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5											
6	Ops	NL	Oper Supv & Eng - Honolulu	500010	PJW211HSTNENPJZZZZ501	O/S	244,948	0	(244,948)	-100%	Represent O/S costs for the Environmental 316(b) work for the Honolulu generating facility. The related 2009 budget amount is combined with all the other HECO generating facilities and is reported in location WST. See line 8 for the 2009 budget.
7	Ops	NL	Oper Supv & Eng - Waiau	500020	PJW211WSTNENPJZZZZZ501	O/S	237,965	0	(237,965)	-100%	Represent O/S costs for the Environmental 316(b) work for the Waiau generating facility. The related 2009 budget amount is combined with all the other HECO generating facilities and is reported in location WST. See line 8 for the 2009 budget.
8	Ops	NL	Oper Supv & Eng - Waiau	500020	PJW211WSTNENPJZZZZZ508	O/S	0	492,000	492,000	--	The 2009 budget amount represents outside services costs for the Environmental 316(b) work for all the HECO generating facilities (Honolulu, Kahe, Waiau). The budget amount is inputted to one code block but the actuals incurred is reported in the various generating facilities where the cost is incurred. See lines 6, 7 and 10 for the 2007 actuals totalling $721K. 2009 Budget adjustment of $356K brings the 2009TY total for 316(b) to $848K. Variance is $127K.
9	Ops	NL	Oper Supv & Eng - Waiau	500020	PYA211WSTNENPYZZZZZ901	FS	321,429	0	(321,429)	-100%	The 2009 budget amount of $0 is due to the Kahe 7 amortization ending in December 2008.
10	Ops	NL	Oper Supv & Eng - Kahe	500030	PJW211KSTNENPJZZZZZ501	O/S	237,859	0	(237,859)	-100%	Represent O/S costs for the Environmental 316(b) work for the Kahe generating facility. The related 2009 budget amount is combined with all the other HECO generating facilities and is reported in location WST. See line 8 for the 2009 budget.
11	Ops	Lab	Steam Exp - Waiau	502020	PIW242WSTNENPIZZZZZ150	Labor	1,852,590	2,080,866	228,276	12%	Increase is a result of more hours budgeted for work on the boilers as well as increased labor rates.
12	Ops	Lab	Steam Exp - Kahe	502030	PJC241KSTNENPJZZZZZ150	Labor	51,822	256,673	204,851	395%	The 2009 budget amount represents labor estimates for the Division for 1) environmental compliance testing, 2) testing that supports plant operations, mostly for the predictive maintenance programs, 3) testing of fuel used in the plants and 4) consultation to the power plants related to problem-solving. The 2009 budget is forecasted to one HECO code block. Unlike the budget inputs, the 2007 actual cost incurred is charged to various HECO code blocks. The 2007 actual labor cost incurred for the Division for these activities were $181K, a variance of $76K.

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13	Ops	Lab	Electric Expenses - Waiau	505020	PIW243WSTNENPIZZZZZ150	Labor	1,828,937	2,049,033	220,096	12%	Increase is a result of more hours budgeted for work on the turbines and generators as well as increased labor rates.
14	Ops	Lab	Misc Steam Power Exp - Waiau	506020	PJW876WSTNENPJZZZZZ150	Labor	24,035	270,551	246,516	1026%	The 2009 budget amount represents labor estimates for the Environmental Department Water & Hazardous Materials Division for 1) activities related to applying for and obtaining environmental permits and 2) activities related to complying with ongoing environmental permit and regulatory requirements. The 2009 budget is forecasted to one HECO code block. Unlike the budget inputs, the 2007 actual cost incurred is charged to various HECO code blocks. The 2007 actual labor cost incurred for the Division for these activities were $205K, a variance of $66K.
15	Ops	NL	Misc Steam Power Exp - Kahe	506030	PFC723PPONENPFZZZZZ900	FS	0	386,000	386,000	--	Expense to be adjusted out. Represent the performance incentive plan amount allocated to Production. 2007 allocated amount to Production totaled $279,000. See HECO T-11 for further explanation.
16	Ops	NL	Misc Expenses - Oth Prod	549	PNR730PPRNENPASVP7Z501	O/S	0	249,000	249,000	--	Represent R&D cost. See HECO T-14 for explanation on R&D cost.
17	Ops	NL	Other Power Supply Expenses	557	PIC122PHENENPIZZZZZ502	O/S	4,968	225,000	220,032	4429%	Primarily due to Power Purchase Division outside service legal expenses. In 2009 expect to incur legal expenses to begin renegotiation, then preparation work for KPLP firm capacity contract. Unlike 2007, outside legal assistance will be need to support new contracts such as Honolulu City and County Boiler addition and Sea Solar Power. Also, the successful bidders to the Renewable Energy (RE) Request for Proposal (RFP) PPA will need outside legal assistance.
18	Ops	NL	Other Power Supply Expenses	557	PXB210PPONENPIZZZZZ501	O/S	85,503	450,000	364,497	426%	General and Legal Outside Services: In 2009, anticipate completing HECO Renewable Energy RFP (initiated in late-2007) and continue conduct of two new RFPs (initiated in 2008) arising from HECO IRP-4 (filed June 2008). Outside services cost estimates include competitive bidding consultant, Independent Observer as required by the Framework, and outside legal services.
19	Ops	NL	Other Power Supply Expenses	557	PXB210PPONENPIZZZZZ502	O/S	7,701	270,000	262,299	3406%	

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20	Maint	NL	Maint of Structures - Honolulu	511010	PIN265HSTNEP0001271501	O/S	398,179	0	(398,179)	-100%	Per review of ALL Hono station maintenance O/S cost, Act. 265, Common Structures & System-Corrective totaled $516k in 2007 compared to $92k in 2009, a decrease of $424k. Less O/S cost budgeted in this area in 2009. Note Hono, 511010, O/S 2007 cost was $508k in 2007 compared to $128k in 2009.
21	Maint	NL	Maint of Structures - Waiau	511020	PIX265WSTNEP0001271501	O/S	54,597	300,000	245,403	449%	Per review of ALL Waiau station maintenance O/S cost, Act. 265, Common Structures & System-Corrective totaled $231k in 2007 compared to $563k in 2009, an increase of $332k. More O/S cost budgeted in this area in 2009. Note Waiau, 511020, O/S 2007 cost was $374k in 2007 compared to $731k in 2009, an increase of $357k.
22	Maint	NL	Maint of Structures - Kahe	511030	PIL263KWWNEP0001271501	O/S	0	220,000	220,000	--	2009 cost for cleaning of Kahe Pond 2A and 2B. Cleaning occurs intermitently and the last cleaing was in 2005 (PIL265KWWNENPIZZZZZ501). No cleaning was needed in 2007.
23	Maint	NL	Maint Boiler & FO Plant - Honolulu	512010	PIN270ITFNEP0001271501	O/S	0	200,000	200,000	--	Per review of Hono and Iwilei tank farm (HTF and ITF), O/S cost, Maint of Fuel Feed System (Act 269 and 270), totaled $325k in 2007 compared to $314k in 2009, a difference of $11k.
24	Maint	NL	Maint Boiler & FO Plant - Honolulu	512010	PIN271HSTNEP0001271501	O/S	0	200,000	200,000	--	Hono (Hono and Iwilei) Fuel Feed system cost (Act. 269, 270 and 271) for 2007 totals $326k. 2009 budgeted cost is $514k, a difference of $188k.
25	Maint	Lab	Maint Boiler & FO Plant - Honolulu	512010	PIT257H09NEP0001496150	Labor	309,943	0	(309,943)	-100%	H9 Overhaul scheduled in 2007 (10/12/07 to 11/21/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
26	Maint	NL	Maint Boiler & FO Plant - Honolulu	512010	PIT258H09NEP0001280501	O/S	522,444	0	(522,444)	-100%	Honolulu 9 Outage with cost incurred in 2006 and 2007. No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
27	Maint	NL	Maint Boiler & FO Plant - Honolulu	512010	PIT259H09NEP0001280501	O/S	252,970	0	(252,970)	-100%	Honolulu 9 Outage with cost incurred in 2006 and 2007. No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
28	Maint	Lab	Maint Boiler & FO Plant - Waiau	512020	PIT257W06NEP0001425150	Labor	0	373,309	373,309	--	Waiau 6 Overhaul scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2007 to 2009.
29	Maint	Lab	Maint Boiler & FO Plant - Waiau	512020	PIT257W07NEP0001106150	Labor	482,440	0	(482,440)	-100%	Waiau 7 Overhaul scheduled in 2007 (3/25/07 to 6/20/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
30	Maint	NL	Maint Boiler & FO Plant - Waiau	512020	PIT257W07NEP0001106501	O/S	320,979	0	(320,979)	-100%	Waiau 7 Overhaul scheduled in 2007 (3/25/07 to 6/20/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.

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31	Maint	NL	Maint Boiler & FO Plant - Waiau	512020	PIT258W06NEP0001425201	Matl	0	256,200	256,200	--	Waiau 6 Overhaul scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2007 to 2009.
32	Maint	NL	Maint Boiler & FO Plant - Waiau	512020	PIT258W07NEP0001106201	Matl	644,833	0	(644,833)	-100%	Waiau 7 Overhaul scheduled in 2007 (3/25/07 to 6/20/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
33	Maint	NL	Maint Boiler & FO Plant - Waiau	512020	PIT258W07NEP0001106501	O/S	333,156	0	(333,156)	-100%	Waiau 7 Overhaul scheduled in 2007 (3/25/07 to 6/20/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
34	Maint	NL	Maint Boiler & FO Plant - Waiau	512020	PIT259W06NEP0001425201	Matl	0	278,250	278,250	--	Waiau 6 Overhaul scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2007 to 2009.
35	Maint	NL	Maint Boiler & FO Plant - Waiau	512020	PIX259W07NENPIZZZZZ201	Matl	208,143	0	(208,143)	-100%	Per review of ALL Waiau station maintenance Material cost, Act. 259, Boiler Plt & Rel Eq-Corrective totaled $912k in 2007 compared to $456k in 2009, a decrease of $456k. Less material cost forecast in this area in 2009. Note Waiau, 512020, material 2007 cost was $1,116k in 2007 compared to $606k in 2009, a decrease of $510k.
36	Maint	Lab	Maint Boiler & FO Plant - Waiau	512020	PIX259WSTNENPIZZZZZ150	Labor	183,272	775,189	591,917	323%	Per review of ALL Waiau station maintenance 150ee labor cost, Act. 259, Boiler Plt & Rel Eq- Corrective totaled $563k in 2007 compared to $775k in 2009, an increase of $212k. More labor cost forecast in this area in 2009. Note Waiau, 512020, labor cost in 2007 was $682k in 2007 compared to $1,219k in 2009, an increase of $537.
37	Maint	NL	Maint Boiler & FO Plant - Waiau	512020	PIX259WSTNENPIZZZZZ501	O/S	520,064	912,000	391,936	75%	Per review of ALL Waiau station maintenance O/S cost, Act. 259, Boiler Plt and Rel Eq-Corrective totaled $1,147k in 2007 compared to $1,411k in 2009, an increase of $264k. More O/S cost forecast in this area in 2009. Note Waiau, 512020, O/S 2007 cost was $1,459k in 2007 compared to $1,809k in 2009, an increase of $350k.
38	Maint	NL	Maint Boiler & FO Plant - Waiau	512020	PIX259WSTNEP0001271501	O/S	0	499,200	499,200	--	Per review of ALL Waiau station maintenance O/S cost, Act. 259, Boiler Plt and Rel Eq-Corrective totaled $1,147k in 2007 compared to $1,411k in 2009, an increase of $264k. More O/S cost forecast in this area in 2009. Note Waiau, 512020, O/S 2007 cost was $1,459k in 2007 compared to $1,809k in 2009, an increase of $350k.

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39	Maint	Lab	Maint Boiler & FO Plant - Waiau	512020	PYE259WSTNENPYZZZZZ150	Labor	25,912	247,680	221,768	856%	The 2009 budget amount represents labor estimates for the Power Supply Engineering Department Technical Services Division who provides field engineering, condition assessment, performance monitoring and trouble shooting services primarily for the HECO Operations & Maintenance Department. The 2009 labor budget that is forecasted to NARUC account 512 is forecasted to one HECO code block. Unlike the budget input, the 2007 actual cost incurred is charged to various HECO code blocks. The 2007 actual labor cost incurred for the Division (charged to NARUC account 512) was $161K, a variance of $61K.
40	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIL259K05NENPIZZZZZ201	Matl	214,067	0	(214,067)	-100%	Per review of ALL Kahe station maintenance Material cost, Act. 259, Boiler Plt & Rel Eq- Corrective totaled $1,054k in 2007 compared to $312k in 2009, a decrease of $742k. Less material cost forecast in this area in 2009. Note Kahe, 512030, material 2007 cost was $1,229k in 2007 compared to $690k in 2009, a decrease of $539k.
41	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIL259K06NENPIZZZZZ201	Matl	238,787	0	(238,787)	-100%	Per review of ALL Kahe station maintenance Material cost, Act. 259, Boiler Plt & Rel Eq- Corrective totaled $1,054k in 2007 compared to $312k in 2009, a decrease of $742k. Less material cost forecast in this area in 2009. Note Kahe, 512030, material 2007 cost was $1,229k in 2007 compared to $690k in 2009, a decrease of $539k.
42	Maint	Lab	Maint Boiler & FO Plant - Kahe	512030	PIL259KSTNENPIZZZZZ150	Labor	46,250	896,553	850,303	1838%	Per review of ALL Kahe station maintenance 150ee labor cost, Act. 259, Boiler Plt & Rel Eq- Corrective totaled $602k in 2007 compared to $897k in 2009, an increase of $295k. More labor cost in this area in 2009. Note Kahe, 512030, labor cost in 2007 was $887k in 2007 compared to $1,281k in 2009, an increase of $394k.
43	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIL259KSTNENPIZZZZZ201	Matl	69,906	311,640	241,734	346%	Per review of ALL Kahe station maintenance Material cost, Act. 259, Boiler Plt & Rel Eq- Corrective totaled $1,054k in 2007 compared to $312k in 2009, a decrease of $742k. Less material cost forecast in this area in 2009. Note Kahe, 512030, material 2007 cost was $1,229k in 2007 compared to $690k in 2009, a decrease of $539k.

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44	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIL259KSTNENPIZZZZZ501	O/S	422,707	687,600	264,893	63%	Per review of ALL Kahe station maintenance O/S cost, Act. 259, Boiler Plt and Rel Eq-Corrective totaled $734k in 2007 compared to $1,187k in 2009, an increase of $453k. More O/S cost forecast in this area in 2009. Note Kahe, 512030, O/S 2007 cost was $894k in 2007 compared to $1,543k in 2009, an increase of $649k.
45	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIL259KSTNEP0001271501	O/S	0	499,200	499,200	--	Per review of ALL Kahe station maintenance O/S cost, Act. 259, Boiler Plt and Rel Eq-Corrective totaled $734k in 2007 compared to $1,187k in 2009, an increase of $453k. More O/S cost forecast in this area in 2009. Note Kahe, 512030, O/S 2007 cost was $894k in 2007 compared to $1,543k in 2009, an increase of $649k.
46	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIL269KTFNEP0001269501	O/S	0	328,955	328,955	--	Estimated repair cost in 2009 to allow continued reliable service in compliance with AP1653 standards. Note that total cost budgeted for is $658k of which $329k is budgeted in 2008.
47	Maint	Lab	Maint Boiler & FO Plant - Kahe	512030	PIT257K01NEP0000846150	Labor	356,606	0	(356,606)	-100%	Kahe 1 Overhaul (11/24/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Kahe 1 Overhaul (2009), P0001426 has cost starting in 2009 (refer to line 50). Note that two separate overhauls and that cost is not comparable from 2007 to 2009.
48	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT257K01NEP0000846201	Matl	361,281	0	(361,281)	-100%	Kahe 1 Overhaul (11/24/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Kahe 1 Overhaul (2009), P0001426, has cost starting in 2009 but matching cost for this RA, activity, and expense element do not appear on this report. Note that two separate overhauls and that cost is not comparable from 2007 to 2009.
49	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT257K01NEP0000846501	O/S	404,832	0	(404,832)	-100%	Kahe 1 Overhaul (11/24/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Kahe 1 Overhaul (2009), P0001426 has cost starting in 2009 (refer to line 50). Note that two separate overhauls and that cost is not comparable from 2007 to 2009.
50	Maint	Lab	Maint Boiler & FO Plant - Kahe	512030	PIT257K01NEP0001426150	Labor	0	731,893	731,893	--	Kahe 1 Overhaul (2009) P0001426 has cost starting in 2009. Kahe 1 Overhaul (11/26/06 to 2/22/07), P0000846 has cost in 2006 and 2007 (refer to line 47). Note that two separate overhauls and that cost is not comparable from 2009 to 2007.

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51	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT257K01NEP0001426501	O/S	0	372,000	372,000	--	Kahe 1 Overhaul (2009) P0001426 has cost starting in 2009. Kahe 1 Overhaul (11/26/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Note that two separate overhauls and that cost is not comparable from 2009 to 2007.
52	Maint	Lab	Maint Boiler & FO Plant - Kahe	512030	PIT257K02NEP0001107150	Labor	0	800,791	800,791	--	Kahe 2 Overhaul (postpn'd frm '08 to '09) scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
53	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT257K02NEP0001107501	O/S	0	380,000	380,000	--	Kahe 2 Overhaul (postpn'd frm '08 to '09) scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
54	Maint	Lab	Maint Boiler & FO Plant - Kahe	512030	PIT257K03NEP0001105150	Labor	589,105	0	(589,105)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
55	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT257K03NEP0001105201	Matl	374,926	0	(374,926)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
56	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT257K03NEP0001105501	Matl	284,891	0	(284,891)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
57	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT257K05NEP0001276501	O/S	0	384,000	384,000	--	Kahe 5 Overhaul is scheduled to start in 2008 with some cost budgeted in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
58	Maint	Lab	Maint Boiler & FO Plant - Kahe	512030	PIT257K06NEP0001428150	Labor	0	740,697	740,697	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
59	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT257K06NEP0001428501	O/S	0	377,000	377,000	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
60	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K01NEP0001426201	Matl	0	366,000	366,000	--	Kahe 1 Overhaul (2009) P0001426 has cost starting in 2009. Kahe 1 Overhaul (11/26/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Note that two separate overhauls and that cost is not comparable from 2009 to 2007.
61	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K01NEP0001426501	O/S	0	430,000	430,000	--	Kahe 1 Overhaul (2009) P0001426 has cost starting in 2009. Kahe 1 Overhaul (11/26/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Note that two separate overhauls and that cost is not comparable from 2009 to 2007.
62	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K02NEP0001107201	Matl	0	345,000	345,000	--	Kahe 2 Overhaul (postpn'd frm '08 to '09) scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
63	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K02NEP0001107501	O/S	0	440,000	440,000	--	Kahe 2 Overhaul (postpn'd frm '08 to '09) scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.

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64	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K03NEP0001105201	Matl	680,333	0	(680,333)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
65	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K03NEP0001105501	O/S	322,711	0	(322,711)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
66	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K05NEP0001276501	O/S	0	260,000	260,000	--	Kahe 5 Overhaul is scheduled to start in 2008 with some cost budgeted in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
67	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K06NEP0001428201	Matl	0	434,700	434,700	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
68	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT258K06NEP0001428501	O/S	0	438,000	438,000	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
69	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K01NEP0000846501	O/S	270,479	0	(270,479)	-100%	Kahe 1 Overhaul (11/24/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Kahe 1 Overhaul (2009), P0001426 has cost starting in 2009. Note that two separate overhauls and that cost is not comparable from 2007 to 2009.
70	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K01NEP0001426201	Matl	0	452,500	452,500	--	Kahe 1 Overhaul (2009) P0001426 has cost starting in 2009. Kahe 1 Overhaul (11/26/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Note that two separate overhauls and that cost is not comparable from 2009 to 2007.
71	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K01NEP0001426501	O/S	0	322,000	322,000	--	Kahe 1 Overhaul (2009) P0001426 has cost starting in 2009. Kahe 1 Overhaul (11/26/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Note that two separate overhauls and that cost is not comparable from 2009 to 2007.
72	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K02NEP0001107201	Matl	0	360,000	360,000	--	Kahe 2 Overhaul (postpn'd frm '08 to '09) scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
73	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K02NEP0001107501	O/S	0	334,000	334,000	--	Kahe 2 Overhaul (postpn'd frm '08 to '09) scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
74	Maint	Lab	Maint Boiler & FO Plant - Kahe	512030	PIT259K03NEP0001105150	Labor	266,812	0	(266,812)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
75	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K03NEP0001105201	Matl	290,408	0	(290,408)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
76	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K03NEP0001105501	O/S	446,429	0	(446,429)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.

Hawaiian Electric Company, Inc.
2009 Test Year

	A	B	C	D	E	F	G	H	I	J	K
1				**HAWAIIAN ELECTRIC COMPANY, INC.**							
2				**2009 TEST YEAR - PRODUCTION VARIANCES 2007 VS. 2009**							
3											
4	**Ops/ Maint**	**Lab/ NL**	**Projects**	**NARUC**	**Code**	**Type**	**2007**	**2009**	**Inc/(Dec)**	**%Inc /Dec**	**Comments**
77	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K05NEP0001276501	O/S	0	208,000	208,000	--	Kahe 5 Overhaul is scheduled to start in 2008 with some cost budgeted in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
78	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K06NEP0001428201	Matl	0	313,250	313,250	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
79	Maint	NL	Maint Boiler & FO Plant - Kahe	512030	PIT259K06NEP0001428501	O/S	0	318,000	318,000	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
80	Maint	Lab	Maint Electric Plant - Waiau	513020	PIT260W06NEP0001425150	Labor	0	243,595	243,595	--	Waiau 6 Overhaul scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2007 to 2009.
81	Maint	NL	Maint Electric Plant - Waiau	513020	PIT260W07NEP0001106201	Matl	227,594	0	(227,594)	-100%	Waiau 7 Overhaul scheduled in 2007 (3/25/07 to 6/20/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
82	Maint	NL	Maint Electric Plant - Waiau	513020	PIT260W07NEP0001106501	O/S	829,137	0	(829,137)	-100%	Waiau 7 Overhaul scheduled in 2007 (3/25/07 to 6/20/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
83	Maint	NL	Maint Electric Plant - Waiau	513020	PIT261W06NEP0001425501	O/S	0	230,700	230,700	--	Waiau 6 Overhaul scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2007 to 2009.
84	Maint	NL	Maint Electric Plant - Waiau	513020	PIT261W07NEP0001106501	O/S	391,866	0	(391,866)	-100%	Waiau 7 Overhaul scheduled in 2007 (3/25/07 to 6/20/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
85	Maint	NL	Maint Electric Plant - Waiau	513020	PIT262W07NEP0001106501	O/S	382,241	0	(382,241)	-100%	Waiau 7 Overhaul scheduled in 2007 (3/25/07 to 6/20/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
86	Maint	NL	Maint Electric Plant - Waiau	513020	PIX260WSTNENPIZZZZZ501	O/S	15,583	268,500	252,917	1623%	Per review of ALL Waiau station maintenance O/S cost, Act. 260, Maint Stm TurboGen & Rel Eq-Preventive totaled $16k in 2007 compared to $269k in 2009, which is as shown, an increase of $253k. More O/S cost forecast in this area in 2009. Note Waiau, 513020, O/S 2007 cost was $369k in 2007 compared to $305k in 2009, a decrease of $64k.
87	Maint	NL	Maint Electric Plant - Waiau	513020	PIX260WSTNEP0001271201	Matl	0	240,000	240,000	--	Per review of ALL Waiau station maintenance Material cost, Act. 260, Maint Stm TurboGen & Rel Eq- Preventive totaled $107k in 2007 compared to $295k in 2009, an increase of $188k. More material cost forecast in this area in 2009. Note Waiau, 513020, material 2007 cost was $470k in 2007 compared to $580k in 2009, an increase of $110k.

