy that is produced.

c. In its Marginal Cost study, certain production O&M expenses are treated as "variable" O&M, as stated at page 99 of HECO-WP-2217.

d. In its production simulation modeling, certain non-fuel production O&M expenses are treated as variable, rather than fixed costs.

e. Please explain and reconcile the apparent differences in classification of production O&M expenses for the purposes stated in your responses to subparts (a) through (d) of this information request.

f. What percentage of expenses recorded in each NARUC Production O&M expense account other than fuel does the Company believe is variable in relation to KWH generation, as opposed to being a fixed cost associated with the continued availability of the capacity?

g. Provide a copy of all studies and other documents associated with your responses to subparts a through d and f of this information request.

HECO Response:

a. Yes. All the non-fuel production o&m expenses are classified as demand-related in HECO's embedded cost of service study.

b. HECO has not determined whether some portion of the test-year 2005 non-fuel production o&m expenses are costs that vary with the amount of energy produced. The determination of the test-year estimates of the non-fuel production o&m expenses are based on activities relating to the maintenance and operation of the generation plant facilities.

marginal energy costs in HECO's Marginal Cost study refers to the cost of water and chemicals for boiler water treatment and demineralization as well as wastewater treatment for HECO's generating units.

d. In HECO's production simulation model, certain non-fuel production o&m expenses are inputs to the model but are not used in the determination of the system lambdas or running costs which only include fuel costs.

e. The apparent difference in the classification of certain production o&m expenses in the Company's embedded and marginal cost studies is due to the method used to develop test-year production o&m expenses based on activities related to operation and maintenance of the generating units, and is not separated between variable o&m and fixed o&m.

f. See response to subpart e above. The Company has not made a determination of the percentage of recorded expenses in each NARUC Production o&m expense account other than fuel that is variable in relation to kWh generation as opposed to being fixed cost associated with the continued availability of generation capacity. The estimate of the test-year 2005 production o&m expense in HECO T-6 is not separated between variable and fixed costs, but rather is based on activity-based management.

g. There are no studies or documents associated with the responses to subparts a through d and f of this information request other than HECO-WP-2217, page 99, the determination of which is provided in HECO response to CA-IR-224.

CA-IR-221

Ref: T-22, Page 15, Lines 12 – 21.

Please state whether the Company's marginal cost of service methodology and procedures are the same as were employed by HECO in its most recent general rate case proceeding and describe any changes in methodology or procedures that have been employed, with an explanation for the changes that were made.

HECO Response:

The Company's marginal cost of service methodology and procedures are the same as were employed by HECO in its most recent general rate case proceeding, Docket No. 7766, test-year 1995.

CA-IR-222

Ref: T-22, Page 14, Line 21 and HECO-WP-2202, Page 82.

Please provide a complete copy of the Company's "Class Load Study" results and report, indicating how specific amounts from the study were incorporated into the determination of allocation factors used in the Company's embedded cost of service study (HECO-WP-2202, page 82). If any of the Demand Allocation Factor input values or load factors were based upon adjustments to the Class Load Study or other input data or calculations, please fully explain and provide such additional information.

HECO Response:

A copy of the 2003 HECO Class Load Study used in the Company's embedded cost of service study is voluminous. One copy each will be provided to the Consumer Advocate and the Commission under separate transmittal.

The classes' peak demands used in the demand allocation factors shown in the referenced workpaper, HECO-WP-2202, are based on the class load factors based on class peaks from the Company's Class Load Study. The class load factors based on non-coincident demand for Schedules R, G, H, and F used in the calculation of the class non-coincident demands used in the calculation of the demand allocation factors are from the Company's Class Load Study. The class load factors based on non-coincident demand for Schedules J and the P's are based on the classes' recorded billing data for 2003.

CA-IR-223

Ref: T-22, Page 15, Line 12.

Please provide a copy of the documentation relied upon by HECO to understand and apply the "National Economic Research Associations (NERA) method" in the design and conduct of its Marginal Cost of Service Study.

HECO Response:

In early 1980's, HECO commissioned NERA to prepare its first marginal cost study. The marginal cost studies that were filed in HECO's subsequent rate cases were prepared following the marginal cost study prepared by NERA. In 1992, HECO commissioned NERA to review its marginal cost study for use in HECO's general rate case, Docket No. 7700. As a result of

CA-IR-224

Ref: T-22, Page 16, Line 3 and HECO-WP-2217, Page 99.

Please explain and provide supporting calculations and documentation for the production O&M expenses that are treated as "variable" O&M in the Company's Marginal Cost of Service Study.

HECO Response:

Please see the attached Excel spreadsheet for the PMONTH production simulation's calculation of the variable O&M expenses, which include the cost of water and chemicals for boiler treatment and demineralization as well as water treatment for HECO generating units, and emission fees (see footnote to the table on page 2).

Hawaiian Electric Company, Inc.
Test Year 2005 Variable O&M Expenses
From the Production Simulation Run

	(1) Net Generation MWh		(2) Variable O&M $/MWh		(3) Variable O&M Exp. $
H8	18,809	$	0.610518	$	11,483
H9	41,557	$	0.575525	$	23,917
W3	60,266	$	0.578452	$	34,861
W4	61,174	$	0.580149	$	35,490
W5	107,572	$	0.571541	$	61,482
W6	166,440	$	0.522592	$	86,980
W7	466,447	$	0.464900	$	216,851
W8	492,765	$	0.457790	$	225,583
W9	298	$	0.936813	$	279
W10	2,546	$	0.859541	$	2,188
K1	396,463	$	0.537182	$	212,973
K2	488,012	$	0.477773	$	233,159
K3	496,963	$	0.449315	$	223,293
K4	446,718	$	0.450205	$	201,115
K5	931,897	$	0.487196	$	454,016
K6	676,835	$	0.443254	$	300,010
Kalaeloa	603,701	$	-	$	-
Kalaeloa	758,056	$	-	$	-
AES-Hawaii	1,531,094	$	-	$	-
HPOWER	339,925	$	94.408728	$	32,091,887
Kalaeloa	141,195	$	-	$	-
BTSSCT	-	$	-	$	-
Riderl	13	$	-	$	-
Total	8,228,746			$	34,415,568
					($300 rounding difference)

(1) Data from PMONTH Annual Summary Output Report.
(2) Variable O&M factors from Docket No. 7310 adjusted for inflation and emission fees.

(3) = (1) x (2)

CA-IR-225

Ref: T-22, Page 23, Lines 5-12 and HECO-106, Page 8.

Please explain how the assumed "730 hours per month" that is reasonably applied to Traffic Signal Lights that are on 24 hours daily, times 365 days, divided by 12 months (equals 730 hours) will produce a reasonable estimate of monthly energy consumption for civil defense sirens that are presumably not subject to constant operation.

HECO Response:

The proposed determination of the billing kWh based on 730 hours per month is based on the assumption that the qualified loads which include traffic signal lights and civil defense sirens are loads that are on 24/7. The civil defense sirens although not subjected to constant operation, have transmitters that are constantly on and that are either electricity powered or solar powered.

CA-IR-226

Ref: T-22, Page 27, Schedule J Demand Ratchet Change.

Please explain the basis for the proposed change in the billing demand ratchet and provide complete copies of all studies performed by the Company to evaluate the impacts of this proposed change upon individual customers and upon overall annual HECO revenue levels.

HECO Response:

As stated in HECO T-22, page 27, the proposed change in the billing demand ratchet for Schedule J from the 75% ratchet to average ratchet is to make the demand ratchet provisions for all demand rate schedules (J, PS, PP, and PT) the same and consistent.

The analysis prepared by the Company to evaluate the impact of the proposed change uses the recorded billing loads of Schedule J customers for 2003, which is a very large datafile. A summary of the results is attached. The results of the analysis indicate that the proposed change in demand ratchet will decrease the average billing kW of 2% of the customers. It will have no impact on another 22% of the Schedule J customers' average billing kW, and the majority of the Schedule J customers (60%) will have less than 6 kW impact on their average billing kW per month. Overall, the average impact of the proposed change in Schedule J's demand ratchet on customers' average billing kW per month is only 3.0 kW.

The analysis also compared the customers' base bill at present rates based on the customers' average billing kWh per month, average billing kW per month at the current demand ratchet, and average billing kW per month at the proposed demand ratchet. The results indicate that the proposed change in Schedule J's demand ratchet would decrease the base bills for 2% of the Schedule J customers; will have no impact on 23% of the Schedule J customers; and would

impact the majority of the Schedule J customers' by less than 2%. Overall, the average impact on Schedule J customers' base bill at present rates is less than 1% (0.85%).

The proposed change in Schedule J's demand ratchet will not impact the HECO's annual revenues. The proposed change was incorporated in the design of the proposed rates for Schedule J, which is designed to produce the class's proposed allocated revenue requirements of $280,140,500 as shown in HECO-2201, HECO-2220, and HECO-WP-304, pages 16-101.

HAWAIIAN ELECTRIC COMPANY, INC.
SCHEDULE J - GENERAL POWER DEMAND
IMPACT OF PROPOSED CHANGE TO DEMAND RATCHET[1] ON CUSTOMERS' BILLING KW

	Bill Frequency Distribution By kW Impact[2]	
	No. of Customers	Percent
No. of customers with Lower kW_b	102	2.00%
No. of customers with No kW_b Impact	1124	22.40%
No. of customers with 1 to 5 kW_b increase	2998	59.80%
No. of customers with 6 to 10 kW_b increase	480	9.60%
No. of customers with 11 to 15 kW_b increase	155	3.10%
No. of customers with 16 to 20 kW_b increase	67	1.30%
No. of customers with 21 to 25 kW_b increase	31	0.60%
No. of customers with 26 to 30 kW_b increase	21	0.40%
No. of customers with 31 to 35 kW_b increase	8	0.20%
No. of customers with 36 to 40 kW_b increase	8	0.20%
No. of customers with 41 to 45 kW_b increase	7	0.10%
No. of customers with 46 to 50 kW_b increase	1	0.00%
No. of customers with 51 to 55 kW_b increase	2	0.00%
No. of customers with 56 to 60 kW_b increase	0	0.00%
No. of customers with 61 to 65 kW_b increase	3	0.10%
No. of customers with 66 to 70 kW_b increase	1	0.00%
No. of customers with 71 to 75 kW_b increase	0	0.00%
No. of customers with >75 kW_b Increase	5	0.10%
Total Number of Bills	5,013	100.00%
Average Increase in kWb		3.00

[1] Proposal to change the Schedule J demand ratchet from 75% ratchet to mean ratchet.
[2] Based on recorded billing data for 2003.

HAWAIIAN ELECTRIC COMPANY, INC.
SCHEDULE J - GENERAL POWER DEMAND
IMPACT OF PROPOSED CHANGE TO DEMAND RATCHET[1]
ON CUSTOMERS' AVERAGE BASE BILL AT PRESENT RATES

	Bill Impact Frequency Distribution[2]	
	No of Customers	Percent
No. of customers with Less than 0% Impact	96	1.90%
No. of customers with 0% Impact	1136	22.70%
No. of customers with 0.01 % to 0.50% impact	891	17.80%
No. of customers with 0.50% to 1.0% impact	1135	22.60%
No. of customers with 1.01 % to 1.50% impact	791	15.80%
No. of customers with 1.51% to 2.00% Impact	469	9.40%
No. of customers with 2.01% to 2.5% Impact	285	5.70%
No. of customers with 2.51% to 3.0% Impact	127	2.50%
No. of customers with 3.01% to 4.0% Impact	72	1.40%
No. of customers with 4.01% to 5.0% Impact	8	0.20%
No. of customers with 5.01% to 6.0% Impact	3	0.10%
No. of customers with > 6.0% Impact	0	0.00%
Total	5,013	100.00%
Average % Increase in Avg. Base Bill		0.85%

[1] Proposal to change the Schedule J demand ratchet from 75% ratchet to mean ratchet.
[2] Based on recorded billing data for 2003.

CA-IR-227

Ref: T-22, Page 27, Network Adjustment.

Please explain each difference in cost, or quality of service associated with the Iwilei Network and provide copies of supporting studies and documentation associated with the amount of additional charges to PS and Schedule J (proposed) customers resulting from such cost and service quality differences.

HECO Response:

The network adjustment in HECO's Schedule P was approved by the Public Utilities Commission and has been in effect for over 30 years. This adjustment is applied to customers who are served from the Company's Iwilei Network system, which is an underground network distribution system that serves the financial district of downtown Honolulu and the Chinatown area. The network system is considered to be the most reliable system in HECO's electrical system due to the multiple redundancies of circuits on both the primary and secondary voltage levels.

The major difference between a network system and a radial system which is the standard system provided by the Company, is the number of feeders connected to a vault, and the method of backup service after a fault occurs. A typical vault with underground service on a radial system will have two cables connected to one transformer switchgear. One cable is designated as the primary feeder and the other as the backup feeder. Only one of the two feeders will be connected at any one time, never both simultaneously. The backup feeder is disconnected from the vault through an open switch. If there is a problem on the primary feeder and auto-transfer is available, the vault will automatically be transferred to the backup feeder. This process will take seconds and the customer will experience an outage during that time, whereas a manual

transfer will depend upon how quickly a troubleman can get there to perform the switching operation.

A network system provides very high reliability because of multiple primary feeders (typically four) and multiple transformers (one per feeder) at each vault for spot network customers. A typical "spot network" customer is a multi-story building. Most large customers will have four feeders/transformers serving them while some of the medium sized customers may have three feeders/transformers. A handful of even smaller customers have only two feeders/ transformers. All of the primary lines are energized at the customer's vault and tied at

$263,000. See HECO-2220 and HECO-2222, and HECO-WP-304, pages 41-45, and HECO-WP-304, pages 107-108.

CA-IR-228

Ref: T-22, Page 28, Schedule H Cooking and Water Heating Service.

Please explain the background and origin of this "end-use rate" and provide the following information:

a. Describe why the billing kw load under Schedule H should continue to be discounted from actual demands for cooking and water heating at a time when HECO is attempting to control demand growth and expand DSM.

b. Provide an estimate of the average annual savings (dollars and percentage) being experienced by Schedule H customers at present rate levels, relative to the effective delivered price they would pay under the otherwise applicable rate schedule, if Schedule H were not available.

c. Explain the rate administration policies and procedures required to ensure that only eligible loads are being served under Schedule H and describe HECO's recent experience in applying such policies and procedures that have produced declining customer counts and sales (see HECO-211).

HECO Response:

a. Schedule H is applicable to specific end-uses including commercial cooking, heating, refrigeration, and air conditioning loads. This rate schedule was approved by the PUC in the 1950's, and has been in effect since then, designed to provide small commercial customers with energy options for their cooking and heating load. The determination of the billing kW load should continue as defined in the rate Schedule H for the following reasons:

   1. This rate schedule currently serves only about 1,000 customers or only 0.4% of HECO's customers, and account for only 0.7% of HECO's total energy sales and total sales revenues. Its impact on system peak is very minimal – only 0.6% of the system peak. Given its very small size and the continued decline in the number of Schedule H customers, it is unlikely that keeping the current Schedule H design will adversely impact HECO's effort to control demand growth.

2. The customers currently served under Schedule H have incurred costs to separate their Schedule H-qualified loads from their other non-qualified loads. These customers are normally served with two meters – one meter under Schedule H, and their non-qualified loads are served under Schedule G or J depending on load size. To change the determination of billing demand in Schedule H would result in increased costs to these customers as they will have to incur cost to consolidate their loads under one meter, if such load consolidation results in lower cost under Schedule G or Schedule J.

[redacted]

Additionally, HECO may also incur additional metering costs if the customer's consolidated load totals 25 kW or higher which require a demand meter.

b. The requested information is not readily available and would require extensive programming [redacted]

Required kW Load provision. The determination of the billing kW load based on site inspection ensures that only the qualified loads are served under Schedule H. Power inspection involves physically inspecting the electric facilities and circuit breaker panels in the customers' service sites to determine what equipments are connected to the "H" meter. It also require verifying the kW nameplate rating of the various equipment that are connected to the "H" meter to determine the billing kW as provided in Schedule H. Such power inspections are conducted when a customer start service under Schedule H, and every other year thereafter (or more often if necessary), to ensure that only qualified loads are served under Schedule H. However, sometimes when customers make changes to their

CA-IR-229

Ref: T-22, Page 30, Line 22; DSM Cost Allocations.

According to the testimony, "[t]he test-year DSM costs estimates included in the customer

[redacted]

costs incurred for each rate class from 1996 to 2003." Please provide the following information:

a. Explain and reconcile the "Total Cust Serv. Exp (C8 FCT, %) values in HECO-WP-2202 at page 144 into the C8 Customer Service factor percentages shown at HECO-2214.

b. Provide the analysis of DSM program costs incurred from 1996 to 2003 that was conducted

test-year estimate for customer service expense in Account No. 910.

The allocation of the customer service expenses in Accounts 909, 911, 912, as well as the non-DSM costs included in Account 910, are allocated based on the number of customers and on the activities performed by the various areas in the Company that incur customer service expense.

The allocated Accounts 909 to 912 are then summed by rate schedule and used as the basis for the C8 – Customer Service Expense allocation factors shown in HECO-2214, and used in the embedded cost of service study.

c. The test-year DSM cost by program is provided in HECO-1104. The estimated participants by program are provided in HECO-1106.

HAWAIIAN ELECTRIC COMPANY, INC.
Summary Allocation of DSM Program Rebates, 2000 - 2003

Year 2000

Rate Class	REWH	RNC	CIEE	CINC	CICR	Total
Schedule R	$1,072,268.18	$405,535.53	$0.00	$0.00	$0.00	$1,477,803.71
Schedule E	$13,264.15	$1,602.31	$0.00	$0.00	$0.00	$14,866.46
Schedule G	$711.03	$49,892.04	$7,874.00	$53,710.00	$414.00	$112,601.06
Schedule J - Sec	$40.06	$0.00	$124,215.00	$241,684.00	$64,012.00	$429,951.06
Schedule J - Pri	$0.00	$0.00	$15,218.00	$0.00	$2,180.00	$17,398.00
Schedule H	$0.00	$0.00	$369.00	$0.00	$8,119.00	$8,488.00
Schedule PS	$0.00	$0.00	$51,738.00	$3,226.00	$159,753.00	$214,717.00
Schedule PP	$71,993.95	$688,574.19	$290,436.00	$273,589.00	$220,708.00	$1,545,301.14
Schedule PT	$0.00	$98,742.57	$15,377.00	$2,307.00	$144,407.00	$260,833.57
Total	$1,158,277.36	$1,244,346.64	$505,227.00	$574,516.00	$599,593.00	$4,081,960.00

Year 2001

	REWH	RNC	CIEE	CINC	CICR	Total
Schedule R	$550,818.07	$526,222.40	$0.00	$0.00	$0.00	$1,077,040.47
Schedule E	$5,645.78	$2,658.71	$0.00	$0.00	$0.00	$8,304.48
Schedule G	$762.66	$6,641.47	$16,290.00	$37,846.00	$246.00	$61,786.12
Schedule J - Sec	$42.37	$0.00	$160,449.00	$220,592.00	$138,755.00	$519,838.37
Schedule J - Pri	$0.00	$0.00	$27,071.00	$55,912.00	$14,675.00	$97,658.00
Schedule H	$116.52	$0.00	$2,627.00	$915.00	$0.00	$3,658.52
Schedule PS	$0.00	$0.00	$61,718.00	$2,723.00	$128,842.00	$193,283.00
Schedule PP	$101,094.36	$104,865.27	$651,073.00	$145,339.00	$350,942.00	$1,353,313.63
Schedule PT	$68,956.86	$17,477.55	$0.00	$15,392.00	$0.00	$101,826.40
Total	$727,436.61	$657,865.39	$919,228.00	$478,719.00	$633,460.00	$3,416,709.00

Year 2002

	REWH	RNC	CIEE	CINC	CICR	Total
Schedule R	$790,891.20	$321,640.75	$0.00	$0.00	$0.00	$1,112,531.95
Schedule E	$5,392.12	$2,014.05	$0.00	$0.00	$0.00	$7,406.17
Schedule G	$937.76	$15,238.59	$10,729.00	$223.00	$161,751.00	$188,879.35
Schedule J - Sec	$799.23	$0.00	$267,621.00	$75,498.00	$14,670.00	$358,588.23
Schedule J - Pri	$32,768.29	$0.00	$26,482.00	$0.00	$12,615.00	$71,865.29
Schedule H	$42.63	$0.00	$0.00	$0.00	$0.00	$42.63
Schedule PS	$0.00	$0.00	$130,230.00	$540.00	$88,355.00	$219,125.00
Schedule PP	$392,420.26	$217,219.13	$334,739.00	$143,538.00	$365,779.00	$1,453,695.39
Schedule PT	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total	$1,223,251.48	$556,112.52	$769,801.00	$219,799.00	$643,170.00	$3,412,134.00

Year 2003

	REWH	RNC	CIEE	CINC	CICR	Total
Schedule R	$1,165,752.08	$472,090.96	$0.00	$0.00	$0.00	$1,637,843.04
Schedule E	$10,022.40	$2,878.66	$0.00	$0.00	$0.00	$12,901.06
Schedule G	$1,068.91	$8,710.07	$17,760.44	$232.53	$396.49	$28,168.43
Schedule J - Sec	$52.92	$0.00	$397,196.62	$175,693.48	$74,261.34	$647,204.35
Schedule J - Pri	$0.00	$0.00	$43,093.88	$2,754.54	$17,601.44	$63,449.86
Schedule H	$52.92	$0.00	$1,207.35	$0.00	$28.82	$1,289.08
Schedule PS	$0.00	$0.00	$256,624.55	$33,876.30	$150,859.87	$441,360.71
Schedule PP	$0.00	$230,187.09	$239,507.03	$146,806.56	$365,285.86	$981,786.55
Schedule PT	$0.00	$0.00	$0.00	$500.83	$1,406.09	$1,906.91
Total	$1,176,949.22	$713,866.78	$955,389.86	$359,864.23	$609,839.91	$3,815,910.00

Total Allocated Rebates For 2000 - 2003

	2000	2001	2002	2003	TOTAL	%
Schedule R	$1,477,803.71	$1,077,040.47	$1,112,531.95	$1,637,843.04	$5,305,219.17	36.02%
Schedule E	$14,866.46	$8,304.48	$7,406.17	$12,901.06	$43,478.17	0.30%
Schedule G	$112,601.06	$61,786.12	$188,879.35	$28,168.43	$391,434.97	2.66%
Schedule J - Sec	$429,951.06	$519,838.37	$358,588.23	$647,204.35	$1,955,582.01	13.28%
Schedule J - Pri	$17,398.00	$97,658.00	$71,865.29	$63,449.86	$250,371.15	1.70%
Schedule H	$8,488.00	$3,658.52	$42.63	$1,289.08	$13,478.22	0.09%
Schedule PS	$214,717.00	$193,283.00	$219,125.00	$441,360.71	$1,068,485.71	7.26%
Schedule PP	$1,545,301.14	$1,353,313.63	$1,453,695.39	$981,786.55	$5,334,096.70	36.22%
Schedule PT	$260,833.57	$101,826.40	$0.00	$1,906.91	$364,566.89	2.48%
Total	$4,081,960.00	$3,416,709.00	$3,412,134.00	$3,815,910.00	$14,726,713.00	100.00%

Pricing/KC/7-14-04
CA-IR-229(b).xls

CA-IR-230

Ref: T-22, page 43, Lines 3-9.

Please provide a summary by customer of the following Rider I information for each customer and in total for the past three years:

a. Total contract demand in KW;
b. Interruptible portions of subpart (a) of this information request demand;
c. Billing KW discount percentage in relation to subpart (b) of this information request;
d. Frequency and duration of interruptions during the last 36 months (2002, 2003 and 2004);
e. Explain changes or trends in information responsive to subparts (a), (b), (c) and (d) of this information request; and
f. Identify and, to the extent possible, quantify the additional Rider I customer participation that is expected as a result of reducing minimum KW participation from 500 KW to 100 KW.

HECO Response:

a. The requested information on 'total contract demand in kW' is not clear. The Rider I contract specifies the customer's contract interruptible load and firm load, if any. This information is provided in page 3 of this response.

b. The customers' interruptible kW loads are provided in page 3 of this response. For customers whose entire loads are interruptible, their contract interruptible load is defined as their maximum measured kW load for the billing period. The interruptible kW load provided in page 3 is the customer's highest interruptible load for the calendar year. For customers with firm load, their interruptible load is defined as their maximum measured kW load less their firm load.

c. The adjustment to the customers' billing kW is provided in page 3 of this response.

d. The frequency and duration of interruptions of the customers' service are provided in page 3 of this response.

e. The Rider I customers' interruptible loads are fairly consistent for the last three years, 2002-2004. The frequency and duration of interruptions in 2002 were due to AES tripping off.

f. The requested information is not available. The Company has not quantified the additional Rider I customers that is expected as a result of reducing the minimum participation from 500 kW to 100 kW. The only information available is the number of Schedule J customers with kW load between 100 kW and 499 kW provided in HECO T-22, page 43, lines 16-21, which defines the additional market for Rider I. This group of customers account for approximately 18% of Schedule J (about 1,200 customers). Occasionally in the past, there were some customer inquiries regarding participating in Rider I with less than 500 kW of interruptible load, but the customers did not pursue further when informed that Rider I requires a minimum of 500 kW of interruptible load.

HAWAIIAN ELECTRIC COMPANY, INC.
RECORDED INFORMATION FOR RIDER I CUSTOMERS, 2002 -2004

	Contract Interruptible kW Load[1]			Billing kW Adj.	Frequency & Duration of Interruption[6]		
	2002	2003	2004		2002	2003	2004
Rider I Customer No. 1[2]	3,844.8	4,084.8	3,962.4	40% of interruptible kW load	1 interruption for 6 hours.		1 interruption for 8 hours in response to customer notification.
Rider I Customer No. 2[2]	2,786.4	2,467.8	2,642.4	30% of interruptible kW load	2 interruptions for 6 and 8 hours; 1 interuuption for 10 hours in response to customer notification.	1 interruption for 4:45 hours in response to customer notification.	1 interruption for 1 hour; 1 interruption for 10:30 hours in response to customer notification.
Rider I Customer No. 3[3]	1,616.6	1,679.6	1,782.2	30% of interruptible kW load	2 interruptions for 1:15 hours and1 hour; 1 interruption for 8 hours in response to customer notification.		1 interruption for 1 hour.
Rider I Customer No. 4[4]	726.4	763.6	774.4	30% of interruptible kW load	1 interruption for 2 hours; 1 interruption for 8 hours in response to customer notification.		1 interruption for 2:30 hours; 1 interruption for 7:15 hours in response to customer notification.
Rider I Customer No. 5[2,5]			2,437.2	30% of interruptible kW load			
Total	8,974.2	8,995.8	11,598.6				

[1] Contract interruptible load shown is highest of 12 billing months in that year.
[2] All load is interruptible.
[3] Interruptible load excludes 250 kW contract firm load.
[4] Interruptible load excludes 500 kW contract firm load.
[5] Started Rider I service in August 2004.
[6] Based on generation report and the customers' 15-minute load profile.

Pricing/Es:2-16-05
CA-IR-230.xls

CA-IR-231

Ref: T-22, Page 50, Line 14 to Page 51, Line 14; Field Collection and Service Establishment Charges.

Please explain the Company's policies and procedures with respect to customer notifications, dispatching of field collection personnel, termination of service, restoration of service and imposition of each applicable charge under various normally encountered scenarios of customer interaction with the Company (for example, customer no answer, answer without payment, answer with payment, installment payment agreement, third party payment, etc.)

HECO Response:

In accordance to HECO's Tariff, seven (7) days after the bill date, if the customer has not made sufficient payment on the past due amount, HECO is required to provide written notification to our customers, informing them the date on or after which service can be disconnected, the reason for the disconnection and what action the customer can take to avoid the disconnection. If sufficient payment is not received within five (5) business days after the written notification has been sent to the customer a field call document is generated. In addition to system generated field call documents, non-sufficient funds check orders and special collection orders are manually created to be worked by the Field Service & Collections Division.

Once, the Field Call Document has been generated the Field Service & Collections Division will receive the document. The Planner assigns the daily work for each Field Service Representative ("FSR") based on available resources. Prior to going to the premise, commercial or residential, the FSR will review the customer's account information (payment history, notes on the account, etc.) in the ACCESS system. At the premise, the FSR will determine if the meter is accessible. The following outlines the different actions taken by the FSR:

Termination of Service - Customer Not on Premise

If the FSR determines that no one is at the premise or the FSR suspects that someone is there but refuses to answer and there is no safe way to get to the meter, the following situations can arise:

1. Disconnect service – the FSR will disconnect service and call to inform the office and the account status will be updated to identify the account as being disconnected for non-pay. A tag is left on the meter indicating why service was disconnected.
2. Leave a door hanger - the door hanger has the following information: the amount that need to be paid (total past due); payment due date; and, if appropriate, "cash" only and/or any other important information. When the FSR returns to the office they will normally input remarks on the customer account that a door hanger has been left.
3. Receive payment from a third party – in this case, the customer on the account may not be home; however, someone else who is at the premise may be willing to make payment to the FSR. The FSR will accept the payment, write out a receipt and mark the receipt to charge a collection fee.

Termination of Service - Customer on Premise

When the customer is on the premise, the following situations may occur:

1. Disconnect service – the FSR will disconnect service if customer is unable to make payment. The FSR will call the office to update the account status and identify the account as being disconnected for non-pay. A tag is left on the meter indicating why service was disconnected.
2. Receive full payment – FSR receives full payment of past due amount. The FSR will accept the payment, write out a receipt and mark the receipt to charge a collection fee.

When the FSR returns to the office they will update the customer's account to indicate that full payment has been received.

3. Partial payment - if the customer is unable to pay the total past due amount, the FSR will review the account and determine, if a partial payment can be accepted and the amount of the partial payment. The FSR will accept the partial payment, write out a receipt and mark the receipt to charge a collection fee. When the FSR returns to the office they will update the customer's account to indicate that a partial payment has been received.
4. Partial payment with arrangement for balance - if the customer is unable to pay the total past due amount, the FSR will review the account and determine, if a partial payment can be accepted and the amount of the partial payment. In some cases, the FSR will accept a partial payment and may set up an arrangement for the balance of the past due. The FSR will accept the payment, write out a receipt and mark the receipt to charge a collection fee. When the FSR returns to the office they will update the customer's account to indicate that a partial payment has been received and an arrangement will be created.
5. Extension with agreement for balance – in some situations, the FSR may provide the customer with an extension or an arrangement for payment. In the case of an extension, when the FSR returns to the office they will input remarks on the customer account that an extension was granted. In the case of an arrangement, when the FSR returns to the office they will create the arrangement in ACCESS.

Field Collection Charges

A collection fee (FCC) of $15.00 is charged when a FSR collects money while working a system generated Field Call Document or manually created order. The FSR assesses the fee at the time of collection by making the appropriate mark on the customer receipt. This fee is applied only

when a field call results in actual collection of a full or partial payment from the customer. HECO is proposing to apply the proposed Field Collection Charge to every field collection call made regardless of whether a field collection call results in successful collection of payment from the customer. The Company incurs the same costs for every field collection call made regardless of whether or not it results in successful collection of payment from the customer.

Reconnection/Restoration of Service

For customers who have been disconnected for non-pay, their service can be restored once payment has been received and/or confirmed. The customer can either make payment at HECO offices or at other designated sites. If the customer makes payment at a location other than HECO, they are required to provide HECO with confirmation of payment. Once the payment has been received/confirmed a reconnection order will be created.

Once the reconnection order has been created, the order will be dispatched to the FSR, and if the FSR is able to complete the reconnect the same day, a same day reconnect fee will be assessed to the customer. If the order is not completed on the day the payment has been received/confirmed, a next day reconnect fee will be assessed to the customer's account.

A same-day reconnect fee (S) of $25.00 ($15.00 – service establishment fee and $10.00 same day fee) is charged to the customer account when a FSR reconnects a customer on the same day the customer makes payment after being disconnected for non-payment.

A next day reconnect fee (Y) of $15.00 ($15.00 – service establishment fee) is charged to the customer account when a FSR reconnects a customer on a day after payment is made on a account disconnected for non-payment.

CA-IR-232

Ref: T-22, Page 53 and Pages 57 to 60; Residential Time-of-Use Service Pilot.

a. Please provide copies of all available studies, reports, analyses and other documents prepared by, or for HECO to evaluate the TOU Pilot Program and customer participation, customer acceptance and comments, as well as the load management performance achieved under the Program to date.

b. What, if any, changes to the program are thought to be necessary as a result of the Pilot program and HECO's assessment of results to-date?

c. Provide copies of all analysis and/or documentation relied upon to determine the reasonableness of the changes identified in response to subpart (b) of this information request.

HECO Response:

a. The requested information is not yet available. The recording of the billing loads under the TOU pilot program rates for at least 12-months for all program participants will be completed at the end of the February 2005 billing period. The pilot program report providing the analysis of the data, customer participation, customer acceptance, and performance of the program to-date, is targeted for completion by June 2005.

b. The changes to the program that are thought to be necessary for the more effective program performance in terms of customer response and sustainability of customer subscription to the program are:

   1. Eliminate the Option 1 Energy Rates in the pilot program, and move the Option 1 participants to the Option 2 Energy Rates.

   2. Designate the hours from 7:00 a.m. to 5:00 p.m. during the weekends and holidays as off-peak hours. These hours are designated as mid-peak hours under the current time-of-use rating periods used in the pilot program.

c. The program changes identified in subpart b above are based on the information provided in HECO T-22, pages 57 to 60, HECO-2236, and HECO-2237, as well as from the participants' calls and inquiries received in the course of the day to day management of the pilot program. These changes are reflected in the proposed standard Schedule TOU-R provided in HECO-106, pages 54-56, and discussed in HECO T-22, pages 53-56.

CA-IR-233

Ref: T-22, pages 54-56; Residential Time-of-Use Proposed Rates.

Please explain and provide the supporting calculations associated with HECO's derivation of the following proposed rate elements:

a. The "difference in the installed [illegible]

place, is based on an estimate of what the Customer Service Department can manually bill using the current process of billing the participants in the Schedule TOU-R pilot program, as confirmed by the then Manager of Customer Service Department (A. Ejercito).

HAWAIIAN ELECTRIC COMPANY, INC.
DOCKET NO. 04-0113, TEST-YEAR 2005
TIME-OF-USE SERVICE
DETERMINATION OF PROPOSED CUSTOMER CHARGE (R, G)

	TIME-OF-USE METER COST	
	Self-Contained Metering	
	1-Phase Service	3-Phase Service
Installed Costs, $	$187.00	$238.00
Rate of Return, %	9.11%	9.11%
Return on Rate Base, $	$17.04	$21.68
Operating Income Divisor	0.55599	0.55599
Revenue Requirement, $/year	$30.65	$38.99
Total Revenue Requirements, $/month	**$2.55**	**$3.25**

	REGULAR METER COST	
	Self-Contained Metering	
	1-Phase Service	3-Phase Service
Installed Costs, $	$86.00	$207.00
Rate of Return, %	9.11%	9.11%
Return on Rate Base, $		

Operating Income Divisor	0.55599	0.55599
Revenue Requirement, $/year	$14.08	$33.92
Total Revenue Requirements, $/month	**$1.17**	**$2.83**
Incremental TOU Meter Cost, $/month	$1.38	$0.42

HAWAIIAN ELECTRIC COMPANY, INC.
DOCKET NO. 04-0113, TEST-YEAR 2005
SCHEDULE TOU-J - Small Commercial Time-of-Use Service DEMAND
DETERMINATION OF PROPOSED CUSTOMER CHARGE

Time-of-Use Meter Cost:

	SECONDARY VOLTAGE			
	Self-Contained Metering		Transformer-Rated Metering	
	1-Phase Service	3-Phase Service	1-Phase Service	3-Phase Service
Installed Costs, $	[redacted]			
Rate of Return, %	9.11%	9.11%	9.11%	9.11%
Return on Rate Base, $	$19.50	$21.68	$48.47	$93.74
Operating Income Divisor	0.55599	0.55599	0.55599	0.55599
Revenue Requirement, $/year	$35.07	$38.99	$87.18	$168.60
Total Revenue Requirements, $/month	**$2.92**	**$3.25**	**$7.27**	**$14.05**
Weighted Average, $/Month	**$5.97**	**$10.82**		

Regular Meter Cost:

	SECONDARY VOLTAGE			
	Self-Contained Metering		Transformer-Rated Metering	
	1-Phase Service	3-Phase Service	1-Phase Service	3-Phase Service
Installed Costs, $	$187.00	$207.00	$511.00	$1,029.00
Rate of Return, %	9.11%	9.11%	9.11%	9.11%
Return on Rate Base, $	$17.04	$18.86	$46.55	$93.74
Operating Income Divisor	0.55599	0.55599	0.55599	0.55599
Revenue Requirement, $/year	$30.65	$33.92	$83.72	$168.60
Total Revenue Requirements, $/month	**$2.55**	**$2.83**	**$6.98**	**$14.05**
Weighted Average, $/Month	**$5.66**	**$10.69**		
Incremental TOU Meter Cost, $/month	**$0.31**	**$0.13**		

CA-IR-234

Ref: T-22, pages 60-64; Residential Time-of-Use Proposed Rates.

Please explain and provide supporting calculations associated with HECO's derivation of the following proposed TOU-C rate elements:

a. Customer charges no higher than for Schedules G and J, even though additional costs for TOU metering and billing would be involved;

b. TOU-C energy rate differentials by period;

c. Demand Service TOU-C rate differentials by period; and

d. Minimum charges no higher than for Schedule G, even though additional costs for TOU metering and billing would be involved.

HECO Response:

a. Please see pages 3 and 4 to HECO's response to CA-IR-233 subpart a. The differences in the installed costs of regular meters and time-of-use meters are minimal.

b. The energy rate differences between the proposed Schedule G and the proposed Non-Demand Energy Rates in Schedule TOU-C are the same as the rate differences for Option 2 Energy Rates of the current Schedule TOU-R pilot program as well as the proposed standard Schedule TOU-R. The energy rate for the priority peak period of 18.8200 ¢/kWh is 5¢/kWh higher than the energy rate in the proposed Schedule G of 13.8200 ¢/kWh, the mid-peak energy rate of 15.8200 ¢/kWh is 2.0¢/kWh higher than the proposed Schedule G energy rate, and the off-peak energy rate of 8.8200 ¢/kWh is 5.0¢/kWh lower than the proposed Schedule G energy rate. The proposal to reflect the same rate differences as Option 2 of the current residential time-of-use pilot program is based on the preliminary results of the pilot program in terms of customers' response and impact on customers as reported in HECO T-22, pages 58-59, and absent the same information for small commercial customers.

c. The energy rate differences between the proposed Schedule J and the proposed Energy Rates for Demand Service in Schedule TOU-C reflect the same differences as the proposed Non-Demand Energy Rates in Schedule TOU-C and the proposed energy rate in Schedule G, except for the off-peak period. The proposed energy rate for the priority peak period of 15.9083 ¢/kWh is 5.0 ¢/kWh higher than the average proposed energy rate for Schedule J of 10.9083 ¢/kWh, and the proposed mid-peak energy rate of 12.9083 ¢/kWh is 2.0¢/kWh higher than the average proposed energy rate for Schedule J. The proposed off-peak energy rate for Demand Service of 7.00 ¢/kWh is set to recover the full unit energy cost for Schedule J of 6.804 ¢/kWh as provided in HECO-WP-2202, page 10 of 173.

d. Please see HECO Response to sub-part a. above.

CA-IR-235

Ref: T-22, Pages 64 - 66; Rate Schedules CHP and EDR.

Please explain whether the Company's inclusion of test period revenues, expenses and investment balances for utility-owned CHP and for the pending Rider EDR should be modified, given the anticipated schedule for these separately docketed matters and provide supporting calculations for each adjustment properly made to the Company's filing, as applicable.

HECO Response:

Upon further consideration in light of HECO's increasing need for generating capacity as discussed in HECO T-1, HECO will withdraw its proposed Rider EDR in the pending Docket No. 02-0405, and will exclude assumptions regarding EDR customers in its test-year revenues in HECO's rebuttal testimony. The amount that will be excluded from HECO's test-year revenues include the revenue adjustment of -$7,200 for Schedule J shown in HECO-2220.

The CHP Program Application in Docket No. 03-0366, and the Pacific Allied Products CHP Agreement Application in Docket No. 04-0314 were suspended while the Commission considers DG policy issues in Docket No. 03-0371 and the Pacific Allied Products agreement was terminated by the customer. No utility-owned CHP systems were installed in 2004, and none are expected to be installed before mid-2006. See response to CA-IR-276. As a result, HECO will not include for utility-owned CHP systems in the test-year revenues, expenses, and investment balances in HECO's rebuttal testimony.

CA-IR-236

Ref: HECO Response to CA-IR-2, HECO T-6, Attachment 3C, Page 13.

Please explain why a budget "Recycle" was performed for the projected 2005 test year budgeted amounts and provide complete documentation, including correspondence, instructions, spreadsheets, analyses, reports and other information, for all changes made as part of this and every other such "Recycle" that was conducted.

HECO Response:

A budget "Recycle" was performed for the 2005 budget because, as described at HECO T-18, page 15, the 2005 budget which was the starting point for developing the test year estimates was initially developed in 2003 and reviewed and revised in early 2004. See CA-IR-8, pages 33 through 35 for correspondence related to the "Recycle".

CA-IR-237

Ref: HECO-WP-101(N) Pages 1432 and 1433.

Please provide an electronic (excel format) and hard copy report of the actual 2002, actual 2003, actual 2004 and budgeted test year 2005 projected costs by Expense Element, with a secondary sort by NARUC Account.

HECO Response:

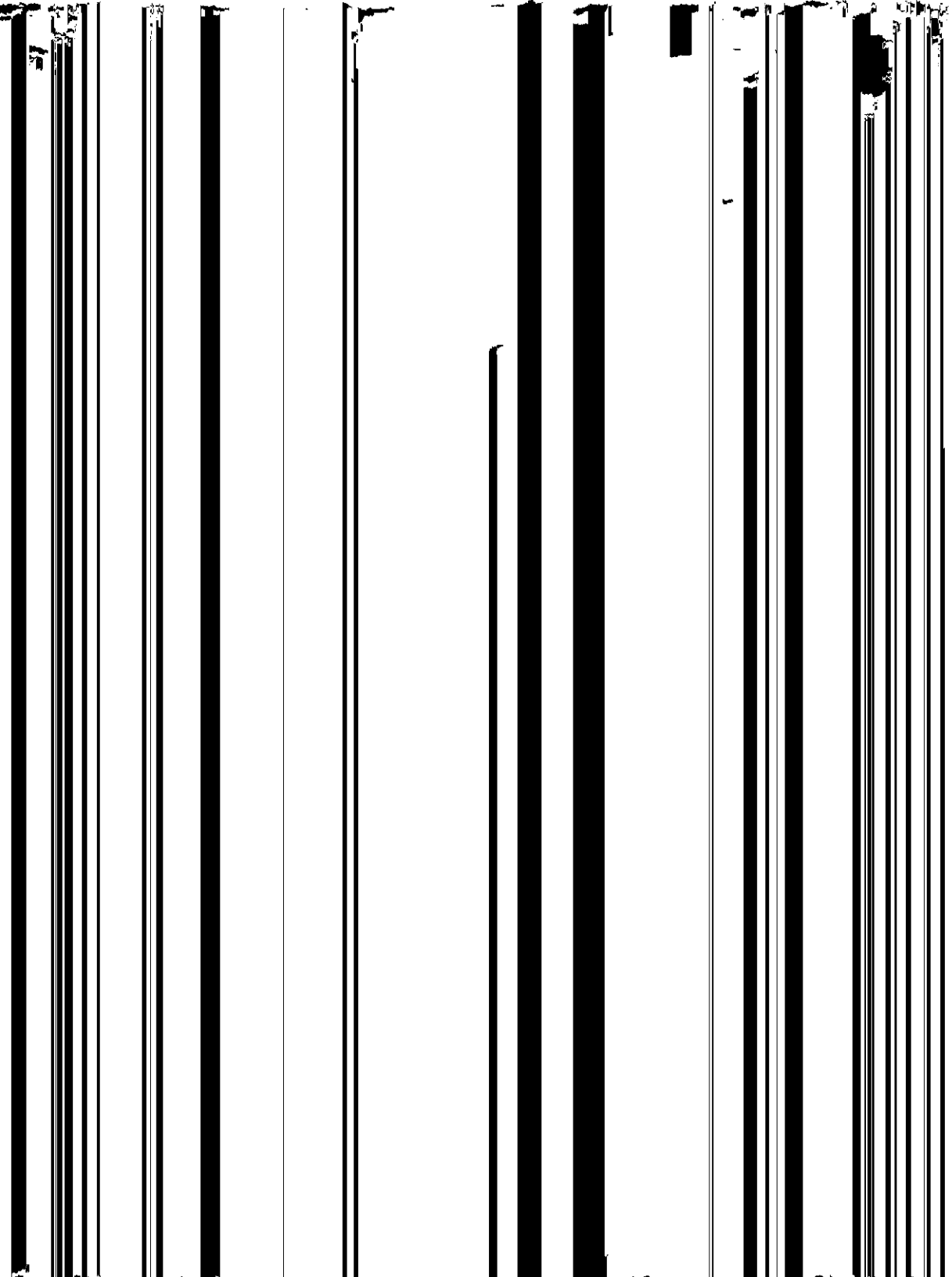
The electronic file with the requested information will be provided under separate transmittal.

The hard copy report of the requested information is provided on pages 2 to 42 of this response.

heco2005_datafile (labor) (CA-IR-237).xls

	Data			
	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
MAGES	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00
HE	0.00	0.00	72.60	0.00
	0.00	0.00	72.60	0.00
MAGES	0.00	0.00	0.00	81,100.73
MAGES	317,889.10	207,026.64	177,745.19	23,415.92
	317,889.10	207,026.64	177,745.19	104,516.65
ENG-HONOLULU	2,520.68	0.00	0.00	0.00
ENG-WAIAU	309,307.44	233,634.21	174,730.52	443,578.55
ENG-KAHE	78,278.47	42,034.32	76,907.96	76,019.76
NOLULU	522,916.65	472,547.52	529,310.99	795,425.35
AIAU	1,588,852.39	1,610,614.20	1,677,825.42	2,308,413.33
HE	1,568,511.62	1,636,831.55	1,659,746.90	1,850,534.35
ENSES-HONOLULU	453,259.46	428,494.61	494,709.62	758,666.55
ENSES-WAIAU	1,470,102.61	1,504,866.23	1,579,106.86	1,991,011.68
ENSES-KAHE	1,495,127.62	1,563,559.34	1,550,169.06	1,747,989.54
OWER EXP-HONOLULU	153,919.81	175,131.22	157,636.65	179,841.91
OWER EXP-WAIAU	745,763.68	644,585.69	882,759.06	700,796.27
OWER EXP-KAHE	1,058,543.42	948,994.82	790,003.87	704,888.34
ENG-HONOLULU	599.35	3,381.92	0.00	1,127.59
ENG-WAIAU	4,134.21	5,371.13	3,618.33	2,251.31
ENG-KAHE	1,600.91	97,337.38	65,778.08	15,107.88
UCTURES-HONOLULU	130,668.35	129,780.51	135,403.09	117,653.00
UCTURES-WAIAU	255,123.03	163,913.56	226,965.43	397,829.76
UCTURES-KAHE	258,217.62	196,941.66	202,785.94	287,714.13
& FO PLANT-HONOLULU	300,545.01	934,027.36	200,445.34	278,287.18
& FO PLANT-WAIAU	1,225,970.07	1,106,343.42	1,888,409.96	2,309,811.11
& FO PLANT-KAHE	2,269,031.82	1,378,467.79	1,758,814.06	2,936,375.54
IC PLANT-HONOLULU	311,333.19	1,354,996.95	88,462.52	183,399.45
IC PLANT-WAIAU	883,985.47	686,446.42	1,009,446.19	1,352,812.78
IC PLANT-KAHE	1,145,462.32	762,942.63	958,101.28	1,689,650.05
EAM PLANT-HONOLULU	74,081.20	87,431.43	102,681.84	220,485.99
EAM PLANT-WAIAU	280,557.50	198,683.28	272,271.72	635,417.61
EAM PLANT-KAHE	676,243.32	593,835.51	499,065.47	662,865.19
ENG- OTH PRD	0.00	0.00	0.00	118,386.20
XP- OTH PROD	0.00	124.22	528.45	0.00
S- OTH PROD	0.00	0.00	0.00	45,792.08
S- OTH PROD	0.00	0.00	17,573.67	0.00
ENG- OTH PRD	0.00	0.00	3,998.45	47,971.20
ENG- OTH PRD	0.00	0.00	75.74	0.00
URES- OTH PRD	1,166.00	1,532.64	11,145.12	0.00
ANT- OTH PROD	0.00	0.00	0.00	0.00
ANT- OTH PROD	27,545.82	15,803.68	335,694.89	16,039.22
ANT- OTH PROD	0.00	0.00	116.98	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
150	Labor Cost	557	OTHER POWER SUPPLY EXPENSES	250,899.02	266,994.76	302,683.97	288,990.51
		560	OPER SUPV & ENG - TRANS OPER	84,076.33	85,547.22	159,018.86	120,895.20
		561	LOAD DISPATCHING - TRANS OPER	912,776.73	890,868.93	769,648.10	848,218.06
		562	STATION EXPENSES - TRANS OPER	224,141.19	228,027.63	237,709.98	257,144.15
		563	OVERHEAD LINE EXP- TRANS OPER	182,902.79	243,218.13	162,383.08	286,790.98
		564	UNDERGRND LINE EXP - TRANS OPER	0.00	0.00	0.00	3,648.17
		564	UNDERGRND LINE EXP - TRANS OPER	234.85	757.05	810.02	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	1,298.88
		566	MISC TRANS OPER EXPENSES	267,656.58	180,525.31	199,641.21	154,082.21
		569	MAINT OF SUBSTN STRUCTURES - TRANS	15,253.10	8,743.81	33,413.90	3,784.80
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	3,998.40
		570	MAINT OF STATION EQUIP - TRANS	1,071,287.12	864,670.17	951,781.15	1,338,783.39
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	281.60	48,935.25
		571	MAINT OF OVERHEAD LINES-TRANS	330,830.24	292,401.99	332,099.32	296,850.78
		572	MAINT OF UNDERGRND LINES-TRANS	117,115.84	78,093.95	61,146.52	44,066.74
		573	MAINT OF MISC TRANSM PLANT	4,024.21	17,331.85	18,052.39	61,863.28
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	2,335.20
		580	OPER SUPV & ENG - DIST OPER	126,509.19	214,820.77	174,218.12	128,826.36
		581	LOAD DISPATCHING - DIST OPER	579,292.01	561,328.86	628,020.67	774,841.88
		582	STATION EXPENSES - DIST OPER	223,143.61	225,541.16	260,641.19	358,488.49
		583	OVERHEAD LINE EXP - DIST OPER	243,110.26	251,320.51	485,426.72	573,860.98
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		584	UNDERGRND LINE EXP - DIST OPER	395,964.54	314,032.05	318,381.00	376,058.33
		586	METER EXPENSES - DIST OPER	649,191.75	576,674.38	675,541.18	655,613.13
		587	CUSTOMER INSTALLATION EXPENSES	141,807.38	143,139.87	113,338.18	39,956.16
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	4,914.72	77,931.64
		588	MISC DISTRIBUTION OPER EXPENSES	1,645,911.41	1,702,936.38	1,114,601.34	1,304,574.44
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	661.08
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	0.00
		591	MAINT OF STRUCT - DIST	(3,489.28)	924.79	7,893.90	9,074.88
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	2,015.04
		592	MAINT OF SUBSTN EQUIP - DIST	787,983.97	724,289.05	818,229.99	1,163,221.28
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	780.80	45,287.61
		593	MAINT OF OVERHEAD LINES-DIST	1,408,748.30	838,622.18	1,237,092.71	1,202,780.09
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	37,474.69
		594	MAINT OF UNDERGRND LINES-DIST	1,325,744.93	661,054.07	1,140,653.22	891,359.13
		595	MAINT OF LINE TRANSFORMER-DIST	0.00	0.00	507.60	41,941.79
		595	MAINT OF LINE TRANSFORMER-DIST	537,211.09	352,410.12	491,823.83	438,952.85
		596	MAINT OF STREET LIGHTING & SIGNAL	16,438.31	13,414.58	22,819.22	6,331.32
		597	MAINT OF METERS - DIST	5,017.92	5,659.77	6,375.96	2,572.92
		598	MAINT OF MISC DIST PLT	0.00	0.00	0.00	29,787.12
		598	MAINT OF MISC DIST PLT	465,874.99	367,527.39	339,044.05	366,490.09
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	0.00	1,636.56	23,670.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	58,161.79	61,244.89	42,255.89	84,160.72
		902	METER READING EXPENSES	1,494,688.79	1,583,402.11	1,783,894.95	1,873,347.89
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	1,995.21	0.00



rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
.08	2,973,977.57	3,225,826.65	3,952,562.89
.48	0.00	1,510.65	0.00
.00	0.00	0.00	3,945.00
.99	0.00	127,781.42	24,959.20
.00	0.00	0.00	39,076.34
.92	2,278,997.21	2,071,668.62	3,179,124.39
.00	0.00	0.00	2,192.91
.35	10,978.37	12,038.12	6,390.36
.83	604.00	7,704.13	11,531.92
.00	0.00	115,182.11	316,052.59
.45	13,126,550.94	14,012,407.82	12,146,064.07
.49	153,965.68	164,179.65	162,562.39
.00	0.00	0.00	38,281.81
.38	1,194,326.90	1,118,380.75	1,076,001.64
.52	451,221.56	499,091.05	501,314.45
.42	57,331.04	64,896.19	53,016.03
.19	13,991.16	11,901.40	16,362.02
.00	0.00	0.00	0.00
.70	437,071.64	413,417.01	295,053.02
.59	60,855.16	50,794.31	99,529.96
.39	49,494,050.16	52,149,826.45	59,071,129.80
.97)	0.00	0.00	0.00
.33	2,227.71	6,530.70	0.00
.43	(953.39)	6,688.79	0.00
.71	52,414.32	79,541.73	0.00
.48	104,683.56	117,702.18	0.00
.42)	2,727.53	41,685.02	0.00
.64	45,204.74	76,073.24	0.00
.84	104,645.96	111,233.49	0.00
.71)	7,064.44	46,836.91	0.00
.92	2,431.44	3,410.37	0.00
.03)	(14,295.03)	(8,165.08)	0.00
.02	(12,369.97)	7,222.13	0.00
.14)	(196.96)	0.00	0.00
.68	262.31	(703.68)	0.00
.26	19,064.01	13,501.90	0.00
.57	6,404.72	7,873.30	0.00
.14)	12,240.09	13,816.88	0.00
.21)	(3,589.82)	7,624.30	0.00
.11)	66,108.01	4,898.12	0.00
.84	101,618.62	200,223.98	0.00
.11)	92,048.43	144,671.27	0.00
.51)	77,290.88	4,107.17	0.00
.19)	48,387.00	69,276.53	0.00
.46)	22,872.45	68,322.34	0.00
.43	4,314.63	3,917.74	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
155	Labor True-up	514020	MAINT MISC STEAM PLANT-WAIAU	(17,506.03)	(5,084.57)	(12,416.49)	0.00
		514030	MAINT MISC STEAM PLANT-KAHE	(4,032.12)	36,540.29	6,680.60	0.00
		548	GENERATION EXP- OTH PROD	0.00	3.66	(11.00)	0.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	3,418.68	0.00
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	850.23	0.00
		552	MAINT STRUCTURES- OTH PRD	50.30	18.17	592.26	0.00
		553	MAINT ELEC PLANT- OTH PROD	2,509.57	2,592.61	10,858.00	0.00
		554	MAINT MISC PLANT- OTH PROD	0.00	0.00	24.29	0.00
		557	OTHER POWER SUPPLY EXPENSES	32,749.25	39,368.88	28,815.32	0.00
		560	OPER SUPV & ENG - TRANS OPER	1,437.39	(7,241.14)	(10,097.44)	0.00
		561	LOAD DISPATCHING - TRANS OPER	12,301.57	(3,239.89)	44,749.34	0.00
		562	STATION EXPENSES - TRANS OPER	2,821.00	8,807.38	29,127.68	0.00
		563	OVERHEAD LINE EXP- TRANS OPER	(3,408.30)	6,136.62	15,381.91	0.00
		564	UNDERGRND LINE EXP - TRANS OPER	(12.86)	24.44	72.92	0.00
		566	MISC TRANS OPER EXPENSES	9,404.69	22,923.92	608.03	0.00
		569	MAINT OF SUBSTN STRUCTURES - TRANS	5,930.60	1,501.25	1,734.03	0.00
		570	MAINT OF STATION EQUIP - TRANS	(12,399.50)	6,963.29	16,948.43	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	(4,090.58)	8,939.32	18,431.24	0.00
		572	MAINT OF UNDERGRND LINES-TRANS	10,430.73	25,459.27	5,802.51	0.00
		573	MAINT OF MISC TRANSM PLANT	69.16	1,683.74	894.65	0.00
		580	OPER SUPV & ENG - DIST OPER	9,931.15	(1,333.16)	(7,875.87)	0.00
		581	LOAD DISPATCHING - DIST OPER	2,001.66	(5,829.65)	24,896.71	0.00
		582	STATION EXPENSES - DIST OPER	(2,000.86)	4,485.64	16,046.54	0.00
		583	OVERHEAD LINE EXP - DIST OPER	(2,069.74)	10,045.51	51,965.88	0.00
		584	UNDERGRND LINE EXP - DIST OPER	(18,388.41)	20,991.57	(1,269.13)	0.00
		586	METER EXPENSES - DIST OPER	27,055.49	37,332.07	48,266.89	0.00
		587	CUSTOMER INSTALLATION EXPENSES	(10,888.76)	(16,977.97)	(8,888.14)	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	53,707.35	42,518.85	105,867.25	0.00
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	0.00
		591	MAINT OF STRUCT - DIST	(134.49)	56.53	77.58	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	(5,355.55)	5,774.60	11,652.65	0.00
		593	MAINT OF OVERHEAD LINES-DIST	97,343.64	79,123.26	162,543.70	0.00
		594	MAINT OF UNDERGRND LINES-DIST	71,590.82	110,532.95	174,462.60	0.00
		595	MAINT OF LINE TRANSFORMER-DIST	37,847.73	30,997.08	67,939.52	0.00
		596	MAINT OF STREET LIGHTING & SIGNAL	476.06	1,128.57	3,175.28	0.00
		597	MAINT OF METERS - DIST	187.60	121.52	118.34	0.00
		598	MAINT OF MISC DIST PLT	14,507.54	7,197.22	24,418.82	0.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	(8,548.62)	(7,782.43)	(6,384.37)	0.00
		902	METER READING EXPENSES	(91,557.24)	(74,838.49)	(157,665.52)	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	140,336.27	160,874.61	214,630.48	0.00
		905	MISC CUSTOMER ACCOUNTS	(150.86)	0.00	72.63	0.00
		909	SUPERVISION- CUST SERVICE EXP	221.91	0.00	(21,910.18)	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	180,055.28	104,433.93	145,213.02	0.00
		911	INFORMATIONAL ADVERTISING EXP	(182.44)	2,106.23	1,020.31	0.00
		912	MISC CUSTOMER SERVICE EXPENSES	30.29	11.12	(1,114.36)	0.00
		920	ADMIN & GENL EXP - LABR	118,170.10	(226,112.60)	(540,650.71)	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
155	Labor True-up	924	PROPERTY INSURANCE	835.62	(3,155.86)	(5,624.13)	0.00
		925	INJURIES & DAMAGES	(5,113.08)	(55,649.51)	(21,813.71)	0.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	(18,970.11)	(23,959.18)	(13,769.92)	0.00
		926010	EMPL BENEFITS - FLEX CREDITS	(2,016.81)	(2,802.31)	(4,775.70)	0.00
		9301	INSTITUTN/GOODWILL ADVERT EXP	2,496.36	957.93	911.97	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	(17,387.26)	(30,731.72)	2,888.41	0.00
		932	ADMIN AND GENL MAINTENANCE	15,395.11	4,938.05	2,882.61	0.00
155 Total				587,145.77	1,060,457.28	1,456,063.97	0.00
421	Non-Productive Wages	500010	OPER SUPV & ENG-HONOLULU	376.14	0.00	0.00	0.00
		500020	OPER SUPV & ENG-WAIAU	46,425.85	36,845.24	26,129.64	52,769.48
		500030	OPER SUPV & ENG-KAHE	9,975.60	5,614.33	8,741.40	8,006.72
		502010	STEAM EXP-HONOLULU	75,270.88	71,138.20	71,363.81	90,041.22
		502020	STEAM EXP-WAIAU	232,022.99	244,276.83	227,555.60	265,035.42
		502030	STEAM EXP-KAHE	229,420.43	248,502.82	224,099.77	212,319.42
		505010	ELECTRIC EXPENSES-HONOLULU	65,081.08	64,524.24	66,693.96	85,663.50
		505020	ELECTRIC EXPENSES-WAIAU	214,574.58	228,439.97	214,165.63	227,859.18
		505030	ELECTRIC EXPENSES-KAHE	218,396.63	237,576.22	209,890.63	199,931.16
		506010	MISC STEAM POWER EXP-HONOLULU	24,156.16	26,860.02	22,162.43	22,385.51
		506020	MISC STEAM POWER EXP-WAIAU	105,406.83	94,152.29	116,047.08	79,979.04
		506030	MISC STEAM POWER EXP-KAHE	126,532.28	118,382.43	97,213.45	86,022.43
		510010	MAINT SUPV & ENG-HONOLULU	85.32	453.40	0.00	133.85
		510020	MAINT SUPV & ENG-WAIAU	536.83	768.44	484.16	267.25
		510030	MAINT SUPV & ENG-KAHE	188.65	15,375.11	9,048.85	1,795.55
		511010	MAINT OF STRUCTURES-HONOLULU	18,887.60	19,626.01	18,073.49	13,347.08
		511020	MAINT OF STRUCTURES-WAIAU	36,802.15	24,846.66	29,853.91	44,136.28
		511030	MAINT OF STRUCTURES-KAHE	37,690.58	29,530.62	26,707.39	31,936.84
		512010	MAINT BOILER & FO PLANT-HONOLULU	44,453.47	141,752.71	26,097.18	31,530.28
		512020	MAINT BOILER & FO PLANT-WAIAU	166,549.31	169,984.80	251,508.59	251,100.06
		512030	MAINT BOILER & FO PLANT-KAHE	321,412.75	208,372.71	235,448.98	323,042.12
		513010	MAINT ELECTRIC PLANT-HONOLULU	45,101.70	196,596.80	11,716.40	20,650.77
		513020	MAINT ELECTRIC PLANT-WAIAU	119,229.98	103,140.10	129,639.19	146,137.92
		513030	MAINT ELECTRIC PLANT-KAHE	160,940.68	113,051.69	124,358.89	180,747.04
		514010	MAINT MISC STEAM PLANT-HONOLULU	10,169.87	12,948.63	13,361.53	24,994.11
		514020	MAINT MISC STEAM PLANT-WAIAU	38,550.44	29,480.18	35,056.88	68,901.49
		514030	MAINT MISC STEAM PLANT-KAHE	94,813.43	86,708.24	65,573.37	73,615.37
		546	OPER SUPV & ENG- OTH PRD	0.00	0.00	0.00	14,745.20
		548	GENERATION EXP- OTH PROD	0.00	15.96	66.90	0.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	0.00	7,235.08
		549	MISC EXPENSES- OTH PROD	0.00	0.00	2,081.96	0.00
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	558.86	3,483.84
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	8.56	0.00
		552	MAINT STRUCTURES- OTH PRD	168.37	213.92	1,430.42	0.00
		553	MAINT ELEC PLANT- OTH PROD	0.00	0.00	0.00	0.00
		553	MAINT ELEC PLANT- OTH PROD	3,704.16	2,313.36	42,911.20	1,856.52
		554	MAINT MISC PLANT- OTH PROD	0.00	0.00	14.98	0.00
		557	OTHER POWER SUPPLY EXPENSES	40,564.39	39,910.73	41,188.85	35,881.26

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				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
421	Non-Productive Wages	905	MISC CUSTOMER ACCOUNTS	197.83	0.00	167.24	0.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	0.00	286.50
		909	SUPERVISION- CUST SERVICE EXP	193.11	0.00	9,106.74	1,833.60
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	4,446.48
		910	CUSTOMER ASSISTANCE EXPENSES	314,567.29	354,318.43	291,933.71	395,572.76
		911	INFORMATIONAL ADVERTISING EXP	0.00	0.00	0.00	267.25
		911	INFORMATIONAL ADVERTISING EXP	659.95	1,658.01	1,600.38	744.75
		912	MISC CUSTOMER SERVICE EXPENSES	228.45	88.48	1,150.98	1,436.32
		920	ADMIN & GENL EXP - LABR	0.00	0.00	0.00	1,360,365.30
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	19,174.03	(1,316,401.23)
		921	ADMIN & GENL EXP - NLABR	1,579,972.22	1,656,748.07	1,543,276.12	1,316,401.23
		924	PROPERTY INSURANCE	25,970.34	27,219.87	25,983.98	22,667.50
		925	INJURIES & DAMAGES	0.00	0.00	0.00	5,057.53
		925	INJURIES & DAMAGES	185,555.78	188,822.96	163,737.63	134,794.16
		926000	EMPLOYEE PENSIONS AND BENEFITS	50,696.09	68,272.97	69,757.70	60,795.30
		926010	EMPL BENEFITS - FLEX CREDITS	11,586.65	11,255.00	10,786.27	7,857.74
		9301	INSTITUTN/GOODWILL ADVERT EXP	2,468.08	2,214.28	1,667.11	2,070.44
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	0.00	45.50	183.36
		9302	MISCELLANEOUS GENERAL EXPENSES	43,084.12	72,110.27	62,482.88	41,336.22
		932	ADMIN AND GENL MAINTENANCE	16,964.69	10,795.69	7,837.81	12,215.91
421 Total				7,323,315.07	7,337,968.40	6,894,455.16	6,920,878.41
Grand Total				58,294,478.33	58,099,502.48	60,678,163.37	66,096,524.86

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
		546	OPER SUPV & ENG- OTH PRD	0.00	0.00	0.00	(50,038.00)
		549	MISC EXPENSES- OTH PROD	0.00	0.00	(5,805.02)	(23,520.61)
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	(1,192.45)	(14,436.10)
Total				0.00	0.00	(6,997.47)	(87,994.71)
		500010	OPER SUPV & ENG-HONOLULU	(471.64)	0.00	0.00	0.00
		500020	OPER SUPV & ENG-WAIAU	(42,560.25)	(129,417.48)	(73,730.57)	(205,214.38)
		500030	OPER SUPV & ENG-KAHE	(12,014.08)	(21,010.61)	(29,018.31)	(36,420.75)
		502010	STEAM EXP-HONOLULU	(73,784.38)	(236,208.89)	(195,214.41)	(345,623.96)
		502020	STEAM EXP-WAIAU	(219,411.27)	(806,236.39)	(609,811.28)	(1,019,506.83)
		502030	STEAM EXP-KAHE	(192,224.34)	(876,396.67)	(366,786.97)	(835,139.90)
		505010	ELECTRIC EXPENSES-HONOLULU	(63,066.28)	(210,618.29)	(179,023.60)	(328,021.88)
		505020	ELECTRIC EXPENSES-WAIAU	(199,773.93)	(742,230.82)	(565,648.03)	(870,840.08)
		505030	ELECTRIC EXPENSES-KAHE	(201,176.95)	(768,064.22)	(550,468.38)	(766,949.88)
		506010	MISC STEAM POWER EXP-HONOLULU	(20,954.14)	(91,436.09)	(62,462.50)	(91,658.81)
		506020	MISC STEAM POWER EXP-WAIAU	(88,743.40)	(370,174.43)	(346,649.45)	(374,461.78)
		506030	MISC STEAM POWER EXP-KAHE	(112,669.63)	(365,959.38)	(239,170.17)	(314,806.64)
		510010	MAINT SUPV & ENG-HONOLULU	(69.63)	(1,421.94)	0.00	(507.37)
		510020	MAINT SUPV & ENG-WAIAU	(514.52)	(2,414.41)	(1,030.16)	(1,641.85)
		510030	MAINT SUPV & ENG-KAHE	(255.31)	(45,438.88)	(22,170.13)	(7,929.69)
		511010	MAINT OF STRUCTURES-HONOLULU	(17,466.42)	(64,097.86)	(47,765.07)	(51,278.76)
		511020	MAINT OF STRUCTURES-WAIAU	(34,818.21)	(82,566.28)	(82,034.91)	(175,276.22)
		511030	MAINT OF STRUCTURES-KAHE	(34,963.88)	(98,819.22)	(70,348.34)	(126,518.22)
		512010	MAINT BOILER & FO PLANT-HONOLULU	(40,571.12)	(486,017.54)	(73,221.88)	(131,063.43)
		512020	MAINT BOILER & FO PLANT-WAIAU	(140,188.78)	(567,112.73)	(663,164.81)	(984,717.16)
		512030	MAINT BOILER & FO PLANT-KAHE	(348,449.62)	(758,505.21)	(527,258.56)	(1,282,782.85)
		513010	MAINT ELECTRIC PLANT-HONOLULU	(34,565.84)	(664,474.84)	(31,692.91)	(79,537.91)
		513020	MAINT ELECTRIC PLANT-WAIAU	(110,281.09)	(363,579.68)	(323,926.19)	(572,686.32)
		513030	MAINT ELECTRIC PLANT-KAHE	(170,180.64)	(403,738.18)	(385,694.54)	(715,352.59)
		514010	MAINT MISC STEAM PLANT-HONOLULU	(9,853.98)	(44,580.78)	(38,117.93)	(96,405.14)
		514020	MAINT MISC STEAM PLANT-WAIAU	(35,312.38)	(154,802.93)	(140,800.54)	(334,591.74)
		514030	MAINT MISC STEAM PLANT-KAHE	(91,347.04)	(294,157.31)	(181,119.02)	(288,098.97)
		548	GENERATION EXP- OTH PROD	(6.25)	(75.52)	(182.11)	0.00
		552	MAINT STRUCTURES- OTH PRD	(158.88)	(680.32)	(4,132.06)	0.00
		553	MAINT ELEC PLANT- OTH PROD	(3,286.29)	(8,844.54)	(110,803.43)	(14,005.76)
		554	MAINT MISC PLANT- OTH PROD	0.00	0.00	(678.11)	0.00
		557	OTHER POWER SUPPLY EXPENSES	(38,883.28)	(129,386.93)	(108,488.52)	(133,971.75)
		560	OPER SUPV & ENG - TRANS OPER	(12,499.04)	(40,932.82)	(50,156.84)	(61,547.37)
		561	LOAD DISPATCHING - TRANS OPER	(138,535.30)	(475,384.93)	(283,610.84)	(429,374.35)
		562	STATION EXPENSES - TRANS OPER	(35,534.59)	(123,307.71)	(103,432.05)	(127,798.75)
		563	OVERHEAD LINE EXP- TRANS OPER	(29,076.96)	(128,690.02)	(64,120.86)	(142,374.57)
		564	UNDERGRND LINE EXP - TRANS OPER	(30.27)	(394.16)	(336.70)	(1,738.90)
		566	MISC TRANS OPER EXPENSES	(210,869.49)	(137,829.17)	(85,134.66)	(103,505.06)
		569	MAINT OF SUBSTN STRUCTURES - TRANS	(3,606.83)	(5,687.01)	(13,420.84)	(2,090.10)
		570	MAINT OF STATION EQUIP - TRANS	(168,102.85)	(502,405.48)	(364,557.79)	(704,282.81)

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
	EE Desc	571	MAINT OF OVERHEAD LINES-TRANS	(51,802.30)	(182,507.86)	(145,921.53)	(192,068.55)
		572	MAINT OF UNDERGRND LINES-TRANS	(15,414.53)	(44,854.74)	(27,051.84)	(26,725.52)
		573	MAINT OF MISC TRANSM PLANT	(796.17)	(10,513.89)	(7,950.83)	(29,756.94)
		580	OPER SUPV & ENG - DIST OPER	(28,562.75)	(122,798.97)	(60,874.19)	(65,913.27)
		581	LOAD DISPATCHING - DIST OPER	(88,516.94)	(290,979.05)	(267,611.85)	(387,231.31)
		582	STATION EXPENSES - DIST OPER	(34,219.46)	(127,345.11)	(111,725.00)	(180,532.78)
		583	OVERHEAD LINE EXP - DIST OPER	(38,606.48)	(134,624.54)	(187,951.47)	(282,610.59)
		584	UNDERGRND LINE EXP - DIST OPER	(69,141.44)	(171,908.04)	(141,078.63)	(190,059.51)
		586	METER EXPENSES - DIST OPER	(119,305.79)	(353,830.89)	(351,149.64)	(357,675.45)
		587	CUSTOMER INSTALLATION EXPENSES	(66,384.67)	(117,868.17)	(91,585.52)	(17,331.82)
		588	MISC DISTRIBUTION OPER EXPENSES	(266,670.46)	(1,060,105.49)	(483,034.03)	(882,216.83)
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	(232.72)
		591	MAINT OF STRUCT - DIST	511.00	(483.89)	(3,206.06)	(5,131.84)
		592	MAINT OF SUBSTN EQUIP - DIST	(129,112.37)	(406,439.20)	(349,728.60)	(617,968.14)
		593	MAINT OF OVERHEAD LINES-DIST	(222,406.75)	(478,559.24)	(440,586.90)	(625,105.11)
		594	MAINT OF UNDERGRND LINES-DIST	(209,581.81)	(385,364.17)	(453,558.39)	(453,041.13)
		595	MAINT OF LINE TRANSFORMER-DIST	(90,413.40)	(202,170.24)	(204,906.55)	(245,103.79)
		596	MAINT OF STREET LIGHTING & SIGNAL	(2,233.47)	(6,783.79)	(9,241.92)	(2,855.29)
		597	MAINT OF METERS - DIST	(649.99)	(2,535.70)	(2,255.95)	(1,088.63)
		598	MAINT OF MISC DIST PLT	(74,003.07)	(224,931.46)	(155,192.94)	(210,790.69)
		901	SUPERVISION- CUSTOMER ACCOUNTS	(6,218.30)	(133,924.57)	(107,212.05)	(151,678.48)
		902	METER READING EXPENSES	(211,336.94)	(948,184.37)	(746,389.75)	(1,006,246.41)
		903	CUSTOMER RECORDS & COLLECT EXP	(405,449.83)	(1,730,082.52)	(1,146,886.95)	(2,032,267.62)
		904	UNCOLLECTIBLE ACCOUNTS	41,173.91	0.00	6,720.93	0.00
		905	MISC CUSTOMER ACCOUNTS	(142.63)	0.00	(362.23)	0.00
		909	SUPERVISION- CUST SERVICE EXP	(180.78)	0.00	(21,329.65)	(8,191.51)
		910	CUSTOMER ASSISTANCE EXPENSES	(259,887.89)	(1,121,038.75)	(706,903.23)	(1,455,775.45)
		911	INFORMATIONAL ADVERTISING EXP	(504.12)	(4,964.40)	(3,895.83)	(3,560.17)
		912	MISC CUSTOMER SERVICE EXPENSES	(209.63)	(259.13)	(2,579.90)	(4,874.17)
		920	ADMIN & GENL EXP - LABR	1,579,972.22	1,656,748.07	1,562,450.15	0.00
		921	ADMIN & GENL EXP - NLABR	(2,882,448.53)	(7,202,010.55)	(5,427,226.46)	(5,394,054.97)
		922	ADMIN EXPENSES TRANSFERRED	(1,757,814.78)	(1,964,876.85)	(1,833,100.69)	5,078,780.50
		923020	OUTSIDE SERVICES- OTHER	(0.10)	0.00	0.00	0.00
		924	PROPERTY INSURANCE	(19,244.99)	(81,302.61)	(63,602.85)	(80,343.31)
		925	INJURIES & DAMAGES	(131,951.74)	(624,713.97)	(429,202.37)	(534,012.74)
		926000	EMPLOYEE PENSIONS AND BENEFITS	(40,409.12)	(180,771.84)	(222,863.55)	(214,316.70)
		926010	EMPL BENEFITS - FLEX CREDITS	(7,400.49)	(35,724.74)	(29,768.04)	(30,722.98)
		926020	EMPLOYEE BENEFITS TRANSFER	696,750.88	(6,543,019.69)	(4,445,511.99)	16,905,695.77
		9301	INSTITUTN/GOODWILL ADVERT EXP	(2,064.51)	(7,031.44)	(4,608.92)	(8,020.63)
		9302	MISCELLANEOUS GENERAL EXPENSES	(32,838.69)	(244,681.99)	(187,708.68)	(153,398.11)
		931	RENTS EXPENSE - A&G	0.00	0.00	0.00	0.00
		932	ADMIN AND GENL MAINTENANCE	(19,205.37)	(39,950.42)	(25,544.44)	(53,408.29)
Total				(7,903,001.06)	(33,733,493.88)	(24,325,521.81)	(5,677,557.71)
201	Matl-Issues/Purchases	500020	OPER SUPV & ENG-WAIAU	3,577.74	88.42	8.15	6,300.00
		500030	OPER SUPV & ENG-KAHE	50.00	0.00	203.00	0.00
		502010	STEAM EXP-HONOLULU	103,872.58	62,310.82	108,184.22	55,224.00

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2003rec	Sum of 2004rec	Sum of 2005fct	
7,294.36	84,641.36	16,320.00	
0.00	0.00	6,000.00	
3,935.91	25,953.73	0.00	
0.00	0.00	3,003.00	
7,467.33	48,346.09	22,100.04	
3,506.30	6,068.71	17,760.00	
412.42	136.47	6,300.00	
0.00	0.00	25,215.96	
2,494.57	73,119.08	71,252.78	
952.04	1,505.85	8,000.04	
5,889.71	662,516.82	344,192.28	
0.00	0.00	34,502.96	
4,737.77	142,364.29	23,000.04	
0.00	0.00	75,000.00	
5,558.95	179,445.32	0.00	
0.00	0.00	54,999.00	
3,301.80	239,296.22	25,999.92	
0.00	0.00	0.00	
0.00	0.00	266,004.00	
0,932.19	584,815.65	38,400.00	
0.00	0.00	0.00	
2,973.39	29,255.69	24,600.00	
0.00	0.00	1,200.00	
3,841.70	345,048.63	389,964.00	
0.00	25.84	0.00	
0.00	0.00	0.00	
0,628.90	203,360.29	314,551.21	
9,384.20	11,630.77	6,000.00	
0.00	0.00	0.00	
0.00	790.31	99,000.00	
1,304.77	395,832.68	352,037.92	
(485.37)	1,153.67	0.00	
0.00	0.00	300.00	
9,925.20	324,109.46	82,356.00	
1,355.30	111,833.27	98,894.00	
0.00	0.00	0.00	
423.56	193.49	0.00	
0,675.11	41,084.79	41,725.81	
7,951.42	128,555.96	0.00	
5,105.62	14,483,931.71	10,361,219.83	
3,331.94	1,891.47	0.00	
140.63	0.00	0.00	
321.22	208.00	0.00	
5,548.84	17,602.46	0.00	
1,304.75	1,045.19	0.00	
0.00	0.00	0.00	

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
205	Matl-Purchasing Card	505020	ELECTRIC EXPENSES-WAIAU	0.00	0.00	0.00	0.00
		505030	ELECTRIC EXPENSES-KAHE	6.06	0.00	0.00	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	7,644.11	10,222.01	2,349.07	900.00
		506020	MISC STEAM POWER EXP-WAIAU	47,484.61	35,896.82	17,157.23	34,668.00
		506030	MISC STEAM POWER EXP-KAHE	55,370.74	32,403.42	20,633.48	6,000.00
		511010	MAINT OF STRUCTURES-HONOLULU	4,074.84	3,614.45	2,116.97	0.00
		511020	MAINT OF STRUCTURES-WAIAU	22,506.10	25,132.07	18,673.47	0.00
		511030	MAINT OF STRUCTURES-KAHE	16,023.28	8,431.03	7,664.87	0.00
		512010	MAINT BOILER & FO PLANT-HONOLULU	11,459.63	38,608.92	4,531.68	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	43,624.16	53,764.90	72,192.54	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	123,461.34	36,581.33	62,372.55	0.00
		513010	MAINT ELECTRIC PLANT-HONOLULU	11,488.96	116,546.11	3,700.16	0.00
		513020	MAINT ELECTRIC PLANT-WAIAU	45,728.82	49,062.17	37,234.87	0.00
		513030	MAINT ELECTRIC PLANT-KAHE	88,756.98	16,092.56	44,560.70	0.00
		514010	MAINT MISC STEAM PLANT-HONOLULU	8,551.98	7,645.18	3,729.67	0.00
		514020	MAINT MISC STEAM PLANT-WAIAU	48,655.67	41,802.76	23,830.95	0.00
		514030	MAINT MISC STEAM PLANT-KAHE	68,357.63	47,777.95	33,645.90	0.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	0.00	5,400.00
		552	MAINT STRUCTURES- OTH PRD	0.00	36.44	282.62	0.00
		553	MAINT ELEC PLANT- OTH PROD	3,284.03	223.17	10,648.39	0.00
		557	OTHER POWER SUPPLY EXPENSES	981.12	790.15	1,164.83	1,032.00
		560	OPER SUPV & ENG - TRANS OPER	5,435.05	5,685.27	4,656.47	0.00
		561	LOAD DISPATCHING - TRANS OPER	658.52	861.91	611.08	0.00
		562	STATION EXPENSES - TRANS OPER	204.00	0.00	276.62	0.00
		563	OVERHEAD LINE EXP- TRANS OPER	0.00	156.24	0.00	0.00
		566	MISC TRANS OPER EXPENSES	5,503.97	18,072.89	12,591.89	0.00
		569	MAINT OF SUBSTN STRUCTURES - TRANS	0.00	1,243.15	11,493.48	2,400.00
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	1,999.92
		570	MAINT OF STATION EQUIP - TRANS	24,223.78	27,336.09	33,811.26	14,400.00
		571	MAINT OF OVERHEAD LINES-TRANS	22,353.13	14,033.97	10,694.33	0.00
		572	MAINT OF UNDERGRND LINES-TRANS	8,223.49	1,842.37	1,641.41	18,000.00
		573	MAINT OF MISC TRANSM PLANT	0.00	2,720.54	1,098.07	0.00
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	1,801.17	0.00
		581	LOAD DISPATCHING - DIST OPER	67.60	72.90	95.50	0.00
		582	STATION EXPENSES - DIST OPER	185.40	233.76	7.33	0.00
		583	OVERHEAD LINE EXP - DIST OPER	370.73	(63.44)	729.28	0.00
		584	UNDERGRND LINE EXP - DIST OPER	0.00	221.35	130.39	0.00
		586	METER EXPENSES - DIST OPER	11,282.63	8,747.70	6,075.96	2,100.00
		587	CUSTOMER INSTALLATION EXPENSES	0.00	0.00	692.50	1,450.00
		587	CUSTOMER INSTALLATION EXPENSES	0.00	0.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	4,410.50	2,466.03	2,550.32	0.00
		591	MAINT OF STRUCT - DIST	0.00	0.00	0.00	2,000.04
		591	MAINT OF STRUCT - DIST	18.61	834.24	9,930.44	2,400.00
		592	MAINT OF SUBSTN EQUIP - DIST	15,643.39	20,914.72	24,333.47	14,600.04
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	999.96
		593	MAINT OF OVERHEAD LINES-DIST	257.88	191.13	28.87	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
205	Matl-Purchasing Card	594	MAINT OF UNDERGRND LINES-DIST	14,893.57	15,350.63	18,424.94	0.00
		595	MAINT OF LINE TRANSFORMER-DIST	28,082.76	17,684.76	15,355.05	8,499.96
		598	MAINT OF MISC DIST PLT	64,777.50	45,508.93	32,474.73	52,524.00
		902	METER READING EXPENSES	8,750.58	6,301.80	54,614.89	13,350.00
		903	CUSTOMER RECORDS & COLLECT EXP	48,752.56	50,059.73	64,575.33	57,740.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	849.97	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	1,026.00
		910	CUSTOMER ASSISTANCE EXPENSES	39,604.16	46,600.65	41,411.06	51,141.66
		911	INFORMATIONAL ADVERTISING EXP	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	96.42	120,458.00
		921	ADMIN & GENL EXP - NLABR	247,053.12	247,038.55	238,837.56	83,484.04
		924	PROPERTY INSURANCE	568.13	(353.02)	13.93	525.00
		925	INJURIES & DAMAGES	74,335.40	70,181.78	66,026.62	121,765.04
		926000	EMPLOYEE PENSIONS AND BENEFITS	827.84	1,170.98	2,609.35	6,778.00
		926010	EMPL BENEFITS - FLEX CREDITS	0.00	0.00	0.00	0.00
		9301	INSTITUTN/GOODWILL ADVERT EXP	721.30	2,263.73	71.33	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	2,970.04	5,761.11	2,057.01	1,784.62
		932	ADMIN AND GENL MAINTENANCE	48,042.15	54,143.54	53,268.20	18,000.00
205 Total				1,315,444.51	1,222,562.81	1,101,173.30	645,426.28
220	Automotive-Misc	586	METER EXPENSES - DIST OPER	0.00	0.00	0.00	1,356.00
		902	METER READING EXPENSES	0.00	0.00	0.00	0.00
220 Total				0.00	0.00	0.00	1,356.00
221	Automotive-Gas & Oil	506030	MISC STEAM POWER EXP-KAHE	0.00	0.00	0.00	0.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	157.55	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	64.98	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	0.00	1,000.00
		921	ADMIN & GENL EXP - NLABR	922.52	1,747.30	3,120.10	2,760.00
221 Total				922.52	1,747.30	3,342.63	3,760.00
222	Automotive-Stk Matls	598	MAINT OF MISC DIST PLT	0.00	0.00	0.00	0.00
222 Total				0.00	0.00	0.00	0.00
223	Automotive-Gen Supp	514020	MAINT MISC STEAM PLANT-WAIAU	927.60	0.00	0.00	0.00
223 Total				927.60	0.00	0.00	0.00
301	Vehicles	500020	OPER SUPV & ENG-WAIAU	4,465.27	4,255.70	4,140.86	5,200.00
		500030	OPER SUPV & ENG-KAHE	1,825.91	92.37	0.00	0.00
		502010	STEAM EXP-HONOLULU	0.00	0.00	0.00	4,960.00
		502020	STEAM EXP-WAIAU	21,112.00	24,948.08	30,780.13	24,799.90
		502030	STEAM EXP-KAHE	9,225.32	6,466.88	3,649.47	4,960.00
		505010	ELECTRIC EXPENSES-HONOLULU	0.00	0.00	0.00	0.00
		505020	ELECTRIC EXPENSES-WAIAU	0.00	0.00	0.00	0.00
		505030	ELECTRIC EXPENSES-KAHE	0.00	0.00	0.00	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	4,560.59	4,812.42	4,644.25	0.00
		506020	MISC STEAM POWER EXP-WAIAU	21,041.71	32,276.41	19,112.76	24,799.90
		506030	MISC STEAM POWER EXP-KAHE	31,119.00	40,066.14	34,775.46	55,337.84
		510020	MAINT SUPV & ENG-WAIAU	0.00	0.00	0.00	5,265.00
		510030	MAINT SUPV & ENG-KAHE	0.00	0.00	51.21	4,655.00
		511010	MAINT OF STRUCTURES-HONOLULU	0.00	0.00	0.00	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
301	Vehicles	511020	MAINT OF STRUCTURES-WAIAU	0.00	0.00	109.96	0.00
		511030	MAINT OF STRUCTURES-KAHE	0.00	0.00	0.00	0.00
		512010	MAINT BOILER & FO PLANT-HONOLULU	12,713.13	13,400.41	20,080.81	16,368.00
		512020	MAINT BOILER & FO PLANT-WAIAU	35,757.66	51,419.88	95,848.26	27,775.90
		512030	MAINT BOILER & FO PLANT-KAHE	44,280.13	60,854.75	46,634.07	16,368.00
		513010	MAINT ELECTRIC PLANT-HONOLULU	0.00	4.67	0.00	0.00
		513020	MAINT ELECTRIC PLANT-WAIAU	22,039.44	28,729.61	39,559.37	11,407.77
		513030	MAINT ELECTRIC PLANT-KAHE	32,386.11	42,421.28	45,231.65	22,816.00
		514010	MAINT MISC STEAM PLANT-HONOLULU	0.00	0.00	0.00	0.00
		514020	MAINT MISC STEAM PLANT-WAIAU	8,030.51	13,904.32	18,377.74	11,407.77
		514030	MAINT MISC STEAM PLANT-KAHE	5,686.17	4,368.94	4,863.09	0.00
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	0.00	8,280.00
		552	MAINT STRUCTURES- OTH PRD	0.00	0.00	0.00	0.00
		553	MAINT ELEC PLANT- OTH PROD	0.00	0.00	0.00	0.00
		554	MAINT MISC PLANT- OTH PROD	0.00	0.00	0.00	0.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	0.00
		560	OPER SUPV & ENG - TRANS OPER	0.00	0.00	66.43	0.00
		561	LOAD DISPATCHING - TRANS OPER	0.00	0.00	3.84	0.00
		562	STATION EXPENSES - TRANS OPER	7.21	173.44	20.73	0.00
		563	OVERHEAD LINE EXP- TRANS OPER	0.00	0.00	651.87	0.00
		564	UNDERGRND LINE EXP - TRANS OPER	0.00	0.00	0.00	0.00
		566	MISC TRANS OPER EXPENSES	19.90	0.00	603.38	0.00
		569	MAINT OF SUBSTN STRUCTURES - TRANS	0.00	923.62	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	30,880.16	8,726.04	11,344.56	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	127,472.00
		571	MAINT OF OVERHEAD LINES-TRANS	55,171.19	102,129.20	88,455.62	0.00
		572	MAINT OF UNDERGRND LINES-TRANS	11,170.63	9,879.14	14,457.96	23,920.00
		573	MAINT OF MISC TRANSM PLANT	0.00	200.97	0.00	0.00
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	0.00
		582	STATION EXPENSES - DIST OPER	3.44	0.00	22.75	0.00
		583	OVERHEAD LINE EXP - DIST OPER	10.34	3,342.07	92.69	0.00
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		586	METER EXPENSES - DIST OPER	21,800.48	66,803.90	121,082.85	74,749.75
		587	CUSTOMER INSTALLATION EXPENSES	7,240.54	10,286.78	9,454.29	6,497.00
		588	MISC DISTRIBUTION OPER EXPENSES	516.97	3,206.06	343.45	0.00
		591	MAINT OF STRUCT - DIST	0.00	0.00	37.72	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	3,439.64	13,063.49	3,913.06	0.00
		593	MAINT OF OVERHEAD LINES-DIST	55.30	1,643.10	1,161.12	0.00
		594	MAINT OF UNDERGRND LINES-DIST	8.03	(393.60)	560.92	0.00
		595	MAINT OF LINE TRANSFORMER-DIST	3,152.29	5,585.30	3,817.57	0.00
		596	MAINT OF STREET LIGHTING & SIGNAL	0.00	0.00	0.00	1,810.00
		597	MAINT OF METERS - DIST	0.00	0.00	0.00	0.00
		598	MAINT OF MISC DIST PLT	30,356.45	33,805.53	8,317.11	0.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	0.00	0.00	92.10
		902	METER READING EXPENSES	156,365.67	188,894.11	194,891.12	208,686.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	0.00	8,905.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
301	Vehicles	903	CUSTOMER RECORDS & COLLECT EXP	50,233.45	40,481.30	29,021.50	51,825.25
		905	MISC CUSTOMER ACCOUNTS	0.00	0.00	0.00	0.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	0.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	31,088.08	34,169.70	40,371.91	41,955.80
		911	INFORMATIONAL ADVERTISING EXP	0.00	66.34	5.92	0.00
		912	MISC CUSTOMER SERVICE EXPENSES	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	122,587.64	163,397.35	235,708.64	168,653.72
		924	PROPERTY INSURANCE	47.51	18.87	27.52	0.00
		925	INJURIES & DAMAGES	114,999.74	130,652.82	156,481.95	129,179.67
		926000	EMPLOYEE PENSIONS AND BENEFITS	150.71	144.05	398.94	960.00
		9301	INSTITUTN/GOODWILL ADVERT EXP	0.00	0.00	7.33	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	8,513.65	9,037.18	17,262.59	130.00
		931	RENTS EXPENSE - A&G	0.00	0.00	0.00	0.00
		932	ADMIN AND GENL MAINTENANCE	29,229.23	34,388.66	39,810.30	11,960.00
301 Total				931,291.20	1,188,647.28	1,346,254.73	1,101,197.37
401	Stores	500020	OPER SUPV & ENG-WAIAU	0.00	0.00	0.00	590.94
		502010	STEAM EXP-HONOLULU	0.00	0.00	0.00	5,180.01
		502020	STEAM EXP-WAIAU	0.00	0.00	0.00	40,936.20
		502030	STEAM EXP-KAHE	0.00	0.00	0.00	71,008.48
		505010	ELECTRIC EXPENSES-HONOLULU	0.00	0.00	0.00	900.48
		505020	ELECTRIC EXPENSES-WAIAU	0.00	0.00	0.00	6,190.80
		505030	ELECTRIC EXPENSES-KAHE	0.00	0.00	0.00	12,888.12
		506010	MISC STEAM POWER EXP-HONOLULU	0.00	0.00	0.00	1,106.09
		506020	MISC STEAM POWER EXP-WAIAU	0.00	0.00	0.00	3,891.95
		506030	MISC STEAM POWER EXP-KAHE	0.00	0.00	0.00	3,979.65
		510020	MAINT SUPV & ENG-WAIAU	0.00	0.00	0.00	216.68
		511010	MAINT OF STRUCTURES-HONOLULU	0.00	0.00	0.00	1,538.32
		511020	MAINT OF STRUCTURES-WAIAU	0.00	0.00	0.00	12,381.60
		511030	MAINT OF STRUCTURES-KAHE	0.00	0.00	0.00	5,984.44
		512010	MAINT BOILER & FO PLANT-HONOLULU	0.00	0.00	0.00	55,548.36
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	0.00	0.00	85,573.74
		512030	MAINT BOILER & FO PLANT-KAHE	0.00	0.00	0.00	230,354.07
		513010	MAINT ELECTRIC PLANT-HONOLULU	0.00	0.00	0.00	2,228.69
		513020	MAINT ELECTRIC PLANT-WAIAU	0.00	0.00	0.00	41,924.85
		513030	MAINT ELECTRIC PLANT-KAHE	0.00	0.00	0.00	70,721.48
		514010	MAINT MISC STEAM PLANT-HONOLULU	0.00	0.00	0.00	1,688.40
		514020	MAINT MISC STEAM PLANT-WAIAU	0.00	0.00	0.00	2,645.16
		514030	MAINT MISC STEAM PLANT-KAHE	0.00	0.00	0.00	12,381.60
		553	MAINT ELEC PLANT- OTH PROD	0.00	0.00	0.00	35,362.60
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	48.40
		561	LOAD DISPATCHING - TRANS OPER	0.00	0.00	0.00	218.63
		562	STATION EXPENSES - TRANS OPER	0.00	0.00	0.00	1,167.10
		563	OVERHEAD LINE EXP- TRANS OPER	0.00	0.00	0.00	3,282.81
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	736.33
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	29,565.76
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	1,172.32

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
401	Stores	581	LOAD DISPATCHING - DIST OPER	0.00	0.00	0.00	22.51
		582	STATION EXPENSES - DIST OPER	0.00	0.00	0.00	2,290.60
		583	OVERHEAD LINE EXP - DIST OPER	0.00	0.00	0.00	562.80
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	2,354.66
		586	METER EXPENSES - DIST OPER	0.00	0.00	0.00	1,665.89
		587	CUSTOMER INSTALLATION EXPENSES	0.00	0.00	0.00	590.94
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	0.00	9,048.77
		591	MAINT OF STRUCT - DIST	0.00	0.00	0.00	750.40
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	32,285.23
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	5,393.79
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	7,035.00
		595	MAINT OF LINE TRANSFORMER-DIST	0.00	0.00	0.00	7,597.71
		598	MAINT OF MISC DIST PLT	0.00	0.00	0.00	28,553.10
		902	METER READING EXPENSES	0.00	0.00	0.00	2,307.48
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	0.00	36,691.18
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	29,504.91
		911	INFORMATIONAL ADVERTISING EXP	0.00	0.00	0.00	562.80
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	0.00	42,307.36
		925	INJURIES & DAMAGES	0.00	0.00	0.00	7,753.13
		926000	EMPLOYEE PENSIONS AND BENEFITS	0.00	0.00	0.00	9,276.26
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	0.00	0.00	3,913.88
401 Total				0.00	0.00	0.00	971,882.46
404	Energy Delivery	500020	OPER SUPV & ENG-WAIAU	201.35	0.00	0.00	0.00
		500030	OPER SUPV & ENG-KAHE	25,987.34	26,414.56	52,265.42	49,914.00
		502010	STEAM EXP-HONOLULU	1,669.29	0.00	0.00	0.00
		502020	STEAM EXP-WAIAU	229.75	0.00	0.00	0.00
		502030	STEAM EXP-KAHE	187.20	0.00	8,046.97	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	0.00	566.64	116.86	0.00
		506020	MISC STEAM POWER EXP-WAIAU	1,825.84	250.30	1,039.97	0.00
		506030	MISC STEAM POWER EXP-KAHE	43,079.23	20,958.25	18,414.17	11,646.60
		510030	MAINT SUPV & ENG-KAHE	207.09	0.00	13.88	5,547.11
		511010	MAINT OF STRUCTURES-HONOLULU	749.96	350.42	2,205.48	0.00
		511020	MAINT OF STRUCTURES-WAIAU	4,232.95	1,367.65	10,358.23	35,633.05
		511030	MAINT OF STRUCTURES-KAHE	12,149.09	5,313.34	7,875.07	27,298.24
		512010	MAINT BOILER & FO PLANT-HONOLULU	755.03	15,306.01	0.00	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	2,310.44	2,204.33	3,588.78	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	2,174.55	151.34	251.64	0.00
		513010	MAINT ELECTRIC PLANT-HONOLULU	3,959.43	14,771.05	698.86	998.28
		513020	MAINT ELECTRIC PLANT-WAIAU	27,022.80	11,586.78	12,666.76	5,878.76
		513030	MAINT ELECTRIC PLANT-KAHE	14,479.97	7,876.23	11,541.33	10,093.72
		514010	MAINT MISC STEAM PLANT-HONOLULU	741.54	1,124.34	756.07	5,102.32
		514020	MAINT MISC STEAM PLANT-WAIAU	2,835.60	2,978.43	1,968.19	8,041.70
		514030	MAINT MISC STEAM PLANT-KAHE	10,981.34	8,429.42	7,078.30	15,584.26
		549	MISC EXPENSES- OTH PROD	0.00	0.00	5,307.72	0.00
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	46.74	0.00
		552	MAINT STRUCTURES- OTH PRD	0.00	0.00	0.00	0.00

Sum of 2005fct
13,476.78
0.00
0.00
96,500.40
672,395.93
199,073.67
220,369.20
2,689.81
0.00
998.28
99,162.48
3,327.60
3,327.60
1,091,695.71
38,721.06
233,068.43
38,156.48
35,272.56
1,663.80
96,500.40
602,683.82
280,626.49
438,799.52
0.00
229,677.61
17,330.14
0.00
43,896.59
1,003,771.65
332.76
0.00
7,986.24
1,663.80
964,919.70
34,806.69
938,220.15
28,090.49
672,231.77
32,222.26
349,953.71
0.00
0.00
21,962.16
118,462.56
0.00
0.00

rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
.00	0.00	0.00	16,665.73
.53	6,411.51	1,708.20	665.52
.00	0.00	0.00	2,773.00
.99	120,400.69	129,161.26	119,516.30
.46	4,646.07	8,962.98	0.00
.31	68,184.31	34,337.85	71,430.26
.27	12,392.44	40,071.31	0.00
.89	4,024.77	5,037.32	6,433.36
.55	34,981.87	28,130.29	0.00
.79	21,463.95	18,092.34	66,329.05
.04	6,395,276.63	7,533,446.43	9,093,589.56
.92	0.00	0.00	0.00
.64	24,207.22	23,072.73	39,472.56
.82	93.08	3,859.43	1,787.04
.89	92,631.47	101,192.19	153,875.97
.77	318,010.36	319,083.57	451,956.87
.47	322,867.23	317,170.69	361,133.19
.19	84,517.39	95,350.15	147,332.25
.71	300,572.68	305,577.98	391,893.93
.72	312,767.22	300,293.38	343,860.66
.35	15,979.24	16,433.82	14,092.65
.26	81,025.33	116,571.28	94,811.67
.38	48,951.19	36,497.19	58,151.07
.59	653.67	0.00	230.21
.40	774.22	969.04	459.64
.55	1,017.62	424.83	1,773.90
.18	25,531.02	24,794.90	22,955.58
.30	31,997.06	40,040.40	67,467.33
.32	38,262.08	35,685.00	48,460.32
.55	195,045.28	37,215.13	54,228.78
.43	214,607.69	354,138.53	431,865.81
.76	264,816.74	337,665.15	555,598.62
.49	268,915.82	16,473.18	35,280.64
.83	132,695.74	178,178.11	249,949.08
.09	146,416.73	174,840.20	308,474.51
.91	16,378.88	18,938.68	41,778.37
.91	38,569.87	49,565.36	116,598.05
.08	112,021.89	92,067.48	122,918.39
.00	25.06	102.00	0.00
.00	0.00	124.80	0.00
.72	238.70	1,993.30	0.00
.00	0.00	0.00	0.00
.12	2,948.96	65,209.99	0.00
.00	0.00	23.38	0.00
.51	46,494.78	51,896.86	57,191.85
.00	29.82	0.00	0.00

Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
0.00	0.00	0.00
271.18	647.70	0.00
0.00	13.36	0.00
0.00	66.20	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
50.56	21.82	630.72
6,814.42	4,716.22	6,254.64
3,150.79	1,893.98	0.00
1,265.31	80.16	1,182.60
3,150,616.30	3,122,888.17	4,181,666.90
0.00	0.00	0.00
19,944.46	12,958.57	33,153.60
3,023.00	4,252.62	5,030.40
38,410.95	36,192.75	56,570.40
132,122.99	116,045.94	166,514.40
134,483.15	113,308.54	133,394.40
34,841.23	33,732.84	53,820.00
123,544.53	109,156.36	143,157.60
128,615.51	106,328.06	125,611.20
14,601.60	11,273.32	14,064.19
50,796.76	59,082.35	50,248.60
64,163.26	48,543.68	54,045.50
250.85	0.00	84.10
405.89	218.18	167.90
8,072.07	4,465.03	1,128.10
10,652.78	9,119.28	8,385.60
13,505.81	15,368.42	27,729.60
16,147.42	13,097.49	20,065.04
77,976.97	13,050.45	19,809.60
90,884.23	119,935.78	157,759.20
110,817.93	132,298.23	202,958.40
108,598.08	6,030.74	12,974.30
56,053.50	59,206.69	91,814.40
60,109.44	71,308.00	113,558.35
6,980.10	6,783.73	15,703.10
16,012.38	17,577.82	43,288.90
46,975.55	33,370.55	46,250.50
0.00	0.00	9,264.00
9.56	29.51	0.00
0.00	0.00	4,545.60
0.00	1,010.66	0.00
0.00	219.09	2,188.80

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
406	Corp Admin Expense	551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	3.32	0.00
		552	MAINT STRUCTURES- OTH PRD	85.54	113.98	791.97	0.00
		553	MAINT ELEC PLANT- OTH PROD	0.00	0.00	0.00	0.00
		553	MAINT ELEC PLANT- OTH PROD	1,619.71	1,312.65	17,834.14	1,166.40
		554	MAINT MISC PLANT- OTH PROD	0.00	0.00	5.81	0.00
		557	OTHER POWER SUPPLY EXPENSES	19,924.17	21,507.30	21,051.92	22,543.20
		560	OPER SUPV & ENG - TRANS OPER	5,131.51	5,881.58	8,132.11	8,352.00
		561	LOAD DISPATCHING - TRANS OPER	60,667.43	67,017.11	50,553.39	58,195.10
		562	STATION EXPENSES - TRANS OPER	15,276.57	17,608.63	16,312.84	17,229.60
		563	OVERHEAD LINE EXP- TRANS OPER	12,506.92	18,793.37	10,035.76	19,072.70
		564	UNDERGRND LINE EXP - TRANS OPER	0.00	0.00	0.00	232.80
		564	UNDERGRND LINE EXP - TRANS OPER	12.55	56.04	55.93	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	86.40
		566	MISC TRANS OPER EXPENSES	10,676.60	16,376.48	11,428.38	11,152.90
		569	MAINT OF SUBSTN STRUCTURES - TRANS	1,514.70	804.22	2,086.72	288.00
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	288.00
		570	MAINT OF STATION EQUIP - TRANS	75,133.02	70,766.26	63,383.88	95,289.02
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	18.26	3,591.16
		571	MAINT OF OVERHEAD LINES-TRANS	21,536.69	23,789.64	22,661.42	20,651.90
		572	MAINT OF UNDERGRND LINES-TRANS	9,697.38	6,330.80	3,920.16	3,302.40
		573	MAINT OF MISC TRANSM PLANT	332.04	1,588.67	1,336.72	4,387.40
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	748.80
		580	OPER SUPV & ENG - DIST OPER	8,288.11	12,332.48	9,810.12	8,352.00
		581	LOAD DISPATCHING - DIST OPER	37,852.37	41,647.40	40,862.24	52,161.60
		582	STATION EXPENSES - DIST OPER	14,935.97	17,995.75	17,979.14	24,287.90
		583	OVERHEAD LINE EXP - DIST OPER	16,253.49	19,179.10	28,920.06	37,977.60
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		584	UNDERGRND LINE EXP - DIST OPER	27,640.99	26,027.86	21,753.97	28,019.23
		586	METER EXPENSES - DIST OPER	58,099.78	58,094.07	56,028.82	58,425.50
		587	CUSTOMER INSTALLATION EXPENSES	11,273.65	12,178.43	8,828.97	3,038.40
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	300.28	7,284.00
		588	MISC DISTRIBUTION OPER EXPENSES	118,856.63	148,183.90	75,000.13	92,083.50
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	28.80
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	0.00
		591	MAINT OF STRUCT - DIST	(485.74)	86.25	539.64	691.20
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	144.00
		592	MAINT OF SUBSTN EQUIP - DIST	55,652.26	57,891.68	55,365.13	83,512.70
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	50.63	3,012.48
		593	MAINT OF OVERHEAD LINES-DIST	98,765.49	65,006.18	81,715.76	81,259.49
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	2,431.20
		594	MAINT OF UNDERGRND LINES-DIST	82,858.18	53,537.84	68,968.16	58,180.90
		595	MAINT OF LINE TRANSFORMER-DIST	0.00	0.00	35.28	2,788.80
		595	MAINT OF LINE TRANSFORMER-DIST	37,773.37	29,032.18	31,309.03	30,288.10
		596	MAINT OF STREET LIGHTING & SIGNAL	1,249.11	1,138.07	1,853.04	489.60
		597	MAINT OF METERS - DIST	391.47	463.46	488.65	201.60
		598	MAINT OF MISC DIST PLT	0.00	0.00	0.00	1,900.80

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
406	Corp Admin Expense	598	MAINT OF MISC DIST PLT	36,300.58	33,470.96	27,076.18	30,206.31
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	0.00	88.84	1,080.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	3,339.70	3,601.30	2,528.84	4,968.00
		902	METER READING EXPENSES	151,280.94	182,086.96	170,159.20	189,156.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	142.50	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	281,449.42	319,080.66	285,470.88	377,191.20
		905	MISC CUSTOMER ACCOUNTS	93.24	0.00	66.90	0.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	0.00	180.00
		909	SUPERVISION- CUST SERVICE EXP	111.93	0.00	3,647.59	1,152.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	9,655.20
		910	CUSTOMER ASSISTANCE EXPENSES	151,086.54	191,191.76	148,255.81	241,665.80
		911	INFORMATIONAL ADVERTISING EXP	0.00	0.00	0.00	167.90
		911	INFORMATIONAL ADVERTISING EXP	247.58	861.62	773.24	467.90
		912	MISC CUSTOMER SERVICE EXPENSES	83.31	51.41	597.16	902.40
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	9,037.48	30,023.91
		921	ADMIN & GENL EXP - NLABR	759,933.08	897,601.06	783,346.91	824,655.85
		922	ADMIN EXPENSES TRANSFERRED	0.00	0.00	0.00	(7,252,605.46)
		924	PROPERTY INSURANCE	12,523.87	14,724.29	13,088.59	14,241.36
		925	INJURIES & DAMAGES	0.00	0.00	0.00	3,619.00
		925	INJURIES & DAMAGES	90,114.52	102,455.55	83,824.41	84,245.92
		926000	EMPLOYEE PENSIONS AND BENEFITS	24,126.02	37,000.35	34,917.83	38,196.00
		926010	EMPL BENEFITS - FLEX CREDITS	5,453.01	6,124.56	5,050.28	4,936.80
		9301	INSTITUTN/GOODWILL ADVERT EXP	1,036.10	1,220.08	800.94	1,300.80
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	0.00	21.37	115.20
		9302	MISCELLANEOUS GENERAL EXPENSES	20,533.12	39,834.65	32,643.57	25,970.40
		932	ADMIN AND GENL MAINTENANCE	8,454.11	5,781.82	3,868.38	7,674.90
406 Total				3,523,497.78	3,997,828.41	3,488,793.36	(2,904,409.65)
407	Cust Installations	506030	MISC STEAM POWER EXP-KAHE	0.00	0.00	0.00	0.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	0.00
		563	OVERHEAD LINE EXP- TRANS OPER	0.00	0.00	0.00	0.00
		566	MISC TRANS OPER EXPENSES	11,256.33	0.00	0.00	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	0.00
		580	OPER SUPV & ENG - DIST OPER	9,193.25	38,044.86	314.52	0.00
		583	OVERHEAD LINE EXP - DIST OPER	0.00	54.18	0.00	0.00
		584	UNDERGRND LINE EXP - DIST OPER	10,864.45	1,978.64	17,518.00	0.00
		586	METER EXPENSES - DIST OPER	26,164.22	25,348.26	70,504.01	25,588.80
		587	CUSTOMER INSTALLATION EXPENSES	48,458.03	57,330.77	52,831.14	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	19,644.02	61,358.66	10,166.39	33,265.44
		593	MAINT OF OVERHEAD LINES-DIST	571.92	3,747.25	400.00	0.00
		594	MAINT OF UNDERGRND LINES-DIST	32.42	500.00	0.00	0.00
		595	MAINT OF LINE TRANSFORMER-DIST	0.00	0.00	0.00	0.00
		902	METER READING EXPENSES	0.00	243.81	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	2,373.76	176.22	840.00	2,558.88
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	10,235.52
		910	CUSTOMER ASSISTANCE EXPENSES	1,904.74	0.00	2,520.00	7,676.64
		921	ADMIN & GENL EXP - NLABR	4,662.61	4,003.58	2,398.59	0.00

2005fct
0.00
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9,325.28
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0,373.86
6,747.04
8,332.29
4,354.19
4,092.19
9,175.75
6,595.51
8,180.62
6,822.04
7,285.99
9,926.49
279.97
558.98
3,755.62
7,917.06
2,316.46
6,799.84
5,949.46
5,206.67
5,682.34
3,193.62
5,665.44
8,054.68
2,278.25
4,115.95
3,975.61
0,841.40
0.00
5,133.06
0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
422	Employee Benefits	551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	562.32	7,286.88
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	8.46	0.00
		552	MAINT STRUCTURES- OTH PRD	(45.86)	379.78	1,780.01	0.00
		553	MAINT ELEC PLANT- OTH PROD	0.00	0.00	0.00	0.00
		553	MAINT ELEC PLANT- OTH PROD	(934.01)	4,393.30	44,444.30	3,883.14
		554	MAINT MISC PLANT- OTH PROD	0.00	0.00	14.81	0.00
		557	OTHER POWER SUPPLY EXPENSES	(7,703.39)	71,165.62	50,820.19	75,050.07
		560	OPER SUPV & ENG - TRANS OPER	(2,165.67)	19,564.96	19,582.97	27,805.20
		561	LOAD DISPATCHING - TRANS OPER	(24,532.16)	221,660.83	122,962.03	193,741.20
		562	STATION EXPENSES - TRANS OPER	(6,329.65)	58,157.42	39,900.31	57,360.21
		563	OVERHEAD LINE EXP- TRANS OPER	(4,834.59)	60,367.75	24,143.48	63,496.21
		564	UNDERGRND LINE EXP - TRANS OPER	0.00	0.00	0.00	775.03
		564	UNDERGRND LINE EXP - TRANS OPER	(6.17)	187.90	125.98	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	287.64
		566	MISC TRANS OPER EXPENSES	(5,756.36)	54,059.03	27,739.04	37,129.85
		569	MAINT OF SUBSTN STRUCTURES - TRANS	(498.00)	2,667.22	5,106.15	958.80
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	958.80
		570	MAINT OF STATION EQUIP - TRANS	(30,823.69)	233,935.21	153,271.82	317,233.04
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	46.53	11,156.92
		571	MAINT OF OVERHEAD LINES-TRANS	(9,018.52)	80,022.27	53,467.85	69,552.31
		572	MAINT OF UNDERGRND LINES-TRANS	(9,640.24)	21,015.88	9,506.54	10,994.24
		573	MAINT OF MISC TRANSM PLANT	(56.66)	5,422.31	3,148.24	14,606.36
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	479.40
		580	OPER SUPV & ENG - DIST OPER	(3,832.03)	39,174.10	23,482.71	29,818.68
		581	LOAD DISPATCHING - DIST OPER	(16,075.85)	137,638.54	101,498.29	173,654.66
		582	STATION EXPENSES - DIST OPER	(6,332.14)	59,943.01	43,147.49	80,858.48
		583	OVERHEAD LINE EXP - DIST OPER	(5,959.58)	63,094.45	70,930.26	126,433.76
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		584	UNDERGRND LINE EXP - DIST OPER	(11,386.54)	85,610.49	52,447.11	93,280.69
		586	METER EXPENSES - DIST OPER	(23,049.44)	192,365.13	136,051.20	194,508.24
		587	CUSTOMER INSTALLATION EXPENSES	(4,789.57)	35,220.74	19,754.87	10,115.34
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	737.09	24,249.65
		588	MISC DISTRIBUTION OPER EXPENSES	(47,567.75)	392,286.78	181,205.55	306,561.28
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	95.88
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	0.00
		591	MAINT OF STRUCT - DIST	511.82	287.04	1,245.02	2,301.12
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	479.40
		592	MAINT OF SUBSTN EQUIP - DIST	(20,956.06)	191,257.22	135,696.29	278,027.71
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	129.02	10,029.05
		593	MAINT OF OVERHEAD LINES-DIST	(37,815.34)	214,555.48	204,393.94	270,526.38
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	8,093.87
		594	MAINT OF UNDERGRND LINES-DIST	(32,662.81)	179,485.93	172,577.47	193,693.90
		595	MAINT OF LINE TRANSFORMER-DIST	0.00	0.00	84.79	9,284.38
		595	MAINT OF LINE TRANSFORMER-DIST	(14,455.57)	95,759.85	77,966.24	100,834.12
		596	MAINT OF STREET LIGHTING & SIGNAL	(542.96)	3,768.80	4,968.63	1,629.96
		597	MAINT OF METERS - DIST	(168.14)	1,534.66	1,223.30	671.16

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	Data			
lesc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
T OF MISC DIST PLT	0.00	0.00	0.00	6,328.08
T OF MISC DIST PLT	(14,860.50)	111,261.32	67,279.11	100,561.82
ERVISION- CUSTOMER ACCOUNTS	0.00	0.00	195.72	3,595.50
ERVISION- CUSTOMER ACCOUNTS	(1,169.92)	12,188.69	6,150.22	16,539.30
ER READING EXPENSES	(60,937.63)	603,644.58	413,278.57	629,731.85
OMER RECORDS & COLLECT EXP	0.00	0.00	331.95	0.00
OMER RECORDS & COLLECT EXP	(113,884.97)	1,054,397.87	693,874.73	1,255,732.37
CUSTOMER ACCOUNTS	(69.31)	0.00	168.43	0.00
ERVISION- CUST SERVICE EXP	0.00	0.00	0.00	599.25
ERVISION- CUST SERVICE EXP	(43.46)	0.00	9,178.87	3,835.20
OMER ASSISTANCE EXPENSES	0.00	0.00	0.00	9,300.36
OMER ASSISTANCE EXPENSES	(61,348.08)	633,509.48	362,175.49	827,389.11
RMATIONAL ADVERTISING EXP	0.00	0.00	0.00	558.98
RMATIONAL ADVERTISING EXP	(130.59)	2,880.37	1,917.52	1,557.73
CUSTOMER SERVICE EXPENSES	(12.18)	155.67	1,437.28	3,004.24
N & GENL EXP - NLABR	0.00	0.00	21,418.37	91,956.27
N & GENL EXP - NLABR	(309,281.30)	2,965,005.03	1,892,799.36	2,753,415.12
ERTY INSURANCE	(5,265.83)	47,827.39	31,810.80	47,411.86
IES & DAMAGES	0.00	0.00	0.00	10,578.44
IES & DAMAGES	(36,041.46)	339,133.61	203,802.22	281,938.57
OYEE PENSIONS AND BENEFITS	(9,784.06)	121,980.96	85,044.60	127,160.85
BENEFITS - FLEX CREDITS	(2,435.75)	20,152.34	12,503.08	16,435.43
OYEE BENEFITS TRANSFER	0.00	0.00	0.00	(24,145,132.33)
TUTN/GOODWILL ADVERT EXP	(483.32)	3,950.35	2,120.29	4,330.58
ELLANEOUS GENERAL EXPENSES	0.00	0.00	53.89	383.52
ELLANEOUS GENERAL EXPENSES	(8,524.93)	133,090.65	78,163.58	86,459.79
N AND GENL MAINTENANCE	(3,431.79)	18,809.16	9,673.19	25,551.06
	(1,429,460.11)	13,152,327.62	8,476,166.46	(9,669,263.66)
SUPV & ENG-HONOLULU	195.98	0.00	0.00	0.00
SUPV & ENG-WAIAU	25,411.28	19,871.17	14,929.92	37,216.25
SUPV & ENG-KAHE	5,862.87	3,454.28	6,847.65	6,378.05
M EXP-HONOLULU	44,186.58	43,278.62	50,262.79	66,736.18
M EXP-WAIAU	129,472.36	142,405.99	148,289.56	193,675.88
M EXP-KAHE	124,931.52	136,250.74	140,361.05	155,259.83
TRIC EXPENSES-HONOLULU	38,431.10	39,288.35	47,102.89	63,652.12
TRIC EXPENSES-WAIAU	119,840.46	133,211.74	139,589.77	167,045.88
TRIC EXPENSES-KAHE	118,902.76	130,418.73	131,812.80	146,656.32
STEAM POWER EXP-HONOLULU	12,773.06	14,762.23	13,297.86	15,088.55
STEAM POWER EXP-WAIAU	56,441.37	52,879.88	72,230.34	58,797.06
STEAM POWER EXP-KAHE	68,013.77	64,562.02	59,602.63	59,140.24
T SUPV & ENG-HONOLULU	47.08	265.77	0.00	94.50
T SUPV & ENG-WAIAU	330.96	466.68	248.68	189.00
T SUPV & ENG-KAHE	146.57	9,717.47	6,517.71	1,267.44
T OF STRUCTURES-HONOLULU	10,645.49	11,311.66	11,819.61	9,871.08
T OF STRUCTURES-WAIAU	19,974.46	14,522.61	19,922.21	33,377.92
T OF STRUCTURES-KAHE	20,472.58	16,167.39	17,299.84	24,139.04

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
423	Payroll Taxes	512010	MAINT BOILER & FO PLANT-HONOLULU	24,237.03	83,888.28	16,921.16	23,348.29
		512020	MAINT BOILER & FO PLANT-WAIAU	97,039.02	99,442.18	170,929.46	193,793.13
		512030	MAINT BOILER & FO PLANT-KAHE	184,117.57	121,290.24	159,422.48	246,361.91
		513010	MAINT ELECTRIC PLANT-HONOLULU	23,499.79	119,544.12	7,656.98	15,387.32
		513020	MAINT ELECTRIC PLANT-WAIAU	68,065.94	60,811.42	87,797.40	113,501.00
		513030	MAINT ELECTRIC PLANT-KAHE	92,517.76	64,746.95	86,239.85	141,761.63
		514010	MAINT MISC STEAM PLANT-HONOLULU	6,074.06	7,583.08	8,803.55	18,498.91
		514020	MAINT MISC STEAM PLANT-WAIAU	21,223.21	16,182.06	21,407.13	53,311.45
		514030	MAINT MISC STEAM PLANT-KAHE	54,320.84	51,759.54	41,811.16	55,614.30
		546	OPER SUPV & ENG- OTH PRD	0.00	0.00	0.00	9,932.60
		548	GENERATION EXP- OTH PROD	0.00	10.92	42.05	0.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	0.00	3,841.95
		549	MISC EXPENSES- OTH PROD	0.00	0.00	1,721.14	0.00
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	387.24	4,024.78
		551	MAINT SUPV & ENG- OTH PRD	0.00	0.00	7.02	0.00
		552	MAINT STRUCTURES- OTH PRD	101.57	121.94	982.10	0.00
		553	MAINT ELEC PLANT- OTH PROD	0.00	0.00	0.00	0.00
		553	MAINT ELEC PLANT- OTH PROD	2,288.97	1,550.63	27,931.49	1,345.69
		554	MAINT MISC PLANT- OTH PROD	0.00	0.00	11.29	0.00
		557	OTHER POWER SUPPLY EXPENSES	23,078.20	25,160.94	27,416.52	24,246.31
		560	OPER SUPV & ENG - TRANS OPER	6,840.03	6,553.92	12,201.09	10,143.11
		561	LOAD DISPATCHING - TRANS OPER	74,757.02	74,196.84	67,288.49	71,165.61
		562	STATION EXPENSES - TRANS OPER	18,475.49	19,519.53	22,004.87	21,574.40
		563	OVERHEAD LINE EXP- TRANS OPER	14,575.49	19,702.02	14,507.35	24,061.89
		564	UNDERGRND LINE EXP - TRANS OPER	0.00	0.00	0.00	306.08
		564	UNDERGRND LINE EXP - TRANS OPER	18.02	65.36	73.83	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	108.98
		566	MISC TRANS OPER EXPENSES	13,986.96	17,097.12	14,816.54	12,927.40
		569	MAINT OF SUBSTN STRUCTURES - TRANS	1,756.52	844.56	2,870.16	317.54
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	335.47
		570	MAINT OF STATION EQUIP - TRANS	85,242.90	72,962.12	79,842.42	112,324.63
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	32.90	4,105.76
		571	MAINT OF OVERHEAD LINES-TRANS	25,933.08	25,264.20	28,357.47	24,905.98
		572	MAINT OF UNDERGRND LINES-TRANS	10,311.66	6,674.24	5,372.14	3,697.20
		573	MAINT OF MISC TRANSM PLANT	341.81	1,599.50	1,573.42	5,190.12
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	195.92
		580	OPER SUPV & ENG - DIST OPER	11,106.58	17,997.47	13,717.74	10,808.53
		581	LOAD DISPATCHING - DIST OPER	46,979.97	46,184.84	54,027.47	65,009.23
		582	STATION EXPENSES - DIST OPER	17,727.77	19,182.11	22,895.10	30,077.30
		583	OVERHEAD LINE EXP - DIST OPER	19,550.14	21,493.36	43,896.91	48,146.93
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		584	UNDERGRND LINE EXP - DIST OPER	30,802.63	26,842.49	26,202.89	31,551.28
		586	METER EXPENSES - DIST OPER	54,703.74	50,822.76	59,575.40	55,006.07
		587	CUSTOMER INSTALLATION EXPENSES	10,676.50	10,654.71	8,663.84	3,352.32
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	456.38	6,538.47
		588	MISC DISTRIBUTION OPER EXPENSES	131,294.24	129,354.17	98,347.75	109,453.47

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
423	Payroll Taxes	590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	55.46
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	0.00
		591	MAINT OF STRUCT - DIST	(311.34)	80.79	659.98	761.38
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	169.06
		592	MAINT OF SUBSTN EQUIP - DIST	63,197.02	60,963.75	68,633.36	97,594.39
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	93.04	3,799.64
		593	MAINT OF OVERHEAD LINES-DIST	120,644.10	75,881.80	114,274.95	100,913.24
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	3,144.13
		594	MAINT OF UNDERGRND LINES-DIST	113,128.21	64,068.91	107,858.54	74,784.90
		595	MAINT OF LINE TRANSFORMER-DIST	0.00	0.00	54.29	3,518.91
		595	MAINT OF LINE TRANSFORMER-DIST	46,328.91	31,952.50	44,275.62	36,828.03
		596	MAINT OF STREET LIGHTING & SIGNAL	1,376.99	1,218.81	2,176.12	531.20
		597	MAINT OF METERS - DIST	426.66	480.64	544.00	215.87
		598	MAINT OF MISC DIST PLT	0.00	0.00	0.00	2,499.14
		598	MAINT OF MISC DIST PLT	38,707.28	31,302.61	30,039.65	30,748.59
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	0.00	122.61	1,985.91
		901	SUPERVISION- CUSTOMER ACCOUNTS	4,048.52	4,497.11	2,973.78	7,061.08
		902	METER READING EXPENSES	113,199.34	125,638.24	134,192.77	157,173.90
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	169.55	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	247,346.05	259,740.98	283,621.18	331,620.04
		905	MISC CUSTOMER ACCOUNTS	118.70	0.00	126.90	0.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	0.00	330.99
		909	SUPERVISION- CUST SERVICE EXP	112.31	0.00	8,503.06	2,094.07
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	3,278.51
		910	CUSTOMER ASSISTANCE EXPENSES	170,954.81	197,298.53	183,048.52	266,728.29
		911	INFORMATIONAL ADVERTISING EXP	0.00	0.00	0.00	184.13
		911	INFORMATIONAL ADVERTISING EXP	351.42	1,065.67	1,070.38	536.30
		912	MISC CUSTOMER SERVICE EXPENSES	138.50	52.05	545.46	967.53
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	10,214.13	26,393.49
		921	ADMIN & GENL EXP - NLABR	868,306.31	945,971.15	971,892.33	1,013,554.35
		924	PROPERTY INSURANCE	11,690.89	12,580.46	13,073.23	13,638.99
		925	INJURIES & DAMAGES	0.00	0.00	0.00	3,211.69
		925	INJURIES & DAMAGES	90,962.01	94,696.98	90,846.09	90,275.77
		926000	EMPLOYEE PENSIONS AND BENEFITS	24,824.67	35,289.50	38,849.57	42,060.28
		926010	EMPL BENEFITS - FLEX CREDITS	4,407.21	4,527.98	4,908.94	4,448.05
		9301	INSTITUTN/GOODWILL ADVERT EXP	1,305.16	1,210.39	1,047.53	1,372.78
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	0.00	32.15	123.51
		9302	MISCELLANEOUS GENERAL EXPENSES	20,035.48	38,482.37	38,538.94	30,256.50
		932	ADMIN AND GENL MAINTENANCE	8,923.97	5,473.42	4,418.74	8,350.86
423 Total				3,917,947.94	4,044,413.59	4,273,152.90	4,956,069.26
430	AFUDC-Debt	500030	OPER SUPV & ENG-KAHE	2,771.13	0.00	0.00	0.00
		502030	STEAM EXP-KAHE	(2,771.13)	0.00	0.00	0.00
		510030	MAINT SUPV & ENG-KAHE	0.00	0.00	0.00	0.00
		511020	MAINT OF STRUCTURES-WAIAU	0.00	0.00	0.00	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	0.00	0.00	0.00
		513030	MAINT ELECTRIC PLANT-KAHE	(3.42)	0.00	0.00	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
430	AFUDC-Debt	514020	MAINT MISC STEAM PLANT-WAIAU	0.00	0.00	0.00	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	0.00
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	0.00
		583	OVERHEAD LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		586	METER EXPENSES - DIST OPER	0.00	0.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	0.00	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	0.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	0.00
		594	MAINT OF UNDERGRND LINES-DIST	0.00	1.91	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	3,627.86	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	(3,627.86)	0.00	0.00	0.00
430 Total				(3.42)	1.91	0.00	0.00
431	AFUDC-Equity	500030	OPER SUPV & ENG-KAHE	9.64	0.00	0.00	0.00
		502030	STEAM EXP-KAHE	(9.64)	0.00	0.00	0.00
		510030	MAINT SUPV & ENG-KAHE	0.00	0.00	0.00	0.00
		511020	MAINT OF STRUCTURES-WAIAU	0.00	0.00	0.00	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	0.00	0.00	0.00
		513030	MAINT ELECTRIC PLANT-KAHE	(7.26)	0.00	0.00	0.00
		514020	MAINT MISC STEAM PLANT-WAIAU	0.00	0.00	0.00	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	0.00
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	0.00
		583	OVERHEAD LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		586	METER EXPENSES - DIST OPER	0.00	0.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	0.00	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	0.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	0.00
		594	MAINT OF UNDERGRND LINES-DIST	0.00	4.05	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	6,615.76	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	(6,615.76)	0.00	0.00	0.00
431 Total				(7.26)	4.05	0.00	0.00
451	IS Exp-Prod & Dev	500020	OPER SUPV & ENG-WAIAU	89,846.95	95,730.87	88,191.57	103,512.00
		502010	STEAM EXP-HONOLULU	16,175.56	18,951.79	25,511.31	0.00
		502020	STEAM EXP-WAIAU	21,567.54	26,078.16	35,278.60	0.00
		502030	STEAM EXP-KAHE	41,249.03	46,505.26	55,548.86	95,748.00
		505010	ELECTRIC EXPENSES-HONOLULU	0.00	0.00	0.00	0.00
		505030	ELECTRIC EXPENSES-KAHE	14,754.96	12,474.02	10,880.74	10,776.00
		506010	MISC STEAM POWER EXP-HONOLULU	44,602.68	51,320.07	68,030.00	84,060.00
		506020	MISC STEAM POWER EXP-WAIAU	349,363.38	430,022.26	478,941.00	500,835.00
		506030	MISC STEAM POWER EXP-KAHE	6,051.24	0.00	43.25	4,404.00
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	0.00	0.00	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	22,405.84	18,943.14	16,522.68	16,368.00
		513030	MAINT ELECTRIC PLANT-KAHE	13,300.80	11,267.43	9,806.14	9,708.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
451	IS Exp-Prod & Dev	514010	MAINT MISC STEAM PLANT-HONOLULU	7,406.07	12,634.62	17,007.39	0.00
		514020	MAINT MISC STEAM PLANT-WAIAU	251,993.85	334,816.55	451,681.83	444,208.00
		514030	MAINT MISC STEAM PLANT-KAHE	43,461.08	47,282.06	59,216.55	12,204.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	0.00
		561	LOAD DISPATCHING - TRANS OPER	0.00	0.00	0.00	0.00
		562	STATION EXPENSES - TRANS OPER	4,005.76	3,373.47	2,955.27	0.00
		563	OVERHEAD LINE EXP- TRANS OPER	3,823.44	3,218.73	2,820.91	2,796.00
		566	MISC TRANS OPER EXPENSES	128,173.01	178,946.74	151,101.32	173,640.00
		570	MAINT OF STATION EQUIP - TRANS	2,369.36	2,012.18	1,746.32	1,728.00
		571	MAINT OF OVERHEAD LINES-TRANS	5,281.54	4,456.97	3,895.55	3,864.00
		572	MAINT OF UNDERGRND LINES-TRANS	18.35	14.02	4.59	0.00
		581	LOAD DISPATCHING - DIST OPER	4,739.23	7,309.54	151,169.30	7,908.00
		582	STATION EXPENSES - DIST OPER	5,649.96	4,798.35	4,164.24	4,128.00
		583	OVERHEAD LINE EXP - DIST OPER	5,812.67	4,794.37	4,298.60	4,260.00
		584	UNDERGRND LINE EXP - DIST OPER	5,111.04	4,397.42	3,761.27	3,720.00
		586	METER EXPENSES - DIST OPER	78,437.23	78,846.43	109,491.06	85,260.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	703,442.87	817,923.01	976,444.80	911,724.00
		592	MAINT OF SUBSTN EQUIP - DIST	2,916.04	2,476.54	2,149.27	2,124.00
		593	MAINT OF OVERHEAD LINES-DIST	9,108.91	7,707.45	149,259.01	6,648.00
		594	MAINT OF UNDERGRND LINES-DIST	8,996.15	7,576.99	6,600.56	6,516.00
		598	MAINT OF MISC DIST PLT	109,655.87	92,671.78	80,867.16	80,088.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	573,030.53	670,974.63	894,047.82	781,465.00
		902	METER READING EXPENSES	55,986.45	38,765.36	45,347.72	41,916.00
		903	CUSTOMER RECORDS & COLLECT EXP	229,611.26	279,885.77	311,394.10	353,124.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	0.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	350,994.15	452,490.33	564,145.57	454,092.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	0.00	7,700.04
		921	ADMIN & GENL EXP - NLABR	3,240,118.93	3,597,399.51	4,338,330.99	4,071,446.12
		924	PROPERTY INSURANCE	30,796.24	31,347.30	40,854.24	33,900.00
		925	INJURIES & DAMAGES	197,286.72	310,561.48	222,068.21	221,868.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	40,121.47	33,227.95	30,311.73	35,928.00
		926010	EMPL BENEFITS - FLEX CREDITS	78,625.13	30,434.74	76,035.21	32,904.00
		9302	MISCELLANEOUS GENERAL EXPENSES	50,055.68	61,279.48	94,584.80	61,860.00
		932	ADMIN AND GENL MAINTENANCE	0.00	0.00	0.00	0.00
451 Total				6,846,346.97	7,832,916.77	9,584,509.54	8,672,430.16
452	IS Exp-Development	502030	STEAM EXP-KAHE	0.00	0.00	0.00	0.00
		505030	ELECTRIC EXPENSES-KAHE	0.00	0.00	0.00	0.00
		506020	MISC STEAM POWER EXP-WAIAU	0.00	0.00	0.00	0.00
		506030	MISC STEAM POWER EXP-KAHE	0.00	0.00	0.00	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	0.00	0.00	0.00	0.00
		513030	MAINT ELECTRIC PLANT-KAHE	0.00	0.00	0.00	0.00
		514020	MAINT MISC STEAM PLANT-WAIAU	0.00	0.00	0.00	0.00
		514030	MAINT MISC STEAM PLANT-KAHE	0.00	0.00	0.00	0.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	0.00
		560	OPER SUPV & ENG - TRANS OPER	0.00	0.00	0.00	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
452	IS Exp-Development	562	STATION EXPENSES - TRANS OPER	0.00	0.00	0.00	0.00
		563	OVERHEAD LINE EXP- TRANS OPER	0.00	0.00	0.00	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	0.00
		572	MAINT OF UNDERGRND LINES-TRANS	0.00	0.00	0.00	0.00
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	0.00
		581	LOAD DISPATCHING - DIST OPER	0.00	0.00	0.00	0.00
		582	STATION EXPENSES - DIST OPER	0.00	0.00	0.00	0.00
		583	OVERHEAD LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		586	METER EXPENSES - DIST OPER	0.00	0.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	0.00	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	0.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	0.00
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	0.00
		598	MAINT OF MISC DIST PLT	0.00	0.00	0.00	0.00
		902	METER READING EXPENSES	0.00	0.00	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	0.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	0.00
		911	INFORMATIONAL ADVERTISING EXP	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	155.40	0.00	0.00	0.00
		924	PROPERTY INSURANCE	0.00	0.00	0.00	0.00
		925	INJURIES & DAMAGES	0.00	0.00	0.00	0.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	0.00	0.00	0.00	0.00
		926010	EMPL BENEFITS - FLEX CREDITS	0.00	0.00	0.00	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	0.00	0.00	0.00
452 Total				155.40	0.00	0.00	0.00
461	IS Exp-Consultants	581	LOAD DISPATCHING - DIST OPER	0.00	0.00	24,572.59	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	0.00	0.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	1,168.72	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	108,500.00	209,050.00	210,850.00	204,000.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	27,071.99
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	1,134.34	0.00
461 Total				108,500.00	209,050.00	237,725.65	231,071.99
462	IS Exp-PC Sftw Purch	500020	OPER SUPV & ENG-WAIAU	12,707.99	0.00	0.00	2,625.12
		502020	STEAM EXP-WAIAU	0.00	0.00	0.00	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	0.00	372.53	0.00	0.00
		506020	MISC STEAM POWER EXP-WAIAU	609.96	3,494.78	561.11	331,454.21
		506030	MISC STEAM POWER EXP-KAHE	215.20	376.33	3,240.07	15,680.76
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	4,680.00	0.00	0.00
		513030	MAINT ELECTRIC PLANT-KAHE	0.00	0.00	0.00	0.00
		514010	MAINT MISC STEAM PLANT-HONOLULU	0.00	0.00	0.00	0.00
		514020	MAINT MISC STEAM PLANT-WAIAU	722.54	0.00	0.00	0.00
		514030	MAINT MISC STEAM PLANT-KAHE	1,516.98	0.00	0.00	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
462	IS Exp-PC Sftw Purch	557	OTHER POWER SUPPLY EXPENSES	0.00	7.60	0.00	0.00
		560	OPER SUPV & ENG - TRANS OPER	250.17	3.80	878.63	0.00
		561	LOAD DISPATCHING - TRANS OPER	0.00	152.05	279.04	1,093.80
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	2,187.64
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	25,466.74	0.00
		581	LOAD DISPATCHING - DIST OPER	0.00	0.00	0.00	0.00
		582	STATION EXPENSES - DIST OPER	0.00	0.00	0.00	1.05
		582	STATION EXPENSES - DIST OPER	0.00	0.00	0.00	0.00
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	0.00
		586	METER EXPENSES - DIST OPER	0.00	0.00	258.29	3,937.68
		587	CUSTOMER INSTALLATION EXPENSES	248.81	0.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	576.62	0.00	0.00	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	21,698.35	0.00
		902	METER READING EXPENSES	1,089.51	0.00	897.39	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	1,790.69	2,187.60
		903	CUSTOMER RECORDS & COLLECT EXP	963.76	110.05	2,210.90	18,375.84
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	196.88
		910	CUSTOMER ASSISTANCE EXPENSES	1,076.43	1,355.14	6,242.94	16,736.24
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	81.20	8,809.46
		921	ADMIN & GENL EXP - NLABR	17,692.28	51,657.17	105,668.58	12,513.07
		924	PROPERTY INSURANCE	267.25	0.00	0.00	0.00
		925	INJURIES & DAMAGES	207.46	3,535.72	261.06	0.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	0.00	3.80	99.01	1,093.80
		926010	EMPL BENEFITS - FLEX CREDITS	503.06	553.34	0.00	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	0.00	0.00	0.00
462 Total				38,648.02	66,302.31	169,634.00	416,893.15
463	IS Exp-MF Sftw Purch	921	ADMIN & GENL EXP - NLABR	213,899.67	31,756.72	0.00	0.00
		926010	EMPL BENEFITS - FLEX CREDITS	0.00	0.00	0.00	0.00
463 Total				213,899.67	31,756.72	0.00	0.00
501	Outside Svcs-General	500020	OPER SUPV & ENG-WAIAU	63,056.89	6,756.50	20,783.76	89,460.00
		500030	OPER SUPV & ENG-KAHE	66,258.25	3,420.00	27,591.20	0.00
		502010	STEAM EXP-HONOLULU	54,612.41	20,488.32	18,995.23	41,688.00
		502020	STEAM EXP-WAIAU	74,427.96	53,479.62	137,956.38	81,200.00
		502030	STEAM EXP-KAHE	286,488.28	152,939.19	225,172.33	285,732.00
		505010	ELECTRIC EXPENSES-HONOLULU	0.00	0.00	0.00	0.00
		505020	ELECTRIC EXPENSES-WAIAU	0.00	0.00	0.00	0.00
		505030	ELECTRIC EXPENSES-KAHE	0.00	0.00	0.00	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	421,182.15	432,486.61	376,940.40	376,499.96
		506020	MISC STEAM POWER EXP-WAIAU	815,078.02	1,315,059.24	952,153.33	1,241,736.04
		506030	MISC STEAM POWER EXP-KAHE	943,276.70	1,484,605.73	587,231.11	1,103,601.84
		510030	MAINT SUPV & ENG-KAHE	0.00	320.40	0.00	0.00
		511010	MAINT OF STRUCTURES-HONOLULU	102,157.82	75,491.15	130,937.38	252,000.00
		511020	MAINT OF STRUCTURES-WAIAU	694,133.14	319,842.01	1,287,684.84	1,057,004.00
		511030	MAINT OF STRUCTURES-KAHE	338,875.36	169,237.13	548,551.83	580,700.00
		512010	MAINT BOILER & FO PLANT-HONOLULU	229,217.53	829,268.12	488,699.42	315,000.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
501	Outside Svcs-General	512020	MAINT BOILER & FO PLANT-WAIAU	1,268,632.31	1,376,081.22	2,225,877.93	873,100.00
		512030	MAINT BOILER & FO PLANT-KAHE	1,098,841.85	833,767.66	2,275,413.48	1,367,150.34
		513010	MAINT ELECTRIC PLANT-HONOLULU	223,015.74	1,775,720.20	147,734.49	336,000.00
		513020	MAINT ELECTRIC PLANT-WAIAU	1,514,806.25	725,102.80	1,992,434.43	1,208,000.00
		513030	MAINT ELECTRIC PLANT-KAHE	1,450,383.72	312,794.65	1,852,257.12	1,276,250.00
		514010	MAINT MISC STEAM PLANT-HONOLULU	37,022.14	37,265.61	19,357.45	2,000.00
		514020	MAINT MISC STEAM PLANT-WAIAU	223,990.56	286,808.64	211,953.01	145,000.00
		514030	MAINT MISC STEAM PLANT-KAHE	189,791.68	99,431.97	136,796.00	74,000.00
		548	GENERATION EXP- OTH PROD	0.00	0.00	0.00	12,600.00
		548	GENERATION EXP- OTH PROD	0.00	14,118.29	6,615.22	0.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	0.00	602,040.00
		552	MAINT STRUCTURES- OTH PRD	2,432.10	20,390.57	51,750.62	0.00
		553	MAINT ELEC PLANT- OTH PROD	16,424.49	693.90	379,817.21	1,596,000.00
		557	OTHER POWER SUPPLY EXPENSES	971.69	2,713.33	608.50	1,044.00
		560	OPER SUPV & ENG - TRANS OPER	1,415.56	24,547.42	6,163.09	0.00
		561	LOAD DISPATCHING - TRANS OPER	107,171.64	50,145.02	69,921.39	82,823.71
		562	STATION EXPENSES - TRANS OPER	11,494.51	4,883.58	17,002.50	12,900.00
		563	OVERHEAD LINE EXP- TRANS OPER	0.00	0.00	0.00	40,002.00
		563	OVERHEAD LINE EXP- TRANS OPER	0.00	0.00	125,497.92	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	12,000.00
		566	MISC TRANS OPER EXPENSES	23,943.31	16,762.76	38,739.17	0.00
		569	MAINT OF SUBSTN STRUCTURES - TRANS	0.00	0.00	20,488.94	9,000.00
		569	MAINT OF SUBSTN STRUCTURES - TRANS	0.00	0.00	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	3,000.00
		570	MAINT OF STATION EQUIP - TRANS	103,416.03	95,423.32	348,940.82	119,028.22
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	10,000.00
		571	MAINT OF OVERHEAD LINES-TRANS	32,787.27	53,102.75	286,731.86	550,004.04
		572	MAINT OF UNDERGRND LINES-TRANS	35,095.90	12,015.04	1,673.99	0.00
		573	MAINT OF MISC TRANSM PLANT	0.00	0.00	0.00	63,999.96
		573	MAINT OF MISC TRANSM PLANT	0.00	4,969.34	0.00	97,000.08
		580	OPER SUPV & ENG - DIST OPER	10,342.00	0.00	4,732.61	0.00
		581	LOAD DISPATCHING - DIST OPER	117,614.15	100,818.10	168,957.65	170,301.00
		582	STATION EXPENSES - DIST OPER	6.13	0.00	0.00	0.00
		583	OVERHEAD LINE EXP - DIST OPER	0.00	0.00	0.00	2,999.00
		583	OVERHEAD LINE EXP - DIST OPER	3,317.00	1,498.08	188,254.99	0.00
		584	UNDERGRND LINE EXP - DIST OPER	0.00	0.00	0.00	5,998.00
		584	UNDERGRND LINE EXP - DIST OPER	835.20	2,578.07	2,101.36	0.00
		586	METER EXPENSES - DIST OPER	(25,801.61)	(182.07)	2,142.57	7,500.00
		587	CUSTOMER INSTALLATION EXPENSES	24,771.18	14,391.27	66,756.47	24,000.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	27,828.10	60,580.39
		588	MISC DISTRIBUTION OPER EXPENSES	133,333.30	48,307.61	99,460.10	3,312.00
		590	MAINT SUPV & ENG - DIST	0.00	0.00	0.00	0.00
		591	MAINT OF STRUCT - DIST	41.67	458.33	980.12	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	56,109.91	91,761.75	137,132.61	18,000.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	116,001.00
		593	MAINT OF OVERHEAD LINES-DIST	5,082.73	57,650.32	1,748,610.43	1,760,004.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
501	Outside Svcs-General	594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	78,002.00
		594	MAINT OF UNDERGRND LINES-DIST	186,926.92	165,738.36	112,546.10	0.00
		595	MAINT OF LINE TRANSFORMER-DIST	0.00	0.00	0.00	6,100.00
		595	MAINT OF LINE TRANSFORMER-DIST	128,037.11	79,922.05	54,839.47	3,000.00
		596	MAINT OF STREET LIGHTING & SIGNAL	0.00	247.81	(247.81)	0.00
		597	MAINT OF METERS - DIST	3.00	0.00	0.00	0.00
		598	MAINT OF MISC DIST PLT	0.00	0.00	0.00	85,000.08
		598	MAINT OF MISC DIST PLT	247,089.29	269,138.30	276,877.00	467,199.96
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	0.00	0.00	48,000.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	3,859.39	1,090.00	13,619.50	100,000.00
		902	METER READING EXPENSES	164,867.58	37,605.99	154,168.97	88,850.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	0.00	2,400.00
		903	CUSTOMER RECORDS & COLLECT EXP	787,530.08	591,203.73	721,822.53	1,094,256.20
		909	SUPERVISION- CUST SERVICE EXP	10,952.95	0.00	6,948.86	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	266,320.00
		910	CUSTOMER ASSISTANCE EXPENSES	3,895,158.10	4,965,379.51	5,280,813.19	13,649,446.47
		911	INFORMATIONAL ADVERTISING EXP	332,558.20	45,899.19	465,391.68	315,000.00
		912	MISC CUSTOMER SERVICE EXPENSES	0.00	0.00	1,303.00	21,000.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	11,795.49	158,468.00
		921	ADMIN & GENL EXP - NLABR	2,410,526.07	2,948,424.93	3,873,069.95	3,410,365.43
		923020	OUTSIDE SERVICES- OTHER	1,247,595.35	731,097.36	870,208.53	2,973,920.00
		924	PROPERTY INSURANCE	131,103.72	164,436.32	248,737.09	314,169.00
		925	INJURIES & DAMAGES	339,568.49	368,934.80	455,092.36	609,013.92
		926000	EMPLOYEE PENSIONS AND BENEFITS	302,164.78	253,660.20	344,546.39	406,993.36
		926010	EMPL BENEFITS - FLEX CREDITS	54,289.84	(360,987.31)	50,779.87	75,042.00
		9301	INSTITUTN/GOODWILL ADVERT EXP	71,400.13	69,803.08	57,024.15	50,000.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	0.00	0.00	40,000.00
		9302	MISCELLANEOUS GENERAL EXPENSES	51,355.07	61,505.46	14,247.90	633,756.45
		932	ADMIN AND GENL MAINTENANCE	150,224.45	134,240.14	202,180.58	314,136.00
501 Total				21,271,263.44	21,454,753.47	30,681,194.16	41,296,698.45
502	Outside Svcs-Legal	500020	OPER SUPV & ENG-WAIAU	0.00	11,541.58	12,675.64	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	0.00	0.00	0.00	0.00
		506020	MISC STEAM POWER EXP-WAIAU	0.00	0.00	0.00	0.00
		506030	MISC STEAM POWER EXP-KAHE	14,500.00	0.00	7,791.87	89,000.04
		514030	MAINT MISC STEAM PLANT-KAHE	0.00	0.00	0.00	0.00
		557	OTHER POWER SUPPLY EXPENSES	114,635.39	254,440.57	266,573.02	50,004.00
		571	MAINT OF OVERHEAD LINES-TRANS	3,979.94	375.10	0.00	0.00
		572	MAINT OF UNDERGRND LINES-TRANS	0.00	17,021.14	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	2,224.05	0.00	0.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	0.00	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	2,532.01	17,482.69	30,395.36	3,000.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	0.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	142,411.93	(422.36)	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	102,976.61	166,400.18	120,188.34	188,100.00
		923010	OUTSIDE SERVICES- LEGAL	51,674.11	38,569.88	14,695.10	154,000.00
		923020	OUTSIDE SERVICES- OTHER	0.00	0.00	1,453.03	0.00

				Data			
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502	Outside Svcs-Legal	924	PROPERTY INSURANCE	3,695.83	1,040.81	4,166.48	4,644.96
		925	INJURIES & DAMAGES	258,729.98	328,684.95	195,369.87	266,292.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	27,121.79	26,450.89	8,005.24	25,653.00
		926010	EMPL BENEFITS - FLEX CREDITS	0.00	419.76	0.00	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	9,249.07	0.00	0.00
502 Total				722,257.59	873,478.31	661,313.95	780,694.00
503	Outside Svcs-TempHire	557	OTHER POWER SUPPLY EXPENSES	0.00	29,178.13	9,513.95	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	0.00
		902	METER READING EXPENSES	0.00	0.00	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	13,461.73	30,000.00
		910	CUSTOMER ASSISTANCE EXPENSES	646,511.04	688,675.87	696,154.80	100,000.00
		921	ADMIN & GENL EXP - NLABR	101,977.53	125,719.23	135,569.93	0.00
		923020	OUTSIDE SERVICES- OTHER	0.00	0.00	0.00	0.00
		925	INJURIES & DAMAGES	0.00	10.11	0.00	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	35,720.34	0.00	0.00	0.00
503 Total				784,208.91	843,583.34	854,700.41	130,000.00
505	Outside Svcs-Constr	506020	MISC STEAM POWER EXP-WAIAU	204.17	0.00	0.00	0.00
		511010	MAINT OF STRUCTURES-HONOLULU	832.57	773.89	1,007.68	0.00
		511020	MAINT OF STRUCTURES-WAIAU	0.00	0.00	0.00	0.00
		511030	MAINT OF STRUCTURES-KAHE	0.00	0.00	0.00	830,000.00
		512020	MAINT BOILER & FO PLANT-WAIAU	5,538.00	77,622.19	0.00	0.00
		513020	MAINT ELECTRIC PLANT-WAIAU	0.00	62,279.85	0.00	0.00
		513030	MAINT ELECTRIC PLANT-KAHE	0.00	0.00	0.00	0.00
		552	MAINT STRUCTURES- OTH PRD	0.00	0.00	0.00	0.00
		562	STATION EXPENSES - TRANS OPER	0.00	0.00	7,678.08	0.00
		563	OVERHEAD LINE EXP- TRANS OPER	0.00	0.00	0.00	35,001.04
		563	OVERHEAD LINE EXP- TRANS OPER	31,752.46	40,050.27	200,776.56	0.00
		564	UNDERGRND LINE EXP - TRANS OPER	0.00	0.00	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	616.50	900.00	22,568.68	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	11,998.00
		571	MAINT OF OVERHEAD LINES-TRANS	559,955.23	534,129.71	355,086.17	0.00
		572	MAINT OF UNDERGRND LINES-TRANS	709.31	332,876.48	3,464.69	0.00
		583	OVERHEAD LINE EXP - DIST OPER	0.00	0.00	0.00	5,000.00
		583	OVERHEAD LINE EXP - DIST OPER	4,963.98	9,352.25	42,726.98	0.00
		584	UNDERGRND LINE EXP - DIST OPER	7,999.23	121,627.24	(108,597.90)	0.00
		586	METER EXPENSES - DIST OPER	17,328.17	2,594.21	6,513.69	0.00
		587	CUSTOMER INSTALLATION EXPENSES	3,211.99	6,823.54	1,575.91	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	0.00	7,131.76
		588	MISC DISTRIBUTION OPER EXPENSES	24,509.99	18,624.33	18,620.55	0.00
		591	MAINT OF STRUCT - DIST	13,635.55	0.00	0.00	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	304.00	0.00	0.00	0.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	176,000.00
		593	MAINT OF OVERHEAD LINES-DIST	1,530,614.50	2,176,202.16	287,166.03	0.00
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	419,999.00
		594	MAINT OF UNDERGRND LINES-DIST	457,366.26	295,322.31	427,341.39	0.00
		595	MAINT OF LINE TRANSFORMER-DIST	7,836.97	8,395.13	19,140.57	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
505	Outside Svcs-Constr	596	MAINT OF STREET LIGHTING & SIGNAL	5,308.86	3,090.67	3,609.28	0.00
		597	MAINT OF METERS - DIST	0.00	0.00	0.00	0.00
		598	MAINT OF MISC DIST PLT	20,758.61	2,034.76	7,559.12	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	345.30	3,212.53	781.29	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	3,960.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	3,091.67	2,400.00	9,170.12	0.00
		923020	OUTSIDE SERVICES- OTHER	0.00	0.00	0.00	0.00
		924	PROPERTY INSURANCE	(1,741.07)	2,442.18	0.01	0.00
		925	INJURIES & DAMAGES	0.00	3,640.00	0.00	0.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	0.00	0.00	1,533.30	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	10,000.51	715.40	0.00
		932	ADMIN AND GENL MAINTENANCE	0.00	0.00	0.00	0.00
		932	ADMIN AND GENL MAINTENANCE	0.00	0.00	0.00	0.00
505 Total				2,699,102.25	3,714,394.21	1,308,437.60	1,485,129.80
506	Outside Svcs-Engr	506010	MISC STEAM POWER EXP-HONOLULU	0.00	0.00	0.00	0.00
		506020	MISC STEAM POWER EXP-WAIAU	0.00	0.00	0.00	0.00
		511030	MAINT OF STRUCTURES-KAHE	0.00	0.00	0.00	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	10,608.04	12,228.98	0.00	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	0.00	0.00	5,123.94	0.00
		513020	MAINT ELECTRIC PLANT-WAIAU	0.00	14,265.73	0.00	0.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	0.00
		560	OPER SUPV & ENG - TRANS OPER	0.00	0.00	0.00	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	0.00
		569	MAINT OF SUBSTN STRUCTURES - TRANS	7,901.05	0.00	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	32,988.63	0.00	0.00	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	97,500.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	143,000.00	0.00
		572	MAINT OF UNDERGRND LINES-TRANS	39,335.83	23,364.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	151,862.51	103,532.02
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	43,738.14	0.00	0.00
		591	MAINT OF STRUCT - DIST	13,656.63	0.00	0.00	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	33,044.88	0.00	1,952.00	0.00
		921	ADMIN & GENL EXP - NLABR	8,400.00	5,148.45	4,622.00	0.00
		923020	OUTSIDE SERVICES- OTHER	0.00	0.00	0.00	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	35.00	0.00	0.00
		932	ADMIN AND GENL MAINTENANCE	0.00	0.00	0.00	0.00
506 Total				145,935.06	98,780.30	306,560.45	201,032.02
508	Outside Svcs-Environ	502010	STEAM EXP-HONOLULU	0.00	0.00	856.49	0.00
		502020	STEAM EXP-WAIAU	0.00	0.00	1,743.35	0.00
		502030	STEAM EXP-KAHE	0.00	0.00	2,940.70	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	39,300.19	66,310.25	10,214.83	124,571.88
		506020	MISC STEAM POWER EXP-WAIAU	53,256.15	34,615.89	35,480.51	186,288.00
		506030	MISC STEAM POWER EXP-KAHE	126,253.53	37,748.38	172,483.34	224,088.00
		511030	MAINT OF STRUCTURES-KAHE	0.00	0.00	0.00	20,000.04
		512020	MAINT BOILER & FO PLANT-WAIAU	1,427.07	0.00	0.00	0.00
		513020	MAINT ELECTRIC PLANT-WAIAU	0.00	0.00	0.00	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
508	Outside Svcs-Environ	513030	MAINT ELECTRIC PLANT-KAHE	0.00	0.00	0.00	0.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	0.00
		566	MISC TRANS OPER EXPENSES	2,087.67	22,914.38	5,789.53	2,000.04
		570	MAINT OF STATION EQUIP - TRANS	5,578.08	4,791.63	1,315.96	1,020.00
		571	MAINT OF OVERHEAD LINES-TRANS	0.00	0.00	0.00	5,000.04
		571	MAINT OF OVERHEAD LINES-TRANS	1,176.00	398.42	1,180.71	0.00
		573	MAINT OF MISC TRANSM PLANT	385.47	0.00	0.00	2,000.04
		588	MISC DISTRIBUTION OPER EXPENSES	681.43	22,914.41	12,203.39	2,000.04
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	68,000.04
		592	MAINT OF SUBSTN EQUIP - DIST	31,629.16	64,662.06	11,712.79	11,100.00
		595	MAINT OF LINE TRANSFORMER-DIST	13,218.66	0.00	11,244.72	0.00
		598	MAINT OF MISC DIST PLT	1,177.08	0.00	0.00	2,000.04
		910	CUSTOMER ASSISTANCE EXPENSES	4,943.70	7,438.81	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	0.00	24,999.96
		921	ADMIN & GENL EXP - NLABR	112,085.75	37,705.24	14,962.31	9,999.96
		923020	OUTSIDE SERVICES- OTHER	3,489.56	0.00	0.00	0.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	185.16	0.00	0.00	0.00
		932	ADMIN AND GENL MAINTENANCE	619.78	0.00	0.00	0.00
508 Total				397,494.44	299,499.47	282,128.63	683,068.08
509	Outside Svcs-Spec Use	921	ADMIN & GENL EXP - NLABR	25,111.57	58,713.54	106,143.95	265,000.00
		925	INJURIES & DAMAGES	451,503.26	801,092.52	655,864.05	696,408.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	(11,713,298.94)	12,848,948.22	4,869,515.50	11,558,236.00
		926010	EMPL BENEFITS - FLEX CREDITS	8,022,500.74	8,347,712.57	8,891,355.96	10,933,851.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	65.00	0.00	0.00
509 Total				(3,214,183.37)	22,056,531.85	14,522,879.46	23,453,495.00
515	Company Memberships	506010	MISC STEAM POWER EXP-HONOLULU	0.00	0.00	0.00	0.00
		506020	MISC STEAM POWER EXP-WAIAU	0.00	0.00	0.00	0.00
		506030	MISC STEAM POWER EXP-KAHE	0.00	0.00	1,750.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	5,000.00	5,000.00
		921	ADMIN & GENL EXP - NLABR	1,245.00	1,200.00	1,255.00	1,200.00
		925	INJURIES & DAMAGES	0.00	0.00	0.00	480.00
		925	INJURIES & DAMAGES	0.00	0.00	0.00	120.00
		9302	MISCELLANEOUS GENERAL EXPENSES	262,845.00	273,942.00	328,014.00	331,412.00
515 Total				264,090.00	275,142.00	336,019.00	338,212.00
516	Employee Memberships	500020	OPER SUPV & ENG-WAIAU	0.00	0.00	0.00	0.00
		502020	STEAM EXP-WAIAU	188.00	191.00	193.00	700.00
		506030	MISC STEAM POWER EXP-KAHE	120.00	0.00	360.00	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	0.00	0.00	40.00
		557	OTHER POWER SUPPLY EXPENSES	450.00	0.00	450.00	0.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	0.00	530.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	0.00	0.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	0.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	1,500.00
		910	CUSTOMER ASSISTANCE EXPENSES	3,598.00	300.00	3,343.00	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	0.00	4,630.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
516	Employee Memberships	921	ADMIN & GENL EXP - NLABR	47,079.10	29,479.24	56,545.23	25,772.00
		925	INJURIES & DAMAGES	0.00	0.00	0.00	480.00
		925	INJURIES & DAMAGES	0.00	0.00	0.00	0.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	0.00	50.00	706.98	959.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	0.00	150.00	0.00
		932	ADMIN AND GENL MAINTENANCE	150.00	0.00	150.00	0.00
516 Total				51,585.10	30,020.24	62,428.21	34,081.00
520	Mainland Travel	506020	MISC STEAM POWER EXP-WAIAU	0.00	0.00	0.00	5,120.00
		506030	MISC STEAM POWER EXP-KAHE	512.00	294.35	2,639.71	10,000.04
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	0.00	0.00	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	0.00	0.00	0.00	0.00
		513020	MAINT ELECTRIC PLANT-WAIAU	0.00	0.00	0.00	0.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	0.00	6,720.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	3,072.00
		560	OPER SUPV & ENG - TRANS OPER	0.00	0.00	1,932.14	8,160.00
		560	OPER SUPV & ENG - TRANS OPER	200.00	0.00	1,449.06	0.00
		561	LOAD DISPATCHING - TRANS OPER	0.00	0.00	0.00	3,200.00
		566	MISC TRANS OPER EXPENSES	460.75	0.00	3,491.89	0.00
		580	OPER SUPV & ENG - DIST OPER	263.29	0.00	0.00	0.00
		584	UNDERGRND LINE EXP - DIST OPER	394.93	0.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	1,423.61	0.00	1,724.16	6,000.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	0.00
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	0.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	1,363.22	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	1,473.37	2,889.56	2,100.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	0.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	1,500.00
		910	CUSTOMER ASSISTANCE EXPENSES	10,559.01	1,630.45	4,479.29	38,616.09
		912	MISC CUSTOMER SERVICE EXPENSES	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	2,741.62	44,237.08
		921	ADMIN & GENL EXP - NLABR	43,669.71	33,019.91	75,576.42	151,420.71
		924	PROPERTY INSURANCE	3,123.42	3,125.70	2,977.83	0.00
		925	INJURIES & DAMAGES	973.23	5,630.17	5,921.61	3,000.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	573.09	0.00	0.00	1,500.00
		9302	MISCELLANEOUS GENERAL EXPENSES	0.00	4,355.76	0.00	0.00
520 Total				62,153.04	50,892.93	105,823.29	284,645.92
521	Meals & Entertainment	500020	OPER SUPV & ENG-WAIAU	583.88	9.31	30.78	0.00
		500030	OPER SUPV & ENG-KAHE	9.11	0.00	0.00	0.00
		502030	STEAM EXP-KAHE	0.00	0.00	90.15	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	194.53	32.05	0.00	0.00
		506020	MISC STEAM POWER EXP-WAIAU	32.95	29.51	0.00	0.00
		506030	MISC STEAM POWER EXP-KAHE	940.59	671.73	323.13	1,239.96
		510030	MAINT SUPV & ENG-KAHE	0.00	63.65	0.00	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	32.07	0.00	0.00	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	0.00	0.00	0.00	0.00
		513020	MAINT ELECTRIC PLANT-WAIAU	0.00	0.00	0.00	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
521	Meals & Entertainment	514030	MAINT MISC STEAM PLANT-KAHE	170.38	221.20	0.00	0.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	0.00	10,892.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	156.00
		557	OTHER POWER SUPPLY EXPENSES	139.90	0.00	71.39	0.00
		560	OPER SUPV & ENG - TRANS OPER	0.00	0.00	1,018.64	0.00
		561	LOAD DISPATCHING - TRANS OPER	1,089.13	80.45	0.00	500.00
		566	MISC TRANS OPER EXPENSES	664.95	0.00	321.12	0.00
		580	OPER SUPV & ENG - DIST OPER	11.51	11.00	0.00	0.00
		581	LOAD DISPATCHING - DIST OPER	0.00	0.00	1,213.41	0.00
		584	UNDERGRND LINE EXP - DIST OPER	17.26	0.00	0.00	0.00
		586	METER EXPENSES - DIST OPER	0.00	0.00	0.00	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	269.32	76.56	598.68	0.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	0.00
		594	MAINT OF UNDERGRND LINES-DIST	0.00	0.00	0.00	0.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	205.95	0.00	0.00
		902	METER READING EXPENSES	0.00	41.98	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	383.99	61.35	668.33	0.00
		909	SUPERVISION- CUST SERVICE EXP	150.00	0.00	144.15	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	44,676.21	60,308.36	1,581.23	25,507.86
		911	INFORMATIONAL ADVERTISING EXP	0.00	0.00	32.22	0.00
		912	MISC CUSTOMER SERVICE EXPENSES	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	0.00	14,423.00
		921	ADMIN & GENL EXP - NLABR	49,092.46	69,972.34	48,117.54	46,612.85
		924	PROPERTY INSURANCE	22.70	52.37	39.42	0.00
		925	INJURIES & DAMAGES	839.51	1,289.60	348.62	504.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	210.34	176.90	398.90	550.00
		9301	INSTITUTN/GOODWILL ADVERT EXP	240.00	0.00	0.00	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	541.52	1,346.99	1,221.75	1,126.59
521 Total				100,312.31	134,651.30	56,219.46	101,512.26
522	Interisland Travel	500020	OPER SUPV & ENG-WAIAU	2,115.88	0.00	0.00	0.00
		500030	OPER SUPV & ENG-KAHE	19.00	0.00	0.00	0.00
		502020	STEAM EXP-WAIAU	40.00	0.00	0.00	0.00
		502030	STEAM EXP-KAHE	121.98	0.00	0.00	0.00
		506020	MISC STEAM POWER EXP-WAIAU	0.00	0.00	0.00	0.00
		506030	MISC STEAM POWER EXP-KAHE	1,257.75	0.00	652.80	0.00
		510030	MAINT SUPV & ENG-KAHE	0.00	2,995.51	56.00	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	0.00	0.00	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	0.00	53.00	0.00	0.00
		513020	MAINT ELECTRIC PLANT-WAIAU	0.00	0.00	0.00	0.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	0.00	13,200.00
		549	MISC EXPENSES- OTH PROD	0.00	0.00	253.79	0.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	0.00	0.00
		560	OPER SUPV & ENG - TRANS OPER	0.00	0.00	0.00	0.00
		566	MISC TRANS OPER EXPENSES	0.00	0.00	0.00	0.00
		570	MAINT OF STATION EQUIP - TRANS	0.00	0.00	0.00	0.00
		580	OPER SUPV & ENG - DIST OPER	0.00	0.00	0.00	0.00