Hawaiian Electric Company, Inc.
2009 Test Year

	A	B	C	D	E	F	G	H	I	J	K
1				**HAWAIIAN ELECTRIC COMPANY, INC.**							
2				**2009 TEST YEAR - PRODUCTION VARIANCES 2007 VS. 2009**							
3											
4	**Ops/ Maint**	**Lab/ NL**	**Projects**	**NARUC**	**Code**	**Type**	**2007**	**2009**	**Inc/(Dec)**	**%Inc /Dec**	**Comments**
88	Maint	Lab	Maint Electric Plant - Waiau	513020	PIX262WSTNENPIZZZZZ150	Labor	7,007	524,899	517,892	7391%	Per review of ALL Waiau station maintenance 150ee labor cost, Act. 262, Maint Stm TurboGen & Rel Eq-Corrective totaled $256k in 2007 compared to $525k in 2009, an increase of $269k. More labor cost in this area in 2009. Note Waiau, 513020, labor cost in 2007 was $370k in 2007 compared to $688k in 2009, an increase of $318.
89	Maint	NL	Maint Electric Plant - Kahe	513030	PIL260KSTNENPIZZZZZ501	O/S	350	231,000	230,650	65900%	Per review of ALL Kahe station maintenance O/S cost, Act. 260, Maint Stm TurboGen & Rel Eq-Preventive totaled $.4k in 2007 compared to $621k in 2009, an increase of $621k. More O/S cost forecast in this area in 2009 when compared to 2007. Note Kahe, 513030, O/S 2007 cost was $559k in 2007 compared to $1,137k in 2009, an increase of $578.
90	Maint	NL	Maint Electric Plant - Kahe	513030	PIL260KSTNEP0001271501	O/S	0	390,000	390,000	--	Per review of ALL Kahe station maintenance O/S cost, Act. 260, Maint Stm TurboGen & Rel Eq-Preventive totaled $.4k in 2007 compared to $621k in 2009, an increase of $621k. More O/S cost forecast in this area in 2009 when compared to 2007. Note Kahe, 513030, O/S 2007 cost was $559k in 2007 compared to $1,137k in 2009, an increase of $578.
91	Maint	Lab	Maint Electric Plant - Kahe	513030	PIL262KSTNENPIZZZZZ150	Labor	28,385	697,343	668,958	2357%	Per review of ALL Kahe station maintenance 150ee labor cost, Act. 262, Maint Stm TurboGen & Rel Eq-Corrective totaled $472k in 2007 compared to $697k in 2009, an increase of $225k. More labor cost forecast in this area in 2009. Note Kahe, 513030, labor cost in 2007 was $675k in 2007 compared to $996k in 2009, an increase of $321k.
92	Maint	NL	Maint Electric Plant - Kahe	513030	PIL262KSTNENPIZZZZZ201	Matl	7,892	216,000	208,108	2637%	Per review of ALL Kahe station maintenance Material cost, Act. 262, Maint Stm TurboGen & Rel Eq- Corrective totaled $562k in 2007 compared to $216k in 2009, an decrease of $346k. Less material cost forecast in this area in 2009. Note Kahe, 513030, material 2007 cost was $798k in 2007 compared to $512k in 2009, a decrease of $286k.
93	Maint	NL	Maint Electric Plant - Kahe	513030	PIL262KSTNEP0001271501	O/S	0	300,000	300,000	--	Per review of ALL Kahe station maintenance O/S cost, Act. 262, Maint Stm TurboGen & Rel Eq-Corrective totaled $517k in 2007 compared to $516k in 2009, a decrease of only $1k. Note Kahe, 513030, O/S 2007 cost was $558k in 2007 compared to $1,137k in 2009, an increase of $579k.

Hawaiian Electric Company, Inc.
2009 Test Year

	A	B	C	D	E	F	G	H	I	J	K
1				**HAWAIIAN ELECTRIC COMPANY, INC.**							
2				**2009 TEST YEAR - PRODUCTION VARIANCES 2007 VS. 2009**							
3											
4	**Ops/ Maint**	**Lab/ NL**	**Projects**	**NARUC**	**Code**	**Type**	**2007**	**2009**	**Inc/(Dec)**	**%Inc /Dec**	**Comments**
94	Maint	NL	Maint Electric Plant - Kahe	513030	PIT260K01NEP0000846201	Matl	239,940	0	(239,940)	-100%	Kahe 1 Overhaul (11/24/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Kahe 1 Overhaul (2009), P0001426 has cost starting in 2009. Note that two separate overhauls and that cost is not comparable from 2007 to 2009.
95	Maint	NL	Maint Electric Plant - Kahe	513030	PIT260K01NEP0000846501	O/S	541,919	0	(541,919)	-100%	Kahe 1 Overhaul (11/24/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Kahe 1 Overhaul (2009), P0001426 has cost starting in 2009 (refer to line 96). Note that two separate overhauls and that cost is not comparable from 2007 to 2009.
96	Maint	Lab	Maint Electric Plant - Kahe	513030	PIT260K01NEP0001426150	Labor	0	488,594	488,594	--	Kahe 1 Overhaul (2009) P0001426 has cost starting in 2009. Kahe 1 Overhaul (11/26/06 to 2/22/07), P0000846 has cost in 2006 and 2007 (refer to line 95). Note that two separate overhauls and that cost is not comparable from 2009 to 2007.
97	Maint	Lab	Maint Electric Plant - Kahe	513030	PIT260K02NEP0001107150	Labor	0	577,995	577,995	--	Kahe 2 Overhaul (postpn'd frm '08 to '09) scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
98	Maint	Lab	Maint Electric Plant - Kahe	513030	PIT260K03NEP0001105150	Labor	251,903	0	(251,903)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
99	Maint	NL	Maint Electric Plant - Kahe	513030	PIT260K03NEP0001105201	Matl	299,181	0	(299,181)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
100	Maint	NL	Maint Electric Plant - Kahe	513030	PIT260K03NEP0001105501	O/S	641,949	0	(641,949)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.
101	Maint	Lab	Maint Electric Plant - Kahe	513030	PIT260K06NEP0001428150	Labor	0	578,841	578,841	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
102	Maint	NL	Maint Electric Plant - Kahe	513030	PIT260K06NEP0001428501	O/S	0	249,000	249,000	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
103	Maint	NL	Maint Electric Plant - Kahe	513030	PIT261K01NEP0001426501	O/S	0	369,000	369,000	--	Kahe 1 Overhaul (2009) P0001426 has cost starting in 2009. Kahe 1 Overhaul (11/26/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Note that two separate overhauls and that cost is not comparable from 2009 to 2007.
104	Maint	NL	Maint Electric Plant - Kahe	513030	PIT261K02NEP0001107501	O/S	0	431,000	431,000	--	Kahe 2 Overhaul (postpn'd frm '08 to '09) scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
105	Maint	NL	Maint Electric Plant - Kahe	513030	PIT261K03NEP0001105501	O/S	301,125	0	(301,125)	-100%	Kahe 3 Overhaul scheduled in 2007 (6/25/07 to 9/19/07). No overhaul scheduled in 2009 for this unit. Cost is not comparable from 2007 to 2009.

Hawaiian Electric Company, Inc.
2009 Test Year

	A	B	C	D	E	F	G	H	I	J	K
1				**HAWAIIAN ELECTRIC COMPANY, INC.**							
2				**2009 TEST YEAR - PRODUCTION VARIANCES 2007 VS. 2009**							
3											
4	**Ops/ Maint**	**Lab/ NL**	**Projects**	**NARUC**	**Code**	**Type**	**2007**	**2009**	**Inc/(Dec)**	**%Inc /Dec**	**Comments**
106	Maint	NL	Maint Electric Plant - Kahe	513030	PIT261K06NEP0001428501	O/S	0	709,000	709,000	--	Kahe 6 Overhaul is scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
107	Maint	NL	Maint Electric Plant - Kahe	513030	PIT262K01NEP0000846501	O/S	422,432	0	(422,432)	-100%	Kahe 1 Overhaul (11/24/06 to 2/22/07), P0000846 has cost in 2006 and 2007. Kahe 1 Overhaul (2009), P0001426 has cost starting in 2009 but matching cost for this RA, activity, and expense element do not appear on this report. Note that two separate overhauls and that cost is not comparable from 2007 to 2009.
108	Maint	Lab	Maint Misc Steam Plant - Waiau	514020	PIP256WSTNENPIZZZZZ150	Labor	155,488	380,758	225,270	145%	The increase is primarily due to the addition of 5 staff in the Planning Division. The staff added are 3-O&M Engineers, 1-PDM Specialist and 1-MBO Coordinator.
109	Maint	Lab	Maint Misc Steam Plant - Kahe	514030	PIP256KSTNENPIZZZZZ150	Labor	202,060	415,781	213,721	106%	The increase is primarily due to the addition of 5 staff in the Planning Division. The staff added are 3-O&M Engineers, 1-PDM Specialist and 1-MBO Coordinator.
110	Maint	NL	Maint Elec Plant - Oth Prod	553	PIM277PDGNENPIZZZZZ501	O/S	436,286	0	(436,286)	-100%	2007 one time cost for distributed generation oil spill clean-up. Similar cost not budgeted for in 2009.
111	Maint	Lab	Maint Elec Plant - Oth Prod	553	PIT272W10NEP0001274150	Labor	0	825,372	825,372	--	Waiau 10 Overhaul scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
112	Maint	NL	Maint Elec Plant - Oth Prod	553	PIT273W10NEP0001274201	Matl	0	215,000	215,000	--	Waiau 10 Overhaul scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.
113	Maint	NL	Maint Elec Plant - Oth Prod	553	PIT274W10NEP0001274501	O/S	0	667,000	667,000	--	Waiau 10 Overhaul scheduled in 2009. No overhaul in 2007 for this unit. Cost is not comparable from 2009 to 2007.

Hawaii Electric Company, Inc.

POWER SUPPLY MATERIAL INVENTORY
($)

Beginning of Year 2009 I	8,561,752
+ Additions to Inventory	7,583,940
- Deductions to Inventory	7,089,112
End of Year 2009 Inventc	9,056,579

	RECORDED								PLAN		TEST YR.		
	2004	delta %	2005	delta %	2006	delta %	2007	delta %	2008	estimate delta %	FCST 2009	2004-2008 avg delta	FCST 2004-2009 avg delta
Year-End Value	5,488,941	12.3%	6,165,365	11.1%	6,849,128	20.7%	8,267,514	3.6%	8,561,752	5.8%	9,056,579	11.9%	10.7%
Average	5,336,052	11.8%	5,967,972	6.3%	6,346,579	15.6%	7,336,132	14.7%	8,414,633	4.7%	8,809,166	12.1%	10.6%
Total Issues	3,937,500	13.9%	4,483,024	0.5%	4,505,534	13.1%	5,096,281	23.4%	6,289,193	12.7%	7,089,112	12.7%	15.8%
Receipts	4,472,700	9.8%	4,912,812	4.0%	5,107,906	28.3%	6,551,850	0.5%	6,583,431	15.2%	7,583,940	10.6%	11.6%
Receipts-Issues	535,200		429,788		602,372		1,455,569		294,238		494,827		
% delta	13.6%		9.6%		13.4%		28.6%		4.7%		7.0%	14.0%	12.8%

PS receipts

	2004			2005			2006			2007			avg 04-07		avg 05-07	
	receipts	% of total	cum %	receipts	% of total	cum %	receipts	% of total	cum %	receipts	% of total	cum %	%	cum %	%	cum %
JAN	411,770	9%	9%	410,871	8%	8%	326,058	6%	6%	470,486	7%	7%	8%	8%	7%	7%
FEB	335,822	8%	17%	336,121	7%	15%	372,266	7%	14%	501,315	8%	15%	7%	15%	7%	15%
MAR	439,796	10%	27%	562,422	11%	27%	319,167	6%	20%	536,200	8%	23%	9%	24%	9%	23%
APR	358,225	8%	35%	402,026	8%	35%	326,793	6%	26%	631,041	10%	33%	8%	32%	8%	31%
MAY	334,988	7%	42%	355,183	7%	42%	505,595	10%	36%	531,266	8%	41%	8%	40%	8%	40%
JUN	322,199	7%	49%	539,297	11%	53%	460,748	9%	45%	520,600	8%	49%	9%	49%	9%	49%
JUL	293,183	7%	56%	521,590	11%	64%	471,464	9%	54%	334,354	5%	54%	8%	57%	8%	57%
AUG	381,888	9%	64%	338,694	7%	71%	501,806	10%	64%	872,154	13%	67%	10%	67%	10%	67%
SEP	482,216	11%	75%	379,953	8%	78%	377,191	7%	72%	532,149	8%	75%	9%	75%	8%	75%
OCT	476,714	11%	86%	376,598	8%	86%	532,870	10%	82%	560,663	9%	84%	9%	84%	9%	84%
NOV	399,320	9%	95%	416,272	8%	94%	597,738	12%	94%	440,339	7%	91%	9%	93%	9%	93%
DEC	236,574	5%	100%	273,787	6%	100%	316,210	6%	100%	621,283	9%	100%	7%	100%	7%	100%
TOTAL	4,472,695	100%		4,912,814	100%		5,107,906	100%		6,551,850	100%					
2008	receipts	CUM receipts														
JAN	600,642	600,642					Average 2007 Receipts =			545,988						
FEB	490,385	1,091,027														
MAR	374,907	1,465,934														
APR	426,759	1,892,693														
MAY	410,098	2,302,791														
JUN																
JUL																
AUG																
SEP																
OCT																
NOV																
DEC																

PS issues

	2004			2005			2006			2007			avg 04-07		avg 05-07	
	issues	% of total	cum %	issues	% of total	cum %	issues	% of total	cum %	issues	% of total	cum %	%	cum %	%	cum %
JAN	239,529	6%	6%	525,893	12%	12%	339,749	8%	8%	559,135	11%	11%	9%	9%	10%	10%
FEB	303,434	8%	14%	211,334	5%	16%	197,356	4%	12%	279,950	5%	16%	6%	15%	5%	15%
MAR	137,867	4%	17%	290,218	6%	23%	414,054	9%	21%	483,257	9%	26%	7%	22%	8%	23%
APR	279,679	7%	24%	383,291	9%	31%	371,960	8%	29%	395,017	8%	34%	8%	30%	8%	32%
MAY	190,881	5%	29%	365,814	8%	40%	517,105	11%	41%	656,677	13%	47%	9%	39%	11%	42%
JUN	338,010	9%	38%	278,462	6%	46%	450,663	10%	51%	459,359	9%	56%	8%	48%	8%	51%
JUL	571,393	15%	52%	440,942	10%	56%	389,466	9%	59%	581,329	11%	67%	11%	59%	10%	61%
AUG	391,279	10%	62%	292,845	7%	62%	407,550	9%	69%	517,722	10%	77%	9%	68%	9%	69%
SEP	259,346	7%	69%	709,816	16%	78%	502,924	11%	80%	346,914	7%	84%	10%	78%	11%	81%
OCT	303,067	8%	77%	342,794	8%	86%	451,255	10%	90%	288,129	6%	90%	8%	85%	8%	88%
NOV	611,643	16%	92%	439,850	10%	95%	222,861	5%	95%	297,752	6%	95%	9%	94%	7%	95%
DEC	311,371	8%	100%	201,765	5%	100%	240,591	5%	100%	231,040	5%	100%	6%	100%	5%	100%
TOTAL	3,937,499	100%		4,483,024	100%		4,505,534	100%		5,096,281	100%					
2008	issues	CUM issues														
JAN	642,479	642,479														
FEB	491,294	1,133,773														
MAR	371,803	1,505,576														
APR	429,855	1,935,431														
MAY	512,162	2,447,593		average issues January to May =				489,519								
JUN																
JUL																
AUG																
SEP																
OCT																
NOV																
DEC																

2008 Power Supply Inventory Calculations

1	2007 year-end value = 2008 starting inventory value	$	8,267,514
2	2008 projected issues are based on actual issues from January to May 2008 of $490K per month plus projected price increases.		
	issues from January to May 2008	$	2,447,593
	projected issues for June to December 2008 ($490K X 7)		3,430,000
	estimated price increase, including freight = 12%	$	411,600
	2008 projected issues	$	6,289,193
3	2008 projected receipts are based on actual receipts from January to May 2008 and the historical average 2007 receipts of $546K per month plus projected price increases		
	receipts from January to May 2008	$	2,302,791
	projected issues for June to December 2008 ($546K X 7)	$	3,822,000
	estimated price increase, including freight = 12%	$	458,640
	2008 projected receipts	$	6,583,431
4	2008 Production Material Inventory calculations:		
	2007 year-end value	$	8,267,514
	+ projected receipts	$	6,583,431
	- projected issues	$	6,289,193
	2008 projected year-end inventory	$	8,561,752
5	The average inventory value based on the average of the starting and ending inventory		
	2008 starting inventory	$	8,267,514
	2008 ending inventory	$	8,561,752
	2008 average inventory	$	8,414,633

2009 Power Supply Inventory Calculations

1	2008 year-end value = 2009 TY starting inventory value	$	8,561,752
2	2009 projected issues are calculated at an increase of 12.7% from 2008, which is equal to the average increase in issues for 4 prior years.		
	2008 Issues	$	6,289,193
	average increase in issues		12.7%
	2009 projected issues	$	7,089,112
3	Receipts to 2009 are expected to 10.6% more than receipts from 2008, which is the average from 2004-2008, plus estimated additions of new items to inventory.		
	2008 Receipts	$	6,583,431
	average increase in receipts		10.6%
	2009 calculated Receipts	$	7,283,940
	+ additional new items added to PS catalog	$	300,000
	2009 projected receipts	$	7,583,940
4	2009 TY Production Materials Inventory calculations:		
	2008 year-end value	$	8,561,752
	+ projected receipts	$	7,583,940
	- projected issues	$	7,089,112
	projected 2009 TY year-end value	$	9,056,579
5	The average inventory value based on the average of the starting and ending inventory		
	2009 starting inventory	$	8,561,752
	2009 ending inventory	$	9,056,579
	2009 average inventory	$	8,809,166

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Gen. Unit: H8

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	8551	8277	8675	8586	3126	8616	7971	7515	8708
Equiv. Derated Hrs.(MWH)	2447	749	213	34490	2471	0	59464	0	533
MW Rating	58	58	58	58	58	58	58	58	58
Net Generation (MWH)	94670	86344	84060	75175	12306	41816	20287	22816	44379
Service Hours	3853	3525	3383	3114	564	1759	895	1030	1769
Forced Outage Hrs. U1,U2,U3,SF (MWH)	4623	6510	3123	10912	2036	3836	6048	4652	3006
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	0	0	213	34490	2471	0	0	0	533
Availability Factor	97.6	94.5	99.0	97.7	35.7	98.4	91.0	85.6	99.4
Equiv. Avail. Factor	97.1	94.3	99.0	91.0	35.2	98.4	79.3	85.6	99.3
Capacity Factor	18.6	17.0	16.5	14.8	2.4	8.2	4.0	4.5	8.7
Output Factor	42.4	42.2	42.8	41.6	37.6	41.0	39.1	38.2	43.3
Equiv. Forced Outage Rate (EFOR)	2.0	3.1	1.7	23.7	13.0	3.6	10.4	7.2	3.4

Gen. Unit: H9

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	6120	6397	8084	8757	6392	7724	8368	8536	8345
Equiv. Derated Hrs.(MWH)	15489	22458	16413	1161	19840	334	117	514	0
MW Rating	57	57	57	57	57	57	57	57	57
Net Generation (MWH)	79230	61448	109021	112332	60505	67748	55662	47161	56352
Service Hours	3068	2525	4324	4634	2486	2693	2362	2027	2283
Forced Outage Hrs. U1,U2,U3,SF (MWH)	43216	19757	14948	1416	10578	4704	4106	1141	6242
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	12012	22458	16413	1161	19840	213	117	514	0
Availability Factor	69.9	73.0	92.3	99.7	73.0	88.2	95.5	97.2	95.3
Equiv. Avail. Factor	66.8	68.5	89.0	99.5	69.0	88.1	95.5	97.1	95.3
Capacity Factor	15.9	12.3	21.8	22.4	12.1	13.6	11.1	9.4	11.3
Output Factor	45.3	42.7	44.2	42.5	42.7	44.1	41.3	40.8	43.3
Equiv. Forced Outage Rate (EFOR)	25.3	25.8	12.0	1.0	20.0	3.1	3.0	1.4	4.6

Gen. Unit: W3

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	7301	5427	6592	4580	8081	8484	8647	8529	7902
Equiv. Derated Hrs.(MWH)	23147	34352	47947	24600	10377	23	0	0	311
MW Rating	49	49	49	49	49	49	49	49	49
Net Generation (MWH)	126583	67565	145414	50667	47195	35452	23118	57102	40196
Service Hours	4476	2831	5147	2199	2205	1693	1170	2466	1786
Forced Outage Hrs. U1,U2,U3,SF (MWH)	24783	1214	106221	5600	1610	5799	1115	2525	2461
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	23117	32392	45176	22339	10377	0	0	0	311
Availability Factor	83.3	62.0	75.3	52.1	92.2	96.8	98.7	97.1	90.2
Equiv. Avail. Factor	78.0	53.9	64.1	46.4	89.8	96.8	98.7	97.1	90.1
Capacity Factor	29.5	15.7	33.9	11.8	11.0	8.3	5.4	13.3	9.4
Output Factor	57.7	48.7	57.7	47.0	43.7	42.7	40.3	47.3	45.9
Equiv. Forced Outage Rate (EFOR)	19.6	24.0	42.2	24.6	10.9	6.5	1.9	2.0	3.1

Gen. Unit: W4

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	8244	6389	8572	7897	8135	8543	7494	8674	7710
Equiv. Derated Hrs.(MWH)	8040	30674	3325	200	0	0	3013	0	108
MW Rating	49	49	49	49	49	49	49	49	49
Net Generation (MWH)	100559	58100	109584	96949	65255	66504	20089	50421	49341
Service Hours	4352	2541	4582	4309	2923	2914	1009	2301	2309
Forced Outage Hrs. U1,U2,U3,SF (MWH)	9571	4438	8323	32553	5026	7623	5064	3487	5237
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	8040	30674	3325	200	0	0	3013	0	108
Availability Factor	94.1	72.9	97.9	89.9	92.9	97.5	85.5	98.7	88.0
Equiv. Avail. Factor	92.2	65.8	97.1	89.9	92.9	97.5	84.8	98.7	88.0
Capacity Factor	23.4	13.5	25.5	22.5	15.2	15.5	4.7	11.7	11.5
Output Factor	47.2	46.7	48.8	45.9	45.6	46.6	40.6	44.7	43.6
Equiv. Forced Outage Rate (EFOR)	7.9	27.2	5.0	13.4	3.4	5.1	14.8	3.0	4.5

Gen. Unit: W5

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	8557	8448	8440	8021	6488	5973	8520	8566	7443
Equiv. Derated Hrs.(MWH)	17266	4938	1576	2662	92	3280	171	695	46
MW Rating	57	57	57	57	57	57	57	57	57
Net Generation (MWH)	147876	135909	150296	138634	96980	77755	83794	89226	77877
Service Hours	5849	5605	6027	5817	4206	3556	3794	4049	3428
Forced Outage Hrs. U1,U2,U3,SF (MWH)	4518	675	2344	870	10150	3813	1563	8617	4234
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	10017	4702	1149	2446	92	723	171	69	46
Availability Factor	97.7	96.4	96.3	91.3	74.1	68.2	97.3	97.5	85.0
Equiv. Avail. Factor	94.2	95.4	96.0	90.8	74.0	67.5	97.2	97.4	85.0
Capacity Factor	29.6	27.2	30.1	27.7	19.4	15.6	16.8	17.8	15.6
Output Factor	44.4	42.5	43.7	41.8	40.5	38.4	38.7	38.7	39.9
Equiv. Forced Outage Rate (EFOR)	4.3	1.7	1.0	1.0	4.1	2.2	0.8	3.6	2.1

Gen. Unit: W6

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	7958	8198	6437	8282	8540	8339	7041	8571	7957
Equiv. Derated Hrs.(MWH)	38440	17168	8876	636	0	424	258	80	5688
MW Rating	55	55	55	55	55	55	55	55	55
Net Generation (MWH)	126616	110484	124352	166936	119157	141347	92481	111568	98914
Service Hours	5121	4460	4847	6255	4855	5175	3773	4734	4047
Forced Outage Hrs. U1,U2,U3,SF (MWH)	18588	6001	2735	605	7614	1391	8230	6040	6709
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	14912	17168	4253	494	0	424	258	0	5688
Availability Factor	90.8	93.6	73.5	94.3	97.5	95.2	80.4	97.6	90.8
Equiv. Avail. Factor	82.9	90.0	71.6	94.2	97.5	95.1	80.3	97.6	89.7
Capacity Factor	26.3	22.9	25.8	34.6	24.7	29.3	19.2	23.1	20.5
Output Factor	45.0	45.0	46.6	48.5	44.6	49.7	44.6	42.8	44.4
Equiv. Forced Outage Rate (EFOR)	11.2	9.2	2.6	0.3	2.8	0.6	3.9	2.3	5.4