				Data			
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522	Interisland Travel	588	MISC DISTRIBUTION OPER EXPENSES	0.00	0.00	838.90	1,200.00
		588	MISC DISTRIBUTION OPER EXPENSES	250.00	0.00	306.40	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	0.00	0.00
		901	SUPERVISION- CUSTOMER ACCOUNTS	0.00	0.00	0.00	0.00
		902	METER READING EXPENSES	1,143.00	161.48	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	0.00	0.00
		909	SUPERVISION- CUST SERVICE EXP	0.00	0.00	984.66	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	728.40	16,863.57	3,300.92	24,800.00
		921	ADMIN & GENL EXP - NLABR	0.00	0.00	180.20	900.00
		921	ADMIN & GENL EXP - NLABR	26,282.55	15,186.80	16,166.12	31,960.00
		924	PROPERTY INSURANCE	123.00	0.00	0.00	0.00
		925	INJURIES & DAMAGES	488.00	328.69	768.88	0.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	0.00	10.00	381.78	0.00
		9301	INSTITUTN/GOODWILL ADVERT EXP	10.00	0.00	0.00	0.00
		9302	MISCELLANEOUS GENERAL EXPENSES	788.96	0.00	479.60	0.00
522 Total				33,368.52	35,599.05	24,370.05	72,060.00
530	Workers Compensation	506020	MISC STEAM POWER EXP-WAIAU	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	20,700.00	0.00	920.00	0.00
		925	INJURIES & DAMAGES	696,259.74	275,486.28	1,344,169.36	1,156,191.00
530 Total				716,959.74	275,486.28	1,345,089.36	1,156,191.00
550	Intercompany Charges	903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	0.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	1,508,697.35	2,013,220.53	2,079,785.14	2,002,205.00
		926000	EMPLOYEE PENSIONS AND BENEFITS	172,569.68	194,677.49	255,411.79	232,946.00
		9302	MISCELLANEOUS GENERAL EXPENSES	280.00	606.00	0.00	0.00
550 Total				1,681,547.03	2,208,504.02	2,335,196.93	2,235,151.00
570	Rents	506010	MISC STEAM POWER EXP-HONOLULU	0.00	0.00	0.00	0.00
		507030	RENTS EXPENSE-KAHE	11,662.00	42,601.00	70,624.50	77,160.00
		567	RENTS - TRANS OPER	23,746.00	25,580.16	22,200.00	25,841.00
		581	LOAD DISPATCHING - DIST OPER	0.00	0.00	9,686.82	0.00
		589	RENTS - DIST OPER	10,660.00	9,263.10	12,019.39	8,517.00
		592	MAINT OF SUBSTN EQUIP - DIST	0.00	0.00	1,451.08	0.00
		902	METER READING EXPENSES	0.00	0.00	0.00	0.00
		903	CUSTOMER RECORDS & COLLECT EXP	16.98	0.00	0.00	240.00
		910	CUSTOMER ASSISTANCE EXPENSES	60,200.80	59,253.91	58,270.83	0.00
		921	ADMIN & GENL EXP - NLABR	208.21	1,709.61	53,704.33	0.00
		931	RENTS EXPENSE - A&G	0.00	0.00	90,369.20	95,505.00
		931	RENTS EXPENSE - A&G	1,397,768.01	1,523,840.33	1,454,092.83	1,461,382.00
570 Total				1,504,262.00	1,662,248.11	1,772,418.98	1,668,645.00
600	Gen Plt Equip Maint	500020	OPER SUPV & ENG-WAIAU	0.00	0.00	0.00	0.00
		502010	STEAM EXP-HONOLULU	0.00	0.00	0.00	0.00
		502020	STEAM EXP-WAIAU	0.00	0.00	0.00	0.00
		502030	STEAM EXP-KAHE	0.00	0.00	0.00	0.00
		506010	MISC STEAM POWER EXP-HONOLULU	0.00	0.00	0.00	0.00
		506020	MISC STEAM POWER EXP-WAIAU	(9.29)	0.00	0.00	5,580.00
		506030	MISC STEAM POWER EXP-KAHE	36,660.60	63,516.19	9,395.22	38,550.04

eco2005_datafile (nonlabor) (CA-IR-237).xls

	Data			
	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
-WAIAU	0.00	0.00	0.00	6,609.96
PPLY EXPENSES	0.00	0.00	0.00	0.00
DS & COLLECT EXP	57,919.18	67,348.32	70,368.48	83,200.00
ANCE EXPENSES	250.00	0.00	0.00	0.00
AINTENANCE	0.00	0.00	0.00	191,112.04
AINTENANCE	185,445.31	126,839.65	8,889.54	38,725.00
	280,265.80	257,704.16	88,653.24	363,777.04
KAHE	0.00	0.00	109.50	0.00
R EXP-KAHE	0.00	0.00	0.00	0.00
PLANT-HONOLULU	0.00	7.62	0.00	0.00
PLANT-WAIAU	55.83	0.00	0.00	0.00
ANT-KAHE	0.00	0.00	0.00	0.00
AD LINES-TRANS	0.00	(445.51)	0.00	0.00
EQUIP - DIST	(16,171.00)	0.00	0.00	0.00
DS & COLLECT EXP	0.00	0.00	0.00	50,000.00
DS & COLLECT EXP	1,004,453.42	1,066,201.97	1,057,518.12	1,068,588.00
ANCE EXPENSES	40,787.89	1,449.89	1,467.27	51,995.96
- NLABR	0.00	0.00	0.00	0.00
NS AND BENEFITS	0.00	0.00	1,220.55	0.00
	1,029,126.14	1,067,213.97	1,060,315.44	1,170,583.96
	433.26	0.00	0.00	0.00
	2,020.74	0.00	0.00	0.00
ES-KAHE	1,680.25	0.00	0.00	0.00
R EXP-HONOLULU	0.00	0.00	0.00	0.00
R EXP-WAIAU	0.00	0.00	0.00	0.00
R EXP-KAHE	(16,056.75)	1,095.34	(10,462.62)	384,698.00
RES-KAHE	0.00	0.00	0.00	0.00
PLANT-HONOLULU	0.00	(7,120.37)	0.00	0.00
PLANT-WAIAU	0.00	0.00	0.00	0.00
PLANT-KAHE	2,556.61	0.00	0.00	0.00
ANT-KAHE	1,533.96	0.00	0.00	0.00
PLANT-KAHE	3,079.36	8,330.43	875.73	0.00
- OTH PROD	0.00	0.00	(1,582,028.65)	0.00
PLY EXPENSES	0.00	0.00	0.00	0.00
TRANS OPER	(27,779.99)	0.00	0.00	0.00
- TRANS OPER	452.80	0.00	0.00	0.00
P- TRANS OPER	438.54	(4,975.28)	(0.43)	0.00
EXPENSES	0.00	0.00	0.00	98,341.00
EXPENSES	(175,803.43)	9,469.12	995.42	0.00
EQUIP - TRANS	1,798.65	0.00	0.00	0.00
AD LINES-TRANS	599.63	0.00	0.00	0.00
RND LINES-TRANS	0.00	(135,000.00)	0.00	0.00
NSM PLANT	390.08	1,790.54	188.22	0.00
DIST OPER	(62,875.28)	0.00	0.00	0.00
- DIST OPER	664.27	0.00	0.00	0.00
P - DIST OPER	586.45	(433.37)	0.00	0.00

002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
647.19	0.00	(140.00)	0.00
087.00)	(5,093.00)	(5,823.00)	0.00
975.00)	(6,908.40)	(1,867.00)	0.00
0.00	0.00	0.00	163,153.00
105.46	29,426.91	3,090.82	0.00
837.71	(15,280.69)	0.00	0.00
130.33)	0.00	0.00	0.00
010.74	0.00	0.00	0.00
393.64	(17,330.50)	0.00	0.00
0.00	0.00	0.00	0.00
502.21	4,877.66	512.75	0.00
20.00	0.00	0.00	0.00
365.52	2,657.34	3,605.20	0.00
157.81	1,015,298.05	405,963.84	1,082,300.00
719.37	75,708.21	791,422.17	0.00
0.00	0.00	0.00	1,210,351.00
0.00	0.00	0.00	401,279.00
554.26)	(151,865.15)	145,129.05	0.00
000.07	1,980,830.88	2,650,624.74	1,993,104.00
0.00	0.00	0.00	14,400.00
191.77	775,351.22	1,866,761.96	1,539,275.00
140.08	(7,156.26)	(61,840.03)	(136,026.00)
717.27)	(646,396.17)	(837,286.99)	(1,292,925.00)
0.00	0.00	(15,524.01)	30,000.00
647.07	2,544.80	19,452.01	0.00
0.00	0.00	0.00	0.00
581.54	0.00	0.00	0.00
775.47	2,909,821.31	3,373,649.18	5,487,950.00
000.00	900,000.00	900,000.00	900,000.00
168.48	27,883.31	5,778.43	5,400.00
138.98	23,184.83	4,804.81	8,208.00
553.24	0.00	0.00	9,644.84
311.90	35,277.09	7,310.82	4,932.00
807.08	21,166.54	4,386.49	4,056.00
563.98	17,448.25	3,615.95	6,492.00
244.00	302,244.00	302,244.00	302,244.00
889.65	6,247.83	1,294.84	12,072.00
991.47	6,051.34	1,254.02	1,404.00
004.62	51,859.51	10,747.29	1,452.00
883.65	3,857.78	799.54	1,932.00
428.99	8,273.72	1,714.64	900.00
930.42	8,969.45	1,899.52	1,080.00
940.68	8,986.94	1,677.02	1,884.00
991.28	8,231.95	1,850.67	2,076.00
869.93	1,428.60	1,428.60	38,579.13
0.00	0.00	0.00	0.00

				Data			
ee	EE Desc	acct	acct desc	Sum of 2002rec	Sum of 2003rec	Sum of 2004rec	Sum of 2005fct
901	Amort of Def Debits	592	MAINT OF SUBSTN EQUIP - DIST	4,690.89	4,659.92	965.74	40,284.00
		593	MAINT OF OVERHEAD LINES-DIST	14,538.51	14,442.20	2,993.00	3,360.00
		594	MAINT OF UNDERGRND LINES-DIST	14,039.43	13,946.72	2,890.29	3,252.00
		598	MAINT OF MISC DIST PLT	174,177.69	173,027.27	35,857.77	2,136.00
		903	CUSTOMER RECORDS & COLLECT EXP	41,433.36	43,282.32	43,282.32	38,579.13
		910	CUSTOMER ASSISTANCE EXPENSES	105,201.78	114,679.68	114,679.68	96,447.73
		920	ADMIN & GENL EXP - LABR	26,500.00	35,892.00	35,892.00	28,176.00
		921	ADMIN & GENL EXP - NLABR	650,598.29	742,319.14	498,591.22	582,540.00
		925	INJURIES & DAMAGES	18,826.89	44,694.60	44,694.60	9,644.84
		926000	EMPLOYEE PENSIONS AND BENEFITS	1,301,829.00	1,301,849.00	1,301,839.00	1,301,839.00
		9302	MISCELLANEOUS GENERAL EXPENSES	2,792,048.25	2,855,926.66	1,808,154.91	1,844,400.00
901 Total				6,613,702.44	6,775,830.65	5,140,647.17	5,253,014.67
905	Othr Op & NonReg Rev	502020	STEAM EXP-WAIAU	(21,024.93)	0.00	0.00	0.00
		506030	MISC STEAM POWER EXP-KAHE	(154.71)	0.00	0.00	0.00
		512020	MAINT BOILER & FO PLANT-WAIAU	0.00	0.00	0.00	0.00
		512030	MAINT BOILER & FO PLANT-KAHE	(7,954.00)	0.00	0.00	0.00
		514020	MAINT MISC STEAM PLANT-WAIAU	(1,580.42)	0.00	0.00	0.00
		557	OTHER POWER SUPPLY EXPENSES	0.00	0.00	(7,103.19)	0.00
		563	OVERHEAD LINE EXP- TRANS OPER	(25,319.16)	(11,711.34)	(6,209.61)	(20,592.00)
		566	MISC TRANS OPER EXPENSES	(20,962.07)	0.00	0.00	0.00
		571	MAINT OF OVERHEAD LINES-TRANS	(16,256.10)	(114,994.29)	(17,543.75)	(99,689.00)
		583	OVERHEAD LINE EXP - DIST OPER	0.00	0.00	0.00	(84,804.96)
		583	OVERHEAD LINE EXP - DIST OPER	(9,471.28)	(5,414.58)	(42,156.74)	(67,080.00)
		584	UNDERGRND LINE EXP - DIST OPER	0.00	(456.36)	0.00	0.00
		587	CUSTOMER INSTALLATION EXPENSES	(57,129.74)	(5,916.01)	(251,245.79)	0.00
		588	MISC DISTRIBUTION OPER EXPENSES	0.00	(676.15)	(491.93)	0.00
		592	MAINT OF SUBSTN EQUIP - DIST	(9,586.36)	0.00	0.00	0.00
		593	MAINT OF OVERHEAD LINES-DIST	0.00	0.00	0.00	(190,800.00)
		593	MAINT OF OVERHEAD LINES-DIST	(110,732.03)	(316,723.85)	(243,673.89)	(53,724.00)
		594	MAINT OF UNDERGRND LINES-DIST	(38,727.36)	(31,210.55)	(43,995.98)	(38,442.00)
		595	MAINT OF LINE TRANSFORMER-DIST	(17,302.81)	(6,007.98)	(18,354.75)	(5,846.00)
		903	CUSTOMER RECORDS & COLLECT EXP	0.00	0.00	0.00	0.00
		910	CUSTOMER ASSISTANCE EXPENSES	0.00	0.00	0.00	0.00
		921	ADMIN & GENL EXP - NLABR	0.00	(26,000.00)	(400.00)	0.00
		924	PROPERTY INSURANCE	(2,101.05)	(3,224.23)	(48,541.00)	(30,749.04)
		925	INJURIES & DAMAGES	0.00	0.00	0.00	0.00
		926010	EMPL BENEFITS - FLEX CREDITS	0.00	(388,981.50)	0.00	0.00
905 Total				(338,302.02)	(911,316.84)	(679,716.63)	(591,727.00)
Grand Total				66,306,676.25	82,846,362.59	93,306,635.59	107,981,356.59

CA-IR-238

Information Technology Questions
Ref: HECO Response to CA-IR-2, Various Witnesses, IT Non-labor Expenses.

For the Information Technology and Service Department, please provide a list of the total actual incurred costs in the following breakdown for each historical year 2002, 2003 and 2004 and comparable test year 2005 projected test year costs, with an explanation for major changes or trends (exceeding $100,000) in each category of costs among the years:

a. Labor Non-project;
b. Materials Non-project;
c. On-Costs;
d. Other;
e. Outside Services;
f. Transportation;
g. NC charges for EFMS Project;
h. NC charges for EBUS Project; and
i. NC charges for other Projects (itemized).

HECO Response:

The format of the requested data conforms to the 2005B information shown on HECO T-13, CA-IR-2 Attachment 10 Page 5 (worknaper A-1) Therefore this IR response contains comparable

[redacted]

information. Please refer to EXCEL Spreadsheet named CA-IR-238 and 239 Exhibit.xls / CA-IR-238 attached as page 4 to this response for comparative 2002-2004 actuals and 2005 Budget.

Note: expense reclassifications between cost categories were made to present comparable actuals

2005: $105,604
2004: $391,022
2003: $120,334
2002: $126,725

c. On-costs: are a function of company-wide allocations. See Mr. Shiraki's testimony HECO T-13 for discussion on on-costs.

d. Other: 2005B vs 2004 decrease of <$658,755> ($1,181,513 - $1,840,268) is due to primarily to higher 2004 PC Software cost than trend. PC Software cost history:

2005: $233,500
2004: $771,727
2003: $23,553
2002: $177,676

2005B vs 2003 increase of $673,083 ($1,181,513 - $508,430) is due primarily to impact of the new phone system maintenance and network circuits lease, and software (McAfee and Change Management) and consulting charges.

e. Outside Services: 2005B vs 2004 decrease of <$351,796> ($3,090,837 - $3,442,633) is due to higher 2004 outside services than trend. Additional costs related to Sarbanes Oxley control enhancements were made in 2004.

2005B Outside Services budget ($3,090,837) approximates the average of 2002 and 2003 Outside Services actuals (3,093,130 = ($3,615,039 + $2,571,221) / 2).

f. Transportation: variances are less than $100K.

g. NC Charges for EFMS: 2005B vs 2004 increase of $255,268 ($800,000 - $544,732) is due to EFMS applications/enhancements implemented in each year. Please refer to CA-IR-82 for planned 2005B applications/enhancements. (Note: the 2002-2004 software development costs shown in CA-IR-83 response includes both labor and non-labor, but does not include recurring maintenance costs associated with the EFMS program. This makes the numbers

not comparable with the amounts shown on EXCEL Spreadsheet named CA-IR-238 and 239 Exhibit.xls / CA-IR-238. These numbers show non-labor costs only for both software development and recurring maintenance).

h. NC Charges for EBUS: 2005B vs 2004 increase is within $100K. Increase over prior years is based on specific Ebusiness applications implemented in each year. Please refer to CA-IR-82 for planned 2005B applications/enhancements. (Note: the 2002-2004 software development costs shown in CA-IR-83 response includes both labor and non-labor, but does not include recurring maintenance costs associated with the EBUS program. This makes the numbers not comparable with the amounts shown on EXCEL Spreadsheet named CA-IR-238 and 239 Exhibit.xls / CA-IR-238. These numbers show non-labor costs only for both software development and recurring maintenance).

i. NC Charges for Other Projects: 2005B vs 2004 decrease of <$352,712> ($63,613 - 393,912 - 22,413) is due primarily to Middleware expenses being expended mainly in 2004. 2005 contained budgets for remaining consulting charges on this project. (Note: the 2002-2004 software development costs shown in CA-IR-83 response includes both labor and non-labor charged to the Middleware project via the ITS Clearing Account or directly. This makes the numbers not comparable with the amounts shown on EXCEL Spreadsheet named CA-IR-238 and 239 Exhibit.xls / CA-IR-238. These numbers show non-labor costs charged to the ITS clearing account).

Hawaiian Electric Company, Inc.
ITS Department
Actual Incurred Costs charged to Clearing Account
CA-IR-238

		2002	2003	2004	2005B
a.	Labor Non-project;	4,036,236	4,358,902	4,379,536	4,714,393
b.	Materials Non-project;	126,725	120,334	391,022	105,604
c.	On-Costs;	1,139,027	2,654,785	2,069,106	2,149,763
d.	Other;	764,000	508,430	1,840,268	1,181,513
e.	Outside Services;	3,615,039	2,571,221	3,442,633	3,090,837
f.	Transportation;	3,270	2,366	2,017	1,260
g.	NC charges for EFMS Project;	601,493	703,350	544,732	800,000
h.	NC charges for EBUS Project; and	279,240	481,172	693,558	758,300
i.	NC charges for other Projects (itemized).	-			
	- Middleware			393,912	63,613
	- SOX		405	22,413	
		10,565,030	11,400,560	13,779,197	12,865,283

CA-IR-239

Ref: HECO Response to CA-IR-2, Various Witnesses, IT Non-labor Expenses.

For the Information Technology and Service Department, please provide a list that shows the distribution of total accumulated ITS costs in the following breakdown for each historical year 2002, 2003 and 2004 and comparable test year 2005 projected test year costs, with an explanation for major (exceeding $100,000) shifts in the distribution of ITS costs among the years:

a. HELCO Direct Charges;
b. MECO Direct Charges;
c. Expense Element 451 Charges by non-ITS PMs;
d. Intercompany charges based on Purchase Orders;
e. EFMS Project Charges;
f. EBusiness Project Charges;
g. Allocated Charges Among HECO individual RA;
h. Non-project capitalized charges (Indicator NI, NR);
i. Other (explained).

HECO Response:

The format of the requested data conforms to the 2005B information shown on HECO T-13, CA-IR-2, Attachment 10, Pages 5-11 (workpaper A-1 thru A-7). Therefore, this IR response contains comparable information. Please refer to EXCEL Spreadsheet named CA-IR-238 and 239 Exhibit.xls / CA-IR-239 attached as page 3 to this response for comparative 2002-2004 actuals and 2005 Budget. Variance explanations for each category with changes or trends exceeding $100,000 are as follows:

a. HELCO Direct Charges – variances are less than $100K

b. MECO Direct Charges – variances are less than $100K

c. Expense Element 451 Charges by non-ITS PMs – variances are due to types of non-ITS PM projects requiring ITS resource support in each year. Please refer to response to HECO T-13, CA-IR-2, Attachment 10, Page 26 (workpaper E) for a list of 2005B Non-ITS PM Projects requiring ITS resource support. Note the workpaper is labeled: Non-ITS Project

Expense Element 451 charges.

d. Intercompany charges based on Purchase Orders – variance between 2004 and 2005B are within $100K. Comparisons with prior years should be based on the sum of rows a. (HELCO Direct Charges), b. (MECO Direct Charges), and d. (Intercompany Charges) from CA-IR-238 and 239 Exhibit.xls / CA-IR-239 page.

e. EFMS Project Charges – These are the same amounts as shown on the response to CA-IR-238. Please refer to CA-IR-238 for discussion of variances for this item.

f. EBusiness Project Charges – These are the same amounts as shown on the response to CA-IR-238. Please refer to CA-IR-238 for discussion of variances for this item.

g. Allocated Charges Among HECO individual RA – this is the largest component of the Distribution of Total Accumulated ITS Costs. The variances between years is directly related to the amount of charges into the ITS Clearing account (Total Actual Incurred Costs) contained in the response to CA-IR-238.

h. Non-project capitalized charges (Indicator NI, NR) – variances are less than $100K.

i. Other (Direct Charges to O&M) – variance between 2004 and 2005B are within $100K. These charges are not distributions of clearing account charges. They represent direct charges to O&M. Details of the 2005B estimate are contained on HECO T-13, CA-IR-2, Attachment 9, Pages 2 and 3 (workpaper H). Note: in 2003, ITS (Information Technology and Services) and ISOS (Information Security and Office Services) departments were merged into one department. After 2003, a portion of Direct Charges to O&M have transferred to Costs charged to Clearing Accounts based on realignments of personnel and activities from ISOS to ITS Divisions.

Hawaiian Electric Company, Inc.
ITS Department
Distribution of Total Accumulated ITS Costs from Clearing Account + Direct Charges
CA-IR-239

	2002	2003	2004	2005
a. HELCO Direct Charges;	230,446	185,960	238,760	226,338
b. MECO Direct Charges;	164,643	134,747	179,923	177,768
c. Expense Element 451 Charges by non-ITS PMs;	179,883	333,617	121,602	709,008
d. Intercompany charges based on Purchase Orders;	453,383	321,433	298,838	265,335
e. EFMS Project Charges;	601,493	703,350	544,732	799,992
f. EBusiness Project Charges;	279,240	481,172	693,558	758,292
g. Allocated Charges Among HECO individual RA;	8,637,854	9,239,969	11,701,684	9,928,550
h. Non-project capitalized charges (Indicator NI, NR);	18,088	312	100	
Charges from Clearing	10,565,030	11,400,560	13,779,197	12,865,283
i. Other (Direct Charges)	1,722,979	1,955,567	1,670,941	1,636,769
Total Clearing and Direct	12,288,009	13,356,127	15,450,138	14,502,052

CA-IR-240

a. Please confirm that one performance measure tracked by HECO Production Department management personnel is the percentage of planned preventive power plant maintenance that is actually completed in each budget period.

b. Provide copies of the tracking information which indicates the actual performance in 2002, 2003 and 2004 relative to the performance measure identified in subpart (a) of this

c. The maintenance mix trends in b. above represent actual annual results from 1999, when the trends were first developed, through 2004. The 2005 results will change as the year unfolds because the maintenance mix percentages reflect year to date results that are updated monthly. The most current update reflects January, 2005 YTD results. The percentages are derived by consolidating all project and non-project costs associated with the three maintenance activities, Preventive Maintenance (PM), Predictive Maintenance (PDM), and Corrective Maintenance (CM). The data used to derive the percentages is provided on page 3.

Data as of February 2005

Data Source: ABM Pillar. Act$NP-MoYr-ABM.Pln. Total Dept Cost by Proj vs NonProj.
Search: Business Process = Maint Plant Equip

NonProject	$ Month 2/05	$ YTD 2/05	% YTD 2/05
Corrective	725,901	2,149,404	77%
Preventive	135,402	261,380	9%
Predictive	183,669	378,038	14%
Total	1,044,972	2,788,822	100%

Project	$ Month 2/05	$ YTD 2/05	% YTD 2/05
Corrective	239,746	378,371	15%
Preventive	561,378	1,212,343	49%
Predictive	475,895	907,631	36%
Total	1,277,019	2,498,345	100%

NP + P	$ Month 2/05	$ YTD 2/05	% YTD 2/05
Corrective	965,647	2,527,775	48%
Preventive	696,780	1,473,723	28%
Predictive	659,564	1,285,669	24%
Total	2,321,991	5,287,167	100%

Predictive	$ Month 2/05	$ YTD 2/05
O&M $	438,606	1,010,594
Captl $	220,531	274,127

CA-IR-241

a. Please confirm that one performance measure that is tracked by HECO Production Department management personnel is the level of overtime that is incurred and provide tracking information indicating actual performance in 2002, 2003 and 2004 relative to this performance measure.

b. Provide copies of the actual reports produced in the normal course of business to track and explain performance relative to this measure.

HECO Response:

a. Yes. The level of overtime that is incurred by HECO Production Department is one performance measure tracked by management personnel. Overtime performance is tracked on a quarterly and annual basis. Please refer to CA-IR-172.

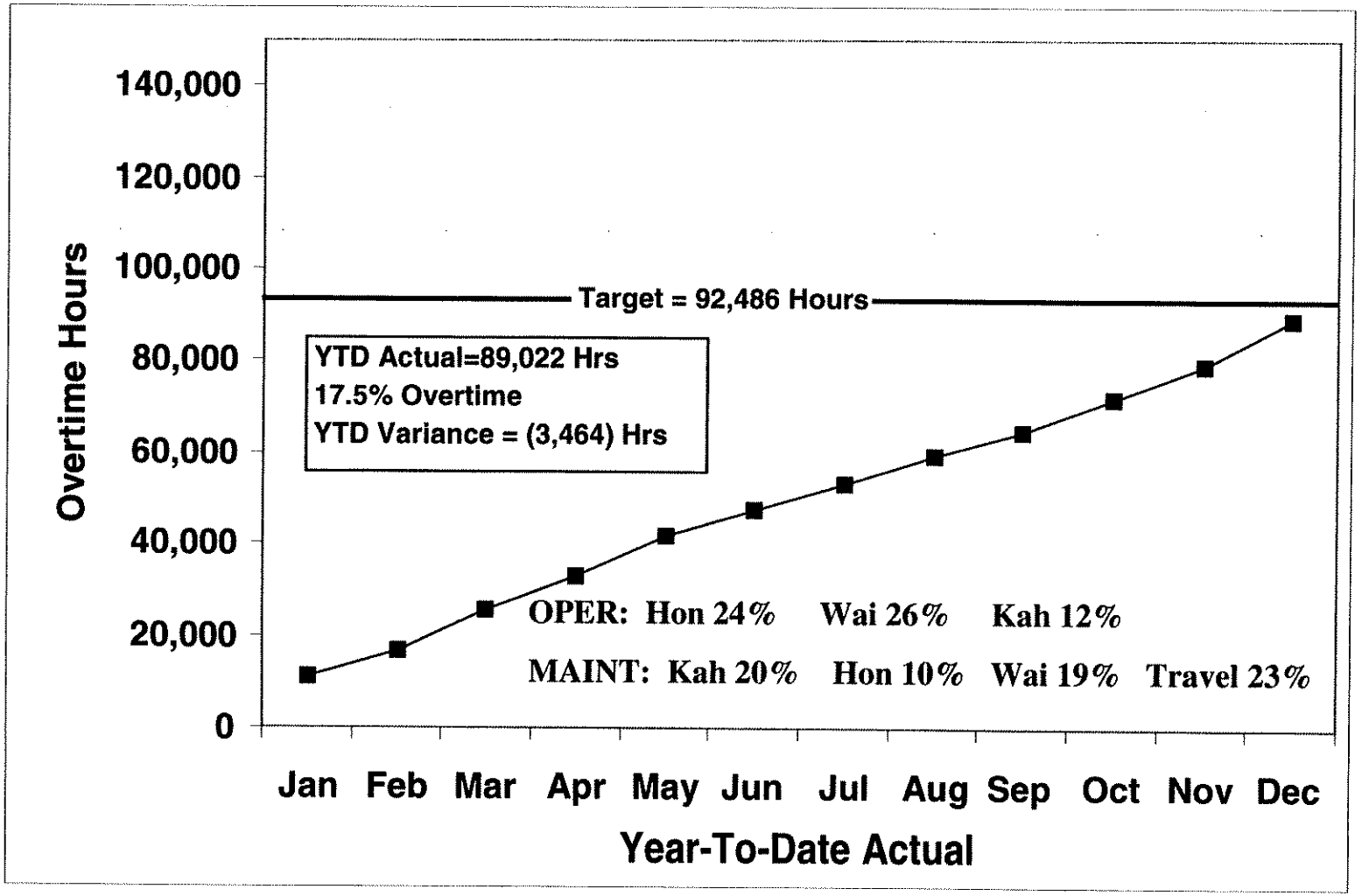
b. Pages 2 through 4 show the power point presentation slides with actual overtime incurred in the years 2002 through 2004 compared to projected overtime performance. This information is shared with Production Department employees on a quarterly basis.

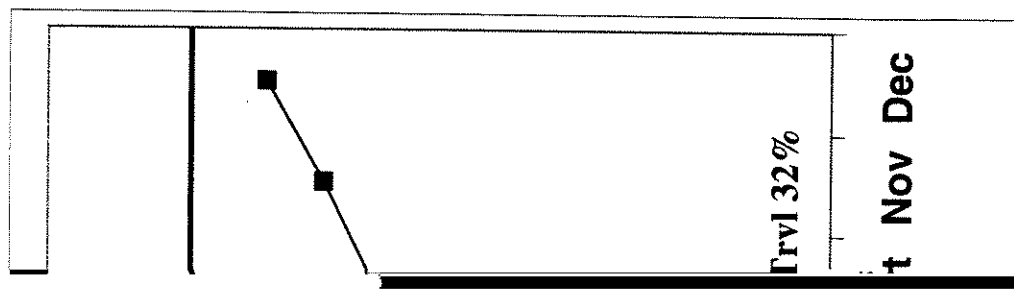
ction Goals

Overtime Target

2003 Production Goals

★Achieve Overtime Target




Trvl 32%
t Nov Dec

CA-IR-242

a. Please confirm that one performance measure that is tracked by HECO Production Department management personnel is the level of total non-fuel O&M expense that is incurred relative to budgeted levels and provide tracking information indicating actual performance in 2002, 2003 and 2004 relative to this performance measure.

b. Provide copies of the actual reports produced in the normal course of business to track and explain performance relative to this measure.

HECO Response:

a. Yes, HECO Production tracks the level of total non-fuel O&M expense on a monthly basis relative to budgeted levels in the operating year. As discussed in HECO T-6 and associated exhibits, and in various CA-IR responses, e.g., CA-IR-41, 42, 43, etc., managing the operations and maintenance of HECO's 16 generating units and coordinating similar activities with the Independent Power Producers is very dynamic and complex as there are many factors that must be considered in order to maintain system reliability, safety and compliance. As discussed in CA-IR-43 the overhaul schedules change throughout the year as priorities change.

The Company objects to providing the internally distributed reports and narrative discussions of the reasons for the variances, as these documents are privileged and confidential and should not be provided on public policy grounds, as described below, and it would be unduly burdensome to produce all such reports, which are generated on a frequent basis, and which would require explanations of how unadjusted budget numbers relate to test year numbers to be meaningful, which also would be unduly burdensome. However, without waiving its objection, HECO provides the following variance information that was provided to Power Supply management by the Production Department in the April monthly

staff meeting (which incorporates the results of the overhaul schedule revisions provided in the update to the response to CA-IR-43).

To put the variance report in context, the original Power Supply Budget reflected in the response to CA-IR-14 was $63.046 million, and the adjusted budget (with allocation of the unspecified target adjustment) was $60.771 million. As shown on page 6, Production O&M's share of the original budget was $57.001 million (which we round to $57 million for variance reporting purposes) and its share of the final budget is $54.665 million.

Page 7 shows the year-to-date budget and actuals through March, and the year-end budget and update amounts. The updated estimate is $57.360 million. The following breakdown between non-projects and projects was presented:

($ in thousands)

	Year End			
	Projected	Budget	Variance	
Non-Projects	$38,771	$41,381	($2,610)	
Projects	$18,589	$15,619	$2,970	
Total	$57,360	$57,000	$360	1%
Target Adj		($2,345)	$2,345	
Target Variance	$57,360	$54,655	$2,705	5%

Page 8 further breaks down the variance of $2,705,000.

The following information regarding non-projects was presented:

($ in thousands)

Non-Projects/Station Work:

	Year End		
	Projected	Budget	Over (Under) Budget
Labor	$15,346	$17,737	($2,391)
Overheads	$10,714	$12,385	($1,671)
Materials	$4,903	$4,503	$400
Outside Services	$7,316	$6,324	$1,992

The increases in outside services were explained as follows:

($ in thousands)

Non-Projects/Station Work:

	Year End		
	Projected	Budget	Over (Under) Budget
Labor	$15,346	$17,737	($2,391)
Overheads	$10,714	$12,385	($1,671)
Materials	$4,903	$4,503	$400
Outside Services	$7,316	$6,224	$1,092
Vehicles & Other	$492	$532	($40)
Total	$38,771	$41,381	($2,610)
			-6%

Substation DG	$356
K6 Corrosion Control	$210
Kahe FO Tank Repairs #11	$210
Misc	$316
Total	$1,092

Note that the costs for substation DG were based on a preliminary estimate, and more detailed information regarding the nine DG units that are expected to be installed in 2005 is provided in the 5/5/05 update filing.

Pages 9 and 10 shows the information presented on the maintenance schedule change. More detailed information was provided in the update to CA-IR-43, filed 4/31/05.

As stated above, HECO objects to providing internally generated variance reports. Explanations of budget variances are communicated through various media ranging from telephone conversations, brief and informal notes, to more standard write-ups containing explanations in "bullet point" form. The explanations are intentionally brief in nature since Company personnel understand the context behind the drivers of the variances and the Company believes that it is not cost effective to spend the time to generate elaborate variance explanations. If the Company is required to produce internally generated variance information at the time of rate cases, then the information will have to be generated in a fashion suitable for external publication, rather than in its present form used for internal management purposes. This would be unduly burdensome, as well as counter productive.

The variance notes and explanations are intended solely to be a management tool, and are not required to be submitted to management in a form to be transmitted outside the Company. Were these documents subject to review in a regulatory proceeding, their candid nature and, therefore, their value would diminish significantly in the future, and HECO's internal communications would be seriously hampered.

This information request basically requests unlimited access to internal reports or documents submitted in connection with the operating forecast and variances from the operating forecast. The information request fails to balance the Consumer Advocate's need for this information against the Company's need to manage.

For example, the Federal Freedom of Information Act ("FFIA"), codified at 5 U.S.C. Section 552, and the Uniform Information Practices Act (modified), codified at H.R.S. Ch. 92F, contains broad disclosure requirements based on the public's interest in open government. However, even such broad disclosure acts provide exceptions from the broad disclosure requirements that are intended to permit the efficient and effective functioning of government. It is common in such acts to protect from disclosing pre-decisional agency memoranda and notes, and/or government records that, by their nature, must be confidential in order to avoid the frustration of a legitimate government function. This is similar to the "deliberative process privilege" recognized by the Pennsylvania Public Utility Commission with respect to its own internal staff reports. See Pennsylvania Public Utility Commission v. West Penn Power company, 73 Pa PUC 122 (July 20, 1990).

HECO also objects to disclosure of the requested information under a protective order. The value of the internal management reports will be diminished for the reasons

stated above if the Company is required to provide the reports to the Consumer Advocate, even if the reports are provided pursuant to a protective order.

Providing variance to budget explanations was raised as an issue by the Consumer Advocate in MECO's 1992-1993 test year rate case, Docket No. 7000. MECO (and essentially HECO and HELCO, or the Companies) and the Consumer Advocate reached agreement in Docket No. 7000 to separate from Docket No. 7000 the Budget Preparation Process/Budget Issues, including the type and amount of information to be provided to the Consumer Advocate between rate cases. MECO and the Consumer Advocate agreed to work together outside of Docket No. 7000 to resolve the budgeting and reporting issues. As a result of the discussions to resolve the issues, among other things, the Companies agreed to provide detailed recorded data files and forecast detailed data files for the link year as part of each subsequent rate case filing. (See transmittal letters dated December 6, 2004 and March 28, 2005 in this proceeding indicating such information was provided to the Commission, Consumer Advocate and Department of Defense). In this case, HECO has provided (as part of its direct testimonies filed in the rate case) explanations of variances by activity, above a threshold, between the budget prepared for the test

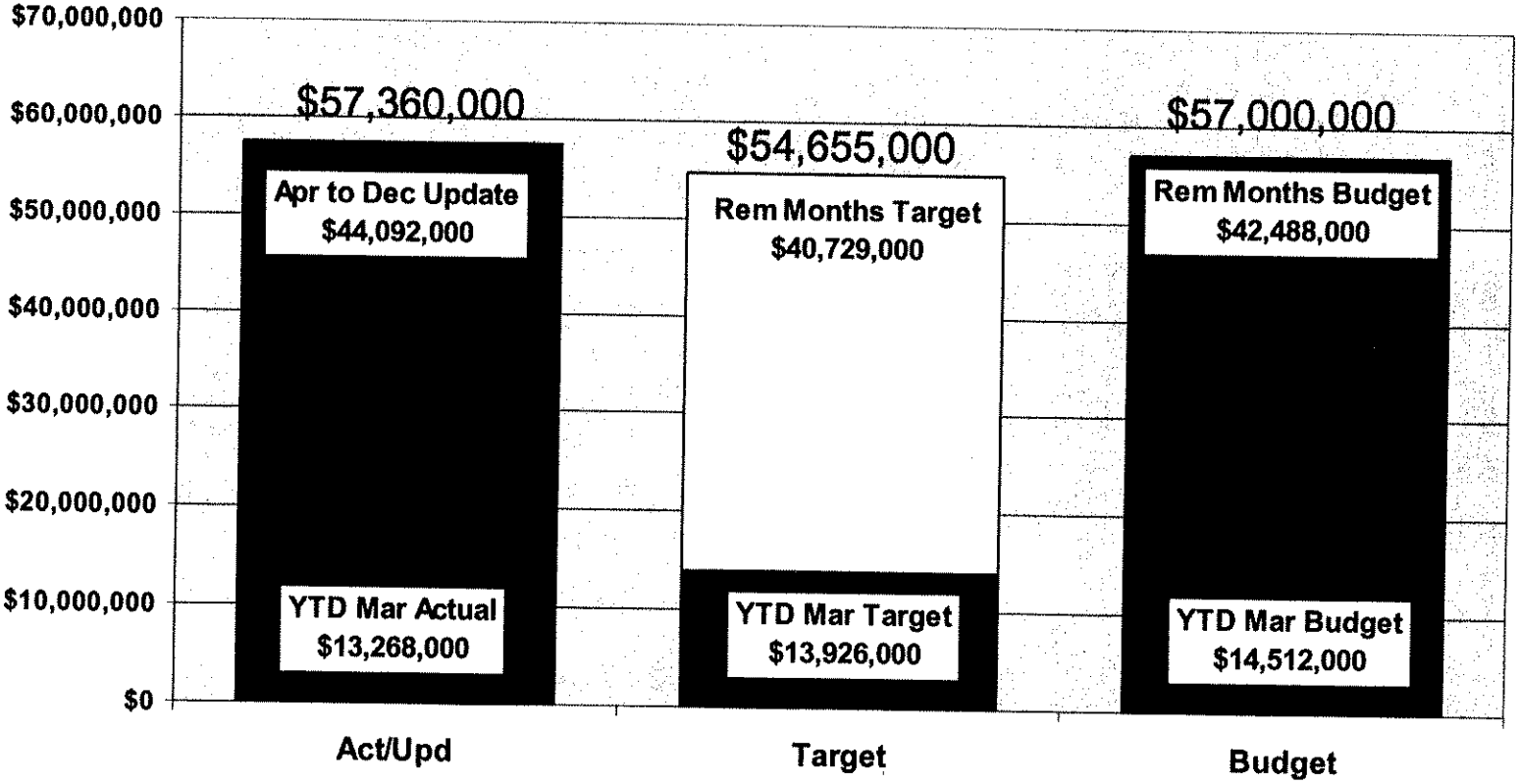
actual information. (See for example HECO-WP-601, HECO-WP-805, and HECO-WP

HECO 2005 O&M Budget
Power Supply

VP	Dept	Budget	Even Hiring Lag	Labor Additions Less Lag	2005 Budget Before Target Allocation	Allocate Target Adj	Target Budget
Pwr Sup	Environmental	3,173,099	(56,069)	37,500	3,154,530	(18,000)	3,136,530
	Plng & Eng	2,536,587	(15,550)	143,750	2,664,787	(17,000)	2,647,787
	Production	**57,000,920**	**(2,002,611)**	**-**	**54,998,309**	**(343,000)**	**54,655,309**
	VP-Pwr Sup	335,359	-	-	335,359	(3,751)	331,608
		63,045,965	(2,074,230)	181,250	61,152,985	(381,751)	60,771,234

Production: O&M

January to March Actual
April to December Update

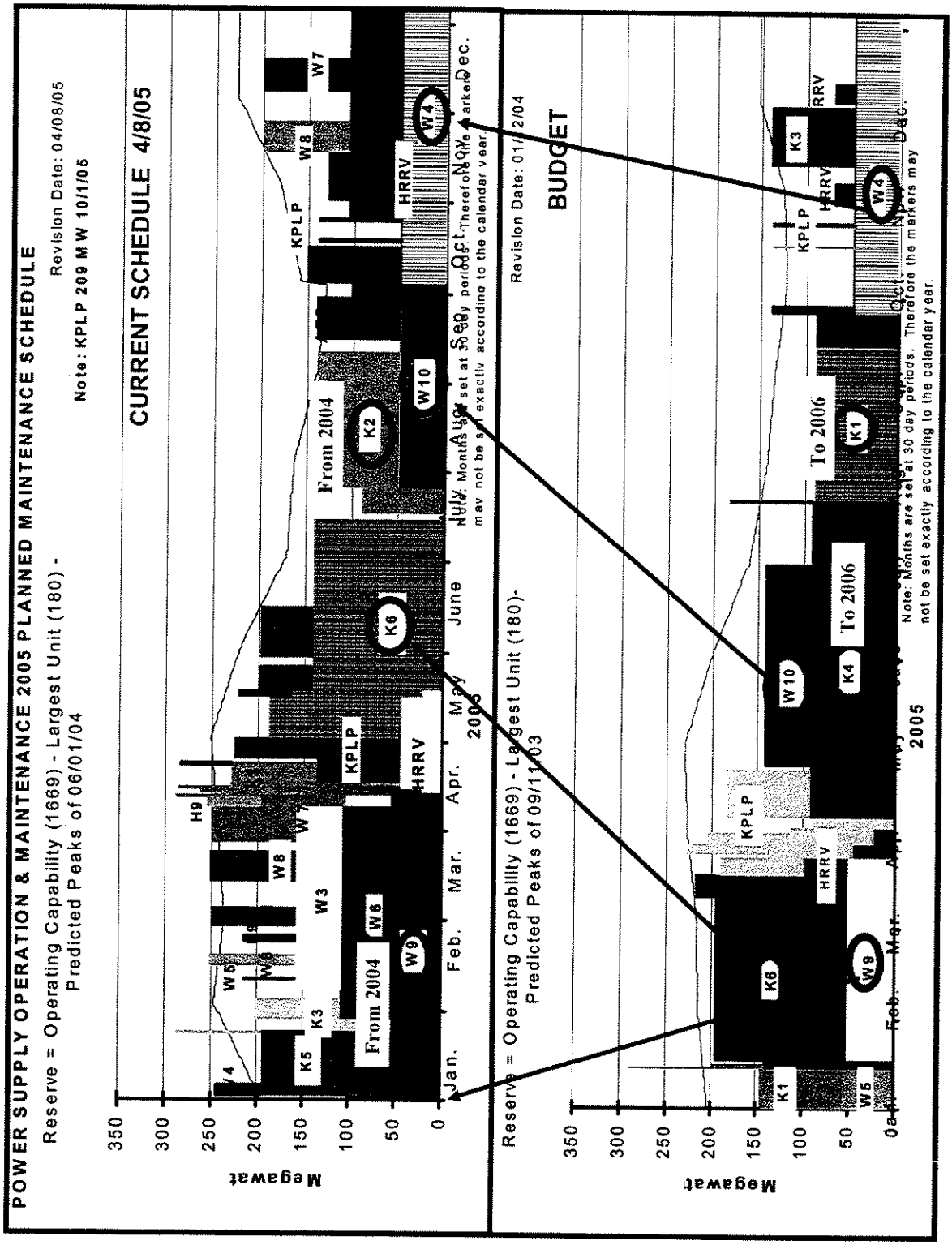


HECO Production O&M Dept
2005

	Budget	Target	Act/Update	Difference Tar vs Act
Jan-March	14,512	13,926	13,268	(658)
Apr-Dec	42,488	40,729	44,092	3,363
	57,000	54,655	57,360	2,705

Act/Update increase over target due to:

Substation DG	356
Kahe 6 Corrosion Control	210
Kahe Fuel Oil Tank repairs	210
Waiau 9 repair costs	2,180
Waiau 6 overhaul	2,036
Waiau 10 overhaul	2,633
Kahe 2 overhaul	1,930
Kahe 4 moved to 2006	(3,571)
Kahe 1 moved to 2006	(1,926)
Kahe Pond 1A	(520)
Others, net	(839)
	2,705


POWER SUPPLY OPERATION & MAINTENANCE 2005 PLANNED MAINTENANCE SCHEDULE
Reserve = Operating Capability (1669) - Largest Unit (180) -
Predicted Peaks of 06/01/04
Revision Date: 04/08/05
Note: KPLP 209 MW 10/1/05
CURRENT SCHEDULE 4/8/05
Megawat
350
300
250
200
150
100
50
0
Jan.
Feb.
Mar.
Apr.
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec.
2005
From 2004
From 2004
K5
K3
W5
W8
W3
W6
W9
H9
W7
KPLP
HRRV
K6
K2
W10
W8
W7
W4
Note: Months are set at 30 day periods. Therefore the markers may not be set exactly according to the calendar year.
Reserve = Operating Capability (1669) - Largest Unit (180)-
Predicted Peaks of 09/11/03
Revision Date: 01/12/04
BUDGET
Megawat
350
300
250
200
150
100
50
0
Jan.
Feb.
Mar.
Apr.
May
June
July
Aug.
Sep.
Oct.
Nov.
Dec.
2005
To 2006
To 2006
K1
W5
K6
W9
W10
K4
K1
K3
W4
KPLP
HRRV
Note: Months are set at 30 day periods. Therefore the markers may not be set exactly according to the calendar year.

Production: O&M

Year-End Projection - Projects

($ in thousands)

Projects/Overhauls:

	Year End			
Project	Projected	Budget	Over (Under) Budget	
W9	$3,212	$1,032	$2,180	
W6	$2,036	$0	$2,036	Was supposed to be a 2004 overhaul
W10	$3,665	$1,032	$2,633	May cost more.
K2	$2,420	$490	$1,930	Was supposed to be a 2004 overhaul. Budget is carry over.
K4	$0	$3,571	($3,571)	Moved to 2006
K1	$0	$1,926	($1,926)	Moved to 2006
W8	$139	$0	$139	2004 Overhaul carry over
W4	$3,776	$3,736	$40	
K6	$2,939	$2,912	$27	
Kahe Pond 1A	$341	$861	($520)	
Other - misc	$62	$59	$3	
Total	**$18,589**	**$15,619**	**$2,970**	19%

CA-IR-243

Please provide complete copies of Production Department budget variance reports that were prepared for reporting periods within the years 2003 and 2004, including full details regarding non-fuel O&M expenses, as well as all narrative reports explaining variances from budget levels.

HECO Response:

HECO objects to providing "variance reports" on the basis stated in the objections and response to CA-IR-242.

CA-IR-244

a. Does the Production Department maintain a listing(s) of discretionary projects that can be performed when resources are available?

b. If affirmative, please provide copies of these listings in the form they are maintained for all available periods of 2003 and 2004 and explain the relative progress made by HECO in

[redacted]

HECO Response:

a. Yes, a list of structural and facility maintenance items is kept and prioritized along with other maintenance project and non-project requirements. The 2005 Production Priority List is provided on pages 2 and 3.

b. When an item on the Production Priority List is selected for implementation, the item is identified and resources are procured to accomplish the work. Completed items are dropped off the list and additional items are added on. There is no report or special listing that's maintained other than the current list of items as shown in a. above. The progress made in past years is mostly reflected in NARUC Accounts 511 and 552 as shown on page 5 in CA-IR-188.

HAWAIIAN ELECTRIC COMPANY, INC.
RATE CASE - 2005 TEST YEAR
2005 PRODUCTION O&M PRIORITY LIST

DESCRIPTION	COST	TYPE	IMPACT	PRIORITY #	RA
Hon Building Repairs	$60,000	D	5m	1	IN
Kahe 1-6 Structural Painting	$150,000	D	5m	1	IL
Kahe Corrosion Control	$40,000	D	5m	1	IL
Kahe Demin Structural Maint	$30,000	D	5m,3m	1	IL
Kahe Waste Water Structural Maint	$60,000	D	2m	1	IL
Waiau Paint - Corrosion Control	$200,000	D	5m	1	IX
Waiau Shop Bldg Repairs	$150,000	D	5m	1	IX
Hon Condenser Corrosion (Repairs External)	$25,000	D	3m	2	IN
Waiau Bathroom/Shower/Locker room Refurbishment	$20,000	D	5m	2	IX
H8/9 Asbestos Strip from FW Heaters	$75,000	D	1m	3	IN
Hon 5/7 Roof Drains Phase 4	$40,000	D	2m	3	IN
Kahe Condenser Scrapers	$35,000	D	4M	3	IL
Kahe Culvert Drain Maintenance	$20,000	D	5m	3	IL
Kahe Distilled Water Tanks Insp & Rpr.	$30,000	D	3m	3	IL
Kahe Intake Bar Grills Insp & Cln	$15,000	D	3m	3	IL
Kahe Roadside Landscaping	$31,000	D	5M	3	IL
Waiau 5/6 Gantry Crane Corrosion Control	$50,000	D	1M,5m	3	IX
Waiau Building Repairs Units 3&4	$150,000	D	1M	3	IX
Waiau Condenser Scrapers	$15,000	D	4M	3	IX
Waiau Maint. Serv. Contract for Weed Control	$20,000	D	5M	3	IX
Waiau Maintenance Service Contract for Landscaping	$30,000	D	5M	3	IX
Hon Cathodic Protection Repairs	$150,000	D	3M	4	IN
Hon Circ Water or Condensate or Boiler Feed P...					

HAWAIIAN ELECTRIC COMPANY, INC.
RATE CASE - 2005 TEST YEAR
2005 PRODUCTION O&M PRIORITY LIST

DESCRIPTION	COST	TYPE	IMPACT	PRIORITY #	RA
Hon Lead Abatement	$4,000	ND	2M	5	IN
Hon Mercury Disposal	$4,000	ND	2M	5	IN
Hon Plant Deck Plating Repairs	$50,000	ND	1M	5	IN
Hon Security Equip. Repairs	$4,000	ND	1M	5	IN
Hon Tree Trimming/Iwilei/Landscape	$10,800	ND	1M,5m	5	IN
K6 CEMS Maintenance	$36,000	ND	2M	5	IL
K6 CEMS Source Test	$25,000	ND	2M	5	IL
Kahe A/C Duct Cleaning and Disinfection	$20,000	ND	1M	5	IL
Kahe Asbestos Abatement/Disposal	$20,000	ND	2M	5	IL
Kahe Black start Annual Maint.	$20,000	ND	3M	5	IL
Kahe Burner Tips Replacements	$100,000	ND	2M,3M	5	IL
Kahe Discharge Structure Bar Grills - Cln & Insp	$15,000	ND	3M	5	IL
Kahe Drott Maint./Certification	$20,000	ND	1M,2M	5	IL
Kahe Fence Repairs	$15,000	ND	1M	5	IL
Kahe Fire Break Clearing	$20,000	ND	1M,3m	5	IL
Kahe Fuel Oil Pipeline Repairs/Insp.	$15,000	ND	2M	5	IL
Kahe Gantry Crane Annual Insp.	$5,000	ND	1M,2M	5	IL
Kahe Hazardous Waste Disposal	$20,000	ND	2M	5	IL
Kahe IK Soot blower Repairs	$12,000	ND	2M,4m	5	IL
Kahe Lead Abatement	$4,000	ND	2M	5	IL
Kahe Mercury Disposal	$4,000	ND	2M	5	IL
Kahe Roadway Repairs	$35,000	ND	2M	5	IL
Kahe Security Equipment	$10,000	ND	1M	5	IL
Kahe Tree Trimming	$17,000	ND	1M,5m	5	IL
Kahe Waste Oil Disposal	$20,000	ND	2M	5	IL
Waiau A/C Duct Cleaning and Disinfection	$15,000	ND	1M	5	IX
Waiau Asbestos Abatement	$100,000	ND	2M	5	IX
Waiau Burner Tips Replacement	$90,000	ND	2M,3M	5	IX
Waiau Fence Repairs	$80,000	ND	1M	5	IX
Waiau Fuel Oil Tank Maint.	$100,000	ND	2M	5	IX
Waiau Gantry Crane Certification	$7,000	ND	1M,2M	5	IX
Waiau Hazardous Waste Disposal	$100,000	ND	2M	5	IX
Waiau Lead Abatement	$40,000	ND	2M	5	IX
Waiau Maintenance Service Contract for Waterways	$40,000	ND	2m,3m,5M	5	IX
Waiau Mercury Disposal	$4,000	ND	2M	5	IX
Waiau Roadway Repairs	$100,000	ND	2M	5	IX
Waiau Sludge Bed Drying Cell Renewal	$100,000	ND	2M	5	IX
Waiau Tree Trimming (Safety & Security)	$10,000	ND	1M,5m	5	IX
	$4,960,300				

LEGEND:

Type	Impact	Priority
D Discretionary	1 Safety / Security	1 Lowest
ND Non-Discretionary	2 Legal / Regulatory	
	3 Reliability	3 Medium
	4 Heat Rate	
	5 Plant & Property	5 Highest
	6 Work Environment	
	M Major	
	m Minor	

CA-IR-245

Ref. HECO response to CA-IR-1 (T&D O&M).

a. Please provide a copy of the "resource leveling reports" by labor class for the 2005 test year forecast, indicating the overtime hours and resulting OT percentage

Construction & Maintenance

	2001	2002	2003	2004	2005
Supply	499,032	417,819	501,120	433,608	459,680
Projected OT Hours	39,038	93,539	50,487	77,048	44,075
Projected OT %	8%	22%	10%	18%	10%
Actual Hours	432,209	411,550	427,905	463,934	107,252
Overtime	63,737	51,087	63,510	97,368	17,005
Actual OT % *	17%	14%	18%	27%	19% **

* Actual OT % = Overtime hours / Productive Straight Time hours

** Actual OT % through 3/20/05.

System Operation

	2001	2002	2003	2004	2005
Supply	232,296	218,184	217,336	213,864	222,970
Projected OT Hours	17,736	10,592	15,286	19,453	53,517
Projected OT %	8%	5%	7%	9%	24%
Actual Hours	197,393	197,039	187,529	187,378	46,807
Overtime	9,909	12,085	11,801	15,251	4,583
Actual OT % *	5%	7%	7%	9%	11% **

* Actual OT % = Overtime hours / Productive Straight Time hours

** Actual OT % through 3/20/05.

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
__BUOCED	*Supply	*Supply	Labor Supply	14,560
__BUOCED	107	NPDZZZZZ	Constr & Maintenance	-1,891
__BUOCED	150	NPDZZZZZ	Constr & Maintenance	-10,802
__BUOCED	150	P0000127	Test & Treat Wood Poles	-396
__BUOCED	150	P0000571	CIS Replacement	0
__BUOCED	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
__BUOCED	150	P1580000	Minor OH Dist Addn (CID)	0
__BUOCED	150	P3400000	Prev OH Dist Repl	-2,148
__BUOCED				-677
__E-ED	*Supply	*Supply	Labor Supply	2,080
__E-ED	107	NPDZZZZZ	Constr & Maintenance	-306
__E-ED	150	NPDZZZZZ	Constr & Maintenance	-1,976
__E-ED	150	P0000128	Critical Skills Plng & Dev	0
__E-ED	150	P0000526	HECO 2005 TY Rate Case	-228
__E-ED				-430
__FS-ED	*Supply	*Supply	Labor Supply	6,240
__FS-ED	107	NPDZZZZZ	Constr & Maintenance	-910
__FS-ED	150	NPDZZZZZ	Constr & Maintenance	-5,578
__FS-ED	150	P0000007	DOD Privatization	-187
__FS-ED	150	P0000128	Critical Skills Plng & Dev	-24
__FS-ED	150	P0000571	CIS Replacement	0
__FS-ED	150	P8290000	Tripler Wahiawa mwr replace	0
__FS-ED				-459
__I-ED	*Supply	*Supply	Labor Supply	4,160
__I-ED	107	NPDZZZZZ	Constr & Maintenance	-571
__I-ED	150	NPDZZZZZ	Constr & Maintenance	-1,986
__I-ED	150	P0000128	Critical Skills Plng & Dev	0
__I-ED	150	P3400000	Prev OH Dist Repl	-1,815
__I-ED				-212
__TC-ED	*Supply	*Supply	Labor Supply	27,040
__TC-ED	107	NPDZZZZZ	Constr & Maintenance	-3,319
__TC-ED	150	NPDZZZZZ	Constr & Maintenance	-19,880
__TC-ED	150	P0000120	Corr (Inc Emg) OH Trsf Rpl	-401
__TC-ED	150	P0000121	Corr (Inc Emg) UG Trsf Rpl	-399
__TC-ED	150	P0000122	Cor (Inc Emg) Mis Cable Rpl	-398
__TC-ED	150	P0000123	Corr (Inc Emg) OH Dist Rpl	-401
__TC-ED	150	P0000124	Cor (Inc Emg) OH Subtrn Rpl	-399
__TC-ED	150	P0000126	Vegetation Management	-3,072
__TC-ED	150	P0000127	Test & Treat Wood Poles	-396
__TC-ED	150	P0000128	Critical Skills Plng & Dev	-24
__TC-ED	150	P0000271	K4 Stormwater Drain Impv	-12
__TC-ED	150	P0000273	Kahe Stormwater Erosion Ctrl	-8
__TC-ED	150	P0000280	Makalapa-Kuahua FO Line	-40
__TC-ED	150	P0000281	Makalapa-Puuloa FO Line	-40
__TC-ED	150	P0000283	PQ Svs - Res PQ/PQ Pager	0
__TC-ED	150	P0000359	Corrective Maintenance	-399
__TC-ED	150	P0000360	Preventive Maintenance	-200
__TC-ED	150	P0000491	K-H#2/Wai-Wah Str 86/25	0
__TC-ED	150	P0000526	HECO 2005 TY Rate Case	-226
__TC-ED	150	P0000563	Mokuone 46-12KV Substation 1	0
__TC-ED	150	P0000571	CIS Replacement	0
__TC-ED	150	P0000667	Kahe Sewer System Upgrade	0
__TC-ED	150	P0000838	46kV Fdrs to Fl Sub	-384

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
__TC-ED	150	P3400000	Prev OH Dist Repl	-1,657
__TC-ED	150	P3401000	Prev OH Subtrans Repl	-1,507
__TC-ED	150	P3402000	Prev OH Trans Repl	-454
__TC-ED				-8,400
__TC-I	150	P0000698	HPP Stormwater Isolation	0
__TC-I				0
__TCS-ED	*Supply	*Supply	Labor Supply	27,040
__TCS-ED	107	NPDZZZZZ	Constr & Maintenance	-4,616
__TCS-ED	150	NPDZZZZZ	Constr & Maintenance	-22,824
__TCS-ED	150	P0000007	DOD Privatization	-124
__TCS-ED	150	P0000120	Corr (Inc Emg) OH Trsf Rpl	-103
__TCS-ED	150	P0000121	Corr (Inc Emg) UG Trsf Rpl	-121
__TCS-ED	150	P0000122	Cor (Inc Emg) Mis Cable Rpl	-409
__TCS-ED	150	P0000123	Corr (Inc Emg) OH Dist Rpl	-248
__TCS-ED	150	P0000124	Cor (Inc Emg) OH Subtrn Rpl	-69
__TCS-ED	150	P0000128	Critical Skills Plng & Dev	-24
__TCS-ED	150	P0000143	Salt Lake Blvd Widening Ph2	0
__TCS-ED	150	P0000190	Waikiki Rehab Project 1	-287
__TCS-ED	150	P0000191	Waikiki Rehab Project 2	0
__TCS-ED	150	P0000192	Waikiki Rehabilitation Project 3	0
__TCS-ED	150	P0000282	Kuahua 46kv Ln Reconnect	-35
__TCS-ED	150	P0000359	Corrective Maintenance	-2,622
__TCS-ED	150	P0000360	Preventive Maintenance	-236
__TCS-ED	150	P0000361	Preventive Inspection	-1,385
__TCS-ED	150	P0000362	Corrective Inspection	-504
__TCS-ED	150	P0000423	Kailua Rd UG Conversion	0
__TCS-ED	150	P0000491	K-H#2/Wai-Wah Str 86/25	-300
__TCS-ED	150	P0000507	Kam Hy Resurf Waiahole-Cr Ln	0
__TCS-ED	150	P0000527	Facilities Attachment Prog	-84
__TCS-ED	150	P0000530	Ka Iwi 12kV UG, Ph 1 Inc 2	0
__TCS-ED	150	P0000562	Mokuone 46-12KV Line Ext	0
__TCS-ED	150	P0000571	CIS Replacement	0
__TCS-ED	150	P0000575	Nimitz Hwy Rehab-UA #1691	0
__TCS-ED	150	P0000838	46kV Fdrs to FI Sub	-81
__TCS-ED	150	P0000886	Wal-Mart Sam's Keeaumoku	0
__TCS-ED	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
__TCS-ED	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
__TCS-ED	150	P0000940	Pearl Highlands 2nd Fdr	-16
__TCS-ED	150	P0000975	Tripler-Koolau Baseyard Comm	-24
__TCS-ED	150	P1510000	Misc OH Svc & Extn (CID)	-468
__TCS-ED	150	P1580000	Minor OH Dist Addn (CID)	-180
__TCS-ED	150	P1670000	P&I&Test Meters & Mtr Eq	-36
__TCS-ED	150	P1690000	Minor T&D Customer Programs	-180
__TCS-ED	150	P1700000	Misc UG Svc & Extn (CID)	-1,512
__TCS-ED	150	P1789000	Preventive OH Transf Repl	-374
__TCS-ED	150	P1793000	Preventive UG Transf Repl	-708
__TCS-ED	150	P1810000	Prev Misc Cable Failure Rpl	-172
__TCS-ED	150	P1820000	Minor UG Addns (CID)	-156
__TCS-ED	150	P1990000	Minor T&D System Programs	-24
__TCS-ED	150	P3400000	Prev OH Dist Repl	-1,201
__TCS-ED	150	P3401000	Prev OH Subtrans Repl	-132
__TCS-ED	150	P3402000	Prev OH Trans Repl	-89
__TCS-ED	150	P8290000	Tripler Wahiawa mwr replace	-12
__TCS-ED	150	P8470000	Koolau/Tripler MWR Repl	-24
__TCS-ED	150	P9028000	Mobile Radio F1/F2 Replace	-32
__TCS-ED				-12,372
D_OHCREW	*Supply	*Supply	Labor Supply	276,144
D_OHCREW	107	NPDZZZZZ	Constr & Maintenance	-33,733
D_OHCREW	108	NPDZZZZZ	Constr & Maintenance	-649

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
D_OHCREW	150	NPDZZZZZ	Constr & Maintenance	-27,932
D_OHCREW	150	P0000007	DOD Privatization	-144
D_OHCREW	150	P0000120	Corr (Inc Emg) OH Trsf Rpl	-5,870
D_OHCREW	150	P0000121	Corr (Inc Emg) UG Trsf Rpl	-3,720
D_OHCREW	150	P0000122	Cor (Inc Emg) Mis Cable Rpl	-5,030
D_OHCREW	150	P0000123	Corr (Inc Emg) OH Dist Rpl	-19,135
D_OHCREW	150	P0000124	Cor (Inc Emg) OH Subtrn Rpl	-5,474
D_OHCREW	150	P0000143	Salt Lake Blvd Widening Ph2	0
D_OHCREW	150	P0000277	New Kuahua Substation	-20
D_OHCREW	150	P0000280	Makalapa-Kuahua FO Line	-1,184
D_OHCREW	150	P0000281	Makalapa-Puuloa FO Line	-2,351
D_OHCREW	150	P0000282	Kuahua 46kv Ln Reconnect	-222
D_OHCREW	150	P0000359	Corrective Maintenance	-13,438
D_OHCREW	150	P0000360	Preventive Maintenance	-1,636
D_OHCREW	150	P0000361	Preventive Inspection	-18,210
D_OHCREW	150	P0000362	Corrective Inspection	-9
D_OHCREW	150	P0000423	Kailua Rd UG Conversion	0
D_OHCREW	150	P0000491	K-H#2/Wai-Wah Str 86/25	-3,100
D_OHCREW	150	P0000507	Kam Hy Resurf Waiahole-Cr Ln	0
D_OHCREW	150	P0000527	Facilities Attachment Prog	-36
D_OHCREW	150	P0000530	Ka Iwi 12kV UG, Ph 1 Inc 2	0
D_OHCREW	150	P0000562	Mokuone 46-12KV Line Ext	0
D_OHCREW	150	P0000563	Mokuone 46-12KV Substation 1	0
D_OHCREW	150	P0000571	CIS Replacement	0
D_OHCREW	150	P0000575	Nimitz Hwy Rehab-UA #1691	0
D_OHCREW	150	P0000597	Diamond Head Rd OH/UG Imp	0
D_OHCREW	150	P0000669	Kakaako ID10	0
D_OHCREW	150	P0000672	Kakaako Makai-Kewalo 25kV DL	0
D_OHCREW	150	P0000764	H-1 Widening Waimalu Reloc	0
D_OHCREW	150	P0000774	Kukui Gardens Conversion	0
D_OHCREW	150	P0000829	W4 Main Xfmr Replacement	-120
D_OHCREW	150	P0000834	46kV Fdrs to Mamala Sub	-600
D_OHCREW	150	P0000835	Comm Links Mamala Sub	-400
D_OHCREW	150	P0000838	46kV Fdrs to FI Sub	-1,965
D_OHCREW	150	P0000839	Comm. Links FI-Maklpa	-494
D_OHCREW	150	P0000886	Wal-Mart Sam's Keeaumoku	0
D_OHCREW	150	P0000895	H8 Main Xfmr Replacement	0
D_OHCREW	150	P0000907	PLC Market Trial	0
D_OHCREW	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
D_OHCREW	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
D_OHCREW	150	P0000939	Waiau CT Separation	-48
D_OHCREW	150	P0000940	Pearl Highlands 2nd Fdr	-208
D_OHCREW	150	P0000947	KoOlina 46kV lines	0
D_OHCREW	150	P0000975	Tripler-Koolau Baseyard Comm	-344
D_OHCREW	150	P0000990	Waiau-Makalapa FO Replacemen	0
D_OHCREW	150	P0000991	Airport-Makalapa Fiber Repla	0
D_OHCREW	150	P0000992	Airport-Iwilei FO Replacemen	0
D_OHCREW	150	P0001026	BPL with Advanced Metering	-7,200
D_OHCREW	150	P1470000	Minor Trans Sub Addns	-1
D_OHCREW	150	P1480000	Minor Dist Sub Addns	-42
D_OHCREW	150	P1510000	Misc OH Svc & Extn (CID)	-13,044
D_OHCREW	150	P1580000	Minor OH Dist Addn (CID)	-4,114
D_OHCREW	150	P1670000	P&I&Test Meters & Mtr Eq	-504
D_OHCREW	150	P1690000	Minor T&D Customer Programs	-2,124
D_OHCREW	150	P1700000	Misc UG Svc & Extn (CID)	-40,752
D_OHCREW	150	P1789000	Preventive OH Transf Repl	-10,945
D_OHCREW	150	P1793000	Preventive UG Transf Repl	-10,402
D_OHCREW	150	P1810000	Prev Misc Cable Failure Rpl	-187
D_OHCREW	150	P1820000	Minor UG Addns (CID)	-3,072

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_LbrClass	_EE	_Proj	Project	FY05
D_OHCREW	150	P1990000	Minor T&D System Programs	-2,352
D_OHCREW	150	P3400000	Prev OH Dist Repl	-15,015
D_OHCREW	150	P3401000	Prev OH Subtrans Repl	-12,583
D_OHCREW	150	P3402000	Prev OH Trans Repl	-13,020
D_OHCREW	150	P8290000	Tripler Wahiawa mwr replace	-160
D_OHCREW	150	P8470000	Koolau/Tripler MWR Repl	-320
D_OHCREW	150	P9028000	Mobile Radio F1/F2 Replace	-225
D_OHCREW				-5,990
D_PTM	*Supply	*Supply	Labor Supply	53,728
D_PTM	107	NPDZZZZZ	Constr & Maintenance	-6,802
D_PTM	150	NPDZZZZZ	Constr & Maintenance	-1,213
D_PTM	150	P0000121	Corr (inc Emg) UG Trsf Rpl	-191
D_PTM	150	P0000123	Corr (Inc Emg) OH Dist Rpl	-214
D_PTM	150	P0000143	Salt Lake Blvd Widening Ph2	0
D_PTM	150	P0000190	Waikiki Rehab Project 1	-150
D_PTM	150	P0000191	Waikiki Rehab Project 2	0
D_PTM	150	P0000192	Waikiki Rehabilitation Project 3	0
D_PTM	150	P0000282	Kuahua 46kv Ln Reconnect	-8
D_PTM	150	P0000283	PQ Svs - Res PQ/PQ Pager	0
D_PTM	150	P0000360	Preventive Maintenance	-1,851
D_PTM	150	P0000361	Preventive Inspection	-2,803
D_PTM	150	P0000423	Kailua Rd UG Conversion	0
D_PTM	150	P0000507	Kam Hy Resurf Waiahole-Cr Ln	0
D_PTM	150	P0000530	Ka Iwi 12kV UG, Ph 1 Inc 2	0
D_PTM	150	P0000562	Mokuone 46-12KV Line Ext	0
D_PTM	150	P0000571	CIS Replacement	0
D_PTM	150	P0000575	Nimitz Hwy Rehab-UA #1691	0
D_PTM	150	P0000597	Diamond Head Rd OH/UG Imp	0
D_PTM	150	P0000669	Kakaako ID10	0
D_PTM	150	P0000672	Kakaako Makai-Kewalo 25kV DL	-6
D_PTM	150	P0000740	PTM Switching Operations	-37,574
D_PTM	150	P0000764	H-1 Widening Waimalu Reloc	0
D_PTM	150	P0000774	Kukui Gardens Conversion	0
D_PTM	150	P0000783	Kakaako Makai-Iwilei 25KV DL	0
D_PTM	150	P0000828	Outage Management System	0
D_PTM	150	P0000834	46kV Fdrs to Mamala Sub	-100
D_PTM	150	P0000886	Wal-Mart Sam's Keeaumoku	0
D_PTM	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
D_PTM	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
D_PTM	150	P0000940	Pearl Highlands 2nd Fdr	-24
D_PTM	150	P0000948	KoOlina 12kV lines	0
D_PTM	150	P0000974	Ala Wai Canal 46kV U Reloc	0
D_PTM	150	P1510000	Misc OH Svc & Extn (CID)	-48
D_PTM	150	P1580000	Minor OH Dist Addn (CID)	-36
D_PTM	150	P1690000	Minor T&D Customer Programs	-168
D_PTM	150	P1700000	Misc UG Svc & Extn (CID)	-1,356
D_PTM	150	P1789000	Preventive OH Transf Repl	-258
D_PTM	150	P1793000	Preventive UG Transf Repl	-180
D_PTM	150	P1820000	Minor UG Addns (CID)	-192
D_PTM	150	P3400000	Prev OH Dist Repl	-2,780
D_PTM	150	P3401000	Prev OH Subtrans Repl	-587
D_PTM	150	P3402000	Prev OH Trans Repl	-239
D_PTM	150	P9903000	Puuloa Road Widening	-120
D_PTM				-3,172
D_UGCREW	*Supply	*Supply	Labor Supply	46,608
D_UGCREW	107	NPDZZZZZ	Constr & Maintenance	-5,866
D_UGCREW	108	NPDZZZZZ	Constr & Maintenance	-2,089
D_UGCREW	150	NPDZZZZZ	Constr & Maintenance	-3,957
D_UGCREW	150	P0000007	DOD Privatization	-323

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_LbrClass	_EE	_Proj	Project	FY05
D_UGCREW	150	P0000121	Corr (Inc Emg) UG Trsf Rpl	-2,761
D_UGCREW	150	P0000122	Cor (Inc Emg) Mis Cable Rpl	-3,792
D_UGCREW	150	P0000123	Corr (Inc Emg) OH Dist Rpl	-547
D_UGCREW	150	P0000143	Salt Lake Blvd Widening Ph2	0
D_UGCREW	150	P0000190	Waikiki Rehab Project 1	-2,792
D_UGCREW	150	P0000191	Waikiki Rehab Project 2	0
D_UGCREW	150	P0000192	Waikiki Rehabilitation Project 3	0
D_UGCREW	150	P0000277	New Kuahua Substation	-700
D_UGCREW	150	P0000282	Kuahua 46kv Ln Reconnect	-640
D_UGCREW	150	P0000359	Corrective Maintenance	-7,870
D_UGCREW	150	P0000360	Preventive Maintenance	-973
D_UGCREW	150	P0000361	Preventive Inspection	-995
D_UGCREW	150	P0000423	Kailua Rd UG Conversion	0
D_UGCREW	150	P0000507	Kam Hy Resurf Waiahole-Cr Ln	0
D_UGCREW	150	P0000530	Ka Iwi 12kV UG, Ph 1 Inc 2	0
D_UGCREW	150	P0000562	Mokuone 46-12KV Line Ext	0
D_UGCREW	150	P0000571	CIS Replacement	0
D_UGCREW	150	P0000575	Nimitz Hwy Rehab-UA #1691	0
D_UGCREW	150	P0000597	Diamond Head Rd OH/UG Imp	0
D_UGCREW	150	P0000615	Kukio 69kV UG Relocation	-972
D_UGCREW	150	P0000669	Kakaako ID10	0
D_UGCREW	150	P0000672	Kakaako Makai-Kewalo 25kV DL	-2,611
D_UGCREW	150	P0000774	Kukui Gardens Conversion	0
D_UGCREW	150	P0000783	Kakaako Makai-Iwilei 25KV DL	-120
D_UGCREW	150	P0000820	K1 Main Xfmr Replacement	-300
D_UGCREW	150	P0000829	W4 Main Xfmr Replacement	-185
D_UGCREW	150	P0000834	46kV Fdrs to Mamala Sub	-2,200
D_UGCREW	150	P0000835	Comm Links Mamala Sub	-498
D_UGCREW	150	P0000886	Wal-Mart Sam's Keeaumoku	0
D_UGCREW	150	P0000895	H8 Main Xfmr Replacement	0
D_UGCREW	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
D_UGCREW	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
D_UGCREW	150	P0000940	Pearl Highlands 2nd Fdr	-298
D_UGCREW	150	P0000947	KoOlina 46kV lines	0
D_UGCREW	150	P0000948	KoOlina 12kV lines	0
D_UGCREW	150	P0000951	Ocean Pointe 46kV Lines	-2,088
D_UGCREW	150	P0000952	Ocean Pointe 12kV Lines	-1,056
D_UGCREW	150	P0000974	Ala Wai Canal 46kV U Reloc	0
D_UGCREW	150	P1510000	Misc OH Svc & Extn (CID)	-300
D_UGCREW	150	P1580000	Minor OH Dist Addn (CID)	-84
D_UGCREW	150	P1690000	Minor T&D Customer Programs	-96
D_UGCREW	150	P1700000	Misc UG Svc & Extn (CID)	-2,028
D_UGCREW	150	P1793000	Preventive UG Transf Repl	-7,593
D_UGCREW	150	P1810000	Prev Misc Cable Failure Rpl	-1,216
D_UGCREW	150	P1820000	Minor UG Addns (CID)	-660
D_UGCREW	150	P1990000	Minor T&D System Programs	-2,112
D_UGCREW	150	P9903000	Puuloa Road Widening	-845
D_UGCREW				-11,959
W_JPCORD	*Supply	*Supply	Labor Supply	2,080
W_JPCORD	107	NPDZZZZZ	Constr & Maintenance	-306
W_JPCORD	150	NPDZZZZZ	Constr & Maintenance	-1,824
W_JPCORD				-50
W_JRPLNR	150	P3400000	Prev OH Dist Repl	-354
W_JRPLNR				-354
				-44,075

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
__BUOCED	*Supply	*Supply	Labor Supply	6,240
__BUOCED	107	NPRZZZZZ	System Operation	-691
__BUOCED	150	NPRZZZZZ	System Operation	-5,544
__BUOCED	150	P0000571	CIS Replacement	0
__BUOCED				5
__E-ED	*Supply	*Supply	Labor Supply	2,080
__E-ED	107	NPRZZZZZ	System Operation	-253
__E-ED	150	NPRZZZZZ	System Operation	-1,829
__E-ED	150	P0000128	Critical Skills Plng & Dev	0
__E-ED	150	P0000526	HECO 2005 TY Rate Case	-114
__E-ED				-116
__I-ED	*Supply	*Supply	Labor Supply	2,080
__I-ED	107	NPRZZZZZ	System Operation	-217
__I-ED	150	NPRZZZZZ	System Operation	-1,860
__I-ED	150	P0000128	Critical Skills Plng & Dev	-24
__I-ED				-21
__TC	150	P0000571	CIS Replacement	-120
__TC				-120
__TCS-ED	*Supply	*Supply	Labor Supply	2,080
__TCS-ED	107	NPRZZZZZ	System Operation	-214
__TCS-ED	150	NPRZZZZZ	System Operation	-1,884
__TCS-ED	150	P0000128	Critical Skills Plng & Dev	0
__TCS-ED				-18
R_COMENG	*Supply	*Supply	Labor Supply	2,080
R_COMENG	107	NPRZZZZZ	System Operation	-236
R_COMENG	150	NPRZZZZZ	System Operation	-1,692
R_COMENG	150	P0000508	PM-Makalapa MW Replace	-16
R_COMENG	150	P0000509	PM-Ewa Nui MW Replace	-16
R_COMENG	150	P0000837	Makalapa 46kV Brkr Addition	-1
R_COMENG	150	P0000907	PLC Market Trial	0
R_COMENG	150	P0001026	BPL with Advanced Metering	-75
R_COMENG	150	P1470000	Minor Trans Sub Addns	-4
R_COMENG	150	P1480000	Minor Dist Sub Addns	-76
R_COMENG	150	P1500000	Misc CM Fac-Op & Ctrl (TD)	-48
R_COMENG	150	P1505000	Other Misc Comm Fac SOD	-24
R_COMENG				-108
R_COMSUP	*Supply	*Supply	Labor Supply	2,080
R_COMSUP	107	NPRZZZZZ	System Operation	-316
R_COMSUP	150	NPRZZZZZ	System Operation	-1,752
R_COMSUP	150	P0000280	Makalapa-Kuahua FO Line	-160
R_COMSUP	150	P0000281	Makalapa-Puuloa FO Line	-48
R_COMSUP	150	P0000508	PM-Makalapa MW Replace	-40
R_COMSUP	150	P0000509	PM-Ewa Nui MW Replace	-40
R_COMSUP	150	P0000711	Remote PBXs	-50
R_COMSUP	150	P0000837	Makalapa 46kV Brkr Addition	-1
R_COMSUP	150	P0000907	PLC Market Trial	0
R_COMSUP	150	P0000975	Tripler-Koolau Baseyard Comm	-40
R_COMSUP	150	P0001026	BPL with Advanced Metering	-175
R_COMSUP	150	P1470000	Minor Trans Sub Addns	-24
R_COMSUP	150	P1480000	Minor Dist Sub Addns	-3
R_COMSUP	150	P1500000	Misc CM Fac-Op & Ctrl (TD)	-49
R_COMSUP	150	P1505000	Other Misc Comm Fac SOD	-12
R_COMSUP	150	P8290000	Tripler Wahiawa mwr replace	-24
R_COMSUP	150	P8470000	Koolau/Tripler MWR Repl	-40
R_COMSUP	150	P9028000	Mobile Radio F1/F2 Replace	-48
R_COMSUP	150	P9262000	Malae-Koolau MW Replace	-50
R_COMSUP	150	P9511000	Generation Hotline Upgrd	-16

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
R_COMTEC	*Supply	*Supply	Labor Supply	12,480
R_COMTEC	107	NPRZZZZZ	System Operation	-1,560
R_COMTEC	150	NPRZZZZZ	System Operation	-9,421
R_COMTEC	150	P0000280	Makalapa-Kuahua FO Line	-976
R_COMTEC	150	P0000281	Makalapa-Puuloa FO Line	-654
R_COMTEC	150	P0000508	PM-Makalapa MW Replace	-320
R_COMTEC	150	P0000509	PM-Ewa Nui MW Replace	-320
R_COMTEC	150	P0000527	Facilities Attachment Prog	-24
R_COMTEC	150	P0000564	W9 DCS Processor Upgrade	-40
R_COMTEC	150	P0000565	W10 DCS Processor Upgrade	-40
R_COMTEC	150	P0000713	Dispatch Center Building	-384
R_COMTEC	150	P0000716	Telecomm Extensions	0
R_COMTEC	150	P0000717	EMS Replacement	-12
R_COMTEC	150	P0000732	Gen Ctrl Unit WAN Upgrades	-400
R_COMTEC	150	P0000733	Trns Sub RTU Migration Pgm	-280
R_COMTEC	150	P0000734	RTU Wide Area Network	-232
R_COMTEC	150	P0000835	Comm Links Mamala Sub	-839
R_COMTEC	150	P0000837	Makalapa 46kV Brkr Addition	-1
R_COMTEC	150	P0000839	Comm. Links Fl-Maklpa	-783
R_COMTEC	150	P0000864	Iwi 46 kV Sub Ctrl Hse Upgr	0
R_COMTEC	150	P0000975	Tripler-Koolau Baseyard Comm	-543
R_COMTEC	150	P0000990	Waiau-Makalapa FO Replacemen	0
R_COMTEC	150	P0000991	Airport-Makalapa Fiber Repla	0
R_COMTEC	150	P0000992	Airport-Iwilei FO Replacemen	0
R_COMTEC	150	P1470000	Minor Trans Sub Addns	-80
R_COMTEC	150	P1480000	Minor Dist Sub Addns	-20
R_COMTEC	150	P1500000	Misc CM Fac-Op & Ctrl (TD)	-624
R_COMTEC	150	P1505000	Other Misc Comm Fac SOD	-120
R_COMTEC	150	P8290000	Tripler Wahiawa mwr replace	-514
R_COMTEC	150	P8470000	Koolau/Tripler MWR Repl	-737
R_COMTEC	150	P9028000	Mobile Radio F1/F2 Replace	-998
R_COMTEC	150	P9262000	Malae-Koolau MW Replace	-950
R_COMTEC	150	P9511000	Generation Hotline Upgrd	-154
R_COMTEC				-8,546
R_CONCRW	*Supply	*Supply	Labor Supply	6,240
R_CONCRW	107	NPRZZZZZ	System Operation	-884
R_CONCRW	150	NPRZZZZZ	System Operation	-4,056
R_CONCRW	150	P0000280	Makalapa-Kuahua FO Line	-64
R_CONCRW	150	P0000281	Makalapa-Puuloa FO Line	-104
R_CONCRW	150	P0000465	K1&2 Service Air Compressors	0
R_CONCRW	150	P0000677	W7/8 Underground Utilities	0
R_CONCRW	150	P0000835	Comm Links Mamala Sub	-195
R_CONCRW	150	P0000837	Makalapa 46kV Brkr Addition	-8
R_CONCRW	150	P0000839	Comm. Links Fl-Maklpa	-108
R_CONCRW	150	P0000975	Tripler-Koolau Baseyard Comm	-144
R_CONCRW	150	P1470000	Minor Trans Sub Addns	-17
R_CONCRW	150	P1480000	Minor Dist Sub Addns	-499
R_CONCRW	150	P1690000	Minor T&D Customer Programs	-240
R_CONCRW	150	P1700000	Misc UG Svc & Extn (CID)	-36
R_CONCRW	150	P1820000	Minor UG Addns (CID)	0
R_CONCRW	150	P8290000	Tripler Wahiawa mwr replace	0
R_CONCRW	150	P8470000	Koolau/Tripler MWR Repl	-304
R_CONCRW	150	P9028000	Mobile Radio F1/F2 Replace	-360
R_CONCRW	150	P9262000	Malae-Koolau MW Replace	-185
R_CONCRW				-964
R_CONSUP	150	P1700000	Misc UG Svc & Extn (CID)	0
R_CONSUP	150	P1820000	Minor UG Addns (CID)	0
R_CONSUP				0
R_ENGMAP	*Supply	*Supply	Labor Supply	10,400

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_LbrClass	_EE	_Proj	Project	FY05
R_ENGMAP	107	NPRZZZZZ	System Operation	-1,200
R_ENGMAP	150	NPRZZZZZ	System Operation	-7,712
R_ENGMAP	150	P0000571	CIS Replacement	0
R_ENGMAP	150	P1510000	Misc OH Svc & Extn (CID)	-72
R_ENGMAP	150	P1580000	Minor OH Dist Addn (CID)	-72
R_ENGMAP	150	P1700000	Misc UG Svc & Extn (CID)	-1,416
R_ENGMAP	150	P1820000	Minor UG Addns (CID)	-96
R_ENGMAP				-180
R_ENGSRE	*Supply	*Supply	Labor Supply	2,080
R_ENGSRE	107	NPRZZZZZ	System Operation	-280
R_ENGSRE	150	NPRZZZZZ	System Operation	-1,888
R_ENGSRE	150	P0000277	New Kuahua Substation	-27
R_ENGSRE	150	P0000571	CIS Replacement	0
R_ENGSRE	150	P0000713	Dispatch Center Building	0
R_ENGSRE	150	P0000715	Dispatch Boards	-33
R_ENGSRE	150	P0000717	EMS Replacement	-271
R_ENGSRE	150	P0000718	Dispatch Training Simulator	0
R_ENGSRE	150	P0000828	Outage Management System	-9
R_ENGSRE				-428
R_ENGSTF	*Supply	*Supply	Labor Supply	12,480
R_ENGSTF	107	NPRZZZZZ	System Operation	-1,360
R_ENGSTF	150	NPRZZZZZ	System Operation	-11,191
R_ENGSTF	150	P0000277	New Kuahua Substation	-63
R_ENGSTF	150	P0000571	CIS Replacement	0
R_ENGSTF	150	P0000715	Dispatch Boards	-66
R_ENGSTF	150	P0000717	EMS Replacement	-4,107
R_ENGSTF	150	P0000718	Dispatch Training Simulator	-409
R_ENGSTF	150	P0000733	Trns Sub RTU Migration Pgm	-245
R_ENGSTF	150	P0000828	Outage Management System	-1,707
R_ENGSTF	150	P1500000	Misc CM Fac-Op & Ctrl (TD)	-24
R_ENGSTF				-6,692
R_ENGSUP	*Supply	*Supply	Labor Supply	2,080
R_ENGSUP	107	NPRZZZZZ	System Operation	-320
R_ENGSUP	150	NPRZZZZZ	System Operation	-1,930
R_ENGSUP	150	P0000571	CIS Replacement	0
R_ENGSUP				-170
R_INSCRW	*Supply	*Supply	Labor Supply	12,480
R_INSCRW	107	NPRZZZZZ	System Operation	-1,352
R_INSCRW	150	NPRZZZZZ	System Operation	-9,918
R_INSCRW	150	P0000089	Pwr Quality Monitor Install	-90
R_INSCRW	150	P0000277	New Kuahua Substation	-30
R_INSCRW	150	P0000278	Makalapa Substation Prot	-18
R_INSCRW	150	P0000279	Puuloa Substation Prot	-9
R_INSCRW	150	P0000563	Mokuone 46-12KV Substation 1	0
R_INSCRW	150	P0000713	Dispatch Center Building	-308
R_INSCRW	150	P0000715	Dispatch Boards	-159
R_INSCRW	150	P0000716	Telecomm Extensions	0

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
R_INSCRW	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
R_INSCRW	150	P0000939	Waiau CT Separation	-64
R_INSCRW	150	P0000946	KoOlina SS Tsf#1 Install	0
R_INSCRW	150	P0000950	Ocean Point SS Tsf#1 Install	-160
R_INSCRW	150	P1470000	Minor Trans Sub Addns	-494
R_INSCRW	150	P1480000	Minor Dist Sub Addns	-2,862
R_INSCRW	150	P1500000	Misc CM Fac-Op & Ctrl (TD)	-876
R_INSCRW				-7,395
R_INSENG	*Supply	*Supply	Labor Supply	4,160
R_INSENG	107	NPRZZZZZ	System Operation	-608
R_INSENG	150	NPRZZZZZ	System Operation	-3,104
R_INSENG	150	P0000089	Pwr Quality Monitor Install	-24
R_INSENG	150	P0000277	New Kuahua Substation	-30
R_INSENG	150	P0000278	Makalapa Substation Prot	-9
R_INSENG	150	P0000279	Puuloa Substation Prot	-9
R_INSENG	150	P0000563	Mokuone 46-12KV Substation 1	0
R_INSENG	150	P0000717	EMS Replacement	-690
R_INSENG	150	P0000732	Gen Ctrl Unit WAN Upgrades	-100
R_INSENG	150	P0000733	Tms Sub RTU Migration Pgm	-720
R_INSENG	150	P0000833	Mamala Substation	-120
R_INSENG	150	P0000836	Ford Island Substation	-96
R_INSENG	150	P0000837	Makalapa 46kV Brkr Addition	-1,
R_INSENG	150	P0000897	HECO CHP Program	-120
R_INSENG	150	P0000946	KoOlina SS Tsf#1 Install	0
R_INSENG	150	P0000950	Ocean Point SS Tsf#1 Install	-96
R_INSENG	150	P1470000	Minor Trans Sub Addns	-12
R_INSENG	150	P1480000	Minor Dist Sub Addns	-680
R_INSENG				

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
R_OPESPT				-144
R_OPESTF	*Supply	*Supply	Labor Supply	10,400
R_OPESTF	107	NPRZZZZZ	System Operation	-1,624
R_OPESTF	150	NPRZZZZZ	System Operation	-8,856
R_OPESTF	150	P0000571	CIS Replacement	0
R_OPESTF	150	P0000717	EMS Replacement	-738
R_OPESTF	150	P0000718	Dispatch Training Simulator	-192
R_OPESTF				-1,010
R_OPESUP	*Supply	*Supply	Labor Supply	12,480
R_OPESUP	107	NPRZZZZZ	System Operation	-2,064
R_OPESUP	150	NPRZZZZZ	System Operation	-11,616
R_OPESUP	150	P0000571	CIS Replacement	0
R_OPESUP	150	P0000713	Dispatch Center Building	0
R_OPESUP	150	P0000715	Dispatch Boards	-261
R_OPESUP				-1,461
R_RELCRW	*Supply	*Supply	Labor Supply	12,480
R_RELCRW	107	NPRZZZZZ	System Operation	-1,520
R_RELCRW	150	NPRZZZZZ	System Operation	-9,423
R_RELCRW	150	P0000277	New Kuahua Substation	-159
R_RELCRW	150	P0000278	Makalapa Substation Prot	-74
R_RELCRW	150	P0000279	Puuloa Substation Prot	-60
R_RELCRW	150	P0000563	Mokuone 46-12KV Substation 1	0
R_RELCRW	150	P0000601	Gen Prot Relay Replacement	-200
R_RELCRW	150	P0000820	K1 Main Xfmr Replacement	-160
R_RELCRW	150	P0000829	W4 Main Xfmr Replacement	-100
R_RELCRW	150	P0000830	K1 Aux Xfmr Replacement	-40
R_RELCRW	150	P0000833	Mamala Substation	-234
R_RELCRW	150	P0000836	Ford Island Substation	-762
R_RELCRW	150	P0000837	Makalapa 46kV Brkr Addition	-58
R_RELCRW	150	P0000856	W7 Main Transformer	0
R_RELCRW	150	P0000857	W7 Aux Transformer	0
R_RELCRW	150	P0000864	Iwi 46 kV Sub Ctrl Hse Upgr	0
R_RELCRW	150	P0000895	H8 Main Xfmr Replacement	0
R_RELCRW	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
R_RELCRW	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
R_RELCRW	150	P0000946	KoOlina SS Tsf#1 Install	0
R_RELCRW	150	P0000950	Ocean Point SS Tsf#1 Install	-160
R_RELCRW	150	P0000971	HECO UF LS 2005 Distr	-492
R_RELCRW	150	P0000972	HECO UF LS 2005 Transmission	-612
R_RELCRW	150	P0000990	Waiau-Makalapa FO Replacemen	0
R_RELCRW	150	P0000991	Airport-Makalapa Fiber Repla	0
R_RELCRW	150	P1470000	Minor Trans Sub Addns	-1,090
R_RELCRW	150	P1480000	Minor Dist Sub Addns	-1,002
R_RELCRW	150	P1680000	Tsf & Equip Pur/Svc (CID)	0
R_RELCRW	150	P1820000	Minor UG Addns (CID)	0
R_RELCRW				-3,666
R_RELENG	*Supply	*Supply	Labor Supply	4,160
R_RELENG	107	NPRZZZZZ	System Operation	-504
R_RELENG	150	NPRZZZZZ	System Operation	-3,112
R_RELENG	150	P0000277	New Kuahua Substation	-159
R_RELENG	150	P0000278	Makalapa Substation Prot	-74
R_RELENG	150	P0000279	Puuloa Substation Prot	-42
R_RELENG	150	P0000563	Mokuone 46-12KV Substation 1	0
R_RELENG	150	P0000571	CIS Replacement	0
R_RELENG	150	P0000601	Gen Prot Relay Replacement	-220
R_RELENG	150	P0000820	K1 Main Xfmr Replacement	-160
R_RELENG	150	P0000830	K1 Aux Xfmr Replacement	-40
R_RELENG	150	P0000833	Mamala Substation	-120

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
R_RELENG	150	P0000836	Ford Island Substation	-160
R_RELENG	150	P0000837	Makalapa 46kV Brkr Addition	-8
R_RELENG	150	P0000856	W7 Main Transformer	0
R_RELENG	150	P0000857	W7 Aux Transformer	0
R_RELENG	150	P0000897	HECO CHP Program	-120
R_RELENG	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
R_RELENG	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
R_RELENG	150	P0000939	Waiau CT Separation	-144
R_RELENG	150	P0000946	KoOlina SS Tsf#1 Install	0
R_RELENG	150	P0000950	Ocean Point SS Tsf#1 Install	-80
R_RELENG	150	P0000971	HECO UF LS 2005 Distr	-108
R_RELENG	150	P0000972	HECO UF LS 2005 Transmission	-36
R_RELENG	150	P1470000	Minor Trans Sub Addns	-204
R_RELENG	150	P1480000	Minor Dist Sub Addns	-212
R_RELENG	150	P9631000	MECO Maalaea 18	0
R_RELENG				-1,343
R_RELSUP	*Supply	*Supply	Labor Supply	2,080
R_RELSUP	107	NPRZZZZZ	System Operation	-252
R_RELSUP	150	NPRZZZZZ	System Operation	-1,548
R_RELSUP	150	P0000277	New Kuahua Substation	-27
R_RELSUP	150	P0000278	Makalapa Substation Prot	-21
R_RELSUP	150	P0000279	Puuloa Substation Prot	-42
R_RELSUP	150	P0000563	Mokuone 46-12KV Substation 1	0
R_RELSUP	150	P0000642	C&I Direct Load Control Program	-100
R_RELSUP	150	P0000833	Mamala Substation	-20
R_RELSUP	150	P0000836	Ford Island Substation	-80
R_RELSUP	150	P0000837	Makalapa 46kV Brkr Addition	-8
R_RELSUP	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
R_RELSUP	150	P0000946	KoOlina SS Tsf#1 Install	0
R_RELSUP	150	P0000950	Ocean Point SS Tsf#1 Install	-80
R_RELSUP	150	P0000971	HECO UF LS 2005 Distr	-36
R_RELSUP	150	P0000972	HECO UF LS 2005 Transmission	-84
R_RELSUP	150	P1470000	Minor Trans Sub Addns	-12
R_RELSUP	150	P1480000	Minor Dist Sub Addns	-33
R_RELSUP				-263
R_SUBCRW	*Supply	*Supply	Labor Supply	64,480
R_SUBCRW	107	NPRZZZZZ	System Operation	-9,108
R_SUBCRW	150	NPRZZZZZ	System Operation	-42,463
R_SUBCRW	150	P0000089	Pwr Quality Monitor Install	-72
R_SUBCRW	150	P0000277	New Kuahua Substation	-4,600
R_SUBCRW	150	P0000278	Makalapa Substation Prot	-810
R_SUBCRW	150	P0000279	Puuloa Substation Prot	-279
R_SUBCRW	150	P0000433	GE Type U Bushing Repl	-224
R_SUBCRW	150	P0000563	Mokuone 46-12KV Substation 1	0
R_SUBCRW	150	P0000733	Tms Sub RTU Migration Pgm	-1,560
R_SUBCRW	150	P0000774	Kukui Gardens Conversion	0
R_SUBCRW	150	P0000820	K1 Main Xfmr Replacement	-600
R_SUBCRW	150	P0000829	W4 Main Xfmr Replacement	-320
R_SUBCRW	150	P0000830	K1 Aux Xfmr Replacement	-360
R_SUBCRW	150	P0000833	Mamala Substation	-1,700
R_SUBCRW	150	P0000836	Ford Island Substation	-5,219
R_SUBCRW	150	P0000837	Makalapa 46kV Brkr Addition	-1,478
R_SUBCRW	150	P0000856	W7 Main Transformer	0
R_SUBCRW	150	P0000857	W7 Aux Transformer	0
R_SUBCRW	150	P0000864	Iwi 46 kV Sub Ctrl Hse Upgr	0
R_SUBCRW	150	P0000895	H8 Main Xfmr Replacement	0
R_SUBCRW	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
R_SUBCRW	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
R_SUBCRW	150	P0000939	Waiau CT Separation	-1,056

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
R_SUBCRW	150	P0000946	KoOlina SS Tsf#1 Install	0
R_SUBCRW	150	P0000950	Ocean Point SS Tsf#1 Install	-1,440
R_SUBCRW	150	P0000971	HECO UF LS 2005 Distr	-1,056
R_SUBCRW	150	P0000972	HECO UF LS 2005 Transmission	-972
R_SUBCRW	150	P1470000	Minor Trans Sub Addns	-2,724
R_SUBCRW	150	P1480000	Minor Dist Sub Addns	-1,854
R_SUBCRW	150	P1500000	Misc CM Fac-Op & Ctrl (TD)	-420
R_SUBCRW	150	P1510000	Misc OH Svc & Extn (CID)	-12
R_SUBCRW	150	P1580000	Minor OH Dist Addn (CID)	-32
R_SUBCRW	150	P1700000	Misc UG Svc & Extn (CID)	-948
R_SUBCRW	150	P1820000	Minor UG Addns (CID)	-168
R_SUBCRW				-14,995
R_SUBENG	*Supply	*Supply	Labor Supply	4,160
R_SUBENG	107	NPRZZZZZ	System Operation	-588
R_SUBENG	150	NPRZZZZZ	System Operation	-3,420
R_SUBENG	150	P0000277	New Kuahua Substation	-9
R_SUBENG	150	P0000278	Makalapa Substation Prot	-3
R_SUBENG	150	P0000279	Puuloa Substation Prot	-3
R_SUBENG	150	P0000563	Mokuone 46-12KV Substation 1	0
R_SUBENG	150	P0000571	CIS Replacement	0
R_SUBENG	150	P0000833	Mamala Substation	-20
R_SUBENG	150	P0000836	Ford Island Substation	-36
R_SUBENG	150	P0000837	Makalapa 46kV Brkr Addition	-8
R_SUBENG	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
R_SUBENG	150	P0000946	KoOlina SS Tsf#1 Install	0
R_SUBENG	150	P0000950	Ocean Point SS Tsf#1 Install	-36
R_SUBENG	150	P1470000	Minor Trans Sub Addns	-12
R_SUBENG	150	P1480000	Minor Dist Sub Addns	-39
R_SUBENG				-14
R_SUBPLN	*Supply	*Supply	Labor Supply	4,160
R_SUBPLN	107	NPRZZZZZ	System Operation	-588
R_SUBPLN	150	NPRZZZZZ	System Operation	-3,204
R_SUBPLN	150	P0000089	Pwr Quality Monitor Install	-6
R_SUBPLN	150	P0000277	New Kuahua Substation	-9
R_SUBPLN	150	P0000278	Makalapa Substation Prot	-9
R_SUBPLN	150	P0000279	Puuloa Substation Prot	-9
R_SUBPLN	150	P0000563	Mokuone 46-12KV Substation 1	0
R_SUBPLN	150	P0000833	Mamala Substation	-30
R_SUBPLN	150	P0000836	Ford Island Substation	-111
R_SUBPLN	150	P0000837	Makalapa 46kV Brkr Addition	-8
R_SUBPLN	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
R_SUBPLN	150	P0000946	KoOlina SS Tsf#1 Install	0
R_SUBPLN	150	P0000950	Ocean Point SS Tsf#1 Install	-111
R_SUBPLN	150	P1470000	Minor Trans Sub Addns	-12
R_SUBPLN	150	P1480000	Minor Dist Sub Addns	-75
R_SUBPLN				-12
R_SUBSUP	*Supply	*Supply	Labor Supply	4,160
R_SUBSUP	107	NPRZZZZZ	System Operation	-588
R_SUBSUP	150	NPRZZZZZ	System Operation	-2,928
R_SUBSUP	150	P0000089	Pwr Quality Monitor Install	-6
R_SUBSUP	150	P0000563	Mokuone 46-12KV Substation 1	0
R_SUBSUP	150	P0000833	Mamala Substation	-72
R_SUBSUP	150	P0000836	Ford Island Substation	-111
R_SUBSUP	150	P0000837	Makalapa 46kV Brkr Addition	-8
R_SUBSUP	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
R_SUBSUP	150	P0000924	Kamoku 46kV UG Alt Phase 2	0
R_SUBSUP	150	P0000939	Waiau CT Separation	-30
R_SUBSUP	150	P0000946	KoOlina SS Tsf#1 Install	0
R_SUBSUP	150	P0000950	Ocean Point SS Tsf#1 Install	-111

» budget manager: 1 Resource Leveling Sum...

_LbrClass	_EE	_Proj	Project	FY05
R_SUBSUP	150	P0000971	HECO UF LS 2005 Distr	-24
R_SUBSUP	150	P0000972	HECO UF LS 2005 Transmission	-36
R_SUBSUP	150	P1470000	Minor Trans Sub Addns	-300
R_SUBSUP	150	P1480000	Minor Dist Sub Addns	-16
R_SUBSUP	150	P1500000	Misc CM Fac-Op & Ctrl (TD)	-24
R_SUBSUP	150	P1510000	Misc OH Svc & Extn (CID)	0
R_SUBSUP	150	P1820000	Minor UG Addns (CID)	0
R_SUBSUP				-94
R_TECSPT	*Supply	*Supply	Labor Supply	2,080
R_TECSPT	107	NPRZZZZZ	System Operation	-252
R_TECSPT	150	NPRZZZZZ	System Operation	-1,560
R_TECSPT	150	P0000563	Mokuone 46-12KV Substation 1	0
R_TECSPT	150	P0000833	Mamala Substation	-64
R_TECSPT	150	P0000836	Ford Island Substation	-121

[redacted]

R_TECSPT	150	P0000922	Kamoku 46kV UG Alt Phase 1	0
R_TECSPT	150	P0000946	KoOlina SS Tsf#1 Install	0
R_TECSPT	150	P0000950	Ocean Point SS Tsf#1 Install	-121
R_TECSPT	150	P0000971	HECO UF LS 2005 Distr	-12
R_TECSPT	150	P0000972	HECO UF LS 2005 Transmission	-24
R_TECSPT				-90
W_JRPLNR	150	P0000123	Corr (Inc Emg) OH Dist Rpl	-62
W_JRPLNR				-62
				-53,517

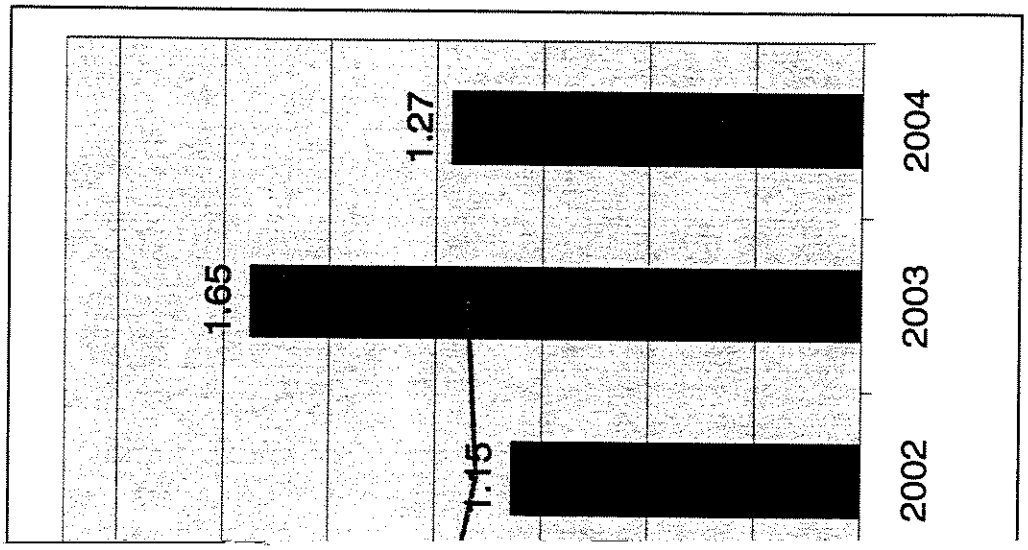
CA-IR-246

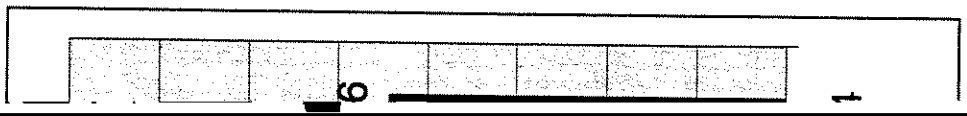
Ref: HECO-818 through HECO-821 & HECO 823 (T&D Reliability).

Please update these charts with actual interruption/ reliability statistics and O&M data for calendar year 2004.

HECO Response:

Please refer to pages 2 to 5 to this response for charts updated with actual interruption/reliability statistics and O&M data for calendar year 2004.

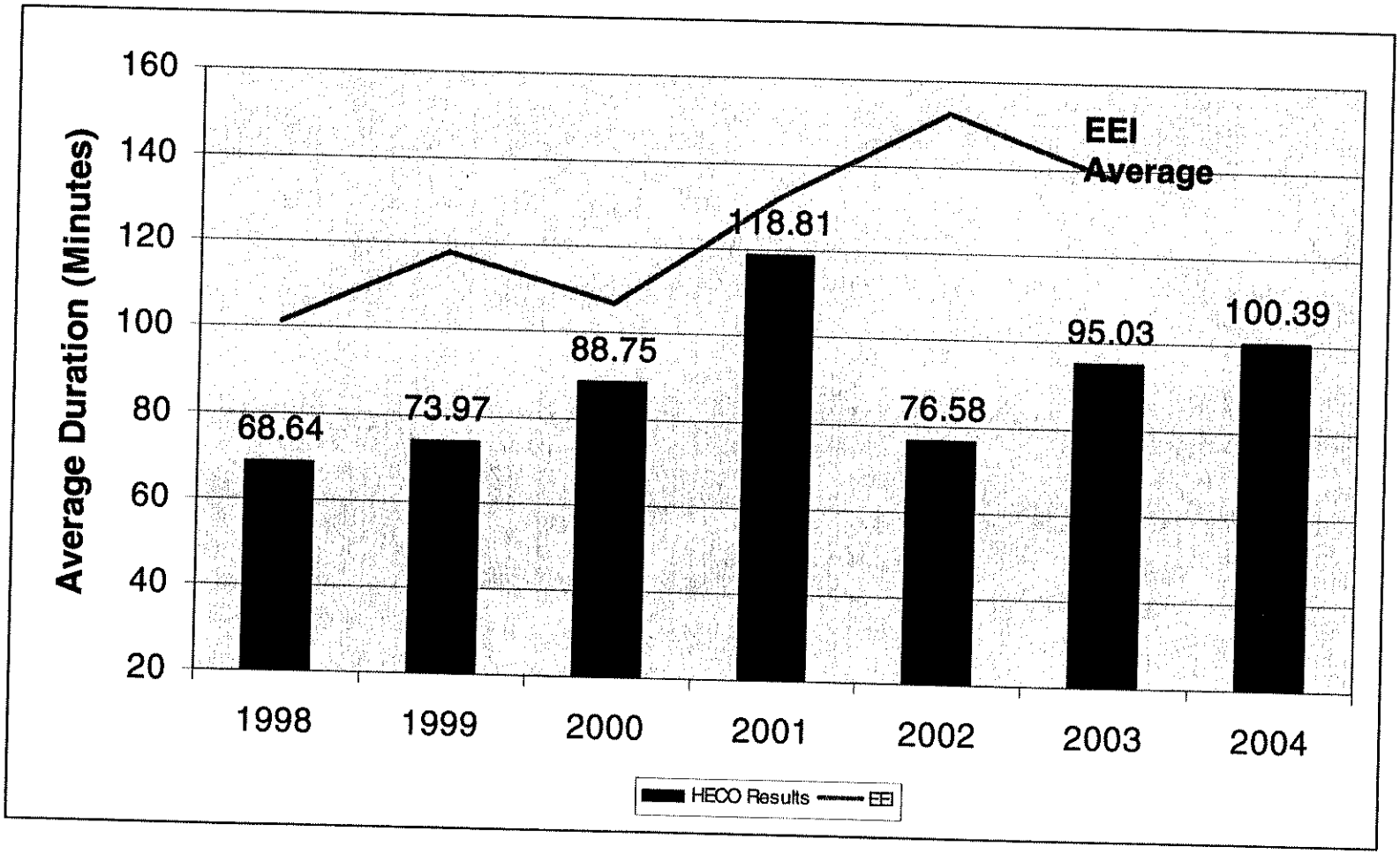

ators
Frequency)
1.27
1.65
1.15
2004
2003
2002



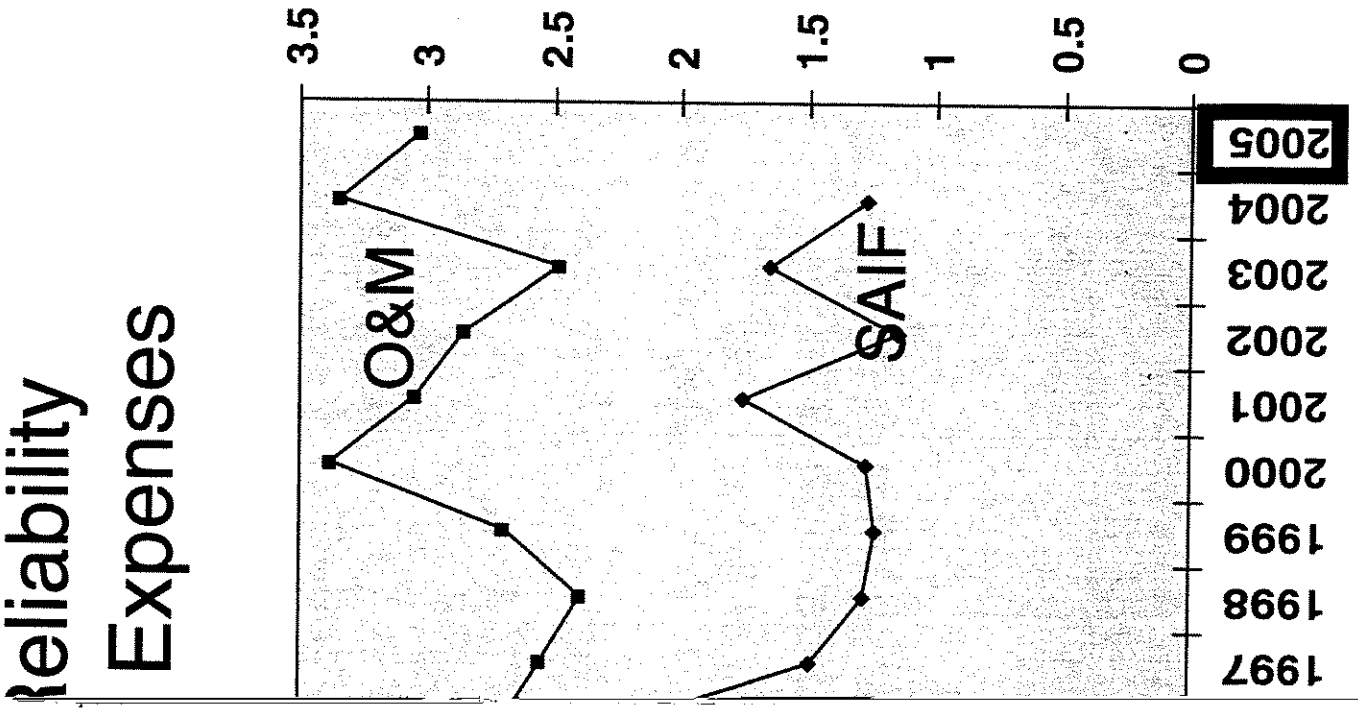
Reliability Indicators

SAID

(System Average Interruption Duration)



Lower is better


Reliability
Expenses
O&M
SAIF
3.5
3
2.5
2
1.5
1
0.5
0
2005
2004
2003
2002
2001
2000
1999
1998
1997

CA-IR-247

Ref: HECO T-8, Page 11 (T&D Planning).

Please provide documentation of the inspection cycles, work plans and system requirements for the 2005 forecast test year.

HECO Response:

Please refer to Attachment A – "C&M Maintenance Plan Guidelines" for documentation regarding Construction & Maintenance (C&M) department's plan for performing inspections of the Transmission & Distribution (T&D) system. As the "C&M Maintenance Plan Guidelines" is a voluminous document, only the applicable section has been included. As noted in the Planning document, inspections of the Transmission system will be performed on a quarterly basis, in conjunction with an annual infrared and corona inspection. Inspections completed as part of the test & treat program will help ensure that the entire system is inspected on a 5-year cycle. Full-time inspectors, as well as overhead crews, are utilized to inspect high-risk circuits. In addition, please refer to Attachment B for detailed descriptions and costs associated with C&M programs that address system requirements.

In general, equipment-related planned work schedules, number of units and frequency of maintenance are factors that form the basis of system requirements. The forecasts include hours for 1) scheduled equipment maintenance (predictive/preventive), 2) equipment failures (corrective) and 3) capital work – which are then compared to available supply. Please refer to CA-IR-1, HECO T-8 for documentation, assumptions and work schedules based on man hours for the various divisions of System Operation as noted below.

Division	Attach #	Pages
Communications (RC)	K-1	1-21
Operations (RD)	K-2	1
Operating Engineering (RE)	K-3	1-60
Instrument & Control (RI)	K-4	1-5
Relay (RR)	K-5	1-12
Substation (RS)	K-6	1-8
Construction Services (RX)	K-6	1, 8-10

C&M Maintenance Plan Guidelines

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1) Introduction

2) Objective

3) Inspections

4) Training

5) Test and Treat Program

6) Inspection Prioritizing

7) Work Packet Prioritizing/Classification

8) Inspection/Work Packet Queries

9) Planning Process

10) Maintenance Repair Methods

11) Records Management

12) Auditing

13) Project Prioritization

14) Appendixes
    a. Appendix A- HECO Inspection Guidelines
    b. Appendix B- DIDS Instruction Manual
    c. Appendix C- Test and Treat Specifications
    d. Appendix D-Problem Severity Number Evaluation and Design Features

f. Records Management

C&M Maintenance Plan Guidelines

1) Introduction

The content of this reference manual will provide information and guidelines to assist HECO personnel in inspecting and prioritizing work on the Transmission & Distribution (T&D) system. Contained in this manual will be references to training, prioritizing, inspection cycles, etc. with supporting material in the Appendices. This manual will be reviewed annually and updated as needed. Updates may include modifications in the procedures or practices established due to new technologies, change in work practices, codes, specifications, etc.

2) Objective

There are two objectives to this manual. The first objective of this manual is to provide HECO a guide to maintain a safe and reliable Transmission & Distribution system. The second objective is to extend the service life of the T&D assets.

3) Inspections

Inspections on the HECO system will be done by HECO personnel and qualified contractors. Cycles for these inspections will vary depending on the type of equipment being inspected as well as the location.

HECO inspectors will primarily do circuit patrols via ground transportation for most Distribution and Sub-transmission circuits. The circuits to be inspected will be determined by the use of data, collected from System Operation, C&M and the Engineering departments. This circuit list will continually be re-evaluated and updated as priorities and circumstances dictate.

The Transmission system is inspected quarterly (4x/yr) each year via helicopter and ground patrol. An infrared/corona inspection will also be done once a year on the entire system, as well as an aerial inspection using high resolution digital cameras/video. All records are kept with the C&M Transmission & Distribution engineer.

C&M also uses contractors to perform Test & Treat inspections on HECO assets

mostly dealing with structures. The Test & Treat program allows HECO to inspect T&D

of Oahu into discreet grids. Using this grid structure to track inspections, HECO will ensure that the entire island is covered in a 3-5 year cycle.

C&M Maintenance Plan Guidelines

4) Training

Trained personnel are required to perform inspections. To obtain a proficient level of training for each inspector, C&M has an Overhead Line Inspector Training program. Below is an outline of this program.

Initial Orientation (Classroom – 2 days)

During this session, the training coordinator or representative will review the following with the inspector(s).

- Role and Responsibilities of the Inspector
- Fundamentals of Inspection (Schedule/Frequency, Inspection Guide)
- Proper timing and completion of checklists and forms
- Work Management training
- DIDS training

Included in this manual are inspection guidelines for inspecting structures in the field. **See Appendix A.**

As outlined above, all inspectors will receive DIDS training. This training will comprise of fundamental training in basic computer skills, digital camera operations, Field View (electronic map) familiarization, and thorough review of the DIDS training manual. The DIDS training manual provides some guidelines on how and what to inspect, but focuses primarily on inputting/downloading the field information to and from the laptop. **See Appendix B for above Training material.**

There will also be on the job training (OJT) for the inspectors on a rotational basis.

- Initial Phase (term to be determined based on trainee's experience: Shadow incumbent inspector, observing and learning. During this phase, trainee will follow and be exposed to specific inspection areas to ensure diverse exposure.
- Second Phase (term to be determined based on trainee's experience: Assume inspection responsibilities, with incumbent inspector monitoring and observing performance.

During this period, specific training may be identified and implemented to supplement learning.

Trainees will receive monthly performance evaluations.

Completion of training will be based on full completion of a training checklist.

C&M Maintenance Plan Guidelines

5) Test and Treat Program

HECO uses independent contractors to Test & Treat all wood, steel, concrete and fiberglass structures. Detailed specific guidelines are provided in the Test and Treat Specification, CS8901-3. This specification provides detailed information on how to inspect the structure, what information is required, in what format, emergency response guidelines, required documentation, treatments to be used, how to classify a pole as a replacement or restoration candidate, when to classify a pole as acceptable, and other related information. **See Appendix C**

HECO's guideline is to have a 3-5 year inspection cycle utilizing Field View's grid system to cover the entire island. This work will be done using contractors with pesticide licenses. All work found from these inspections will then be prioritized with the work identified from the HECO inspections by the Problem Severity Number given to inspections and work packets described in a section 6 and 7.

6) Inspection Prioritizing

All inspections go through a "triage" (review) evaluation. Triaging is the review of an inspection by either a Resource Planner, Supervisor or Superintendent to. Through this triaging process, the inspection is classified as either needing work done or no work is

- All PSEs for inspections will be based on only the inspector's input, and cannot be modified or changed.

C&M Maintenance Plan Guidelines

7) Work Packet Prioritizing/Classification

To ensure that the highest priority work is completed first, a Work Packet Severity Number was also created. The Work Packet PSE originates from the Inspection PSE. During the inspection triaging, if work is required, a Work Packet is created and can be further classified by the "reviewer" providing additional input. This allows the "reviewer" to increase or decrease the PSE for the Work Packet, as well as provide additional information to classify work for queries. **See Appendix D** for details of the Problem Severity Number Evaluation and Design features

- It is C&M's policy to review all inspections through a Triage process, if work is needed, a Work Packet and created. This Work Packet is then further reviewed to modify the Inspection PSE into a Work Packet PSE.
- Any modifications performed during the review are captured in an "audit" trail and is noted in the reviewer's notes.
- All Inspection priorities, which are over ridden, require supporting documentation in the "reviewer's" comment section which is completed during the triaging of the inspection.
- It C&M's policy to consider the Work Packets with highest Work Packet PSE first when scheduling work.

8) Inspection/Work Packet Queries

All inspections and Work Packets have queries via a web browser to search by PSE, date, location, base yard, inspector priority, work packet severity, pole number, grid, work classification, shell thickness, type of work, etc. These options allow C&M and

C&M Maintenance Plan Guidelines

10) Maintenance Repair Methods

When poles are in need of maintenance the following guidelines are used:

- In general, poles are below standard when the shell thickness is below 2". The pole can be replaced to bring the pole back up to standard. Presently

- Arrow pointing to colored dots
-

C&M Maintenance Plan Guidelines

- Text should indicate any discrepancies between Web View print and actual field conditions. (i.e.: incorrect pole location, incorrect TSF information or location etc.)

Records Management cont.

- Property Units:
  - Name of circuit if it is a Sub-Transmission or Transmission ckt.
  - Correct job location
  - Correct PWO
  - Units removed match what is shown in the photo
  - Proper information circled as needed
  - Date pole or anchor installed (taken from JP notice)
  - Estimator's name
  - Crewleader's name
  - Date completed
- Pole Erection and Removal Report - Should show the following information correctly:
  - PWO, Install and Removal Workorder numbers.
  - JP application number
  - Number of poles and anchors
  - Information regarding who delivered and/or set the pole & installed termimesh.
  - Name of crewleader and date completed
  - Name of contractor and date complete
  - What level pole topped to, crewleader and date
  - Any other pertinent information
- Supervisor will re-classify work packet as **Work Packet Closed**.
- Work packet will be "checked in" when completed with review and update.
- RP will review in DIDS and send a notice to Accounting & JP so paperwork can be processed.

For Work Packet status please see **Appendix F, Records Management Information.**

C&M Maintenance Plan Guidelines

12) Auditing

When work is identified and work packets are created, all changes to the work packet are captured in a detailed audit trail that cannot be altered. This includes all forms that are created and or modified and notifications to other personal.

Inspections cannot be altered and it is C&M's policy to not alter the "inspection" data. This may only occur when data is found to be grossly in error. If changes are needed, only the DIDS administrators can make the changes, but all changes must be documented in the reviewer's notes. An example of this would be if the "grid" number was entered incorrectly, or where the inspector populated the wrong field information.

Inspections cannot be modified in any way. Work Packets can be modified. To track all changes to a Work Packets, an audit trail program was created. The user of DIDS cannot modify this audit trail.

13) Project Prioritization

All projects that are created that are developed from the Engineering department are prioritized using the P2 EPRI model. This is a program that has formal guidelines and standards that take into account risks/benefits in prioritizing.

14) Appendices

a. Appendix A-Heco Inspection Guidelines
b. Appendix B-DIDS Inspection Manual
c. Appendix C-Test and Treat Specifications
d. Appendix D-PSE Features/Design
e. Appendix E-Restoration Specification
f. Appendix F-Records Management Information

Description of C&M Programs

The purpose of the following programs is to maintain or improve system reliability, power quality and customer satisfaction by restoring service or the system to its prior or an upgraded condition.

P0000120 Corrective overhead transformer replacement program. The purpose of

Description of C&M Programs

undesirable vegetation to ensure easy and safe access for inspections, maintenance and repairs of facilities.

P0000127 – Test and treat wood poles. This program involves the inspection of wood poles by sounding and boring to determine the condition of the poles and then treatment of the poles with insecticide or fungicide. The program will identify and correct any potential damage by termites or wood rot, which will prolong the life of the pole and reduce replacement costs and outages caused by pole failures.

P0000359 – Corrective maintenance of T&D system. The program is to make minor miscellaneous temporary or permanent repairs or adjustments to unsafe equipment that has failed and poses a danger to customers.

P0000360 – Preventive maintenance of T&D system. The program is to make minor miscellaneous planned repairs, replacements or improvements of overhead and underground equipment that has been identified as deteriorated or damage and not up to standard.

P0000361 – Preventive inspection of T&D system. The purpose of the program is the overhead and underground inspections of the transmission and distribution system to identify potential repairs, replacements or improvements of equipment. This program should identify deteriorated and/or broken equipment before it fails and leads to outages.

P0000362 – Corrective inspection of T&D system. The purpose of the program is the corrective inspection to determine the cause of interruptions or outages to improve system reliability and power quality.

P0000740 – PTM switching operations. This program is being created to capture PTM responsibilities not related to a specific program or project, including emergency or accident investigations, minor repairs and trouble calls.

P1789000 – Preventive overhead transformer replacement. The purpose of the program is the planned repairs or replacement of overhead transformers that have been identified due to rusting, potential future overloading conditions or as part of a planned pole replacement/upgrade.

P1793000 – Preventive underground transformer replacement. The purpose of the program is the planned repairs or replacement of underground padmount transformers that have been identified due to rusting, potential future overloading conditions or as part of a planned pole replacement/upgrade.

Description of C&M Programs

P181000 – Preventive miscellaneous cable failure replacement. The purpose of the program is the planned replacement of underground cables that have been identified as needing replacement due to excessive faulting.

P3400000 – Preventive overhead distribution replacements. The purpose of the program is the repair or replacement of overhead distribution poles and associated equipment, including cutouts, aerial cables, conductors and fixtures prior to failure.

P3401000 – Preventive overhead subtransmission replacements. The purpose of the program is the repair or replacement of overhead subtransmission poles and associated equipment, including anchors, conductors and fixtures prior to failure.

P3402000 – Preventive overhead transmission replacements. The purpose of the program is the repair or replacement of overhead transmission poles and associated

*Proj #	Project	Acct Group Descrip	2000 Act	2001 Act	2002 Act	[illegible]ct	2004 Act	2005 Bud	2003 vs 2005	2004 vs 2005
P0000120	Corr OH Transf Rpl	Capital	152,196	322,529	330,159	353,735	455,624	273,875	(79,860)	(181,749)
		O&M	44,286	76,971	190,551	128,679	187,420	169,050	40,371	(18,370)
P0000121	Corr UG Transf Rpl	Capital	97,661	232,553	277,083	491,929	515,665	208,144	(283,785)	(307,521)
		O&M	28,416	91,199	174,099	96,501	135,579	227,586	131,085	92,007
P0000122	Corr Mis Cable Rpl	Capital	148,220	693,822	1,360,432	2,956,008	9,271,182	898,118	(2,057,890)	(8,373,064)
		O&M	58,643	72,536	18,183	104,177	257,406	270,696	166,519	13,290
P0000123	Corr OH Dist Rpl	Capital	643,922	1,107,478	1,332,337	2,241,608	3,073,035	686,686	(1,554,922)	(2,386,349)
		O&M	139,807	267,089	281,482	331,769	627,447	515,966	184,197	(111,481)
P0000124	Corr OH Subtrn Rpl	Capital	250,996	228,169	387,604	759,839	266,665	417,947	(341,892)	151,282
		O&M	51,329	43,219	55,371	120,400	110,388	122,063	1,663	11,675
P0000125	Corr OH Trans Rpl	Capital	-	-	2,212	-	-	-	-	-
		O&M	-	-	522	-	-	-	-	-
P0000359	Corrective Maintenance	O&M	-	3,467,095	4,421,216	2,476,398	4,047,311	2,349,159	(127,239)	(1,698,152)
P0000362	Corrective Inspection	O&M	-	5,310	10,231	151,462	(2,095)	729	(150,733)	2,824
P0000126	Vegetation Management	O&M	1,866,394	1,721,057	1,809,762	2,384,558	2,289,940	2,088,474	(296,084)	(201,466)
P0000127	Test & Treat Wood Poles	Capital	-	-	-	-	-	-	-	-
		O&M	395,036	77,950	194,321	204,857	257,694	347,907	143,050	90,213
P0000360	Preventive Maintenance	O&M	-	778,021	757,944	373,962	117,500	695,685	321,723	578,185
P0000361	Preventive Inspection	O&M	-	1,142,647	1,294,526	1,533,435	2,130,278	1,849,125	315,690	(281,153)
P0000740	PTM Switching Operations	O&M	-	-	-	1,307,852	1,980,646	3,069,216	1,761,364	1,088,570
P1260000	C&M Recon UG Dist Cable	Capital	94,325	1,298,904	1,284,840	1,380,002	182,713	-	(1,380,002)	(182,713)
P1789000	Preventive OH Transf Repl	Capital	221,460	284,146	222,636	115,498	102,915	549,758	434,260	446,843
		O&M	117,808	126,012	100,395	44,908	31,590	122,020	77,112	90,430
P1793000	Preventive UG Transf Repl	Capital	192,418	319,561	159,598	340,521	156,015	774,661	434,140	618,646
		O&M	78,571	183,359	84,784	70,629	99,404	81,222	10,593	(18,182)
P1810000	Prev Misc Cable Rpl	Capital	2,562,200	1,241,216	1,682,397	815,760	1,775,405	3,128,792	2,313,032	1,353,387
		O&M	157,082	145,885	174,195	364,281	12,443	99,454	(264,827)	87,011
P3400000	Prev OH Dist Repl	Capital	4,388,876	4,689,034	333,571	(195,062)	444,931	1,350,660	1,545,722	905,729
		O&M	1,174,651	1,144,463	1,031,761	490,672	532,907	980,670	489,998	447,763
P3401000	Prev OH Subtrans Repl	Capital	2,514,408	2,646,469	2,142,584	951,934	937,230	1,933,579	981,645	996,349
		O&M	363,252	362,293	444,654	169,755	153,086	231,390	61,635	78,304
P3402000	Prev OH Trans Repl	Capital	523,054	58,402	109,019	1,103,859	510,477	1,377,500	273,641	867,023
		O&M	42,553	3,974	6,535	144,042	170,508	56,490	(87,552)	(114,018)
		TOTAL	16,307,564	22,831,363	20,675,004	21,813,968	30,831,309	24,876,622	3,062,654	(5,954,687)
		Capital	11,789,736	13,122,283	9,624,472	11,315,631	17,691,857	11,599,720	284,089	(6,092,137)
		O&M	4,517,828	9,709,080	11,050,532	10,498,337	13,139,452	13,276,902	2,778,565	137,450

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ATTACHMENT B
PAGE 4 OF 4

CA-IR-248

Ref: HECO-807 (T&D O&M).

Please provide the actual amount of contract labor for calendar years 2000-2004 and the 2005 test year forecast. If the information is contained in the exhibits or work papers previously provided by HECO, please provide a pinpoint reference to the responsive data.

HECO Response:

Please refer to tables below for actual contract labor for calendar years 2000 – 2004 and 2005 test year estimate.

Transmission O&M

	Expense Element					
	501	502	505	506	508	Total
2000 Actual	739,348	-	447,026	13,062	9,831	1,209,267
2001 Actual	260,435	-	554,211	-	80,493	895,139
2002 Actual	315,326	3,980	593,034	80,226	9,226	1,001,792
2003 Actual	261,847	17,396	907,955	23,364	28,103	1,238,665
2004 Actual	915,159	-	589,573	143,000	8,287	1,656,019
2005 Budget	999,758	-	46,999	97,500	10,020	1,154,277

Distribution O&M

	Expense Element					
	501	502	505	506	508	Total
2000 Actual	2,083,189	-	1,532,795	3,565	345,409	3,964,958
2001 Actual	756,525	-	2,270,584	236	188,305	3,215,650
2002 Actual	887,705	-	2,093,839	46,702	46,707	3,074,953
2003 Actual	832,334	2,224	2,644,071	43,738	87,576	3,609,943
2004 Actual	2,890,971	-	705,656	153,815	35,162	3,785,604
2005 Forecast	2,807,997	-	608,131	103,532	83,100	3,602,760

Expense element 501 represents general outside services. Examples of activities that are costed under this expense element include, but are not limited to, Vegetation Management, traffic control, test and treatment of poles, and miscellaneous substation repairs. Expense element 502

represents legal outside services, which includes any legal fees other than those for workers compensation and liability claims. Expense element 505 represents outside contractor costs incurred for the construction of facilities. Examples under expense element 505 include breaking and repairing concrete sidewalks to expose direct buried cables and digging of pole holes. Expense element 506 consists of costs for engineering consultant services and costs associated with the engineering study and design of facilities. Expense element 508 represents costs for environmental consulting and services. An example of an activity under expense element 508 is the disposal of hazardous materials.

CA-IR-249

Ref: HECO T-13, Pages 13-15 (Standard Labor Rates).

The referenced testimony generally describes the Standard Labor Rates used by HECO. Please provide the following:

a. Please provide a copy of the documentation (hours and dollars), in both hard copy and spreadsheet file format (with all formula, cell references and file links intact), supporting the development of the Standard Labor Rates used in the 2005 test year forecast.

b. If not contained in the response to subpart (a) above, please provide a breakdown of the labor dollars (2003 base year) between regular pay and overtime/premium pay by labor group.

c. Referring to the information provided in response to subpart (b) above, please explain the treatment of nonproductive pay (e.g., vacation, holiday, sick leave, etc.) in quantifying the standard labor rates.

d. If not contained in the response to subpart (a) above, please provide a breakdown of the labor hours (2003 base year) between regular and overtime/premium hours by labor group.

e. Referring to the information provided in response to subpart (d) above, please explain the treatment of nonproductive hours (e.g., vacation, holiday sick leave, etc.) in quantifying the standard labor rates.

f. If the responses to subparts (c) and (e) above indicate that the standard labor rates were based on productive hours and dollars, please provide the unproductive hours and dollars in 2003 (base year) and 2005 test year forecast by labor group.

HECO Response:

a. A printed copy of the supporting documentation for the development of the standard labor rates used in the 2005 test year is provided on pages 3 through 8 of this response. The electronic file with the requested information will be provided under separate transmittal.

b. The information requested is not available since straight time and overtime dollars are not identifiable in the distributed labor dollars which are used in the development of the 2005 test year standard labor rates. Straight time and overtime information is only available in payroll data which is not being provided since this payroll data is not comparable to the

distributed labor information used in the development of standard labor rates.

c. Nonproductive pay is not used in the development of standard labor rates.

d. The information requested is not available since straight time and overtime hours are not identifiable in the productive labor hours which are used in the development of the 2005 test year standard labor rates. Straight time and overtime information is only available in payroll data which is not being provided since this payroll data is not comparable to the distributed labor information used in the development of standard labor rates.

e. Nonproductive hours are not used in the development of standard labor rates.

f. The requested information is not available. Nonproductive hours and dollars information is not available by labor group.

Calculation of the 2005 standard labor rates

1) The latest recorded annual information for distributed labor dollars (column A on pages 4 and 5) and productive labor hours (column B on pages 4 and 5) was obtained.

2) Generally, merit overtime is not compensated, therefore, the 2003 base hours were adjusted by the average merit overtime factors (defined in Notes 1 and 2 on pages 4 and 5) so that the change in merit unpaid overtime hours (2003 to 2005) does not significantly impact the 2005 budget labor dollars; i.e., the recorded productive hours (column B on pages 4 and 5) for the merit labor classes were adjusted to remove an average recorded overtime factor (column C on pages 4 and 5) and apply the average budget overtime factor (column D on pages 4 and 5) to result in the adjusted base hours (column E on pages 4 and 5).

3) The 2003 base rates (column F on pages 4 and 5) were then calculated by dividing the latest recorded annual information for distributed labor dollars (column A on pages 4 and 5) by the adjusted base hours (column E on pages 4 and 5).

4) These 2003 base rates (column F on pages 4 and 5) were put in the 2003 Base Rate column on pages 6 and 7.

5) Then, the appropriate 2005 weighted average increase factors from page 8 (1.028 for bargaining unit and 1.059 for merit labor) were applied to the 2003 base rates to result in the 2005 standard labor rates.

Std lbr rates 2005.xls

	A	B	C	D	E = B / C × D	F = A / E
	2003 Data		(Note 1)	Note 2)		
	Data		2003 recd	2005 budget	2003	2003
LAB_COST_CL_L	Amount	Hours	Average merit unpaid OT factor	Average merit unpaid OT factor	adj hours	base rate
AIRSCI	309,184.89	8,847.00	1.07	1.10	9,095.05	33.99
AIRSPE	31,305.83	1,296.00	0	0	1,296.00	24.16
BUOC	5,577,691.27	248,585.97	0	0	248,585.97	22.44
BUOCB	315,193.67	14,543.58	0	0	14,543.58	21.67
BUOCED	403,296.51	19,181.50	0	0	19,181.50	21.03
BUOCI	218,103.26	10,306.25	0	0	10,306.25	21.16
BUOCW	224,770.25	9,622.00	0	0	9,622.00	23.36
BUOCY	65,937.65	3,500.75	0	0	3,500.75	18.84
BUTC	2,950,907.34	114,966.31	0	0	114,966.31	25.67
BUTCED	604,378.54	19,716.25	0	0	19,716.25	30.65
BUTCI	6,825,428.98	212,322.18	0	0	212,322.18	32.15
CHEMST	326,154.50	11,221.25	1.07	1.10	11,535.86	28.27
COMELE	355,675.08	11,669.00	0	0.00	11,669.00	30.48
COMENG	63,512.05	1,859.50	1.07	1.10	1,911.64	33.22
COMSUP	70,126.70	2,032.50	1.07	1.10	2,089.49	33.56
CONCRW	208,391.94	5,975.25	0	0.00	5,975.25	34.88
CONSUP	25,156.11	664.75	1.07	1.10	683.39	36.81
CUDGNR	121,097.13	3,591.50	1.07	1.10	3,692.20	32.80
CUENGR	219,090.02	6,475.00	1.07	1.10	6,656.54	32.91
CUPLNR	144,346.25	5,076.17	0	0.00	5,076.17	28.44
DEPLNR	186,763.65	5,752.00	0	0.00	5,752.00	32.47
E	1,194,436.14	24,046.00	1.08	1.09	24,268.65	49.22
E-B	92,384.21	1,964.00	1.08	1.09	1,982.19	46.61
E-ED	195,297.01	3,754.25	1.08	1.09	3,789.01	51.54
E-I	101,882.22	2,126.00	1.08	1.09	2,145.69	47.48
ENGMAP	274,648.44	10,424.84	0	0.00	10,424.84	26.35
ENGSRE	77,068.96	2,063.17	1.07	1.10	2,121.01	36.34
ENGSTF	233,275.97	7,503.25	1.07	1.10	7,713.62	30.24
ENGSUP	47,991.82	1,898.00	1.07	1.10	1,951.21	24.60
E-W	93,666.45	1,817.00	1.08	1.09	1,833.82	51.08
EXEC	2,264,565.41	23,782.00	1.16	1.13	23,166.95	97.75
EXEC2	350,030.70	6,220.75	1.16	1.13	6,059.87	57.76
E-Y	110,534.87	1,812.00	1.08	1.09	1,828.78	60.44
F	828,387.19	19,027.25	1.07	1.10	19,560.72	42.35
FS	2,565,374.32	66,390.22	1.07	1.10	68,251.62	37.59
FS-B	404,291.12	9,002.00	1.07	1.10	9,254.39	43.69
FS-ED	237,191.20	6,278.25	1.07	1.10	6,454.28	36.75
FS-I	395,571.25	8,929.50	1.07	1.10	9,179.86	43.09
FS-W	74,874.45	1,876.50	1.07	1.10	1,929.11	38.81
GENPLN	490,244.74	14,254.50	1.07	1.10	14,654.16	33.45
HPPMNT	492,456.73	14,932.00	0	0.00	14,932.00	32.98
I	2,538,052.83	113,325.13	0	0.00	113,325.13	22.40
I-B	32,829.26	1,705.00	0	0.00	1,705.00	19.25
I-ED	112,111.99	4,070.00	0	0.00	4,070.00	27.55
I-I	68,448.49	3,062.00	0	0.00	3,062.00	22.35
INSCRW	241,169.05	7,703.00	0	0.00	7,703.00	31.31
INSENG	71,140.89	1,969.50	1.07	1.10	2,024.72	35.14
INSSUP	69,683.68	1,992.00	1.07	1.10	2,047.85	34.03
IRP	180,263.36	5,071.83	0	0.00	5,071.83	35.54
I-W	37,572.59	1,774.00	0	0.00	1,774.00	21.18
I-Y	33,449.54	1,828.25	0	0.00	1,828.25	18.30
JPCORD	56,534.72	2,036.83	0	0.00	2,036.83	27.76
JRPLNR	240,194.79	9,649.65	0	0.00	9,649.65	24.89
KPPMNT	1,751,098.23	51,510.25	0	0.00	51,510.25	34.00
MTELEC	358,548.52	12,031.59	0	0.00	12,031.59	29.80
MTENGR	122,388.83	3,683.50	1.07	1.10	3,786.78	32.32
MTSUPV	59,610.01	1,802.00	1.07	1.10	1,852.52	32.18
OHCREW	8,564,973.96	244,002.90	0	0.00	244,002.90	35.10
OPEDIS	630,517.64	18,536.60	0	0.00	18,536.60	34.01
OPESPT	88,315.19	2,209.75	1.07	1.10	2,271.71	38.88
OPESTF	340,249.05	10,090.58	1.07	1.10	10,373.50	32.80

Note 1: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs
Note 2: (Productive hrs + Nonproductive hrs) / 2080 Annual base hrs

Std lbr rates 2005.xls

	A	B	C	D	E = B / C × D	F = A / E
	2003 Data		(Note 1)	Note 2)		
	Data		2003 recd	2005 budget	2003	2003
LAB_COST_CL_L	Amount	Hours	Average merit unpaid OT factor	Average merit unpaid OT factor	adj hours	base rate
OPESUP	414,018.21	11,062.25	1.07	1.10	11,372.41	36.41
PDSUPV	265,022.03	7,376.50	1.07	1.10	7,583.32	34.95
POLICE	378,578.88	15,957.75	0	0.00	15,957.75	23.72
PPDRAF	105,900.16	3,438.17	0	0.00	3,438.17	30.80
PPELEC	314,827.65	10,774.17	1.07	1.10	11,076.25	28.42
PPENGR	561,849.08	18,795.00	1.07	1.10	19,321.96	29.08
PPMECH	488,062.62	13,894.00	1.07	1.10	14,283.55	34.17
PPPLAN	131,845.44	4,220.00	1.07	1.10	4,338.32	30.39
PPPROJ	304,922.68	7,975.00	1.07	1.10	8,198.60	37.19
PPSPVR	303,872.43	8,321.50	1.07	1.10	8,554.81	35.52
PRJMGT	170,913.64	5,652.00	1.07	1.10	5,810.47	29.41
PRJSUP	108,367.69	3,813.00	1.07	1.10	3,919.91	27.65
PROTEC	177,876.72	5,439.00	1.07	1.10	5,591.50	31.81
PTM	1,569,889.18	44,320.28	0	0.00	44,320.28	35.42
RELCRW	366,299.56	11,571.75	0	0.00	11,571.75	31.65
RELENG	144,791.64	3,949.75	1.07	1.10	4,060.49	35.66
RELSUP	61,149.56	1,794.00	1.07	1.10	1,844.30	33.16
RESHER	93,897.44	3,618.00	0	0.00	3,618.00	25.95
SSENG	439,172.18	13,311.00	1.07	1.10	13,684.21	32.09
STRDFT	121,526.80	3,968.67	0	0.00	3,968.67	30.62
STRENG	425,490.68	13,094.50	1.07	1.10	13,461.64	31.61
SUBCRW	1,570,497.88	47,951.53	0	0.00	47,951.53	32.75
SUBDFT	123,546.40	3,840.00	0	0.00	3,840.00	32.17
SUBENG	60,174.64	1,793.00	1.07	1.10	1,843.27	32.65
SUBPLN	119,649.25	3,780.83	1.07	1.10	3,886.84	30.78
SUBSUP	151,642.84	4,558.17	1.07	1.10	4,685.97	32.36
SURVBU	90,952.09	3,573.75	0	0.00	3,573.75	25.45
SURVEY	239,223.70	8,283.00	1.07	1.10	8,515.23	28.09
TC	11,067,093.72	371,710.44	1.07	1.10	382,132.23	28.96
TC-B	49,121.28	1,712.50	1.07	1.10	1,760.51	27.90
TC-ED	625,430.61	21,531.75	1.07	1.10	22,135.44	28.25
TCENGR	176,922.28	5,476.00	1.07	1.10	5,629.53	31.43
TC-I	512,883.15	16,038.00	1.07	1.10	16,487.66	31.11
TCS	683,197.57	23,362.42	1.07	1.10	24,017.44	28.45
TCS-B	53,038.55	1,772.50	1.07	1.10	1,822.20	29.11
TCS-ED	769,414.49	25,131.17	1.07	1.10	25,835.78	29.78
TCSENG	69,005.05	1,836.00	1.07	1.10	1,887.48	36.56
TCS-I	1,754,994.09	50,017.50	1.07	1.10	51,419.86	34.13
TCS-W	58,211.50	2,101.00	1.07	1.10	2,159.91	26.95
TCS-Y	57,198.14	1,789.00	1.07	1.10	1,839.16	31.10
TC-W	108,360.39	3,536.50	1.07	1.10	3,635.65	29.80
TECDFT	52,971.65	1,845.00	0	0.00	1,845.00	28.71
TECENG	554,620.05	14,477.50	1.07	1.10	14,883.41	37.26
TECHSV	527,554.64	14,770.50	1.07	1.10	15,184.63	34.74
TECSPT	82,321.14	1,784.00	1.07	1.10	1,834.02	44.89
TNDDFT	133,330.18	4,221.00	0	0.00	4,221.00	31.59
TNDENG	909,371.79	28,454.00	1.07	1.10	29,251.78	31.09
TRNPLN	478,021.28	14,237.67	1.07	1.10	14,636.85	32.66
TVLBLR	2,314,291.11	69,888.00	0	0.00	69,888.00	33.11
TVLELC	814,709.60	22,110.50	0	0.00	22,110.50	36.85
TVLMCH	859,288.47	24,480.75	0	0.00	24,480.75	35.10
TVLSPV	305,244.97	8,294.00	1.07	1.10	8,526.54	35.80
TVLTCH	369,687.59	10,542.00	0	0.00	10,542.00	35.07
UGCREW	2,148,690.00	58,731.07	0	0.00	58,731.07	36.59
WHMAID	53,997.35	1,785.00	0	0.00	1,785.00	30.25
WHMSCI	359,398.90	11,427.75	1.07	1.10	11,748.15	30.59
WPPMNT	1,363,736.33	39,985.50	0	0.00	39,985.50	34.11
Grand Total	81,983,904.38	2,582,536.12				

Note 1: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs
Note 2: (Productive hrs + Nonproductive hrs) / 2080 Annual base hrs

Std lbr rates 2005.xls

Labor Class	Labor Classes (description)	BU/Merit	2003 Base Rate	2005 Std Lbr Rate
BUOC	BU - Off & Clerical	BU	22.44	23.07
BUOCB	BU - Off & Clerical (Bs)	BU	21.67	22.28
BUOCED	BU - Off & Clerical (ED)	BU	21.03	21.62
BUOCI	BU - Off & Clerical (Is)	BU	21.16	21.75
BUOCW	BU - Off & Clerical (WA&WP)	BU	23.36	24.01
BUOCY	BU - Off & Clerical YA,YC,YF,YG,YJ,YM	BU	18.84	19.37
BUTC	BU - Trade & Crft	BU	25.67	26.39
BUTCB	BU - Trade & Crft (Bs)	BU	25.67	26.39
BUTCED	BU - Trade & Crft (ED)	BU	30.65	31.51
BUTCI	BU - Trade & Crft (Is)	BU	32.15	33.05
BUTCW	BU - Trade & Crft (WA&WP)	BU	25.67	26.39
BUTCY	BU - Trade & Crft (YA,YC,YF,YG,YJ,YM)	BU	25.67	26.39
TNDDFT	T&D Drafting	BU	31.59	32.47
STRDFT	Structural Drafting	BU	30.62	31.48
SUBDFT	Substation Drafting	BU	32.17	33.07
SURVBU	Surveyor - BU	BU	25.45	26.16
TECDFT	Tech Services Drafting	BU	28.71	29.51
OHCREW	Overhead Crew	BU	35.10	36.08
PTM	Switching (work)	BU	35.42	36.41
UGCREW	Underground Crew	BU	36.59	37.61
TVLBLR	Boiler Maint Tvl	BU	33.11	34.04
TVLELC	Electrical Maint Tvl	BU	36.85	37.88
TVLMCH	Machinist Maint Tvl	BU	35.10	36.08
TVLTCH	Technical Maint Tvl	BU	35.07	36.05
WPPMNT	Waiau Plant Maint	BU	34.11	35.07
KPPMNT	Kah Plant Maint	BU	34.00	34.95
HPPMNT	Honolulu Plant Maint	BU	32.98	33.90
WHMAID	Water/Haz Mat Aide	BU	30.25	31.10
COMELE	Comm. - Electrician	BU	30.48	31.33
COMTEC	Comm. - Tech.	BU	30.48	31.33
OPEDIS	Dispatch	BU	34.01	34.96
ENGMAP	Mapping - Tech	BU	26.35	27.09
INSCRW	Instrument - Tech	BU	31.31	32.19
RELCRW	Relay - Tech/Elec	BU	31.65	32.54
SUBCRW	Substation Crew	BU	32.75	33.67
CONCRW	Construction - Crew	BU	34.88	35.86
JPCORD	Joint Pole Coordinator	BU	27.76	28.54
RESHER	Technical Researcher	BU	25.95	26.68
CUPLNR	Customer Planner	BU	28.44	29.24
DEPLNR	Design Planner	BU	32.47	33.38
JRPLNR	Junior Customer Planner	BU	24.89	25.59
MTELEC	Meter Electricians	BU	29.80	30.63
PPDRAF	PP Drafting	BU	30.80	31.66
E	Enabler	Merit	49.22	52.12
E-B	Enabler - (Bs)	Merit	46.61	49.36
E-ED	Enabler - (ED)	Merit	51.54	54.58
E-I	Enabler - (Is)	Merit	47.48	50.28
E-W	Enabler - WA & WP	Merit	51.08	54.09
E-Y	Enabler - (YA,YF,YG,YJ,YM)	Merit	60.44	64.01
EXEC	Executives - Pres/VPs	Merit	97.75	103.52
F	Facilitator	Merit	42.35	44.85
F-B	Fac - (Bs)	Merit	42.35	44.85
F-ED	Fac - (ED)	Merit	42.35	44.85
F-I	Fac - (Is)	Merit	42.35	44.85
F-W	Facilitator - WA & WP	Merit	42.35	44.85
F-Y	Facilitator - (YA,YF,YG,YJ,YM)	Merit	42.35	44.85
FS	Facilitator - Supv	Merit	37.59	39.81
FS-B	Fac-Sup - (Bs)	Merit	43.69	46.27
FS-ED	Fac-Sup - (ED)	Merit	36.75	38.92
FS-I	Fac-Sup - (Is)	Merit	43.09	45.63
FS-W	Facilitator - Supv WA & WP	Merit	38.81	41.10
FS-Y	Fac-Sup - (YA,YF,YG,YJ,YM)	Merit	37.59	39.81
I	Implementor	Merit	22.40	23.72
I-B	Implementor - (Bs)	Merit	19.25	20.39
I-ED	Implementor - (ED)	Merit	27.55	29.18
I-I	Implementor - (Is)	Merit	22.35	23.67

Labor Class	Labor Classes (description)	BU/Merit	2003 Base Rate	2005 Std Lbr Rate
I-W	Implementor - WA & WP	Merit	21.18	22.43
I-Y	Implementor - (YA,YF,YG,YJ,YM)	Merit	18.30	19.38
TC	Teacher/Coach	Merit	28.96	30.67
TC-B	Teacher/Coach - (Bs)	Merit	27.90	29.55
TC-ED	Teacher/Coach - (ED)	Merit	28.25	29.92
TC-I	Teacher/Coach - (Is)	Merit	31.11	32.95
TC-W	Teacher/Coach - WA & WP	Merit	29.80	31.56
TC-Y	Teacher/Coach - (YA,YF,YG,YJ,YM)	Merit	28.96	30.67
TCS	Teacher/Coach - Supv	Merit	28.45	30.13
TCS-B	Teacher/Coach - Supv - (Bs)	Merit	29.11	30.83
TCS-ED	Teacher/Coach - Supv - (ED)	Merit	29.78	31.54
TCS-I	Teacher/Coach - Supv - (Is)	Merit	34.13	36.14
TCS-W	Teacher/Coach - Supv - WA & WP	Merit	26.95	28.54
TCS-Y	Teacher/Coach - Supv -(YA,YF,YG,YJ,YM	Merit	31.10	32.93
TNDENG	T&D Engineering	Merit	31.09	32.92
TRNPLN	Transmission Planning	Merit	32.66	34.59
PRJMGT	Project Management	Merit	29.41	31.15
PRJSUP	Project Support	Merit	27.65	29.28
DISPLN	Distribution Planning	Merit	0.00	0.00
STRENG	Civil Structural Engineering	Merit	31.61	33.47
PROTEC	Protection	Merit	31.81	33.69
SURVEY	Surveyor	Merit	28.09	29.75
SSENG	Substation Engineering	Merit	32.09	33.98
TECENG	Tech Services Engineering	Merit	37.26	39.46
PPENGR	Power Plant Engineer	Merit	29.08	30.80
PPPLAN	Project Coordinator	Merit	30.39	32.18
PPSPVR	Supv - Plant Maint	Merit	35.52	37.62
TVLSPV	Supv - Tvl Maint	Merit	35.80	37.91
AIRSCI	Air/Noise Scientist	Merit	33.99	36.00
AIRSPE	Air/Noise Specialist	Merit	24.16	25.59
CHEMST	Chemist	Merit	28.27	29.94
WHMSCI	Water/Haz Mat Scientist	Merit	30.59	32.39
POLICE	Police work		23.72	23.72
TCENGR	Telecomm Engr	Merit	31.43	33.28
TCSENG	Sr Telecomm Engr	Merit	36.56	38.72
COMENG	Comm. - Engr	Merit	33.22	35.18
COMSUP	Comm. - Supv	Merit	33.56	35.54
OPESPT	Dispatch - Supt	Merit	38.88	41.17
OPESTF	Dispatch - Staff	Merit	32.80	34.74
OPESUP	Dispatch - Supv	Merit	36.41	38.56
ENGSRE	EMS - Supv	Merit	36.34	38.48
ENGSTF	EMS - Staff	Merit	30.24	32.02
ENGSUP	Mapping - Supv	Merit	24.60	26.05
INSENG	Instrument - Engr	Merit	35.14	37.21
INSSUP	Instrument - Supv	Merit	34.03	36.04
RELENG	Relay - Engr	Merit	35.66	37.76
RELSUP	Relay - Supv	Merit	33.16	35.12
TECSPT	Tech - Supt	Merit	44.89	47.54
SUBENG	Substation - Engr	Merit	32.65	34.58
SUBPLN	Substation - Plnr	Merit	30.78	32.60
SUBSUP	Substation - Supv	Merit	32.36	34.27
CONSUP	Construction - Supv	Merit	36.81	38.98
EXEC2	Executives - Other	Merit	57.76	61.17
CUENGR	Customer Engineer	Merit	32.91	34.85
PDSUPV	Planning Supv	Merit	34.95	37.01
MTENGR	Meter Engineers	Merit	32.32	34.23
MTSUPV	Meter Supv.	Merit	32.18	34.08
GENPLN	Generation Plng Engineer	Merit	33.45	35.42
PPELEC	PP Electrical Engineer	Merit	28.42	30.10
PPPROJ	PP Project Management	Merit	37.19	39.38
PPMECH	PP Mechanical Engineer	Merit	34.17	36.19
TECHSV	PP Technical Services	Merit	34.74	36.79
IRP	IRP Engineer	Merit	35.54	37.64
SUMMER	Summer Hire		5.25	5.25

Std lbr rates 2005.xls

2005 Standard labor rate wage rate increase assumptions

	BU increase		*Merit increase*
2003	*3.0% eff. Nov*	*using 11/1/2002 rates*	*3.50% eff. May* *0.00% eff. Sep*
2004	*1.5% eff. Nov*	*using 11/1/2002 rates*	*3.15% eff. May* *0.25% eff. Sep*
2005	*1.5% eff. May* *1.5% eff. Nov*	*using 11/1/2002 rates* *using 11/1/2002 rates*	*3.50% eff. May* *0.25% eff. Sep*

Bargaining Unit employees	Base yr 2003	2004	2005
Jan	1	1	1.015
Feb	1	1	1.015
Mar	1	1	1.015
Apr	1	1	1.015
May	1	1	1.03
Jun	1	1	1.03
Jul	1	1	1.03
Aug	1	1	1.03
Sep	1	1	1.03
Oct	1	1	1.03
Nov	1	1.015	1.045
Dec	1	1.015	1.045
Weighted avg. increase	1.000	1.003	1.028

Merit Employees	Base yr 2003	2004	2005
Jan	1	1.0000	1.034
Feb	1	1.0000	1.034
Mar	1	1.0000	1.034
Apr	1	1.0000	1.034
May	1	1.0315	1.07019
Jun	1	1.0315	1.07019
Jul	1	1.0315	1.07019
Aug	1	1.0315	1.07019
Sep	1	1.034	1.072775
Oct	1	1.034	1.072775
Nov	1	1.034	1.072775
Dec	1	1.034	1.072775
Weighted avg. increase	1.000	1.022	1.059

CA-IR-250

Ref: HECO T-13, Pages 13-15 (Standard Labor Rates).