Gen. Unit: W7

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	6482	8228	8197	8371	7477	8436	8550	6730	8301
Equiv. Derated Hrs.(MWH)	22093	2439	1113	1006	1457	15552	11764	1490	12231
MW Rating	87	87	87	87	87	87	87	87	87
Net Generation (MWH)	381616	480764	422927	454539	417858	532097	501658	362399	460748
Service Hours	6553	8229	8197	8377	7458	8346	8525	6725	8284
Forced Outage Hrs. U1,U2,U3,SF (MWH)	7662	6821	3064	8126	3941	4150	10408	2870	174
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	16347	1315	977	1006	772	9236	1366	958	8346
Availability Factor	74.0	93.9	93.6	95.3	85.4	96.3	97.6	76.6	94.8
Equiv. Avail. Factor	71.1	93.6	93.4	95.2	85.2	94.3	96.1	76.4	93.2
Capacity Factor	50.1	63.1	55.5	59.5	54.8	69.8	65.8	47.4	60.5
Output Factor	66.9	67.2	59.3	62.4	64.4	73.3	67.6	61.9	63.9
Equiv. Forced Outage Rate (EFOR)	4.2	1.1	0.6	1.2	0.7	1.8	1.6	0.7	1.2

Gen Unit: W8

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	8203	7266	6513	6470	8628	8356	8420	6730	7811
Equiv. Derated Hrs.(MWH)	22766	33790	4851	18134	567	369	9157	15290	4113
MW Rating	90	90	90	90	90	90	90	90	90
Net Generation (MWH)	447153	441258	339797	331975	440762	453605	466635	394390	447188
Service Hours	8262	7159	6554	6465	8622	8355	8417	6725	7811
Forced Outage Hrs. U1,U2,U3,SF (MWH)	7441	105557	176540	29857	0	684	3264	18910	10343
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	21759	33132	3537	17395	0	369	8336	14307	3618
Availability Factor	93.6	82.9	74.3	73.7	98.5	95.4	96.1	76.6	89.2
Equiv. Avail. Factor	90.8	78.7	73.7	71.4	98.4	95.3	95.0	74.7	88.6
Capacity Factor	56.7	56.0	43.1	42.0	55.9	57.5	59.2	49.9	56.7
Output Factor	60.1	68.5	57.6	57.1	56.8	60.3	61.6	65.2	63.6
Equiv. Forced Outage Rate (EFOR)	3.9	18.5	23.5	7.7	0.0	0.1	1.5	5.3	2.0

Gen. Unit: W9

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	8577	8516	6030	6489	8691	8202	8058	8169	8182
Equiv. Derated Hrs.(MWH)	0	0	0	0	0	0	0	0	0
MW Rating	53	53	53	53	53	53	53	53	53
Net Generation (MWH)	7552	11203	17069	17872	10867	6892	2100	1561	1073
Service Hours	1118	802	1096	1163	708	444	193	192	200
Forced Outage Hrs. U1,U2,U3,SF (MWH)	7861	7210	130232	105978	2769	23417	436	19523	11823
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	0	0	0	0	0	0	0	0	0
Availability Factor	97.9	97.2	68.8	73.9	99.2	93.6	92.0	93.0	93.4
Equiv. Avail. Factor	97.9	97.2	68.8	73.9	99.2	93.6	92.0	93.0	93.4
Capacity Factor	1.6	2.4	3.7	3.8	2.3	1.5	0.5	0.3	0.2
Output Factor	12.7	26.4	29.4	29.0	29.0	29.3	20.5	15.3	10.1
Equiv. Forced Outage Rate (EFOR)	11.7	14.5	69.2	63.2	6.9	49.9	4.1	65.7	52.7

Gen. Unit: W10

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	8531	6441	8617	8445	8510	8659	8353	8552	8291
Equiv. Derated Hrs.(MWH)	0	458	0	0	0	0	0	0	0
MW Rating	50	50	50	50	50	50	50	50	50
Net Generation (MWH)	4747	5549	15255	18947	6173	2862	2327	2317	1926
Service Hours	765	405	992	1233	378	152	231	251	309
Forced Outage Hrs. U1,U2,U3,SF (MWH)	3133	6571	3944	2821	10633	1197	608	1938	8707
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	0	458	0	0	0	0	0	0	0
Availability Factor	97.4	73.5	98.4	96.1	97.1	98.8	95.4	97.4	94.6
Equiv. Avail. Factor	97.4	73.4	98.4	96.1	97.1	98.8	95.4	97.4	94.6
Capacity Factor	1.1	1.3	3.5	4.3	1.4	0.7	0.5	0.5	0.4
Output Factor	12.4	27.4	30.8	30.7	32.7	37.7	20.1	18.5	12.5
Equiv. Forced Outage Rate (EFOR)	7.6	26.2	7.4	4.4	36.0	13.6	5.0	13.4	36.0

Gen. Unit: K1

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	7150	7872	8329	8480	8490	7391	8665	8585	7066
Equiv. Derated Hrs.(MWH)	3242	11022	27387	13375	3755	13235	3946	9375	19159
MW Rating	86	86	86	86	86	86	86	86	86
Net Generation (MWH)	415819	385899	444650	503427	455206	394187	445118	471463	363304
Service Hours	7172	7872	8329	8472	8488	7427	8641	8559	7066
Forced Outage Hrs. U1,U2,U3,SF (MWH)	854	1830	13518	10449	7015	4244	1797	304	2652
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	1382	9227	26020	8608	1544	10729	3599	8774	19042
Availability Factor	81.6	89.9	95.1	96.5	96.9	84.4	98.9	97.7	80.7
Equiv. Avail. Factor	81.2	88.4	91.4	94.8	96.4	82.6	98.4	96.5	78.1
Capacity Factor	55.2	51.2	59.0	66.6	60.4	52.3	59.1	62.4	48.2
Output Factor	67.4	57.0	62.1	69.1	62.4	61.7	59.9	64.1	59.8
Equiv. Forced Outage Rate (EFOR)	0.4	1.6	5.4	2.6	1.2	2.3	0.7	1.2	3.6

Gen. Unit: K2

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	7897	8402	6486	8639	8723	8760	7372	8657	8682
Equiv. Derated Hrs.(MWH)	30702	1913	9768	11849	20316	7974	18594	2209	3872
MW Rating	86	86	86	86	86	86	86	86	86
Net Generation (MWH)	389714	456803	340740	499260	448466	493333	372825	488923	573890
Service Hours	7928	8348	6488	8650	8723	8760	7324	8657	8682
Forced Outage Hrs. U1,U2,U3,SF (MWH)	28356	5518	6443	12477	189	0	1819	10901	6682
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	24774	1306	4916	9421	16478	7358	17820	1769	3717
Availability Factor	90.1	95.9	74.0	98.3	99.6	100.0	84.2	98.6	99.1
Equiv. Avail. Factor	86.1	95.7	72.7	96.8	96.9	98.9	81.7	98.3	98.6
Capacity Factor	51.7	60.6	45.2	66.1	59.5	65.5	49.5	64.7	76.2
Output Factor	57.2	63.6	61.1	67.1	59.8	65.5	59.2	65.7	76.9
Equiv. Forced Outage Rate (EFOR)	7.5	0.9	2.0	2.9	2.2	1.0	3.1	1.7	1.4

Gen. Unit: K3

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	6641	8351	8319	8755	8064	8681	6871	8643	8716
Equiv. Derated Hrs.(MWH)	34496	14213	59514	76195	32597	429	13924	432	5256
MW Rating	90	90	90	90	90	90	90	90	90
Net Generation (MWH)	391486	494424	480299	538866	462270	539293	395969	520830	513666
Service Hours	6637	8351	7932	8765	8057	8682	6847	8618	8716
Forced Outage Hrs. U1,U2,U3,SF (MWH)	3508	2549	0	452	833	360	11068	2180	0
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	33573	13655	59182	68846	24331	392	13428	82	5210
Availability Factor	75.8	95.3	95.0	99.7	92.1	99.1	78.4	98.4	99.5
Equiv. Avail. Factor	71.4	93.5	87.4	90.0	87.9	99.0	76.7	98.3	98.8
Capacity Factor	49.7	62.7	60.9	68.2	58.6	68.4	50.2	65.9	65.2
Output Factor	65.5	65.8	67.3	68.3	63.7	69.0	64.3	67.2	65.5
Equiv. Forced Outage Rate (EFOR)	6.2	2.1	8.3	8.8	3.5	0.1	3.9	0.3	0.7

Gen. Unit: K4

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	7962	7023	8323	8019	7771	8065	8694	7450	6388
Equiv. Derated Hrs.(MWH)	30508	7182	2050	2955	10161	26068	12679	886	1697
MW Rating	89	89	89	89	89	89	89	89	89
Net Generation (MWH)	519422	422032	544808	546319	496767	511145	572751	499996	427233
Service Hours	8051	7030	8709	8095	7785	8065	8680	7475	6430
Forced Outage Hrs. U1,U2,U3,SF (MWH)	19697	5300	38862	8225	3782	0	361	39604	55551
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	24885	3438	909	1988	5293	25587	6307	803	1477
Availability Factor	90.9	80.2	95.0	91.3	88.7	92.1	99.2	84.8	72.9
Equiv. Avail. Factor	87.0	79.3	94.7	90.9	87.4	88.7	97.6	84.7	72.7
Capacity Factor	66.6	54.1	69.9	69.9	63.7	65.6	73.5	64.0	54.8
Output Factor	72.5	67.5	70.3	75.8	71.7	71.2	74.1	75.2	74.7
Equiv. Forced Outage Rate (EFOR)	6.1	1.4	4.9	1.4	1.3	3.6	0.9	5.7	9.1

Gen. Unit: K5

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	7432	8231	7816	6087	8325	8356	8697	7710	8611
Equiv. Derated Hrs.(MWH)	8255	8548	4143	64052	3131	5808	3112	16784	3101
MW Rating	142	142	142	142	142	142	142	142	142
Net Generation (MWH)	752271	775686	792295	582534	805284	714554	752221	669068	740272
Service Hours	7494	8243	7775	6081	8325	8356	8601	7684	8607
Forced Outage Hrs. U1,U2,U3,SF (MWH)	20271	34364	31200	3784	11119	6627	2816	2833	14363
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	6589	3405	3943	62468	2496	5717	2150	15819	2272
Availability Factor	84.8	94.0	89.2	69.3	95.0	95.4	99.3	87.8	98.3
Equiv. Avail. Factor	84.2	93.3	88.9	64.2	94.8	94.9	99.0	86.4	98.0
Capacity Factor	60.5	62.4	63.7	46.7	64.7	57.4	60.5	53.6	59.5
Output Factor	70.7	66.3	71.8	67.5	68.1	60.2	61.6	61.3	60.6
Equiv. Forced Outage Rate (EFOR)	2.5	3.1	3.1	7.6	1.1	1.0	0.4	1.7	1.3

Gen. Unit: K6

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours	8760	8760	8760	8784	8760	8760	8760	8784	8760
Available Hours	8340	8194	6755	8339	8195	6392	8593	8712	6716
Equiv. Derated Hrs.(MWH)	13554	19612	54283	31845	8932	6065	4554	10918	27450
MW Rating	142	142	142	142	142	142	142	142	142
Net Generation (MWH)	856173	857749	601547	785354	724961	560359	682509	692857	495810
Service Hours	8394	8233	6752	8319	8175	6445	8598	8712	6245
Forced Outage Hrs. U1,U2,U3,SF (MWH)	3226	19660	3252	9410	14574	279	0	227	40416
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	2001	13823	53895	29265	7962	4127	4354	10855	27450
Availability Factor	95.2	93.5	77.1	94.9	93.6	73.0	98.1	99.2	76.7
Equiv. Avail. Factor	94.1	92.0	72.7	92.4	92.8	72.5	97.7	98.3	74.5
Capacity Factor	68.8	69.0	48.4	63.0	58.3	45.0	54.9	55.5	39.9
Output Factor	71.8	73.4	62.7	66.5	62.5	61.2	55.9	56.0	55.9
Equiv. Forced Outage Rate (EFOR)	0.4	2.8	5.9	3.2	1.9	0.5	0.4	0.9	7.3

Reheat Units (W7&8, K1-6)

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	7113120	7113120	7113120	7132608	7113120	7113120	7113120	7132608	7113120
Available Hours (MWH)	6142178	6478327	6131938	6332944	6670556	6468249	6728168	6446866	6308911
Equiv. Derated Hrs.(MWH)	165616	98719	163109	219411	80916	75500	77730	57384	76879
MW Rating	812	812	812	812	812	812	812	812	812
Net Generation (MWH)	4153654	4314615	3967063	4242274	4251574	4198573	4189686	4099926	4022111
Service Hours (MWH)	6182491	6472005	6129076	6337246	6665967	6471041	6703203	6440028	6243720
Forced Outage Hrs. U1,U2,U3,SF (MWH)	91015	181598	272879	82780	41453	16344	31533	77829	130181
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	131310	79301	153379	198997	58876	63515	57360	53367	71132
Availability Factor	86.3	91.1	86.2	88.8	93.8	90.9	94.6	90.4	88.7
Equiv. Avail. Factor	84.0	89.7	83.9	85.7	92.6	89.9	93.5	89.6	87.6
Capacity Factor	58.4	60.7	55.8	59.5	59.8	59.0	58.9	57.5	56.5
Output Factor	67.2	66.7	64.7	66.9	63.8	64.9	62.5	63.7	64.4
Equiv. Forced Outage Rate (EFOR)	3.54	3.92	6.66	4.39	1.50	1.23	1.32	2.01	3.16

Non Reheat (H8&9, W3-6)

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	2847000	2847000	2847000	2854800	2847000	2847000	2847000	2854800	2847000
Available Hours	2531942	2356105	2542089	2521217	2179752	2573425	2603098	2725036	2607603
Equiv. Derated Hrs.(MWH)	81301	110339	73727	63607	32780	4061	63023	1209	6686
MW Rating	325	325	325	325	325	325	325	325	325
Net Generation (MWH)	675534	519850	722727	640693	401398	430622	295431	378294	367059
Service Hours	1446020	1176388	1529527	1439236	932453	968583	717088	900025	851369
Forced Outage Hrs. U1,U2,U3,SF (MWH)	105299	38595	137694	51956	37014	27166	26126	26462	27889
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	68098	107393.52	70529	61130	32780	1360	3559	583	6686
Availability Factor	88.9	82.8	89.3	88.3	76.6	90.4	91.4	95.5	91.6
Equiv. Avail. Factor	86.1	78.9	86.7	86.1	75.4	90.2	89.2	95.4	91.4
Capacity Factor	23.7	18.3	25.4	22.4	14.1	15.1	10.4	13.3	12.9
Output Factor	46.7	44.2	47.3	44.5	43.0	44.5	41.2	42.0	43.1
Equiv. Forced Outage Rate (EFOR)	11.18	12.02	12.49	7.58	7.20	2.86	3.99	2.92	3.93

CTs (W9&10)

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	902280	902280	902280	904752	902280	902280	902280	904752	902280
Available Hours (MWH)	881131	773398	750440	766167	886123	867656	844724	860557	848196
Equiv. Derated Hrs (MWH)	-1	-1	-1	-1	-1	-1	-1	-1	-1
MW Rating	103	103	103	103	103	103	103	103	103
Net Generation (MWH)	12299	16752	32324	36819	17040	9754	4427	3878	2999
Service Hours (MWH)	97464	62756	107688	123289	56424	31132	21779	22726	26050
Forced Outage Hrs. U1,U2,U3,SF (MWH)	10994	13781	134176	108799	13402	24614	1044	21461	20530
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	0	458	0	0	0	0	0	0	0
Availability Factor	97.7	85.7	83.2	84.7	98.2	96.2	93.6	95.1	94.0
Equiv. Avail. Factor	97.7	85.7	83.2	84.7	98.2	96.2	93.6	95.1	94.0
Capacity Factor	1.4	1.9	3.6	4.1	1.9	1.1	0.5	0.4	0.3
Output Factor	12.6	26.7	30.0	29.9	30.2	31.3	20.3	17.1	11.5
Equiv. Forced Outage Rate (EFOR)	10.14	18.60	55.48	46.88	19.19	44.15	4.57	48.57	44.07

Total Sys. W/O CTs

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	9960120	9960120	9960120	9984648	9960120	9960120	9960120	9987408	9960120
Available Hours (MWH)	8674120	8834432	8674027	8854161	8850308	9041674	9331266	9171902	8916514
Equiv. Derated Hrs.(MWH)	270445	209058	241459	283160	113696	79561	140753	58673	83565
MW Rating	1137	1137	1137	1137	1137	1137	1137	1137	1137
Net Generation (MWH)	4829188	4834465	4689790	4882967	4652972	4629195	4485117	4478220	4389170
Service Hours	7628511	7648393	7658603	7776482	7598420	7439624	7420291	7340053	7095089
Forced Outage Hrs. U1,U2,U3,SF (MWH)	196314	220193	410573	134736	78467	43510	57659	104291	158070
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	199408	186694.75	223908	260127	91656	64875	60919	53950	77818
Availability Factor	87.1	88.7	87.1	88.7	88.9	90.8	93.7	91.8	89.5
Equiv. Avail. Factor	84.4	86.6	84.7	85.8	87.7	90.0	92.3	91.2	88.7
Capacity Factor	48.5	48.5	47.1	48.9	46.7	46.5	45.0	44.8	44.1
Output Factor	63.3	63.2	61.2	62.8	61.2	62.2	60.4	61.0	61.9
Equiv. Forced Outage Rate (EFOR)	5.06	5.17	7.86	4.99	2.22	1.45	1.59	2.13	3.25

Total Sys. (with CTs)

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	10862400	10862400	10862400	10877640	10862400	10862400	10862400	10892160	10862400
Available Hours (MWH)	9555251	9607830	9424467	9620328	9736431	9909330	10175990	10032459	9764710
Equiv. Derated Hrs.(MWH)	270445	209516.69	241459	283160	113696	79561	140753	58673	83565
MW Rating	1240	1240	1240	1240	1240	1240	1240	1240	1240
Net Generation (MWH)	4841487	4851217	4722114	4919786	4670012	4638949	4489544	4482098	4392169
Service Hours (MWH)	7725974.41	7711149	7766291	7899771	7654844	7470756	7442070	7362779	7121139
Forced Outage Hrs. U1,U2,U3,SF (MWH)	207308	233974	544749	243535	91869	68124	58703	125752	178600
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	199408	187153	223908	260127	91656	64875	60919	53950	77818
Availability Factor	88.0	88.5	86.8	88.4	89.6	91.2	93.7	92.1	89.9
Equiv. Avail. Factor	85.48	86.52	84.5	85.8	88.6	90.5	92.4	91.6	89.1
Capacity Factor	44.6	44.7	43.5	45.2	43.0	42.7	41.3	41.1	40.4
Output Factor	62.7	62.9	60.8	62.3	61.0	62.1	60.3	60.9	61.7
Equiv. Forced Outage Rate (EFOR)	5.13	5.30	9.25	6.18	2.37	1.76	1.59	2.40	3.51

Hono. Sta. (Hono 8&9)

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	1007400	1007400	1007400	1007400	1007400	1007400	1007400	1010160	1007400
Available Hours (MWH)	844798	844695	963938	997137	545652	939996	939294	922422	980729
Equiv. Derated Hrs.(MWH)	17936	23207	16626	35651	22311	334	59581	514	533
MW Rating	115	115	115	115	115	115	115	115	115
Net Generation (MWH)	173900	147792	193081	187507	72811	109564	75949	69977	100731
Service Hours (MWH)	398373	348375	442682	444750	174414	255523	186544	175279	232733
Forced Outage Hrs. U1,U2,U3,SF (MWH)	47839	26267	18071	12328	12614	8540	10154	5793	9248
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	12012	22457.92	16626	35651	22311	213	117	514	533
Availability Factor	83.9	83.8	95.7	99.0	54.2	93.3	93.2	91.3	97.4
Equiv. Avail. Factor	82.1	81.5	94.0	95.4	51.9	93.3	87.3	91.3	97.3
Capacity Factor	17.3	14.7	19.2	18.6	7.2	10.9	7.5	6.9	10.0
Output Factor	43.7	42.4	43.6	42.2	41.7	42.9	40.7	39.9	43.3
Equiv. Forced Outage Rate (EFOR)	13.41	13.01	7.53	10.50	18.67	3.31	5.22	3.48	4.04

Waiau Sta. (with CTs)

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	4292400	4292400	4292400	4292400	4292400	4292400	4292400	4304160	4292400
Available Hours (MWH)	3870479	3654584	3627900	3600824	3947242	3987057	4010178	3854381	3900247
Equiv. Derated Hrs.(MWH)	131752	123820	67688	47238	12493	19648	24363	17555	22497
MW Rating	490	490	490	490	490	490	490	490	490
Net Generation (MWH)	1342702	1310832	1324694	1276519	1204247	1316514	1192202	1068984	1177263
Service Hours (MWH)	2458862	2251002	2497532	2428424	2239289	2222244	2051528	1937797	2068384
Forced Outage Hrs. U1,U2,U3,SF (MWH)	83557	138486	433403	186410	41743	48074	30688	63910	49688
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	94192	119841.2	58417	43880	11241	10752	13144	15334	18117
Availability Factor	90.2	85.1	84.5	83.9	92.0	92.9	93.4	89.6	90.9
Equiv. Avail. Factor	87.1	82.3	82.9	82.8	91.7	92.4	92.9	89.1	90.3
Capacity Factor	31.3	30.5	30.9	29.7	28.1	30.7	27.8	24.8	27.4
Output Factor	54.6	58.2	53.0	52.6	53.8	59.2	58.1	55.2	56.9
Equiv. Forced Outage Rate (EFOR)	6.99	10.81	16.78	8.81	2.32	2.59	2.11	3.96	3.20

Waiau Sta. W/O CTs

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	3390120	3390120	3390120	3399408	3390120	3390120	3390120	3399408	3390120
Available Hours	2989348	2881186	2877460	2834657	3061119	3119401	3165454	2993824	3052051
Equiv. Derated Hrs.(MWH)	131752	123362	67688	47238	12493	19648	24363	17555	22497
MW Rating	387	387	387	387	387	387	387	387	387
Net Generation (MWH)	1330403	1294080	1292370	1239700	1187207	1306760	1187775	1065106	1174264
Service Hours	2361399	2188246	2389844	2305135	2182865	2191112	2029749	1915071	2042334
Forced Outage Hrs. U1,U2,U3,SF (MWH)	72563	124705	299227	77611	28341	23460	29644	42449	29158
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	94192	119382.95	58417	43880	11241	10752	13144	15334	18117
Availability Factor	88.2	85.0	84.9	83.4	90.3	92.0	93.4	88.1	90.0
Equiv. Avail. Factor	84.3	81.3	82.9	82.0	89.9	91.4	92.7	87.6	89.4
Capacity Factor	39.2	38.2	38.1	36.5	35.0	38.5	35.0	31.3	34.6
Output Factor	56.3	59.1	54.1	53.8	54.4	59.6	58.5	55.6	57.5
Equiv. Forced Outage Rate (EFOR)	6.85	10.55	13.30	5.10	1.79	1.54	2.08	2.95	2.28

Kahe Sta.

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	5562600	5562600	5562600	5577840	5562600	5562600	5562600	5577840	5562600
Available Hours (MWH)	4839974	5108551	4832629	5022367	5243537	4982277	5226518	5255656	4883734
Equiv. Derated Hrs.(MWH)	120757	62489	157145	200271	78892	59579	56809	40604	60535
MW Rating	635	635	635	635	635	635	635	635	635
Net Generation (MWH)	3324885	3392593	3204339	3455760	3392954	3212871	3221393	3343137	3114175
Service Hours	4868739	5111772	4826077	5026597	5241141	4992989	5203998	5249703	4820022
Forced Outage Hrs. U1,U2,U3,SF (MWH)	75912	69221	93275	44797	37512	11510	17861	56049	119664
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	93204	44854	148865	180596	58104	53910	47658	38102	59168
Availability Factor	87.0	91.8	86.9	90.0	94.3	89.6	94.0	94.2	87.8
Equiv. Avail. Factor	84.8	90.7	84.1	86.5	92.8	88.5	92.9	93.5	86.7
Capacity Factor	59.8	61.0	57.6	62.0	61.0	57.8	57.9	59.9	56.0
Output Factor	68.3	66.4	66.4	68.7	64.7	64.3	61.9	63.7	64.6
Equiv. Forced Outage Rate (EFOR)	3.42	2.20	4.92	4.44	1.81	1.31	1.25	1.77	3.62

Stm. Units - Oil - 1-99MW

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	7472280	7472280	7472280	7492752	7472280	7472280	7472280	7492752	7472280
Available Hours (MWH)	6434496	6502082	6604945	6805669	6504468	6947458	6876086	6839978	6740080
Equiv. Derated Hrs.(MWH)	248636	180899	183033	187263	101633	67688	133087	30971	53014
MW Rating	853	853	853	853	853	853	853	853	853
Net Generation (MWH)	3220744	3201030	3295948	3515079	3122727	3354282	3050387	3116295	3153088
Service Hours	5372317	5308801	5595769	5731682	5255420	5337882	4978033	5011821	4986105
Forced Outage Hrs. U1,U2,U3,SF (MWH)	172817	166169	376121	121542	52774	36604	54843	101231	103291
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	190818	169467	166070	168394	81198	55031	54415	27276	48096
Availability Factor	86.1	87.0	88.4	90.8	87.0	93.0	92.0	91.3	90.2
Equiv. Avail. Factor	82.8	84.6	85.9	88.3	85.7	92.1	90.2	90.9	89.5
Capacity Factor	43.1	42.8	44.1	46.9	41.8	44.9	40.8	41.6	42.2
Output Factor	60.0	60.3	58.9	61.3	59.4	62.8	61.3	62.2	63.2
Equiv. Forced Outage Rate (EFOR)	6.56	6.13	9.08	4.95	2.52	1.71	2.17	2.51	2.97

Stm. Units - Oil 100-199MW

	2007	2006	2005	2004	2003	2002	2001	2000	1999
Period Hours (MWH)	2487840	2487840	2487840	2494656	2487840	2487840	2487840	2494656	2487840
Available Hours (MWH)	2239624	2332350	2069082	2048492	2345840	2094216	2455180	2331924	2176434
Equiv. Derated Hrs.(MWH)	21809	28159	58426	95897	12063	11873	7666	27702	30551
MW Rating	284	284	284	284	284	284	284	284	284
Net Generation (MWH)	1608444	1633435	1393842	1367888	1530245	1274913	1434730	1361925	1236082
Service Hours (MWH)	2256194	2339592	2062834	2044800	2343000	2101742	2442258	2328232	2108984
Forced Outage Hrs. U1,U2,U3,SF (MWH)	23497	54024	34452	13194	25693	6906	2816	3060	54779
Equiv. Forced Derated Hours D1,D2,D3 (MWH)	8590	17228	57838	91733	10458	9844	6504	26674	29722
Availability Factor	90.0	93.8	83.2	82.1	94.3	84.2	98.7	93.5	87.5
Equiv. Avail. Factor	89.1	92.6	80.8	78.3	93.8	83.7	98.4	92.4	86.3
Capacity Factor	64.7	65.7	56.0	54.8	61.5	51.2	57.7	54.6	49.7
Output Factor	71.3	69.8	67.6	66.9	65.3	60.7	58.7	58.5	58.6
Equiv. Forced Outage Rate (EFOR)	1.41	2.98	4.40	5.10	1.53	0.79	0.38	1.28	3.91

NERC Website GAR

	50				150							
	12 units				2 units							
	1-99 MW Oil Primary 1982-2003 Data				100-199 MW Oil Primary 1982-2003 Data				COMPOSITE INDUSTRY			
	AF	**EAF**	**EFOR**	**Unit**	**AF**	**EAF**	**EFOR**	Unit-Yrs	AF	EAF	EFOR	
1990	90.13	88.66	6.56	77.00	84.03	79.94	10.96	48	85.56	82.12	9.86	
1991	90.95	89.25	8.40	75.00	89.45	84.36	11.65	48	89.83	85.58	10.84	
1992	92.56	88.64	13.75	67.00	79.86	75.85	10.41	46	83.04	79.05	11.25	
1993	91.07	87.84	10.65	62.00	87.71	83.66	11.22	49	88.55	84.71	11.08	
1994	87.23	86.07	20.35	58.00	88.38	84.56	10.57	44	88.09	84.94	13.02	
1995	91.01	89.21	9.93	45.00	86.97	83.78	13.19	39	87.98	85.14	12.38	
1996	91.78	90.15	8.36	49.00	84.17	82.21	14.64	42	86.07	84.20	13.07	
1997	92.09	90.41	8.94	46.00	83.62	81.51	13.54	38	85.74	83.74	12.39	
1998	89.67	89.11	4.00	44.00	87.43	85.08	10.94	33	87.99	86.09	9.21	
1999	89.23	88.63	5.45	41.00	85.80	83.96	9.85	33	86.66	85.13	8.75	
2000	91.20	90.51	4.34	37.00	86.61	84.00	8.75	27	87.76	85.63	7.65	
2001	90.09	88.16	8.43	41.00	83.94	80.27	10.14	32	85.48	82.24	9.71	
2002	90.85	88.82	3.22	36.00	80.86	78.70	12.94	30	83.36	81.23	10.51	
2003	90.48	89.19	4.94	37.00	79.04	76.48	13.49	31	81.90	79.66	11.35	
2004	90.97	80.08	35.63		86.79	82.05	13.60		87.84	81.56	19.11	
2005	86.94	85.42	11.70		85.63	83.21	7.00		85.96	83.76	8.18	(1)
2005new	86.94	85.42	11.70		85.63	83.21	7.00		86.75	85.10	11.03	(2)
2006	83.11	80.21	22.70		83.27	79.60	25.13		83.13	80.12	23.05	

Note (1): 2005 using MW
Note (2): 2005 using # of units - changed formula to weight percentages by # of units versus avg MW

OLD Composite Industry Formula (prior to 2005):

[((Peer Grp 1-99 MW Percentage) x (50 MW - midpoint of 1-99 group)) + (Peer Grp 100-199 MW Percentage) x (150 MW - mid point of 100-199 group))]
[(50 MW - midpoint of 1-99 group) + (150 MW - mid point of 100-199 group)]

NEW Composite Industry Formula (effective 2005):

[((Peer Grp 1-99 MW Percentage) x (# HECO Units in Peer Grp 1-99)) + (Peer Grp 100-199 MW Percentage) x (# HECO Units in Peer Grp 100-199))]
Total HECO Units

EFOR Percentages		EAF Percentages		
	Industry		Industry	
1990	9.86%	1990	82.12%	
1991	10.84%	1991	85.58%	
1992	11.25%	1992	79.05%	
1993	11.08%	1993	84.71%	
1994	13.02%	1994	84.94%	
1995	12.38%	1995	85.14%	
1996	13.07%	1996	84.20%	
1997	12.39%	1997	83.74%	
1998	9.21%	1998	86.09%	
1999	8.75%	1999	85.13%	
2000	7.65%	2000	85.63%	
2001	9.71%	2001	82.24%	
2002	10.51%	2002	81.23%	
2003	11.35%	2003	79.66%	
2004	19.11%	2004	81.56%	
2005	11.03%	2005	85.10%	(3)
2006	23.05%	2006	80.12%	

Note (3): 2005 using # of units - changed formula to weight percentages by # of units versus avg MW

NERC Website GAR

	12 units 1-99 MW Oil Primary 1982-2003 Data		2 units 100-199 MW Oil Primary 1982-2003 Data		COMPOSITE INDUSTRY	
	EAF	**EFOR**	**EAF**	**EFOR**	EAF	EFOR
1990	88.72	6.42	80.75	9.67	87.58	6.88
1991	89.26	8.40	85.47	11.63	88.72	8.86
1992	88.64	13.77	76.57	10.18	86.92	13.26
1993	87.84	10.65	84.43	9.71	87.35	10.52
1994	86.09	20.31	84.97	9.75	85.93	18.80
1995	89.21	9.93	84.96	10.47	88.60	10.01
1996	90.15	8.36	82.80	13.36	89.10	9.07
1997	90.43	8.94	81.83	12.88	89.20	9.50
1998	89.15	3.97	86.13	10.46	88.72	4.90
1999	88.63	5.45	83.96	9.86	87.96	6.08
2000	90.51	4.33	84.36	7.98	89.63	4.85
2001	88.16	8.43	80.39	9.93	87.05	8.64
2002	82.83	17.63	74.75	20.41	81.68	18.03
2003	81.46	19.63	71.70	24.98	80.07	20.39
2004	72.06	44.01	74.45	28.60	72.40	41.81
2005	83.25	18.11	75.02	22.36	82.07	18.72
2006	81.11	19.65	79.20	22.70	80.84	20.09

NEW Composite Industry Formula:

$$\frac{[((\textbf{Peer Grp 1-99 MW Percentage}) \times (\textbf{\# HECO Units in Peer Grp 1-99})) + (\textbf{Peer Grp 100-199 MW Percentage}) \times (\textbf{\# HECO Units in Peer Grp 100-199}))]}{\textbf{Total HECO Units}}$$

EFOR Percentages	Industry
1990	6.9%
1991	8.9%
1992	13.3%
1993	10.5%
1994	18.8%
1995	10.0%
1996	9.1%
1997	9.5%
1998	4.9%
1999	6.1%
2000	4.9%
2001	8.6%
2002	18.0%
2003	20.4%
2004	41.8%
2005	18.7%
2006	20.1%

EAF Percentages	Industry
1990	87.6%
1991	88.7%
1992	86.9%
1993	87.4%
1994	85.9%
1995	88.6%
1996	89.1%
1997	89.2%
1998	88.7%
1999	88.0%
2000	89.6%
2001	87.1%
2002	81.7%
2003	80.1%
2004	72.4%
2005	82.1%
2006	80.8%

2002-2006

GENERATING AVAILABILITY REPORT

Equations - Appendix B

November 2007

North American Electric Reliability Corporation
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EQUATIONS

(NOTE: for more equations, see Appendix F "Performance Indices and Equations" at NERC-GADS website: http://www.nerc.com/~filez/dri.html)

SOME WORDS ABOUT CALCULATIONS
Please note that when you are calculating a single generating unit's performance statistics, it does not matter if you use unweighted- or weighted-based statistics. The answer will generally be the same. The real difference between the unweighted and weighted statistics is in pooling (or grouping) of a set of generating units. In such cases, a group of units of similar size will show little or no differences but a for group of units where the MW size is very different (greater than 50 MW), the statistics will be very different.

With unweighted statistics, all units are considered equal in outage impact. In the unweighted equations, no MW size is introduced into the equations and the results are based on time, not energy produced (or not produced.) In such cases, a 50 MW gas turbine and a 1,000 MW nuclear unit have the same impact of the resulting statistics.

With weighted statistics, the larger MW size unit in the group has more impact on the final statistics than a smaller generating unit. That is because the MW size of the unit (NMC) is part of the equation. In such cases, a 1,000 MW nuclear unit would have 20 times impact on the final outcome of the calculation than would its 50 MW gas turbine companion.

MORE WORDS ABOUT DATA POOLING
When grouping a fleet of units of dissimilar size and/or duty cycle, weighting puts the proper relative weight of each unit's contribution into the fleet's composite indexes.

Using the unweighted equations currently in the IEEE 762 Standard (Section 7), an older, smaller, little-run unit will have just as much weight as a newer, larger, base-load unit. The effect of this could unrealistically and disproportionately swing the fleet unweighted averages too high (for a very high availability on a small unit) or too low (for a very low availability on a small unit).

The current IEEE 762 Standard's unweighted equations should not be abandoned, however, even for group statistics. There are valid applications for this method as well. (One being purely to evaluate equipment reliability and availability regardless of size).

The weighted calculations, although primarily needed for grouping units' performance indexes, may apply to individual units as well. The effect will be minimal, but over the months or years, many units' net maximum capacities (NMC) do change somewhat.

SPECIAL NOTE: To weight an equation, one does not simply take each unit's EFOR, for example, and multiply the EFOR by the NMC, add them up and divide by the sum of the NMCs. Each term in the equation must be multiplied by the NMC and then all the products are summed over all the units.

NON-WEIGHTED (Traditional) EQUATIONS

Age
[Years in commerical service/Number of units]

Availability Factor (AF)

[AH / PH] x 100 %

Average Run Time (ART)
[SH / Actual Unit Starts]

Equivalent Availability Factor (EAF)
[(AH - (EUDH + EPDH + ESEDH)) / PH] x 100 %

Equivalent Forced Outage Rate (EFOR)
[(FOH + EFDH) / (FOH + SH + EFDHRS + Synchronous Hrs + Pumping Hrs)] x 100 %

Equivalent Forced Outage Rate demand (EFORd)
{[(f*FOH) + fp(EFDH)] / [SH + (f*FOH)]} x 100 %

where
fp = (SH/AH)
f = [(1/r) + (1/T)] / [(1/r) + (1/T) + (1/D)
r=Average Forced outage deration = (FOH) / (# of FO occurrences)
D=Average demand time = (SH) / (# of unit actual starts)
T=Average reserve shutdown time = (RSH) / (# of unit attempted starts)

Forced Outage Factor (FOF)
[FOH / PH] x 100 %

Forced Outage Rate (FOR)
[FOH / (FOH + SH + Synchronous Hrs + Pumping Hrs)] x 100 %

Gross Capacity Factor (GCF)
[GAG / (PH x GMC)] x 100 %

Gross Output Factor (GOF)
[GAG / (SH x GMC)] x 100 %

Net Capacity Factor (NCF)
[NAG / (PH x NMC)] x 100 %

Net Output Factor (NOF)
[NAG / (SH x NMC)] x 100 %

Scheduled Outage Factor (SOF)
[SOH / PH] x 100 %

Service Factor (SF)
[SH / PH] x 100 %

Starting Reliability (SR)
[Actual Unit Starts / Attempted Unit Starts] x 100 %

WEIGHTED STATISTICAL EQUATIONS

Weighted Service Factor (WSF)
[(SH x NMC) / (PH x NMC)] x 100 %

Weighted Availability Factor (WAF)
[(AH x NMC) / (PH x NMC)] x 100 %

Weighted Equivalent Availability Factor (EAF)
{(AH x NMC) - [(EUDH + EPDH + ESEDH) x NMC] / (PH x NMC)} x 100 %

Weighted Forced Outage Rate (WFOR)
{(FOH x NMC) / [(FOH + SH + Synchronous Hrs + Pumping Hrs) x NMC]} x 100 %

Weighted Equivalent Forced Outage Rate (WEFOR)
{[(FOH + EFDH) x NMC] / [(FOH + SH + EFDHRS + Synchronous Hrs + Pumping Hrs) x NMC]} x 100 %

Weighted Equivalent Forced Outage Rate demand (WEFORd)
{[S [(FOHd + (EFDHd)x NMC] / S [(SH + FOHd) x NMC]} x 100 %

where
fp = (SH/AH)
f = [(1/r) + (1/T)] / [(1/r) + (1/T) + (1/D)
r=Average Forced outage deration = (FOH) / (# of FO occurrences)
D=Average demand time = (SH) / (# of unit actual starts)
T=Average reserve shutdown time = (RSH) / (# of unit attempted starts)

Weighted Scheduled Outage Factor (WSOF)
[(SOH x NMC) / (PH x NMC)] x 100 %

Weighted Forced Outage Factor (WFOF)
[(FOH x NMC) / (PH x NMC)] x 100 %

Average Number of Occurrences Per Unit-Year

AVG NO OCC PER UNT-YR = [(Sum of All Outage and/or Derating Occurrences) / Number of Unit-Years]

Average MWh Per Unit-Year

AVG MWh PER UNIT-YR = [(Sum of All Hours for Each Outage and/or Derating Type x NMC in MW) / Number of Unit-Years]

Average MWh Per Outage

AVG MWh PER OUTAGE = [(Sum of All Hours for Each Outage and/or Derating Type x NMC in MW) / Number of Occurrences]

Average Hours Per Unit-Year

AVG HRS PER UNIT-YR = [(Sum of All Hours for Each Outage and/or Derating Type) / Number of Unit-Years]

Average Equivalent Hours Per Unit-Year
Computed the same way as Average Hours Per Unit-Year shown above, except deratings are converted to equivalent full outage hours. Equivalent hours are computed for each derating event experienced by each unit. These equivalent hours are then summarized and used in the numerator of the Average Hours Per Unit-Year equation.

Computation Method

Each of the statistics presented is computed from summaries of the basic data terms required in each equation. Examples of these computations are shown below:

EFOR = [(FOH + EFDH) / (FOH + SH + EFDHRS)] x 100 %

Where: FOH = Sum of All FOHi / Number of Unit-Years

SH = Sum of All SHi / Number of Unit-Years

EFDH = Sum of All EFDHk / Number of Unit-Years

EFDHRS = Sum of All EFDHRSk / Number of Unit-Years

FOF= [FOH / PH] x 100 %

Where: FOH = Sum of All FOHi / Number of Unit-Years

PH = Sum of All PHi / Number of Unit-Years

NCF = [NAG / (PH x NMC)] x 100 %

= Net Energy Produced / Maximum Potential Energy (MPE)

Where: NAG = Sum of All NAGi / Number of Unit-Years

MPE = Product of Each PHi and NMCi Combination N
/ Number of Unit-Years

NOTE: i = individual unit in any individual year
k = individual derating occurrence

Major Equipment Group Calculations
EFOR and EAF Examples

```
EFOR for Total Unit =
     [(FOH + EFDH) / (SH + FOH + EFDHRS)] x 100 %

EFOR for Steam Turbines =
     [(All Steam Turbine Related Forced Outages and
       Equivalent Forced Derating Durations) /
       (Expected Mission Hours)] x 100 %

   where:  Durations are calculated from all cause codes
           related to the major equipment group.

           The Expected Mission Hours is the sum of
           1) the Unit-Year Average Service Hours,
           2) theFOH due to the major equipment group, and
           3) the Equivalent Forced Derated Hours During
              Reserve Shutdowns when the major equipment
              group was the cause of the derating.

EAF for Total Unit =
    [AH - (EUDH + EPDH + ESEDH) / PH] x 100 %
 or
    {1 - [(FOH+POH w/Ext.+MOH w/Ext.+EPDH+EFDH+ESEDH) / PH]} x 100%

EAF for Steam Turbines =
    {1 - [(All Steam Turbine Related Planned, Maintenance,
       and Forced Outages and Equivalent Planned&Maintenance&Forced
       Derated Hours) / Period Hours]} x 100 %
```

Date-11/02/07

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION
GENERATING AVAILABILITY DATA SYSTEM

1982-2006 Historical Availability Statistics

FOSSIL Oil Primary 001-099 MW

Year	Number of Util.	Units	CAPACITY WEIGHTED STATISTICS WSF	WAF	WEAF	WSOF	WFOF	WFOR	WEFOR	UNIT STARTS Attempts	Actual	Capacity (Net, MW) Max	Dep	Net Generation MWHr/U-Yr
1982	21	74	31.70	87.98	85.55	10.48	1.31	3.76	5.67	40.59	40.49	54	53	99,094
1983	22	80	33.28	90.21	88.08	7.66	2.09	5.44	7.52	53.92	53.84	53	53	104,984
1984	24	86	33.22	88.86	87.37	8.93	1.67	4.32	5.87	45.59	45.52	53	52	103,249
1985	26	80	32.99	86.49	84.53	10.78	2.58	6.56	9.29	47.16	46.98	52	52	97,693
1986	24	81	36.64	88.00	86.66	9.28	2.56	6.04	7.26	53.45	53.41	52	52	111,569
1987	22	72	39.81	88.13	86.24	8.80	3.01	6.47	8.93	41.49	41.40	53	52	122,769
1988	23	78	40.33	90.83	89.10	7.67	1.46	3.24	4.08	53.18	52.80	54	53	130,112
1989	26	87	45.17	89.18	87.48	8.36	2.46	4.87	6.13	58.75	58.51	54	53	145,992
1990	22	77	41.61	90.20	88.72	7.76	2.04	4.68	6.42	53.90	53.62	54	53	127,613
1991	23	75	32.87	90.96	89.26	7.16	1.88	5.41	8.40	49.55	49.31	54	53	100,602
1992	19	67	28.49	92.56	88.64	6.14	1.29	4.34	13.77	33.98	33.85	54	53	86,036
1993	18	62	30.04	91.07	87.84	7.90	1.03	3.32	10.65	49.38	48.79	54	53	83,682
1994	16	58	27.46	87.24	86.09	6.40	6.36	18.80	20.31	40.34	40.07	52	52	69,967
1995	15	45	33.75	91.01	89.21	6.32	2.67	7.33	9.93	50.41	49.89	52	52	91,067
1996	15	49	33.62	91.78	90.15	6.24	1.98	5.56	8.36	37.34	37.12	53	53	89,648
1997	15	46	34.06	92.12	90.43	5.71	2.18	6.01	8.94	47.64	47.32	55	54	93,188
1998	14	44	34.59	89.71	89.15	9.16	1.13	3.16	3.97	40.74	40.67	55	55	101,833
1999	15	41	36.22	89.23	88.63	9.01	1.75	4.62	5.45	47.02	46.87	55	55	104,937
2000	12	37	40.15	91.20	90.51	7.30	1.50	3.60	4.33	52.24	51.89	55	55	116,694
2001	14	41	38.23	90.09	88.16	8.11	1.80	4.50	8.43	43.27	43.22	55	55	117,971
2002	14	40	37.08	84.67	82.83	7.74	7.60	17.01	17.63	40.88	40.78	57	56	108,092
2003	14	41	39.95	82.61	81.46	8.15	9.24	18.78	19.63	36.89	36.82	55	55	125,819
2004	13	39	34.70	84.92	72.06	8.09	6.99	16.77	44.01	47.14	47.06	57	57	108,040
2005	12	35	41.92	85.09	83.25	7.12	7.79	15.67	18.11	52.94	52.77	59	58	128,259
2006	13	34	36.24	81.82	81.11	10.08	8.11	18.28	19.65	49.60	49.45	61	61	115,969
2002-2006:			37.95	83.85	80.09	8.21	7.95	17.31	23.52	45.08	44.97	58	57	117,052
1997-2006:			37.26	87.17	84.75	8.03	4.80	11.41	15.66	45.63	45.48	56	56	111,681
1982-2006:			35.78	88.85	86.75	8.10	2.99	7.45	10.51	47.21	47.01	54	54	108,009

TRADITIONAL NON-WEIGHTED STATISTICS

Year	AGE	U-Yrs	GCF	NCF	GOF	NOF	SF	AF	EAF	SOF	FOF	FOR	EFOR	SR	ART
1982	30.82	71	21.31	21.12	67.16	66.60	26.34	89.23	86.43	9.10	1.44	4.92	8.09	99.75	56.98
1983	31.45	72	22.65	22.52	68.00	67.68	27.63	91.39	88.67	6.55	2.02	6.32	9.74	99.85	44.94
1984	32.27	73	22.48	22.35	67.62	67.28	27.45	89.73	87.83	8.07	1.62	5.10	7.19	99.85	52.97
1985	33.32	69	21.56	21.43	65.31	64.98	27.04	87.54	85.27	9.85	2.37	7.37	11.03	99.62	50.40
1986	34.17	74	24.59	24.45	67.07	66.75	31.33	88.04	86.41	8.89	2.89	7.91	9.43	99.93	51.39
1987	34.66	65	26.78	26.63	67.23	66.88	34.00	86.33	84.14	9.67	3.95	9.70	12.50	99.78	71.92
1988	35.82	71	27.85	27.63	69.24	68.52	35.57	89.68	87.36	8.34	1.79	4.50	6.19	99.29	59.17
1989	37.44	77	31.23	30.98	69.31	68.58	39.79	89.01	86.83	8.69	2.30	5.16	7.17	99.59	59.58
1990	37.93	74	27.32	27.17	65.89	65.29	35.15	89.59	87.73	8.41	2.00	5.37	7.53	99.48	57.42
1991	38.78	69	21.59	21.42	65.96	65.15	27.48	90.73	88.82	7.21	2.06	6.98	10.15	99.52	48.82
1992	39.06	61	18.40	18.25	64.95	64.06	23.54	92.33	88.92	6.42	1.24	5.01	13.56	99.62	61.09
1993	39.27	54	18.01	17.76	60.16	59.12	24.28	91.62	88.37	7.28	1.10	4.35	11.78	98.81	43.58
1994	40.05	51	16.31	15.39	59.58	56.04	21.48	87.74	85.86	6.47	5.79	21.25	23.82	99.33	46.93
1995	40.31	42	20.32	19.83	60.84	58.76	26.06	89.88	87.54	6.83	3.29	11.22	14.76	98.97	45.75
1996	41.49	44	19.25	19.11	57.71	56.83	26.59	90.04	87.80	7.85	2.11	7.35	11.29	99.41	62.90
1997	42.16	41	19.67	19.51	58.16	57.27	27.16	91.73	89.87	5.76	2.52	8.48	10.96	99.33	50.26
1998	43.07	39	21.23	20.99	61.73	60.68	27.97	90.66	90.10	8.18	1.16	3.97	4.75	99.83	60.26
1999	44.02	41	21.95	21.85	60.92	60.32	30.53	90.16	89.45	8.27	1.57	4.90	5.95	99.68	57.05
2000	44.30	37	24.48	24.28	61.29	60.49	33.18	90.95	90.25	6.52	2.54	7.10	7.81	99.33	56.18
2001	45.39	38	24.41	24.28	64.08	63.50	31.74	89.59	87.33	8.34	2.07	6.13	11.38	99.88	64.33
2002	44.50	40	22.16	21.55	61.03	58.13	30.86	85.17	83.75	7.26	7.58	19.71	20.29	99.76	66.30
2003	45.25	40	26.19	25.88	65.81	64.78	34.30	83.29	82.31	7.67	9.04	20.87	21.60	99.81	81.72
2004	46.00	39	21.67	21.47	63.03	61.88	28.41	83.93	74.17	8.22	7.85	21.66	45.43	99.83	53.02
2005	46.07	35	25.15	24.88	60.52	59.36	35.80	81.76	80.41	9.18	9.07	20.22	22.29	99.68	59.54
2006	47.27	32	22.11	21.82	61.59	60.20	30.79	80.84	80.21	10.79	8.38	21.39	22.70	99.70	54.54
2002-2006:		186	23.46	23.12	62.46	60.91	32.00	83.11	80.21	8.52	8.37	20.73	26.15	99.76	62.42
1997-2006:		382	22.87	22.62	61.87	60.70	31.00	86.97	84.94	7.95	5.08	14.08	17.98	99.67	59.76
1982-2006:		1,350	23.05	22.82	64.66	63.77	29.86	88.78	86.54	8.03	3.11	9.15	12.50	99.58	55.68