Please provide the spreadsheets and other supporting documents used in developing the standard labor rates (hours and dollars) actually applied by HECO in calendar years 2002 and 2003.

HECO Response:

The electronic file with the requested information will be provided under separate transmittal.

The printed copy of the requested information is provided on pages 2 to 17 of this response.

Calculation of the 2002 standard labor rates

Note: Final 2002 budget rates were actually input in MIMS for 2002 recorded standard labor costing:

1) The latest recorded annual information for distributed labor dollars (column A on pages 3-5) and productive labor hours (column E on pages 3-5) was obtained.

2) The recorded distributed labor dollars (column A on pages 3-5) for the merit labor classes were adjusted to remove recorded merit extra straight time pay (column B on pages 3-5) and add the budgeted merit extra straight time pay (column C on pages 3-5) to result in the adjusted amount (column D on pages 3-5).

3) Generally, merit overtime is not compensated, therefore, the 2000 base hours was adjusted by the average merit overtime factors (defined in Notes 1 and 2 on pages 3-5) so that the change in merit unpaid overtime hours (2000 to 2002) would not significantly impact the 2002 budget labor dollars; i.e., the recorded productive hours (column E on pages 3-5) for the merit labor classes were adjusted to remove an average recorded merit unpaid overtime factor (column F on pages 3-5) and apply the average budget merit unpaid overtime factor (column G on pages 3-5) to result in the adjusted base hours (column H on pages 3-5).

4) The 2000 base rates (column I on pages 3-5) were then calculated by dividing the adjusted amount (column D on pages 3-5) by the adjusted hours (column H on pages

Std lbr rates 2002.xls

Labor Class	A 2000 Recorded Amount	B 014 Merit Extra Straight Time Pay 2000 Recorded	C 014 Merit Extra Straight Time Pay 2002 Budget	D = A -B + C 2000 Adjusted Recorded Amount	E 2000 Recorded Hours	F (Note 1) 2000 average recd merit unpaid OT factor	G (Note 2) 2002 average budget merit unpaid OT factor	H = E / F × G 2000 adj hours	I = D / H 2000 base rate
AIRSCI	186,522.34			186,522.34	5,893.50	1.06	1.09	6060.3	30.78
AIRSPE	69,647.28			69,647.28	3,115.50	1.06	1.09	3203.67	21.74
BUOC	5,710,352.49			5,710,352.49	274,445.68	1	1	274445.68	20.81
BUOCB	305,273.73			305,273.73	15,233.92	1	1	15233.92	20.04
BUOCED	375,111.93			375,111.93	18,690.83	1	1	18690.83	20.07
BUOCI	213,288.28			213,288.28	11,060.00	1	1	11060	19.28
BUOCW	186,445.49			186,445.49	8,617.00	1	1	8617	21.64
BUOCY	64,987.20			64,987.20	3,771.00	1	1	3771	17.23
BUTC	2,696,299.60			2,696,299.60	106,098.57	1	1	106098.57	25.41
BUTCED	725,796.52			725,796.52	29,610.00	1	1	29610	24.51
BUTCI	6,722,112.61			6,722,112.61	221,308.14	1	1	221308.14	30.37
CHEMST	297,948.72			297,948.72	11,024.00	1.06	1.09	11336	26.28
COMELE	264,609.67			264,609.67	8,517.17	1	1	8517.17	31.07
COMENG	55,100.23	735.99	925.13	55,289.37	1,813.00	1.06	1.09	1864.31	29.66
COMSUP	70,782.17	13,705.11	17,227.08	74,304.14	2,224.50	1.06	1.09	2287.46	32.48
COMTEC	25,021.43			25,021.43	849.50	1	1	849.5	29.45
CONCRW	243,424.65			243,424.65	8,231.45	1	1	8231.45	29.57
CONSUP	61,744.69	2,803.87	3,524.42	62,465.24	1,794.50	1.06	1.09	1845.29	33.85
CUDGNR	223,450.52			223,450.52	7,177.00	1.06	1.06	7177	31.13
CUENGR	91,463.48			91,463.48	3,109.00	1.06	1.09	3196.99	28.61
CUPLNR	246,874.54			246,874.54	9,090.33	1	1	9090.33	27.16
DEPLNR	52,689.62			52,689.62	1,772.00	1	1	1772	29.73
DISPLN	362,982.90	357.84	449.80	363,074.86	11,976.50	1.06	1.09	12315.46	29.48
ENGMAP	316,833.28			316,833.28	13,527.50	1	1	13527.5	23.42
ENGSRE	66,621.34			66,621.34	1,876.58	1.06	1.09	1929.69	34.52
ENGSTF	191,193.11	315.17	396.16	191,274.10	6,443.90	1.06	1.09	6626.27	28.87
ENGSUP	51,492.83	239.62	301.20	51,554.41	1,856.00	1.06	1.09	1908.53	27.01
E	811,948.95	2,893.07	3,636.54	812,692.42	20,041.00	1.14	1.06	18634.61	44.71
E-V	197,244.32	523.49	658.02	197,378.85	4,255.00	1.14	1.06	3956.4	44.71
E-B	44,444.43			44,444.43	1,050.00	1.14	1.06	976.32	45.52
E-V-ED	200,720.15	970.96	1,220.48	200,969.67	4,992.00	1.14	1.06	4641.68	43.3
E-V-I	281,594.73	2,011.59	2,528.53	282,111.67	6,115.50	1.14	1.06	5686.34	49.61
E-W	78,808.33			78,808.33	1,752.00	1.14	1.06	1629.05	48.38
E-Y	102,277.90			102,277.90	1,772.00	1.14	1.06	1647.65	62.08
EXEC	1,485,223.40			1,485,223.40	18,478.58	1.12	1.2	19798.48	75.02
EXEC2	111,840.28			111,840.28	2,246.00	1.12	1.2	2406.43	46.48
F	487,116.81	11,611.93	14,595.99	490,100.87	13,373.90	1.06	1.09	13752.41	35.64
F-Y	9,784.69	489.23	614.95	9,910.41	263.50	1.06	1.09	270.96	36.58
FS	2,241,641.85	10,318.61	12,970.31	2,244,293.55	61,733.67	1.06	1.09	63480.85	35.35
FS-B	507,986.22			507,986.22	12,305.67	1.06	1.09	12653.94	40.14
FS-ED	407,007.27	924.27	1,161.79	407,244.79	12,108.25	1.06	1.09	12450.94	32.71
FS-I	422,813.42	624.28	784.71	422,973.85	10,413.00	1.06	1.09	10707.71	39.5
FS-W	43,405.65			43,405.65	1,266.50	1.06	1.09	1302.34	33.33
FS-Y	64,998.96			64,998.96	1,552.00	1.06	1.09	1595.92	40.73
GENPLN	411,402.70			411,402.70	13,376.50	1.06	1.09	13755.08	29.91
HPPMNT	433,448.47			433,448.47	13,843.25	1	1	13843.25	31.31
I	2,541,896.31	210.67	264.81	2,541,950.45	120,841.81	1.06	1.09	124261.86	20.46
I-B	52,501.14			52,501.14	2,995.00	1.06	1.09	3079.76	17.05
I-ED	222,041.93			222,041.93	10,497.00	1.06	1.09	10794.08	20.57
I-I	184,058.49			184,058.49	8,933.83	1.06	1.09	9186.68	20.04
I-W	36,578.78			36,578.78	1,676.00	1.06	1.09	1723.43	21.22
I-Y	25,799.16			25,799.16	1,356.00	1.06	1.09	1394.38	18.5
INSCRW	261,561.26			261,561.26	8,996.00	1	1	8996	29.08
INSENG	59,158.71	1,742.95	2,190.86	59,606.62	1,813.00	1.06	1.09	1864.31	31.97
INSSUP	56,648.92	2,092.37	2,630.07	57,186.62	1,806.50	1.06	1.09	1857.63	30.78
IRP	218,658.02			218,658.02	7,002.00	1.06	1.09	7200.17	30.37
JPCORD	39,992.47			39,992.47	1,646.00	1	1	1646	24.3
JRPLNR	252,615.92			252,615.92	11,191.16	1	1	11191.16	22.57
KPPMNT	1,499,521.27			1,499,521.27	48,704.75	1	1	48704.75	30.79
MTELEC	519,536.17			519,536.17	18,864.92	1	1	18864.92	27.54

Note 1: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs
Note 2: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs

Std lbr rates 2002.xls

Labor Class	A 2000 Recorded Amount	B 014 Merit Extra Straight Time Pay 2000 Recorded	C 014 Merit Extra Straight Time Pay 2002 Budget	D = A -B + C 2000 Adjusted Recorded Amount	E 2000 Recorded Hours	F (Note 1) 2000 average recd merit unpaid OT factor	G (Note 2) 2002 average budget merit unpaid OT factor	H = E / F × G 2000 adj hours	I = D / H 2000 base rate
MTENGR	107,863.80			107,863.80	3,633.00	1.06	1.09	3735.82	28.87
MTSUPV	58,273.90	1,617.50	2,033.17	58,689.57	1,952.50	1.06	1.09	2007.76	29.23
NOCOST	0.00			0.00	261.33				
OHCREW	8,606,147.57			8,606,147.57	273,705.80	1	1	273705.8	31.44
OPEDIS	665,591.99			665,591.99	20,684.13	1	1	20684.13	32.18
OPESPT	77,402.66	1,033.85	1,299.53	77,668.34	1,949.00	1.06	1.09	2004.16	38.75
OPESTF	245,125.38	1,366.10	1,717.16	245,476.44	7,569.50	1.06	1.09	7783.74	31.54
OPESUP	427,744.56			427,744.56	12,227.50	1.06	1.09	12573.56	34.02
PDSUPV	211,129.49			211,129.49	6,618.08	1.06	1.09	6805.39	31.02
POLICE	198,334.68			198,334.68	9,889.73	1	1	9889.73	**20**
PPDRAF	120,882.94			120,882.94	3,970.00	1	1	3970	30.45
PPELEC	188,204.90	191.54	240.76	188,254.12	6,608.00	1.06	1.09	6795.02	27.7
PPENGR	775,286.36	14,583.56	18,331.28	779,034.08	25,325.23	1.06	1.09	26041.99	29.91
PPMECH	397,642.54			397,642.54	12,678.00	1.06	1.09	13036.81	30.5
PPPLAN	154,392.49			154,392.49	5,437.50	1.06	1.09	5591.39	27.61
PPPROJ	237,544.97			237,544.97	6,814.00	1.06	1.09	7006.85	33.9
PPSPVR	310,818.01	36,083.23	45,355.99	320,090.77	9,785.25	1.06	1.09	10062.19	31.81
PRJMGT	205,848.89	9,282.82	11,668.34	208,234.41	5,969.50	1.06	1.09	6138.45	33.92
PRJSUP	135,240.13	4,345.59	5,462.33	136,356.87	5,626.42	1.06	1.09	5785.65	23.57
PROTEC	151,558.65			151,558.65	5,036.00	1.06	1.09	5178.53	29.27
PTM	1,227,194.84			1,227,194.84	37,639.37	1	1	37639.37	32.6
RELCRW	335,067.38			335,067.38	11,327.00	1	1	11327	29.58
RELENG	129,224.97	11,262.15	14,156.33	132,119.15	3,920.25	1.06	1.09	4031.2	32.77
RELSUP	51,234.97	217.74	273.70	51,290.93	1,645.00	1.06	1.09	1691.56	30.32
RESHER	91,310.34			91,310.34	3,758.00	1	1	3758	24.3
SSENG	438,420.14	2,576.45	3,238.55	439,082.24	14,695.50	1.06	1.09	15111.41	29.06
STRDFT	112,586.97			112,586.97	3,948.00	1	1	3948	28.52
STRENG	350,526.37			350,526.37	11,697.00	1.06	1.09	12028.05	29.14
SUBCRW	1,834,589.93			1,834,589.93	58,401.97	1	1	58401.97	31.41
SUBDFT	156,929.17			156,929.17	5,245.33	1	1	5245.33	29.92
SUBENG	58,911.90	1,049.41	1,319.09	59,181.58	1,933.50	1.06	1.09	1988.22	29.77
SUBPLN	27,172.79			27,172.79	901.50	1.06	1.09	927.01	29.31
SUBSUP	118,009.82	12,706.43	15,971.76	121,275.15	3,545.92	1.06	1.09	3646.27	33.26
SUMMER	7,907.78			7,907.78	1,432.17	1	1	1432.17	**5.25**
SURVBU	84,645.83			84,645.83	3,550.00	1	1	3550	23.84
SURVEY	227,980.64			227,980.64	8,699.50	1.06	1.09	8945.71	25.48
TC	8,703,610.14	27,635.60	34,737.47	8,710,712.01	327,522.99	1.06	1.09	336792.51	25.86
TC-ED	729,246.48	343.34	431.57	729,334.71	25,967.75	1.06	1.09	26702.69	27.31
TC-I	502,976.78	1,073.75	1,349.68	503,252.71	16,856.50	1.06	1.09	17333.57	29.03
TC-W	127,992.62	1,927.31	2,422.59	128,487.90	4,851.92	1.06	1.09	4989.23	25.75
TCBUSM	45,514.82			45,514.82	1,396.00	1.06	1.09	1435.51	31.71
TCENGR	209,279.79	886.54	1,114.37	209,507.62	7,419.33	1.06	1.09	7629.31	27.46
TCPMGR	117,653.04	213.46	268.32	117,707.90	3,848.50	1.06	1.09	3957.42	29.74
TCSENG	60,457.98	438.75	551.50	60,570.73	1,769.00	1.06	1.09	1819.07	33.3
TCS	968,840.37	16,974.57	21,336.74	973,202.54	34,474.08	1.06	1.09	35449.77	27.45
TCS-B	48,705.46			48,705.46	1,804.50	1.06	1.09	1855.57	26.25
TCS-ED	596,011.77	219.42	275.81	596,068.16	20,661.48	1.06	1.09	21246.24	28.06
TCS-W	39,271.61			39,271.61	1,181.00	1.06	1.09	1214.42	32.34
TCS-Y	54,535.92			54,535.92	1,838.00	1.06	1.09	1890.02	28.85
TCS-I	1,438,644.66	1,349.96	1,696.88	1,438,991.58	45,024.08	1	1	45024.08	31.96
TECDFT	53,848.65			53,848.65	1,967.83	1	1	1967.83	27.36
TECENG	331,043.32	1,017.26	1,278.68	331,304.74	10,505.00	1.06	1.09	10802.31	30.67
TECSPT	73,551.95	337.34	424.03	73,638.64	1,784.33	1.06	1.09	1834.83	40.13
TNDDFT	67,750.67			67,750.67	2,228.67	1	1	2228.67	30.4
TNDENG	659,052.21	8,672.68	10,901.41	661,280.94	22,730.75	1.06	1.09	23374.07	28.29
TRNPLN	324,599.94			324,599.94	11,214.50	1.06	1.09	11531.89	28.15
TVLBLR	2,313,441.23			2,313,441.23	74,582.00	1	1	74582	31.02
TVLELC	707,451.05			707,451.05	20,862.50	1	1	20862.5	33.91
TVLMCH	824,493.88			824,493.88	23,147.25	1	1	23147.25	35.62
TVLSPV	259,567.16	45,396.11	57,062.11	271,233.16	7,679.00	1.06	1.09	7896.33	34.35

Note 1: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs
Note 2: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs

Std lbr rates 2002.xls

	A	B	C	D = A -B + C	E	F (Note 1)	G (Note 2)	H = E / F × G	I = D / H
Labor Class	2000 Recorded Amount	014 Merit Extra Straight Time Pay 2000 Recorded	014 Merit Extra Straight Time Pay 2002 Budget	2000 Adjusted Recorded Amount	2000 Recorded Hours	2000 average recd merit unpaid OT factor	2002 average budget merit unpaid OT factor	2000 adj hours	2000 base rate
TVLTCH	514,021.03			514,021.03	14,075.00	1	1	14075	36.52
UGCREW	2,449,775.42			2,449,775.42	67,740.43	1	1	67740.43	36.16
WHMAID	49,727.67			49,727.67	1,731.00	1	1	1731	28.73
WHMSCI	172,872.86			172,872.86	6,154.17	1.06	1.09	6328.34	27.32
WPPMNT	1,378,623.28			1,378,623.28	44,059.50	1	1	44059.5	31.29
	76,541,657.24	255,373.48	321000	76,607,283.76	2,639,546.91			2,666,499.15	

Note 1: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs
Note 2: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs

Labor Class	Labor Classes (description)	BU/Merit	2000 Base Rate	2002 Std Lbr Rate
BUOC	BU - Off & Clerical	BU	20.81	21.41
BUOCB	BU - Off & Clerical (Bs)	BU	20.04	20.62
BUOCED	BU - Off & Clerical (ED)	BU	20.07	20.65
BUOCI	BU - Off & Clerical (Is)	BU	19.28	19.84
BUOCW	BU - Off & Clerical (WA&WP)	BU	21.64	22.27
BUOCY	BU - Off & Clerical YA,YC,YF,YG,YJ,YM	BU	17.23	17.73
BUTC	BU - Trade & Crft	BU	25.41	26.15
BUTCB	BU - Trade & Crft (Bs)	BU	25.41	26.15
BUTCED	BU - Trade & Crft (ED)	BU	24.51	25.22
BUTCI	BU - Trade & Crft (Is)	BU	30.37	31.25
BUTCW	BU - Trade & Crft (WA&WP)	BU	25.41	26.15
BUTCY	BU - Trade & Crft (YA,YC,YF,YG,YJ,YM)	BU	25.41	26.15
TNDDFT	T&D Drafting	BU	30.40	31.28
STRDFT	Structural Drafting	BU	28.52	29.35
SUBDFT	Substation Drafting	BU	29.92	30.79
SURVBU	Surveyor - BU	BU	23.84	24.53
TECDFT	Tech Services Drafting	BU	27.36	28.15
OHCREW	Overhead Crew	BU	31.44	32.35
PTM	Switching (work)	BU	32.60	33.55
UGCREW	Underground Crew	BU	36.16	37.21
TVLBLR	Boiler Maint Tvl	BU	31.02	31.92
TVLELC	Electrical Maint Tvl	BU	33.91	34.89
TVLMCH	Machinist Maint Tvl	BU	35.62	36.65
TVLTCH	Technical Maint Tvl	BU	36.52	37.58
WPPMNT	Waiau Plant Maint	BU	31.29	32.20
KPPMNT	Kah Plant Maint	BU	30.79	31.68
HPPMNT	Honolulu Plant Maint	BU	31.31	32.22
WHMAID	Water/Haz Mat Aide	BU	28.73	29.56
COMELE	Comm. - Electrician	BU	31.07	31.97
COMTEC	Comm. - Tech.	BU	29.45	30.30
OPEDIS	Dispatch	BU	32.18	33.11
ENGMAP	Mapping - Tech	BU	23.42	24.10
INSCRW	Instrument - Tech	BU	29.08	29.92
RELCRW	Relay - Tech/Elec	BU	29.58	30.44
SUBCRW	Substation Crew	BU	31.41	32.32
CONCRW	Construction - Crew	BU	29.57	30.43
JPCORD	Joint Pole Coordinator	BU	24.30	25.00
RESHER	Technical Researcher	BU	24.30	25.00
CUPLNR	Customer Planner	BU	27.16	27.95
DEPLNR	Design Planner	BU	29.73	30.59
JRPLNR	Junior Customer Planner	BU	22.57	23.22
MTELEC	Meter Electricians	BU	27.54	28.34
PPDRAF	PP Drafting	BU	30.45	31.33
E	Enabler	Merit	44.71	47.35
E-B	Enabler - (Bs)	Merit	45.52	48.21
E-ED	Enabler - (ED)	Merit	44.71	47.35
E-I	Enabler - (Is)	Merit	44.71	47.35
E-V	Enabler - vehicles	Merit	44.71	47.35
E-V-ED	Enabler - (ED) w/ vehicles	Merit	43.30	45.85
E-V-I	Enabler - (Is) w/ vehicles	Merit	49.61	52.54
E-W	Enabler - WA & WP	Merit	48.38	51.23
E-Y	Enabler - (YA,YF,YG,YJ,YM)	Merit	62.08	65.74
EXEC	Executives - vehicles	Merit	75.02	79.45
F	Facilitator	Merit	35.64	37.74
F-B	Fac - (Bs)	Merit	35.64	37.74
F-ED	Fac - (ED)	Merit	35.64	37.74
F-I	Fac - (Is)	Merit	35.64	37.74
F-W	Facilitator - WA & WP	Merit	35.64	37.74
F-Y	Faciltator - (YA,YF,YG,YJ,YM)	Merit	36.58	38.74
FS	Facilitator - Supv	Merit	35.35	37.44
FS-B	Fac-Sup - (Bs)	Merit	40.14	42.51
FS-ED	Fac-Sup - (ED)	Merit	32.71	34.64
FS-I	Fac-Sup - (Is)	Merit	39.50	41.83
FS-W	Facilitator - Supv WA & WP	Merit	33.33	35.30
FS-Y	Fac-Sup - (YA,YF,YG,YJ,YM)	Merit	40.73	43.13

Labor Class	Labor Classes (description)	BU/Merit	2000 Base Rate	2002 Std Lbr Rate
I	Implementor	Merit	20.46	21.67
I-B	Implementor - (Bs)	Merit	17.05	18.06
I-ED	Implementor - (ED)	Merit	20.57	21.78
I-I	Implementor - (Is)	Merit	20.04	21.22
I-W	Implementor - WA & WP	Merit	21.22	22.47
I-Y	Implementor - (YA,YF,YG,YJ,YM)	Merit	18.50	19.59
TC	Teacher/Coach	Merit	25.86	27.39
TC-B	Teacher/Coach - (Bs)	Merit	25.86	27.39
TC-ED	Teacher/Coach - (ED)	Merit	27.31	28.92
TC-I	Teacher/Coach - (Is)	Merit	29.03	30.74
TC-W	Teacher/Coach - WA & WP	Merit	25.75	27.27
TC-Y	Teacher/Coach - (YA,YF,YG,YJ,YM)	Merit	25.86	27.39
TCS	Teacher/Coach - Supv	Merit	27.45	29.07
TCS-B	Teacher/Coach - Supv - (Bs)	Merit	26.25	27.80
TCS-ED	Teacher/Coach - Supv - (ED)	Merit	28.06	29.72
TCS-I	Teacher/Coach - Supv - (Is)	Merit	31.96	33.85
TCS-W	Teacher/Coach - Supv - WA & WP	Merit	32.34	34.25
TCS-Y	Teahcer/Coach - Supv -(YA,YF,YG,YJ,YM	Merit	28.85	30.55
TNDENG	T&D Engineering	Merit	28.29	29.96
TRNPLN	Transmission Planning	Merit	28.15	29.81
PRJMGT	Project Management	Merit	33.92	35.92
PRJSUP	Project Support	Merit	23.57	24.96
DISPLN	Distribution Planning	Merit	29.48	31.22
STRENG	Civil Structural Engineering	Merit	29.14	30.86
PROTEC	Protection	Merit	29.27	31.00
SURVEY	Surveyor	Merit	25.48	26.98
SSENG	Substation Engineering	Merit	29.06	30.77
TECENG	Tech Services Engineering	Merit	30.67	32.48
PPENGR	Power Plant Engineer	Merit	29.91	31.67
PPPLAN	Project Coordinator	Merit	27.61	29.24
PPSPVR	Supv - Plant Maint	Merit	31.81	33.69
TVLSPV	Supv - Tvl Maint	Merit	34.35	36.38
AIRSCI	Air/Noise Scientist	Merit	30.78	32.60
AIRSPE	Air/Noise Specialist	Merit	21.74	23.02
CHEMST	Chemist	Merit	26.28	27.83
WHMSCI	Water/Haz Mat Scientist	Merit	27.32	28.93
POLICE	Police work		20.00	20.00
TCBUSM	Telecomm Business Mgr	Merit	31.71	33.58
TCENGR	Telecomm Engr	Merit	27.46	29.08
TCPMGR	Telecomm Proj Mgr	Merit	29.74	31.49
TCSENG	Sr Telecomm Engr	Merit	33.30	35.26
COMENG	Comm. - Engr	Merit	29.66	31.41
COMSUP	Comm. - Supv	Merit	32.48	34.40
OPESPT	Dispatch - Supt	Merit	38.75	41.04
OPESTF	Dispatch - Staff	Merit	31.54	33.40
OPESUP	Dispatch - Supv	Merit	34.02	36.03
ENGSRE	EMS - Supv	Merit	34.52	36.56
ENGSTF	EMS - Staff	Merit	28.87	30.57
ENGSUP	Mapping - Supv	Merit	27.01	28.60
INSENG	Instrument - Engr	Merit	31.97	33.86
INSSUP	Instrument - Supv	Merit	30.78	32.60
RELENG	Relay - Engr	Merit	32.77	34.70
RELSUP	Relay - Supv	Merit	30.32	32.11
TECSPT	Tech - Supt	Merit	40.13	42.50
SUBENG	Substation - Engr	Merit	29.77	31.53
SUBPLN	Substation - Plnr	Merit	29.31	31.04
SUBSUP	Substation - Supv	Merit	33.26	35.22
CONSUP	Construction - Supv	Merit	33.85	35.85
EXEC2	Executives - no vehicle	Merit	46.48	49.22
RECORD	Records Coordinator	Merit	24.82	26.28
CUDGNR	Customer Designer	Merit	31.13	32.97
CUENGR	Customer Engineer	Merit	28.61	30.30
PDSUPV	Planning Supv	Merit	31.02	32.85
MTENGR	Meter Engineers	Merit	28.87	30.57
MTSUPV	Meter Supv.	Merit	29.23	30.95

Labor Class	Labor Classes (description)	BU/Merit	2000 Base Rate	2002 Std Lbr Rate
GENPLN	Generation Plng Engineer	Merit	29.91	31.67
PPELEC	PP Electrical Engineer	Merit	27.70	29.33
PPPROJ	PP Project Management	Merit	33.90	35.90
PPMECH	PP Mechanical Engineer	Merit	30.50	32.30
IRP	IRP Engineer	Merit	30.37	32.16
SUMMER	Summer Hire		5.25	5.25

2002 Standard labor rate wage rate increase assumptions

	BU increase		*Merit increase*
2001	*2.5% eff. Nov*	*using 1/1/2000 rates*	*3.25% eff. May* *0.25% eff. Sep*
2002	*2.5% eff. Nov*	*using 1/1/2000 rates*	*3.25% eff. May* *0.50% eff. Sep*

Bargaining Unit employees	Base yr 2000	2001	2002
Jan	1	1	1.025
Feb	1	1	1.025
Mar	1	1	1.025
Apr	1	1	1.025
May	1	1	1.025
Jun	1	1	1.025
Jul	1	1	1.025
Aug	1	1	1.025
Sep	1	1	1.025
Oct	1	1	1.025
Nov	1	1.025	1.05
Dec	1	1.025	1.05
Weighted avg. increase	1	1.004	1.029

Merit Employees	Base yr 2000	2001	2002
Jan	1	1	1.0350
Feb	1	1	1.0350
Mar	1	1	1.0350
Apr	1	1	1.0350
May	1	1.0325	1.068638
Jun	1	1.0325	1.068638
Jul	1	1.0325	1.068638
Aug	1	1.0325	1.068638
Sep	1	1.0350	1.073813
Oct	1	1.0350	1.073813
Nov	1	1.0350	1.073813
Dec	1	1.0350	1.073813
Weighted avg. increase	1	1.023	1.059

Calculation of the 2003 standard labor rates

Note: Final 2003 budget rates were actually input in MIMS for 2003 recorded standard labor costing:

1) The latest recorded annual information for distributed labor dollars (column A on pages 11-13) and productive labor hours (column B on pages 11-13) was obtained.

2) The 2001 base rates (column F on pages 11-13) were then calculated by dividing the sum of the distributed labor dollars (column A on pages 11-13) and the 2003 merit extra straight time pay budget (column C on pages 11-13) by the recorded productive hours (column B on pages 11-13) divided by the average recorded merit unpaid overtime factor (column D on pages 11-13) and multiplied by the average budget merit unpaid overtime factor (column E on pages 11-13). The 2001 base rates were not adjusted to remove the recorded 2001 merit extra straight time pay because it was insignificant, under $2,000. The 2001 base hours were adjusted by the average merit overtime factors (defined in Notes 1 and 2 on pages 11-13) so that the change in merit unpaid overtime hours (2001 to 2003) would not significantly impact the 2003 budget labor dollars since, in general, merit overtime is not compensated.

3) These 2001 base rates (column F on pages 11-13) were put in the 2001 Base Rate column on pages 14-16.

4) Then, the appropriate weighted average increase factors from page 17 (1.03 for bargaining unit and 1.063 for merit labor) were applied to the base rates to result in the standard labor rates.

Std lbr rates 2003.xls

	A	B	C	D	E	F = (A + C) / (B / D × E)
	Data			(Note 1)	(Note 2)	
LAB_COST_CL_L	TRAN_AMOUNT	NO_OF_HOURS_L	2003 Merit Extra Straight Time Pay Budget	2001 average recd merit unpaid OT factor	2003 average budget merit unpaid OT factor	2001 Base Rate
AIRSCI	273,849.80	8,334.00	3,209.65	1.01	1.03	32.60
AIRSPE	39,894.99	1,776.00		1	1	22.46
BUOC	5,786,047.11	274,808.34		1	1	21.05
BUOCB	286,063.10	13,851.50		1	1	20.65
BUOCED	322,187.65	15,899.00		1	1	20.26
BUOCI	193,975.45	10,268.50		1	1	18.89
BUOCW	184,681.28	8,241.83		1	1	22.41
BUOCY	66,665.01	3,729.00		1	1	17.88
BUTC	2,600,340.32	107,500.87		1	1	24.19
BUTCED	727,567.16	24,505.00		1	1	29.69
BUTCI	6,438,035.00	212,381.52		1	1	30.31
CHEMST	312,476.11	11,303.48	3,662.37	1.02	1.00	28.64
COMELE	297,707.39	10,605.00		1	1	28.07
COMENG	58,964.41	1,866.75	691.09	1.02	1.02	32.08
COMSUP	60,736.55	1,852.00	711.86	1.05	1.07	32.68
CONCRW	242,389.98	7,636.50		1.00	1.00	31.74
CONSUP	63,806.22	1,785.67	747.84	1.02	1.00	36.95
CUDGNR	162,184.39	5,133.50				
CUENGR	141,091.05	4,505.67	3,554.54	1.00	1.07	29.75
CUPLNR	200,021.52	7,291.17		1.00	1.00	27.43
DEPLNR	101,976.82	3,409.33		1.00	1.00	29.91
DISPLN	351,654.61	11,228.50	4,121.56	1.00	1.00	31.69
E	629,971.28	15,168.15		1.13	1.06	46.52
E-B	86,983.57	2,066.00		1.13	1.06	44.88
ENGMAP	331,339.11	13,873.50		1.00	1.00	23.88
ENGSRE	67,761.71	1,900.50	794.20	1.06	1.09	35.21
ENGSTF	188,843.52	6,326.00	2,213.34	1.01	1.10	27.76
ENGSUP	53,641.51	1,913.00	628.70	1.09	1.04	29.65
E-V	361,209.94	7,547.00		1.13	1.06	46.52
E-V-ED	186,837.82	4,579.50		1.13	1.06	43.49
E-V-I	290,572.42	6,001.75		1.13	1.06	51.61
E-W	81,004.82	1,766.50		1.13	1.06	48.88
EXEC	1,612,708.30	20,372.75		1.14	1.17	80.78
EXEC2	209,168.48	3,983.75		1.14	1.17	48.67
E-Y	103,038.92	1,809.50		1.13	1.06	60.70
F	638,968.08	17,621.75	7,489.02	1.16	1.03	41.32
FS	2,429,660.33	64,266.98	28,476.80	1.07	1.08	38.02
FS-B	553,401.01	13,035.42	6,486.13	1.07	1.08	42.71
FS-ED	361,930.10	10,053.00	4,242.00	1.07	1.08	36.22
FS-I	460,032.40	11,277.00	5,391.80	1.07	1.08	40.91
FS-W	72,105.16	2,066.00	845.11	1.07	1.08	35.11
FS-Y	21,949.94	520.00	257.26	1.07	1.08	38.02
GENPLN	451,253.03	14,297.00	5,288.91	1.02	1.00	32.57
HPPMNT	398,708.75	12,837.00		1.00	1.00	31.06
I	2,617,392.32	123,201.31		1.00	1.00	21.24
I-B	48,428.45	2,638.50		1.00	1.00	18.35
I-ED	177,623.36	7,406.00		1.00	1.00	23.98
I-I	188,276.26	9,060.00		1.00	1.00	20.78
INSCRW	243,521.40	8,398.50		1.00	1.00	29.00
INSENG	60,966.52	1,809.50	714.56	1.01	1.08	31.94
INSSUP	58,074.85	1,789.50	680.67	1.02	1.08	31.13
IRP	302,343.37	9,894.83	3,543.61	1.03	1.00	31.81
I-W	23,315.90	1,266.00		1.00	1.00	18.42
I-Y	32,361.73	1,888.00		1.00	1.00	17.14
JPCORD	42,817.80	1,724.00		1.00	1.00	24.84
JRPLNR	224,047.63	9,351.58		1.00	1.00	23.96
KPPMNT	1,506,104.42	47,600.00		1.00	1.00	31.64
MTELEC	485,948.66	17,089.00		1.00	1.00	28.44
MTENGR	114,092.98	3,708.00	1,337.23	1.00	1.00	31.13

Note 1: (Productive hrs + Nonproductive hrs) / 2080 Annual base hrs
Note 2: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs

Std ibr rates 2003.xls

	A	B	C	D (Note 1)	E (Note 2)	F = (A + C) / (B / D × E)
	Data					
LAB_COST_CL_L	TRAN_AMOUNT	NO_OF_HOURS_L	2003 Merit Extra Straight Time Pay Budget	2001 average recd merit unpaid OT factor	2003 average budget merit unpaid OT factor	2001 Base Rate
MTSUPV	57,695.79	1,872.00	676.22	1.00	1.14	27.35
OHCREW	8,869,070.27	271,431.19		1.00	1.00	32.68
OPEDIS	746,211.05	22,931.48		1.00	1.00	32.54
OPESPT	80,046.12	1,940.25	938.18	1.08	1.08	41.74
OPESTF	252,800.83	7,488.92	2,962.95	1.07	1.08	33.84
OPESUP	394,325.52	11,011.42	4,621.69	1.08	1.10	35.57

Std lbr rates 2003.xls

	A	B	C	D	E	F = (A + C) / (B / D × E)
	Data			(Note 1)	(Note 2)	
LAB_COST_CL_L	TRAN_AMOUNT	NO_OF_HOURS_L	2003 Merit Extra Straight Time Pay Budget	2001 average recd merit unpaid OT factor	2003 average budget merit unpaid OT factor	2001 Base Rate
WHMAID	43,657.95	1,516.00		1.00	1.00	28.80
WHMSCI	309,528.28	10,905.25	3,627.82	1.12	1.03	31.23
WPPMNT	1,332,423.26	44,322.25		1.00	1.00	30.06
Grand Total	77,687,666.82	2,634,270.56				0.00
TECHSV	526440.3	15730.07		1.07	1.12	31.88
		Totals	331,500			

Note 1: (Productive hrs + Nonproductive hrs) / 2080 Annual base hrs
Note 2: (Productive hrs + Nonproductive hrs) / 2088 Annual base hrs

Std lbr rates 2003.xls

Labor Class	Labor Classes (description)	BU/Merit	2001 Base Rate	2003 Std Lbr Rate
BUOC	BU - Off & Clerical	BU	21.05	21.69
BUOCB	BU - Off & Clerical (Bs)	BU	20.65	21.27
BUOCED	BU - Off & Clerical (ED)	BU	20.26	20.87
BUOCI	BU - Off & Clerical (Is)	BU	18.89	19.46
BUOCW	BU - Off & Clerical (WA&WP)	BU	22.41	23.08
BUOCY	BU - Off & Clerical YA,YC,YF,YG,YJ,YM	BU	17.88	18.41
BUTC	BU - Trade & Crft	BU	24.19	24.91
BUTCB	BU - Trade & Crft (Bs)	BU	24.19	24.91
BUTCED	BU - Trade & Crft (ED)	BU	29.69	30.58
BUTCI	BU - Trade & Crft (Is)	BU	30.31	31.22
BUTCW	BU - Trade & Crft (WA&WP)	BU	24.19	24.91
BUTCY	BU - Trade & Crft (YA,YC,YF,YG,YJ,YM)	BU	24.19	24.91
TNDDFT	T&D Drafting	BU	30.85	31.78
STRDFT	Structural Drafting	BU	28.93	29.80
SUBDFT	Substation Drafting	BU	31.05	31.99
SURVBU	Surveyor - BU	BU	24.25	24.98
TECDFT	Tech Services Drafting	BU	27.82	28.65
OHCREW	Overhead Crew	BU	32.68	33.66
PTM	Switching (work)	BU	33.89	34.90
UGCREW	Underground Crew	BU	30.14	31.04
TVLBLR	Boiler Maint Tvl	BU	29.32	30.20
TVLELC	Electrical Maint Tvl	BU	32.48	33.46
TVLMCH	Machinist Maint Tvl	BU	33.30	34.30
TVLTCH	Technical Maint Tvl	BU	33.75	34.77
WPPMNT	Waiau Plant Maint	BU	30.06	30.96
KPPMNT	Kah Plant Maint	BU	31.64	32.59
HPPMNT	Honolulu Plant Maint	BU	31.06	31.99
WHMAID	Water/Haz Mat Aide	BU	28.80	29.66
COMELE	Comm. - Electrician	BU	28.07	28.91
COMTEC	Comm. - Tech.	BU	28.07	28.91
OPEDIS	Dispatch	BU	32.54	33.52
ENGMAP	Mapping - Tech	BU	23.88	24.60
INSCRW	Instrument - Tech	BU	29.00	29.87
RELCRW	Relay - Tech/Elec	BU	29.19	30.06
SUBCRW	Substation Crew	BU	30.01	30.91
CONCRW	Construction - Crew	BU	31.74	32.69
JPCORD	Joint Pole Coordinator	BU	24.84	25.58
RESHER	Technical Researcher	BU	25.35	26.11
CUPLNR	Customer Planner	BU	27.43	28.26
DEPLNR	Design Planner	BU	29.91	30.81
JRPLNR	Junior Customer Planner	BU	23.96	24.68
MTELEC	Meter Electricians	BU	28.44	29.29
PPDRAF	PP Drafting	BU	31.12	32.05
E	Enabler	Merit	46.52	49.45
E-B	Enabler - (Bs)	Merit	44.88	47.71
E-ED	Enabler - (ED)	Merit	43.49	46.23
E-I	Enabler - (Is)	Merit	51.61	54.86
E-V	Enabler - vehicles	Merit	46.52	49.45
E-V-ED	Enabler - (ED) w/ vehicles	Merit	43.49	46.23
E-V-I	Enabler - (Is) w/ vehicles	Merit	51.61	54.86
E-W	Enabler - WA & WP	Merit	48.88	51.96
E-Y	Enabler - (YA,YF,YG,YJ,YM)	Merit	60.70	64.53
EXEC	Executives - Pres/VPs	Merit	80.78	85.87
F	Facilitator	Merit	41.32	43.92
F-B	Fac - (Bs)	Merit	41.32	43.92
F-ED	Fac - (ED)	Merit	41.32	43.92
F-I	Fac - (Is)	Merit	41.32	43.92
F-W	Facilitator - WA & WP	Merit	41.32	43.92
F-Y	Facilitator - (YA,YF,YG,YJ,YM)	Merit	41.32	43.92
FS	Facilitator - Supv	Merit	38.02	40.42
FS-B	Fac-Sup - (Bs)	Merit	42.71	45.40
FS-ED	Fac-Sup - (ED)	Merit	36.22	38.50
FS-I	Fac-Sup - (Is)	Merit	40.91	43.49
FS-W	Facilitator - Supv WA & WP	Merit	35.11	37.33
FS-Y	Fac-Sup - (YA,YF,YG,YJ,YM)	Merit	38.02	40.42

Labor Class	Labor Classes (description)	BU/Merit	2001 Base Rate	2003 Std Lbr Rate
I	Implementor	Merit	21.24	22.58
I-B	Implementor - (Bs)	Merit	18.35	19.51
I-ED	Implementor - (ED)	Merit	23.98	25.49
I-I	Implementor - (Is)	Merit	20.78	22.09
I-W	Implementor - WA & WP	Merit	18.42	19.58
I-Y	Implementor - (YA,YF,YG,YJ,YM)	Merit	17.14	18.22
TC	Teacher/Coach	Merit	28.41	30.20
TC-B	Teacher/Coach - (Bs)	Merit	28.41	30.20
TC-ED	Teacher/Coach - (ED)	Merit	23.30	24.77
TC-I	Teacher/Coach - (Is)	Merit	29.27	31.11
TC-W	Teacher/Coach - WA & WP	Merit	29.39	31.24
TC-Y	Teacher/Coach - (YA,YF,YG,YJ,YM)	Merit	28.41	30.20
TCS	Teacher/Coach - Supv	Merit	30.27	32.17
TCS-B	Teacher/Coach - Supv - (Bs)	Merit	26.62	28.30
TCS-ED	Teacher/Coach - Supv - (ED)	Merit	28.48	30.28
TCS-I	Teacher/Coach - Supv - (Is)	Merit	30.80	32.74
TCS-W	Teacher/Coach - Supv - WA & WP	Merit	30.29	32.20
TCS-Y	Teacher/Coach - Supv -(YA,YF,YG,YJ,YM	Merit	30.91	32.85
TNDENG	T&D Engineering	Merit	29.21	31.05
TRNPLN	Transmission Planning	Merit	32.20	34.23
PRJMGT	Project Management	Merit	29.36	31.21
PRJSUP	Project Support	Merit	20.42	21.71
DISPLN	Distribution Planning	Merit	31.69	33.68
STRENG	Civil Structural Engineering	Merit	22.87	24.31
PROTEC	Protection	Merit	25.06	26.64
SURVEY	Surveyor	Merit	23.18	24.64
SSENG	Substation Engineering	Merit	25.58	27.19
TECENG	Tech Services Engineering	Merit	30.85	32.79
PPENGR	Power Plant Engineer	Merit	28.55	30.35
PPPLAN	Project Coordinator	Merit	25.97	27.60
PPSPVR	Supv - Plant Maint	Merit	33.38	35.49
TVLSPV	Supv - Tvl Maint	Merit	33.00	35.08
AIRSCI	Air/Noise Scientist	Merit	32.60	34.65
AIRSPE	Air/Noise Specialist	Merit	22.46	23.88
CHEMST	Chemist	Merit	28.64	30.44
WHMSCI	Water/Haz Mat Scientist	Merit	31.23	33.19
POLICE	Police work		20.00	20.00
TCENGR	Telecomm Engr	Merit	21.97	23.35
TCSENG	Sr Telecomm Engr	Merit	33.15	35.24
COMENG	Comm. - Engr	Merit	32.08	34.10
COMSUP	Comm. - Supv	Merit	32.68	34.74
OPESPT	Dispatch - Supt	Merit	41.74	44.37
OPESTF	Dispatch - Staff	Merit	33.84	35.97
OPESUP	Dispatch - Supv	Merit	35.57	37.81
ENGSRE	EMS - Supv	Merit	35.21	37.43
ENGSTF	EMS - Staff	Merit	27.76	29.51
ENGSUP	Mapping - Supv	Merit	29.65	31.52
INSENG	Instrument - Engr	Merit	31.94	33.95
INSSUP	Instrument - Supv	Merit	31.13	33.09
RELENG	Relay - Engr	Merit	32.50	34.54
RELSUP	Relay - Supv	Merit	30.24	32.14
TECSPT	Tech - Supt	Merit	40.03	42.55
SUBENG	Substation - Engr	Merit	31.38	33.36
SUBPLN	Substation - Plnr	Merit	33.10	35.18
SUBSUP	Substation - Supv	Merit	37.96	40.35
CONSUP	Construction - Supv	Merit	36.95	39.27
EXEC2	Executives - Other	Merit	48.67	51.73
CUENGR	Customer Engineer	Merit	29.75	31.62
PDSUPV	Planning Supv	Merit	34.33	36.49
MTENGR	Meter Engineers	Merit	31.13	33.09
MTSUPV	Meter Supv.	Merit	27.35	29.08
GENPLN	Generation Plng Engineer	Merit	32.57	34.62
PPELEC	PP Electrical Engineer	Merit	25.89	27.52
PPPROJ	PP Project Management	Merit	34.84	37.04
PPMECH	PP Mechanical Engineer	Merit	33.54	35.65

Labor Class	Labor Classes (description)	BU/Merit	2001 Base Rate	2003 Std Lbr Rate
TECHSV	PP Technical Services	Merit	31.88	33.89
IRP	IRP Engineer	Merit	31.81	33.81
SUMMER	Summer Hire		5.25	5.25

Std lbr rates 2003.xls

2003 Standard labor rate wage rate increase assumptions

	BU increase		*Merit increase*
2001	*2.5% eff. Nov*	*using 1/1/2000 rates*	*3.25% eff. May* *0.25% eff. Sep*
2002	*2.5% eff. Nov*	*using 1/1/2000 rates*	*3.25% eff. May* *0.50% eff. Sep*
2003	*3.0% eff. Nov*	*using 11/1/2002 rates*	*3.50% eff. May* *0.25% eff. Sep*

Bargaining Unit employees	Base yr			
	2000	2001	2002	2003
Jan	0.97561	0.97561	1	1.02439
Feb	0.97561	0.97561	1	1.02439
Mar	0.97561	0.97561	1	1.02439
Apr	0.97561	0.97561	1	1.02439
May	0.97561	0.97561	1	1.02439
Jun	0.97561	0.97561	1	1.02439
Jul	0.97561	0.97561	1	1.02439
Aug	0.97561	0.97561	1	1.02439
Sep	0.97561	0.97561	1	1.02439
Oct	0.97561	0.97561	1	1.02439
Nov	0.97561	1	1.02439	1.055122
Dec	0.97561	1	1.02439	1.055122
Weighted avg. increase	0.97561	0.980	1.004	1.030

Merit Employees	Base yr			
	2000	2001	2002	2003
Jan	1	1	1.0000	1.0375
Feb	1	1	1.0000	1.0375
Mar	1	1	1.0000	1.0375
Apr	1	1	1.0000	1.0375
May	1	1	1.0325	1.073813
Jun	1	1	1.0325	1.073813
Jul	1	1	1.0325	1.073813
Aug	1	1	1.0325	1.073813
Sep	1	1.0000	1.0375	1.076406
Oct	1	1.0000	1.0375	1.076406
Nov	1	1.0000	1.0375	1.076406
Dec	1	1.0000	1.0375	1.076406
Weighted avg. increase	1	1.000	1.023	1.063

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CA-IR-251

Ref: HECO-1310 (HEI Billings).

The referenced workpaper support was provided in a "Word" document file. Please provide the following:

a. Please provide HECO-1310 in an Excel spreadsheet file format with intact formulae, cell references and file links.

b. Please provide actual 2004 HEI charges to HECO, showing direct and allocated charges in a format comparable to the 2003 data set forth on HECO-1310.

c. Referring to item (a) above, please provide additional HEI workpapers supporting the conversion of 2003 direct labor hours and shared labor hours into their respective labor dollars.

d. Referring to items (a) and (c) above, please provide a copy of the underlying workpapers and calculations supporting the derivation of any standard hourly labor rates used therein.

HECO Response:

a. The electronic file with the requested information will be provided under separate transmittal.

b. The actual 2004 HEI charges to HECO, showing direct and allocated charges in a format comparable to the 2003 data set forth on HECO-1310, is provided on pages 163 through 167 of this response.

c. A proforma bill is available for the period 1/1/03 to 12/31/03 which was run specifically for rate case purposes and excludes any incentive compensation from the employee labor rates. The proforma bill was run using actual 2003 direct labor hours and shared labor hours along with 2003 actual nonlabor dollars. The amounts reflected on the proforma bill agree to the 2003 amounts reflected on HECO-1310 pages 1 through 3. This proforma bill is voluminous and contains confidential employee labor rates (which include actual salary,

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benefits and payroll taxes and loadings). One copy each will be provided to the Consumer Advocate and the Commission under protective order.

In addition, the proforma bill was run using the 2004 allocation factors for all allocation factors except the common equity based allocation factors. The common equity based allocation factors are 2005 estimated allocation factors based upon the estimated 12/31/04 common equity of the companies. All allocation factors were applied to the 2003 shared charges because the 2004 shared charges were not available at the time the rate case estimate was being developed. See HECO's response to CA-IR-252 a. for the workpapers and supporting documents used in the development of each allocation factor.

d. Please see the attached workpapers on pages 160 through 162 of this response for a sample template used for calculating hourly labor rates for employees. Labor rates are based upon actual labor costs for salary, benefits and payroll taxes and loadings are added onto labor costs for normal departmental costs. These costs include those with respect to office supplies, dues and subscriptions, meeting and seminars, pension costs, computer costs, utilities, etc. There is no profit or premium component to the labor rates.

Due to the confidential nature of employee salary and benefit information, the actual loaded labor rate calculations for HEI employees (pages 160-162) are only available for review at the HEI Controller's office. Please contact Irene Sekiya at (808) 543-4778 to arrange to review this information.

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Due to the voluminous and confidential nature of the information, one copy (pages 3 – 159) will be provided to the Consumer Advocate and the Public Utilities Commission under protective order and under separate transmittal.

HEI Loaded Labor Rates
Department Name
January 1, 2003
Page 1 of 3

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		Salary, payroll taxes, and benefit costs NAME	2003 Department Name Costs	Legend	Source
DATA					
Salary current annual		0		YER	Salary A
Payroll Taxes					
FICA	Rate 6.20% on up to $87,000	0		AC	YER-P
	Rate 1.45%	0		AC	YER-P
FUTA	Rate 0.8% on up to $7,000	0		AC	YER-P
SUTA	Rate 0.41% on up to $30,200	0		AC	YER-P
TDI		0		NA	Salary C
Benefits - Annual costs for:					
Medical		0		YER-C	Benefits A
Dental		0		YER-C	Benefits A
Vision		0		YER-C	Benefits A
Group life Insurance		0		YER-C	Benefits A
Dependent life insurance		0		YER-C	Benefits A
AD&D		0		YER-C	Benefits A
FLEX Adjustment		0		YER-C	Benefits A
Long-term disability		0		YER-C	Benefits A
Qualified Pension/OPEB 22.254% of 1/1/02 salary		0		AC-A	Benefits B
Bonus		0		AC-C	Benefits C-1

2003 Available Hours		
Total compensated hours	0	0
Holidays	0	0
Vacation	0	0
2003 Available Hours	0	0

Legend

YER	Salary as of January 1, 2003
YER-C	Based on January 2003 annualized premiums/credits
YER-P	Based upon salary as of January 1, 2003, multiplied by the applicable tax rates.
AC	Actual cost as recorded in this department
AC-C	Actual cost but cost was recorded as corporate not departmental cost
AC-T	Actual cost as recorded by Treasurer
AC-I	Actual cost as recorded by VP Information Systems
AC-A	Actual cost as recorded by VP Admininstration (and VP Info Systems and Corporate RA as applicable)
AC-Z	Actual cost as recorded by the VP Administration & the Corporate Secretary
AC-P	Actual cost as recorded by the President & VP Administration (as applicable)
NA	Not Applicable

HEI Loaded Labor Rates
Department Name
January 1, 2003
Page 2 of 3

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		Loaded Hourly Labor Rates NAME	2003 Department Name Costs	Legend	Source
RATES					
Salary		0.0000		YER	
FICA	Rate 6.20% on up to $87,000	0.0000		YER-P	
	Rate 1.45%	0.0000		YER-P	
FUTA	Rate 0.8% on up to $7,000	0.0000		YER-P	
SUTA	Rate 0.41% on up to $30,200	0.0000		YER-P	
TDI		0.0000		NA	
	Subtotal	0.0000			
Benefits					
Medical		0.0000		YER-C	Benefits A
Dental		0.0000		YER-C	Benefits A
Vision		0.0000		YER-C	Benefits A
Group life insurance		0.0000		YER-C	Benefits A
Dependent life insurance		0.0000		YER-C	Benefits A
AD&D		0.0000		YER-C	Benefits A
FLEX Adjustment		0.0000		YER-C	Benefits A
Long-term disability		0.0000		YER-C	Benefits A
Qualified Pension/OPEB		0.0000		AC-A	Benefits B
Executive incentive comp		0.0000		AC	
Bonus		0.0000		AC-C	Benefits C-1
Dividend Equivalent		0.0000		AC	
Other human resources costs		0.0000		AC-A	Benefits E
	Subtotal	0.0000			
Loaded rate before departmental costs		0.0000			
Departmental Loadings					
HEI Loadings					
Office Supplies		0.0000		AC	
Computer software/supplies		0.0000		AC	
Subscriptions		0.0000		AC	
Books		0.0000		AC	
Membership fees / dues - other		0.0000		AC	
Telephone equipment		0.0000		AC	
Long Distance		0.0000		AC	
Copier		0.0000		AC-P	Copier A
Mailing Services		0.0000		AC-A	Mailing A
Rent buildings		0.0000		AC-A	Rent A-4
HEI corp info system expense		0.0000		AC-I	Info Sys A
Insurance - Directors & officers		0.0000		AC-Z	Insurance A
Insurance - GL, w/c, property, business tvl		0.0000		AC-Z	Insurance A
Depreciation-computer		0.0000		AC	
Depreciation-furniture & fixtures		0.0000		AC	
Depreciation - dept LH improve		0.0000		AC	
Depreciation - King Street		0.0000		AC-A	Depreciation A
Total HEI loadings		0.0000			
HECO loadings					
Rent-parking		0.0000		AC-A	Rent B
Total HECO loadings		0.0000			
Total loaded labor rate		0.0000			

HEI Loaded Labor Rates
Department Name
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RATES	Loaded Hourly Labor Rates NAME	2003 Department Name Costs	Legend	Source
Other HECO Charges				
President's office	Unallocable or charge to the activity.		AC	
Other HEI Charges				
Computer supplies/other	Unallocable or charge to the activity.		AC	
Seminars - mainland	Unallocable or charge to the activity.		AC	
Seminars - air travel	Unallocable or charge to the activity.		AC	
Seminars - nonair	Unallocable or charge to the activity.		AC	
Seminars - hotels	Unallocable or charge to the activity.		AC	
Meals & entertainment	Unallocable or charge to the activity.		AC	
Local seminars	Designated as unallocable.		AC	
Seminars - misc	Designated as unallocable.		AC	
BOD expense	Unallocable or charge to the activity.		AC	
Stockholder expenses	Unallocable or charge to the activity.		AC	
Other A&G	Unallocable		AC	
Legal fees	Charge to the activity.		AC	
Insurance - Directors & Officers	Allocated to the individual		AC	See Insurance A
Medical benefits allocation	Included in benefits.		AC	
Dental benefits allocation	Included in benefits.		AC	
Vision benefits allocation	Included in benefits.		AC	
Group life allocation	Included in benefits.		AC	
Long-term disability allocation	Included in benefits.		AC	
Qualified benefit plan	Included in benefits.		AC	
Nonqualified directors plan	Unallocable		AC	
Flex credits	Included in benefits.		AC	
Other post retirement benefits	Included in benefits.		AC	
HR-administration	Included in benefits.		AC	
HR-benefits	Included in benefits.		AC	
Payroll taxes	N/A-payroll taxes on the current year salary is used		AC	
OTS exam	Designated as unallocable.		AC	

Total corporate secretary costs	0
Total per general ledger	
Difference	0

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HECO
EXCLUDING INCENTIVE COMPENSATION

Activity code	ACTIVITY CODE DESCRIPTIONS	Direct Charges-2004 Direct Labor Hours	Direct Labor Dollars	Direct Nonlabor Dollars	Shared Charges-2004 Shared Labor Hours	2004 Allocation Factor	Shared Labor Dollars	Shared Nonlabor Dollars	2004 Actual
ACC	**Accounting**								
ACC 001	Research accounting issues				4.00	38.9%	179.44		179.44
ACC 004	Maintain general ledger	314.00	16,668.24						16,668.24
ACC 008	Analyze financial results	2.00	1,466.67						1,466.67
ACC 009	Monitor accounting and reporting standards	13.75	3,138.76	7,000.00	59.00	38.9%	2,140.42		12,279.18
ACC 018	Intercompany billing administration				453.25	40.8%	8,502.17		8,502.17
		329.75	21,273.67	7,000.00	516.25		10,822.03	0.00	39,095.70
ADM	**Administrative**								
ADM 006	Assist on rate cases	380.00	29,792.11						29,792.11
ADM 007	Corporate risk review				17.50	40.8%	4,277.96		4,277.96
ADM 011	Telephone charges			3,056.32					3,056.32
ADM 012	Rent - ASB Tower (formerly Pacific Tower)			54,667.90					54,667.90
ADM 013	Supplies			2,000.00					2,000.00
ADM 014	Rent - Central Pacific			41,194.25					41,194.25
ADM 112	Sarbanes-Oxley Section 302	2.00	271.46						271.46
		382.00	30,063.57	100,918.47	17.50		4,277.96	0.00	135,260.00
ANN	**Annual meeting**								
ANN 001	Annual shareholder meeting planning & coordination				105.25	38.6%	4,996.59	4,605.91	9,602.50
		0.00	0.00	0.00	105.25		4,996.59	4,605.91	9,602.50
AUD	**Audits**								
AUD 005	Audit Committee meeting attendance					62.1%		220.47	220.47
		0.00	0.00	0.00	0.00		0.00	220.47	220.47
BOD	**Board of Directors**								
BOD 001	Board of Directors meetings	314.75	18,013.77	282.79					18,296.56
BOD 002	Attendance (presentations)	42.50	30,679.35						30,679.35
BOD 005	Misc. board matters	2.30	1,152.36	380.96					1,533.32
		359.55	49,845.48	663.75	0.00		0.00	0.00	50,509.23
BUD	**Budgets**								
BUD 001	Preparation	0.25	19.99						19.99
		0.25	19.99	0.00	0.00		0.00	0.00	19.99
CAS	**Cash Management**								
CAS 006	Cash disbursements (wire confirmations)	5.67	249.98						249.98
		5.67	249.98	0.00	0.00		0.00	0.00	249.98

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HECO
3 INCENTIVE COMPENSATION

CODE DESCRIPTIONS	Direct Charges-2004 Direct Labor Hours	Direct Labor Dollars	Direct Nonlabor Dollars	Shared Charges-2004 Shared Labor Hours	2004 Allocatio Factor	Shared Labor Dollars	Shared Nonlabor Dollars	2004 Actual	
Relations									
ons and communications	1.50	1,114.14						1,114.14	
	1.50	1,114.14	0.00	0.00		0.00	0.00	1,114.14	
- general									
	24.25	17,828.16						17,828.16	
	28.50	20,464.24	2,081.27					22,545.51	
	52.75	38,292.40	2,081.27	0.00		0.00	0.00	40,373.67	
ng planning and coordination	17.75	2,386.48	109.37					2,495.85	
ng due diligence	11.75	1,452.88						1,452.88	
				18.75	38.6%	1,436.75	107,792.21	109,228.96	
	29.50	3,839.36	109.37	18.75		1,436.75	107,792.21	113,177.69	
ources									
sulting services	1.00	232.48		2.75	39.9%	253.45		485.93	
on consulting services	1.75	399.63		0.50	41.2%	47.04		446.67	
nduct development and administrative assistance				0.75	39.9%	68.34		68.34	
nduct review				5.25	39.9%	484.92	6,162.08	6,647.00	
on committee meetings				135.50	41.2%	8,741.55		8,741.55	
ncentive plan (LTIP)	1.25	79.09		26.50	6.6%	138.28		217.37	(1)
centive compensation plan (EICP)				56.00	25.5%	1,205.36		1,205.36	(2)
ls with dividend equivalents	22.00	1,195.61		186.50	30.8%	5,071.63	4,448.53	10,715.77	(3)
is	16.00	712.50						712.50	(4)
leferred compensation				7.25	71.4%	352.49	72.03	424.52	(5)
	42.00	2,619.31	0.00	421.00		16,363.06	10,682.64	29,665.01	
(spam filtering)			7,805.00		90.0%		3,664.67	11,469.67	
rices					32.0%		29,661.42	29,661.42	
rices					33.0%		3,317.56	3,317.56	
net connection					58.6%		24,877.98	24,877.98	
r Protocol (FTP) server					90.0%		312.50	312.50	
overy (ISDN line)			2,129.43					2,129.43	
	0.00	0.00	9,934.43	0.00		0.00	61,834.13	71,768.56	

HECO
EXCLUDING INCENTIVE COMPENSATION

Activity code	ACTIVITY CODE DESCRIPTIONS	Direct Charges-2004 Direct Labor Hours	Direct Labor Dollars	Direct Nonlabor Dollars	Shared Charges-2004 Shared Labor Hours	2004 Allocatio Factor	Shared Labor Dollars	Shared Nonlabor Dollars	2004 Actual
INV	**Investor Relations**								
INV 001	Analyst/media communications				134.50	38.6%	5,132.57		5,132.57
INV 003	Fact sheet				4.50	38.6%	143.77		143.77
INV 004	Financial mailing list				38.00	38.6%	817.24	3,527.92	4,345.16
INV 005	Financial news releases			98.80	184.50	38.6%	7,892.15	3,462.14	11,453.09
INV 006	Group analyst meetings				768.50	38.6%	47,012.34	103,498.03	150,510.37
INV 007	HEI stock - share forecast				4.00	38.6%	86.45		86.45
INV 008	Investor base/stockholder monitoring				18.50	38.6%	709.22	15,142.01	15,851.23
INV 009	Investor relations planning				68.00	38.6%	1,567.72	653.29	2,221.01
INV 011	National Association of Investors Corporation (NAIC)					38.6%		802.88	802.88
INV 012	One-on-one meetings/visits with analysts				82.00	38.6%	9,443.31		9,443.31
INV 013	Other investor relations activities				118.00	38.6%	4,094.40	30,130.20	34,224.60
INV 015	Retail/broker/shareholder communications				33.50	38.6%	1,266.37		1,266.37
INV 018	Statistical supplement				18.50	38.6%	541.20		541.20
INV 019	Surveys	0.50	34.39		10.50	44.1%	342.10		376.49
INV 020	Teleconferencing				14.00	38.6%	1,072.05		1,072.05
		0.50	34.39	98.80	1,497.00		80,120.89	157,216.47	237,470.55
PEN	**Pension plan**								
PEN 005	HEIRS	2.60	145.63		426.20	45.2%	12,000.37	15,087.63	27,233.63
PEN 007	HEI Retirement Plan	6.50	364.07		7.25	72.8%	402.95		767.02
PEN 009	Master pension trust				773.00	67.7%	84,667.62	1,559.20	86,226.82
PEN 022	Supplemental Exec. Retirement plan					50.0%		1,495.00	1,495.00
PEN 026	OPEB funded plans/trusts				648.50	68.5%	39,275.55	1,577.71	40,853.26
PEN 028	HECO OPEB Plan	43.50	2,484.61		84.50	68.5%	3,606.64		6,091.25
PEN 030	HEI postretirement electric discount trust	1.50	119.94		1.00	27.2%	21.26		141.20
		54.10	3,114.25	0.00	1,940.45		139,974.39	19,719.54	162,808.18
RPT	**Reports**								
RPT 001	10K preparation	1.00	52.34		306.75	38.9%	11,254.14	15,425.52	26,732.00
RPT 011	10Q preparation	23.71	1,738.99	904.80	859.25	38.9%	31,036.36	32,179.49	65,859.64
RPT 015	10Q printing and mailing					36.3%		313.82	313.82
RPT 021	8K preparation	25.00	2,237.16	11,305.59	139.75	38.9%	3,569.31	6,693.38	23,805.44
RPT 041	Proxy preparation				71.70	38.6%	3,521.43	17,085.89	20,607.32
RPT 045	Proxy printing and mailing					35.9%		89,046.27	89,046.27
RPT 051	Annual report preparation	75.00	4,411.95		985.80	38.9%	35,412.28	121,829.05	161,653.28
RPT 055	Annual report printing and mailing					36.3%		52,386.97	52,386.97
RPT 098	Financial Reporting-Sarbanes Oxley Related Charges					38.9%		53,081.96	53,081.96
		124.71	8,440.44	12,210.39	2,363.25		84,793.52	388,042.35	493,486.70

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HECO
EXCLUDING INCENTIVE COMPENSATION

Activity code	ACTIVITY CODE DESCRIPTIONS	Direct Charges-2004 Direct Labor Hours	Direct Labor Dollars	Direct Nonlabor Dollars	Shared Charges-2004 Shared Labor Hours	2004 Allocatio Factor	Shared Labor Dollars	Shared Nonlabor Dollars	2004 Actual
STO	**Stock Transfer activities**								
STO 001	Preferred stock dividend payments	14.55	785.28						785.28
STO 003	Form 1099 (for preferred stockholders)	3.00	141.96						141.96
STO 004	Preferred stockholder database maintenance	17.30	755.36						755.36
STO 005	Other preferred stock communications	1.25	55.70						55.70
STO 006	Preferred stock transfer administrative activities	50.90	2,789.06	152.58					2,941.64
STO 011	Common stock dividend payments				61.80	35.9%	1,150.13	1,826.58	2,976.71
STO 012	HEI dividend reinvestment program administration				2,769.85	35.9%	47,281.69	36,526.76	83,808.45
STO 013	Form 1099 Dividends				25.50	35.9%	440.06	771.37	1,211.43
STO 014	Common stockholder database maintenance				1,197.80	35.9%	18,703.95	433.58	19,137.53
STO 015	Other common stock communications				1,950.75	35.9%	34,124.46		34,124.46
STO 016	Common stock transfer administrative activities				2,309.65	35.9%	46,065.41	12,330.69	58,396.10
STO 018	Stock transfer system				150.30	35.9%	2,576.77	47,041.02	49,617.79
STO 019	Stock transfer division expenses					35.9%		39,494.44	39,494.44
STO 020	Stock transfer division miscellaneous income					35.9%		(31,909.43)	(31,909.43)
		87.00	4,527.36	152.58	8,465.65		150,342.47	106,515.01	261,537.42
TAX	**Tax**								
TAX 001	Tax return preparation	290.18	15,513.76		227.50	36.3%	4,684.83	5,671.84	25,870.43
TAX 002	Tax return review	80.00	7,955.58		57.50	36.3%	2,615.20		10,570.78
TAX 003	Tax and financial planning	156.25	18,706.43		42.50	36.3%	2,069.38		20,775.81
TAX 006	Tax research	169.01	9,888.26	469.87	10.00	36.3%	164.03		10,522.16
TAX 007	Tax accrual review	242.50	16,837.42		21.00	36.3%	755.71		17,593.13
TAX 008	Tax compliance software implementation	48.25	2,631.06		2.00	36.3%	39.65		2,670.71
TAX 009	Assistance on the IRS/State examination	168.68	12,532.09		169.75	36.4%	5,302.17		17,834.26
TAX 010	Information returns	83.25	4,451.80						4,451.80
TAX 011	IRS/Dept. of Taxation correspondence	26.25	1,178.07						1,178.07
TAX 012	Estimated tax computation	16.20	1,038.12		3.00	36.3%	58.84		1,096.96
TAX 013	General excise tax returns	3.50	222.13						222.13
TAX 014	Payroll tax withholding	78.25	3,728.20						3,728.20
TAX 017	Other tax matters	36.25	2,273.36	427.82					2,701.18
TAX 018	Executive payroll issues	11.75	1,042.97						1,042.97
TAX 019	Taxes-Sarbanes Oxley Related Charges	240.00	16,086.57						16,086.57
TAX 020	Tax Depreciation	336.50	17,942.01						17,942.01
		1,986.82	132,027.83	897.69	533.25		15,689.81	5,671.84	154,287.17
	Total of all activity codes	3,456.10	295,462.17	134,066.75	15,878.35		508,817.47	862,300.57	1,800,646.96
Less other costs related to incentive compensation to be consistent with HECO-1310									
HUM 011	Long-term incentive plan (LTIP)								(217.37) (1)
HUM 012	Executive incentive compensation plan (EICP)								(1,205.36) (2)
HUM 013	Stock options with dividend equivalents								(10,715.77) (3)
HUM 014	Stock options								(712.50) (4)
HUM 015	Executives deferred compensation								(424.52) (5)
	Adjusted total								1,787,371.44

HECO Charges

Shared charges

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	Activity Code	Workorder #	2004
ANNUAL MEETING ACTIVITIES			
Annual meeting expenses	ANN001	CR000047	2,318.25
Annual meeting room set-up	ANN001	FA000224	1,161.86
Other annual meeting charges	ANN001	AD000684	3,301.41
Harry Arakaki work for HEI	ANN001	AD001377	279.09
Total annual meeting charges			7,060.61
2004 HECO allocation factor			38.6%
Total shared annual meeting charges to HECO			2,725.40
INVESTOR RELATIONS ACTIVITIES			
News releases - printing services	INV004	IT000293	387.73
Digital printing services	INV006	IT000323	461.42
Group analyst meeting charges	INV006	AD000201	19,964.11
Group analyst meeting meals	INV006	AD000202	597.51
Other investor relations charges	INV013	AD000196	214.09
Total investor relations charges			21,624.86
2004 HECO allocation factor			38.6%
Total shared investor relations charges to HECO			8,347.20
PENSION PLAN ACTIVITIES			
Master Pension Trust related charges	PEN009	AD000578	1,918.85
Total Master Pension Trust charges			1,918.85
2004 HECO allocation factor			67.7%
Total shared Master Pension Trust charges to HECO			1,299.06
OPEB funded plans/trusts charges	PEN026	AD000578	1,918.86
Total OPEB funded plans/trusts charges			1,918.86
2004 HECO allocation factor			68.5%
Total shared OPEB funded plans/trusts charges to HECO			1,314.42
REPORTING ACTIVITIES			
10-K services	RPT001	AD000132	52.01
2004 HECO allocation factor			38.9%
Total shared 10-K charges to HECO			20.23
10-Q printing services	RPT015	IT000294	864.50
2004 HECO allocation factor			36.3%
Total shared 10-Q charges to HECO			313.81
Proxy Statement charges	RPT041	AD000164	12,196.42
Total proxy charges			12,196.42
2004 HECO allocation factor			38.6%
Total shared proxy charges to HECO			4,707.82
Annual report charges	RPT051	CR000048	2,622.48
Total annual report charges			2,622.48
2004 HECO allocation factor			38.9%
Total shared annual report charges to HECO			1,020.14
STOCK TRANSFER ACTIVITIES			
DRIP statements charges	STO012	IT000299	20.20
Shareholder Services charges	STO016	IT000295	351.92
Stock Transfer charges	STO016	AD000140	219.76
Information system charges	STO019	IT000229/255	16,644.00
Total stock transfer charges			17,235.88
2004 HECO allocation factor			35.9%
Total shared stock transfer charges to HECO			6,187.68
Total shared charges to HECO			25,935.76

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Ref: HECO-1310 (HEI Billings).

The referenced workpaper support was provided in a "Word" document file. Please provide the following:

a. Please provide HECO-1310 in an Excel spreadsheet file format with intact formulae, cell references and file links.

b. Please provide actual 2004 HEI charges to HECO, showing direct and allocated charges in a format comparable to the 2003 data set forth on HECO-1310.

c. Referring to item (a) above, please provide additional HEI workpapers supporting the conversion of 2003 direct labor hours and shared labor hours into their respective labor dollars.

d. Referring to items (a) and (c) above, please provide a copy of the underlying workpapers and calculations supporting the derivation of any standard hourly labor rates used therein.

HECO Response:

a. The electronic file with the requested information will be provided under separate transmittal.

b. The actual 2004 HEI charges to HECO, showing direct and allocated charges in a format comparable to the 2003 data set forth on HECO-1310, will not be available until the end of March 2005 since the annual true-up to reflect actual loading rates is currently being developed. However, the information will be provided as soon as it becomes available and will be made available no later than March 31, 2005.

c. A proforma bill is available for the period 1/1/03 to 12/31/03 which was run specifically for rate case purposes and excludes any incentive compensation from the employee labor rates. The proforma bill was run using actual 2003 direct labor hours and shared labor hours along with 2003 actual nonlabor dollars. The amounts reflected on the proforma bill agree

to the 2003 amounts reflected on HECO-1310 pages 1 through 3. This proforma bill is voluminous and contains confidential employee labor rates (which include actual salary, benefits and payroll taxes and loadings). One copy each will be provided to the Consumer Advocate and the Commission under protective order.

In addition, the proforma bill was run using the 2004 allocation factors for all allocation factors except the common equity based allocation factors. The common equity based allocation factors are 2005 estimated allocation factors based upon the estimated 12/31/04 common equity of the companies. All allocation factors were applied to the 2003 shared charges because the 2004 shared charges were not available at the time the rate case estimate was being developed. See HECO's response to CA-IR-252 a. for the [redacted]

CONFIDENTIAL
Subject To Protective Order

Due to the voluminous and confidential nature of the information, one copy (pages 3 – 159) will be provided to the Consumer Advocate and the Public Utilities Commission under protective order and under separate transmittal.

HEI Loaded Labor Rates
Department Name
January 1, 2003
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		Salary, payroll taxes, and benefit costs NAME	2003 Department Name Costs	Legend	Source
DATA					
Salary current annual		0		YER	Salary A
Payroll Taxes					
FICA	Rate 6.20% on up to $87,000	0		AC	YER-P
	Rate 1.45%	0		AC	YER-P
FUTA	Rate 0.8% on up to $7,000	0		AC	YER-P
SUTA	Rate 0.41% on up to $30,200	0		AC	YER-P
TDI		0		NA	Salary C
Benefits - Annual costs for:					
Medical		0		YER-C	Benefits A
Dental		0		YER-C	Benefits A
Vision		0		YER-C	Benefits A
Group life Insurance		0		YER-C	Benefits A
Dependent life insurance		0		YER-C	Benefits A
AD&D		0		YER-C	Benefits A
FLEX Adjustment		0		YER-C	Benefits A
Long-term disability		0		YER-C	Benefits A
Qualified Pension/OPEB 22.254% of 1/1/02 salary		0		AC-A	Benefits B
Bonus		0		AC-C	Benefits C-1

2003 Available Hours		
Total compensated hours	0	0
Holidays	0	0
Vacation	0	0
2003 Available Hours	0	0

Legend

YER	Salary as of January 1, 2003
YER-C	Based on January 2003 annualized premiums/credits
YER-P	Based upon salary as of January 1, 2003, multiplied by the applicable tax rates.
AC	Actual cost as recorded in this department
AC-C	Actual cost but cost was recorded as corporate not departmental cost
AC-T	Actual cost as recorded by Treasurer
AC-I	Actual cost as recorded by VP Information Systems
AC-A	Actual cost as recorded by VP Admininstration (and VP Info Systems and Corporate RA as applicable)
AC-Z	Actual cost as recorded by the VP Administration & the Corporate Secretary
AC-P	Actual cost as recorded by the President & VP Administration (as applicable)
NA	Not Applicable

HEI Loaded Labor Rates
Department Name
January 1, 2003
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		Loaded Hourly Labor Rates NAME	2003 Department Name Costs	Legend	Source
RATES					
Salary		0.0000		YER	
FICA	Rate 6.20% on up to $87,000	0.0000		YER-P	
	Rate 1.45%	0.0000		YER-P	
FUTA	Rate 0.8% on up to $7,000	0.0000		YER-P	
SUTA	Rate 0.41% on up to $30,200	0.0000		YER-P	
TDI		0.0000		NA	
	Subtotal	0.0000			
Benefits					
Medical		0.0000		YER-C	Benefits A
Dental		0.0000		YER-C	Benefits A
Vision		0.0000		YER-C	Benefits A
Group life Insurance		0.0000		YER-C	Benefits A
Dependent life insurance		0.0000		YER-C	Benefits A
AD&D		0.0000		YER-C	Benefits A
FLEX Adjustment		0.0000		YER-C	Benefits A
Long-term disability		0.0000		YER-C	Benefits A
Qualified Pension/OPEB		0.0000		AC-A	Benefits B
Executive incentive comp		0.0000		AC	
Bonus		0.0000		AC-C	Benefits C-1
Dividend Equivalent		0.0000		AC	
Other human resources costs		0.0000		AC-A	Benefits E
	Subtotal	0.0000			
Loaded rate before departmental costs		0.0000			
Departmental Loadings					
HEI Loadings					
Office Supplies		0.0000		AC	
Computer software/supplies		0.0000		AC	
Subscriptions		0.0000		AC	
Books		0.0000		AC	
Membership fees / dues - other		0.0000		AC	
Telephone equipment		0.0000		AC	
Long Distance		0.0000		AC	
Copier		0.0000		AC-P	Copier A
Mailing Services		0.0000		AC-A	Mailing A
Rent buildings		0.0000		AC-A	Rent A-4
HEI corp info system expense		0.0000		AC-I	Info Sys A
Insurance - Directors & officers		0.0000		AC-Z	Insurance A
Insurance - GL, w/c, property, business tvl		0.0000		AC-Z	Insurance A
Depreciation-computer		0.0000		AC	
Depreciation-furniture & fixtures		0.0000		AC	
Depreciation - dept LH improve		0.0000		AC	
Depreciation - King Street		0.0000		AC-A	Depreciation A
Total HEI loadings		0.0000			
HECO loadings					
Rent-parking		0.0000		AC-A	Rent B
Total HECO loadings		0.0000			
Total loaded labor rate		0.0000			

HEI Loaded Labor Rates
Department Name
January 1, 2003
Page 3 of 3

RATES	Loaded Hourly Labor Rates NAME	2003 Department Name Costs	Legend	Source
Other HECO Charges				
President's office	Unallocable or charge to the activity.		AC	
Other HEI Charges				
Computer supplies/other	Unallocable or charge to the activity.		AC	
Seminars - mainland	Unallocable or charge to the activity.		AC	
Seminars - air travel	Unallocable or charge to the activity.		AC	
Seminars - nonair	Unallocable or charge to the activity.		AC	
Seminars - hotels	Unallocable or charge to the activity.		AC	
Meals & entertainment	Unallocable or charge to the activity.		AC	
Local seminars	Designated as unallocable.		AC	
Seminars - misc	Designated as unallocable.		AC	
BOD expense	Unallocable charge to the activity.		AC	
Stockholder expenses	Unallocable charge to the activity.		AC	
Other A&G	Unallocable		AC	
Legal fees	Charge to the activity		AC	
Insurance - Directors & Officers	Allocated to the individual		AC	See Insurance A
Medical benefits allocation	Included in benefits.		AC	
Dental benefits allocation	Included in benefits.		AC	
Vision benefits allocation	Included in benefits.		AC	
Group life allocation	Included in benefits.		AC	
Long-term disability allocation	Included in benefits.		AC	
Qualified benefit plan	Included in benefits.		AC	
Nonqualified directors plan	Unallocable		AC	
Flex credits	Included in benefits.		AC	
Other post retirement benefits	Included in benefits.		AC	
HR-administration	Included in benefits.		AC	
HR-benefits	Included in benefits.		AC	
Payroll taxes	N/A-payroll taxes on the current year salary is used		AC	
OTS exam	Designated as unallocable.		AC	
Rounding				
Total corporate secretary costs		0		
Total per general ledger				
Difference		0		

CA-IR-252

Ref: HECO-1310 (HEI Billings).

Please provide the following with regard to the HEI allocation applied to shared costs:

a. Please provide a copy of all workpapers, in hard copy and spreadsheet file format (with intact formulae and cell references), supporting the development of the HEI allocation factors set forth on HECO-1310.

b. If not supplied in response to subpart (a) above, please provide the source documents supporting the inputs used in the development of each allocation factor.

c. Have the allocation factors referenced in response to subpart (a) above, been revised or updated?

d. If so, please provide the information requested in subparts (a) and (b) above for the updated factors.

HECO Response:

a. See pages 3 through 7 of this response for the workpapers supporting the development of the HEI allocation factors set forth on HECO-1310. The electronic file of the information provided on pages 3 through 7 of this response will be provided under separate transmittal.

Please see the source documents for the allocation factors labeled Source A through J on pages 8 through 39 which support the inputs used in the development of each allocation factor.

b. Please see the response to part a.

c. Yes, the allocation factors referenced in response to part a above have been updated for the 12/31/04 actual results which will be used to allocate the shared charges to HECO in 2005. As indicated in Section 3.2b. to the Administrative Services Agreement between Hawaiian Electric Industries, Inc. and Hawaiian Electric Company, Inc., the allocation percentages will be calculated annually, and will be based primarily upon prior year data. Hence, the

2005 shared activities will be allocated based primarily upon the 12/31/04 data in accordance with the Administrative Services Agreement.

Note: The updated 12/31/04 actual common equity based allocator which will be used to allocate approximately 80% of the total shared charges would have resulted in higher allocations to HECO than what is reflected in the 2005 test year estimate shown on HECO-1310.

See pages 40 through 44 of this response for the workpapers supporting the development of the actual 12/31/04 HEI allocation factors. The electronic file of the information provided on pages 40 through 44 of this response will be provided under separate transmittal.

Please see the source documents for the allocation factors labeled Source A through I on pages 45 through 69 which support the inputs used in the development of each allocation factor.

d. Please see the response to part c.

Equity Allocation Factors
Estimated results as of 12/31/04 used for determining HEI's 2005 estimate of shared charges to HECO shown on HECO-1310
(in thousands of dollars)

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	TOTAL
Publicly-traded company related:													
Common equity	(1)	(A)	637,323	1,047	186,450	193,696	505,405	1,965	85,377	16,842	3,976	31	1,632,112
Common equity %			39.0%	0.1%	11.4%	11.9%	31.0%	0.1%	5.2%	1.0%	0.3%	0.0%	100.0%
Preferred equity (publicly held)	(2)	(B)	8,793	0	0	0							8,793
Preferred equity %			100.0%	0.0%	0.0%	0.0%							100.0%
Common + pref. (publicly held) equity	(1) + (2)		646,116	1,047	186,450	193,696	505,405	1,965	85,377	16,842	3,976	31	1,640,905
Common + pref. (publicly held) equity %			39.4%	0.1%	11.4%	11.8%	30.8%	0.1%	5.2%	1.0%	0.2%	0.0%	100.0%
Common + pref. (publicly held) equity	(1) + (2)		646,116		186,450	193,696							1,026,262
Common + pref. (publicly held) equity %			62.9%		18.2%	18.9%							100.0%
AUD004 & AUD005 ONLY													

(A) The common equity forecast was based primarily upon what was provided by the utilities and the other subsidiaries in the Rating Agency Meetings in May 2004. See response to CA-IR-252 subpart c. for the actual 12/31/04 results which indicates that HECO's common equity allocation percentage should have been 39.7% instead of the 39.0% shown above which is the basis for HEI's 2005 estimate of shared charges to HECO that use the common equity allocator.

(B) The publicly held preferred equity amount remained unchanged from the prior year actual. See support B-1 which was verified by the HECO Securities Administrator which agrees to the $8,793 shown on the schedule above.

ı Factors
s as of 12/31/04 used for determining HEI's 2005 estimate of shared charges to HECO shown on HECO-1310

)	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	Note 1 HEIPC	Note 1 HIG	TOTAL	Less: HEIPC & HIG	TOTAL agrees to p1
mpany related including discontinued operations:																	
	(1)	(A)	637,323 36.6%	1,047 0.1%	186,450 10.7%	193,696 11.1%	505,405 29.0%	1,965 0.1%	85,377 4.9%	16,842 1.0%	3,976 0.2%	31 0.0%	71,633 4.1%	38,911 2.2%	1,742,656 100.0%	(110,544)	1,632,112
ly held)	(2)	(B)	8,793 100.0%	0 0.0%	0 0.0%	0 0.0%									8,793 100.0%		8,793
ly held) equity ly held) equity %	(1) + (2)		646,116 36.9%	1,047 0.1%	186,450 10.6%	193,696 11.1%	505,405 28.8%	1,965 0.1%	85,377 4.9%	16,842 1.0%	3,976 0.2%	31 0.0%	71,633 4.1%	38,911 2.2%	1,751,449 100.0%	(110,544)	1,640,905

quity of HEI Power Corp. (HEIPC) as of February 29, 2000 and of Hawaiian Insurance & Guaranty Company, Ltd. (HIG) as of September 30, 1992 (prior to any of its investments) adjusted for the income tax benefits of losses on common equity are included in the relative common equity calculations shown here. HEI made a ue to allocate shareholder dependent costs to HEIPC and HIG because HEI must still theoretically report to all of its shareholders even with the exit from HEIPC's iness and HIG's insurance business. Examples of shareholder dependent costs include printing and mailing costs for the annual report and proxy and stock transfer for the support for HEIPC's adjusted equity and Source A-2 for HIG's adjusted equity.

y forecast was based primarily upon what was provided by the utilities and the other subsidiaries in the Rating Agency Meetings in May 2004. See response to CA-IR- ctual 12/31/04 results which indicates that HECO's common equity allocation percentage should have been 37.1% instead of the 36.6% shown above which is the timate of shared charges to HECO which use the common equity including discontinued operations allocator.

referred equity amount remained unchanged from the prior year actual. See support B-1 which was verified by the HECO Securities Administrator which agrees to e schedule above.

Allocation Factors
Actual results as of 12/31/03 (except as noted) used for determining HEI's 2005 estimate of shared charges to HECO shown on HECO-1310
(in thousands of dollars, except as noted)

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	TOTAL	ADJ	HEI Corp., (and its financing subs HEI Capital Trust I Hycap) & Elim	CONS.
Financing related:																
Short-term debt		(C)	0		6,000	0	0	0	0	0	0	0	6,000		(6,000)	0
Long-term debt		(C)	394,823		140,868	163,729	0	0	17,073	0	0	0	716,493		347,927	1,064,420
Total debt	(3)		394,823	0	146,868	163,729	0	0	17,073	0	0	0	722,493		341,927	1,064,420
Debt (Long-term & short-term) %			54.6%	0.0%	20.3%	22.7%	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	100.0%			
Preferred equity	(4)	(C)	22,293		7,000	5,000							34,293			34,293
Preferred equity %			65.0%	0.0%	20.4%	14.6%							100.0%			
Common equity (should have been updated for 12/31/04 estimate)	(5)	(C)	582,562	47	174,639	187,195	464,724	1,978	80,184	14,984	3,949	31	1,510,293		(421,262)	1,089,031
Common equity %			38.6%	0.0%	11.6%	12.4%	30.8%	0.1%	5.3%	1.0%	0.2%	0.0%	100.0%			
Debt + Equity (pref. & common)	(3)+(4)+(5)		999,678	47	328,507	355,924	464,724	1,978	97,257	14,984	3,949	31	2,267,079		(79,335)	2,187,744
Debt + Equity (pref. & common) %			44.1%	0.0%	14.5%	15.7%	20.5%	0.1%	4.3%	0.6%	0.2%	0.0%	100.0%			
Employee related:																
Gross payroll		(E)	98,847	0	21,882	21,975	57,781	0	0	0	0	181	200,666		6,657	207,323
Gross payroll %			47.6%	0.0%	10.6%	10.6%	27.9%	0.0%	0.0%	0.0%	0.0%	0.1%	96.8%		3.2%	100.0%
# of employees		(F)	1,275	0	289	298	1,285	0	0	0	0	5	3,152		44	3,196
# of employees %			39.9%	0.0%	9.0%	9.3%	40.2%	0.0%	0.0%	0.0%	0.0%	0.2%	98.6%		1.4%	100.0%
Tax-related																
Pretax income (Note 1)		(D)	80,465	134	18,237	30,167	87,344	75	2,945	1,965	78	75	221,485	(568)	(38,502)	182,415
Pretax income %			36.3%	0.1%	8.2%	13.6%	39.5%	0.0%	1.3%	0.9%	0.1%	0.0%	100.0%			
General (3 factor formula):																
Common equity (should have been updated for 12/31/04 estimate)			38.6%	0.0%	11.6%	12.4%	30.8%	0.1%	5.3%	1.0%	0.2%	0.0%	100.0%			100.0%
Pretax income			36.3%	0.1%	8.2%	13.6%	39.5%	0.0%	1.3%	0.9%	0.1%	0.0%	100.0%			100.0%
Gross payroll			47.6%	0.0%	10.6%	10.6%	27.9%	0.0%	0.0%	0.0%	0.0%	0.1%	96.8%	0.0%	3.2%	100.0%
Average			40.8%	0.0%	10.1%	12.2%	32.8%	0.0%	2.2%	0.7%	0.1%	0.0%	98.9%	0.0%	1.1%	100.0%

Note 1: Where the pretax income amount was negative, the absolute value was used since it would be illogical to allocate a negative amount.

Source:

(C) SEC Form U-3A-2 (Statement by Holding Company Claiming Exemption Under Rule U-3A-2 from the Provisions of the Public Utility Holding Company Act of 1935). See support labeled Source C, Exhibit A, pages 1-3 and Exhibit A-1, pages 1-2.

(D) SEC Form U-3A-2 (Statement by Holding Company Claiming Exemption Under Rule U-3A-2 from the Provisions of the Public Utility Holding Company Act of 1935). See support labeled Source D, Exhibit A, pages 4-6 and Exhibit A-1, pages 3-4.

(E) Gross payroll amounts provided by subsidiaries from their payroll registers. See support labeled Source E for the various subsidiaries.

(F) HECO Human Resources department report. See support labeled Source F.

ted) used for determining HEI's 2005 estimate of shared charges to HECO shown on HECO-1310

el	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	TOTAL	HEI Corp.	CONS.
	(G)	1,467	0	296	300	1,118	9	0	0	0	4	3,194	55	3,249
		45.2%	0.0%	9.1%	9.2%	34.4%	0.3%	0.0%	0.0%	0.0%	0.1%	98.3%	1.7%	100.0%
ts*)														
Ref 1	(H)	411,318,930		76,728,861	63,705,689							551,753,480	8,504,408	560,257,888
		411,318,930		76,728,861	63,705,689	0	0	0	0	0	0	551,753,480	8,504,408	560,257,888
		73.4%		13.7%	11.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.5%	1.5%	100.0%
of plan assets*):														
Ref 1	(H)	411,318,930		76,728,861	63,705,689	0	0	0	0	0	0	551,753,480	8,504,408	560,257,888
Ref 2 (not used)							0					0		0
Ref 3	(H)					28,605,807						28,605,807		28,605,807
		411,318,930		76,728,861	63,705,689	28,605,807	0	0	0	0	0	580,359,287	8,504,408	588,863,695
		69.9%		13.0%	10.8%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	98.6%	1.4%	100.0%
he exception of the executive life trust*)														
ding used due to HELCO's $0 balance since 12/31/97 In order to more fairly allocate administrative time/expenses to this activity, per J. Haraga, Treasury Administrator														
Ref 5	(H)	10,896,820		3,308,549	2,402,990							16,608,359	833,899	17,442,258
Ref 6	(H)	3,340,074		990,580	809,490							5,140,144	558,623	5,698,767
Ref 7	(H)	37,843,843		7,803,834	7,094,623							52,742,300		52,742,300
Ref 8 not used												0		0
Ref 9 not used												0		0
Ref 11	(I)	637,414		82,092	71,902							791,398	108,008	899,406
Ref 10	(H)	16,349		8,142	15,308							39,799		39,799
		52,734,500		12,193,187	10,394,313	0	0	0	0	0	0	75,322,000	1,500,530	76,822,530
		68.6%		15.9%	13.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.0%	2.0%	100.0%
ssets*):														
Ref 5	(H)	10,896,820		3,308,549	2,402,990	0	0	0	0	0	0	16,608,359	833,899	17,442,258
Ref 6	(H)	3,340,074		990,580	809,490	0	0	0	0	0	0	5,140,144	558,623	5,698,767
Ref 7	(H)	37,843,843		7,803,834	7,094,623	0	0	0	0	0	0	52,742,300	0	52,742,300
Ref 8 not used												0		0
Ref 9 not used												0		0
Ref 10	(H)	16,349		8,142	15,308	0	0	0	0	0	0	39,799	0	39,799
		52,097,086		12,111,105	10,322,411	0	0	0	0	0	0	74,530,602	1,392,522	75,923,124
		68.6%		16.0%	13.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.2%	1.8%	100.0%
ets*):														
Ref 5	(H)	10,896,820		3,308,549	2,402,990	0	0	0	0	0	0	16,608,359	833,899	17,442,258
Ref 6	(H)	3,340,074		990,580	809,490	0	0	0	0	0	0	5,140,144	558,623	5,698,767
Ref 7	(H)	37,843,843		7,803,834	7,094,623	0	0	0	0	0	0	52,742,300	0	52,742,300
		52,080,737		12,102,963	10,307,103	0	0	0	0	0	0	74,490,803	1,392,522	75,883,325
		68.6%		16.0%	13.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.2%	1.8%	100.0%
n assets*):														
Ref 10	(H)	16,349		8,142	15,308	0	0	0	0	0	0	39,799	0	39,799
		16,349		8,142	15,308	0	0	0	0	0	0	39,799	0	39,799
		41.1%		20.4%	38.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

f 12/31/03 was not available at the time the rate case estimates were being developed, hence the 12/31/02 market values were used. See response to CA-
2/31/04.

a O'Brien. See support labeled Source G.
sury Administrator, Julie Haraga). See support labeled Source H.
wide (received from Treasury Administrator, Julie Haraga). See support labeled Source I.

2004 EXECUTIVES UNDER VARIOUS PLANS

		HECO	HELCO	MECO	ASB	HEI	TOTAL
HUM011	# of executives (LTIP) NOTE A	1	1	1	6	6	15
	%	6.6	6.7	6.7	40.0	40.0	100.0
HUM012	# of executives (EICP) NOTE B	14	1	1	33	6	55
HUM017	%	25.5	1.8	1.8	60.0	10.9	100.0
	Average stock options						
HUM013	# of executives (1 + 2) NOTE C	8	1	1	8	8	26
HUM014	%	30.8	3.8	3.8	30.8	30.8	100.0
HUM015	# of executives (Deferred) NOTE D	5	0	0	1	1	7
	%	71.4	0	0	14.3	14.3	100.0
HUM016	# of directors (Deferred) NOTE E	0	0	0	0	1	1
	%	0	0	0	0	100.0	100.0
HUM002	# of executives (OFFICER MERIT) NOTE H	14	1	1	12	6	34
HUM010	COMPENSATION COMMITTEE	41.2	2.9	2.9	35.3	17.7	100.0

not used for rate case purposes due to test year amounts excluding incentive compensation

Note A: Based on executives in 2004-2006 Long-Term Incentive Plan (projected as information is not available as of 1/22/04)
Note B: Based on executives in 2004 Executive Incentive Compensation Plan (projected as information is not available as of 1/22/04)
Note C: Based on average of executives in 2003 and 2004 SOIP with dividend equivalents (2004 projected as information is not available as of 1/22/04).
Note D: Based on executives that are receiving distributions or deferring executive compensation as of 1/2/04. See deferred compensation binder for count.
Note E: Based on directors that are receiving distributions or deferring director's compensation as of 1/02/04.
Note H: Based on senior executives in 2004 (projected as information is not available as of 1/22/04).

stock options-every other year all executives							
	# of executives NOTE F (1)	14	1	1	14	8	38
stock options-every HEI executives & subsidiary presidents							
	# of executives NOTE G (2)	1	1	1	1	7	11

Note F: Based on executives in 2003 SOIP with dividend equivalents
Note G: Based on executives in 2004 SOIP with dividend equivalents

	HEI Power Corp & Subs. Consolidated	Reclasses	HEIII	Combined HEIPC & HEIII	Grouped for HEI Fin'l Rptg
	$ 90,143,957.69	$ (87,500,000.00)	177,363.29	2,821,321.18	2,821,321.18
57) (2)	9,238.54	(9,238.54)	20,072.70	20,072.70	20,072.70
	1,106,589.71	9,238.54	61,966.41	1,177,794.66	1,177,794.66
	216,590.51			216,590.51	
	-				
	9,710,260.35			9,710,260.35	
	40,744,057.48			40,744,057.48	
	(2,707,390.22)			(2,707,390.22)	38,036,667.26
	64,741.23	87,500,000.00	52,654,496.63	140,219,239.86	150,140,337.81
	(7,752.91)			(7,752.91)	
	-				
57) (1)	-				
14)	$ 139,282,292.58	$ -	$ 52,913,901.03	$ 192,196,193.61	$ 192,196,193.61

	$ 299,576.21			
	14,231.85			
	82,746.07			
	151,692.00			
	48,000.00			
	596,246.13			826,275.57
57 (2)	2,955,359.37			2,955,359.37
	17,073,100.00			17,073,100.00
	(126,243.77)			43,229,920.10
	-			
	1,525,314.74		1 · **	1,667,636.49
57	22,023,776.47	Rate per L. Ishii, 002 Director of Taxes	0 · 3891	65,752,291.53
	876,314.25			876,314.25
21 (1)	133,549,280.00			142,626,967.38
64) I/S	(17,167,078.14)		0 · 6109 X	(17,061,379.55)
	-			
57	117,258,516.11			126,443,902.08
14	$ 139,282,292.58			192,196,193.61

(1) 117,258,516 · 11 X
(2) 0 · 6109
71,633,227 · 4916 *
Revised equity for interco. billing purposes

	Inc/(Dec)	
	Month	Year To Date
	27,837.7	31,100.0
	(1,501.5)	(2,619.4)
	1,797.5	1,206.2
	803.4	3,399.5
	248.0	(913.4)
	(9,049.5)	(7,463.5)
	20,035.6	24,509.4
	0.0	0.0
	20,000.0	20,000.0
	(17,742.1)	(14,331.9)
	254.0	2,174.5
	2,511.9	7,842.6
	22,547.5	

Source A-

Source B-1

INTEROFFICE CORRESPONDENCE

Hawaiian Electric Industries, Inc.

January 12, 2005

To: Cheryl Sakai

From: Carol Imai

Subject: Publicly-held preferred stock

Please confirm that as of 12/31/04 the following series (and its related amounts) are the only **publicly-held preferred stock for all utilities**:

			$000's
Series	C	HECO	$3,000
Series	D	HECO	$1,000
Series	E	HECO	$3,000
Series	I	HECO	$1,793
Series			
Series			
		Total	$8,793

Carol - I can't verify whether C, D, E, and I are publicly held, but for intercompany billing purposes only you can assume that they are publicly held (based on the large number of holders for each of these series). Call me at ext. 7965 if you have any questions. (QUIPS not included above.)

Reviewed and verified by: Cheryl Sakai
Cheryl Sakai, Securities Administrator
Date: 1/21/05

Please return this form to me by **Monday, January 24.** If you have any questions, please call me at 543-7920.

Source C

Exhibit A
Page 1 of 7

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Balance Sheet (Page 1 of 3)
December 31, 2003
(Unaudited)
(in thousands)

ASSETS	Hawaiian Electric Industries, Inc.	Hawaiian Electric Company, Inc. and subsidiaries	HEI Diversified, Inc. and subsidiary (ASB)	HEI Investments, Inc.	HEI Properties, Inc.
Cash and equivalents	$ 12,009	158	209,720	813	$ 49
Federal funds sold	–	–	56,678	–	–
Notes receivable from affiliated companies	6,000	–	1,320	9,743	279
Accounts receivable and unbilled revenues, net	11,970	154,704	23,138	1,047	126
Available-for-sale investment and mortgage-related securities	12,124	–	1,775,053	–	–
Available-for-sale mortgage-related securities pledged for repurchase agreements	–	–	941,571	–	–
Held-to-maturity investment securities	–	–	94,624	–	–
Loans receivable, net	–	–	3,121,979	–	–
Property, plant and equipment, net	1,815	2,240,370	69,703	–	–
Other	289	186,024	145,969	45,171	3,554
Goodwill and other intangibles	–	–	93,987	–	–
Investments in subsidiaries, at equity	1,532,101	–	–	–	–
	$ 1,576,308	2,581,256	6,533,742	56,774	$ 4,008
LIABILITIES AND STOCKHOLDERS' EQUITY					
Liabilities					
Accounts payable	$ 8,350	84,452	43,225	14	$ 5
Deposit liabilities	–	–	4,026,250	–	–
Short-term borrowings	14,371	6,000	–	–	–
Securities sold under agreements to repurchase	–	–	831,335	–	–
Advances from Federal Home Loan Bank	–	–	1,017,053	–	–
Long-term debt, net	468,000	699,420	17,073	–	–
Deferred income taxes	(16,289)	170,841	30,796	41,329	71
Regulatory liabilities	–	71,882	–	–	–
Contributions in aid of construction	–	233,969	–	–	–
Other	12,845	235,956	22,989	447	(17)
	487,277	1,502,520	5,988,721	41,790	59
Company-obligated trust preferred securities	–	100,000	–	–	–
Preferred stock of subsidiaries-not subject to mandatory redemption	–	34,293	113	Minority interest stock held by ASB officers	–
Minority interests	–	–	–	–	–
	–	134,293	113	–	–
Stockholders' equity					
Common stock	888,431	381,416	331,072	9,080	3,968
Retained earnings (deficit)	197,774	563,215	214,789	5,904	(19)
Accumulated other comprehensive income (loss)	2,826	(188)	(953)	–	–
	1,089,031	944,443	544,908	14,984	3,949
	$ 1,576,308	2,581,256	6,533,742	56,774	$ 4,008

Continued on next page.

ASB 464,724
HEIDI 80,184

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Balance Sheet (Page 2 of 3)
December 31, 2003
(Unaudited)
(in thousands)

(Continued)

	HEI Leasing, Inc.	Pacific Energy Conservation Services, Inc.	HEI District Cooling, Inc.	ProVision Technologies, Inc.	Hycap Management, Inc.
ASSETS					
Cash and equivalents	$ –	42	–	–	$ 497
Federal funds sold	–	–	–	–	–
Notes receivable from affiliated companies	–	3	–	–	–
Accounts receivable and unbilled revenues, net	–	7	–	–	25
Available-for-sale investment and mortgage-related securities	–	–	–	–	–
Available-for-sale mortgage-related securities pledged for repurchase agreements	–	–	–	–	–
Held-to-maturity investment securities	–	–	–	–	–
Loans receivable, net	–	–	–	–	–
Property, plant and equipment, net	–	–	–	–	–
Other	–	11	–	–	–
Goodwill and other intangibles	–	–	–	–	–
Investments in subsidiaries, at equity	–	–	–	–	18,193
	$ –	63	–	–	$ 18,715
LIABILITIES AND STOCKHOLDERS' EQUITY					
Liabilities					
Accounts payable	$ –	15	–	–	$ 2
Deposit liabilities	–	–	–	–	–
Short-term borrowings					

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Balance Sheet (Page 3 of 3)
December 31, 2003
(Unaudited)
(in thousands)

(Continued)	Hawaiian Electric Industries Capital Trust I and subsidiary	The Old Oahu Tug Service, Inc.	Reclassifications and Eliminations Dr. (Cr.)	Consolidated
ASSETS				
Cash and equivalents	$ 22			
Federal funds sold	–	–	–	56,678
Notes receivable from affiliated companies	120,073	3,026	(140,444)	–
Accounts receivable and unbilled revenues, net	6	4	(3,311)	187,716
Available-for-sale investment and mortgage-related securities	–	–	–	1,787,177
Available-for-sale mortgage-related securities pledged for repurchase agreements	–	–	–	941,571
Held-to-maturity investment securities	–	–	–	94,624
Loans receivable, net	–	–	–	3,121,979
Property, plant and equipment, net	–	–	–	2,311,888
Other	1,210	–	–	382,228
Goodwill and other intangibles	–	–	–	93,987
Investments in subsidiaries, at equity	–	–	(1,550,294)	–
	$ 121,311	3,030	(1,694,049)	$ 9,201,158
LIABILITIES AND STOCKHOLDERS' EQUITY				
Liabilities				
Accounts payable	$ 25	3	3,311	$ 132,780
Deposit liabilities	–	–	–	4,026,250
Short-term borrowings	–	–	20,371	–
Securities sold under agreements to repurchase	–	–	–	831,335
Advances from Federal Home Loan Bank	–	–	–	1,017,053
Long-term debt, net	–	–	120,073	1,064,420
Deferred income taxes	–	(158)	–	226,590
Regulatory liabilities	–	–	–	71,882
Contributions in aid of construction	–	–	–	233,969
Other	–	1,207	–	273,442
	25	1,052	143,755	7,877,721
Company-obligated trust preferred securities	100,000	–	–	200,000
Preferred stock of subsidiaries-not subject to mandatory redemption	–	–	–	34,406 - 113 = 34,293
Minority interests	18,193	–	18,193	–
	118,193	–	18,193	234,406
Stockholders' equity				
Common stock	3,093	2,443	750,077	888,431
Retained earnings (deficit)	–	(454)	783,176	197,774
Accumulated other comprehensive income (loss)	–	(11)	(1,152)	2,826
	3,093	1,978	1,532,101	1,089,031
	$ 121,311	3,030	1,694,049	$ 9,201,158

Minority interest stock held by ASB officers

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES
Consolidating Schedule - Balance Sheet Information (Page 1 of 2)
December 31, 2003
(Unaudited)
(in thousands)

ASSETS	Hawaiian Electric Company, Inc.	Hawaii Electric Light Company, Inc.	Maui Electric Company, Limited
Cash and equivalents	$ 9	4	$ 87
Notes receivable from affiliated companies	10,800	–	25,500
Accounts receivable and unbilled revenues, net	106,457	27,528	21,613
Property, plant and equipment, net	1,388,144	449,936	402,290
Other	135,592	23,377	27,055
Investments in subsidiaries, at equity	364,973	–	–
	$ 2,005,975	500,845	$ 476,545
LIABILITIES AND STOCKHOLDER'S EQUITY			
Liabilities			
Accounts payable	$ 57,313	11,980	$ 14,418
Short-term borrowings	31,500	10,800	

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES
Consolidating Schedule - Balance Sheet Information (Page 2 of 2)
December 31, 2003
(Unaudited)
(in thousands)

(Continued)

	HECO Capital Trust I	HECO Capital Trust II	RHI	Reclassifications and Eliminations Dr. (Cr.)	Consolidated
ASSETS					
Cash and equivalents	$ –	–	58	–	$ 158
Notes receivable from affiliated companies	51,546	51,546	–	(139,392)	–
Accounts receivable and unbilled revenues, net	–	–	–	(894)	154,704
Property, plant and equipment, net	–	–	–	–	2,240,370
Other	–	–	–	–	186,024
Investments in subsidiaries, at equity	–	–	–	(364,973)	–
	$ 51,546	51,546	58	(505,259)	$ 2,581,256
LIABILITIES AND STOCKHOLDER'S EQUITY					
Liabilities					
Accounts payable	$ –	–	–	(741)	$ 84,452
Short-term borrowings					

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Statement of Income (Page 1 of 3)
Year ended December 31, 2003
(Unaudited)
(in thousands)

	Hawaiian Electric Industries, Inc.	Hawaiian Electric Company, Inc. and subsidiaries	HEI Diversified, Inc. and subsidiary	HEI Investments, Inc.	HEI Properties, Inc.
Revenues					
Electric utility	$ –	1,396,685	–	–	$ –
Bank	–	–	371,320	–	–
Other	10,765	–	240	2,084	170
Equity in net income of subsidiaries	142,354	–	–	–	–
	153,119	1,396,685	371,560	2,084	170
Expenses					
Electric utility	–	1,220,120	–	–	–
Bank	–	–	278,565	–	–
Other	16,675	–	1,391	119	92
	16,675	1,220,120	279,956	119	92
Operating income (loss)					
Electric utility	–	176,565	–	–	–
Bank	–	–	92,755	–	–
Other	136,444	–	(1,151)	1,965	78
	136,444	176,565	91,604	1,965	78
Interest expense–other than bank	(33,993)	(44,341)	(1,428)	–	–
Allowance for borrowed funds used during construction	–	1,914	–	–	–
Preferred stock dividends of subsidiaries	–	(915)	(11)	–	–
Preferred securities distributions of trust subsidiaries	–	(7,675)	–	–	–
Allowance for equity funds used during construction	–	4,267	–	–	–
Income (loss) from continuing operations before income taxes and minority interest	102,451	129,815	90,165	1,965	78
Income tax expense (benefit)	(15,597)	49,824	30,000	(311)	–
Income (loss) from continuing operations before minority interest	118,048	79,991	60,165	2,276	78
Minority interest in net income of subsidiaries	–	–	–	–	–
Income (loss) from continuing operations	118,048	79,991	60,165	2,276	78
Preferred stock dividends of parent	–	1,080	–	–	–
Preferred securities distributions	–	–	–	–	–
Income (loss) continuing operations for common stock	118,048	78,911	60,165	2,276	78
Income (loss) from discontinued operations	(3,870)	–	–	–	–
Net income (loss) for common stock	$ 114,178	78,911	60,165	2,276	$ 78

Continued on next page.

ASB 87,344

2,821 HEID,
124 Equity in net inc. of sub
2985

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Statement of Income (Page 2 of 3)
Year ended December 31, 2003
(Unaudited)
(in thousands)

Exhibit A
Page 5 of 7

(Continued)

	HEI Leasing, Inc.	Pacific Energy Conservation Services, Inc.	HEI District Cooling, Inc.	ProVision Technologies, Inc.	Hycap Management, Inc.
Revenues					
Electric utility	$ –	–	–	–	$ –
Bank	–	–	–	–	–
Other	–	207	–	439	4
Equity in net income of subsidiaries	–	–	–	–	1,432
	–	207	–	439	1,436
Expenses					
Electric utility	–	–	–	–	–
Bank	–	–	–	–	–
Other	5	282	–	533	71
	5	282	–	533	71
Operating income (loss)					
Electric utility	–	–	–	–	–
Bank	–	–	–	–	–
Other	(5)	(75)	–	(94)	1,365
	(5)	(75)	–	(94)	1,365
Interest expense–other than bank	–	–	–	–	–
Allowance for borrowed funds used during construction	–	–	–	–	–
Preferred stock dividends of subsidiaries	–	–	–	–	–
Preferred securities distributions of trust subsidiaries	–	–	–	–	–
Allowance for equity funds used during construction	–	–	–	–	–
Income (loss) from continuing operations before income taxes and minority interest	(5)	(75)	–	(94)	1,365
Income tax expense (benefit)	–	–	–	(21)	478
Income (loss) from continuing operations before minority interest	(5)	(75)	–	(73)	887
Minority interest in net income of subsidiaries	–	–	–	–	–
Income (loss) from continuing operations	(5)	(75)	–	(73)	887
Preferred stock dividends of parent	–	–	–	–	–
Preferred securities distributions	–	–	–	–	–
Income (loss) continuing operations for common stock	(5)	(75)	–	(73)	887
Income (loss) from discontinued operations					
Net income (loss) for common stock	$ (5)	(75)	–	(73)	$ 887

HEI Leasing discontinued in 2003

ProVision sold in 2003

Continued on next page

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Statement of Income (Page 3 of 3)
Year ended December 31, 2003
(Unaudited)
(in thousands)

(Continued)

	Hawaiian Electric Industries Capital Trust I and subsidiary	The Old Oahu Tug Service, Inc.	Reclassifications and Eliminations Dr. (Cr.)	Consolidated
Revenues				
Electric utility	$ –	–	–	$ 1,396,685
Bank	–	–	–	371,320
Other	10,051	31	10,680	13,311
Equity in net income of subsidiaries	–	–	143,786	–
	10,051	31	154,466	1,781,316
Expenses				
Electric utility	–	–	–	1,220,120
Bank	–	–	–	278,565
Other	–	106	(210)	19,064
	–	106	(210)	1,517,749
Operating income (loss)				
Electric utility	–	–	–	176,565
Bank	–	–	–	92,755
Other	10,051	(75)	154,256	(5,753)
	10,051	(75)	154,256	263,567
Interest expense–other than bank	–	–	(10,470)	(69,292)
Allowance for borrowed funds used during construction	–	–	–	1,914
Preferred stock dividends of subsidiaries	–	–	1,080	(2,006)
Preferred securities distributions of trust subsidiaries	–	–	8,360	(16,035)
Allowance for equity funds used during construction	–	–	–	4,267
Income (loss) from continuing operations before income taxes and minority interest	10,051	(75)	153,226	182,415
Income tax expense (benefit)	–	(6)	–	64,367
Income (loss) from continuing operations before minority interest	10,051	(69)	153,226	118,048
Minority interest in net income of subsidiaries	1,432	–	(1,432)	–
Income (loss) from continuing operations	8,619	(69)	151,794	118,048
Preferred stock dividends of parent	–	–	(1,080)	–
Preferred securities distributions	8,360	–	(8,360)	–
Income (loss) from continuing operations for common stock	259	(69)	142,354	118,048
Income (loss) from discontinued operations	–	–	–	(3,870)
Net income (loss) for common stock	$ 259	(69)	142,354	$ 114,178

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES
Consolidating Schedule - Income Information (Page 1 of 2)
Year ended December 31, 2003
(Unaudited)
(in thousands)

	Hawaiian Electric Company, Inc.	Hawaii Electric Light Company, Inc.	Maui Electric Company, Limited
Revenues			
Electric utility	$ 966,867	214,540	$ 215,667
Equity in net income (loss) of subsidiaries	29,459	–	–
	996,326	214,540	215,667
Expenses–Electric utility	857,708	186,687	175,592
Operating income	138,618	27,853	40,075
Interest expense	(33,161)	(9,332)	(10,148)
Allowance for borrowed funds used during construction	1,658	80	176
Preferred stock dividends of subsidiaries	–	–	–
Preferred securities distributions of trust subsidiaries	–	–	–
Allowance for equity funds used during construction	3,652	170	445
Income(loss) from continuing operations before income taxes	(5) 110,767	(1) 18,771	(3) 30,548
Income taxes	30,776	7,088	11,960
Income (loss) from continuing operations	79,991	11,683	18,588
Preferred stock dividends	(6) 1,080	(2) 534	(4) 381
Net income (loss) for common stock	$ 78,911	11,149	$ 18,207

Continued on next page.

0· *

HECO pretax income (5) 110,767·00*+
(6)? 1,080·00 -
HECO Capital Trust I 124·00 +
HECO Capital Trust II 113·00 +
30,374·00 -
Elimination 915·00 +
80,465·00 *

(1) 18,771·*
(2) 534· -
002
HELCO pretax income 18,237 *

(3) 30,548·*
(4) 381· -
002
MECO pretax income 30,167· *

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES
Consolidating Schedule - Income Information (Page 2 of 2)
Year ended December 31, 2003
(Unaudited)
(in thousands)

(Continued)

	HECO Capital Trust I	HECO Capital Trust II	Renewable Hawaii, Inc.	Reclassifications and Eliminations Dr. (Cr.)	Consolidated
Revenues					
Electric utility	$ 4,149	3,763	–	8,301	$ 1,396,685
Equity in net income (loss) of subsidiaries	–	–	–	29,459	–
	4,149	3,763	–	37,760	1,396,685
Expenses–Electric utility	–	–	133	–	1,220,120
Operating income (loss)	4,149	3,763	(133)	37,760	176,565
Interest expense	–	–	(1)	(8,301)	(44,341)
Allowance for borrowed funds used during construction	–	–	–	–	1,914
Preferred stock dividends of subsidiaries	–	–		915	(915)
Preferred securities distributions of trust subsidiaries	(4,025)	(3,650)		–	(7,675)
Allowance for equity funds used during construction	–	–		–	4,267
Income(loss) from continuing operations before income taxes	124	113	(134)	30,374	129,815
Income taxes	–	–	–	–	49,824
Income (loss) from continuing operations	124	113	(134)	30,374	79,991
Preferred stock dividends	–	–	–	(915)	1,080
Net income (loss) for common stock	$ 124	113	(134)	29,459	$ 78,911

HECO

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	3,206,473.94	86,120,329.67	86,120,329.67	86,120,329.67
Police Earnings	9,040.00	400,791.75	32,010.00	32,010.00
Overtime Pay:				
Extra Straight Time	17,201.16	451,711.13	451,711.13	451,711.13
Time and a Half	181,118.82	4,246,967.75	4,246,967.75	4,246,967.75
Doubletime	54,480.43	1,993,142.50	1,993,142.50	1,993,142.50
Callout	81,666.54	2,087,636.45	2,087,636.45	2,087,636.45
Penalties	13,140.94	433,733.15	433,733.15	433,733.15
Total Overtime Pay	347,607.89	9,213,190.98	9,213,190.98	9,213,190.98
Exception Pay				
Shift	10,034.76	276,905.81	276,905.81	276,905.81
Higher Duty	30,056.54	788,915.77	788,915.77	788,915.77
Differentials	5,437.85	225,665.49	225,665.49	225,665.49
Total Exception	45,529.15	1,291,487.07	1,291,487.07	1,291,487.07
Total Productive Costs	3,608,650.98	97,025,799.47	96,657,017.72	96,657,017.72
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	240.00	8,000.20	8,000.20	8,000.20
GROSS PAY	3,608,890.98	97,033,799.67	96,665,017.92	96,665,017.92
Other Pay				
Meals	10,056.00	275,997.60 (1)	275,997.60	275,997.60
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	943,174.00	943,174.00	943,174.00
Cash Bonus	0.00	869,917.12	869,917.12	869,917.12
Total Other Pay	10,056.00	2,089,088.72	2,089,088.72	2,089,088.72
GROSS EARNINGS	3,618,946.98	[redacted] (2)	98,754,106.64	98,754,106.64
Other Taxable Income:				
Flex Credits	93,735.56	2,287,077.11	2,287,077.11	2,287,077.11
Less: Flex Benf	122,466.52	2,988,852.91	2,988,852.91	
Less: Flex Spend	23,800.02	587,989.05	587,989.05	
Less: Transp Spend	1,614.60	227,132.78	227,132.78	227,132.78
Temp Disability Inc	3,206.46	21,774.79	21,774.79	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	0.00	0.00	0.00	0.00
Taxable Reimburseements	0.00	10,000.00	10,000.00	10,000.00
Retired Def Exec	0.00	37,160.79		
SERP	0.00	0.00		
Other Taxable	2,447.77	52,239.79	52,239.79	52,239.79
Total Other Tax Income	48,491.35-	1,395,722.26-	1,432,883.05-	2,122,184.12
Less: HEIRS	182,849.56	8,718,037.55		
Less: Deferred Exec Bonus	0.00	13,298.67		
Non-Cash Allowances				
Group Term Life	14,136.58	353,600.70	353,600.70	353,600.70

(2) 99,122,888.39*+
(1) 275,997.60 -
98,846,890.79 *

HELCO

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	669,642.66	17,258,771.61	17,258,771.61	17,258,771.61
Police Earnings	473.00	22,658.00	0.00	0.00
Overtime Pay:				
Extra Straight Time	9,679.27	260,443.11	260,443.11	260,443.11
Time and a Half	74,617.95	2,031,785.50	2,031,785.50	2,031,785.50
Doubletime	18,278.71	586,517.53	586,517.53	586,517.53
Callout	34,139.37	1,116,451.88	1,116,451.88	1,116,451.88
Penalties	4,543.82	123,799.90	123,799.90	123,799.90
Total Overtime Pay	141,259.12	4,118,997.92	4,118,997.92	4,118,997.92
Exception Pay				
Shift	2,985.33	85,746.56	85,746.56	85,746.56
Higher Duty	6,923.00	210,499.64	210,499.64	210,499.64
Differentials	273.52	4,821.48	4,821.48	4,821.48
Total Exception	10,181.85	301,067.68	301,067.68	301,067.68
Total Productive Costs	821,556.63	21,701,495.21	21,678,837.21	21,678,837.21
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	0.00	0.00	0.00	0.00
GROSS PAY	821,556.63	21,701,495.21	21,678,837.21	21,678,837.21
Other Pay				
Meals	3,660.00	132,559.20 (1)	132,559.20	132,559.20
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	57,198.00	57,198.00	57,198.00
Cash Bonus	0.00	122,875.00	122,875.00	122,875.00
Total Other Pay	3,660.00	312,632.20	312,632.20	312,632.20
GROSS EARNINGS	825,216.63	22,014,127.41 (2)	21,991,469.41	21,991,469.41
Other Taxable Income:				
Flex Credits	20,792.93	504,040.71	504,040.71	504,040.71
Less: Flex Benf	28,248.19	689,567.23	689,567.23	
Less: Flex Spend	2,743.26	65,738.26	65,738.26	
Less: Transp Spend	0.00	0.00	0.00	0.00
Temp Disability Inc	0.00	408.00	408.00	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	0.00	0.00	0.00	0.00
Taxable Reimbursements	0.00	0.00	0.00	0.00
Retired Def Exec	0.00	0.00		
SERP	0.00	0.00		
Other Taxable	0.00	0.00	0.00	0.00
Total Other Tax Income	10,198.52-	250,856.78-	250,856.78-	504,040.71
Less: HEIRS	40,396.60	1,613,971.22		
Less: Deferred Exec Bonus	0.00	0.00		
Non-Cash Allowances				
Group Term Life	2,961.23	78,482.45	78,482.45	78,482.45

(2) 22,014,127.41*+
(1) 132,559.20 -
21,881,568.21 *

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MECO

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	711,119.87	18,508,072.11	18,508,072.11	18,508,072.11
Police Earnings	1,724.00	3,064.00	0.00	0.00
Overtime Pay:				
Extra Straight Time	18,151.28	191,946.97	191,946.97	191,946.97
Time and a Half	118,693.81	1,759,962.05	1,759,962.05	1,759,962.05
Doubletime	74,272.31	395,398.82	395,398.82	395,398.82
Callout	29,576.95	554,805.88	554,805.88	554,805.88
Penalties	2,422.62	68,654.46	68,654.46	68,654.46
Total Overtime Pay	243,116.97	2,970,768.18	2,970,768.18	2,970,768.18
Exception Pay				
Shift	4,229.44	104,972.25	104,972.25	104,972.25
Higher Duty	7,597.46	152,990.20	152,990.20	152,990.20
Differentials	229.02	3,470.93	3,470.93	3,470.93
Total Exception	12,055.92	261,433.38	261,433.38	261,433.38
Total Productive Costs	968,016.76	21,743,337.67	21,740,273.67	21,740,273.67
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	0.00	455.00	455.00	455.00
GROSS PAY	968,016.76	21,743,792.67	21,740,728.67	21,740,728.67
Other Pay				
Meals	8,376.00	98,952.00 (1)	98,952.00	98,952.00
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	77,242.00	77,242.00	77,242.00
Cash Bonus	0.00	153,469.23	153,469.23	153,469.23
Total Other Pay	8,376.00	329,663.23	329,663.23	329,663.23
GROSS EARNINGS	976,392.76	22,073,455.90 (2)	22,070,391.90	22,070,391.90
Other Taxable Income:				
Flex Credits	21,513.68	523,775.34	523,775.34	523,775.34
Less: Flex Benf	29,367.39	721,834.45	721,834.45	
Less: Flex Spend	2,612.52	58,065.44	58,065.44	
Less: Transp Spend	0.00	0.00	0.00	0.00
Temp Disability Inc	0.00	0.00	0.00	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	0.00	1,129.40	1,129.40	1,129.40
Taxable Reimbursements	0.00	378.47	378.47	378.47
Retired Def Exec	0.00	0.00		
SERP	0.00	0.00		
Other Taxable	0.00	0.00	0.00	0.00
Total Other Tax Income	10,466.23-	254,616.68-	254,616.68-	525,283.21
Less: HEIRS	50,632.59	1,739,643.75		
Less: Deferred Exec Bonus	0.00	0.00		
Non-Cash Allowances				
Group Term Life	3,348.54	87,350.84	87,350.84	87,350.84

(2) 22,073,455.90 **+
(1) 98,952.00 -
21,974,503.90 *

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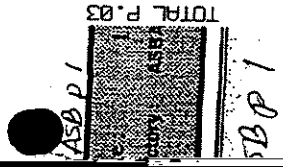

ASB p. 3

GS INVEST SVCS

Year-To-Date Register
As Of: 12-31-2003

ALS

ASB p 3

CUR AMT	MTD AMT	QTD AMT	YTD AMT
3,335.40-	3,335.40-	156,413.57	757,901.43
151.88	151.88	43,174.94	187,476.76
		9,773.61	45,555.75
		2,406.59	19,320.07
			1,537.60
8.93	8.93	2,017.10	7,311.16
			2,436.07
			281.08
			350.00
		150.00	300.00
		216,435.93	1,300,718.46
			8,000.00
		6,112.68	12,202.40
			84.67
41.89-	41.89-	6,143.35	33,940.21
		20,386.65	108,213.17
		630.90	2,959.48
			29.12
3,216.48-	3,216.48-	463,645.32	2,488,617.43
		206.16	1,115.36
		340.00	680.00
			287.00
		435.00	2,475.00
3,216.48-	3,216.48-	464,626.48	2,493,174.79
3,216.48-	3,216.48-	464,626.48	2,493,174.79
		99.46	531.45
7.60-	7.60-	1,432.40	7,689.41
		764.63	4,127.72
		715.86	5,959.12
61.57-	61.57-	9,246.35	42,756.41
		860.10	4,730.55
		2,157.80	14,202.55
		418.01	2,215.82
		1,200.80	6,851.90
		2,735.32	16,320.90
		31,041.05	211,630.74
			4,000.00
		755.28	4,209.50
		411.76	2,264.69
		61.57	512.99
			184.71
		5.24	34.11
		35.97	201.65
		980.00	4,400.00
		1,191.34	6,030.80
		150.08	804.44
		70.56	388.08
		45.56	250.58
		635.00	3,243.00

(1) 2,451,717.74

ASB p. 3

[redacted]

PEC

Req.By: AUTO SUBMIT PEC
Run on: 12/29/03 at: 12:57:32
Period: 01/99

HAWAIIAN ELECTRIC INDUSTRIES
Tax and Balancing Report

Page: 2
Report: HWBTBRA
Version: 5.2.34.01HW

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	6,325.44	153,070.59	153,070.59	153,070.59
Police Earnings	0.00	0.00	0.00	0.00
Overtime Pay:				
Extra Straight Time	0.00	0.00	0.00	0.00
Time and a Half	525.22	21,236.44	21,236.44	21,236.44
Doubletime	0.00	0.00	0.00	0.00
Callout	0.00	0.00	0.00	0.00
Penalties	0.00	0.00	0.00	0.00
Total Overtime Pay	525.22	21,236.44	21,236.44	21,236.44
Exception Pay				
Shift	0.00	0.00	0.00	0.00
Higher Duty	0.00	0.00	0.00	0.00
Differentials	159.00	3,195.00	3,195.00	3,195.00
Total Exception	159.00	3,195.00	3,195.00	3,195.00
Total Productive Costs	7,009.66	177,502.03	177,502.03	177,502.03
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	0.00	0.00	0.00	0.00
GROSS PAY	7,009.66	177,502.03	177,502.03	177,502.03
Other Pay				
Meals	0.00	0.00	0.00	0.00
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	0.00	0.00	0.00
Cash Bonus	0.00	3,000.00	3,000.00	3,000.00
Total Other Pay	0.00	3,000.00	3,000.00	3,000.00
GROSS EARNINGS	7,009.66	180,502.03	180,502.03	180,502.03
Other Taxable Income:				
Flex Credits	355.14	7,255.26	7,255.26	7,255.26
Less: Flex Benf	666.66	13,386.60	13,386.60	
Less: Flex Spend	0.00	0.00	0.00	
Less: Transp Spend	0.00	0.00	0.00	0.00
Temp Disability Inc	0.00	0.00	0.00	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	0.00	0.00	0.00	0.00
Taxable Reimbursements	0.00	0.00	0.00	0.00
Retired Def Exec	0.00	0.00		
SERP	0.00	0.00		
Other Taxable	0.00	0.00	0.00	0.00
Total Other Tax Income	311.52-	6,131.34-	6,131.34-	7,255.26
Less: HEIRS	147.57	4,135.21		
Less: Deferred Exec Bonus	0.00	0.00		
Non-Cash Allowances				
Group Term Life	4.12	77.28	77.28	77.28

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PECS

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	170,771.80	4,594,944.74	4,594,944.74	4,594,944.74
Police Earnings	0.00	0.00	0.00	0.00
Overtime Pay:				
Extra Straight Time	40.00	679.54	679.54	679.54
Time and a Half	30.00	5,553.63	5,553.63	5,553.63
Doubletime	0.00	0.00	0.00	0.00
Callout	0.00	0.00	0.00	0.00
Penalties	0.00	0.00	0.00	0.00
Total Overtime Pay	70.00	6,233.17	6,233.17	6,233.17
Exception Pay				
Shift	0.00	0.00	0.00	0.00
Higher Duty	0.00	0.00	0.00	0.00
Differentials	0.00	0.00	0.00	0.00
Total Exception	0.00	0.00	0.00	0.00
Total Productive Costs	170,841.80	4,601,177.91	4,601,177.91	4,601,177.91
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	0.00	0.00	0.00	0.00
GROSS PAY	170,841.80	4,601,177.91	4,601,177.91	4,601,177.91
Other Pay				
Meals	0.00	0.00	0.00	0.00
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	1,904,226.12	1,904,226.12	1,904,226.12
Cash Bonus	0.00	152,075.00	152,075.00	152,075.00
Total Other Pay	0.00	2,056,301.12	2,056,301.12	2,056,301.12
GROSS EARNINGS	170,841.80	6,657,479.03	6,657,479.03	6,657,479.03
Other Taxable Income:				
Flex Credits	3,248.68	79,392.30	79,392.30	79,392.30
Less: Flex Benf	4,571.36	111,717.00	111,717.00	
Less: Flex Spend	1,993.42	47,942.08	47,942.08	
Less: Transp Spend	1,279.67	18,014.04	18,014.04	18,014.04
Temp Disability Inc	0.00	244.80	244.80	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	0.00	0.00	0.00	0.00
Taxable Reimbursements	0.00	1,200.00	1,200.00	1,200.00
Retired Def Exec	0.00	100,000.00		
SERP	0.00	25,676.29		
Other Taxable	2,150.00	44,950.00	44,950.00	44,950.00
Total Other Tax Income	2,445.77-	73,790.27	51,886.02-	107,528.26
Less: HEIRS	7,334.01	442,713.50		
Less: Deferred Exec Bonus	0.00	79,749.17		
Non-Cash Allowances				
Group Term Life	779.91	18,657.96	18,657.96	18,657.96

HAWAIIAN ELECTRIC INDUSTRIES, INC.

EMPLOYEES AT MONTH-END
(Excludes All Leaves, Part Time, and Temporaries)
2003

RECEIVED
JAN 13 2004
By

	Dec 2002	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Utility:													
HECO	1,303	1,299	1,303	1,305	1,311	1,303	1,299	1,296	1,291	1,288	1,277	1,280	1,275
HELCO	291	292	291	292	294	297	297	295	296	293	291	291	289
MECO	300	303	303	305	306	303	303	303	302	300	302	296	298
	1,894	**1,894**	**1,897**	**1,902**	**1,911**	**1,903**	**1,899**	**1,894**	**1,889**	**1,881**	**1,870**	**1,867**	**1,862**
Diversified:													
Financial - ASB	1,272	1,260	1,263	1,278	1,282	1,290	1,289	1,286	1,264	1,248	1,258	1,301	1,285
Alternative Energy - PECS	4	4	4	4	4	4	4	4	4	5	5	5	5
ProVision Technologies*	4	4	3	3	2	1	-	-	-	-	-	-	-
IPP - HEI Power Corp	2	2	1	1	1	1	1	1	1	1	1	1	(A) (1)
	1,282	**1,270**	**1,271**	**1,286**	**1,289**	**1,296**	**1,294**	**1,291**	**1,269**	**1,254**	**1,264**	**1,307**	**1,291**
HEI Corporate	**44**	**45**	**45**	**45**	**45**	**45**	**45**	**45**	**45**	**45**	**45**	**45**	**44**
	3,220	**3,209**	**3,213**	**3,233**	**3,245**	**3,244**	**3,238**	**3,230**	**3,203**	**3,180**	**3,179**	**3,219**	**3,197**

disc ops

(A) <1>
3,196

For standardization purposes across all companies, all figures represent the number of full-time regular employees or equivalent. Actual number of employees on payroll may differ.
* Effective 5/1/03, ProVision Technologies is closed.

Source ?

Fujimoto, Debbie

From: Imai, Carol
Sent: Monday, January 12, 2004 1:48 PM
To: Fujimoto, Debbie
Subject: FW: In response to your 1/2/2004 memo - Participants in HEIRS

RECEIVED
JAN 12 2004
By

------ Forwarded Message
From: "O'Brien, Myra" <myra.obrien@heco.com>
Date: Mon, 12 Jan 2004 13:38:46 -1000
To: "Imai, Carol" <cimai@hei.com>
Cc: "Ho, Karen" <karen.ho@heco.com>
Subject: In response to your 1/2/2004 memo - Participants in HEIRS

Per your memo dated 1/2/2004, HEI's intercompany billing to its subsidiaries should be allocated in the following manner.

This is the HEIRS participant count by company as of 12/31/2003.

Participants with balances > $0.00

Company	Division	Q4 2003			
SB	ASB	1,118		34.305%	1,118.00*+
HECO	HE(HECO)	1,467		45.014%	1,467.00 +
HEI	HI	55	*	1.688%	55.00 +
HL	HL (HELCO)	296		9.083%	296.00 +
HP	HP (Disc ops)	8		0.245%	8.00 +
HEI	HTBYB (add to HEI)	(Toots) 9	*	0.276%	9.00 +
ME	ME (MECO)	300		9.205%	300.00 +
PECS	PE	4		0.123%	4.00 +
PVT	PV / Add to HEI	2	*	0.061%	2.00 +
	TOTAL	3,259		100.000%	3,259.00 *
HEI *	Consolidated	66		2.025%	

Myra O'Brien
Compensation & Benefits Division
HECO - 543-4674

End of Forwarded Message

HEI RET PLAN
Asset Reconciliation
(based on final trust & financial statements adj to cash basis)
2002

		HECO	HELCO	MECO	HEI	TOTAL
(1)	Market value, 1/1/02	505,841,724	93,899,648	77,848,407	10,167,941	687,757,720
(2)	Income					
	(a) Contributions	0	0	0	0	0
	(b) Int, div & other income	9,504,320	1,769,960	1,471,956	193,975	12,940,211
	(c) Adjustments	0	0	0	0	0
	(d) Total	9,504,320	1,769,960	1,471,956	193,975	12,940,211
(3)	Disbursements					
	(a) Benefit payments	(25,843,104)	(4,250,117)	(3,125,898)	(248,775)	(33,467,894)
	(b) Investment mgt / trustee fees	(2,380,823)	(442,150)	(367,250)	(48,002)	(3,238,225)
	(c) Other expenses	(544,962)	(101,186)	(92,952)	(13,003)	(752,103)
	(d) Total	(28,768,889)	(4,793,453)	(3,586,100)	(309,780)	(37,458,222)
(4)	Transfers	387,248	(60,804)	(320,588)	(5,856)	0
(5)	Net realized & unrealized gains (losses)	(75,645,473)	(14,086,490)	(11,707,986)	(1,541,872)	(102,981,821)
(6)	Adjustment to beginning market value	0	0	0	0	0
(7)	Market value, 12/31/02	411,318,930 (1)	76,728,861 (2)	63,705,689 (3)	8,504,408 (4)	560,257,888 (5)

Source H. Pension Ref 1

Source H
Pension Ref 3

AMERICAN SAVINGS BANK RETIREMENT PLAN
Asset Reconciliation
(based on final trust & financial statements adj to cash basis)
2002

(1)	Market value, 1/1/02	31,354,497
(2)	Income	
	(a) Contributions	2,835,622
	(b) Interest, dividends & other income	614,031
	(c) Adjustments	
	(d) Total	3,449,653
(3)	Disbursements	
	(a) Benefit payments	(875,124)
	(b) Investment mgt / trustee fees	(153,208)
	(c) Other expenses	(334,476)
	(d) Total	(1,362,808)
(4)	Adjustment to beginning market value	0
(5)	Net realized & unrealized gains (losses)	(4,835,535)
(6)	Market value, 12/31/02	28,605,807

HEI 401(h)
Asset Reconciliation
(based on final trust & financial statements adj to cash basis)
2002

		HECO	HELCO	MECO	HEI	TOTAL
(1)	Market value, 1/1/02	13,162,319	3,914,217	2,900,750	982,186	20,959,472
(2)	Income					
	(a) Contributions	0	0	0	0	0
	(b) Int, div & other income	249,290	75,065	55,412	18,923	398,690
	(c) Adjustments	0	0	0	0	0
	(d) Total	249,290	75,065	55,412	18,923	398,690
(3)	Disbursements					
	(a) Benefit payments	(493,619)	(62,195)	(65,521)	(7,265)	(628,600)
	(b) Investment mgt / trustee fees	(61,630)	(18,466)	(13,654)	(4,645)	(98,395)
	(c) Other expenses	(11,244)	(3,376)	(2,495)	(850)	(17,965)
	(d) Total	(566,493)	(84,037)	(81,670)	(12,760)	(744,960)
(4)	Transfers	34,890	0	(30,816)	(4,074)	0
(5)	Net realized & unrealized gain (loss)	(1,983,186)	(596,696)	(440,686)	(150,376)	(3,170,944)
(6)	Adjustment to beginning market value	0	0	0	0	0
(7)	Market value, 12/31/02	10,896,820 (7)	3,308,549 (8)	2,402,990 (9)	833,899 (10)	17,442,258 (11)

Source: H Reston Rej 6

401(h)final02.xls.11/19/03.10:52 AM

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DOCKET NO. 04-0113
PAGE 34 OF 69

HECO OPEB PLAN - NBU VEBA
Asset Reconciliation
(based on final trust & financial statements adj to cash basis)
2002

		HECO	HELCO	MECO	HEI	TOTAL
(1)	Market value, 1/1/02	2,267,984	979,944	782,654	629,894	4,660,476
(2)	Income					
	(a) Contributions	3,262,062	478,144	508,105	72,748	4,321,059
	(b) Int, div & other income	40,845	16,243	12,889	9,251	79,228
	(c) Adjustments	0	0	0	0	0
	(d) Total	3,302,907	494,387	520,994	81,999	4,400,287
(3)	Disbursements					
	(a) Benefit payments	(1,720,436)	(264,807)	(287,009)	(31,368)	(2,303,620)
	(b) Investment mgt / trustee fees	(12,472)	(4,814)	(3,893)	(2,726)	(23,905)
	(c) Other expenses	(13,280)	(5,897)	(4,600)	(4,041)	(27,818)
	(d) Total	(1,746,188)	(275,518)	(295,502)	(38,135)	(2,355,343)
(4)	Transfers	35,704	0	(32,948)	(2,756)	0
(5)	Net realized & unrealized gain (loss)	(520,333)	(208,233)	(165,708)	(112,379)	(1,006,653)
(6)	Adjustment to beginning market value	0	0	0	0	0
(7)	Market value, 12/31/02	3,340,074 (12)	990,580 (13)	809,490 (14)	558,623 (15)	5,698,767 (16)

Source: Pension Rpt 6

HECO OPEB PLAN - BU VEBA
Asset Reconciliation
(based on final trust & financial statements adj to cash basis)
2002

	HECO	HELCO	MECO	TOTAL
value, 1/1/02	46,146,025	9,546,290	8,655,536	64,347,851
ntributions	1,419,094	373,270	223,746	2,016,110
, div & other income	649,506	134,078	121,914	905,498
justments	0	0	0	0
tal	2,068,600	507,348	345,660	2,921,608
sements				
nefit payments	(2,301,306)	(536,185)	(428,767)	(3,266,258)
estment mgt / trustee fees	(193,594)	(40,023)	(36,374)	(269,991)
ner expenses	(13,488)	(2,788)	(2,533)	(18,809)
al	(2,508,388)	(578,996)	(467,674)	(3,555,058)
rs	6,175	(48,051)	41,876	0
lized & unrealized gain (loss)	(7,868,569)	(1,622,757)	(1,480,775)	(10,972,101)
nent to beginning market value	0	0	0	0
value, 12/31/02	37,843,843 (17)	7,803,834 (18)	7,094,623 (19)	52,742,300 (20)

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Source H
Pension Rec 7

HEI ELECTRIC DISCOUNT TRUST
Asset Reconciliation
(based on final trust & financial statements adj to cash basis)
2002

		HECO	HELCO	MECO	TOTAL
(1)	Market value, 1/1/02	34,817	17,742	20,277	72,836
(2)	Income				
	(a) Contributions	246,000	69,000	44,250	359,250
	(b) Int, div & other income	892	354	159	1,405
	(c) Adjustments	0	0	0	0
	(d) Total	246,892	69,354	44,409	360,655
(3)	Disbursements				
	(a) Benefit payments	(264,230)	(68,053)	(46,860)	(379,143)
	(b) Investment mgt / trustee fees	(3,072)	(1,102)	(637)	(4,811)
	(c) Other expenses	(276)	(109)	(95)	(480)
	(d) Total	(267,578)	(69,264)	(47,592)	(384,434)
(4)	Transfers	8,709	(7,156)	(1,553)	0
(5)	Net realized & unrealized gain (loss)	(6,491)	(2,534)	(233)	(9,258)
(6)	Adjustment to beginning market value	0	0	0	0
(7)	Market value, 12/31/02	16,349 (26)	8,142 (21)	15,308 (29)	39,799 (77)

Source of Pension Ref 10

Retiree Medical Plans: 2002 OPEB Postretirement Benefit Cost under SFAS 106

Exhibit 12

	BU VEBA (1)	NBU VEBA (2)	401(h) (3)	Elec Disc (4)	Exec Life (5)	Total (6)
7.25% Discount						
HEI						
HECO	$ (1,535)	$ 2,674,226	$ 247,511	$ 705,115	$ 637,414 (11)	$ 4,262,731
HELCO	328,042	303,693	(188,672)	213,429	82,082 (12)	738,574
MECO	53,174	373,004	(34,494)	160,421	71,902 (13)	624,007
HEI	0	68,646	4,102	0	108,008 (14)	180,756
Total	**379,681**	**3,419,569**	**28,447**	**1,078,965**	**899,406** (15)	**5,806,068**
ASB[1]	0	0	0	0	0	35,000
TOOTS[1]	0	0	0	0	0	4,000
Grand Total	**379,681**	**3,419,569**	**28,447**	**1,078,965**	**899,406**	**5,845,068**

[1] Estimated.

Trend Rates:

. Medical:	10 --> 4.75%
. Dental	4.75%
. Vision	3.75%

Long term asset return rate:

– BU VEBA, 401(h) Account:	10.0%
– NBU VEBA	5.5
– Elec Disc Trust	6.0

Pension Ref II Source I

Source J

Executives - HUM002 - Note H
* HUM010

HEI - 2004 & 2005

(6)
- R.F. Clarke
- P.C. Lewis — Change to P.U. Wong for 2005
- E.K. Yeaman
- A.I.T. Chang
- C.F. Wall
- C.Y. Harada

ASB - 2004 & 2005

(12)
- C.H. Lau
- S.A. Aoyama
- A.M. Nakamoto
- R.Y. Nakatsuka
- A.N. Sakamoto
- D. Hudson
- G.S.H. Lee
- M.M. Lum
- A.Q.C. Malczon
- P.S. Yamada
- W.T. Ishihara
- A.M.P. Springer

Add for 2005
- D.K. Todani

MECO - 2004 & 2005

(1) E.L. Reinhardt

HELCO - 2004 & 2005

(1) W.H.W. Lee

HECO - 2004 & 2005

(14)
- T.M. May
- R.A. Alm
- T.L. Joaquin
- K.E. Stahlkopf
- J.M. Erickson
- T.C. Simmons
- C.M. Shirai
- R. vonGnechten — Change to T.S.Y. Sekimura for 2005
- W.A. Bonnet
- C.M. Freedman
- P.U. Wong — Change to A.E. Ejercito for 2005
- L.A. Nagata
- E.T. Shiraki — Change to P. Nanbu for 2005
- M.M. Egged

Add for 2005
- H.K. Kageura
- D.G. Waller

uity Allocation Factors
tual results as of 12/31/04 to be used in HEI's 2005 actual billings to HECO

housands of dollars)

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	TOTAL	HEI Corp., (and its financing sub Hycap) & Elim	CONS.
olicly-traded company related:															
mmon equity	(1)	(A)	640,892	294	186,505	189,413	556,311	2,164	20,536	16,805	3,035	0	1,615,955	(405,010)	1,210,945
mmon equity %			39.7%	0.0%	11.6%	11.7%	34.4%	0.1%	1.3%	1.0%	0.2%	0.0%	100.0%		
ferred equity (publicly held)	(2)	(B)	8,793	0	0	0							8,793	0	8,793
ferred equity %			100.0%	0.0%	0.0%	0.0%							100.0%		
mmon + pref. (publicly held) equity	(1) + (2)		649,685	294	186,505	189,413	556,311	2,164	20,536	16,805	3,035	0	1,624,748	(405,010)	1,219,738
mmon + pref. (publicly held) equity %			40.0%	0.0%	11.5%	11.7%	34.2%	0.1%	1.3%	1.0%	0.2%	0.0%	100.0%		
mmon + pref. (publicly held) equity	(1) + (2)		649,685	294	186,505	189,413							1,025,897		
mmon + pref. (publicly held) equity %			63.3%	0.0%	18.2%	18.5%							100.0%		

D004 & AUD005 ONLY

SEC Form U-3A-2 (Statement by Holding Company Claiming Exemption Under Rule U-3A-2 from the Provisions of the Public Utility Holding Company Act of 1935). See support labeled urce A, Exhibit A, pages 1 & 2 and Exhibit A-1, page 1.

See support labeled Source B which was verified by the HECO Securities Administrator.

Equity Allocation Factors
Actual results as of 12/31/04 to be used in HEI's 2005 actual billings to HECO
(in thousands of dollars)

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	Note 1 HEIPC	Note 1 HIG	TOTAL (inclu HEIPC & HIG)	Less: HEIPC & HIG	TOTAL
Publicly-traded company related including discontinued operations:																	
Common equity	(1)	(A)	640,892	294	186,505	189,413	556,311	2,164	20,536	16,805	3,035	0	71,633	38,911	1,726,499	(110,544)	1,615,955
Common equity %			37.1%	0.0%	10.8%	11.0%	32.2%	0.1%	1.2%	1.0%	0.2%	0.0%	4.1%	2.3%	100.0%		
Preferred equity (publicly held)	(2)	(B)	8,793	0	0	0									8,793		8,793
Preferred equity %			100.0%	0.0%	0.0%	0.0%									100.0%		
Common + pref. (publicly held) equity	(1) + (2)		649,685	294	186,505	189,413	556,311	2,164	20,536	16,805	3,035	0	71,633	38,911	1,735,292	(110,544)	1,624,748
Common + pref. (publicly held) equity %			37.4%	0.0%	10.8%	10.9%	32.1%	0.1%	1.2%	1.0%	0.2%	0.0%	4.1%	2.2%	100.0%		

Note 1: The common equity of HEI Power Corp. (HEIPC) as of February 29, 2000 and of Hawaiian Insurance & Guaranty Company, Ltd. (HIG) as of September 30, 1992 (prior to any writedowns or writeoffs of its investments) adjusted for the income tax benefits of losses on common equity are included in the relative common equity calculations shown here. HEI made a policy decision to continue to allocate shareholder dependent costs to HEIPC and HIG because HEI must still theoretically report to all of its shareholders even with the exit from HEIPC's international power business and HIG's insurance business. Examples of shareholder dependent costs include printing and mailing costs for the annual report and proxy and stock transfer costs. See CA-IR-252 a. page 6, Source A-1 for HEIPC's adjusted equity supporting document and CA-IR-252 a. page 7, Source A-2 for HIG's adjusted equity supporting document.

(A) SEC Form U-3A-2 (Statement by Holding Company Claiming Exemption Under Rule U-3A-2 from the Provisions of the Public Utility Holding Company Act of 1935). See support labeled Source A, Exhibit A, pages 1 & 2 and Exhibit A-1, page 1.

(B) See support labeled Source B which was verified by the HECO Securities Administrator.

5 actual billings to HECO

RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	TOTAL	ADJ	HEI Corp., (and its financing sub Hycap) & Elim	CONS.
	34,850	0	0	0	0	0	0	0	88,568		(11,957)	76,611
	130,908	153,778	0	0	0	0	0	0	752,735		414,000	1,166,735
0	165,758	153,778	0	0	0	0	0	0	841,303		402,043	1,243,346
0.0%	19.7%	18.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%			
	7,000	5,000							34,293			34,293
0.0%	20.4%	14.6%							100.0%			
294	186,505	189,413	556,311	2,164	20,536	16,805	3,035	0	1,615,955		(405,010)	1,210,945
0.0%	11.6%	11.7%	34.4%	0.1%	1.3%	1.0%	0.2%	0.0%	100.0%			
294	359,263	348,191	556,311	2,164	20,536	16,805	3,035	0	2,491,551		(2,967)	2,488,584
0.0%	14.4%	14.0%	22.3%	0.1%	0.8%	0.7%	0.1%	0.0%	100.0%			
0	23,174	23,341	56,897	0	0	0	0	174	205,653		7,193	212,846
0.0%	10.9%	11.0%	26.7%	0.0%	0.0%	0.0%	0.0%	0.1%	96.6%		3.4%	100.0%
0	306	306	1,291	0	0	0	0	4	3,308		45	3,353
0.0%	9.1%	9.1%	38.5%	0.0%	0.0%	0.0%	0.0%	0.1%	98.6%		1.4%	100.0%
53	20,452	31,715	99,563	142	4,341	2,132	914	101	237,955	(2,420)	(35,316)	200,219
0.0%	8.6%	13.3%	41.8%	0.1%	1.8%	0.9%	0.4%	0.1%	100.0%			
0.0%	11.6%	11.7%	34.4%	0.1%	1.3%	1.0%	0.2%	0.0%	100.0%			100.0%
0.0%	8.6%	13.3%	41.8%	0.1%	1.8%	0.9%	0.4%	0.1%	100.0%			100.0%
0.0%	10.9%	11.0%	26.7%	0.0%	0.0%	0.0%	0.0%	0.1%	96.6%	0.0%	3.4%	100.0%
0.0%	10.4%	12.0%	34.3%	0.1%	1.0%	0.6%	0.2%	0.1%	98.9%	0.0%	1.1%	100.0%

te value was used since it would be illogical to allocate a negative amount.

ption Under Rule U-3A-2 from the Provisions of the Public Utility Holding Company Act of 1935). See support labeled

ption Under Rule U-3A-2 from the Provisions of the Public Utility Holding Company Act of 1935). See support labeled

gisters. See support labeled Source D for the various subsidiaries.
Source E.

s 2005 actual billings to HECO

	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	TOTAL	HEI Corp.	CONS.
	(F)	1,481	0	293	299	1,072	7	0	0	0	5	3,157	52	3,209
		46.2%	0.0%	9.1%	9.3%	33.4%	0.2%	0.0%	0.0%	0.0%	0.2%	98.4%	1.6%	100.0%
f 1	(G)	524,207,095		102,496,113	86,596,328							713,299,536	14,855,003	728,154,539
		524,207,095		102,496,113	86,596,328	0	0	0	0	0	0	713,299,536	14,855,003	728,154,539
		72.0%		14.1%	11.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.0%	2.0%	100.0%
n assets):														
f 1	(G)	524,207,095		102,496,113	86,596,328	0	0	0	0	0	0	713,299,536	14,855,003	728,154,539
f 2 (not used)							0					0		0
f 3	(G)					54,748,643						54,748,643		54,748,643
		524,207,095		102,496,113	86,596,328	54,748,643	0	0	0	0	0	768,048,178	14,855,003	782,903,182
		68.9%		13.1%	11.1%	7.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.1%	1.9%	100.0%
xception of the executive life trust)														
sed due to HELCO's $0 balance since 12/31/97 in order to more fairly allocate administrative time/expenses to this activity, per J. Haraga, Treasury Administrator)														
f 5	(G)	14,416,006		4,386,451	3,124,193							21,926,650	1,116,326	23,042,976
f 6	(G)	8,694,421		1,872,354	1,799,426							12,366,201	858,044	13,224,245
f 7	(G)	51,975,586		11,305,025	10,296,677							73,577,288		73,577,288
f 8 not used												0		0
f 9 not used												0		0
f 11	(H)	855,395		102,407	91,145							1,048,947	112,303	1,161,250
f 10	(G)	15,462		41,125	26,903							83,490		83,490
		75,956,870		17,707,362	15,338,344	0	0	0	0	0	0	109,002,576	2,088,673	111,089,249
		68.4%		15.9%	13.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.1%	1.9%	100.0%
):														
f 5	(G)	14,416,006		4,386,451	3,124,193	0	0	0	0	0	0	21,926,650	1,116,326	23,042,976
f 6	(G)	8,694,421		1,872,354	1,799,426	0	0	0	0	0	0	12,366,201	858,044	13,224,245
f 7	(G)	51,975,586		11,305,025	10,296,677	0	0	0	0	0	0	73,577,288	0	73,577,288
f 8 not used												0		0
f 9 not used												0		0
f 10	(G)	15,462		41,125	26,903	0	0	0	0	0	0	83,490	0	83,490
		75,101,475		17,604,955	15,247,199	0	0	0	0	0	0	107,953,629	1,974,370	109,927,999
		68.3%		16.0%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.2%	1.8%	100.0%
f 5	(G)	14,416,006		4,386,451	3,124,193	0	0	0	0	0	0	21,926,650	1,116,326	23,042,976
f 6	(G)	8,694,421		1,872,354	1,799,426	0	0	0	0	0	0	12,366,201	858,044	13,224,245
f 7	(G)	51,975,586		11,305,025	10,296,677	0	0	0	0	0	0	73,577,288	0	73,577,288
		75,086,013		17,563,830	15,220,296	0	0	0	0	0	0	107,870,139	1,974,370	109,844,509
		68.4%		16.0%	13.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.2%	1.8%	100.0%
sets):														
f 10	(G)	15,462		41,125	26,903	0	0	0	0	0	0	83,490	0	83,490
		15,462		41,125	26,903	0	0	0	0	0	0	83,490	0	83,490
		18.5%		49.3%	32.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Brien. See support labeled Source F.
Administrator, Julie Haraga). See support labeled Source G.
) (received from Treasury Administrator, Julie Haraga). See support labeled Source H.

2005 EXECUTIVES UNDER VARIOUS PLANS

		HECO	HELCO	MECO	ASB	HEI	TOTAL
HUM011	# of executives (LTIP)	4	1	1	7	6	19
	%	21.0	5.3	5.3	36.8	31.6	100
HUM012	# of executives (EICP)	16	1	1	36	6	60
HUM017	%	26.6	1.7	1.7	60	10	100
	Average stock options						
HUM013	# of executives (1 + 2)	9	1	1	8	8	27
HUM014	%	33.4	3.7	3.7	29.6	29.6	100
HUM015	# of executives (Deferred)	3	0	0	1	1	5
	%	60	0	0	20	20	100
HUM016	# of directors (Deferred)	0	0	0	0	1	1
	%	0	0	0	0	100	100
HUM002	# of executives (OFFICER MERIT) NOTE A	16	1	1	13	6	37
HUM010	COMPENSATION COMMITTEE	43.3	2.7	2.7	35.1	16.2	100

not used for rate tax purposes due to test year amounts excluding incentive compensation

Note A: Based on senior executives in 2005

stock options-every other year all executives							
	# of executives (1)	14	1	1	14	8	38
stock options-every HEI executives & subsidiary presidents							
	# of executives (2)	1	1	1	1	7	11

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Balance Sheet (Page 1 of 3)
December 31, 2004
(Unaudited)
(in thousands)

ASSETS	Hawaiian Electric Industries, Inc.	Hawaiian Electric Company, Inc. and subsidiaries	HEI Diversified, Inc. and subsidiary	HEI Investments, Inc.	HEI Properties, Inc.
Cash and equivalents	$ 10,297	327	120,296	1,072	$ 4
Federal funds sold	–	–	41,491	–	–
Notes receivable from affiliated companies	11,957	–	2,602	15,641	1,528
Accounts receivable and unbilled revenues, net	1,678	187,534	24,755	26	70
Available-for-sale investment and mortgage-related securities	–	–	2,034,091	–	–
Available-for-sale mortgage-related securities pledged for repurchase agreements	–	–	919,281	–	–
Held-to-maturity investment securities	–	–	97,365	–	–
Loans receivable, net	–	–	3,249,191	–	–
Property, plant and equipment, net	1,818	2,348,154	72,330	–	–
Other	4,902	234,970	131,568	42,021	1,510
Goodwill and other intangibles	–	–	91,263	–	–
Investments in subsidiaries, at equity	1,616,189	–	–	–	–
	$ 1,646,841	2,770,985	6,784,233	58,760	$ 3,112
LIABILITIES AND STOCKHOLDERS' EQUITY					
Liabilities					
Accounts payable	$ 9,218	105,176	45,093	16	$ 6
Deposit liabilities	–	–	4,296,172	–	–
Short-term borrowings	22,747	88,568	–	–	–
Securities sold under agreements to repurchase	–	–	811,438	–	–
Advances from Federal Home Loan Bank	–	–	988,231	–	–
Long-term debt, net	414,000	752,735	–	–	–
Deferred income taxes	(19,774)	189,193	19,298	41,131	71
Regulatory liabilities, net	–	88,459	–	–	–
Contributions in aid of construction	–	235,505	–	–	–
Other	9,705	259,952	47,042	808	–
	435,896	1,719,588	6,207,274	41,955	77
Preferred stock of subsidiaries- not subject to mandatory redemption	–	34,293	112	Minority interest stock held by ASB affiliates –	–
Stockholders' equity					
Common stock	1,010,090	384,600	331,071	9,080	3,968
Retained earnings (deficit)	208,998	632,779	252,967	7,725	(933)
Accumulated other comprehensive income (loss)	(8,143)	(275)	(7,191)	–	–
	1,210,945	1,017,104	576,847	16,805	3,035
	$ 1,646,841	2,770,985	6,784,233	58,760	$ 3,112

Continued on next page.

ASB 556,311
HEIDI 20,536

Source A
Exhibit A
Page 2 of 5

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Balance Sheet (Page 2 of 2)
December 31, 2004
(Unaudited)
(in thousands)

(Continued)

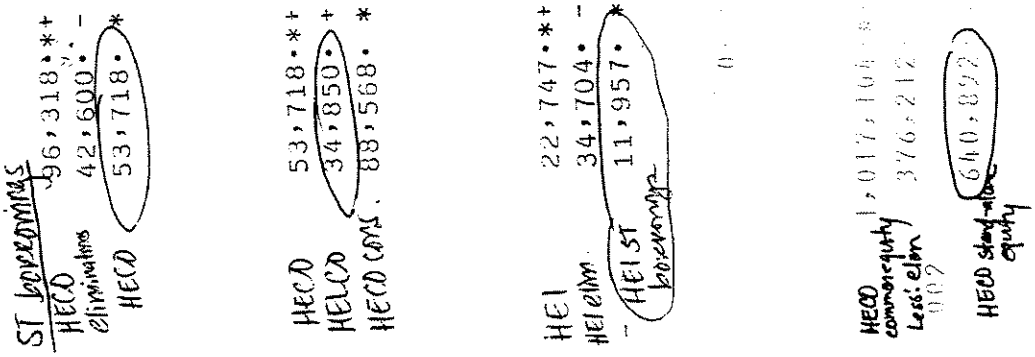
ASSETS	Pacific Energy Conservation Services, Inc	Hycap Management, Inc.	The Old Oahu Tug Service, Inc.	Reclassifications and Eliminations Dr. (Cr.)	Consolidated
Cash and equivalents	$ 7	135	–	–	$ 132,138
Federal funds sold	–	–	–	–	41,491
Notes receivable from affiliated companies	1	–	2,975	(34,704)	–
Accounts receivable and unbilled revenues, net	15	–	36	(5,581)	208,533
Available-for-sale investment and mortgage-related securities	–	–	–	–	2,034,091
Available-for-sale mortgage-related securities pledged for repurchase agreements	–	–	–	–	919,281
Held-to-maturity investment securities	–	–	–	–	97,365
Loans receivable, net	–	–	–	–	3,249,191
Property, plant and equipment, net	1	–	–	–	2,422,303
Other	–	–	–	–	414,971
Goodwill and other intangibles	–	–	–	–	91,263
Investments in subsidiaries, at equity	–	–	–	(1,616,189)	–
	$ 24	135	3,011	(1,656,474)	$ 9,610,627
LIABILITIES AND STOCKHOLDERS' EQUITY					
Liabilities					
Accounts payable	$ 3	–	12	5,581	$ 153,943
Deposit liabilities	–	–	–	–	4,296,172
Short-term borrowings	–	–	–	34,704	76,611
Securities sold under agreements to repurchase	–	–	–	–	811,438
Advances from Federal Home Loan Bank	–	–	–	–	988,231
Long-term debt, net	–	–	–	–	1,166,735
Deferred income taxes	–	–	(154)	–	229,765
Regulatory liabilities, net	–	–	–	–	88,459
Contributions in aid of construction	–	–	–	–	235,505
Other	21	(99)	989	–	318,418
	24	(99)	847	40,285	8,365,277
Preferred stock of subsidiaries- not subject to mandatory redemption	–	–	–	–	34,405
Stockholders' equity					
Common stock	710	(359)	2,443	731,513	1,010,090
Retained earnings (deficit)	(710)	593	(270)	892,151	208,998
Accumulated other comprehensive income (loss)	–	–	(9)	(7,475)	(8,143)
	–	234	2,164	1,616,189	1,210,945
	$ 24	135	3,011	1,656,474	$ 9,610,627

Minority interest stock held by ASB officers.
-112 = 34,298

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES
Consolidating Schedule - Balance Sheet Information
December 31, 2004
(Unaudited)
(in thousands)

Exhibit A-1
Page 1 of 2

ASSETS	Hawaiian Electric Company, Inc.	Hawaii Electric Light Company, Inc.	Maui Electric Company, Limited	RHI	Reclassifications and Eliminations Dr. (Cr.)	Consolidated
Cash and equivalents	$ 9	3	17	298	–	$ 327
Notes receivable from affiliated companies	34,850	–	7,750	–	(42,600)	–
Accounts receivable and unbilled revenues, net	127,404	32,100	27,616	–	414	187,534
Property, plant and equipment, net	1,461,069	478,582	408,503	–	–	2,348,154
Other	165,310	33,642	36,018	–	–	234,970
Investments in subsidiaries, at equity	376,212	–	–	–	(376,212)	–
	$ 2,164,854	544,327	479,904	298	(418,398)	$ 2,770,985
LIABILITIES AND STOCKHOLDER'S EQUITY						
Liabilities						
Accounts payable	$ 74,724	18,770	11,360	–	(322)	$ 105,176
Short-term borrowings	96,318	34,850	–	–	42,600	88,568
Long-term debt, net	468,049	130,908	153,778	–	–	752,735
Deferred income taxes	146,812	23,590	18,791	–	–	189,193
Regulatory liabilities, net	52,866	22,386	13,207	–	–	88,459
Contributions in aid of construction	144,322	56,041	35,142	–	–	235,505
Other	142,366	64,277	53,213	4	(92)	259,952
	1,125,457	350,822	285,491	4	42,186	1,719,588
Preferred stock-not subject to mandatory redemption	22,293	7,000	5,000	–	–	34,293
Stockholder's equity						
Common stock	384,600	100,644	94,921	481	196,046	384,600
Retained earnings (deficit)	632,779	85,861	94,492	(187)	180,166	632,779
Accumulated other comprehensive loss	(275)	–	–	–	–	(275)
	1,017,104	186,505	189,413	294	376,212	1,017,104
	$ 2,164,854	544,327	479,904	298	418,398	$ 2,770,985



INTEROFFICE CORRESPONDENCE

Source B

Hawaiian Electric Industries, Inc.