Date-11/02/07

NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION
GENERATING AVAILABILITY DATA SYSTEM

1982-2006 Historical Availability Statistics

FOSSIL Oil Primary 100-199 MW

Year	Number of Util.	Units	CAPACITY WEIGHTED STATISTICS WSF	WAF	WEAF	WSOF	WFOF	WFOR	WEFOR	UNIT STARTS Attempts	Actual	Capacity (Net, MW) Max	Dep	Net Generation MWHr/U-Yr
1982	28	77	54.94	81.26	76.59	11.98	6.76	10.95	15.41	46.88	46.81	140	138	384,938
1983	24	66	50.79	77.52	72.91	16.16	6.33	11.08	16.23	48.64	48.58	137	136	369,222
1984	24	56	52.33	80.70	76.96	15.74	3.56	6.38	11.01	49.77	49.77	139	138	389,547
1985	25	48	52.67	81.79	77.03	13.49	4.72	8.22	14.33	41.29	41.19	141	140	377,909
1986	25	58	58.46	86.23	82.20	10.10	3.67	5.91	10.69	46.30	46.15	134	133	418,054
1987	24	51	55.33	84.52	80.93	12.10	3.38	5.76	9.65	45.94	45.77	142	140	414,996
1988	23	61	51.53	81.16	76.96	14.60	4.23	7.59	12.12	45.31	45.21	138	136	404,706
1989	23	58	58.57	82.96	79.21	13.58	3.45	5.57	8.92	40.44	40.41	136	134	460,454
1990	21	48	56.93	84.93	80.75	12.02	3.04	5.08	9.67	41.25	39.77	141	139	426,026
1991	24	48	53.16	90.69	85.47	6.66	2.65	4.75	11.63	41.59	41.34	136	134	373,782
1992	22	46	43.67	80.67	76.57	16.73	2.61	5.63	10.18	34.94	34.88	140	137	294,925
1993	22	49	46.43	88.57	84.43	9.46	1.97	4.07	9.71	33.71	33.47	133	132	296,514
1994	20	44	45.86	88.84	84.97	8.55	2.62	5.40	9.75	47.17	46.73	137	135	307,235
1995	18	39	36.50	88.19	84.96	9.55	2.26	5.83	10.47	45.30	44.84	138	136	232,376
1996	19	42	38.28	84.82	82.80	10.41	4.77	11.09	13.36	37.51	37.34	134	134	233,184
1997	17	38	40.77	83.97	81.83	11.47	4.56	10.06	12.88	34.03	33.83	131	130	269,085
1998	15	33	42.94	88.50	86.13	8.31	3.31	7.15	10.46	45.32	45.12	128	128	303,457
1999	16	33	50.39	85.80	83.96	10.23	3.97	7.30	9.86	41.03	40.15	134	133	328,879
2000	12	27	39.45	86.98	84.36	11.66	1.37	3.36	7.98	34.73	34.69	132	132	266,455
2001	13	32	41.25	84.05	80.39	14.32	1.64	3.82	9.93	49.10	48.84	132	131	289,826
2002	14	33	33.61	76.80	74.75	15.77	7.43	18.10	20.41	50.19	49.98	132	131	217,467
2003	14	34	33.23	74.09	71.70	16.58	9.33	21.92	24.98	36.54	36.27	131	130	211,963
2004	15	35	29.71	78.92	74.45	12.86	8.23	21.68	28.60	26.94	26.81	129	128	194,993
2005	15	33	35.84	77.32	75.02	13.96	8.73	19.59	22.36	30.79	30.59	128	127	224,889
2006	14	29	30.89	83.09	79.20	11.11	5.80	15.80	22.70	20.31	19.88	127	127	186,823
2002-2006:			32.64	77.92	74.89	14.11	7.97	19.63	23.89	32.96	32.72	129	128	207,405
1997-2006:			37.59	81.64	78.85	12.75	5.62	13.01	17.04	36.71	36.43	130	130	247,258
1982-2006:			46.96	83.13	79.45	12.43	4.44	8.64	13.16	41.37	41.13	135	134	327,958

TRADITIONAL NON-WEIGHTED STATISTICS

Year	AGE	U-Yrs	GCF	NCF	GOF	NOF	SF	AF	EAF	SOF	FOF	FOR	EFOR	SR	ART
1982	23.53	57	31.88	31.39	58.06	57.13	53.73	80.84	76.36	12.71	6.45	10.71	15.30	99.85	100.50
1983	24.34	50	31.02	30.69	61.05	60.44	49.78	77.24	72.90	16.11	6.65	11.79	16.93	99.88	89.70
1984	25.47	45	32.22	31.83	61.49	60.83	51.30	81.24	77.63	15.56	3.21	5.88	10.61	100.00	90.47
1985	25.05	37	31.08	30.57	58.90	58.04	50.95	81.47	77.12	13.61	4.92	8.80	14.64	99.76	108.37
1986	26.67	46	36.13	35.68	61.77	61.04	55.76	86.92	83.22	9.51	3.57	6.02	10.62	99.68	105.80
1987	27.24	41	33.87	33.47	61.15	60.49	54.84	84.78	81.51	11.94	3.28	5.65	9.28	99.63	104.86
1988	28.52	40	33.90	33.38	65.71	64.77	50.49	81.76	77.79	14.05	4.19	7.66	12.29	99.78	98.14
1989	29.50	39	39.13	38.73	66.80	66.13	57.79	83.66	80.16	13.13	3.20	5.25	8.62	99.93	125.09
1990	29.54	34	35.05	34.62	61.50	60.82	57.34	84.86	80.96	12.13	3.02	5.00	9.41	96.41	126.08
1991	30.43	36	31.84	31.37	59.81	59.01	52.37	90.09	84.90	6.74	3.17	5.71	12.89	99.40	110.96
1992	31.19	35	24.35	23.97	55.69	54.89	43.34	81.08	77.23	16.16	2.76	5.99	10.54	99.83	109.16
1993	32.48	37	25.75	25.38	55.43	54.66	44.80	87.22	83.72	9.48	3.30	6.86	11.67	99.29	117.32
1994	33.89	35	26.01	25.67	56.69	55.96	45.49	88.54	85.06	8.47	2.99	6.16	10.12	99.07	85.22
1995	34.40	29	19.60	19.20	53.66	52.62	35.51	87.39	84.46	9.18	3.43	8.81	13.00	98.98	69.35
1996	35.42	31	20.06	19.75	52.35	51.61	36.89	86.66	84.75	9.09	4.25	10.33	12.92	99.55	86.70
1997	36.84	30	23.78	23.45	58.30	57.53	39.02	85.03	83.22	10.42	4.55	10.44	12.97	99.41	100.96
1998	37.16	25	27.24	27.01	63.46	62.90	41.26	88.68	86.75	7.59	3.82	8.48	11.17	99.56	80.03
1999	37.62	26	29.33	28.14	58.28	55.84	48.71	87.42	85.87	9.02	3.56	6.82	9.01	97.86	106.12
2000	38.55	22	23.20	22.92	58.84	58.11	36.20	87.83	85.67	10.91	1.26	3.37	7.41	99.88	91.64
2001	40.65	27	25.51	25.14	61.95	60.95	39.90	85.92	82.90	12.55	1.53	3.70	8.83	99.47	71.58
2002	40.48	28	19.23	18.87	57.70	56.14	31.83	78.32	76.56	14.07	7.61	19.31	21.20	99.58	55.75
2003	41.53	29	18.79	18.51	56.62	55.71	31.49	76.06	73.95	14.28	9.66	23.48	26.12	99.26	76.05
2004	41.24	32	17.44	17.18	58.75	57.82	26.79	79.36	75.06	11.61	9.03	25.21	31.93	99.52	87.80
2005	42.08	30	20.41	20.09	56.99	56.06	32.17	77.50	75.33	13.03	9.47	22.75	25.35	99.35	92.11
2006	43.77	26	17.03	16.74	55.15	54.18	26.55	83.27	79.60	10.44	6.28	19.12	20.64	97.88	116.90
2002-2006:		145	18.59	18.29	57.11	56.05	29.76	78.80	75.98	12.71	8.49	22.19	25.13	99.27	79.72
1997-2006:		275	22.04	21.65	58.73	57.61	35.13	82.62	80.14	11.48	5.90	14.39	17.65	99.24	84.48
1982-2006:		866	28.04	27.63	59.69	58.83	45.30	83.47	80.10	11.90	4.63	9.28	13.56	99.42	96.49

Planned Maintenance Schedule Development

1. The Long Range Planning Schedule (LRPS) from Power Supply Technical Division establishes the baseline for scheduled overhauls and inspections.

2. The duration of each unit outage is based on the scope of work to be accomplished. For planning purposes, the nominal planning duration and interval of each type of outage on the HECO LRPS is as follows:
    a. The nominal duration of each type of outage on the LRPS is as follows:
        i. Boiler Standard – 3 to 4 weeks
        ii. Boiler Chemical Clean – 3 to 4 weeks
        iii. High Pressure/Low Pressure Turbine – 6 weeks
        iv. High Pressure/Low Pressure/Generator – 7 to 9 weeks
        v. High Pressure Turbine – not typical as stand alone
        vi. Low Pressure Turbine – not typical as stand alone
        vii. Generator – 4 weeks
        viii. Major (Combustion Turbine) – 8 weeks
        ix. Hot Gas Path (Combustion Turbine – 6 weeks
        x. Combustor Inspection (Combustion Turbine) – 2 weeks
        xi. Generator (Combustion Turbine) – Included in Major.
    b. Nominal component intervals for maintenance are as follows:
        i. Boiler Standard – every 3 years
        ii. Boiler Chemical Clean – 6 to 9 years, evaluation based
        iii. High Pressure/Low Pressure Turbine – 6 years
        iv. Generator – 9 years
        v. Major (Combustion Turbine) – 8 years
        vi. Hot Gas Path (Combustion Turbine – 8 years
        vii. Combustor Inspection (Combustion Turbine) – 4 years
        viii. Generator (Combustion Turbine) – Included in Major.
    c. Each of the nominal planning durations or intervals can vary based on unit specific condition evaluation, operation, machine type, etc.
    d. Experience gained from problems found at each inspection or during operation is also utilized in making future maintenance decisions, including re-evaluation of the nominal planning durations or intervals.
    e. The number of run hours and number of starts is also reviewed and evaluated in making maintenance decisions on the combustion turbine maintenance durations and intervals.
    f. A steam boiler inspection is REQUIRED by permit every 3 years.
    g. “Breaker Close” to “Unit Firm” for scheduling purposes
        i. K6 requires a minimum of 2 days from” breaker close” to “unit firm”.

ii. All other units are typically 1 day from “breaker close” to “unit firm”.

h. *Note: The above durations and intervals have been established based on historical data and should be considered as typical durations and intervals, without contingency for extenuating circumstances.*

3. AES, KPLP, HPOWER unit PO requests are provided each year by the Power Purchase Division for the next several years.

4. Review the O&M budget and labor resource impact to the PMS. The following are reviewed:
   a. Labor resource availability can typically support 2-3 turbine overhauls in a given year.
   b. Labor resource availability can typically support 2-3 generator overhauls in a given year.
   c. Outside Service contractor labor or additional overtime may be required to support the scheduled work.
   d. Capital or O&M projects may require a longer unit overhaul duration than the typical boiler, turbine, generator, combustion turbine overhaul.
   e. Note: Budget evaluation is repeated throughout the year as the impact of changes to the PMS on the O&M budget and the impact of changes in the O&M budget on the PMS requires continual monitoring and adjustments.

5. Once the units to be scheduled on outage for a given year are identified, the placement within the calendar year is determined.
   a. The Monthly MW Peaks are provided by Forecasts & Research Division.
   b. The Reserve Margin is equal to the System Operating Capability minus the Spinning Reserve minus the Forecast Monthly Peak.
      i. System Operating Capability is normally 1673MW, not including Distributed Generation.
      ii. Spinning Reserve is usually 180MW when AES is in service and 142MW when AES is not in service.
   c. The maximum generation which can be removed from service for outage should not exceed the Reserve Margin on a weekday basis. Because system peaks are lower during weekends, exceeding the Reserve Margin may occur during the weekend days.
   d. Full plant outages for AES and KPLP are to be avoided during the summer months due to their MW capability.
   e. The 138-KV transmission line or transformer maintenance schedule is provided by the Energy Delivery process area and is

accommodated for in the PMS. In some cases, the 138-KV work can force changes in the PMS.

f. Arrange unit scheduling to accommodate economic system heat rate management where possible:
    i. Avoid scheduling K5 and K6 in overhaul within the same year to minimize the negative impact to system heat rate.
    ii. Avoid scheduling 2 reheat outages at the same time. *Note: This may be unavoidable if, for example, the units share common cooling water discharge tunnels and work on the tunnels is scheduled.*
g. Attempt to schedule a reheat unit in outage during the January/February timeframe to force unit loading higher on the remaining units to minimize air pre-heater and boiler fouling on the other steam units.

6. Scheduling Maintenance Outages (MOs)
    a. Typically, one equipment problem is defined to be the critical path for the identified MO.
    b. Typical MO work identified for inclusion in the PMS could be, but is not limited to:
        i. Boiler inspection
        ii. Air preheater washing
        iii. Circulating water tunnel cleaning
        iv. Boiler washing
        v. Specific equipment maintenance
        vi. Specific project work.
    c. Work order backlog items requiring a unit shutdown are to be reviewed for inclusion into the scheduled MO.
    d. Operating Division identifies and sets the priority of when an MO is required and the work to be performed.
    e. Material and labor availability is considered in the scheduling of MOs.
    f. Adjustments to other generating unit scheduled outages may be required due to the occurrence of an MO extension or due to a new and previously unscheduled MO (or FO).
    g. MOs are scheduled with the approval of the System Operations Operating Engineer.

7. To confirm that a PMS has a “normal” amount of outage time for POs and MOs, the total lost MWHs attributable to the POs and MOs are calculated and compared to historical experience. Recent historical experience has placed the typical total PO + MO lost MWHs at approximately 1,000,000 MWHs. This total is expected to vary with time and maintenance requirements and should be periodically reviewed. Situational requirements may dictate a deviation from the “normal” total lost MWHs.

8. Forced outages (FO) are unexpected and are not planned for. Adjustments to other generating unit scheduled outages may be required due to a generating unit forced outage to assure that we do not violate any of the scheduling constraints.

9. Constraints for PMS and MO schedule development:
    a. Allow for 1 to 2 weeks of gap between POs to allow for mobilization and staging of personnel, parts, and equipment.
    b. If possible, avoid scheduling W7 and W8 during Jul-Oct to allow for system MVAR support.
    c. W3 or W4 needs to be available to run when the 138KV back up to the 46KV system is not available.
    d. CEIP 138KV line maintenance requires limiting total IPP output to the system due to system reliability considerations.
        i. Check with System Operations on MW limitations.
        ii. This limitation will be removed with the addition of the CEIP transmission line for CIP CT1.
    e. Auxiliary steam requirements for in-plant fuel oil pipeline and tank heating:
        i. Avoid scheduling H8 and H9 at the same time.
        ii. Avoid scheduling W7 and W8 at the same time. If it is necessary for W7 and W8 to be unavailable simultaneously, W5 or W6 must be available to supply steam for in-plant fuel oil pipeline and tank heating on a 24/7 basis.
        iii. H9 requires atomizing steam from H8 for cold boiler start up.
    f. Do not schedule H8 and H9 at the same time if one unit is needed to support the downtown 46-kV circuit. Check with System Operations on downtown network circuit outage plans.
    g. Fuel oil pipeline and fuel oil tank maintenance is typically coordinated to overlap with a unit overhaul or an outage at the respective station to manage station fuel oil consumption and inventory while the pipeline or tank is out of service.
    h. The fuel oil ordering process occurs months in advance, therefore, it is necessary to coordinate with Fuels Division to update their fuel oil ordering and pipeline and tank maintenance plans.

10. Reviews, Approvals, Distribution
    a. The PMS is reviewed by the following:
        i. O&M Department
        ii. Power Supply Services Department
        iii. Substation Division
        iv. C&M Department
        v. Power Supply Engineering Department
        vi. Energy Delivery Engineering Department

vii. System Planning Division
viii. System Operations Department.

b. The PMS is approved and signed by the O&M Dept. Manager.
c. The PMS is distributed to the following:
    i. O&M Department
    ii. Power Supply Services Department
    iii. Substation Division
    iv. C&M Department
    v. Power Supply Engineering Department
    vi. Energy Delivery Engineering Department
    vii. System Planning Division
    viii. System Operations Department.

11. Changes/updates to the PMS:
    a. Updates and revisions to the PMS are approved and signed by the Power supply O&M Department Manager.
    b. Changes and updates can be driven by, but not limited to:
        i. Recently identified equipment or generating unit problems
        ii. IPP outage scheduling revisions
        iii. Weather related events
        iv. Financial considerations
        v. Capital project scheduling considerations
        vi. Resource (labor/material/service supplier) availability considerations
        vii. Revisions to the sales forecast
        viii. Other system considerations.

PMS Normalization Process

1. Started with extracted data from OUTAGEMASTER2 (.xls) for the years 1999-2007.
2. Deleted U1-U4 and D1-D4 data EXCEPT for the following (because they were Projects):
    a. W9 Forced Outage (U1) from 10/14/04 to 04/11/05.
    b. W8 Forced Outage (U1) from 10/14/05 to 02/08/06.
3. Corrected the extracted data for any pertinent errors:
    a. Coding error for type of outage (MO vs. PO)
    b. Double entry of data.
    c. Data overlap.
4. Performed calculation for Lost MWHs for the line items in the extracted data.
5. Consolidated PO lines to retain Start/Finish information (to allow calculation of comparative duration).
6. Performed calculation for Planned Duration vs. Actual Duration comparison using the following Planned Maintenance Schedules as a reference:
    a. 1999 dtd 03/25/98; could not determine what schedule was used for Report 1, used the schedule deemed most closely timed to the budget.
    b. 2000 dtd 05/11/99; Report 1 schedule.
    c. 2001 dtd 04/18/00; Report 1 schedule.
    d. 2002 dtd 05/11/01; Report 1 schedule.
    e. 2003 dtd 01/03/03; Report 1 schedule.
    f. 2004 dtd 06/09/03; Report 1 schedule.
    g. 2005 dtd 01/12/04; Report 1 schedule.
    h. 2006 dtd 08/03/05; Report 1 schedule.
    i. 2007 dtd 02/14/06; Report 1 schedule.
    j. Comparison was limited only to those outages assigned a Project Number (i.e., overhauls). All other outages were considered to be Maintenance Outages (or other).
    k. Comparison was limited only to those outages for which a schedule existed in the above identified Planned Maintenance Schedules.
    l. The derived Duration Correction Factor was deemed necessary to account for unforecast of emergent work found after the overhaul has started and which extends the overhaul duration.
7. (Refer to file: OUTAGEMASTER for Normalization(03-17-08).xls for steps 1 through 6 above.)
8. The historical and future PO instances and durations were tallied in Matrix(03-17-08).xls spreadsheet.
9. The Duration Correction Factor derived above was applied to the future planned overhaul durations in the Matrix(03-17-08).xls file to reflect that historical outage durations are mostly lower than future planned outages due to factors including emergent work.

10. The Matrix(03-17-08).xls spreadsheet calculates the average number of overhauls and duration, by Unit Class, for the historical and forward looking overhauls.
11. The Future duration averages for each unit class were multiplied the average number of overhauls per year for each unit class to get the average Overhaul-Days per year by unit class.
12. The Average Overhaul-Days was divided by the rounded number of overhauls to get a Normalized Overhaul Duration to use in the Normalized Schedule for each unit class.
13. The results were input into a schedule using the 2009 Reserve Margin calculation. This was termed the Normalized Schedule.
14. Power Purchase Division provided inputs for AES, KPLP, and HPOWER outages.
    a. AES: 11 days of equivalent -90MW outages.
    b. KPLP: 24 days of equivalent full plant outages.
    c. HPOWER: 53 days of equivalent ½ plant outages.
    d. (Refer to Power Purchase for derivation of these schedules.)
15. The Lost MWHs due to MO was calculated for each year from 2000-2007.
    a. Data from 2007TY CA-IR-64 was used for 2000-2006.
    b. 2007 Recorded was taken from NERC/GADS.
16. The average Lost MWH due to MO (without CIP1) was calculated. (Refer to file: PO+MO Calc_2000-2013.xls.)
17. MOs were added to the TY2009 Normalized Schedule to result in a total Lost MWH due to MO of ~351,102 (based on the average of 2003-2007; without CIP1).

Overhaul Normalization Calculation

Start 12/2/2013
End 12/16/2013
Dur 15

Overlaps years

		Duration in Days															Recorded			Future			All Years			Average		Duration Correction		
		1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Count	Tot Dur	Ave	Count	Tot Dur	Ave	Count	Tot Dur	Ave	Recorded	Future	Factor	Corrected	Normalized Amount and Duration
Reheat 90	K1	66			50				92			62				61	3	208	69	2	123	62	5	331	66					
	K2			57				89				62			50		2	146	73	2	112	56	4	258	65					
	K3			70						85				55			2	155	78	1	55	55	3	210	70					
	K4	67	37		29	66			61				73			48	5	260	52	2	121	61	7	381	54					
	W7		66			52				90				69			3	208	69	1	69	69	4	277	69					
	W8		76				73	116			64		82			57	3	265	88	3	203	68	6	468	78	72	62	1.072242	66	
	Count	2	3	2	2	2	1	2	2	2	1	2	2	2	1	3			2.0			1.8			1.9					2 Equals (2) Reheat 90's at 64 Days
Reheat 140	K5		41				104				55				71		2	145	73	2	126	63	4	271	68					Est Lost MWH 275875
	K6	72			98			77				66				71	3	247	82	2	137	69	5	384	77	77	66	1.222088	80	
	Count	1	1	0	1	0	1	1	0	0	1	1	0	0	1	1			0.6			0.7			0.6					1 Equals (1) Reheat 140 at 48 Days
Cycler	H8		26			231					85				92		2	257	129	2	177	89	4	434	109					Est Lost MWH 161990
	H9				112				104	40				71			3	256	85	1	71	71	4	327	82					
	W3	31					126										2	157	79	0	0		2	157	79					
	W4			49					83								2	132	66	0	0		2	132	66					
	W5	44			192						68			64			2	236	118	2	132	66	4	368	92					
	W6			57				80				90					2	137	69	1	90	90	3	227	76	91	79	1.357747	107	Use (2) Cyclers as cannot schedule (1) LONG outage
	Count	2	1	2	2	1	1	1	2	1	2	1	0	2	1	0			1.6			1.0			1.3					2 Equals (2) Cyclers at 68 Days
																	0	0					0	0						Est Lost MWH 162780
Combustion Turbine	W9	14		29			182				26				61		3	225	75	2	87	44	5	312	62					
	W10			17					87			61	40	30			2	104	52	3	131	44	5	235	47	64	44	1.069015	47	
	BP1											20		26	39	15	0	0		4	100	25	4	100	25				25	
	Count	1	0	2	0	0	1	0	1	0	1	1	1	1	1	0			0.6			0.8			0.7					1 Equals (1) CT at 31 Days
																														Est Lost MWH 37273
				49	There were (2) overhauls in 2001 for W4 of duration 18 + 30.																									637918
										72	There were (2) overhauls in 2007 for H9 of duration 32 + 40.																			