January 12, 2005

To: Cheryl Sakai

From: Carol Imai

Subject: Publicly-held preferred stock

Please confirm that as of 12/31/04 the following series (and its related amounts) are the only **publicly-held preferred stock for all utilities**:

		$000's
Series C	HECO	$3,000
Series D	HECO	$1,000
Series E	HECO	$3,000
Series I	HECO	$1,793
Series		
Series		
Total		$8,793

Carol - I can't verify whether C, D, E, and I are publicly held, but for intercompany billing purposes only you can assume that they are publicly held (based on the large number of holders for each of these series). Call me at ext. 7965 if you have any questions. (QUIPS not included above.)

Reviewed and verified by: Cheryl Sakai
Cheryl Sakai, Securities Administrator
Date: 1/21/05

Please return this form to me by **Monday, January 24**. If you have any questions, please call me at 543-7920.

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Statement of Income (Page 1 of 3)
Year ended December 31, 2004
(Unaudited)
(in thousands)

	Hawaiian Electric Industries, Inc.	Hawaiian Electric Company, Inc. and subsidiaries	HEI Diversified, Inc. and subsidiary	HEI Investments, Inc.	HEI Properties, Inc.
Revenues					
Electric utility	$ –	1,550,671	–	–	$ –
Bank	–	–	364,284	–	–
Other	8,049	–	92	2,315	(833)
Equity in net income of subsidiaries	128,465	–	–	–	–
	136,514	1,550,671	364,376	2,315	(833)
Expenses					
Electric utility	–	1,376,768	–	–	–
Bank	–	–	259,310	–	–
Other	15,613	–	811	183	81
	15,613	1,376,768	260,121	183	81
Operating income (loss)					
Electric utility	–	173,903	–	–	–
Bank	–	–	104,974	–	–
Other	120,901	–	(719)	2,132	(914)
	120,901	173,903	104,255	2,132	(914)
Interest expense–other than bank	(28,029)	(49,588)	(437)	–	–
Allowance for borrowed funds used during construction	–	2,542	–	–	–
Preferred stock dividends of subsidiaries	–	(915)	(11)	–	–
Allowance for equity funds used during construction	–	5,794	–	–	–
Income (loss) from continuing operations before income taxes	92,872	131,736	103,807	2,132	(914)
Income tax expense (benefit)	(14,867)	49,479	57,481	311	–
Income (loss) from continuing operations	107,739	82,257	46,326	1,821	(914)
Preferred stock dividends of parent	–	1,080	–	–	–
Income (loss) continuing operations for common stock	107,739	81,177	46,326	1,821	(914)
Income from discontinued operations	1,913	–	66	–	–
Net income (loss) for common stock	$ 109,652	81,177	46,392	1,821	$ (914)

ASD 99,563

4,244 HEIDI
97 Equity in net income of SUB
4,341

HAWAIIAN ELECTRIC INDUSTRIES, INC. AND SUBSIDIARIES
Consolidating Statement of Income (Page 2 of 2)
Year ended December 31, 2004
(Unaudited)
(in thousands)

(Continued)

	Pacific Energy Conservation Services, Inc.	Hycap Management, Inc	The Old Oahu Tug Service, Inc.	Reclassifi-cations and Eliminations Dr. (Cr.)	Consolidated
Revenues					
Electric utility	$ –	–	–	–	$ 1,550,671
Bank	–	–	–	–	364,284
Other	195	424	38	1,178	9,102
Equity in net income of subsidiaries	–	–	–	128,465	–
	195	424	38	129,643	1,924,057
Expenses					
Electric utility	–	–	–	–	1,376,768
Bank	–	–	–	–	259,310
Other	296	50	180	(195)	17,019
	296	50	180	(195)	1,653,097
Operating income (loss)					
Electric utility	–	–	–	–	173,903
Bank	–	–	–	–	104,974
Other	(101)	374	(142)	129,448	(7,917)
	(101)	374	(142)	129,448	270,960
Interest expense–other than bank	–	–	–	(878)	(77,176)
Allowance for borrowed funds used during construction	–	–	–	–	2,542
Preferred stock dividends of subsidiaries	–	–	–	975	(1,901)
Allowance for equity funds used during construction	–	–	–	–	5,794
Income (loss) from continuing operations before income taxes	(101)	374	(142)	129,545	200,219
Income tax expense (benefit)	–	131	(55)	–	92,480
Income (loss) from continuing operations	(101)	243	(87)	129,545	107,739
Preferred stock dividends of parent	–	–	–	(1,080)	–
Income (loss) continuing operations for common stock	(101)	243	(87)	128,465	107,739
Income from discontinued operations	–	–	–	66	1,913
Net income (loss) for common stock	$ (101)	243	(87)	128,531	$ 109,652

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES
Consolidating Schedule - Income Information
Year ended December 31, 2004
(Unaudited)
(in thousands)

Exhibit A-1
Page 2 of 2

	Hawaiian Electric Company, Inc.	Hawaii Electric Light Company, Inc.	Maui Electric Company, Limited	Renewable Hawaii, Inc.	Reclassifications and Eliminations Dr. (Cr.)	Consolidated
Revenues						
Electric utility	$ 1,057,449	241,822	252,034	–	634	$ 1,550,671
Equity in net income of subsidiaries	31,746	–	–	–	31,746	–
	1,089,195	241,822	252,034	–	32,380	1,550,671
Expenses–Electric utility	953,740	212,403	210,572	53	–	1,376,768
Operating income (loss)	135,455	29,419	41,462	(53)	32,380	173,903
Interest expense	(31,625)	(8,670)	(9,927)	–	(634)	(49,588)
Allowance for borrowed funds used during construction	2,312	75	155	–	–	2,542
Preferred stock dividends of subsidiaries	–	–	–	–	915	(915)
Allowance for equity funds used during construction	5,226	162	406	–	–	5,794
Income(loss) from continuing operations before income taxes	(1) 111,368	(5) 20,986	(7) 32,096	(53)	(3) 32,661	131,736
Income taxes	29,111	8,150	12,218	–	–	49,479
Income (loss) from continuing operations	82,257	12,836	19,878	(53)	32,661	82,257
Preferred stock dividends	(2) 1,080	(6) 534	(8) 381	–	(4) (915)	1,080
Net income (loss) for common stock	$ 81,177	12,302	19,497	(53)	31,746	$ 81,177

HAWAIIAN ELECTRIC COMPANY, INC. AND SUBSIDIARIES
Consolidating Schedule - Retained Earnings Information
Year ended December 31, 2004
(Unaudited)
(in thousands)

	Hawaiian Electric Company, Inc.	Hawaii Electric Light Company, Inc.	Maui Electric Company, Limited	Renewable Hawaii, Inc.	Reclassifications And Eliminations Dr. (Cr.)	Consolidated
Retained earnings, beginning of year	$ 563,215	74,629	92,909	(134)	167,404	$ 563,215
Net income (loss)	81,177	12,302	19,497	(53)	31,746	81,177
Common stock dividends	(11,613)	(1,070)	(17,914)	–	(18,984)	(11,613)
Retained earnings (deficit), end of year	$ 632,779	85,861	94,492	(187)	180,166	$ 632,779

HECO - pretax inc.
(1) 111,368 * +
(2) 1,080 - -
(3) 32,661 - -
(4) 915 + +
78,542 *

HECO - pretax inc.
(5) 20,986 * +
(6) 534 - -
20,452 *

HECO - pretax inc.
(7) 32,096 * +
(8) 381 - -
31,715 *

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	3,612,742.35	85,666,907.86	85,666,907.86	85,666,907.86
Police Earnings	4,812.50	207,056.33	0.00	0.00
Overtime Pay:				
Extra Straight Time	19,016.04	563,237.15	563,237.15	563,237.15
Time and a Half	192,718.68	6,390,499.40	6,390,499.40	6,390,499.40
Doubletime	110,773.02	3,092,322.10	3,092,322.10	3,092,322.10
Callout	90,734.28	2,469,274.55	2,469,274.55	2,469,274.55
Penalties	38,166.32	544,111.78	544,111.78	544,111.78
Total Overtime Pay	451,408.34	13,059,444.98	13,059,444.98	13,059,444.98
Exception Pay				
Shift	10,173.17	273,911.80	273,911.80	273,911.80
Higher Duty	34,800.09	845,841.46	845,841.46	845,841.46
Differentials	7,599.90	205,939.77	205,939.77	205,939.77
Total Exception	52,573.16	1,325,693.03	1,325,693.03	1,325,693.03
Total Productive Costs	4,121,536.35	100,259,102.20	100,052,045.87	100,052,045.87
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	3,040.00	14,197.50	14,197.50	14,197.50
GROSS PAY	4,124,576.35	100,273,299.70	100,066,243.37	100,066,243.37
Other Pay				
Meals	13,215.60	426,225.60 (L)	426,225.60	426,225.60
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	1,019,238.00	1,019,238.00	1,019,238.00
Cash Bonus	6,325.00	774,575.00	774,575.00	774,575.00
Total Other Pay	19,540.60	2,220,038.60	2,220,038.60	2,220,038.60
GROSS EARNINGS	4,144,116.95	102,493,338.30 (S)	102,286,281.97	102,286,281.97
Other Taxable Income:				
Flex Credits	97,774.53	2,278,053.33	2,278,053.33	2,278,053.33
Less: Flex Benf	130,151.90	3,064,997.18	3,064,997.18	
Less: Flex Spend	26,730.13	629,874.84	629,874.84	
Less: Transp Spend	1,296.03	236,879.59	236,879.59	236,879.59
Temp Disability Inc	0.00	7,383.75	7,383.75	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	726.47	726.47	726.47	726.47
Taxable Reimbursements	300.00	19,741.97	19,741.97	19,741.97
Retired Def Exec	0.00	0.00		
SERP	0.00	0.00		
Other Taxable	3,847.77	76,492.02	76,492.02	76,492.02
Total Other Tax Income	55,529.29-	1,549,354.07-	1,549,354.07-	2,138,134.20
Less: HEIRS	240,596.53	9,515,921.61		
Less: Deferred Exec Bonus	0.00	12,964.64		
Non-Cash Allowances				
Group Term Life	14,426.44	359,933.42	359,933.42	359,933.42

(S) 102,493,338.3**
(L) 426,225.6 -
102,067,112.7 *

Source D
HEO

CA-IR-252
DOCKET NO. 04-0113
PAGE 52 OF 69

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	714,569.31	17,934,139.92	17,934,139.92	17,934,139.92
Police Earnings	0.00	15,643.00	0.00	0.00
Overtime Pay:				
Extra Straight Time	5,692.06	298,040.44	298,040.44	298,040.44
Time and a Half	76,449.44	2,129,890.37	2,129,890.37	2,129,890.37
Doubletime	10,251.73	711,245.57	711,245.57	711,245.57
Callout	38,635.52	1,403,299.13	1,403,299.13	1,403,299.13
Penalties	6,376.75	177,348.81	177,348.81	177,348.81
Total Overtime Pay	137,405.50	4,719,824.32	4,719,824.32	4,719,824.32
Exception Pay				
Shift	3,102.47	95,346.76	95,346.76	95,346.76
Higher Duty	7,860.60	226,676.77	226,676.77	226,676.77
Differentials	24.00	1,470.58	1,470.58	1,470.58
Total Exception	10,987.07	323,494.11	323,494.11	323,494.11
Total Productive Costs	862,961.88	22,993,101.35	22,977,458.35	22,977,458.35
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	0.00	0.00	0.00	0.00
GROSS PAY	862,961.88	22,993,101.35	22,977,458.35	22,977,458.35
Other Pay				
Meals	4,824.00	147,735.84	147,735.84	147,735.84
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	83,911.00	83,911.00	83,911.00
Cash Bonus	0.00	97,200.00	97,200.00	97,200.00
Total Other Pay	4,824.00	328,846.84	328,846.84	328,846.84
GROSS EARNINGS	867,785.88	23,321,948.19	23,306,305.19	23,306,305.19
Other Taxable Income:				
Flex Credits	22,024.16	513,509.54	513,509.54	513,509.54
Less: Flex Benf	30,185.10	714,508.96	714,508.96	
Less: Flex Spend	3,362.95	71,193.98	71,193.98	
Less: Transp Spend	0.00	0.00	0.00	0.00
Temp Disability Inc	1,672.00	15,335.94	15,335.94	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	0.00	2,750.00	2,750.00	2,750.00
Taxable Reimbursements	0.00	0.00	0.00	0.00
Retired Def Exec	0.00	0.00		
SERP	0.00	0.00		
Other Taxable	350.00	2,450.00	2,450.00	2,450.00
Total Other Tax Income	9,501.89-	251,657.46-	251,657.46-	518,709.54
Less: HEIRS	44,624.20	1,728,897.50		
Less: Deferred Exec Bonus	0.00	0.00		
Non-Cash Allowances				
Group Term Life	3,274.31	79,956.75	79,956.75	79,956.75

(a) 23,321,948.19**
(b) 147,735.84 -
23,174,212.35 *

Source D
HELCO

HLEEN K
at: 15:13:09

MAUI ELECTRIC COMPANY, LTD.

Tax and Balancing Report

Page: 2
Report: HWBTBRA
Version: 5.2.36.01HW

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
s	748,545.07	18,987,578.62	18,987,578.62	18,987,578.62
ngs	0.00	3,444.00	0.00	0.00
:				
aight Time	20,622.67	352,008.04	352,008.04	352,008.04
a Half	131,066.34	2,261,720.06	2,261,720.06	2,261,720.06
e	32,370.99	557,587.94	557,587.94	557,587.94
	24,242.20	680,843.42	680,843.42	680,843.42
	4,867.28	87,674.93	87,674.93	87,674.93
Overtime Pay	213,169.48	3,939,834.39	3,939,834.39	3,939,834.39
y				
ty	4,168.37	106,238.75	106,238.75	106,238.75
ials	4,394.84	110,777.81	110,777.81	110,777.81
Exception	1,903.38	21,238.65	21,238.65	21,238.65
Productive Costs	10,466.59	238,255.21	238,255.21	238,255.21
	972,181.14	23,169,112.22	23,165,668.22	23,165,668.22
ent	0.00	0.00	0.00	0.00
	0.00	2,057.06	2,057.06	2,057.06
PAY	972,181.14	23,171,169.28	23,167,725.28	23,167,725.28
	8,976.00	133,524.00 (b)	133,524.00	133,524.00
s	0.00	0.00	0.00	0.00
s	0.00	101,191.00	101,191.00	101,191.00
Other Pay	0.00	69,100.00	69,100.00	69,100.00
EARNINGS	8,976.00	303,815.00	303,815.00	303,815.00
	981,157.14	23,474,984.28 (a)	23,471,540.28	23,471,540.28
e Income:				
ts	22,021.66	523,664.89	523,664.89	523,664.89
Benf	30,772.18	735,901.93	735,901.93	
Spend	2,912.98	68,680.77	68,680.77	
sp Spend	0.00	0.00	0.00	0.00
ility Inc	836.00	6,520.80	6,520.80	
ering	0.00	0.00	0.00	0.00
s	0.00	0.00	0.00	0.00
imbursements	0.00	4,600.00	4,600.00	4,600.00
f Exec	0.00	0.00		
	0.00	0.00		
ble	0.00	0.00	0.00	0.00
ther Tax Income	10,827.50-	269,797.01-	269,797.01-	528,264.89
	51,846.79	1,839,695.95		
d Exec Bonus	0.00	0.00		
wances				
Life	3,598.85	87,469.27	87,469.27	87,469.27

(a) 23,474,984.28*+
(b) 133,524. -
23,341,460.28 *

Source D
MECO

Page: 1
Directory: ASB1
ASB1 12
-Date Register
f: 12-31-2004
Source D
ASB p. 1
12-31-04 12:31

Page: 2
Directory: ASBA

To-Date Register
As Of: 12-31-2004

Source D
ASB p. 2

12-31-04 12:3

> ANT	(1)
56	.75
16	.89
15	.00
10	.28
10	.00
15	.63
15	.45
21	.50
15	.00
10	.00
0	.00
3	.29
6	.79
3	.60
4	.39
2	.51
7	.44
7	.87
0	.60
3	.22
1	.84
1	.10
	.99
	.17
	.42
	.06
	.41
	.79
1	.00
1	.00
	.81
	.83
1	.00
	.89
	.40
	.13
	.69
	.25
	.42
	.89
	.10
	.93
	.09
	.71
	.52
	.26
	.69
	.81
	.26

INSURANCE OF HAWAII INC

Year-To-Date Register
As Of: 12-31-2004

Page: 3
Directory: ASB

	CUR AMT	MTD AMT	QTD AMT	YTD AMT
REPORT TOTALS		51,655.36	181,378.59	670,020.63
		29,806.76	108,498.12	428,692.36
		62.09	62.09	80.76
Y		4,313.96	18,442.37	62,509.34
Y		1,909.78	6,019.70	19,977.46
NT		1,917.00	1,917.00	6,269.00
		1,868.80	5,606.40	20,577.32
				446.86
			137.54	122.71
CN				623.54
LE				1,125.00
		350.00	1,050.00	23,772.04
		1,171.58	3,846.24	4,200.00
			43.74	11,039.74
AR		2,943.51	8,957.31	1,568.07
		340.44	1,131.30	35,474.76
		4,691.17	12,764.59	3,638.80
		101,050.45	349,854.99	20,300.41
		186.72	570.05	1,306,438.80
				2,285.40
				170.00
		150.00	450.00	1,875.00
		101,367.17	350,875.04	1,310,769.20
		101,367.17	350,875.04	1,310,769.20
		55.77	167.31	681.51
E		548.35	1,668.15	6,957.68
		353.69	1,068.74	4,342.67
		1,511.64	4,534.92	15,627.12
		2,072.38	6,412.22	22,279.16
		1,730.59	5,559.19	23,440.80
E		142.17	438.04	1,642.64
E		542.50	1,627.50	6,290.00
		6,028.41	20,244.37	69,261.43
		401.05	1,051.95	5,388.17
		190.96	572.88	2,405.12
			195.08	195.08
		551.13	1,285.97	4,855.50
		9.57	27.48	92.55
				16.13
		32.26	119.88	433.32
		274.46	951.36	4,084.34
		56.00	168.00	717.92
		44.52	133.56	535.32
				768.96
		199.10	696.85	4,037.72
		72.18	434.43	2,430.18
		35.00	222.50	1,505.00
		1,770.34	1,770.34	5,769.40

① 1,306,438.80
Less: Annuity Premiums ② (431,313.56)
1,116,125.24

Source D
ASB p. 3

01-21-05

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	4,976.46	158,116.31	158,116.31	158,116.31
Police Earnings	0.00	0.00	0.00	0.00
Overtime Pay:				
Extra Straight Time	0.00	0.00	0.00	0.00
Time and a Half	0.00	8,567.06	8,567.06	8,567.06
Doubletime	0.00	0.00	0.00	0.00
Callout	0.00	0.00	0.00	0.00
Penalties	0.00	0.00	0.00	0.00
Total Overtime Pay	0.00	8,567.06	8,567.06	8,567.06
Exception Pay				
Shift	0.00	0.00	0.00	0.00
Higher Duty	0.00	0.00	0.00	0.00
Differentials	78.00	2,541.00	2,541.00	2,541.00
Total Exception	78.00	2,541.00	2,541.00	2,541.00
Total Productive Costs	5,054.46	169,224.37	169,224.37	169,224.37
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	0.00	0.00	0.00	0.00
GROSS PAY	5,054.46	169,224.37	169,224.37	169,224.37
Other Pay				
Meals	0.00	0.00	0.00	0.00
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	0.00	0.00	0.00
Cash Bonus	0.00	4,750.00	4,750.00	4,750.00
Total Other Pay	0.00	4,750.00	4,750.00	4,750.00
GROSS EARNINGS	5,054.46	173,974.37	173,974.37	173,974.37
Other Taxable Income:				
Flex Credits	497.30	8,535.84	8,535.84	8,535.84
Less: Flex Benf	1,023.96	17,116.32	17,116.32	
Less: Flex Spend	0.00	0.00	0.00	
Less: Transp Spend	0.00	0.00	0.00	0.00
Temp Disability Inc	5,287.72	5,287.72	5,287.72	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	0.00	0.00	0.00	0.00
Taxable Reimbursements	0.00	0.00	0.00	0.00
Retired Def Exec	0.00	0.00		
SERP	0.00	0.00		
Other Taxable	0.00	0.00	0.00	0.00
Total Other Tax Income	4,761.06	3,292.76-	3,292.76-	8,535.84
Less: HEIRS	253.09	7,681.46		
Less: Deferred Exec Bonus	0.00	0.00		
Non-Cash Allowances				
Group Term Life	6.12	104.64	104.64	104.64

Source of PECS

	AMOUNT Current	Year-To-Date	FICA YTD	SUTA YTD
Base Earnings	180,948.64	4,574,200.69	4,574,200.69	4,574,200.69
Police Earnings	0.00	0.00	0.00	0.00
Overtime Pay:				
Extra Straight Time	0.00	565.05	565.05	565.05
Time and a Half	0.00	7,070.38	7,070.38	7,070.38
Doubletime	0.00	0.00	0.00	0.00
Callout	0.00	0.00	0.00	0.00
Penalties	0.00	0.00	0.00	0.00
Total Overtime Pay	0.00	7,635.43	7,635.43	7,635.43
Exception Pay				
Shift	0.00	0.00	0.00	0.00
Higher Duty	0.00	0.00	0.00	0.00
Differentials	0.00	0.00	0.00	0.00
Total Exception	0.00	0.00	0.00	0.00
Total Productive Costs	180,948.64	4,581,836.12	4,581,836.12	4,581,836.12
Cash Adjustment	0.00	0.00	0.00	0.00
Instructor	0.00	0.00	0.00	0.00
GROSS PAY	180,948.64	4,581,836.12	4,581,836.12	4,581,836.12
Other Pay				
Meals	0.00	0.00	0.00	0.00
Tip Bonus	0.00	0.00	0.00	0.00
Exec Bonus	0.00	2,159,830.00	2,159,830.00	2,159,830.00
Cash Bonus	0.00	451,000.00	451,000.00	451,000.00
Total Other Pay	0.00	2,610,830.00	2,610,830.00	2,610,830.00
GROSS EARNINGS	180,948.64	7,192,666.12	7,192,666.12	7,192,666.12
Other Taxable Income:				
Flex Credits	3,329.67	78,245.84	78,245.84	78,245.84
Less: Flex Benf	5,530.59	129,911.36	129,911.36	
Less: Flex Spend	1,993.95	47,274.80	47,274.80	
Less: Transp Spend	1,859.62	19,553.27	19,553.27	19,553.27
Temp Disability Inc	0.00	0.00	0.00	
Meter Tampering	0.00	0.00	0.00	0.00
Reimb Class	0.00	0.00	0.00	0.00
Taxable Reimbursements	0.00	1,200.00	1,200.00	1,200.00
Retired Def Exec	0.00	0.00		
SERP	0.00	24,346.64		
Other Taxable	2,150.00	51,600.00	51,600.00	51,600.00
Total Other Tax Income	3,904.49-	41,346.95-	65,693.59-	111,492.57
Less: HEIRS	8,473.21	439,661.41		
Less: Deferred Exec Bonus	0.00	64,958.30		
Non-Cash Allowances				
Group Term Life	1,180.77	28,418.53	28,418.53	28,418.53

Source D
HEI

Source E

Aug	Sep	Oct	Nov	Dec
1,346	1,357	1,374	1,386	1,401
301	304	307	307	306
301	303	304	305	306
1,948	**1,964**	**1,985**	**1,998**	**2,013**
1,294	1,291	1,297	1,302	1,291
5	5	5	5	4
1	1	1	1	1
1,300	**1,297**	**1,303**	**1,308**	**1,296**
45	**45**	**45**	**45**	**45**
3,293	**3,306**	**3,333**	**3,351**	**3,354**

number of employees on payroll may differ.

Source F

Participants with balances > $0.00			
Company Charged	Division	Q4 2004**	2005
ASB	ASB	1,072	33.323%
HECO	HE	1,481	46.037%
HEI*	HI	(D) 52	1.616%
HELCO	HL	293	9.108%
HPC (Discops)	HP	(B) 7	0.218%
HEI* (HTBYB)	HTBYB	(E) 7	0.218%
MECO	ME	299	9.294%
PECS	PE	5	0.155%
HEI* (Provision)	PV	(C) 1	0.031%
	TOTAL	(A) 3,217	100.000%
HEI*	Consolidated	(F) 60	1.865%
**Number of participants as of 12/31/2004			
HEIRS			

1,072 **+
1,481 * +
52 * +
293 * +
7 * +
7 * +
299 * +
5 * +
1 * +
(A) 3,217 * *

HEI Consolidated (D) 52 **+
(E) 7 * +
(C) 1 * +
60 * *

3,217 **+
Less HEIPC discops (B) 7 * -
Less: Provision sold in 2003 (C) 1 * -
3,209 * *

—— Forwarded Message
From: "O'Brien, Myra" <myra.obrien@heco.com>
Date: Fri, 21 Jan 2005 09:09:33 -1000
To: "Imai, Carol" <cimai@hei.com>
Cc: "Ho, Karen" <karen.ho@heco.com>
Subject: HEIRS Participant Count as of 12/31/2004

Source: Myra O'Brien

Per your memo, HEI's intercompany billing to its subsidiaries should be allocated in the following manner. Attached is the Fidelity counts as of 12/31/2004 which was provided by Jan Batson, plan representative.

<<Picture (Metafile)>>

<<QuarterlyPartBal2004.xls>>

—— End of Forwarded Message

HEI RET PLAN
Asset Reconcillation
(based on The Bank of New York's final trust & financial statements)
2004

		HECO	HELCO	MECO	HEI	TOTAL
(1)	Market value, 1/1/04	490,309,770	93,546,744	77,824,403	12,008,372	673,689,289
(2)	Income					
	(a) Contributions	15,186,494	4,868,450	4,580,816	1,744,669	26,380,429
	(b) Int, div & other income	10,028,926	1,925,475	1,609,948	264,281	13,828,630
	(c) Adjustments	0	0	0	0	0
	(d) Total	25,215,420	6,793,925	6,190,764	2,008,950	40,209,059
(3)	Disbursements					
	(a) Benefit payments	(29,280,687)	(5,000,750)	(3,777,147)	(317,352)	(38,375,936)
	(b) Investment mgt / trustee fees	(2,004,013)	(382,741)	(320,124)	(51,220)	(2,758,098)
	(c) Other expenses	(248,076)	(47,070)	(42,878)	(6,342)	(344,366)
	(d) Total	(31,532,776)	(5,430,561)	(4,140,149)	(374,914)	(41,478,400)
(4)	IVF loss (other expenses)	(24,294)	(4,637)	(3,869)	(602)	(33,402)
(5)	Transfers	(41,875)	(203,025)	190,037	54,863	0
(6)	Net realized & unrealized gains (losses)	40,280,850	7,793,667	6,535,142	1,158,334	55,767,993
(7)	Adjustment to beginning market value	0	0	0	0	0
(8)	Market value, 12/31/04	524,207,095 1	102,496,113 2	86,596,328 3	14,855,003 4	728,154,539 5

Prepared by Julie Haraga Date 2/7/05

Reviewed by Helen Lee Date 2/11/05

HEIRetPlanfinal04 2/7/2005 2:52 PM

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Source G
Pension Ref 1

Source G
Pension Ref 3

AMERICAN SAVINGS BANK RETIREMENT PLAN
Asset Reconciliation
(based on The Bank of New York's final trust & financial statements)
2004

(1)	Market value, 1/1/04	50,164,254
(2)	Income	
	(a) Contributions	871,701
	(b) Interest, dividends & other income	1,036,956
	(c) Adjustments	0
	(d) Total	1,908,657
(3)	Disbursements	
	(a) Benefit payments	(1,069,562)
	(b) Investment mgt / trustee fees	(207,047)
	(c) Other expenses	(257,677)
	(d) Total	(1,534,286)
(4)	IVF loss (other expenses)	(2,547)
(5)	Adjustment to beginning market value	0
(6)	Net realized & unrealized gains (losses)	4,212,565
(7)	Market value, 12/31/04	54,748,643 G

Prepared by Julie Haruya Date 2/7/05

Reviewed by Helena Lee Date 2/11/05

HEI 401(h)
Asset Reconciliation
(based on The Bank of New York's final trust & financial statements)
2004

		HECO	HELCO	MECO	HEI	TOTAL
(1)	Market value, 1/1/04	12,718,542	4,003,225	2,894,062	962,561	20,578,390
(2)	Income					
	(a) Contributions	1,188,816	72,427	73,075	44,161	1,378,479
	(b) Int, div & other income	263,483	82,461	59,131	20,251	425,326
	(c) Adjustments	0	0	0	0	0
	(d) Total	1,452,299	154,888	132,206	64,412	1,803,805
(3)	Disbursements					
	(a) Benefit payments	(770,016)	(89,396)	(116,142)	(10,345)	(985,899)
	(b) Investment mgt / trustee fees	(52,394)	(16,354)	(11,769)	(4,044)	(84,561)
	(c) Other expenses	(9,363)	(2,964)	(2,132)	(728)	(15,187)
	(e) Total	(831,773)	(108,714)	(130,043)	(15,117)	(1,085,647)
(4)	IVF loss (other expenses)	(630)	(201)	(144)	(49)	(1,024)
(5)	Transfers	(8,701)	714	(12,482)	20,469	0
(6)	Net realized & unrealized gain (loss)	1,086,269	336,539	240,594	84,050	1,747,452
(7)	Adjustment to beginning market value	0	0	0	0	0
(8)	Market value, 12/31/04	14,416,006 [7]	4,386,451 [8]	3,124,193 [9]	1,116,326 [10]	23,042,976 [11]

Prepared by Julie Hanya Date 2/7/05

Reviewed by [signature] Date 2/11/05

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Source G
Pension Ref 5

HECO OPEB PLAN - NBU VEBA
Asset Reconciliation
(based on The Bank of New York's final trust & financial statements)
2004

		HECO	HELCO	MECO	HEI	TOTAL
(1)	Market value, 1/1/04	5,927,995	1,525,519	1,369,747	728,319	9,551,580
(2)	Income					
	(a) Contributions	4,004,378	475,011	558,070	79,090	5,116,549
	(b) Int, div & other income	128,254	30,795	28,617	14,693	202,359
	(c) Adjustments	0	0	0	0	0
	(d) Total	4,132,632	505,806	586,687	93,783	5,318,908
(3)	Disbursements					
	(a) Benefit payments	(1,916,177)	(287,738)	(270,481)	(37,759)	(2,512,155)
	(b) Investment mgt / trustee fees	(24,713)	(5,962)	(5,491)	(2,846)	(39,012)
	(c) Other expenses	(43,713)	(10,719)	(9,811)	(5,153)	(69,396)
	(d) Total	(1,984,603)	(304,419)	(285,783)	(45,758)	(2,620,563)
(4)	IVF loss (other expenses)	0	0	0	0	0
(5)	Transfers	(4,549)	387	(7,897)	12,059	0
(6)	Net realized & unrealized gain (loss)	622,946	145,061	136,672	69,641	974,320
(7)	Adjustment to beginning market value	0	0	0	0	0
(8)	Market value, 12/31/04	8,694,421 [12]	1,872,354 [13]	1,799,426 [14]	858,044 [15]	13,224,245 [16]

Prepared by Julie Haruyama Date 2/7/05

Reviewed by Glenn Lee Date 2/11/05

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Source G
Attrition Ref 6

HECO OPEB PLAN - BU VEBA
Asset Reconciliation
(based on The Bank of New York's final trust & financial statements)
2004

		HECO	HELCO	MECO	TOTAL
(1)	Market value, 1/1/04	48,568,400	10,183,572	9,244,866	67,996,838
(2)	Income				
	(a) Contributions	1,161,737	682,245	511,017	2,354,999
	(b) Int, div & other income	945,762	199,386	183,254	1,328,402
	(c) Adjustments	0	0	0	0
	(d) Total	2,107,499	881,631	694,271	3,683,401
(3)	Disbursements				
	(a) Benefit payments	(2,822,946)	(718,904)	(432,002)	(3,973,852)
	(b) Investment mgt / trustee fees	(181,988)	(38,180)	(35,132)	(255,300)
	(c) Other expenses	(11,782)	(2,459)	(2,264)	(16,505)
	(e) Total	(3,016,716)	(759,543)	(469,398)	(4,245,657)
(4)	IVF loss (other expenses)	0	0	0	0
(5)	Transfers	(45,869)	73,979	(28,110)	0
(6)	Net realized & unrealized gain (loss)	4,362,272	925,386	855,048	6,142,706
(7)	Adjustment to beginning market value	0	0	0	0
(8)	Market value, 12/31/04	51,975,586 [17]	11,305,025 [18]	10,296,677 [19]	73,577,288 [20]

Prepared by Julie Haruya Date 2/8/05

Reviewed by Allan Lee Date 2/11/05

BUVEBA.final04.2/8/2005.2:16 PM

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Source 9
Pension Ref 7

HEI ELECTRIC DISCOUNT TRUST
Asset Reconciliation
(based on The Bank of New York's final trust & financial statements)
2004

		HECO	HELCO	MECO	TOTAL
(1)	Market value, 1/1/04	16,790	27,912	17,142	61,844
(2)	Income				
	(a) Contributions	325,000	100,000	75,000	500,000
	(b) Int, div & other income	582	533	418	1,533
	(c) Adjustments	0	0	0	0
	(d) Total	325,582	100,533	75,418	501,533
(3)	Disbursements				
	(a) Benefit payments	(325,172)	(89,263)	(60,729)	(475,164)
	(b) Investment mgt / trustee fees	(4,207)	(2,467)	(2,038)	(8,712)
	(c) Other expenses	(164)	(109)	(85)	(358)
	(d) Total	(329,543)	(91,839)	(62,852)	(484,234)
(4)	Plan cost reallocation	0	0	0	0
(5)	Transfers	1,910	2,603	(4,513)	0
(6)	Net realized & unrealized gain (loss)	723	1,916	1,708	4,347
(7)	Adjustment to beginning market value	0	0	0	0
(8)	Market value, 12/31/04	15,462 21	41,125 22	26,903 23	83,490 24

Prepared by Julie Haraga Date 2/7/05

Reviewed by Eleanor Lee Date 2/11/05

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Source G
Pension Ref 10

XU. D Miyamoto

Retiree Medical Plans: 2004 OPEB Postretirement Benefit Cost under SFAS 106

Exhibit 3C

	BU VEBA (1)	NBU VEBA (2)	401(h) (3)	Elec Disc (4)	Exec Life (5)	Total (6)
6.25% Discount						
HEI						
HECO	$ 993,186	$ 2,560,799	$ 1,081,612	$ 742,495	$ 855,395 (4) 25	$ 6,233,487 (3)
HELCO	608,966	302,465	(67,493)	221,823	102,407 (6) 26	1,168,168 (5)
MECO	379,926	363,106	67,555	182,579	91,145 (8) 27	1,084,311 (7)
HEI	0	69,566	53,685	0	112,303 (2) 28	235,554 (1)
Total	**1,982,078**	**3,295,936**	**1,135,359**	**1,146,897**	**1,161,250** 29	**8,721,520**
ASB[1]	**0**	**0**	**0**	**0**	**0**	**35,000**
TOOTS[1]	**0**	**0**	**0**	**0**	**0**	**4,000** (9)
Grand Total	**1,982,078**	**3,295,936**	**1,135,359**	**1,146,897**	**1,161,250**	**8,760,520**

[1] Estimated.

Trend Rates:	
Medical:	10.0 --> 4.25%
Dental :	4.25%
Vision :	3.25%

Long term asset return rate:	
BU VEBA, 401(h) Account:	9.0%
NBU VEBA	5.0%
Elec Disc Trust	5.5%

1

Source H
Pension Ref 1

Executives - HUM002 - Note H
* HUM010

Source I

HEI - 2004 & 2005

1 R.F. Clarke
2 P.C. Lewis — Change to P.U. Wong for 2005
3 E.K. Yeaman
4 A.I.T. Chang
5 C.F. Wall
6 C.Y. Harada

(6)

ASB - 2004 & 2005

1 C.H. Lau
2 S.A. Aoyama
3 A.M. Nakamoto
4 R.Y. Nakatsuka
5 A.N. Sakamoto
6 D. Hudson
7 G.S.H. Lee
8 M.M. Lum
9 A.Q.C. Malczon
10 P.S. Yamada
11 W.T. Ishihara
12 A.M.P. Springer

Add for 2005

13 D.K. Todani

(13)

MECO - 2004 & 2005

1 E.L. Reinhardt

(1)

HELCO - 2004 & 2005

1 W.H.W. Lee

(1)

HECO - 2004 & 2005

1 T.M. May
2 R.A. Alm
3 T.L. Joaquin
4 K.E. Stahlkopf
5 J.M. Erickson
6 T.C. Simmons
7 C.M. Shirai
8 R. vonGnechten — Change to T.S.Y. Sekimura for 2005
9 W.A. Bonnet
10 C.M. Freedman
11 P.U. Wong — Change to A.E. Ejercito for 2005
12 L.A. Nagata
13 E.T. Shiraki — Change to P. Nambu for 2005
14 M.M. Egged

Add for 2005

15 H.K. Kageura
16 D.G. Waller

(9)

CA-IR-253

Ref: HECO-1310 (HEI Billings).

Please provide a copy of all workpapers supporting each of the adjustments described in the

footnotes to HECO-1310.

HECO Response:

1. Footnotes 1 and 2: The 2004 inflation rate adjustment of 2.2% (footnote 1) and the 2005 inflation rate adjustment of 2.1% (footnote 2) were based upon the Blue Chip Economic Indicators Consumer Price Index (CPI). See page 5 for the support for the 2004 CPI and page 6 for the 2005 CPI.

related to utility windfarm analysis assistance which is not expected to occur in 2005 and beyond. See the supporting details of the adjustment in the intercompany bill for the period 1/1/03 to 12/31/03 provided in response to CA-IR-251 part c, Activity code CON012, direct labor and nonlabor charges on pages 30 to 33.

6. Footnote 8: The 2003 actual (which is the basis for the 2005 test year estimate) was adjusted to exclude the one-time nonrecurring charge of $81.04 related to a former HECO employee who transferred to HEI during 2002. In 2003, HEI paid to this employee the award she had earned while being employed by HECO during 2002 and HEI was now seeking reimbursement from HECO. See the supporting details of the adjustment in the intercompany bill for the period 1/1/03 to 12/31/03 provided in the response to CA-IR-251 part c, Activity code HUM005, direct non-labor charges on pages 36 and 39.

7. Footnote 9: The 2003 actual (which is the basis for the 2005 test year estimate) was adjusted to exclude costs related to incentive compensation in order to simplify the issues related to this rate case only. Hence, all charges related to the incentive compensation plans and stock options were removed from the test year estimate. See the supporting details of the adjustment in the intercompany bill for the period 1/1/03 to 12/31/03 provided in the response to CA-IR-251 part c, Activity codes HUM011 thru HUM018 on pages 36 to 45.

8. Footnotes 10 and 11: The 2004 internet credit adjustment of $31,939.63 was made primarily to remove the cost of e-mail filtering from the 2003 actual since it will be directly billed to HECO by the vendor from January 2004. After this adjustment, the 2004 estimate reflects the amount shown on page 8 of the supporting workpaper.

   The 2005 internet adjustment of $14,400.00 was made for additional bandwidth capacity to handle HECO's future initiatives such as increased virtual private network for

work-at-home, extranets, internet protocol telephone and general usage growth. The $14,400.00 was calculated as follows:

Additional 3.2 mbs of capacity = $2,000 per month (quote from Time Warner Telecom). HECO's portion of 60% (based upon the internet traffic study conducted in 2004) = $1,200 (or $2,000 x 60%) multiplied by 12 months = $14,400 annually.

9. Footnote 12: The 2004 estimate was increased to include costs for additional time and external auditing fees related to compliance with Sarbanes-Oxley Sections 404 [and 302]. See page 9 for the supporting workpaper. Employee names were redacted from the workpaper because the workpaper contains confidential employee labor rates.

10. Footnote 13: The 2003 actual (which is the basis for the 2005 test year estimate) was adjusted to exclude the non-recurring stock option proposal and the CEO's attendance at a proxy workshop which are not expected to occur in 2005 and beyond. See the supporting details for the adjustment on page 10 and in the intercompany bill for the period 1/1/03 to 12/31/03 provided in the response to CA-IR-251 part c, Activity code RPT041, shared labor and non-labor charges.

11. Footnote 14: The 2003 actual (which is the basis for the 2005 test year estimate) was adjusted to exclude the non-recurring costs related to the DRIP registration statement which are not expected to occur in 2005 and beyond. See the supporting details for the adjustment on page 11 and in the intercompany bill for the period 1/1/03 to 12/31/03 provided in the response to CA-IR-251 part c, Activity code STO012, shared labor and non-labor charges.

12. Footnote 15: The 2004 estimate was increased to include costs for the implementation of the new IRS forms (M-3), return disclosures and additional documentation on tax items as a result of Sarbanes-Oxley Section 404 [and 302]. See page 12 for the supporting workpaper.

Employee names were redacted from the workpaper because the workpaper contains confidential employee labor rates.

APRIL 10, 2003 ■ BLUE

2004 Real GDP Consensus Forecast Slips To 3.5%

APRIL 2003 Forecast For 2004 SOURCE:	Percent Change 2004 From 2003 (Year-Over-Year)									Average For 2004			Total Units-2004		2004
	1 Real GDP (Chained) ('96 $)	2 GDP Price Index	3 Nominal GDP (Cur. $)	4 Consumer Price Index	5 Indust. Prod. (Total)	6 Dis. Pers. Income ('96 $)	7 Personal Cons. Exp ('96 $)	8 Non-Res. Fix. Inv. ('96 $)	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 ('96 $)
Genetski.com	5.2 H	0.7	5.9	0.9 L	5.1	5.0 H	na	na	15.7	2.9	4.9	5.9	na	16.9	na
National City Corporation	4.4	1.8	6.2	2.2	7.0	3.7	4.0	11.1	11.7	2.6	5.0	5.4	1.59	17.6	-525.3
Motorola	4.3	1.9	6.3	1.6	6.8	4.6	4.1 H	10.7	na	2.9	5.8	5.4	1.55	17.3	-518.0
National Assn. of Home Builders	4.2	1.9	6.1	2.0	5.4	4.0	3.7	6.9	13.3	2.7	4.8	5.4	1.65	16.6	-535.6
Global Insight (was DRI-WEFA)	4.2	1.8	6.1	1.6	6.7	4.4	3.8	10.1	23.6	2.1	5.4	5.7	1.58	17.2	-529.3
Conference Board*	4.0	1.9	6.0	2.8	6.5	4.2	3.7	8.4	12.4	1.8	4.8	5.5	1.54	16.6	-495.9
LaSalle National Bank	4.0	1.9	6.0	1.8	4.5	4.1	3.6	9.8	10.9	4.9 H	6.5 H	5.7	1.58	16.2	-486.0
Morgan Stanley	4.0	1.6	5.7	1.9	7.7 H	4.2	3.3	10.7	12.6	3.0	4.9	5.7	1.55	16.4	-579.9
Deutsche Bank Securities	3.9	2.0	6.0	1.6	2.0	3.4	2.9	8.1	na	3.5	5.4	5.3	1.52	15.0	-557.1
Turning Points (Micrometrics)	3.9	1.8	5.7	2.2	3.7	2.9	2.0	6.2	14.7	1.9	4.2	5.5	1.71	17.4	-510.4
National Assn. of Realtors	3.9	1.7	5.5	2.3	5.8	3.6	3.6	6.5	11.5	2.6	4.6	5.5	1.66	17.0	-492.0
Comerica Bank	3.8	2.4	6.4 H	2.7	5.6	2.8	3.5	5.0	12.0	2.4	6.2	5.2	1.63	16.9	-590.0
MMS International	3.8	2.1	6.4 H	2.1	5.6	2.7	3.5	7.6	22.6	2.5	5.4	5.6	1.78 H	17.7 H	-606.0
Fannie Mae	3.8	1.8	5.7	2.1	5.1	3.8	3.4	10.5	8.1	2.8	4.7	5.4	1.66	na	-546.6
Macroeconomic Advisers, LLC**	3.8	1.7	5.6	1.8	5.1	4.0	3.5	10.3	8.3	2.8	4.9	5.4	1.67	17.2	-557.8
Wells Capital Management	3.7	2.1	5.9	3.0	4.3	3.4	3.3	9.5	9.9	2.0	4.9	5.6	1.62	16.1	-633.0
Ford Motor Company	3.7	1.9	5.8	2.3	4.3	3.7	3.0	8.2	na	3.3	5.9	5.6	1.69	na	-488.7
Banc of America Corp.	3.7	1.3	5.0	2.1	4.0	3.8	3.2	5.6	8.0	3.0	5.1	5.8	1.64	16.6	-511.0
Wayne Hummer Investments LLC*	3.6	1.9	5.5	2.4	4.5	3.5	2.7	7.0	9.5	2.8	5.1	5.5	1.59	16.5	-495.4
Georgia State University*	3.6	1.9	4.8	2.3	5.7	2.5	2.9	8.8	16.5	2.5	4.6	5.7	1.72	16.3	-531.3
DaimlerChrysler AG	3.6	1.8	5.5	2.4	5.2	3.4	3.2	6.5	7.6	2.5	5.6	5.9	1.70	na	-557.4
DuPont**	3.6	1.8	5.4	2.5	4.3	3.5	3.3	8.8	10.0	2.9	4.9	5.7	1.60	17.0	-560.0
UCLA Business Forecasting Proj.*	3.5	2.8 H	6.4 H	2.8	4.9	2.5	2.6	9.2	24.1 H	3.8	4.8	5.8	1.71	16.7	-483.1
Eaton Corporation	3.5	1.9	5.5	2.5	4.4	4.4	2.8	11.3 H	12.2	2.9	4.5	6.0	1.57	17.0	-567.5
Credit Suisse First Boston	3.5	1.9	5.4	2.0	4.4	na	3.6	4.3	8.5	na	na	5.6	1.58	16.7	-585.0
Kellner Economic Advisers	3.5	1.9	5.4	2.4	4.0	3.3	3.0	6.0	10.0	2.3	4.9	5.7	1.59	15.9	-530.0
Inforum - Univ. of Maryland	3.5	1.7	5.3	2.2	4.0	3.2	3.0	7.2	12.1	2.9	4.9	5.6	1.67	16.6	-501.0
Swiss Re	3.5	1.4	5.0	1.6	4.0	4.1	2.9	10.2	10.8	2.7	5.1	5.6	1.66	17.0	-569.5
Wachovia	3.4	2.5	5.8	2.5	3.8	3.9	2.5	7.8	16.9	2.5	5.3	5.6	1.67	17.2	-541.0
U.S. Chamber of Commerce	3.4	1.9	5.4	2.3	4.4	3.4	2.8	5.7	na	2.8	5.1	5.5	1.59	na	-541.0
Economclast	3.4	1.8	5.2	2.8	4.0	3.5	3.2	7.6	10.2	2.6	5.1	5.7	1.59	16.5	-503.0
BMO Nesbitt Burns	3.4	1.7	5.2	2.2	3.5	3.4	3.2	5.3	8.4	2.4	4.7	5.5	1.65	15.8	-572.0
General Motors Corporation	3.4	1.7	5.2	2.8	4.5	3.6	3.1	7.2	9.1	2.3	4.6	5.6	1.64	16.7	-516.7
Schwab Washington Research Group	3.4	1.4	4.8	1.4	4.7	3.9	3.0	8.9	9.5	2.4	4.7	5.9	1.63	16.7	-544.0
ClearView Economics	3.4	1.3	4.7	2.4	4.1	3.7	3.8	7.3	12.6	2.3	4.6	5.4	1.60	17.1	-651.0 L
Merrill Lynch Economics	3.4	1.2	4.7	1.4	3.6	4.2	2.8	6.6	3.6	1.1	4.1	5.9	1.64	16.4	-527.9
Naroff Economic Advisors	3.3	2.3	5.5	2.3	3.4	3.0	3.4	8.0	10.0	4.0	5.7	4.5 L	1.66	17.1	-465.0 H
Federal Express Corp.	3.3	2.2	5.5	2.7	3.5	2.9	3.1	4.9	8.0	2.4	5.4	5.5	1.60	16.2	-537.5
J.W. Coons & Associates	3.3	2.0	5.4	2.7	3.3	3.2	2.8	8.3	8.6	2.2	4.4	5.4	1.72	16.9	-626.0
SOM Economics, Inc.	3.3	1.5	4.8	2.0	3.7	3.2	2.9	7.1	4.7	2.7	4.7	6.1	1.60	17.2	-604.0
J P MorganChase	3.2	1.5	4.8	1.4	3.5	3.7	3.3	3.1 L	8.3	1.9	4.5	5.6	1.41 L	16.2	-592.0
Moody's Investors Service	3.1	2.2	5.4	2.6	1.9	3.3	3.6	3.9	11.0	2.9	5.4	5.4	1.65	16.6	-574.0
UBS Warburg	3.1	1.4	4.6	2.2	4.5	3.8	2.8	8.5	na	1.9	4.4	5.8	1.50	na	-598.8
Nomura Securities	3.0	2.4	5.5	3.1 H	4.0	2.6	2.3	6.5	5.2	2.6	4.6	6.0	1.63	17.1	-468.0
Eggert Economic Enterprises, Inc.	3.0	1.8	4.8	2.2	2.8	2.8	2.6	5.0	4.0	2.0	4.5	5.6	1.55	15.8	-554.0
Goldman Sachs & Co.	3.0	0.7 L	3.7	1.5	3.8	3.7	3.0	5.3	6.2	2.0	4.8	6.2 H	1.50	16.0	-539.6
Perna Associates	2.9	2.0	5.0	2.8	3.5	3.2	3.1	6.9	8.6	2.7	5.3	5.6	1.54	16.7	-632.0
Bank One	2.8	1.9	5.2	2.2	3.4	2.5	3.5	7.2	11.6	2.7	4.6	5.7	1.49	15.8	-612.7
Daiwa Institute of Research America	1.7 L	1.3	3.1 L	1.6	1.9 L	-1.5 L	1.5 L	5.1	2.5 L	0.7 L	3.1 L	5.9	1.56	14.5 L	-568.0
2004 Consensus: April Avg.	**3.5**	**1.8**	**5.4**	**2.2**	**4.4**	**3.4**	**3.1**	**7.5**	**10.8**	**2.6**	**4.9**	**5.6**	**1.61**	**16.6**	**-548.1**
Top 10 Avg.	4.2	2.3	6.2	2.8	6.3	4.3	3.8	10.4	17.3	3.4	5.7	6.0	1.70	17.3	-487.8
Bottom 10 Avg.	2.9	1.2	4.5	1.5	2.9	2.3	2.5	4.8	5.8	1.7	4.3	5.3	1.52	15.7	-614.6
March Avg.	3.6	1.8	5.5	2.3	4.3	3.6	3.2	7.6	10.4	2.8	5.1	5.6	1.61	16.7	-540.5
Number Of Forecasts Changed From A Month Ago:															
Down	19	16	22	20	16	17	18	14	14	25	22	10	15	12	25
Same	21	21	14	23	17	19	18	19	14	19	21	25	19	22	4
Up	9	12	13	6	16	12	12	15	16	4	5	14	14	10	19
April Median	3.5	1.8	5.5	2.2	4.3	3.5	3.2	7.3	10.0	2.6	4.9	5.6	1.61	16.7	-542.5
April Diffusion Index	40 %	46 %	41 %	36 %	50 %	45 %	44 %	51 %	52 %	28 %	32 %	54 %	49 %	48 %	44 %

***Former winner of Annual Blue Chip Economic Forecasting Award **Denotes two-time winner.**

BASIC DATA SOURCES: [1]Gross Domestic Product (GDP), chained 1996$, National Income and Product Accounts (NIPA), Bureau of Economic Analysis (BEA); [2]GDP Chained Price Index, NIPA, BEA; [3]GDP, current dollars, NIPA, BEA; [4]Consumer Price Index-All Urban Consumers, Bureau of Labor Statistics (BLS); [5]Total Industrial Production, Federal Reserve Board (FRB); [6]Disposable Personal Income, 1996$, NIPA, BEA; [7]Personal Consumption Expenditures, 1996$, NIPA, BEA; [8]Non-residential Fixed Investment, 1996$, NIPA, BEA; [9]Corporate Profits Before Taxes, current dollars, with inventory valuation and capital consumption adjustments, NIPA, BEA; [10]Treasury Bills, 3-month, secondary market, bank discount basis, FRB; [11]10-Year Treasury note yield, FRB; [12]Unemployment Rate, civilian work force, BLS; [13]Housing Starts, Bureau of Census; [14]Total U.S. Auto and Truck sales (includes imports and all weight classes of trucks), BEA; [15]Net Exports of Goods and Services, 1996$, NIPA, BEA

2005 Real GDP Consensus Forecast Starts 3.7%

January 2004 Forecast For 2005 SOURCE:	Percent Change 2005 From 2004 (Year-Over-Year)									Average For 2005			Total Units-2005		-2005-
	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 $)
Genetski.com	5.0 H	1.9	6.9 H	2.4	5.4	4.5	na	na	10.5	2.8	5.4	5.5	na	17.5	na
Deutsche Bank Securities	4.3	1.7	6.0	1.9	3.6	3.3	3.1	10.3	na	4.2	6.4	5.1	na	na	-503.9
Eggert Economic Enterprises, Inc.	4.3	1.4	5.6	1.9	2.6	3.8	4.3	8.9	11.7	1.4	4.5	5.6	1.80	17.5	-572.0
Moody's Investors Service	4.2	1.7	5.9	2.6	4.0	3.6	3.6	8.9	10.0	3.1	5.5	5.3	1.67	16.7	-561.0
Macroeconomic Advisers, LLC**	4.2	1.0	5.2	1.5	7.2	3.1	3.5	10.0	6.9	2.0	5.3	5.2	1.55	16.7	-460.3
Conference Board*	4.1	1.9	6.1	3.2 H	4.8	3.4	4.5 H	9.9	-3.0 L	3.7	5.6	5.2	1.58	18.4	-569.0
Turning Points (Micrometrics)	4.1	1.7	5.8	2.5	4.3	3.3	3.7	8.5	11.7	1.9	5.6	5.5	2.05 H	19.6 H	-523.7
ClearView Economics	4.1	1.5	5.6	2.6	4.8	4.0	3.7	9.9	8.9	3.3	5.7	5.3	1.75	17.6	-598.7
U.S. Trust Co.	4.0	1.5	5.5	2.0	3.0	3.5	3.5	6.0	8.0	2.5	4.9	5.2	1.75	17.0	-560.0
National Assn. of Realtors	4.0	1.4	5.4	2.4	6.8	2.8	3.5	9.2	7.0	2.5	5.1	5.1	1.61	17.1	-496.0
Fannie Mae	4.0	1.1	5.2	1.8	5.8	3.1	3.3	10.1	7.0	3.0	5.4	5.3	1.69	na	-517.7
Schwab Washington Research Group*	4.0	0.8 L	4.8	1.3	7.1	2.9	3.1	9.8	7.5	1.8	5.1	5.5	1.61	17.0	-448.9
Action Economics	3.9	1.9	6.7	1.8	5.5	3.4	3.4	8.8	8.8	2.6	5.5	5.5	1.83	17.7	-497.0
Wayne Hummer Investments LLC*	3.9	1.9	5.9	2.3	4.2	4.0	3.4	10.0	8.4	2.2	5.6	5.0	1.68	16.5	-502.0
National City Corporation	3.9	1.8	5.7	2.2	5.7	3.6	3.5	11.1	2.5	3.1	5.5	5.3	1.66	17.3	-517.0
Eaton Corporation	3.9	1.7	5.6	2.1	5.2	5.0 H	3.1	10.4	12.7	1.8	4.4	5.7	1.62	17.1	-551.6
Global Insight (was DRI-WEFA)	3.8	1.7	5.6	1.6	5.7	3.3	3.5	9.5	28.2 H	2.2	5.6	5.4	1.69	17.3	-508.5
Motorola	3.8	1.7	5.6	1.6	5.7	3.3	3.5	9.5	na	2.2	5.6	5.4	1.69	17.3	-508.4
Morgan Stanley	3.8	1.4	5.3	2.2	5.5	3.4	3.6	11.4	7.7	2.6	5.4	5.3	1.59	16.3	-585.6
Bank One	3.8	1.3	5.1	2.0	3.7	3.3	3.8	11.6	16.2	2.8	6.1	5.8	1.46	15.6 L	-637.0 L
National Assn. of Home Builders	3.8	1.2	5.1	1.6	5.5	3.1	3.3	7.7	7.0	2.2	5.3	5.4	1.71	16.5	-481.0
Wells Capital Management	3.7	2.6 H	6.5	2.8	4.4	3.7	3.3	13.3 H	6.9	3.3	5.8	5.3	1.62	16.0	-582.4
BMO Nesbitt Burns	3.7	2.1	5.8	2.0	4.0	3.1	2.6	10.1	7.7	3.0	5.1	5.2	1.70	16.7	-515.0
SOM Economics, Inc.	3.7	1.7	5.5	2.0	4.2	3.1	3.3	10.3	7.5	3.0	5.1	5.8	1.65	18.0	-524.0
Banc of America Corp.	3.7	1.7	5.4	2.0	4.0	3.6	3.4	8.1	11.0	3.0	5.6	5.4	1.81	17.3	-518.0
J.W. Coons Advisors	3.7	1.6	5.3	2.2	5.3	3.1	3.0	10.5	10.9	2.3	4.8	5.3	1.74	17.2	-564.7
Georgia State University*	3.7	1.5	5.2	2.2	7.4 H	3.4	3.5	10.5	10.9	2.2	5.6	5.5	1.55	16.5	-580.2
Credit Suisse First Boston	3.7	1.5	5.2	1.7	4.0	na	3.2	8.1	6	2.7	na	5.5	na	na	-576.0
Swiss Re	3.7	1.3	5.0	1.3	5.1	3.0	2.8	12.1	8.2	3.1	5.3	5.3	1.73	17.0	-526.4
Nomura Securities	3.7	1.3	5.0	2.0	5.6	2.8	3.2	8.8	4.6	2.1	5.4	5.4	1.60	16.5	-477.0
Perna Associates	3.6	2.0	5.7	2.7	4.2	3.5	3.5	7.8	8.1	3.3	5.4	5.3	1.67	16.6	-511.0
J P MorganChase	3.6	1.4	5.0	1.9	5.0	3.6	3.4	9.0	7.6	1.3	5.6	5.6	1.49	17.0	-544.0
LaSalle National Bank	3.5	1.9	5.5	1.9	5.1	5.0 H	3.3	8.5	8.1	3.3	5.5	5.7	1.70	16.8	-520.0
DaimlerChrysler AG	3.5	1.5	5.1	2.2	4.5	3.5	3.3	6.1	6.0	2.8	5.3	5.4	1.72	na	-519.7
Standard & Poors Corp.*	3.4	1.7	5.1	1.5	5.2	2.8	3.1	8.4	26.8	2.1	5.5	5.6	1.63	16.3	-481.0
General Motors Corporation	3.4	0.9	4.3	2.6	6.0	2.8	2.9	7.5	0.1	3.0	5.9	5.6	1.35 L	na	-444.6
Federal Express Corp.	3.3	2.5	5.8	2.7	3.4	3.1	3.3	7.0	7.6	2.0	5.2	5.5	1.68	16.0	-540.0
Economclast	3.3	1.9	5.2	1.8	4.0	3.6	2.5 L	10.0	10.0	1.6	5.1	5.3	1.67	16.4	-518.0
Inforum - Univ. of Maryland	3.3	1.9	5.2	2.4	3.6	3.5	3.1	6.3	5.7	2.3	5.4	5.7	1.86	16.3	-465.0
UBS Warburg	3.3	1.7	5.0	2.3	5.1	3.6	2.7	8.7	na	3.4	5.3	5.5	1.60	na	-562.0
DuPont**	3.3	1.7	5.0	2.0	3.9	2.8	2.9	6.1	14.0	3.5	5.5	5.4	1.75	17.2	-493.0
UCLA Business Forecasting Proj.*	3.2	1.9	5.2	2.1	4.5	2.9	3.3	6.6	8.2	2.4	5.5	6.2	1.72	16.6	-442.0 H
Comerica Bank	3.1	2.6 H	6.4	2.6	4.1	2.7	3.2	6.0	8.7	2.6	6.5 H	5.5	1.60	16.7	-534.0
Naroff Economic Advisors	3.1	2.2	5.3	2.4	3.8	3.5	3.0	7.5	10.5	4.2 H	5.8	4.7 L	1.67	16.6	-455.0
Wachovia	3.0	2.2	5.2	2.3	5.5	3.4	2.6	8.0	12.0	2.5	5.5	5.4	1.80	17.3	-500.0
Kellner Economic Advisers	3.0	2.2	5.2	2.7	3.5	3.7	3.4	4.0 L	12.0	2.0	5.7	5.6	1.55	16.0	-475.0
Daiwa Institute of Research America	2.2 L	0.9	3.1 L	1.0 L	2.3 L	2.5 L	2.6	4.1	7.0	1.1 L	3.8 L	6.2 H	1.57	17.1	-584.0
2005 Consensus: January Avg.	**3.7**	**1.7**	**5.4**	**2.1**	**4.8**	**3.4**	**3.3**	**8.8**	**9.2**	**2.6**	**5.4**	**5.4**	**1.67**	**16.9**	**-522.9**
Top 10 Avg.	4.2	2.2	6.1	2.7	6.3	4.1	3.8	11.2	15.6	3.5	5.9	5.8	1.80	17.8	-463.0
Bottom 10 Avg.	3.1	1.1	4.7	1.5	3.3	2.8	2.8	6.0	4.3	1.7	4.8	5.1	1.53	16.2	-585.0
December Avg.	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Number Of Forecasts Changed From A Month Ago:															
Down	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Same	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
Up	na	na	na	na	na	na	na	na	na	na	na	na	na	na	na
January Median	3.7	1.7	5.3	2.1	4.8	3.4	3.3	8.9	8.2	2.6	5.5	5.4	1.67	17.0	-518.0
January Diffusion Index	na %	na %	na %	na %	na %	na %	na %	na %	na %	na %	na %	na %	na %	na %	na %

*Former winner of Annual Blue Chip Economic Forecasting Award **Denotes two-time winner.

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

ER/DECEMBER
1,700
255
15,931
1.20
0.93
-
33,933.03
1,307.26
1,468.11
989.12
41.21
37,738.75
4,164.15
173.48
160.43
6.68
4,504.73
23.46
4,528.20
4,504.73
0.875
3,941.64
4,528.20
3,941.64
586.55
23.46

2004 Internet Billing Budget
Last Update: 9/26/03

	2004 Annual Expense	Allocation Factors: HEI	HECO	ASB	Allocated Amount: HEI	HECO	ASB
HEI Only							
Verisign:							
Digital Certificate SSL Kahala Annual Fee	250	100%	0%	0%	250	0	0
Domain Name Annual Fee (various)	200	100%	0%	0%	200	0	0
Comtest:							
Cacheflow Maintenance	4,000	100%	0%	0%	4,000	0	0
SmartFilter Annual Subscription	4,000	100%	0%	0%	4,000	0	0
NetEnforcer Maintenance	1,400	100%	0%	0%	1,400	0	0
Network Associates Sniffer Maintenance	2,100	100%	0%	0%	2,100	0	0
Tumbleweed MMS (aka WorldSecure):							
MMS Server SW Maint	5,000	100%	0%	0%	5,000	0	0
Dell 2650 Server & MS SQL WIN Maint	1,500	100%	0%	0%	1,500	0	0
V-One VPN Server Maint (50 seat)	1,500	100%	0%	0%	1,500	0	0
NetEnterprise:							
Engineering Support	3,000	100%	0%	0%	3,000	0	0
Email backup Svc	1,200	100%	0%	0%	1,200	0	0
Commercial Data Systems Off-Hour Support	5,500	100%	0%	0%	5,500	0	0
Oceanic RoadRunner Connection	1,200	100%	0%	0%	1,200	0	0
	30,850				30,850	0	0
HEI+HEIPC+HECO+ASB (1)							
Commercial Data Systems:							
Sun Firewall Hardware/SW Maint 7x24 Gold	11,000	68%	32%	0%	7,480	3,520	0
2-Sunfire 280R SN:135C043A, SN:122CO66B8)	0	68%	32%	0%	0	0	0
Enterprise 250 SN:041H2CA0	0	68%	32%	0%	0	0	0
Secure Technologies Hawaii Inc (STHI):							
Firewall Software Maint (Stonesoft, Checkpoint, ISS)	17,400	68%	32%	0%	11,832	5,568	0
Firewall Security Maintenance (include 24 hours T&M)	22,000	68%	32%	0%	14,960	7,040	0
	50,400				34,272	16,128	0
HEI+HECO+ASB							
NetEnterprise:							
2xT1 Internet Circuit & Port Chg (3)	28,800	3%	60%	37%	864	17,280	10,656
Cisco Router Maintenance (2)	2,000	34%	33%	33%	680	660	660
Router Management (2)	3,000	34%	33%	33%	1,020	990	990
Sprint:							
2xT1 Internet Circuit & Port Chg (3)	28,800	3%	60%	37%	864	17,280	10,656
Internet Connection Installation Fee (2)	1,000	34%	33%	33%	340	330	330
ARIN ASN Maintenance (2)	100	34%	33%	33%	34	33	33
	63,700				3,802	36,573	23,325
HEI+HECO							
FTP Server - Dell 2650 Hdwr/sw Maint (4)	1,000	10%	90%	0%	100	900	0
	1,000				100	900	0
Total Expense	145,950				69,024	53,601	23,325
Capital Depreciation Expense							
HEI Only	19,643	100%	0%	0%	19,643	0	0
HEI+HEIPC+HECO+ASB (1)	40,587	68%	32%	0%	27,599	12,988	0
HEI+HECO+ASB (2)	0	34%	33%	33%	0	0	0
HEI+HECO (4)	347	10%	90%	0%	35	312	0
Total Depreciation	60,577				47,277	13,300	0
TOTAL INTERNET	206,527				116,301	66,901	23,325
FrontBridge (Bigfish) Email & Virus filtering service (5)	36,000	10%	90%	0%	3,600	32,400	0
TOTAL INTERNET + FRONTBRIDGE	242,527				119,901	99,301	23,325

(1) Allocation factors include upgades and higher security requirements to support HEIPC International communications requirements.
(2) Fixed allocation costs split equally.
(3) Allocation based on internet traffic study
(4) Allocation based on FTP account ratio
(5) Allocation based on FrontBridge e-mail traffic study

Support for Footnote 12

SOX 404 Charges excluding incentive compensation

		(a) Estimated Additional Hours	(b) 12/31/03 Labor Rate	(c) = (b) *1.022 2004 Estimated Labor Rate (based upon a 2.2% increase)		(a) x (c) 2004 Addl Charges	Allocation %	HECO's portion
INV022	Investor Relations-Sarbanes Oxley Related Chg	60	100.1	102.3022		6,138.13	39.0%	2,393.87
INV022	Investor Relations-Sarbanes Oxley Related Chg	60	58.61	59.89942		3,593.97	39.0%	1,401.65
INV022	Investor Relations-Sarbanes Oxley Related Chg	20	60.78	62.11716	Internal Audit SOX testing-	1,242.34	39.0%	484.51
INV022	Investor Relations-Sarbanes Oxley Related Chg	20	60.08	61.40176	Internal Audit SOX testing-	1,228.04	39.0%	478.94
INV022	Investor Relations-Sarbanes Oxley Related Chgs				External Auditor attestation fees	3,347.00	39.0%	1,305.33
								6,064.30
PEN010	Pension-Sarbanes Oxley Related Charges	22.5	92.37	94.40214	(Note 1)	2,124.05	69.9%	1,484.71
PEN010	Pension-Sarbanes Oxley Related Charges	22.5	56.84	58.09048	(Note 1)	1,307.04	69.9%	913.62
								2,398.33
RPT044	Proxy-Sarbanes Oxley Related Charges	50	60.9	62.2398	(Note 1)	3,111.99	39.0%	1,213.68
RPT044	Proxy-Sarbanes Oxley Related Charges	12.5	60.78	62.11716	Internal Audit SOX testing-	776.46	39.0%	302.82
RPT044	Proxy-Sarbanes Oxley Related Charges	12.5	60.08	61.40176	Internal Audit SOX testing-	767.52	39.0%	299.33
RPT044	Proxy-Sarbanes Oxley Related Charges				External Auditor attestation fees	2,092.00	39.0%	815.88
								2,631.71
RPT098	Fin Rpting-Sarbanes Oxley Related Charges	45	97.21	99.34862	(Note 1)	4,470.69	39.4%	1,761.45
RPT098	Fin Rpting-Sarbanes Oxley Related Charges	75	70.6	72.1532	(Note 1)	5,411.49	39.4%	2,132.13
RPT098	Fin Rpting-Sarbanes Oxley Related Charges	165	60.78	62.11716	Internal Audit SOX testing-	10,249.33	39.4%	4,038.24
RPT098	Fin Rpting-Sarbanes Oxley Related Charges	165	60.08	61.40176	Internal Audit SOX testing-	10,131.29	39.4%	3,991.73
RPT098	Fin Rpting-Sarbanes Oxley Related Charges				External Auditor attestation fees	27,615.00	39.4%	10,880.31
								22,803.86
STO021	Stock Transfer-Sarbanes Oxley Related Chgs	360	67.68	69.16896	(Note 1)	24,900.83	36.6%	9,113.70
STO021	Stock Transfer-Sarbanes Oxley Related Chgs	95	60.78	62.11716	Internal Audit SOX testing-	5,901.13	36.6%	2,159.81
STO021	Stock Transfer-Sarbanes Oxley Related Chgs	95	60.08	61.40176	Internal Audit SOX testing-	5,833.17	36.6%	2,134.94
STO021	Stock Transfer-Sarbanes Oxley Related Chgs				External Auditor attestation fees	15,900.00	36.6%	5,819.40
								19,227.85
TAX019	Taxes-Sarbanes Oxley Related Charges	24	66.705	68.17251	(Note 1)	1,636.14	Directly charged to HECO	1,636.14

Note 1: Includes time for updating of controls and procedures and evaluation of testing results.

Support for Footnote 13

Adjustment to RPT041 Proxy Preparation (refer to intercompany bill provided in CA-IR-251 c.)

Activity	Period	Employee/Vendor	Description of services/charges	Total Charge	Allocation Factor	HECO Portion	RPT Bill Ref
Shared labor charges for RPT041:							
RPT041	11/30/03	Clarke, Robert	Workshop re Proxy Season changes	3,321.95	39.0%	① 1,295.56	p. 7
Shared non-labor charges for RPT041:							
RPT041	02/28/03	Georgeson Shareholder	Stock option proposal analysis	8,840.00	39.0%	② 3,447.60	p. 13
RPT041	04/30/03	Skadden, Arps	Professional services including stock option proposal	19,946.16	39.0%	7,779.00	p. 13
RPT041	06/30/03	Skadden, Arps	Professional services including stock option proposal	14,070.16	39.0%	5,487.36	p. 13
RPT041	08/31/03	Skadden, Arps	Professional services including stock option proposal	439.92	39.0%	171.57	p. 13
RPT041		Skadden, Arps	Normalized annual proxy professional services	(10,000.00)	39.0%	(3,900.00)	
						14,281.09	

Reference:
① CA-IR-251, page 93.
② CA-IR-251, page 99

Support for Footnote 14

Adjustment to STO012 HEI Dividend Reinvestment program administration (refer to intercompany bill provided in CA-IR-251 c.)

Activity	Period	Employee/Vendor	Description of services/charges	Total Charge	Allocation Factor	HECO Portion	STO Bill Ref
Shared labor charges for STO012:							
STO012	08/15/03	Horita, Sandra	Form S-3 - DRIP	211.80	36.6%	(1) 77.52	p. 7
STO012	07/15/03	Yeaman, Eric	DRIP registration	228.21	36.6%	(2) 83.52	p. 9
STO012	08/15/03	Yeaman, Eric	S-3 registration and DRIP prospectus review	517.78	36.6%	189.51	p. 9
Shared non-labor charges for STO012:							
STO012	11/30/03	Bowne	Document charge for EDGAR filing of Form 424(b)(3)	12,582.44	36.6%	(3) 4,605.17	p. 22
STO012	09/30/03	Goodsill, et al	Professional services re 2003 DRIP registration	12,861.45	36.6%	(4) 4,707.29	p. 23
STO012	10/31/03	Goodsill, et al	Professional services re 2003 DRIP registration	15,839.64	36.6%	5,797.31	p. 23
STO012	12/31/03	Goodsill, et al	Professional services re 2003 DRIP registration	234.36	36.6%	(5) 85.78	p. 24
STO012	12/31/03	Goodsill, et al	Professional services re 2003 DRIP registration	8,387.35	36.6%	3,069.77	p. 24
STO012	09/30/03	KPMG	Professional services re 2003 DRIP registration	10,416.60	36.6%	3,812.48	p. 24
						22,428.35	

References:

(1) CA-IR-251, page 112
(2) CA-IR-251, page 114
(3) CA-IR-251, page 127
(4) CA-IR-251, page 128
(5) CA-IR-251, page 129

Support for Footnote 15

		Estimated Additional Hours 2004/2005	Hours 2003	(a) Addl Hours 2004 - 2003	(b) 12/31/03 Labor Rate	(c) = (b) *1.022 2004 Estimated Labor Rate (based upon a 2.2% increase)	Employees	(a) x (c) 2004 Addl Charges
TAX001	Tax return preparation	900	768	132	52.88	54.04336		7,133.72
TAX002	Tax return review	200	138	62	98.35	100.5137		6,231.85
TAX006	Tax research	350	253	97	83.1933333	85.02358667		8,247.29
TAX007	Tax accrual review	500	392	108	83.1933333	85.02358667		9,182.55
TAX009	Assist on IRS exam	500	359	141	83.1933333	85.02358667		11,988.33

The increased hours are for the implementation of new IRS forms (M-3), return disclosures and additional documentation on tax items as a results of Sarbanes-Oxley Section 404 [and 302].

CA-IR-254

Ref: HECO-1310 (HEI Billings).

a. Does HEI retain any costs that are not subject to direct assignment to, or otherwise allocated to HECO, HELCO and/or MECO?

b. If so, please provide the following:

[redacted]

1. Please identify the nature and type of costs typically retained by HEI.
2. Please provide the actual percentage of costs retained by HEI in calendar years 2001, 2002, 2003 and 2004, showing all calculations and supporting documents.
3. Please provide the percentage of costs retained by HEI implicit in the 2005 test year forecast, showing all calculations.

HECO Response:

a. Yes, HEI retains a significant amount of costs that are not subject to direct assignment or otherwise allocated to HECO, HELCO, MECO or to its other subsidiaries. For the period 2001 – 2004, HEI retained between 75.2% - 83.8% of its total operating expenses. HEI retains 100% of its interest and income tax expense. See page 4 for the workpaper support of the percentage of costs that were retained by HEI for the years 2001, 2002, 2003 and 2004.

b. 1) The costs typically retained by HEI are the costs that HECO may not incur on a stand-alone basis (and where there may appear to be a duplication of activities at both HEI and HECO). For example, HEI currently does not bill for costs related to the following activities:

- All HEI board of directors activities.
- HEI Internal Audit activities unless an audit is performed for an activity which HECO would have to perform as the publicly-traded entity (i.e. shareholder services audit, annual report & SEC filings audit, investor relations audit etc).

Although HEI currently does not bill for the activities listed above, an argument can be made that these are necessary and beneficial holding company activities that should be allocated to the subsidiaries.

In addition, there are several items that benefit the subsidiaries that are currently being absorbed by HEI as follows:

- HEI Charitable Foundation (HEICF) contributions and the related administrative costs. Charges for events sponsored by HEICF on behalf of subsidiaries are not currently charged to those subsidiaries.
- The cost to raise equity from other than the Dividend Reinvestment Plan (DRIP) is currently being capitalized on HEI's books and not charged to the subsidiaries receiving the equity.
- Use of the HEI training rooms (other than a nominal amount for supplies) is currently not charged to the subsidiaries using the training rooms.

b. 2) See page 4 for the workpaper support of the actual percentage of costs retained by HEI in calendar years 2001, 2002, 2003 and 2004.

b. 3) See page 4 for the workpaper support of the estimated 78.1% of total operating expenses to be retained by HEI implicit in the 2005 test year forecast. HEI also retains 100% of its interest and income tax expense. Note that of the estimated 21.9% of costs that are billed

[redacted]

to HEI's subsidiaries, HECO's 2005 test year amount of $1.7 million reflected on HECO-1310 represents approximately 39% of the total estimated costs that are billed.

HAWAIIAN ELECTRIC INDUSTRIES, INC.
EXCERPT FROM TRIAL BALANCE

MAIN ACCOUNT	DESCRIPTION		2005 Forecast	2004	2003	2002	2001
	ADMINISTRATIVE & GENERAL EXPENSE						
55000	Labor Expense		7,417,778	7,863,101.03	7,037,495.14	6,867,341.97	5,610,494.16
(55100 TO 55110)	Nonlabor Expense		686,946	534,303.92	441,559.48	508,566.28	478,139.60
(55200 TO 55204)	Intercompany Billing to Subs	(a)	(4,405,311)	(5,145,793.45)	(5,495,706.13)	(3,283,552.71)	(3,422,096.01)
(55500 TO 55509)	Advertising/Public Relations/Communications		197,268	173,477.40	193,430.36	162,192.10	122,983.03
56001	Legal Services		202,200	234,763.44	277,754.06	227,389.79	197,328.33
56002	Services From Associated Companies		218,458	191,439.64	212,009.15	213,608.52	107,550.27
(56032 TO 56070)	Other Outside Services		927,385	1,137,504.99	654,424.43	302,002.55	465,928.47
57000	Insurance Expense		1,214,270	991,442.38	282,987.65	193,354.91	276,558.91
57500	Employee Benefits		1,070,056	947,048.26	1,250,078.45	771,122.54	594,890.56
57600	Other Employee Benefits		1,710,777	1,864,638.61	2,017,945.96	1,380,208.17	2,339,571.53
58500	Rent-Building		888,500	889,964.21	839,571.26	973,781.06	785,302.92
(59002 TO 59099)	Misc A&G Expense		3,474,364	3,778,099.24	7,085,893.73	6,919,096.39	2,716,321.42
(59105 TO 59150)	Investor Relations		743,644	674,131.04	705,444.60	724,072.89	630,757.91
(59201 TO 59203)	Common Stock Expense		424,817	615,195.00	186,496.43	193,024.23	181,960.08
(59300 TO 59318)	HEI Info Tech Expense		312,087	195,596.96	237,226.74	(519,258.06)	(604,723.27)
	TOTAL ADMINISTRATIVE & GENERAL EXPENSE		15,083,239	14,944,912.67	15,926,611.31	15,632,950.63	10,480,967.91
	DEPRECIATION & AMORTIZATION						
(60000 TO 60011)	Depreciation Expense		275,876	324,189.73	398,633.55	662,962.66	694,566.12
61000	Amortization		33,965	3,773.73	4,820.15	228,498.01	352,703.00
	TOTAL DEPRECIATION & AMORTIZATION		309,841	327,963.46	403,453.70	891,460.67	1,047,269.12
	TAXES, OTHER THAN INCOME TAXES						
80000	Payroll Tax Expense		315,426	$347,886.00	$318,735.73	$453,731.34	$410,268.39
81000	State General Excise Tax & Use Tax		8,217	(7,311.68)	25,618.20	5,711.83	61,845.10
85000	Other Taxes		0	19.92	0.00	30.20	0.00
	TOTAL TAXES, OTHER THAN INCOME TAXES		323,643	340,594.24	344,353.93	459,473.37	472,113.49
	TOTAL EXPENSES (agrees to Schedule 1-Condensed Financial Information of Registrant, Condensed Statements of Income from the 12/31/04 and 12/31/03 10-K)		15,716,723	15,613,470.37	16,674,418.94	16,983,884.67	12,000,350.52
(55200 TO 55204)	Add back: Intercompany Billings to Subs	(a)	4,405,311	5,145,793.45	5,495,706.13	3,283,552.71	3,422,096.01
	TOTAL EXPENSES excluding Interco Billings	(b)	20,122,034	20,759,263.82	22,170,125.07	20,267,437.38	15,422,446.53
% billed to subs for management service fees (including interco. borrowing)		**(c) = (a) / (b)**	21.9%	24.8%	24.8%	16.2%	22.2%
% of costs retained by HEI (excluding interest and income taxes)		**1- (c)**	78.1%	75.2%	75.2%	83.8%	77.8%

Hawaiian Electric Industries, Inc.
SCHEDULE I — CONDENSED FINANCIAL INFORMATION OF REGISTRANT (continued)
HAWAIIAN ELECTRIC INDUSTRIES, INC. (PARENT COMPANY)
CONDENSED STATEMENTS OF INCOME

(in thousands)	Years ended December 31, 2003	2002	2001
Revenues [1, 2]	$ 10,765	$ (3,881)	$ (5,338)
Equity in income from continuing operations of subsidiaries	142,354	152,725	143,730
	153,119	148,844	138,392
Expenses:			
Operating, administrative and general	15,927	15,633	10,481
Depreciation of property, plant and equipment	403	891	1,047
Taxes, other than income taxes	345	460	472
	16,675	16,984	12,000
Operating income	136,444	131,860	126,392
Interest expense	33,993	37,576	43,539
Income from continuing operations before income tax benefits	102,451	94,284	82,853
Income tax benefits	15,597	23,933	24,893
Income from continuing operations	118,048	118,217	107,746
Loss from discontinued subsidiary operations	(3,870)	–	(24,041)
Net income	$114,178	$ 118,217	$ 83,705

1 2003 revenues include $9.3 million from the settlement of lawsuits in the fourth quarter of 2003.
2 2002 and 2001 revenues include $4.5 million and $8.7 million, respectively, of writedowns of the income notes that HEI purchased in connection with the termination of ASB's investment in trust certificates in 2001. There were no writedowns of the income notes in 2003. See "Disposition of certain debt securities" in "Business–Bank–American Savings Bank, F.S.B."

The Company's financial reporting policy for income tax allocations is based upon a separate entity concept whereby each subsidiary provides income tax expense (or benefits) as if each were a separate taxable entity. The difference between the aggregate separate tax return income tax provisions and the consolidated financial reporting

Hawaiian Electric Industries, Inc.

SCHEDULE I — CONDENSED FINANCIAL INFORMATION OF REGISTRANT (continued)
HAWAIIAN ELECTRIC INDUSTRIES, INC. (PARENT COMPANY)
CONDENSED STATEMENTS OF INCOME

(in thousands)	Years ended December 31, 2004	2003	2002
Revenues [1, 2, 3]	$ 8,049	$ 10,765	$ (3,881)
Equity in income from continuing operations of subsidiaries	128,465	142,354	152,725
	136,514	153,119	148,844
Expenses:			
Operating, administrative and general	14,945	15,927	15,633
Depreciation of property, plant and equipment	328	403	891
Taxes, other than income taxes	340	345	460
	15,613	16,675	16,984
Operating income	120,901	136,444	131,860
Interest expense	28,029	33,993	37,576
Income from continuing operations before income tax benefits	92,872	102,451	94,284
Income tax benefits	14,867	15,597	23,933
Income from continuing operations	107,739	118,048	118,217
Income (loss) from discontinued subsidiary operations	1,913	(3,870)	–
Net income	$109,652	$114,178	$ 118,217

1 2004 revenues include $5.6 million from the gain on sale of income notes in 2004.
2 2003 revenues include $9.3 million from the settlement of lawsuits in the fourth quarter of 2003.
3 2002 revenues include $4.5 million of writedowns of the income notes that HEI purchased in connection with the termination of ASB's investment in trust certificates in 2001. There were no writedowns of the income notes in 2003. See "Disposition of certain debt securities" in "Business–Bank–American Savings Bank, F.S.B."

The Company's financial reporting policy for income tax allocations is based upon a separate entity concept whereby each subsidiary provides income tax expense (or benefits) as if each were a separate taxable entity. The difference between the aggregate separate tax return income tax provisions and the consolidated financial reporting income tax provision is charged or credited to HEI's separate tax provision.

CA-IR-255

Ref: HECO-1312 (HECO Billings to HEI).

The referenced workpaper support was provided in a "Word" document file. Please provide the following:

a. Please provide HECO-1312 in an Excel spreadsheet file format with intact formulae, cell references and file links.

b. Please provide the actual 2004 HECO billings to HEI.

c. Referring to subpart (a) above, please provide additional HECO workpapers supporting the development and quantification of the 2005 test year charges to HEI.

d. Referring to subparts (a) and (c) above, please provide a copy of the underlying workpapers and calculations supporting the derivation of any standard hourly labor rates or allocation factors used therein.

HECO Response:

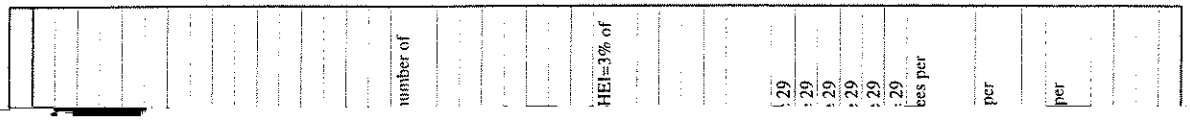
a. HECO-1312 is a report generated from the PILLAR budgeting tool; it does not exist in an Excel spreadsheet file format. However, in response to this request, the information on this report has been extracted into an electronic Excel spreadsheet file format and will be provided under separate transmittal. See columns A through F on the attached pages 3-5 for a printed version of the Excel spreadsheet file.

b. This information was provided in the response to CA-IR-6 part a.

c. Workpapers that were provided by the departments that have budgeted direct labor and non-labor amounts for HECO billings to HEI in the 2005 test period are referenced in column G on pages 3-5 of this response.

d. The standard labor rates are use to distribute all productive labor costs, including costs billable to HEI. See Mr. Ernest Shiraki's testimony at HECO T-13, pages 13-15 for additional information on standard labor rates. Also as discussed in HECO T-13, pages 7-8,

to the extent practical, labor and non-labor costs incurred by HECO in providing administrative services and other services are billed directly to HEI. Where direct charging is not practical or appropriate, some other reasonable basis for allocation is used to bill. Column H on pages 3-5 of this response indicates whether the 2005 test year amounts are based on direct charging or allocation, and provides additional information on the allocation basis, as needed.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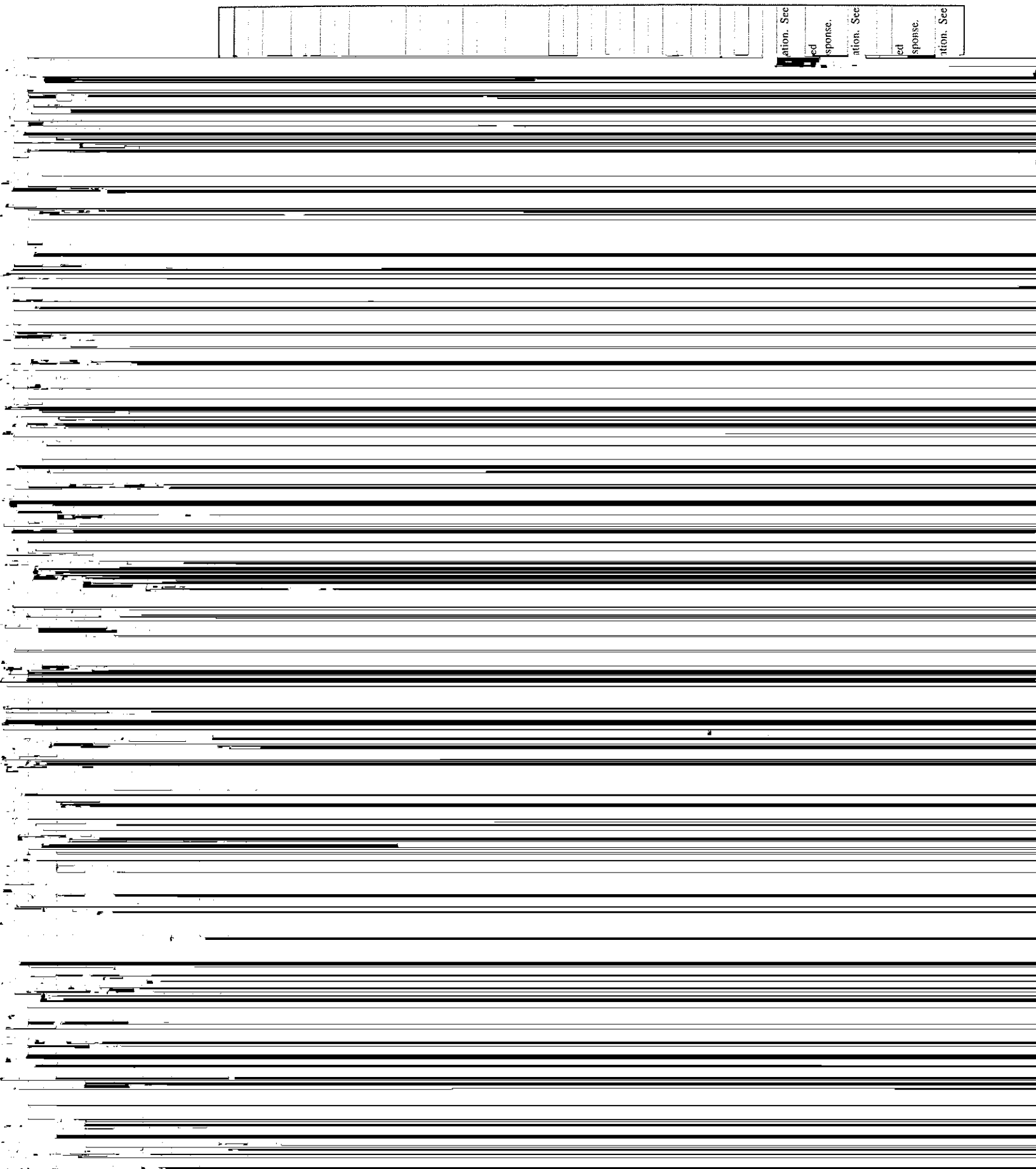


HECO-1312
Extracted from Pillar

	A	B	C	D	E	F	G	H
1	RA	Resp Area	Act	Activity	Exp Class	FY05	Support	Allocation factors used
82	PKI	Risk Management	951	Prov Risk Mgt Svcs-Prop	On-Costs	53.57		
83	PKI	Risk Management	953	Prov Risk Mgt Svcs-WC	Labor	19.24	See pages 9-35 of this response	Direct charge and allocation based on combined premium allocation. See pages 9-25 of this response.
84	PKI	Risk Management	953	Prov Risk Mgt Svcs-WC	Non-Labor	1,399.00	See pages 9-35 of this response	Allocation based on combined premium allocation. See pages 9-25 of this response.
85	PKI	Risk Management	953	Prov Risk Mgt Svcs-WC	On-Costs	9.86		
86	PKT	Treasury	749	Maint Rel-Ind Assoc	Non-Labor	1,431.00	CA-IR-2 HECO T-13, Attachment 28 page 34	Direct charge
87	PKT	Treasury	825	Manage Cash	Labor	32,387.52	CA-IR-1 HECO T-13, Attachment 31 pages 40 & 42	Direct charge
88	PKT	Treasury	825	Manage Cash	Non-Labor	40,153.00	CA-IR-2 HECO T-13, Attachment 28 pages 42 & 48	Direct charge
89	PKT	Treasury	825	Manage Cash	On-Costs	17,723.07		
90	PKT	Treasury	826	Manage Financing	Non-Labor	71,797.00	$35,397 - CA-IR-2 HECO T-13, Attachment 28 page 50 $36,400 - See page 36 of this response	Direct charge
91	PNC	Legal	756	Maint Rel-Invest	Labor	538.20	CA-IR-1 HECO T-13, Attachment 14 page 8	Direct charge
92	PNC	Legal	756	Maint Rel-Invest	On-Costs	215.67		
93	PNC	Legal	961	Cond Legal Due Diligence	Labor	593.00	CA-IR-1 HECO T-13, Attachment 14 page 11	Direct charge
94	PNC	Legal	961	Cond Legal Due Diligence	On-Costs	405.00		
95	PPA	Admin-Ind Rel	766	Maint Employee Recds	Labor	52.60	CA-IR-1 Project No. P0001010 page 3	Direct charge
96	PPA	Admin-Ind Rel	766	Maint Employee Recds	On-Costs	18.62		
97	PPI	Labor Rel & Wage Adm	766	Maint Employee Recds	Labor	254.50	CA-IR-1 Project No. P0001010 page 3	Direct charge
98	PPI	Labor Rel & Wage Adm	766	Maint Employee Recds	On-Costs	135.03		
99	PPW	Disablity Management	953	Prov Risk Mgt Svcs-WC	Labor	597.15	CA-IR-1 HECO T-13, Attachement 2A page 15	Direct charge
100	PPW	Disablity Management	953	Prov Risk Mgt Svcs-WC	Non-Labor	0.00		
101	PPW	Disablity Management	953	Prov Risk Mgt Svcs-WC	On-Costs	263.25		
102	PQC	Corp Communications	750	Maint Rel- Cust	Labor	11,287.30	See page 37 of this response	Direct charge
103	PQC	Corp Communications	750	Maint Rel- Cust	Non-Labor	1,000.00	See page 37 of this response	Direct charge
104	PQC	Corp Communications	750	Maint Rel- Cust	On-Costs	6,204.70		
105	PQC	Corp Communications	753	Maint Rel-Community	Labor	306.70	See page 37 of this response	Direct charge
106	PQC	Corp Communications	753	Maint Rel-Community	Non-Labor	300.00	See page 37 of this response	Direct charge
107	PQC	Corp Communications	753	Maint Rel-Community	On-Costs	167.83		
108	PQC	Corp Communications	756	Maint Rel-Invest	Labor	3,423.66	See page 37 of this response	Direct charge
109	PQC	Corp Communications	756	Maint Rel-Invest	On-Costs	1,509.31		
110	PVP	Purchasing	807	Co-wide Empl Commun	Non-Labor	13,540.00	CA-IR-2 HECO T-13, Attachment 20 page 3	Direct charge

Labor Input Sheet - NonProject
2005

Prepared by J HIRASHIMA
Date ###### 7/24/03

	Rates tab card	Units tab card												
Class	Rates Link To	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
		(enter employee count in "Units tab card")												
	Available Hours	18	18	18	18	18	18	18	18	18	18	18	18	21
		(enter hours in "Units tab card")												
	BUOC	0	144	144	0	144	144	144	144	144	144	288	288	1,72
	BUOC	156	156	156	156	156	156	156	156	156	156	156	156	1,87
	BUOC													
	BUOC													
	BUOC	45	45	45	45	45	45	45	45	45	45	45	45	54
	BUOC	450	450	450	450	450	450	450	450	450	450	450	450	5,40
	[redacted]													67
	BUOC	61	61	61	61	61	61	61	61	61	61	62	62	73
	BUOC	650	650	650	650	650	650	650	650	650	650	650	650	7,80
	BUOC	100	100	100	100	100	100	100	100	100	100	100	100	1,20
	BUOC	30	30	30	30	30	30	30	30	30	30	30	30	36
	BUOC	15	15	15	15	15	15	15	15	15	15	15	15	18
	[redacted]													63
	BUOC	54	54	54	54	54	54	54	54	54	54	54	54	65
	BUOC	1,343	1,055	1,487	1,344	1,343	1,344	1,199	1,488	1,343	1,200	1,198	1,199	15,54
	BUOC	10	10	10	10	10	10	10	10	10	10	10	10	12
	Pgm Demand	3,024	2,880	3,312	3,024	3,168	3,168	3,024	3,312	3,168	3,024	3,168	3,168	37,44
		3,024	2,880	3,312	3,024	3,168	3,168	3,024	3,312	3,168	3,024	3,168	3,168	37,44
	6, 12/30 (1/2)	0	8	8	0	8	8	8	8	8	8	16	16	9
		168	160	184	168	176	176	168	184	176	168	176	176	208

ly hours due to Project Demand hours (which are budgeted in the Project file)

Allocation based on number of employees at each company:

Intercompany Billings 2005-2006

At 12/31/2003	***#Ees***		
HECO	1,291	67%	66.96%
HELCO	290	15%	15.04%
MECO	298	15%	15.46%
PECS	5	0%	0.26%
HEI	44	3%	2.28%
	1,928	100%	100.00%

Labor Input Sheet - Nc ject/NonProgram
Year: 2005

USE THIS WORKSHEET TO INPUT LABOR!

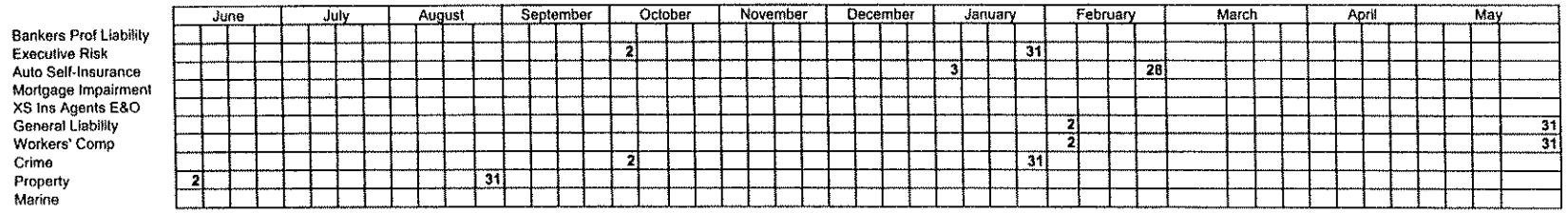
Resp Area (RA) FI (Coordinators)
Labor Class I - Implementor

Prepared by Sandy Lee
Date 2/18/2004

Dimension tab card					Units tab card												
Line Item	RA	Act	Loc	Labor Class	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Emp Pol/Prac/Proc 08/07/03 Update	FI	765	PHE	I - Implementor	36	36	36	36	36	36	36	36	36	36	48	61	469
Emp Pol/Prac/Proc 2/10/04 Update					13	13	13	13	13	13	13	13	13	13	13	13	156
Total - Emp Pol/Prac/Proc 2/10/04 Update					49	49	49	49	49	49	49	49	49	49	61	74	625
Maintain Employee Records 08/07/03 Update	FI	766	PHE	I - Implementor	13	13	13	13	13	13	13	22	13	13	23	13	175
Maintain Employee Records 2/10/04 Update					5	5	5	5	5	5	5	5	5	5	5	5	60
Total - Maintain Employee Records					18	18	18	18	18	18	18	27	18	18	28	18	235
Recruiting Pol/Prac 08/07/03 Update	FI	767	PHE	I - Implementor	209	209	218	205	239	209	205	228	209	209	229	210	2,579
Recruiting Pol/Prac 02/10/04 Update					61	57	65	61	28	60	48	156	58	58	38	40	730
Recruiting Pol/Prac 02/17/04 Update					14	-28	-54	11	21	66	35	-5	33	3	9	-6	99
Total - Recruiting Pol/Prac					284	238	229	277	288	335	288	379	300	270	276	244	3,408
Recruiting Pol/Prac PECS 08/07/03 Update	FI	767	PECS	I - Implementor	1	1	1	1	1	1	1	1	1	1	0	0	10
Recruiting Pol/Prac HEI 08/07/03 Update	FI	767	HEI	I - Implementor	1	1	1	1	1	0	0	0	0	0	0	0	5
Process Payroll 08/07/03 Update	FI	777	PHE	I - Implementor	4	4	4	4	4	4	4	4	4	0	14	4	54
Process Payroll 02/10/04 Update					1	1	1	1	1	1	1	1	1	1	1	1	12
Process Payroll 02/18/04 Update														4	-10		
Total - Process Payroll					5	5	5	5	5	5	5	5	5	5	5	5	60
Pln & Determine Trng Nds 08/07/03 Update	FI	785	PHE	I - Implementor	9	3	9	9	9	9	1	9	17	30	0	8	113
Pln & Determine Trng Nds 02/18/04 Update					11	12		-9	-9		-1	-9	-17	-30		12	-40
Total - Pln & Determine Trng Nds					20	15	9	0	0	9	0	0	0	0	0	20	73
Attend Training 08/07/03 Update	FI	789	PHE	I - Implementor	7	7	39	7	7	7	7	7	7	7	7	7	116
Attend Training 02/10/04 Update					3	3	3	3	3	3	3	3	3	3	3	3	36
Total - Attend Training					10	10	42	10	10	10	10	10	10	10	10	10	152

CA-IR-255
DOCKET NO. 04-0113
PAGE 8 OF 37

	Line of coverage	HECO	HELCO	MECO	PECS	HEI	RHI	Subtotal	ASB	TOTAL
x	D&O	181,732.31	55,191.72	50,433.04	0.00	1,027,054.29	6.64	1,314,418.00	707,764.00	2,022,182.00
x	Fiduciary	66,790.28	13,991.29	14,209.45	141.52	2,122.56	0.00	97,255.10	30,718.34	127,973.44
x	SR	5,787.45	1,311.82	1,352.67	22.70	199.71	0.00	8,674.35	6,441.10	15,115.45
	Auto Bond	3,623.97	678.81	653.29	0.00	0.00	0.00	4,956.07	40.85	4,996.92
	GL	825,930.76	210,208.81	234,519.17	480.23	4,724.13	0.00	1,275,863.10	136,217.07	1,412,080.17
	XWC	164,026.70	45,374.46	46,794.09	0.00	789.50	0.00	256,984.75	11,056.14	268,040.89
	Prop w/o ics	1,351,159.39	308,654.32	429,099.91	0.00	8,469.20	0.00	2,097,382.82	91,481.61	2,188,864.43
	BM w/o ics	508,597.44	105,417.25	151,810.60	0.00	1,994.05	0.00	767,819.34	2,023.08	769,842.42
	Total	1,859,756.83	414,071.57	580,910.51	0.00	10,463.25	0.00	2,865,202.16	93,504.69	2,958,706.85
x	Crime	77,413.42	17,547.05	18,093.49	303.58	2,671.52	0.00	116,029.06	270,876.14	386,905.20
	P&I	3,176.25	0.00	0.00	0.00	0.00	0.00	3,176.25	0.00	3,176.25
	Hull & Machinery	457.20	0.00	0.00	0.00	0.00	0.00	457.20	0.00	457.20
	Inland/Ocean	6,000.00	26,500.00	17,500.00	0.00	0.00	0.00	50,000.00	0.00	50,000.00
	Bankers Prof	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65,776.00	65,776.00
	Mrtg Imprmnt/E&O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33,497.60	33,497.60
	Ins Agents E&O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26,398.00	26,398.00
	XS Ins Agents E&O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00
	Frc'd Placed	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16,748.88	16,748.88
	Lenders Protection	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00
	Mtg Brokers Bond	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00
	Property - ICS	1,487.50	916.43	1,147.31	0.00	0.00	0.00	3,551.24	-	3,551.24
	BIA Ins Agt E&O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	124,614.00	124,614.00
	BIA XS Ins Agt E&O	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52,500.00	52,500.00
	Property and B/M	1,859,756.83	414,071.57	580,910.51	0.00	10,463.25	0.00	2,865,202.16	93,504.69	2,958,706.85
		1,859,756.83	414,071.57	580,910.51	0.00	10,463.25	0.00	2,865,202.16	93,504.69	2,958,706.85
		62.86%	14.00%	19.63%	0.00%	0.35%	0.00%	96.84%	3.16%	100.00%
	D&O	181,732.31	55,191.72	50,433.04	0.00	1,027,054.29	6.64	1,314,418.00	707,764.00	2,022,182.00
	Crime	77,413.42	17,547.05	18,093.49	303.58	2,671.52	0.00	116,029.06	270,876.14	386,905.20
3		259,145.73	72,738.77	68,526.53	303.58	1,029,725.81	6.64	1,430,447.06	978,640.14	2,409,087.20
		10.76%	3.02%	2.84%	0.01%	42.74%	0.00%	59.38%	40.62%	100.00%
	D&O	181,732.31	55,191.72	50,433.04	0.00	1,027,054.29	6.64	1,314,418.00	707,764.00	2,022,182.00
	Auto Bond	3,623.97	678.81	653.29	0.00	0.00	0.00	4,956.07	40.85	4,996.92
	Crime	77,413.42	17,547.05	18,093.49	303.58	2,671.52	0.00	116,029.06	270,876.14	386,905.20
4		262,769.70	73,417.58	69,179.82	303.58	1,029,725.81	6.64	1,435,403.13	978,680.99	2,414,084.12
		10.88%	3.04%	2.87%	0.01%	42.65%	0.00%	59.46%	40.54%	100.00%
	Auto Bond	3,623.97	678.81	653.29	0.00	0.00	0.00	4,956.07	40.85	4,996.92
	GL	825,930.76	210,208.81	234,519.17	480.23	4,724.13	0.00	1,275,863.10	136,217.07	1,412,080.17
	XWC	164,026.70	45,374.46	46,794.09	0.00	789.50	0.00	256,984.75	11,056.14	268,040.89
5		993,581.43	256,262.08	281,966.55	480.23	5,513.63	0.00	1,537,803.92	147,314.06	1,685,117.98
		58.96%	15.21%	16.73%	0.03%	0.33%	0.00%	91.26%	8.74%	100.00%



	Property	Liability	Liability	Auto	Liability Worker's Comp	
HECO	62.86%	100%	10.76%	10.88%	58.96%	58.92%	58.92%
HELCO	14.00%		3.02%	3.04%	15.21%	15.21%	15.21%
MECO	19.63%		2.84%	2.87%	16.73%	16.74%	16.74%
PECS	0.00%		0.01%	0.01%	0.03%	0.03%	0.03%
HEI	0.35%		42.74%	42.65%	0.33%	0.33%	0.33%
RHI	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%
ASB	3.16%		40.62%	40.54%	8.74%	8.77%	8.77%
	100.00%	100%	100.0%	100.0%	100.0%	100.0%	100.0%
TIME SHEET #:	1	2	3	4	5	6	7

	HECO	HECO	HELCO	HELCO	MECO	MECO	PECS	PECS	HEI	HEI	HEIIC	HEIIC	ASB	ASB
Property/BM	$ 1,859,756.83	100.00%	$ 414,071.57	100.00%	$ 580,910.51	100.00%	$ -	100.00%	$ 10,463.25	100.00%	$ -	100.00%	$ 93,504.69	100.00%
(1)														
Property	1,859,756.83	100.00%	414,071.57	100.00%	580,910.51	100.00%	0.00	0.00%	10,463.25	100.00%	0.00	0.00%	93,504.69	#REF!
(X)	$ 1,859,756.83		$ 414,071.57		$ 580,910.51		$ -		$ 10,463.25		$ -		$ 93,504.69	
D&O	181,732.31		55,191.72		50,433.04		0.00		1,027,054.29		6.64		707,764.00	
Crime	$ 77,413.42		$ 17,547.05		$ 18,093.49		$ 303.58		$ 2,671.52		$ -		$ 270,876.14	
(3)	$ 259,145.73		$ 72,738.77		$ 68,526.53		$ 303.58		$1,029,725.81		$ 6.64		$ 978,640.14	
D&O	181,732.31		55,191.72		50,433.04		0.00		1,027,054.29		6.64		707,764.00	
Crime	$ 77,413.42		$ 17,547.05		$ 18,093.49		$ 303.58		$ 2,671.52		$ -		$ 270,876.14	
(X)	$ 64,266.85		$ 16,627.27		$ 14,448.49		$ 84.19		$ 253,281.19		$ 1,275.30		$ 281,531.47	
Auto	$ 3,623.97		$ 678.81		$ 653.29		$ -		$ -		$ -		$ 40.85	
D&O	181,732.31		55,191.72		50,433.04		0.00		1,027,054.29		6.64		707,764.00	
Crime	$ 77,413.42		$ 17,547.05		$ 18,093.49		$ 303.58		$ 2,671.52		$ -		$ 270,876.14	
(x)	$ 262,769.70		$ 73,417.58		$ 69,179.82		$ 303.58		$1,029,725.81		$ 6.64		$ 978,680.99	
Auto	$ 3,623.97	83.49%	$ 678.81	82.29%	$ 653.29	83.40%	$ -	100.00%	$ -	85.68%	$ -	0.00%	$ 40.85	92.49%
GL	$ 825,930.76		$ 210,208.81		$ 234,519.17		$ 480.23		$ 4,724.13		$ -		$ 136,217.07	
W/C	$ 164,026.70	16.51%	$ 45,374.46	17.71%	$ 46,794.09	16.60%	$ -	0.00%	$ 789.50	14.32%	$ -	0.00%	$ 11,056.14	7.51%
(5)	$ 993,581.43		$ 256,262.08		$ 281,966.55		$ 480.23		$ 5,513.63		$ -		$ 147,314.06	
GL	$ 825,930.76	83.43%	$ 210,208.81	82.25%	$ 234,519.17	83.37%	$ 480.23	100.00%	$ 4,724.13	85.68%	$ -	0.00%	$ 136,217.07	92.49%
W/C	$ 164,026.70	16.57%	$ 45,374.46	17.75%	$ 46,794.09	16.63%	$ -	0.00%	$ 789.50	14.32%	$ -	0.00%	$ 11,056.14	7.51%
(7)	$ 989,957.46		$ 255,583.27		$ 281,313.26		$ 480.23		$ 5,513.63		$ -		$ 147,273.21	
GL	$ 825,930.76	83.43%	$ 210,208.81	82.25%	$ 234,519.17	83.37%	$ 480.23	100.00%	$ 4,724.13	85.68%	$ -	0.00%	$ 136,217.07	92.49%
W/C	$ 164,026.70	16.57%	$ 45,374.46	17.75%	$ 46,794.09	16.63%	$ -	0.00%	$ 789.50	14.32%	$ -	0.00%	$ 11,056.14	7.51%
(6)	$ 989,957.46		$ 255,583.27		$ 281,313.26		$ 480.23		$ 5,513.63		$ -		$ 147,273.21	
D&O	181,732.31		55,191.72		50,433.04		0.00		1,027,054.29		6.64		707,764.00	
Auto Bond	3,623.97		678.81		653.29		0.00		0.00		0.00		40.85	
Crime	$ 77,413.42		$ 17,547.05		$ 18,093.49		$ 303.58		$ 2,671.52		$ -		$ 270,876.14	
(4)	$ 262,769.70		$ 73,417.58		$ 69,179.82		$ 303.58		$1,029,725.81		$ 6.64		$ 978,680.99	

Note: Changed formula to remove "#Div/0!"

2005	ST		098	098	098	789	749									
(WILLIE)	Hours	Xtra	Hol	Vac	Sick	Tng	Tng	Other	Available	HECO	HELCO	MECO	PECS	HEI	RHI	ASB	
January	168		0					80	88	89.57	2.68	2.52	0.01	37.54	0	35.68	168.00
February	160		8		8			80	64	117.74	9.73	10.71	0.02	0.21	0	5.59	144.00
March	184		8					80	96	136.56	14.6	16.07	0.03	0.32	0	8.42	176.00
April	168		0			40		80	48	108.28	7.3	8.04	0.01	0.16	0	4.21	128.00
May	176		8		8			80	80	127.12	12.17	13.4	0.03	0.27	0	7.01	160.00
June	176		8	80				80	8	85.03	1.12	1.57	0	0.03	0	0.25	88.00
July	168		8					80	80	130.28	11.2	15.71	0	0.28	0	2.53	160.00
August	184		8					80	96	140.34	13.44	18.85	0	0.34	0	3.03	176.00
September	176		8	80				80	8	88	0	0	0	0	0	0	88.00
October	168		8	40		32		80	8	80.86	0.24	0.23	0	3.42	0	3.25	88.00
November	176		16					80	80	88.6	2.42	2.28	0.01	34.19	0	32.5	160.00
December	176		16					80	80	88.6	2.42	2.28	0.01	34.19	0	32.5	160.00
	2080	0	96	200	16	72		**960**	**736**	1280.98	77.32	91.66	0.12	110.95	0	134.97	**1696.00**
									1696								

2005	ST		098	098	098	789	749									
(AMY)	Hours	Xtra	Hol	Vac	Sick	Tng	Tng	Other	Available	HECO	HELCO	MECO	PECS	HEI	RHI	ASB	
January	168		0		8			80	80	88.72	2.43	2.29	0.01	34.12	0	32.43	160.00
February	160		8					80	72	122.45	10.95	12.05	0.02	0.24	0	6.29	152.00
March	184		8					80	96	136.56	14.6	16.07	0.03	0.32	0	8.42	176.00
April	168		0					80	88	131.85	13.39	14.73	0.03	0.29	0	7.71	168.00
May	176		8		8			80	80	127.12	12.17	13.4	0.03	0.27	0	7.01	160.00
June	176		8					80	88	135.31	12.32	17.28	0	0.31	0	2.78	168.00
July	168		8					80	80	130.28	11.2	15.71	0	0.28	0	2.53	160.00
August	184		8					80	96	140.34	13.44	18.85	0	0.34	0	3.03	176.00
September	176		8					80	88	168	0	0	0	0	0	0	168.00
October	168		8	40				80	40	84.29	1.21	1.14	0.01	17.1	0	16.25	120.00
November	176		16	40				80	40	84.29	1.21	1.14	0.01	17.1	0	16.25	120.0
December	176		16	0	8			80	72	116.29	1.21	1.14	0.01	17.1	0	16.25	152.00
	2080	0	96	80	24			**960**	**920**	1465.5	94.13	113.8	0.15	87.47	0	118.95	**1880.00**
									1880								

2005 (RUSS)	ST Hours	Xtra	098 Hol	098 Vac	098 Sick	789 Tng	749 Tng	785 Emp	Available	HECO	HELCO	MECO	PECS	HEI	RHI	ASB	
January	168	20	0					9	179	28.49	5.44	5.13	0.02	76.35	0	72.57	188.00
February	160	20	8	24	8			7	133	85.41	20.23	22.25	0.04	0.44	0	11.63	140.00
March	184	20	8	40				8	148	95.21	22.51	24.78	0.04	0.49	0	12.97	156.00
April	168	20	0			40		7	141	90.08	21.45	23.61	0.04	0.46	0	12.36	148.00
May	176	20	8		8			9	171	109.76	26.01	28.63	0.05	0.56	0	14.99	180.00
June	176	20	8					9	179	121.52	25.05	35.14	0	0.63	0	5.66	188.00
July	168	20	8	40				7	133	90.61	18.61	26.11	0	0.47	0	4.2	140.00
August	184	20	8					10	186	126.91	26.03	36.52	0	0.66	0	5.88	196.00
September	176	20	8					9	179	188	0	0	0	0	0	0	188.00
October	168	20	8			32		7	141	22.16	4.26	4.01	0.02	60.27	0	57.28	148.00
November	176	20	16	16				8	156	24.78	4.71	4.44	0.02	66.68	0	63.37	164.00
December	176	20	16					9	171	40.78	4.71	4.44	0.02	66.68	0	63.37	180.00
	2080	240	96	120	16	72		99	**1917** 2016	1023.71	179.01	215.06	0.25	273.69	0	324.28	**2016.00**

		HECO	HELCO	MECO	PECS	HEI	RHI	ASB	
WILLLIE									
January	Liability	89.57	2.68	2.52	0.01	37.54	0	35.68	168
	Property								
	Marine								
	W/C								
									168
February	Liability	98.3	8.01	8.93	0.02	0.18	0	5.17	120.61
	Property							0.00	0
	Marine								
	W/C	19.44	1.72	1.78	0	0.03	0	0.42	23.39
									144
March	Liability	113.93	12.01	13.4	0.03	0.27	0	7.79	147.43
	Property							0.00	0
	Marine								
	W/C	22.63	2.59	2.67	0	0.05	0	0.63	28.57
									176
April	Liability	90.34	6	6.7	0.01	0.14	0	3.89	107.08
	Property							0.00	0
	Marine								
	W/C	17.94	1.3	1.34	0	0.02	0	0.32	20.92
									128
May	Liability	106.06	10.01	11.17	0.03	0.23	0	6.48	133.98
	Property							0.00	0
	Marine								
	W/C	21.06	2.16	2.23	0	0.04	0	0.53	26.02
									160
June	Liability								
	Property	85.03	1.12	1.57	0	0.03	0	0.25	88
	Marine								
	W/C								
									88
July	Liability								
	Property	130.28	11.2	15.71	0	0.28	0	2.53	160
	Marine								
	W/C								
									160
August	Liability							0.26	0.26
	Property	140.34	13.44	18.85	0	0.34	0	2.77	175.74
	Marine								
	W/C								
									176
September	Liability	88	0	0	0	0	0	0	88
	Property								
	Marine								
	W/C								
									88
October	Liability	80.86	0.24	0.23	0	3.42	0	3.25	88
	Property								
	Marine								
	W/C								
									88
November	Liability	88.6	2.42	2.28	0.01	34.19	0	32.5	160
	Property								
	Marine								
	W/C								
									160
December	Liability	88.6	2.42	2.28	0.01	34.19	0	32.5	160
	Property								
	Marine								
	W/C								
									160
									1696

		HECO	HELCO	MECO	PECS	HEI	RHI	ASB	
AMY									
January	Liability	88.72	2.43	2.29	0.01	34.12	0	32.43	160
	Property								
	Marine								
	W/C								
									160
February	Liability	102.24	9.01	10.05	0.02	0.21	0	5.82	127.35
	Property							0.00	0
	Marine								
	W/C	20.21	1.94	2	0	0.03	0	0.47	24.65
									152
March	Liability	113.93	12.01	13.4	0.03	0.27	0	7.79	147.43
	Property							0.00	0
	Marine								
	W/C	22.63	2.59	2.67	0	0.05	0	0.63	28.57
									176
April	Liability	110	11.01	12.28	0.03	0.25	0	7.13	140.7
	Property							0.00	0
	Marine								
	W/C	21.85	2.38	2.45	0	0.04	0	0.58	27.3
									168
May	Liability	106.06	10.01	11.17	0.03	0.23	0	6.48	133.98
	Property							0.00	0
	Marine								
	W/C	21.06	2.16	2.23	0	0.04	0	0.53	26.02
									160
June	Liability								
	Property	135.31	12.32	17.28	0	0.31	0	2.78	168
	Marine								
	W/C								
									168
July	Liability								
	Property	130.28	11.2	15.71	0	0.28	0	2.53	160
	Marine								
	W/C								
									160
August	Liability							0	0
	Property	140.34	13.44	18.85	0	0.34	0	3.03	176
	Marine								
	W/C								
									176
September	Liability	168	0	0	0	0	0	0	168
	Property								
	Marine								
	W/C								
									168
October	Liability	84.29	1.21	1.14	0.01	17.1	0	16.25	120
	Property								
	Marine								
	W/C								
									120
November	Liability	84.29	1.21	1.14	0.01	17.1	0	16.25	120
	Property								
	Marine								
	W/C								
									120
December	Liability	116.29	1.21	1.14	0.01	17.1	0	16.25	152
	Property								
	Marine								
	W/C								
									152
									1880

[redacted]

Russ January	Liability	28.49	5.44	5.13	0.02	76.35	0	72.57	188
	Property								
	Marine								
	W/C								
									188
February	Liability	71.31	16.65	18.56	0.04	0.38	0	10.76	117.7
	Property							0.00	0
	Marine								
	W/C	14.1	3.58	3.69	0	0.06	0	0.87	22.3
									140
March	Liability	79.43	18.51	20.66	0.04	0.42	0	12	131.06
	Property							0.00	0
	Marine								
	W/C	15.78	4	4.12	0	0.07	0	0.97	24.94
									156
April	Liability	75.15	17.64	19.68	0.04	0.39	0	11.43	124.33
	Property							0.00	0
	Marine								
	W/C	14.93	3.81	3.93	0	0.07	0	0.93	23.67
									148
May	Liability	91.57	21.39	23.87	0.05	0.48	0	13.86	151.22
	Property							0.00	0
	Marine								
	W/C	18.19	4.62	4.76	0	0.08	0	1.13	28.78
									180
June	Liability	121.52	25.05	35.14	0	0.63	0	5.66	188
	Property								
	Marine								
	W/C								
									188
July	Liability	90.61	18.61	26.11	0	0.47	0	4.2	140
	Property								
	Marine								
	W/C								
									140
August	Liability	126.91	26.03	36.52	0	0.66	0	0.51	0.51
	Property							5.37	195.49
	Marine								
	W/C								
									196
September	Liability	188	0	0	0	0	0	0	188
	Property								
	Marine								
	W/C								
									188
October	Liability	22.16	4.26	4.01	0.02	60.27	0	57.28	148
	Property								
	Marine								0
	W/C								
									148
November	Liability	24.78	4.71	4.44	0.02	66.68	0	63.37	164
	Property								
	Marine								
	W/C								
									164
December	Liability	40.78	4.71	4.44	0.02	66.68	0	63.37	180
	Property								
	Marine								
	W/C								
									180
									2016

2005 (MARK)	ST Hours	Xtra	098 Hol	098 Vac	098 Sick	789 Tng	749 Tng	Other	Available	heco liab 0.6	heco prop 0.1	meco liab 0.05	meco prop 0.05	helco liab 0.1	helco prop 0.05	asb liab 0.02	hei liab 0.02	pecs liab 0.01	
Jan	168		0						168	100.80	16.80	8.40	8.40	16.80	8.40	3.36	3.36	1.68	
Feb	160	12	8	40					124	74.40	12.40	6.20	6.20	12.40	6.20	2.48	2.48	1.24	
Mar	184	12	8			8			180	108.00	18.00	9.00	9.00	18.00	9.00	3.60	3.60	1.80	
Apr	168		0		8				160	96.00	16.00	8.00	8.00	16.00	8.00	3.20	3.20	1.60	
May	176		8						168	100.80	16.80	8.40	8.40	16.80	8.40	3.36	3.36	1.68	
Jun	176		8	40					128	76.80	12.80	6.40	6.40	12.80	6.40	2.56	2.56	1.28	
Jul	168		8						160	96.00	16.00	8.00	8.00	16.00	8.00	3.20	3.20	1.60	
Aug	184		8			8			168	100.80	16.80	8.40	8.40	16.80	8.40	3.36	3.36	1.68	
Sep	176		8	40			40		88	52.80	8.80	4.40	4.40	8.80	4.40	1.76	1.76	0.88	
Oct	168		8		8				152	91.20	15.20	7.60	7.60	15.20	7.60	3.04	3.04	1.52	
Nov	176		16						160	96.00	16.00	8.00	8.00	16.00	8.00	3.20	3.20	1.60	
Dec	176	8	16	40					128	76.80	12.80	6.40	6.40	12.80	6.40	2.56	2.56	1.28	
Total	2080	32	96	160	16	16	40	0	1784	1070.40	178.40	89.20	89.20	178.40	89.20	35.68	35.68	17.84	1784.00

	hei liab	pecs liab	
9	0.01	0	
2	1.68	0.00	
6	1.64	0.00	
6	1.84	0.00	
0	1.60	0.00	
0	1.20	0.00	
2	1.28	0.00	
0	1.20	0.00	
4	1.76	0.00	
0	1.60	0.00	
8	1.52	0.00	
0	1.60	0.00	
2	1.68	0.00	
0	18.60	0.00	1860.00

s	Xtra	098 Hol	098 Vac	098 Sick	789 Tng	749 Tng	Other	Available	heco liab 0.8	heco prop 0.1	meco liab 0.05	meco prop 0	helco liab 0.05	helco prop 0	asb liab 0	hei liab 0	pecs liab 0	
68		0						168	134.40	16.80	8.40	0.00	8.40	0.00	0.00	0.00	0.00	
60	12	8						164	131.20	16.40	8.20	0.00	8.20	0.00	0.00	0.00	0.00	
84	8	8						184	147.20	18.40	9.20	0.00	9.20	0.00	0.00	0.00	0.00	
68		0		8				160	128.00	16.00	8.00	0.00	8.00	0.00	0.00	0.00	0.00	
76		8						168	134.40	16.80	8.40	0.00	8.40	0.00	0.00	0.00	0.00	
76		8						168	134.40	16.80	8.40	0.00	8.40	0.00	0.00	0.00	0.00	
68		8				8		152	121.60	15.20	7.60	0.00	7.60	0.00	0.00	0.00	0.00	
84		8	80					96	76.80	9.60	4.80	0.00	4.80	0.00	0.00	0.00	0.00	
76		8						168	134.40	16.80	8.40	0.00	8.40	0.00	0.00	0.00	0.00	
68		8	40	8				112	89.60	11.20	5.60	0.00	5.60	0.00	0.00	0.00	0.00	
76		16				8		152	121.60	15.20	7.60	0.00	7.60	0.00	0.00	0.00	0.00	
76	8	16						168	134.40	16.80	8.40	0.00	8.40	0.00	0.00	0.00	0.00	
80	28	96	120	16	16	0	0	1860	1488.00	186.00	93.00	0.00	93.00	0.00	0.00	0.00	0.00	1860.00

	meco liab	meco prop	helco liab	helco prop	asb liab	hei liab	pecs liab	
9	0	0	0	0	0	0	0	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
								1820.00

2005 (SHIRLEY)	ST Hours	Xtra	098 Hol	098 Vac	098 Sick	789 Tng	749 Tng	Other	Available	heco liab 0.01	heco prop 0.99	meco liab 0	meco prop 0	helco liab 0	helco prop 0	asb liab 0	hei liab 0	pecs liab 0	
Jan	168		0						168	1.68	166.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Feb	160		8						152	1.52	150.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mar	184		8	40	8				128	1.28	126.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Apr	168		0						168	1.68	166.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
May	176		8			8			160	1.60	158.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Jun	176		8						168	1.68	166.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Jul	168		8	40	8				112	1.12	110.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Aug	184		8						176	1.76	174.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sep	176		8	40					128	1.28	126.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Oct	168		8		8				152	1.52	150.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Nov	176		16	40					120	1.20	118.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Dec	176		16						160	1.60	158.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Total	2080	0	96	160	24	8	0	0	1792	17.92	1774.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1792.00

2005 (GERI)	ST Hours	Xtra	098 Hol	098 Vac	098 Sick	789 Tng	749 Tng	Other	Available	heco liab 0.4	heco prop 0.3	liab ins 0.1	prop ins 0.1	payroll 777 0.03	invoice 843 0.05	order 842 0.02	hei liab 0	pecs liab 0	
Jan	168		0						168	67.20	50.40	16.80	16.80	5.04	8.40	3.36	0.00	0.00	
Feb	160		8						152	60.80	45.60	15.20	15.20	4.56	7.60	3.04	0.00	0.00	
Mar	184		8	40	8				128	51.20	38.40	12.80	12.80	3.84	6.40	2.56	0.00	0.00	
Apr	168		0						168	67.20	50.40	16.80	16.80	5.04	8.40	3.36	0.00	0.00	
May	176		8			8			160	64.00	48.00	16.00	16.00	4.80	8.00	3.20	0.00	0.00	
Jun	176		8						168	67.20	50.40	16.80	16.80	5.04	8.40	3.36	0.00	0.00	
Jul	168		8	40					120	48.00	36.00	12.00	12.00	3.60	6.00	2.40	0.00	0.00	
Aug	184		8	40					136	54.40	40.80	13.60	13.60	4.08	6.80	2.72	0.00	0.00	
Sep	176		8		8				160	64.00	48.00	16.00	16.00	4.80	8.00	3.20	0.00	0.00	
Oct	168		8						160	64.00	48.00	16.00	16.00	4.80	8.00	3.20	0.00	0.00	
Nov	176		16						160	64.00	48.00	16.00	16.00	4.80	8.00	3.20	0.00	0.00	
Dec	176		16	40					120	48.00	36.00	12.00	12.00	3.60	6.00	2.40	0.00	0.00	
Total	2080	0	96	160	16	8	0	0	1800	720.00	540.00	180.00	180.00	54.00	90.00	36.00	0.00	0.00	1800.00

Facilitator Supervisor - 2005 Input Sheet

	Code Block	EE	January	February	March	April	May	June	July	August	September	October	November	December	
HECO	PKI098PHENDNPKZZZZZ	107	0	40	48	0	16	8	48	8	8	8	32	16	232
	PKI749PHENENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI785PHENENPKZZZZZ	150	9	7	8	7	9	9	7	10	9	7	8	9	99
	PKI789PHENENPKZZZZZ	150	0	0	0	40	0	0	0	0	0	32	0	0	72
	PKI950PHENENPKZZZZZ	150	28.49	71.31	79.43	75.15	91.57	0	0	0	188	22.16	24.78	40.78	621.67
	PKI951PHENENPKZZZZZ	150	0	0	0	0	0	121.52	90.61	126.91	0	0	0	0	339.04
	PKI952PHENENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953PHENENPKZZZZZ	150	0	14.1	15.78	14.93	18.19	0	0	0	0	0	0	0	63
HELCO	PKI950HELBENPKZZZZZ	150	5.44	16.65	18.51	17.64	21.39	0	0	0	0	4.26	4.71	4.71	93.31
	PKI951HELBENPKZZZZZ	150	0	0	0	0	0	25.05	18.61	26.03	0	0	0	0	69.69
	PKI952HELBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953HELBENPKZZZZZ	150	0	3.58	4	3.81	4.62	0	0	0	0	0	0	0	16.01
MECO	PKI950MAUBENPKZZZZZ	150	5.13	18.56	20.66	19.68	23.87	0	0	0	0	4.01	4.44	4.44	100.79
	PKI951MAUBENPKZZZZZ	150	0	0	0	0	0	35.14	26.11	36.52	0	0	0	0	97.77
	PKI952MAUBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953MAUBENPKZZZZZ	150	0	3.69	4.12	3.93	4.76	0	0	0	0	0	0	0	16.5
PECS	PKI950PECBENPKZZZZZ	150	0.02	0.04	0.04	0.04	0.05	0	0	0	0	0.02	0.02	0.02	0.25
	PKI951PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI952PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
HEI	PKI950HEIBENPKZZZZZ	150	76.35	0.38	0.42	0.39	0.48	0	0	0	0	60.27	66.68	66.68	271.65
	PKI951HEIBENPKZZZZZ	150	0	0	0	0	0	0.63	0.47	0.66	0	0	0	0	1.76
	PKI952HEIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953HEIBENPKZZZZZ	150	0	0.06	0.07	0.07	0.08	0	0	0	0	0	0	0	0.28
RHI	PKI950RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI951RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI952RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
ASB	PKI950ASBBENPKZZZZZ	150	72.57	10.76	12	11.43	13.86	0	0	0.51	0	57.28	63.37	63.37	305.15
	PKI951ASBBENPKZZZZZ	150	0	0	0	0	0	5.66	4.2	5.37	0	0	0	0	15.23
	PKI952ASBBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953ASBBENPKZZZZZ	150	0	0.87	0.97	0.93	1.13	0	0	0	0	0	0	0	3.9
															2016
															2419

Teacher/Coach - 2005 Input Sheet

	Code Block	EE	January	February	March	April	May	June	July	August	September	October	November	December	
HECO	PKI098PHENDNPKZZZZZ	107	0	128	32	32	88	240	80	120	160	192	80	160	1312
	PKI749PHENENPKZZZZZ	150	0	0	0	0	0	0	0	0	40	0	0	0	40
	PKI785PHENENPKZZZZZ	150													
	PKI789PHENENPKZZZZZ	150	0	0	16	40	8	0	8	16	8	32	8	0	136
	PKI950PHENENPKZZZZZ	150	475.97	447.50	533.93	458.34	454.06	326.40	329.60	335.20	420.00	394.46	450.20	447.00	5072.66
	PKI951PHENENPKZZZZZ	150	184.80	140.40	194.80	176.00	184.80	229.83	305.48	317.94	176.80	127.20	175.20	144.80	2358.05
	PKI952PHENENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953PHENENPKZZZZZ	150	0	19.44	22.63	17.94	21.06	0	0	0	0	0	0	0	81.07
HELCO	PKI950HELBENPKZZZZZ	150	36.28	36.81	48.41	38.00	41.21	27.60	29.60	30.40	25.20	28.64	34.02	32.02	408.19
	PKI951HELBENPKZZZZZ	150	8.40	6.20	9.00	8.00	8.40	7.52	19.20	21.84	4.40	7.60	8.00	6.40	114.96
	PKI952HELBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953HELBENPKZZZZZ	150	0	1.72	2.59	1.3	2.16	0	0	0	0	0	0	0	7.77
MECO	PKI950MAUBENPKZZZZZ	150	27.72	31.53	40.80	30.70	33.97	21.20	21.60	22.00	20.80	21.03	25.88	25.48	322.71
	PKI951MAUBENPKZZZZZ	150	8.40	6.20	9.00	8.00	8.40	7.97	23.71	27.25	4.40	7.60	8.00	6.40	125.33
	PKI952MAUBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953MAUBENPKZZZZZ	150	0	1.78	2.67	1.34	2.23	0	0	0	0	0	0	0	8.02
PECS	PKI950PECBENPKZZZZZ	150	1.69	1.26	1.83	1.61	1.71	1.28	1.60	1.68	0.88	1.52	1.61	1.29	17.96
	PKI951PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI952PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
HEI	PKI950HEIBENPKZZZZZ	150	42.58	4.30	5.71	4.94	4.79	3.84	4.40	5.12	3.36	7.98	38.99	38.43	164.44
	PKI951HEIBENPKZZZZZ	150	0	0	0	0	0	0.03	0.28	0.34	0	0	0	0	0.65
	PKI952HEIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953HEIBENPKZZZZZ	150	0	0.03	0.05	0.02	0.04	0	0	0	0	0	0	0	0.14
RHI	PKI950RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI951RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI952RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
ASB	PKI950ASBBENPKZZZZZ	150	54.16	22.41	27.95	21.49	20.64	14.08	14.00	19.46	16.16	19.97	50.10	50.18	330.6
	PKI951ASBBENPKZZZZZ	150	0	0	0	0	0	0.25	2.53	2.77	0	0	0	0	5.55
	PKI952ASBBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953ASBBENPKZZZZZ	150	0	0.42	0.63	0.32	0.53	0	0	0	0	0	0	0	1.9
															9020
															10508

Implementor - 2005 Input Sheet

	Code Block	EE	January	February	March	April	May	June	July	August	September	October	November	December	
HECO	PKI098PHENDNPKZZZZZ	107	8	8	8	0	16	8	8	8	8	48	56	24	200
	PKI749PHENENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI785PHENENPKZZZZZ	150													0
	PKI789PHENENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI950PHENENPKZZZZZ	150	88.72	102.24	113.93	110	106.06	0	0	0	168	84.29	84.29	116.29	973.82
	PKI951PHENENPKZZZZZ	150	0	0	0	0	0	135.31	130.28	140.34	0	0	0	0	405.93
	PKI952PHENENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953PHENENPKZZZZZ	150	0	20.21	22.63	21.85	21.06	0	0	0	0	0	0	0	85.75
HELCO	PKI950HELBENPKZZZZZ	150	2.43	9.01	12.01	11.01	10.01	0	0	0	0	1.21	1.21	1.21	48.1
	PKI951HELBENPKZZZZZ	150	0	0	0	0	0	12.32	11.2	13.44	0	0	0	0	36.96
	PKI952HELBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953HELBENPKZZZZZ	150	0	1.94	2.59	2.38	2.16	0	0	0	0	0	0	0	9.07
MECO	PKI950MAUBENPKZZZZZ	150	2.29	10.05	13.4	12.28	11.17	0	0	0	0	1.14	1.14	1.14	52.61
	PKI951MAUBENPKZZZZZ	150	0	0	0	0	0	17.28	15.71	18.85	0	0	0	0	51.84
	PKI952MAUBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953MAUBENPKZZZZZ	150	0	2	2.67	2.45	2.23	0	0	0	0	0	0	0	9.35
PECS	PKI950PECBENPKZZZZZ	150	0.01	0.02	0.03	0.03	0.03	0	0	0	0	0.01	0.01	0.01	0.15
	PKI951PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI952PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953PECBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
HEI	PKI950HEIBENPKZZZZZ	150	34.12	0.21	0.27	0.25	0.23	0	0	0	0	17.1	17.1	17.1	86.38
	PKI951HEIBENPKZZZZZ	150	0	0	0	0	0	0.31	0.28	0.34	0	0	0	0	0.93
	PKI952HEIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953HEIBENPKZZZZZ	150	0	0.03	0.05	0.04	0.04	0	0	0	0	0	0	0	0.16
RHI	PKI950RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI951RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI952RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953RHIBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
ASB	PKI950ASBBENPKZZZZZ	150	32.43	5.82	7.79	7.13	6.48	0	0	0	0	16.25	16.25	16.25	108.4
	PKI951ASBBENPKZZZZZ	150	0	0	0	0	0	2.78	2.53	3.03	0	0	0	0	8.34
	PKI952ASBBENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI953ASBBENPKZZZZZ	150	0	0.47	0.63	0.58	0.53	0	0	0	0	0	0	0	2.21
															1880
															2080

BU-OC - 2005 Input Sheet

	Code Block	EE	January	February	March	April	May	June	July	August	September	October	November	December	
HECO	PKI098PHENDNPKZZZZZ	107	0	16	112	0	16	16	104	56	64	24	72	72	552
	PKI777PHENENPKZZZZZ	150	5.04	4.56	3.84	5.04	4.80	5.04	3.60	4.08	4.80	4.80	4.80	3.60	54
	PKI842PHENENPKZZZZZ	150	3.36	3.04	2.56	3.36	3.20	3.36	2.40	2.72	3.20	3.20	3.20	2.40	36
	PKI843PHENENPKZZZZZ	150	8.40	7.60	6.40	8.40	8.00	8.40	6.00	6.80	8.00	8.00	8.00	6.00	90
	PKI749PHENENPKZZZZZ	150	0	0	0	0	0	0	0	0	0	0	0	0	0
	PKI789PHENENPKZZZZZ	150	0	0	0	0	16	0	0	0	0	0	0	0	16
	PKI950PHENENPKZZZZZ	150	85.68	77.52	65.28	85.68	81.60	85.68	61.12	69.76	81.28	81.52	81.20	61.60	917.92
	PKI951PHENENPKZZZZZ	150	233.52	211.28	177.92	233.52	222.40	233.52	158.88	228.64	190.72	214.48	182.80	206.40	2494.08
	PKI952PHENENPKZZZZZ	150													0
	PKI953PHENENPKZZZZZ	150													0
HELCO	PKI950HELBENPKZZZZZ	150													0
	PKI951HELBENPKZZZZZ	150													0
	PKI952HELBENPKZZZZZ	150													0
	PKI953HELBENPKZZZZZ	150													0
MECO	PKI950MAUBENPKZZZZZ	150													0
	PKI951MAUBENPKZZZZZ	150													0
	PKI952MAUBENPKZZZZZ	150													0
	PKI953MAUBENPKZZZZZ	150													0
PECS	PKI950PECBENPKZZZZZ	150													0
	PKI951PECBENPKZZZZZ	150													0
	PKI952PECBENPKZZZZZ	150													0
	PKI953PECBENPKZZZZZ	150													0
HEI	PKI950HEIBENPKZZZZZ	150													0
	PKI951HEIBENPKZZZZZ	150													0
	PKI952HEIBENPKZZZZZ	150													0
	PKI953HEIBENPKZZZZZ	150													0
RHI	PKI950RHIBENPKZZZZZ	150													0
	PKI951RHIBENPKZZZZZ	150													0
	PKI952RHIBENPKZZZZZ	150													0
	PKI953RHIBENPKZZZZZ	150													0
ASB	PKI950ASBBENPKZZZZZ	150													0
	PKI951ASBBENPKZZZZZ	150													0
	PKI952ASBBENPKZZZZZ	150													0
	PKI953ASBBENPKZZZZZ	150													0
															3412
															4160

Line of coverage	HECO	HELCO	MECO	PECS	HEI	RHI	Subtotal	ASB	TOTAL
D&O	181,732.31	55,191.72	50,433.04	0.00	1,027,054.29	6.64	1,314,418.00	707,764.00	2022182
	8.99%	2.73%	2.49%	0.00%	50.79%	0.00%	65.00%	35%	100%
Fiduciary	66,790.28	13,991.29	14,209.45	141.52	2,122.56	0.00	97,255.10	30,718.34	127973.44
	52.19%	10.93%	11.10%	0.11%	1.66%	0.00%	76.00%	24%	100%
SR	5,787.45	1,311.82	1,352.67	22.70	199.71	0.00	8,674.35	6,441.10	15115.45
	38.29%	8.68%	8.95%	0.15%	1.32%	0.00%	57.39%	43%	100%
Auto Bond	3,623.97	678.81	653.29	0.00	0.00	0.00	4,956.07	40.85	4996.92
	72.52%	13.58%	13.07%	0.00%	0.00%	0.00%	99.18%	1%	100%
GL	825,930.76	210,208.81	234,519.17	480.23	4,724.13	0.00	1,275,863.10	136,217.07	1412080.17
	58.49%	14.89%	16.61%	0.03%	0.33%	0.00%	90.35%	10%	100%
XWC	164,026.70	45,374.46	46,794.09	0.00	789.50	0.00	256,984.75	11,056.14	268040.89
	61.19%	16.93%	17.46%	0.00%	0.29%	0.00%	95.88%	4%	100%
Prop w/o ics	1,351,159.39	308,654.32	429,099.91	0.00	8,469.20	0.00	2,097,382.82	91,481.61	2188864.43
	61.73%	14.10%	19.60%	0.00%	0.39%	0.00%	95.82%	4%	100%
BM w/o ics	508,597.44	105,417.25	151,810.60	0.00	1,994.05	0.00	767,819.34	2,023.08	769842.42
	66.07%	13.69%	19.72%	0.00%	0.26%	0.00%	99.74%	0%	100%
Crime	77,413.42	17,547.05	18,093.49	303.58	2,671.52	0.00	116,029.06	270,876.14	386905.2
	20.01%	4.54%	4.68%	0.08%	0.69%	0.00%	29.99%	70%	100%
P&I	3,176.25	0.00	0.00	0.00	0.00	0.00	3,176.25	0.00	3176.25
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0%	100%
Hull & Machinery	457.20	0.00	0.00	0.00	0.00	0.00	457.20	0.00	457.2
	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0%	100%
Inland/Ocean	6,000.00	26,500.00	17,500.00	-	-	-	50,000.00	-	50000
	0.12	0.53	0.35	-	-	-	1.00	-	100%
Bankers Prof	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	6577600.00%	65776
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%	100%
Mrtg Imprmnt/E&O	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3349760%	33497.6
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%	100%
Ins Agents E&O	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2639800%	26398
	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	100%	100%
XS Ins Agents E&O	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%	0
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Frc'd Placed	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1674888%	16748.88
	0	0	0	0	0	0	0	1	100%
Lenders Protection	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%	0
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mtg Brokers Bond	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0%	0
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Property - ICS	148750.00%	91643.00%	114731.00%	0.00%	0.00%	0.00%	355124.00%	0%	3551.24
	0.42	0.26	0.32	0	0	0	1	0	100%
BIA Ins Agt E&O	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12461400.00%	124614
	0	0	0	0	0	0	0	1	100%
BIA XS Ins Agt E&O	-	-	-	-	-	0	-	52,500.00	52500
	-	-	-	-	-	0	-	1.00	100%
							-		
WC Assessment From W/C Calcula									
2004	119,807.00	30,532.00	41,577.00	-	-			15,274.00	207190
2005	144104	36313	52081	0	0			16023	248521

	A	B	C	D	E	F	G	H	I
1		HEI Forecast						2/15/2004	
2		CORPORATE TOTAL		11/1/02-03		11/1/03-04		11/1/04-05	
3			Renewal	2003 Act / Fcst	% inc	2004Forecast	% inc	2005 Forecast	
4			Date	Purchase Price		Purchase Price		Purchase Price	
5		Cas/Prop							
6		D&O-1	1-Feb	$ 30,000.00	2453.33%	$ 766,000.00	15.00%	$ 880,900.00	
7		D&O-2	1-Feb	$ -	#DIV/0!	$ -	#DIV/0!	$ -	
8		D&O-3	1-Feb	$ 27,707.25	3260.79%	$ 931,182.00	15.00%	$ 1,070,859.30	
9		D&O-4	1-Feb	$ 5,000.00	6400.00%	$ 325,000.00	15.00%	$ 373,750.00	2,325,509.30
10		Fiduc-1	1-Feb	$ 86,947.75	47.27%	$ 128,044.20	14.04%	$ 146,022.32	
11		S/R	1-Feb	$ -	#DIV/0!	$ 15,120.00	-100.00%	$ -	
12		Crime	1-Feb	$ 351,919.60	9.96%	$ 386,965.91	9.48%	$ 423,654.63	
13									

HEI	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Total
Activity													
Liability 950	-	1,186,473	-	-	-	14,804	-	-	-	300	-	-	1,201,577
Property 951	-	-	-	-	-	-	-	-	12,332	-	-	-	12,332
Marine 952	-	-	-	-	-	-	-	-	-	-	-	-	-
Work Comp 953	-	-	-	-	-	1,343	-	-	-	-	-	-	1,343
Total	-	1,186,473	-	-	-	16,147	-	-	12,332	300	-	-	1,215,252
Check Total shown below:	-	1,186,473	-	-	-	16,147	-	-	12,332	300	-	-	1,215,252

HEI Cash Schedule for Policies Beginning in 2005

Coverage	Renewal Date	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Total
D&O	1-Feb		1,181,126											1,181,126
Fiduc	1-Feb		2,424											2,424
Crime	1-Feb		2,923											2,923
S/R	1-Feb		-											-
GL	1-Jun						6,304							6,304
XWC	1-Jun						1,343							1,343
Prop	1-Sep									9,357				9,357
B&M	1-Sep									2,284				2,284
Subtotal		-	1,186,473	-	-	-	7,647	-	-	11,641	-	-	-	1,205,761
Auto Bond	31-Mar			-										-
Misc Bonds	various						8,500				300			8,800
Subtotal		-	-	-	-	-	8,500	-	-	-	300	-	-	8,800
WC Spec Fund	1-Sep									-				-
USL&H Assessment	Jan/Aug													-
USL&H Bond	1-Jul													-
Subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Protection & Indemnity	10-Nov													-
Hull & Machinery	10-Nov													-
Inland/Ocean Cargo	1-Dec													-
Subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Rate Case Items														-
Property-ICS	1-Sep													-
B&M-ICS	1-Sep													-
ICS subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Prop-Mahakea	1-Sep													-
B&M-Mahakea	1-Sep													-
Mahakea subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Prop-Hale Kekela	1-Sep									-				-
B&M-Hale Kekela	1-Sep									691				691
Hale Kekela subtotal		-	-	-	-	-	-	-	-	691	-	-	-	691
Subtotal		-	-	-	-	-	-	-	-	691	-	-	-	691
GRAND TOTAL		-	1,186,473	-	-	-	16,147	-	-	12,332	300	-	-	1,215,252

Prepared: 02/20/2004

HEI		Annualized Purchase Price For Policies Beginning in 2005												
Coverage	Renewal Date	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Total
D&O	1-Feb	85,589	98,427	98,427	98,427	98,427	98,427	98,427	98,427	98,427	98,427	98,427	98,427	1,168,288
Fiduc	1-Feb	177	202	202	202	202	202	202	202	202	202	202	202	2,399
Crime	1-Feb	223	244	244	244	244	244	244	244	244	244	244	244	2,902
S/R	1-Feb	17	-	-	-	-	-	-	-	-	-	-	-	17
GL	1-Jun	467	467	467	467	467	525	525	525	525	525	525	525	6,012
XWC	1-Jun	69	69	69	69	69	112	112	112	112	112	112	112	1,128
Prop	1-Sep	740	740	740	740	740	740	740	740	780	780	780	780	9,039
B&M	1-Sep	181	181	181	181	181	181	181	181	190	190	190	190	2,213
Subtotal		87,462	100,330	100,330	100,330	100,330	100,432	100,432	100,432	100,480	100,480	100,480	100,480	1,191,998
Auto Bond	31-Mar	-	-	-	-	-	-	-	-	-	-	-	-	-
Misc Bonds	various	-	-	-	-	-	8,500	-	-	-	300	-	-	8,800
Subtotal		-	-	-	-	-	8,500	-	-	-	300	-	-	8,800
WC Spec Fund	1-Sep	-	-	-	-	-	-	-	-	-	-	-	-	-
USL&H Assessment	Jan/Aug	-	-	-	-	-	-	-	-	-	-	-	-	-
USL&H Bond	1-Jul	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Protection & Indemnity	10-Nov	-	-	-	-	-	-	-	-	-	-	-	-	-
Hull & Machinery	10-Nov	-	-	-	-	-	-	-	-	-	-	-	-	-
Inland/Ocean Cargo	1-Dec	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Rate Case Items														
Property-ICS	1-Sep	-	-	-	-	-	-	-	-	-	-	-	-	-
B&M-ICS	1-Sep	-	-	-	-	-	-	-	-	-	-	-	-	-
ICS subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Prop-Mahakea	1-Sep	-	-	-	-	-	-	-	-	-	-	-	-	-
B&M-Mahakea	1-Sep	-	-	-	-	-	-	-	-	-	-	-	-	-
Mahakea subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Prop-Hale Kekela	1-Sep	-	-	-	-	-	-	-	-	-	-	-	-	-
B&M-Hale Kekela	1-Sep	55	55	55	55	55	55	55	55	58	58	58	58	-
Hale Kekela subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal		-	-	-	-	-	-	-	-	-	-	-	-	-
GRAND TOTAL		87,462	100,330	100,330	100,330	100,330	108,932	100,432	100,432	100,480	100,780	100,480	100,480	1,200,798

Prepared: 02/20/2004

Daily Costs

Worksheet on allocation of KI Costs for 2005:

Type of Cost	Estimate	Liability	Property	Marine	W/C	Total	
Office Supplies	$ 2,100.00	$ 1,050.00	$ 840.00		$ 210.00	$ 2,100.00	
Subscriptions	$ 700.00	$ 420.00	$ 210.00		$ 70.00	$ 700.00	
TOTAL	$ 2,800.00	$ 1,470.00	$ 1,050.00		$ 280.00	$ 2,800.00	
Cellular Phone	$ 200.00	$ 200.00				$ 200.00	**(For HECO Liability only)**
						$ 3,000.00	

Note: Allocation for Office Supplies between lines 50% to liability, 40% to property, 10% to work comp.
Allocation for Subscriptions between lines 60% to liability, 30% to property, 10% to work comp.
Allocation: HECO 50%, HELCO 10%, MECO 10%, HEI 20% and ASB 10%. (All other entities consolidated under HEI)

Prepared: 02/20/2004

Daily Costs Input Sheet

Daily Costs 2005 - Input Sheet

						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
HECO	PKI 950	PHE	NE	NPKZZZZZ 501	$ 200.00	$ 13.00	$ 17.00	$ 17.00	$ 17.00	$ 17.00	$ 17.00	$ 17.00	$ 17.00	$ 17.00	$ 17.00	$ 17.00	$ 17.00	$ 200.00
HECO	PKI 950	PHE	NE	NPKZZZZZ 205	$ 735.00	$ 64.00	$ 61.00	$ 61.00	$ 61.00	$ 61.00	$ 61.00	$ 61.00	$ 61.00	$ 61.00	$ 61.00	$ 61.00	$ 61.00	$ 735.00
	PKI 951	PHE	NE	NPKZZZZZ 205	$ 525.00	$ 41.00	$ 44.00	$ 44.00	$ 44.00	$ 44.00	$ 44.00	$ 44.00	$ 44.00	$ 44.00	$ 44.00	$ 44.00	$ 44.00	$ 525.00
	PKI 952	PHE	NE	NPKZZZZZ 205	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	PKI 953	PHE	NE	NPKZZZZZ 205	$ 140.00	$ 8.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 140.00
HELCO	PKI 950	HEL	BE	NPKZZZZZ 205	$ 147.00	$ 15.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 147.00
	PKI 951	HEL	BE	NPKZZZZZ 205	$ 105.00	$ 6.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 105.00
	PKI 952	HEL	BE	NPKZZZZZ 205	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	PKI 953	HEL	BE	NPKZZZZZ 205	$ 28.00	$ 2.70	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 28.00
MECO	PKI 950	MAU	BE	NPKZZZZZ 205	$ 147.00	$ 15.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 147.00
	PKI 951	MAU	BE	NPKZZZZZ 205	$ 105.00	$ 6.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 105.00
	PKI 952	MAU	BE	NPKZZZZZ 205	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	PKI 953	MAU	BE	NPKZZZZZ 205	$ 28.00	$ 2.70	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 28.00
HEI	PKI 950	HEI	BE	NPKZZZZZ 205	$ 294.00	$ 19.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 294.00
	PKI 951	HEI	BE	NPKZZZZZ 205	$ 210.00	$ 12.00	$ 18.00	$ 18.00	$ 18.00	$ 18.00	$ 18.00	$ 18.00	$ 18.00	$ 18.00	$ 18.00	$ 18.00	$ 18.00	$ 210.00
	PKI 952	HEI	BE	NPKZZZZZ 205														
	PKI 953	HEI	BE	NPKZZZZZ 205	$ 56.00	$ 4.30	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 4.70	$ 56.00
ASB	PKI 950	ASB	BE	NPKZZZZZ 205	$ 147.00	$ 15.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 12.00	$ 147.00
	PKI 951	ASB	BE	NPKZZZZZ 205	$ 105.00	$ 6.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 9.00	$ 105.00
	PKI 952	ASB	BE	NPKZZZZZ 205														
	PKI 953	ASB	BE	NPKZZZZZ 205	$ 28.00	$ 2.70	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 2.30	$ 28.00
					$3,000.00													$3,000.00

Prepared: 02/20/2004

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DOCKET NO. 04-0113
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Travel CostsCalculation - 2005

RIMS (4/04)				HECO **PHE NE	HELCO **HEL BE	MECO **MAU BE	PECS **PEC BE	HEI **HEI BE	HEIIC **HIC BE	ASB **ASB BE	TOTAL	
Meals	$ 150	PKI 789 ** NPKZZZZZ 521		$ 43.87	$ 11.17	$ 12.46	$ -	$ 0.26	$ -	$ 7.24	$ 74.74	$ 75.00
Other	$ 3,000	PKI 789 ** NPKZZZZZ 520		$ 877.35	$ 223.35	$ 249.15	$ -	$ 5.40	$ -	$ 144.75	$ 1,494.60	$ 1,500.00
	$ 3,150	PKI 789 ** NPKZZZZZ 521		$ 49.55	$ 10.27	$ 14.79	$ -	$ 0.19	$ -	$ 0.20	$ 74.81	$ 75.00
		PKI 789 ** NPKZZZZZ 520		$ 991.05	$ 205.35	$ 295.80	$ -	$ 3.90	$ -	$ 3.90	$ 1,496.10	$ 1,500.00
												$ 3,150.00
AEGIS (7/04)	(w/Prop Mktg)											
Meals	$ -	PKI 789 ** NPKZZZZZ 521		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
Other	$ -	PKI 789 ** NPKZZZZZ 520		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	
	$ -											
Property Mktg	(Europe)											
Meals	$ 275	PKI 789 ** NPKZZZZZ 521		$ 181.69	$ 37.65	$ 54.23	$ -	$ 0.71	$ -	$ 0.72	$ 274.29	$ 275.00
Other	$ 7,200	PKI 789 ** NPKZZZZZ 520		$ 4,757.04	$ 985.68	$ 1,419.84	$ -	$ 18.72	$ -	$ 18.72	$ 7,181.28	$ 7,200.00
	$ 7,475											$ 7,475.00
EEI (9/03)	(West Coast)											
Meals		PKI 789 ** NPKZZZZZ 521		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Other		PKI 789 ** NPKZZZZZ 520		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	$ -											
STARS (03/04)	(San Antonio)											
Meals	$ 150	PKI 789 ** NPKZZZZZ 521		$ 87.74	$ 22.34	$ 24.92	$ -	$ 0.52	$ -	$ 14.48	$ 149.48	$ 150.00
Other	$ 2,300	PKI 789 ** NPKZZZZZ 520		$ 1,345.27	$ 342.47	$ 382.03	$ -	$ 8.28	$ -	$ 221.95	$ 2,291.72	$ 2,300.00
	$ 2,450											$ 2,450.00
Interisland (2/03)												
Meals		PKI 789 ** NPKZZZZZ 521										
Other											$ -	$ -
	$ -										$ -	$ -
	$ 13,075											$ 13,075.00

Note: PECS, HEIIC, (shaded areas) combined with HEI.

Prepared: 02/20/2004

Travel Input Sheet

Travel Costs 2005 - Input Sheet					March	April	July	August	September	October	
HECO	PKI 789	PHE	NE	NPKZZZZZ 521	$ 87.74	$ 43.87	$ -		$ -		$ 131.61
	PKI 789	PHE	NE	NPKZZZZZ 520	$1,345.27	$ 877.35	$ -		$ -		$ 2,222.62
	PKI 789	PHE	NE	NPKZZZZZ 521		$ 49.55	$ 181.69				$ 231.24

4C

Moody's Quarterly HEIMTN Fees

Per Moody's Invoice: HEI will be charged $8,500 per quarter in 2004 for MTN access fee.

Estimating a $600 quarterly increase (to $9,100) for 2005.

Corporate Communications				
HEI intercompany billings				
2005 forecast				
Activity	**Description**			
750	**Maintain relations - customers (for Hoa Hana magazine)**			
	Labor hours:	636.5	2002 actual	
		436	2003 actual	
		450	2005 forecast	
	(for 2003, 2005, labor hours cut back back because layout and design of Hoa Hana magazine			
	was outsourced by HEI)			
	Nonlabor costs:	$ 1,000.00	rough estimate for possible travel costs for covering	
			neighbor island stories, photo developing/film, etc.	
753	**Maintain relations - community**			
	Labor hours:	7.5	2002 actual	
		2.5	2003 actual	
		10	2005 forecast	
	(for misc photography and other services for HEI; e.g., community service			
	awardee photos)			
	Nonlabor costs:	$ 300.00	nominal cost for photo developing/film etc.	
756	**Maintain relations - investors**			
	Annual meeting:			
	Labor hours:	33	2002 actual	
		24.25	2003 actual	
		30	2005 forecast	
	Annual report:			
	Labor hours:	56	2002 actual	
		53.25	2003 actual	
		56	2005 forecast	

CA-IR-256

Ref: HECO-1312 (HECO Billings to HEI).

a. Does HECO fully load its billings to HEI with rents, benefits and other overhead costs similar to the charges HECO receives from HEI?

b. If not, please explain why such loadings are not included in the billings to HEI and explain whether benefits follow labor costs.

HECO Response:

a. Yes, the HECO billings to HEI are fully loaded with rent, benefits and other overhead costs similar to the charges HECO receives from HEI as these costs are included in the on-costs applied to labor hours or labor dollars.

b. Not applicable.

CA-IR-257

Ref: HECO-1314 (A&G Expense Transferred).

Please provide a copy of the original and updated KPMG studies.

HECO Response:

The Administrative Transfer Study prepared by KPMG in December 1996 and the

Administrative Transfer Study updated in 2004 are voluminous. One copy each will be provided

to the Consumer Advocate and the Public Utilities Commission under separate transmittal.

Due to the voluminous nature of the information, one copy (pages 2-74) will be provided to the Consumer Advocate and the Public Utilities Commission under separate transmittal.

CA-IR-258

Ref: HECO-1603 (Rate Case Expense).

Please update the Company's test year forecast of rate case expense, including any additional consulting fees or other costs currently anticipated by HECO.

HECO Response:

See page 2 to this response for the updated 2005 test year estimate of rate case expenses.

Hawaiian Electric Company, Inc.
Account 928 - Regulatory Commission Expenses
Test Year 2005 Estimate
($ in 1000s)

Legal Fees		$377
Consultant - Return on Equity		59
Consultant - Rate of Return on Rate Base		40
Consultant - DSM		157
Stenographer		10
Consultant - HEI impact (affidavit)		16
Supplies		3
Printing Services		10
Total 2005 Rate Case Expenses		$672
Amortization period (2005-2007)	3 years	
2005 amortization		$224

CA-IR-259

Ref: HECO-1603 (Rate Case Expense).

The referenced exhibit amortizes rate case expense over a three-year period. Please identify and describe any Company plans for a "next" rate case beyond the current docket. If none, please so state.

HECO Response:

HECO has not determined when HECO would file its next rate increase application. HECO does not expect to file as frequently as in the early 1990's (1990, 1992, 1994 and 1995 test year cases filed within 6 years) or as infrequently as in the late 1990's and early 2000's (one case in 10 years). The decision on its next rate increase application will depend on a number of factors, including the amount of rate relief granted in this proceeding, the impact and results of the Energy Efficiency Docket proceeding (Docket No. 05-0069) and the mechanism used to recover program-related costs, the completion of significant capital expenditures and computer software development projects, increase in operations and maintenance expenses beyond the normalized amounts included in rates as a result of this rate case, and changes in kilowatthour sales and the cost of capital for the Company. HECO has utilized a three-year amortization period, since based on the current planned investments, and proposed treatment of lost margins for DSM programs, it is not unlikely that HECO's next rate case would be filed within three years from the conclusion of this proceeding.