NOTES:

1.) We plan for a duration and take longer than planned because we find unexpected work. (This is the reason for Duration Correction Factor.)

2.) The duration by type of outage (Boiler vs. Turbine vs. Generator) cannot be isolated -- everything is inter-mixed.

3.) The outage duration can be driven by Capital Project duration and this cannot be isolated.

Input Required in these Highlighed Cells

POWER SUPPLY OPERATION & MAINTENANCE
PLANNED MAINTENANCE
SCHEDULE

An HEI Company

Peaks as of:
Revision date:

UNIT	DATE				Duration		REMARKS
	Brk Op	Start	Bkr Cl	Firm	Wks.Days	REMARKS	

Type	Days	Rating	Lost MWH	MO Tot	PO Tot	Total		Unit	Capability
	1	0	0	0	0	0		AES	0
	1	0	0					AES-	0
	1	0	0					CIP	110
	1	0	0					H8	56
	1	0	0					H9	57
	1	0	0					HRRV	0
	1	0	0					HRRV-	0
	1	0	0					K1	86
	1	0	0					K2	86
	1	0	0					K3	90
	1	0	0					K4	89
	1	0	0					K5	142
	1	0	0					K6	142
	1	0	0					KPLP	0
	1	0	0					KPLP-	0
	1	0	0					W10	50
	1	0	0					W3	49
	1	0	0					W4	49
	1	0	0					W5	57
	1	0	0					W6	56
	1	0	0					W7	87
	1	0	0					W8	90
	1	0	0					W9	53
	1	0	0						
	1	0	0						
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	1	0	0						
	1	0	0						
	1	0	0						
	1	0	0						
			0						

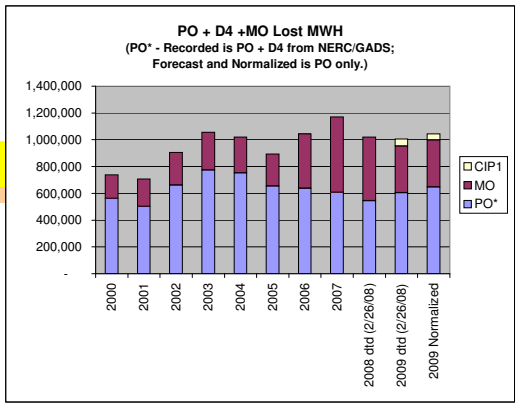
* - Recorded is PO + D4 from NERC/GADS; Forecast is PO only.

	MO	PO*	CIP1	Tot		
2000	177709	560664		738373		
2001	206120	502147		708267		
2002	243931	661878		905810		
2003	281249	774850		1056099		
2004	266270	752931		1019201		
2005	238380	654854		893234		
2006	404479	638450		1042928		
2007	565133	606117		1171250	Recorded	
2008 dtd (2/26/08)	474120	544944		1019064	Forecast	2/26/08 Schedule
2009 dtd (2/26/08)	349128	604776	52800	1006704		2/26/08 Schedule
2009 Normalized	351600	647760	44880	1044240		3/17/09 Normalized Schedule
This Schedule	0	0	0	0		1/0/1900 Schedule

(ADJUST TO CORRECT FOR CIP)

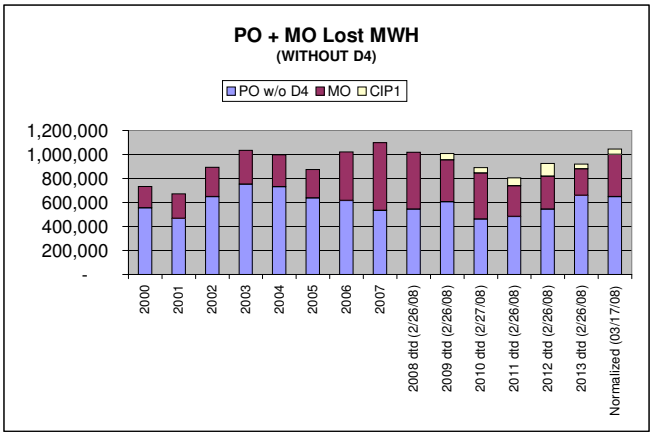
2003-2007 Average PO + MO =	1036542
Normalized PO + MO w/o CIP1 =	999360
Difference	37182
2003-2007 Average PO =	685440
2003-2007 Average MO =	351102
PO + MO	1036542

D4 Total Lost MWH		
	1999	5747
	2000	4724
	2001	36681
	2002	13571
	2003	22040
	2004	21956
	2005	17550
	2006	22363
	2007	73385



	MO	PO w/o D4	CIP1	Tot		
2000	177709	555940		733649		
2001	206120	465466		671586		
2002	243931	648307		892238		
2003	281249	752810		1034059		
2004	266270	730975		997245		
2005	238380	637305		875684		
2006	404479	616086		1020565		
2007	565133	532732		1097865	Recorded	
2008 dtd (2/26/08)	474120	544944		1019064	Forecast	2/26/08 Schedule
2009 dtd (2/26/08)	349128	604776	52800	1006704		2/26/08 Schedule
2010 dtd (2/27/08)	384000	460536	44880	889416		02/27/08 Schedule
2011 dtd (2/26/08)	254160	483864	68640	806664		02/26/08 Schedule
2012 dtd (2/26/08)	276000	543192	105600	924792		02/26/08 Schedule
2013 dtd (2/26/08)	221784	658296	39600	919680		02/26/08 Schedule
Normalized (03/17/0	351600	647760	44880	1044240		3/17/08 Normalized Schedule

2003-2007 Average PO + MO =	1005084	
Normalized PO + MO w/o CIP1 =	999360	
Difference	5724	**(= 4 days of W5)**
2003-2007 Average PO =	653982	
2003-2007 Average MO =	351102	
PO + MO	1005084	



Overhaul Normalization Calculation

Overlaps years

		Recorded					Budget		
		2003	2004	2005	2006	2007	2008	2009	
Reheat 90	K1				6,153,046			5,119,238	
	K2			5,360,558				5,313,719	K2 in 2009 Only
	K3					6,947,530			
	K4	2,496,563			4,774,065				
	W7	1,891,812				6,099,113			
	W8		3,585,725	**1,626,028**			4,722,739		W8 in 2005 does NOT includes $866,078 for Insurance Credit
	Count	2	1	2	2	2	1	2	
	Ave Cost	2,194,188	3,585,725	3,493,293	5,463,556	6,523,322	4,722,739	5,216,479	**4,969,609 = Average of 2008 & 2009**
Reheat 140	K5		4,588,252				4,607,058		
	K6			3,625,418				6,572,781	
	Count	-	1	1	-	-	1	1	
	Ave Cost		4,588,252	3,625,418			4,607,058	6,572,781	**5,589,920 = Average of 2008 & 2009**
Cycler	H8	4,929,482					6,488,582		H8 in 2008 includes reallocation of K2 Labor
	H9	3,545,243				3,415,789			H9 in 2007 is sum of 2 outages
	W3		3,308,665						
	W4				5,173,048				
	W5	4,598,415					5,618,339		
	W6			2,794,283				2,824,691	Does NOT include expenses carrying over into 2010.
	Count	3	1	1	1	1	2	1	
	Ave Cost	4,357,713	3,308,665	2,794,283	5,173,048	3,415,789	6,053,461	2,824,691	**4,439,076 = Average of 2008 & 2009**
Combustion Turbine	W9		4,010,056						W9 in 2004 does NOT include $2,991,459 for Insurance Credit
	W10				5,129,794			2,467,721	
	BP1								
	Count	-	1	-	1	-	-	1	
	Ave Cost		4,010,056		5,129,794			2,467,721	**2,467,721 = Average of 2008 & 2009**
Grand Total		**17,461,515**	**15,492,698**	**13,406,287**	**21,229,953**	**16,462,432**	**21,436,718**	**22,298,150**	

Project costs for Forced Outage work.

Handy-Whitman Index	7/1/2003	7/1/2004	7/1/2005	7/1/2006	7/1/2007
Bulletin No. 166	441	458	484	507	532
July1 Index					
Cost Trends of Electric Utility Construction					
Pacific Region (1973 = 100)					
Steam Production Plant -- Total Steam Production Plant					
pg E-6-7 to E-6-8					
Multiplier to escalate prior years to 2007.	1.20634921	1.16157205	1.09917355	1.04930966	1

Multiplier to escalate 2007 to 2009 $$$ 1.09833929 (squart root of 1.20634921 above)

Average Overhaul Cost, by unit class, escalated to 2007 $$$

	2003	2004	2005	2006	2007	Average
Reheat 90 Average Cost	2,646,956	4,165,078	3,839,735	5,732,962	6,523,322	4,581,611
Reheat 140 Average Cost	-	5,329,585	3,984,964	-	-	4,657,274
Cycler Average Cost	5,256,924	3,843,253	3,071,402	5,428,129	3,415,789	4,203,099
CT Average Cost	-	4,657,969	-	5,382,742	-	5,020,356

Normalized

	Ave Cost	# Units	Total	Escalate to 2009		Per Unit in 2009
Reheat 90 Average Cost	4,581,611	1.9	8,705,060	1.09833929	9,561,109	5,032,163
Reheat 140 Average Cost	4,657,274	0.6	2,794,365	1.09833929	3,069,161	5,115,268
Cycler Average Cost	4,203,099	1.3	5,464,029	1.09833929	6,001,358	4,616,429
CT Average Cost	5,020,356	0.7	3,514,249	1.09833929	3,859,838	5,514,054
			20,477,703		**22,491,466**	

"# Units" from PMS Normalization file, Matrix(03-17-08).xls.

Reasonableness Check to 2009 Budget

	2009bud	# Units	Cost per Unit
Reheat 90	10,432,957	2	5,216,479
Reheat 140	6,572,781	1	6,572,781
Cycler	2,824,691	1	2,824,691
CT	2,467,721	1	2,467,721
	22,298,150		

Comments:

1 CT Average Cost is high, but we will perform CI's in 2009, 2010, and 2011 and a Major in 2012.
2 Carryover of expenses from 2002 to 2003 are INCLUDED in the 2003 tallies.
-- $1,007,915 was added to H9 amount of $2,537,328 in 2003 (total = $3,545,243).
-- $3,419,654 was added to W5 amount of $1,178,761 in 2003 (total = $4,598,415).
3 W6 total of $2.825M DOES NOT INCLUDE the amount of carryover into 2010. The amount of $2.825M for W6 is understated, but it was not used in the normalized expense calculation.
4 $1,075,049 was added to H8 amount of $5,412,633 in 2008 for K2 Reallocation (total = $6,488,582).
5 The Insurance Credit amounts for W9 in 2004 and W8 in 2005 are not included. These (2) outage amounts are understated for the work performed.
6 The Handy-Whitman Index for the period 2003 to 2007 was used to determine an inflation escalation from 2007 to 2009. This factor was arrived at by taking the square root of the 1.206 multiplier for 2003.
7 Normalized Total will be understated if the real inflation exceeds our projected 1.098 factor.

Overhaul Project Cost Summary

acctblk	PROJ	LOC	2003rec	2004rec	2005rec	2006rec	2007rec	2008bud	2009bud	Sum	
B31	P0000523	H08	4,900,031	29,451	-	-	-	-	-	4,929,482	
	P0001278	H08	-	-	-	-	-	5,412,633	-	5,412,633	Add $1,075,049 to H8 in 2008 for K2 Reallocation
	P0000138	H09	2,537,328	-	-	-	-	-	-	2,537,328	Add $1,007,915 for costs in 2002
	P0001280	H09	-	-	-	745,007	1,372,640	-	-	2,117,647	Sum
	P0001496	H09	-	-	-	-	1,298,142	-	-	1,298,142	3,415,789
	P0000249	W03	511	3,305,216	2,938	-	-	-	-	3,308,665	
	P0000244	W04	6,654	18	-	-	-	-	-	6,671	
	P0000847	W04	-	-	204,738	4,848,769	119,541	-	-	5,173,048	
	P0000252	W05	1,177,912	850	-	-	-	-	-	1,178,761	Add $3419,654 for costs in 2002
	P0001279	W05	-	-	-	-	114,951	5,503,388	-	5,618,339	
	P0000654	W06	-	555,313	2,374,147	-	(135,177)	-	-	2,794,283	
	P0001425	W06	-	-	-	-	-	-	2,824,691	2,824,691	
	Cycler		**8,622,435**	**3,890,848**	**2,581,823**	**5,593,776**	**2,770,098**	**10,916,020**	**2,824,691**		
										-	
	P0000251	K01	9,245	3,338	-	-	-	-	-	12,584	
	P0000846	K01	-	-	-	2,049,301	4,103,746	-	-	6,153,046	
	P0001426	K01	-	-	-	-	-	-	5,119,238	5,119,238	
	P0000247	K02	108	-	-	-	-	-	-	108	
	P0000650	K02	-	94,744	5,067,176	198,638	-	-	-	5,360,558	
	P0001107	K02	-	-	-	-	-	4,076,126	5,313,719	9,389,845	
	P0000248	K03	(51,566)	398	-	-	-	-	-	(51,169)	
	P0001105	K03	-	-	-	22,550	6,924,980	-	-	6,947,530	
	P0000139	K04	(100,868)	-	-	-	-	-	-	(100,868)	
	P0000520	K04	3,658	3,869	-	-	-	-	-	7,527	
	P0000655	K04	1,378,271	1,118,291	-	-	-	-	-	2,496,563	
	P0000845	K04	-	-	281,200	4,363,308	129,557	-	-	4,774,065	
	P0000522	W07	1,866,025	25,787	-	-	-	-	-	1,891,812	
	P0001106	W07	-	-	-	55,484	6,043,629	-	-	6,099,113	
	P0000521	W08	-	3,444,804	140,921	-	-	-	-	3,585,725	
	P0001273	W08	-	-	-	-	-	4,722,739	-	4,722,739	
	Reheat 90		**3,104,874**	**4,691,231**	**5,489,297**	**6,689,281**	**17,201,911**	**8,798,865**	**10,432,956**		
										-	
	P0000519	K05	366,497	4,221,754	-	-	-	-	-	4,588,252	
	P0001276	K05	-	-	-	-	-	3,507,058	1,100,000	4,607,058	
	P0000250	K06	1,897	-	-	-	-	-	-	1,897	
	P0000844	K06	-	330	3,639,176	18,882	(32,971)	-	-	3,625,418	
	P0001428	K06	-	-	-	-	-	852,633	5,720,148	6,572,781	
	Reheat 140		**368,394**	**4,222,084**	**3,639,176**	**18,882**	**(32,971)**	**4,359,691**	**6,820,148**		
										-	
	P0000937	W09	-	981,918	2,821,672	206,465	-	-	-	4,010,056	
	P0001277	W09	-	-	-	-	-	-	-	-	
	P0000938	W10	-	-	637,284	4,489,444	3,067	-	-	5,129,794	
	P0001274	W10	-	-	-	-	-	-	2,467,721	2,467,721	
	CT		**-**	**981,918**	**3,458,956**	**4,695,909**	**3,067**	**-**	**2,467,721**		
										-	
Grand Total Overhaul "P" Proje			**12,095,703**	**13,786,081**	**15,169,252**	**16,997,848**	**19,942,105**	**24,074,577**	**22,545,516**		

	2003rec	2004rec	2005rec	2006rec	2007rec	2008bud	2009bud
Cycler	8,622,435	3,890,848	2,581,823	5,593,776	2,770,098	10,916,020	2,824,691
Reheat 90	3,104,874	4,691,231	5,489,297	6,689,281	17,201,911	8,798,865	10,432,956
Reheat 140	368,394	4,222,084	3,639,176	18,882	(32,971)	4,359,691	6,820,148
CT	-	981,918	3,458,956	4,695,909	3,067	-	2,467,721
Total Overhaul "P"	**12,095,703**	**13,786,081**	**15,169,252**	**16,997,848**	**19,942,105**	**24,074,577**	**22,545,516**

NAR...	NARUC Descr	*RA #	Resp Area	*A...	Activity	FY03 Act02-03$RA	FY04 Act04-05$RA	FY05 Act04-05$RA	FY06 Act06-07$ RA	FY07 Act06-07$ RA	FY08 Budget08	FY09 RC Budget09
184	CLRNG ACCTS	PIA	Admin-PS Services	789	Attend Training	$1,688	$1,417	$8,155	$4,294	$4,852	$16,900	$25,348
				797	Attend Safety Training	$0	$0	$44	$76	$134	0	0
						$1,688	$1,417	$8,199	$4,370	$4,986	$16,900	$25,348
		PIB	Admin-PS O&M	785	Plan Emp Trng & Dev	$2,282	$13,013	$1,171	$2,470	$131	$0	$0
				787	Dev Empl Training	0	$0	$27,621	$37,706	$0	0	0
				788	Conduct Empl Training	0	$0	$4,295	$10,221	$1,711	$0	$0
				789	Attend Training	$127,523	$162,488	$251,924	$162,997	$58,554	$70,137	$78,270
				797	Attend Safety Training	$842	$1,921	$8,234	$549	$3,176	$8,903	$9,775
						$130,646	$177,422	$293,245	$213,943	$63,572	$79,041	$88,045
		PIC	Power Purchase	789	Attend Training	$2,346	$6,512	$5,612	$1,615	$8,057	$200	$200
				797	Attend Safety Training	$420	$1,582	$927	$53	$431	0	0
						$2,765	$8,094	$6,539	$1,668	$8,488	$200	$200
		PID	PS Training	785	Plan Emp Trng & Dev	0	0	0	$12,826	$7	0	0
				787	Dev Empl Training	0	0	0	$73,742	$205,687	$230,257	$303,181
				788	Conduct Empl Training	0	0	0	$7,351	$11,919	$40,003	$58,062
				789	Attend Training	0	0	0	$4,108	$186,974	$485,129	$497,135
				797	Attend Safety Training	0	0	0	$0	$790	$2,678	$4,237
						0	0	0	$98,027	$405,377	$758,066	$862,614
		PIE	PS Technical Ser...	785	Plan Emp Trng & Dev	$0	0	0	0	0	0	0
				789	Attend Training	$0	0	0	0	0	0	0
				797	Attend Safety Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
		PIF	Fuel Resources	789	Attend Training	$4,298	$3,869	$494	$2,595	$2,529	0	0
				797	Attend Safety Training	0	$689	$0	0	0	0	0
						$4,298	$4,558	$494	$2,595	$2,529	0	0
		PIH	Honolulu Stn Oper	785	Plan Emp Trng & Dev	$0	$3,233	$0	0	0	0	0
				789	Attend Training	$49,437	$49,833	$192,488	$196,241	$237,393	$259,928	$266,511
				797	Attend Safety Training	$8,507	$5,587	$9,850	$6,931	$1,933	$29,604	$29,420
						$57,944	$58,654	$202,338	$203,172	$239,326	$289,533	$295,931
		PIJ	Fuels Infrastructure	789	Attend Training	0	0	0	$0	$620	0	0

NAR...	NARUC Descr	*RA #	Resp Area	*A...	Activity	FY03 Act02-03$RA	FY04 Act04-05$RA	FY05 Act04-05$RA	FY06 Act06-07$ RA	FY07 Act06-07$ RA	FY08 Budget08	FY09 RC Budget09
184	CLRNG ACCTS	PIJ				0	0	0	$0	$620	0	0
		PIK	Kahe Stn Oper	785	Plan Emp Trng & Dev	$611	$3,880	$2,462	$1,525	$61	0	0
				789	Attend Training	$172,155	$310,594	$615,325	$501,336	$790,154	$870,809	$979,106
				797	Attend Safety Training	$32,211	$21,404	$32,189	$29,375	$28,850	$65,721	$64,965
						$204,976	$335,878	$649,976	$532,236	$819,064	$936,530	$1,044,071
		PIL	Kahe Stn Maint	785	Plan Emp Trng & Dev	$6,666	$6,940	$7,279	$7,888	$7,756	0	0
				789	Attend Training	$52,152	$73,057	$57,535	$72,099	$62,495	$177,752	$153,228
				797	Attend Safety Training	$37,871	$28,266	$42,601	$35,062	$41,732	$29,940	$30,786
						$96,689	$108,263	$107,416	$115,048	$111,983	$207,693	$184,014
		PIM	Maintenance Admin	785	Plan Emp Trng & Dev	$4,358	$1,820	$751	$887	$1,620	$0	$0
				789	Attend Training	$6,115	$2,717	$5,182	$3,904	$8,029	$3,777	$11,488
				797	Attend Safety Training	$596	$717	$611	$1,379	$839	$1,683	$1,646
						$11,068	$5,254	$6,544	$6,170	$10,489	$5,460	$13,135
		PIN	Honolulu Stn Maint	785	Plan Emp Trng & Dev	$595	0	0	$0	$1,269	0	0
				787	Dev Empl Training	0	0	0	$0	$5,667	0	0
				789	Attend Training	$15,314	$30,522	$47,298	$43,300	$36,204	$85,016	$74,762
				797	Attend Safety Training	$13,538	$10,775	$9,882	$15,142	$10,348	$10,494	$10,453
						$29,447	$41,297	$57,180	$58,442	$53,489	$95,510	$85,215
		PIO	Operations Admin	785	Plan Emp Trng & Dev	$4,678	$5,197	$14,193	$1,547	$0	$15,102	$0
				789	Attend Training	$1,941	$3,340	$23,754	$5,470	$8,674	$27,383	$9,904
				797	Attend Safety Training	0	$0	$3,315	$864	$888	$1,991	$1,948
						$6,619	$8,537	$41,261	$7,882	$9,562	$44,476	$11,852
		PIP	Plan & Engr	785	Plan Emp Trng & Dev	$5,379	$7,379	$4,602	$9,746	$11,777	$6,817	$7,046
				787	Dev Empl Training	0	0	0	$0	$914	0	0
				788	Conduct Empl Training	0	0	0	$146	$6,867	0	0
				789	Attend Training	$62,585	$75,035	$113,210	$83,873	$156,592	$194,592	$220,602
				797	Attend Safety Training	$8,304	$10,472	$10,413	$11,835	$6,768	$19,796	$22,158
						$76,268	$92,885	$128,225	$105,599	$182,918	$221,206	$249,805
		PIR	PS Tech Solutions	789	Attend Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0

NAR...	NARUC Descr	*RA #	Resp Area	*A...	Activity	FY03 Act02-03$RA	FY04 Act04-05$RA	FY05 Act04-05$RA	FY06 Act06-07$ RA	FY07 Act06-07$ RA	FY08 Budget08	FY09 RC Budget09
184	CLRNG ACCTS	PIT	Traveling Mainten...	785	Plan Emp Trng & Dev	$20,845	$18,095	$28,234	$30,442	$1,537	$0	$0
				787	Dev Empl Training	0	0	0	$0	$1,979	0	0
				789	Attend Training	$113,901	$117,923	$138,528	$261,305	$123,634	$380,689	$425,019
				797	Attend Safety Training	$73,427	$56,127	$70,905	$85,464	$73,142	$74,134	$78,943
						$208,173	$192,144	$237,667	$377,211	$200,292	$454,823	$503,962
		PIW	Waiau Stn Oper	785	Plan Emp Trng & Dev	$829	$2,240	$2,606	$1,509	$0	0	0
				787	Dev Empl Training	0	$0	$21,409	$37,389	$0	0	0
				788	Conduct Empl Training	0	$0	$9,702	$19,261	$70	0	0
				789	Attend Training	$355,482	$437,508	$866,416	$791,810	$1,239,831	$1,178,742	$1,224,890
				797	Attend Safety Training	$23,829	$25,050	$33,504	$36,512	$38,883	$71,114	$69,838
						$380,141	$464,798	$933,637	$886,482	$1,278,783	$1,249,857	$1,294,728
		PIX	Waiau Stn Maint	785	Plan Emp Trng & Dev	$0	$2,203	$254	$18,415	$1,146	0	0
				787	Dev Empl Training	0	0	0	$0	$933	0	0
				789	Attend Training	$62,922	$71,921	$162,742	$85,209	$84,364	$162,711	$175,874
				797	Attend Safety Training	$41,199	$28,471	$39,430	$42,522	$33,370	$29,088	$28,604
						$104,121	$102,595	$202,426	$146,146	$119,813	$191,799	$204,478
		PIY	CIP Stn Oper	789	Attend Training	0	0	0	0	0	$0	$67,422
				797	Attend Safety Training	0	0	0	0	0	$0	$7,076
						0	0	0	0	0	$0	$74,498
		PIZ	CIP Stn Maint	789	Attend Training	0	0	0	0	0	$0	$88,975
				797	Attend Safety Training	0	0	0	0	0	$0	$8,124
						0	0	0	0	0	$0	$97,099
						$1,314,844	$1,601,796	$2,875,147	$2,758,990	$3,511,292	$4,551,093	$5,034,996
						$1,314,844	$1,601,796	$2,875,147	$2,758,990	$3,511,292	$4,551,093	$5,034,996
1861	CHGS BILL AS...	PIB	Admin-PS O&M	789	Attend Training	0	$588	$0	0	0	0	0
						0	$588	$0	0	0	0	0
		PIE	PS Technical Ser...	788	Conduct Empl Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
		PIK	Kahe Stn Oper	789	Attend Training	0	$4,858	$0	0	0	0	0

NAR...	NARUC Descr	*RA #	Resp Area	*A...	Activity	FY03 Act02-03$RA	FY04 Act04-05$RA	FY05 Act04-05$RA	FY06 Act06-07$ RA	FY07 Act06-07$ RA	FY08 Budget08	FY09 RC Budget09
1861	CHGS BILL AS...	PIK				0	$4,858	$0	0	0	0	0
		PIL	Kahe Stn Maint	788	Conduct Empl Training	0	$0	$127	$1,089	$780	0	0
						0	$0	$127	$1,089	$780	0	0
		PIT	Traveling Mainten...	788	Conduct Empl Training	0	$0	$776	0	0	0	0
				789	Attend Training	0	$2,767	$0	0	0	0	0
						0	$2,767	$776	0	0	0	0
						$0	$8,213	$903	$1,089	$780	0	0
						$0	$8,213	$903	$1,089	$780	0	0
506	MISC STM PW...	PIA	Admin-PS Services	788	Conduct Empl Training	0	0	0	0	0	$0	0
				789	Attend Training	0	$3,280	$10,920	$254	$1,113	$2,023	$9,648
						0	$3,280	$10,920	$254	$1,113	$2,023	$9,648
		PIB	Admin-PS O&M	787	Dev Empl Training	$32,542	$30,971	$42,357	0	0	$0	$0
				788	Conduct Empl Training	$3,371	$10,738	$7,665	0	0	$0	$0
						$35,913	$41,709	$50,022	0	0	$0	$0
		PID	PS Training	785	Plan Emp Trng & Dev	0	0	0	0	0	$27,729	$27,945
						0	0	0	0	0	$27,729	$27,945
		PIE	PS Technical Ser...	788	Conduct Empl Training	$0	0	0	0	0	0	0
				789	Attend Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
		PIH	Honolulu Stn Oper	788	Conduct Empl Training	0	0	0	0	0	$0	0
						0	0	0	0	0	$0	0
		PIK	Kahe Stn Oper	787	Dev Empl Training	0	$24,044	$0	0	0	0	0
				788	Conduct Empl Training	$880	$6,094	$0	0	0	$0	$0
						$880	$30,139	$0	0	0	$0	$0
		PIL	Kahe Stn Maint	796	Prov & Mg Fire Protect	$212	$0	$349	0	0	0	0
						$212	$0	$349	0	0	0	0

NAR...	NARUC Descr	*RA #	Resp Area	*A...	Activity	FY03 Act02-03$RA	FY04 Act04-05$RA	FY05 Act04-05$RA	FY06 Act06-07$ RA	FY07 Act06-07$ RA	FY08 Budget08	FY09 RC Budget09
506	MISC STM PW...	PIO	Operations Admin	788	Conduct Empl Training	$229	0	0	0	0	0	0
						$229	0	0	0	0	0	0
		PIP	Plan & Engr	787	Dev Empl Training	$0	$644	$4,178	0	0	0	0
				788	Conduct Empl Training	$9,089	$1,000	$1,311	$1,158	$0	$0	$0
						$9,089	$1,644	$5,490	$1,158	$0	$0	$0
		PIT	Traveling Mainten...	796	Prov & Mg Fire Protect	0	0	0	$0	$211	0	0
						0	0	0	$0	$211	0	0
		PIW	Waiau Stn Oper	787	Dev Empl Training	0	$17,770	$56,759	0	0	0	0
				788	Conduct Empl Training	$3,089	$6,442	$19,823	0	0	$0	$0
						$3,089	$24,212	$76,582	0	0	$0	$0
		PIX	Waiau Stn Maint	788	Conduct Empl Training	$964	0	0	0	0	$0	$0
				789	Attend Training	0	$6,090	$0	0	0	0	0
				796	Prov & Mg Fire Protect	0	$0	$131	$154	$77	0	0
						$964	$6,090	$131	$154	$77	$0	$0
						$50,377	$107,074	$143,494	$1,566	$1,402	$29,752	$37,593
						$50,377	$107,074	$143,494	$1,566	$1,402	$29,752	$37,593
514	MAINT MISC S...	PIB	Admin-PS O&M	787	Dev Empl Training	$31,519	$29,388	$39,659	0	0	$0	$0
				788	Conduct Empl Training	$206	$987	$208	0	0	$0	$0
						$31,725	$30,375	$39,867	0	0	$0	$0
		PIE	PS Technical Ser...	787	Dev Empl Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
		PIK	Kahe Stn Oper	787	Dev Empl Training	$0	0	0	0	0	0	0
				788	Conduct Empl Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
		PIL	Kahe Stn Maint	787	Dev Empl Training	$0	0	0	0	0	0	0
				796	Prov & Mg Fire Protect	$11	0	0	0	0	0	0
						$11	0	0	0	0	0	0

NAR...	NARUC Descr	*RA #	Resp Area	*A...	Activity	FY03 Act02-03$RA	FY04 Act04-05$RA	FY05 Act04-05$RA	FY06 Act06-07$ RA	FY07 Act06-07$ RA	FY08 Budget08	FY09 RC Budget09
514	MAINT MISC S...	PIP	Plan & Engr	787	Dev Empl Training	$0	$240	$3,546	$554	$0	0	0
				788	Conduct Empl Training	$3,001	$173	$1,599	$3,945	$0	0	0
						$3,001	$413	$5,145	$4,499	$0	0	0
		PIR	PS Tech Solutions	787	Dev Empl Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
		PIT	Traveling Mainten...	787	Dev Empl Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
		PIW	Waiau Stn Oper	788	Conduct Empl Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
		PIX	Waiau Stn Maint	787	Dev Empl Training	$0	0	0	0	0	0	0
						$0	0	0	0	0	0	0
						$34,736	$30,788	$45,012	$4,499	$0	$0	$0
						$34,736	$30,788	$45,012	$4,499	$0	$0	$0
925	INJURIES & DA...	PIA	Admin-PS Services	795	Mg Safety Pgm & Trng	$99	$280	$224	$230	$192	0	0
						$99	$280	$224	$230	$192	0	0
		PIB	Admin-PS O&M	795	Mg Safety Pgm & Trng	$23,832	$29,549	$37,384	$49,181	$40,246	$44,156	$44,433
						$23,832	$29,549	$37,384	$49,181	$40,246	$44,156	$44,433
		PIH	Honolulu Stn Oper	795	Mg Safety Pgm & Trng	$1,336	$2,554	$870	$2,583	$940	$0	$0
						$1,336	$2,554	$870	$2,583	$940	$0	$0
		PIK	Kahe Stn Oper	795	Mg Safety Pgm & Trng	$4,586	$3,798	$11,061	$6,402	$4,424	$8,568	$0
						$4,586	$3,798	$11,061	$6,402	$4,424	$8,568	$0
		PIL	Kahe Stn Maint	795	Mg Safety Pgm & Trng	$13,439	$16,333	$11,905	$8,247	$6,784	0	0
						$13,439	$16,333	$11,905	$8,247	$6,784	0	0
		PIN	Honolulu Stn Maint	795	Mg Safety Pgm & Trng	$3,998	$5,599	$3,195	$6,711	$123	0	0
						$3,998	$5,599	$3,195	$6,711	$123	0	0

NAR...	NARUC Descr	*RA #	Resp Area	*A...	Activity	FY03 Act02-03$RA	FY04 Act04-05$RA	FY05 Act04-05$RA	FY06 Act06-07$ RA	FY07 Act06-07$ RA	FY08 Budget08	FY09 RC Budget09
925	INJURIES & DA...	PIO	Operations Admin	795	Mg Safety Pgm & Trng	0	$260	$172	$233	$0	0	0
						0	$260	$172	$233	$0	0	0
		PIP	Plan & Engr	795	Mg Safety Pgm & Trng	$1,030	$921	$407	$3,130	$3,043	0	0
						$1,030	$921	$407	$3,130	$3,043	0	0
		PIT	Traveling Mainten...	795	Mg Safety Pgm & Trng	$22,038	$11,150	$8,051	$9,908	$6,053	0	0
						$22,038	$11,150	$8,051	$9,908	$6,053	0	0
		PIW	Waiau Stn Oper	795	Mg Safety Pgm & Trng	$2,471	$5,919	$18,081	$10,538	$5,565	$0	$0
						$2,471	$5,919	$18,081	$10,538	$5,565	$0	$0
		PIX	Waiau Stn Maint	795	Mg Safety Pgm & Trng	$20,366	$47,046	$19,215	$62,343	$14,162	$0	$0
						$20,366	$47,046	$19,215	$62,343	$14,162	$0	$0
						$93,194	$123,408	$110,565	$159,506	$81,532	$52,723	$44,433
						$93,194	$123,408	$110,565	$159,506	$81,532	$52,723	$44,433
						$1,493,151	$1,871,280	$3,175,121	$2,925,650	$3,595,005	$4,633,568	$5,117,022

Hawaiian Electric Company, Inc.

REVENUE REQUIREMENTS
Direct
DATA INPUT TEST YEAR: 2009
File: C:\[HECO-WP-709 p.1 PInput1.xls]HECO
DESCRIPTION LINK TO REV REQ MODEL:

($ Thous)			Base Case Test Year Estimates Direct Present Rates	Change	Direct wo CIP CT1 Direct w/o CIP CT-1	Change	Direct w CIP CT1 Direct w/ CIP CT-1 Annualized
RATE BASE							
Production Stores Inventory	D.Giovanni	BEG BAL	8,562	0	8,562	0	8,562
	D.Giovanni	END BAL	9,057	0	9,057	0	9,057
INCOME STATEMENT ITEMS							
Production	D.Giovanni		80,391	(1,489)	78,902	2,598	81,500

Production O&M- Base Case Change (In-Service Date 8/1/08)

2009 Budgeted CT1	(1,340)	Net of On-Cost reclass for GL Code adjustments. See separate schedule.
Emis Fees Bud Adj	33	Bud Adj for -$33k (to report operation part of the year instead of full year) already reported in $80,391k TY Estimate, therefore exclude.
CIP CT1 Air Quality Bud Adj	(155)	Not reflected in 2009 Orig Budget, but included in TY Estimate.
CIP CT1 Fish Mon Bud Adj	(27)	Not reflected in 2009 Orig Budget, but included in TY Estimate.
As Adjusted	(1,489)	

Production O&M- Annualization Change (Full Year Amount)

2009 Annualized CT1	2,416	See separate schedule.
Emis Fees Bud Adj	0	Already in $2,416k above, as $2,416k represents the 2009 Orig Budget.
CIP CT1 Air Quality Bud Adj	155	Not reflected in $2,416k above, as $2,416 represent the 2009 Orig Budget.
CIP CT1 Fish Mon Bud Adj	27	Not reflected in $2,416k above, as $2,416 represent the 2009 Orig Budget.
As Adjusted	2,598	

Hawaiian Electric Company, Inc.
CIP CT 1 Unit - Calculation of Unit Full Cost

PURPOSE: The purpose of this worksheet is to calculate the full cost for CIP CT-1 O&M using available 2009 budgeted O&M and capital cost.

SUMMARIZED FROM DETAILS BELOW:

2009 Budgeted O&M	$1,561,927	(D)	(All shaded and italicized amounts)
Less: On-Cost Corp Adm, EB, PT	($221,921)	[(E) + (F)]	Represent GL code adjustment reclassed and reported as A&G cost. See HECO T-11 for calculations.
Net of reclassed on-cost	$1,340,006	(I)	
Total Calculated Full Cost O&M:	$2,890,294	(G)	All cost
Less: On-Cost Corp Adm, EB, PT	($473,877)	[(E) + (F) + sum(H)]	Represent GL code adjustment reclassed and reported as A&G cost. See HECO T-11 for calculations.
Net of reclassed on-cost	$2,416,417	(J)	

	EE	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total
Operations (O&M)														
Direct Labor (Excl 421. In On-Cost)		*$6,980*	*$6,863*	*$8,004*	*$7,922*	*$7,122*	*$7,809*	*$7,704*	*$49,837*	*$48,014*	*$44,527*	*$36,923*	*$46,867*	*$278,571*
On-Costs - NonProductive Wages	421	*$930*	*$940*	*$1,075*	*$1,075*	*$955*	*$1,060*	*$1,025*	*$6,640*	*$6,405*	*$5,925*	*$4,910*	*$6,215*	*$37,155*
		$7,910	**$7,803**	**$9,079**	**$8,997**	**$8,077**	**$8,869**	**$8,729**	**$56,477**	**$54,419**	**$50,452**	**$41,833**	**$53,082**	**$315,726**
Non-Labor														
On-Costs - Power Supply Clearing	405	*$1,895*	*$1,916*	*$2,191*	*$2,191*	*$1,946*	*$2,160*	*$2,089*	*$13,532*	*$13,053*	*$12,075*	*$10,007*	*$12,666*	$75,722
On-Costs - Corp Admin	406	*$738*	*$746*	*$854*	*$854*	*$758*	*$842*	*$814*	*$5,272*	*$5,086*	*$4,704*	*$3,899*	*$4,935*	$29,501
On-Costs - Employee Benefits	422	*$2,014*	*$2,036*	*$2,328*	*$2,328*	*$2,069*	*$2,296*	*$2,220*	*$14,382*	*$13,873*	*$12,834*	*$10,635*	*$13,462*	$80,478
On-Costs - Payroll Taxes	423	*$579*	*$569*	*$663*	*$657*	*$590*	*$647*	*$639*	*$4,131*	*$3,980*	*$3,691*	*$3,061*	*$3,885*	$23,093
Sub- On-Costs Corp Adm, EB, PT		*$3,331*	*$3,351*	*$3,845*	*$3,838*	*$3,417*	*$3,785*	*$3,673*	*$23,785*	*$22,940*	*$21,229*	*$17,595*	*$22,282*	*$133,072*
Safety Equip: Shoes, Glasses, Oth (A)	201	$100	$100	$100	$100	$100	$100	*$100*	*$100*	*$100*	*$100*	*$100*	*$100*	$1,200
Operate & Monitor Plant Equip - General (A)	201	$300	$300	$300	$300	$300	*$300*	*$300*	*$300*	*$300*	*$300*	*$300*	*$300*	$3,600
LPB, Lube Oil, Diesel (A)	201	$300	$300	$300	$300	$300	*$300*	*$300*	*$300*	*$300*	*$300*	*$300*	*$300*	$3,600
Electric Plant Supplies (A)	201	$300	$300	$300	$300	$300	*$300*	*$300*	*$300*	*$300*	*$300*	*$300*	*$300*	$3,600
Waste Water Treat. Chem (A)	201	$7,000	$7,000	$7,000	$7,000	$7,000	*$7,000*	*$7,000*	*$7,000*	*$7,000*	*$7,000*	*$7,000*	*$7,000*	$84,000
Demin/Evap. Chemicals (A)	201	$2,000	$2,000	$2,000	$2,000	$2,000	*$2,000*	*$2,000*	*$2,000*	*$2,000*	*$2,000*	*$2,000*	*$2,000*	$24,000
Boiler Water Treatment (A)	201	$7,000	$7,000	$7,000	$7,000	$7,000	$7,000	*$7,000*	*$7,000*	*$7,000*	*$7,000*	*$7,000*	*$7,000*	$84,000
Permit Reg Air (Pwr Supply O&M) (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$12,500*	$12,500
Permit Reg Air (Enviromnental) (C)	501	$0	$0	$0	$0	$0	$0	$0	*$9,693*	*$9,692*	*$9,692*	*$9,692*	*$9,692*	$48,461
Comply Ongoing Wstewtr (C)	508	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$20,221*	$20,221
Foss, Environ. Svcs (A)	501	$500	$500	$500	$500	$500	$500	*$500*	*$500*	*$500*	*$500*	*$500*	*$500*	$6,000
Sewage (A)	501	$150	$150	$150	$150	$150	$150	*$150*	*$150*	*$150*	*$150*	*$150*	*$150*	$1,800
RO Water (A)	501	$15,000	$15,000	$15,000	$15,000	$15,000	$15,000	*$15,000*	*$15,000*	*$15,000*	*$15,000*	*$15,000*	*$15,000*	$180,000
City Water (A)	501	$500	$500	$500	$500	$500	$500	*$500*	*$500*	*$500*	*$500*	*$500*	*$500*	$6,000
Telephones (A)	501	$400	$400	$400	$400	$400	$400	*$400*	*$400*	*$400*	*$400*	*$400*	*$400*	$4,800
Cell Phones, Pgrs, SatCom (A)	501	$500	$500	$500	$500	$500	$500	*$500*	*$500*	*$500*	*$500*	*$500*	*$500*	$6,000
Exterminator Svc/Land (A)	501	$1,500	$1,500	$1,500	$1,500	$1,500	$1,500	*$1,500*	*$1,500*	*$1,500*	*$1,500*	*$1,500*	*$1,500*	$18,000
Janitorial (A)	501	$2,000	$2,000	$2,000	$2,000	$2,000	$2,000	*$2,000*	*$2,000*	*$2,000*	*$2,000*	*$2,000*	*$2,000*	$24,000
Provide/manage Svcs-Waste/Refuse (A)	501	$500	$500	$500	$500	$500	$500	*$500*	*$500*	*$500*	*$500*	*$500*	*$500*	$6,000
Landscaping (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$25,000*	$0	$0	$25,000
Haz Waster Disposal (B)	501	$0	$0	$7,000	$0	$0	$7,000	$0	$0	*$7,000*	$0	$0	*$7,000*	$28,000
Stores On-Cost (A)	401	$1,790	$1,790	$1,790	$1,790	$1,790	*$1,042*	*$1,790*	*$1,790*	*$1,790*	*$1,790*	*$1,790*	*$1,790*	$20,733
Vehicles (A)	301	$546	$546	$546	$546	$546	*$546*	*$572*	*$520*	*$546*	*$546*	*$494*	*$546*	$6,500
		$45,612	**$45,653**	**$53,422**	**$46,415**	**$45,748**	**$52,584**	**$46,174**	**$87,370**	**$93,071**	**$108,382**	**$77,629**	**$124,748**	**$826,809**
TOTAL OPERATIONS		**$53,522**	**$53,456**	**$62,501**	**$55,412**	**$53,825**	**$61,453**	**$54,903**	**$143,847**	**$147,490**	**$158,834**	**$119,462**	**$177,830**	**$1,142,535**
Maintenance (O&M)														
Direct Labor (Excl EE 421. In On-Costs)		*$2,166*	*$2,077*	*($1,061)*	*($1,193)*	*$2,210*	*$5,923*	*$5,967*	*$43,413*	*$46,193*	*$45,283*	*$27,000*	*$34,001*	$211,980
On-Costs - NonProductive Wages	421	*$245*	*$235*	*($120)*	*($135)*	*$250*	*$670*	*$675*	*$4,935*	*$5,250*	*$5,145*	*$3,070*	*$3,860*	$24,080
		$2,411	**$2,312**	**($1,181)**	**($1,328)**	**$2,460**	**$6,593**	**$6,642**	**$48,348**	**$51,443**	**$50,428**	**$30,070**	**$37,861**	**$236,060**
Non-Labor														
On-Costs - Power Supply Clearing	405	*$499*	*$479*	*($245)*	*($275)*	*$510*	*$1,365*	*$1,376*	*$10,058*	*$10,700*	*$10,486*	*$6,257*	*$7,867*	$49,075
On-Costs - Corp Admin	406	*$195*	*$187*	*($95)*	*($107)*	*$199*	*$532*	*$536*	*$3,918*	*$4,169*	*$4,085*	*$2,438*	*$3,065*	$19,120

Hawaiian Electric Company, Inc.
CIP CT 1 Unit - Calculation of Unit Full Cost

PURPOSE: The purpose of this worksheet is to calculate the full cost for CIP CT-1 O&M using available 2009 budgeted O&M and capital cost.

SUMMARIZED FROM DETAILS BELOW:

2009 Budgeted O&M	$1,561,927	(D) (All shaded and italicized amounts)
Less: On-Cost Corp Adm, EB, PT	($221,921)	[(E) + (F)] Represent GL code adjustment reclassed and reported as A&G cost. See HECO T-11 for calculations.
Net of reclassed on-cost	$1,340,006	(I)
Total Calculated Full Cost O&M:	$2,890,294	(G) All cost
Less: On-Cost Corp Adm, EB, PT	($473,877)	[(E) + (F) + sum(H)] Represent GL code adjustment reclassed and reported as A&G cost. See HECO T-11 for calculations.
Net of reclassed on-cost	$2,416,417	(J)

	EE	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total
On-Costs - Employee Benefits	422	*$531*	*$509*	*($260)*	*($292)*	*$542*	*$1,451*	*$1,462*	*$10,689*	*$11,372*	*$11,144*	*$6,650*	*$8,361*	$52,157
On-Costs - Payroll Taxes	423	*$180*	*$172*	*($88)*	*($99)*	*$183*	*$491*	*$495*	*$3,599*	*$3,829*	*$3,754*	*$2,238*	*$2,819*	$17,573
Sub- On-Costs Corp Adm, EB, PT		*$906*	*$868*	*($443)*	*($498)*	*$924*	*$2,474*	*$2,492*	*$18,206*	*$19,369*	*$18,982*	*$11,325*	*$14,244*	*$88,850*
Maint GEN & rel eq/PRED (A)	201	$500	$500	$500	$500	$500	$500	*$500*	*$500*	*$500*	*$500*	*$500*	*$500*	$6,000
Maint Gen R rel eq/PREV (A)	201	$500	$500	$500	$500	$500	$500	*$500*	*$500*	*$500*	*$500*	*$500*	*$500*	$6,000
Maint Sta Com struct/PREV (A)	201	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	$12,000
Maint Plt & rel eq/PREV (A)	201	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	$12,000
Maint Gen & rel eq/PREV (A)	201	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	$12,000
Maint Sta Com Misc EQ-PREV (A)	201	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	$12,000
Maint Fuel FD PREV (A)	201	$500	$500	$500	$500	$500	$500	*$500*	*$500*	*$500*	*$500*	*$500*	*$500*	$6,000
Maint Plt Eq- Pred - Gen Plant - Trend (A)	501	$500	$500	$500	$500	$500	$500	*$500*	*$500*	*$500*	*$500*	*$500*	*$500*	$6,000
Maint Sta Com str/ PREV- Gen Pl- Trend (A)	501	$100	$100	$100	$100	$100	$100	*$100*	*$100*	*$100*	*$100*	*$100*	*$100*	$1,200
Elevator maint (A)	501	$100	$100	$100	$100	$100	$100	*$100*	*$100*	*$100*	*$100*	*$100*	*$100*	$1,200
Air Cond maint (A)	501	$200	$200	$200	$200	$200	$200	*$200*	*$200*	*$200*	*$200*	*$200*	*$200*	$2,400
Clean Solvent (A)	501	$100	$100	$100	$100	$100	$100	*$100*	*$100*	*$100*	*$100*	*$100*	*$100*	$1,200
Maint Sta Com struct- Gen Plant- Trend (A)	501	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	$12,000
Air Cond Repairs HP000360 (A)	501	$100	$100	$100	$100	$100	$100	*$100*	*$100*	*$100*	*$100*	*$100*	*$100*	$1,200
Elevator Repairs HP000750 (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$500*	$500
Maint Blr Plt Eq - Gen Plant - Trend (A)	501	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	*$1,000*	$12,000
Facility Repairs (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$80,000*	*$80,000*	$0	$160,000
Waste Water Facility Maint (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$10,000*	$0	$10,000
Demin Maintenance (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$30,000*	$0	$30,000
Gantry Crane Annual Inspection (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	*$4,200*	$0	$0	$0	$4,200
Blackstart Maintenance (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$20,000*	$0	$20,000
A/C Duct Cleaning and Disinfection (C)	501	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	*$5,000*	$0	$5,000
Stores On-Cost (A)	401	$579	$579	$579	$579	$579	$579	*$579*	*$579*	*$579*	*$579*	*$579*	*$579*	$6,949
Vehicles - Sedan (A)	301	$798	$798	$798	$798	$798	$798	*$836*	*$760*	*$798*	*$798*	*$722*	*$798*	$9,500
		$11,382	**$11,324**	**$9,289**	**$9,204**	**$11,411**	**$13,816**	**$13,883**	**$38,204**	**$44,246**	**$119,446**	**$172,483**	**$32,588**	**$487,275**
TOTAL MAINTENANCE		**$13,793**	**$13,636**	**$8,108**	**$7,876**	**$13,871**	**$20,409**	**$20,525**	**$86,552**	**$95,689**	**$169,874**	**$202,553**	**$70,449**	**$723,335**
TOTAL OPERATIONS & MAINTENANCE		**$67,315**	**$67,092**	**$70,609**	**$63,288**	**$67,696**	**$81,862**	**$75,428**	**$230,399**	**$243,179**	**$328,708**	**$322,015**	**$248,279**	**$1,865,869**

Hawaiian Electric Company, Inc.
CIP CT 1 Unit - Calculation of Unit Full Cost

PURPOSE: The purpose of this worksheet is to calculate the full cost for CIP CT-1 O&M using available 2009 budgeted O&M and capital cost.

SUMMARIZED FROM DETAILS BELOW:

2009 Budgeted O&M	$1,561,927	(D)	(All shaded and italicized amounts)
Less: On-Cost Corp Adm, EB, PT	($221,921)	[(E) + (F)]	Represent GL code adjustment reclassed and reported as A&G cost. See HECO T-11 for calculations.
Net of reclassed on-cost	$1,340,006	(I)	
Total Calculated Full Cost O&M:	$2,890,294	(G)	All cost
Less: On-Cost Corp Adm, EB, PT	($473,877)	[(E) + (F) + sum(H)]	Represent GL code adjustment reclassed and reported as A&G cost. See HECO T-11 for calculations.
Net of reclassed on-cost	$2,416,417	(J)	

	EE	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09	Total	
Capital (January - July 2009) (2)															
Operations Capital															
Direct Labor	150	*$38,698*	*$33,800*	*$43,788*	*$42,846*	*$40,398*	*$45,030*	*$47,525*	$0	$0	$0	$0	$0	$292,085	
On-Costs - NonProductive Wages	421	*$5,135*	*$4,485*	*$5,810*	*$5,685*	*$5,360*	*$5,975*	*$6,305*	$0	$0	$0	$0	$0	$38,755	
		$43,833	*$38,285*	*$49,598*	*$48,531*	*$45,758*	*$51,005*	*$53,830*	*$0*	*$0*	*$0*	*$0*	*$0*	*$330,840*	
On-Costs - Power Supply Clearing	405	*$10,465*	*$9,140*	*$11,841*	*$11,586*	*$10,924*	*$12,177*	*$12,850*	$0	$0	$0	$0	$0	$78,983	
On-Costs - Corp Admin	406	*$4,077*	*$3,561*	*$4,613*	*$4,514*	*$4,256*	*$4,744*	*$5,006*	$0	$0	$0	$0	$0	$30,771	
On-Costs - Employee Benefits	422	*$11,122*	*$9,715*	*$12,584*	*$12,314*	*$11,610*	*$12,942*	*$13,657*	$0	$0	$0	$0	$0	$83,944	
On-Costs - Payroll Taxes	423	*$3,208*	*$2,802*	*$3,630*	*$3,552*	*$3,349*	*$3,733*	*$3,940*	$0	$0	$0	$0	$0	$24,214	
		$18,407	*$16,078*	*$20,827*	*$20,380*	*$19,215*	*$21,419*	*$22,603*	$0	$0	$0	$0	$0	$138,929	(H)
Total Operations Capital		*$72,705*	*$63,503*	*$82,266*	*$80,497*	*$75,897*	*$84,601*	*$89,283*	*$0*	*$0*	*$0*	*$0*	*$0*	*$548,752*	
Maintenance Capital															
Direct Labor	150	*$36,082*	*$34,342*	*$39,011*	*$39,044*	*$35,298*	*$43,322*	*$42,478*	$0	$0	$0	$0	$0	$269,577	
On-Costs - NonProductive Wages	421	*$4,100*	*$3,905*	*$4,430*	*$4,440*	*$4,010*	*$4,925*	*$4,825*	$0	$0	$0	$0	$0	$30,635	
		$40,182	*$38,247*	*$43,441*	*$43,484*	*$39,308*	*$48,247*	*$47,303*	*$0*	*$0*	*$0*	*$0*	*$0*	*$300,212*	
On-Costs - Power Supply Clearing	405	*$8,356*	*$7,958*	*$9,028*	*$9,049*	*$8,172*	*$10,037*	*$9,834*	$0	$0	$0	$0	$0	$62,434	
On-Costs - Corp Admin	406	*$3,255*	*$3,101*	*$3,517*	*$3,525*	*$3,184*	*$3,910*	*$3,832*	$0	$0	$0	$0	$0	$24,324	
On-Costs - Employee Benefits	422	*$8,881*	*$8,458*	*$9,595*	*$9,617*	*$8,686*	*$10,668*	*$10,450*	$0	$0	$0	$0	$0	$66,355	
On-Costs - Payroll Taxes	423	*$2,991*	*$2,847*	*$3,234*	*$3,237*	*$2,926*	*$3,591*	*$3,522*	$0	$0	$0	$0	$0	$22,348	
		$15,127	*$14,406*	*$16,346*	*$16,379*	*$14,796*	*$18,169*	*$17,804*	$0	$0	$0	$0	$0	$113,027	(H)
Total Maintenance Capital		*$63,665*	*$60,611*	*$68,815*	*$68,912*	*$62,276*	*$76,453*	*$74,941*	*$0*	*$0*	*$0*	*$0*	*$0*	*$475,673*	
TOTAL CAPITAL		**$136,370**	**$124,114**	**$151,081**	**$149,409**	**$138,173**	**$161,054**	**$164,224**	**$0**	**$0**	**$0**	**$0**	**$0**	**$1,024,425**	
TOTAL O&M AND CAPITAL- (Calc Full Cost)		**$203,685**	**$191,206**	**$221,690**	**$212,697**	**$205,869**	**$242,916**	**$239,652**	**$230,399**	**$243,179**	**$328,708**	**$322,015**	**$248,279**	**$2,890,294**	(G)
Total 2009 Budgeted O&M- Pillar		*$16,952*	*$16,729*	*$13,246*	*$12,925*	*$17,333*	*$36,735*	*$75,428*	*$230,399*	*$243,179*	*$328,708*	*$322,015*	*$248,279*	*$1,561,927*	(D)
Total 2009 Capital - Pillar		*$136,370*	*$124,114*	*$151,081*	*$149,409*	*$138,173*	*$161,054*	*$164,224*	*$0*	*$0*	*$0*	*$0*	*$0*	*$1,024,425*	
Total O&M and Capital- Pillar		*$153,322*	*$140,843*	*$164,327*	*$162,334*	*$155,506*	*$197,789*	*$239,652*	*$230,399*	*$243,179*	*$328,708*	*$322,015*	*$248,279*	*$2,586,352*	

Notes:
- *Shaded, Italicized amounts are budgeted 2009 used as the starting numbers to calculate a full year's cost.*
- O&M Labor cost budgeted prior to CIP CT-1 in service date of July 31, 2009 is for administrative, supervisory and warehouse personnel time incurred throughout the year.
- There are some Non-Labor O&M costs incurred prior to CIP CT-1 July 31, 2009 in-service date due to preparation prior to unit going live.

(A) - Represent routine type work that expect to incur charge every month, therefore show monthly cost in earlier months.
(B) - Represent routine type work, incurring cost on a quarterly basis, therefore, show quarterly cost in earlier months.
(C) - Represent non-routine type work, that would normally occur one time or annually, therefore, no additional cost shown in earlier months.

(1) - Negative amount in labor and on-cost in March and April due to correction to labor that should have been booked in June and July. No material impact. Further work not necessary.
(2)- Represent the budget, capital labor cost for the 7-Operations and 8-Maintenance staff who will be operating and maintaining CIP CT-1. All staff hired in January 2009. Most of their time productive time prior to the July 31, 2009 go-live date will be spent on "first-time training" on CIP CT-1 which is reported as capital cost. For purpose of this workpaper, use the reported capital cost as the January - July labor cost in calculating the full cost for CIP CT-1.

Maintenance Supplementary Labor Summary

	2008 Budget	2009 Budget
Station	$ 756,000	$ 860,580
Overhauls	$ 1,906,667	$ 2,466,333
Total	$ 2,662,667	$ 3,326,913

	2007 Actuals
Station	$ 1,716,326
Overhauls	$ 2,307,358
Total	$ 4,023,684

2007 Actual Supplementary Labor Summary

Count of Work_Order	
WORKGROUP	Total
PPHOMMT	39
PPKAM	34
PPKAMMT	227
PPPDM	1
PPSWOHM	5
PPSWOKM	7
PPSWOWM	41
PPTRB	1
PPTRBBL	413
PPTREEL	2
PPTRMMA	105
PPWAM	1
PPWAMMT	312
Grand Total	1188

Sum of TRAN _ AMOUNT		
MPROJECT	Total	
NPIZZZZZ	$ 1,682,362.68	
P0000654	$ (71,256.38)	Waiau 6 Overhaul (2004)
P0000846	$ 549,484.96	Kahe 1 Overhaul (11/24/06 to 2/22/07)
P0001105	$ 849,092.20	Kahe 3 Overhaul - 6/25/07 to 9/19/07
P0001106	$ 533,335.52	Waiau 7 Overhaul (3/25/07 to 6/20/07)
P0001271	$ 33,963.25	PS O&M Program
P0001280	$ 444,982.87	Honolulu 9 Outage (2006)
P0001496	$ 1,718.62	H9 Overhaul (10/12/07 to 11/21/07)
Grand Total	$ 4,023,683.72	

Station	$ 1,716,325.93
OH's	$ 2,307,357.79
	$ 4,023,683.72

2008 Budget
Outside Service -- Maintenance Supplemental Labor

		W5	H8	W8	K5	Hon Sta	Waiau Sta	Kahe Sta	Total
Boiler PM 257	Boiler	80,000	80,000	120,000	25,000				305,000
	Insulators	40,000	40,000	60,000	13,333				153,333
	Electricians	20,000	20,000	40,000	8,333				88,333
	Technicians	60,000	60,000	40,000	10,000				170,000
Turb PM 260	Machinists	80,000	80,000	30,000					190,000
Boiler CM 259	Boiler			60,000	13,333				73,333
	Insulators	30,000	30,000	40,000	6,667				106,667
	Electricians			30,000	5,000				35,000
	Technicians	40,000	40,000	40,000	5,000				125,000
	Welders	30,000	30,000						60,000
Boiler PDM 258	Boiler	30,000	30,000	60,000	16,667				136,667
	Insulators	30,000	30,000	40,000	10,000				110,000
	Electricians			30,000	6,667				36,667
	Technicians			40,000	6,667				46,667
	All						378,000	378,000	756,000
Turb PDM 261	Helpers								0
	Electricians		40,000						40,000
	Machinists	100,000	100,000	30,000					230,000
									2,662,667

Amounts compiled from 2008 Budget workpapers

Sum of Total	
Craft	Total
All	756,000
Boiler	515,000
Electricians	200,000
Insulators	370,000
Machinists	420,000
Technicians	341,667
Welders	60,000
Grand Total	2,662,667

2009 Budget
Outside Service -- Maintenance Supplemental Labor

		K5	K6	K2	K1	W10	W6	Hon Sta	Waiau St	Kahe Sta	Total
Boiler PM 257	Helpers										0
	Boiler	95,000	90,000	90,000	90,000		27,000				392,000
	Insulators	46,667	40,000	30,000	40,000		12,000				168,667
	Electricians	31,667	40,000	40,000	40,000		12,000				163,667
	Technicians	30,000	40,000	40,000	40,000		12,000				162,000
	Welders										0
Turb PM 260	Helpers										0
	Machinists	36,000	100,000	40,000	30,000		30,000				236,000
Boiler CM 259	Helpers										0
	Boiler	46,667	40,000	40,000	40,000		12,000				178,667
	Insulators	33,333	20,000	30,000	20,000		6,000				109,333
	Electricians	25,000	20,000	20,000	20,000		6,000				91,000
	Technicians	35,000	40,000	40,000	40,000		12,000				167,000
	Welders										0
Boiler PDM 258	Helpers										0
	Boiler	33,333	60,000	60,000	60,000		18,000				231,333
	Insulators	20,000	20,000	20,000	20,000		6,000				86,000
	Electricians	13,333	40,000	40,000	40,000		12,000				145,333
	Technicians	13,333	40,000	40,000	40,000		12,000				145,333
	All							104,580	396,000	360,000	860,580
Turb PDM 261	Helpers										0
	Machinists		100,000	30,000	30,000		30,000				190,000
											3,326,913

Amounts compiled from 2009 Budget workpapers

Sum of Total	
Craft	Total
All	860,580
Boiler	802,000
Electricians	400,000
Insulators	364,000
Machinists	426,000
Technicians	474,333
Grand Total	3,326,913

2008 Pivot

Sum of Total	
Craft	Total
All	756,000
Boiler	515,000
Electricians	200,000
Insulators	370,000
Machinists	420,000
Technicians	341,667
Welders	60,000
Grand Total	2,662,667

2008 Pivot Data

2008 Budget
Outside Service -- Maintenance Supplemental Labor

	Craft	W5	H8	W8	K5	Hon Sta	Waiau Sta	Kahe Sta	Total
Boiler PM 257	Boiler	80,000	80,000	120,000	25,000	0	0	0	305,000
Boiler PM 257	Insulators	40,000	40,000	60,000	13,333	0	0	0	153,333
Boiler PM 257	Electricians	20,000	20,000	40,000	8,333	0	0	0	88,333
Boiler PM 257	Technicians	60,000	60,000	40,000	10,000	0	0	0	170,000
Turb PM 260	Machinists	80,000	80,000	30,000	0	0	0	0	190,000
Boiler CM 259	Boiler	0	0	60,000	13,333	0	0	0	73,333
Boiler CM 259	Insulators	30,000	30,000	40,000	6,667	0	0	0	106,667
Boiler CM 259	Electricians	0	0	30,000	5,000	0	0	0	35,000
Boiler CM 259	Technicians	40,000	40,000	40,000	5,000	0	0	0	125,000
Boiler CM 259	Welders	30,000	30,000	0	0	0	0	0	60,000
Boiler PDM 258	Boiler	30,000	30,000	60,000	16,667	0	0	0	136,667
Boiler PDM 258	Insulators	30,000	30,000	40,000	10,000	0	0	0	110,000
Boiler PDM 258	Electricians	0	0	30,000	6,667	0	0	0	36,667
Boiler PDM 258	Technicians	0	0	40,000	6,667	0	0	0	46,667
Boiler PDM 258	All	0	0	0	0	0	378,000	378,000	756,000
Turb PDM 261	Electricians	0	40,000	0	0	0	0	0	40,000
Turb PDM 261	Machinists	100,000	100,000	30,000	0	0	0	0	230,000
									2,662,667

Amounts compiled from 2008 Budget workpapers

2009 Pivot

Sum of Total	
Craft	Total
All	860,580
Boiler	802,000
Electricians	400,000
Insulators	364,000
Machinists	426,000
Technicians	474,333
Grand Total	3,326,913

2009 Pivot Data

2009 Budget
Outside Service -- Maintenance Supplemental Labor

	Craft	K5	K6	K2	K1	W10	W6	Hon Sta	Waiau Sta	Kahe Sta	Total
Boiler PM 257	Boiler	95,000	90,000	90,000	90,000	0	27,000	0	0	0	392,000
Boiler PM 257	Insulators	46,667	40,000	30,000	40,000	0	12,000	0	0	0	168,667
Boiler PM 257	Electricians	31,667	40,000	40,000	40,000	0	12,000	0	0	0	163,667
Boiler PM 257	Technicians	30,000	40,000	40,000	40,000	0	12,000	0	0	0	162,000
Turb PM 260	Machinists	36,000	100,000	40,000	30,000	0	30,000	0	0	0	236,000
Boiler CM 259	Boiler	46,667	40,000	40,000	40,000	0	12,000	0	0	0	178,667
Boiler CM 259	Insulators	33,333	20,000	30,000	20,000	0	6,000	0	0	0	109,333
Boiler CM 259	Electricians	25,000	20,000	20,000	20,000	0	6,000	0	0	0	91,000
Boiler CM 259	Technicians	35,000	40,000	40,000	40,000	0	12,000	0	0	0	167,000
Boiler PDM 258	Boiler	33,333	60,000	60,000	60,000	0	18,000	0	0	0	231,333
Boiler PDM 258	Insulators	20,000	20,000	20,000	20,000	0	6,000	0	0	0	86,000
Boiler PDM 258	Electricians	13,333	40,000	40,000	40,000	0	12,000	0	0	0	145,333
Boiler PDM 258	Technicians	13,333	40,000	40,000	40,000	0	12,000	0	0	0	145,333
Boiler PDM 258	All	0	0	0	0	0	0	104,580	396,000	360,000	860,580
Turb PDM 261	Machinists	0	100,000	30,000	30,000	0	30,000	0	0	0	190,000
											3,326,913

Amounts compiled from 2009 Budget workpapers

HAWAIIAN ELECTRIC COMPANY, INC.

DESCRIPTION OF TRANSMISSION-OPERATION EXPENSES

NARUC Account Number	DESCRIPTION
560	**Transmission Operation Supervision and Engineering.** Includes the costs of supervision and direction of the transmission system.
561	**Load Dispatching.** Includes the cost of labor, materials used and expenses incurred in load dispatching operations pertaining to the transmission of electricity. Some examples are: a. Directing and switching. b. Arranging and controlling clearances for construction, maintenance, test and emergency purposes. c. Controlling system voltages. d. Obtaining reports on the weather and special events. e. Preparing operating and data reports.
562	**Transmission Operations Station Expense.** Includes the costs of operating transmission substations and switching stations, including stations located in or adjacent to a generating station. Costs include the inspection, testing and adjusting of station equipment such as transformers, regulators, switchgear, circuit breakers, batteries and chargers, meters and relays, wood and steel structures and station fences; operating switching equipment, telephone service, water bills, care of ground such as weeding, watering, cutting grass and fertilizing. Also includes the cost of inspecting, testing and adjusting the equipment used for load dispatching such as the operating computer and its related communications equipment.
563	**Overhead Line Expenses.** Includes the costs of operating overhead transmission lines. Some examples are: a. Inspecting and testing of lightning arrestors, circuit breakers, switches and grounds outside substations. b. Load tests of circuits. c. Routine voltage surveys. d. Routine line inspection, termite prevention treatment and pole tests for rotten poles or termites. e. Switching overhead lines for operating purposes.

HAWAIIAN ELECTRIC COMPANY, INC.

DESCRIPTION OF TRANSMISSION-OPERATION EXPENSES

NARUC Account Number	DESCRIPTION
564	**Underground Line Expense.** Includes the costs of operating underground transmission lines. Some examples: a. Inspecting and testing of gas and oil transmission cables, potheads, splices and ground wires. b. Routing inspection and cleaning of manholes, conduit, network and transformer vaults. c. Routine voltage surveys. d. Electrolysis surveys. e. Regulation and addition of oil and gas in high-voltage cable systems. f. Termite control.
565	**Transmission of Electricity by Others.** Includes amounts payable to others for the transmission of the utility's electricity over transmission facilities owned by others.
566	**Miscellaneous Transmission Expenses (Summary Account)** Includes the costs of transmission map and record work, transmission office expenses and other transmission expenses not provided for elsewhere. Some examples are: a. Mobile Radio expense. Includes the costs of operating the mobile radio system and its equipment. b. Microwave System expense. Includes the costs of operating the microwave system and its equipment. c. Other Transmission expense. Includes those transmission system operation expenses not provided for in other accounts such as: Preparing general records of transmission lines and stations; ground resistance records; joint pole maps and records; and transmission maps and prints; general clerical and secretarial work other than secretarial work for supervision and engineering personnel; miscellaneous labor.
567	**Rents.** Includes the costs of renting property used by the transmission system.

HAWAIIAN ELECTRIC COMPANY, INC.

DESCRIPTION OF TRANSMISSION-MAINTENANCE EXPENSES

NARUC Account Number	DESCRIPTION
568	**Maintenance Supervision and Engineering.** Includes the costs of general supervision and direction of the maintenance of the transmission system. Excludes charges for the direct supervision and general clerical work which can be identified with a more appropriate account.
569	**Maintenance of Substation Structures.** Includes the costs of maintaining transmission substation structures and improvements. Some examples are: a. Repairing and repainting stations, buildings, fences and gates. b. Repairing sprinkler systems, ventilating equipment and controls. c. Replacing and repairing floodlights and station signs. d. Replacing lawns, shrubs and trees. e. Repairing sidewalks, curbs and roadways within station property.
570	**Maintenance of Station Equipment (Summary Account).** Includes the costs of maintaining transmission station equipment. Maintenance of Substation equipment. Some examples are: a. Repairing transformers and regulators. b. Repairing line taps, capacitor couplers and transmitter cabinets. c. Repairing switchgear and circuit breakers. d. Repairing switchboards, meters, relays, control wiring, etc. e. Repairing ground mats and fence grounds. f. Repairing bus compartments, bus runs and supports g. Repairing conduit. h. Repairing batteries and chargers. i. Testing before and after maintenance or repair of electrical equipment. j Oil samples after preventative maintenance.
571	**Maintenance of Overhead Lines (Summary Account).** Includes the cost of maintaining transmission overhead lines. <u>Maintenance of Towers and Fixtures</u> a. Repainting towers. b. Moving line or tower in relocation of the same tower or section of line. c. Realigning and straightening towers and fixtures on towers. d. Relocating fixtures or towers. e. Repairing tower signs, stencils, tags, etc. f. Replacing parts of towers.

HAWAIIAN ELECTRIC COMPANY, INC.
DESCRIPTION OF TRANSMISSION-MAINTENANCE EXPENSES

NARUC Account Number	DESCRIPTION

Maintenance of Poles and Fixtures.
Includes the costs of maintaining transmission poles and fixtures. Some examples are:
a. Replacing or removing additional clamps or strain insulators on guys in place.
b. Moving line or guy pole while relocating the same pole or section of line.
c. Painting poles, crossarms or pole extensions.
d. Readjusting and changing position of guys or braces.
e. Realigning and straightening poles, crossarm braces and other pole fixtures.
f. Relocating crossarms, racks, brackets and other pole fixtures.
g. Repairing or realigning pins, racks or brackets.
h. Repairing pole-supported platform
i. Shaving, cutting rot or treating poles or crossarms in use or salvaged for reuse.
j. Stubbing poles already in service.
k. Supporting fixtures and conductors and transferring them to new poles during pole replacements.
l. Repairing of pole signs, stencils, tags, etc.

Maintenance of Overhead Conductors and Devices.
Includes the costs of maintaining transmission overhead conductors and devices. Some examples are:
a. Overhauling and repairing line cutouts, line switches, line breakers, etc.
b. Washing and/or siliconing insulators and bushings.
c. Re-fusing cutouts.
d. Repairing line oil circuit breakers, associated relays and control wiring.
e. Repairing grounds.
f. Resagging, retying or rearranging position or spacing of conductors as a permanent repair.
g. Sampling, testing, changing, purifying and replenishing insulating oil.
h. Standing by phones, going to calls, cutting faulty lines clear, or similar activities during emergencies.
i. Transferring loads, switching and reconnecting circuits and equipment for maintenance.

Maintenance of Roads and Trails.
Includes the costs of maintaining roads and trails. Some examples are:
a. Repairing roads, trails, bridges, etc.
b. Trimming trees and clearing brush to maintain roadway clearances.

Maintenance of Overhead Lines - Tree Trimming.

HAWAIIAN ELECTRIC COMPANY, INC.
DESCRIPTION OF TRANSMISSION-MAINTENANCE EXPENSES

NARUC Account Number	DESCRIPTION
	Includes the costs of inspecting and maintaining transmission overhead line clearances.
	Maintenance of Overhead Lines - Storm Damage.
	Includes the costs of restoring the transmission system damaged by the storm.
572	**Maintenance of Underground Lines (Summary Account).**
	Includes the costs of maintaining the transmission underground lines.
	Maintenance of Underground Conduit.
	Includes the costs of maintaining the underground conduits. Some examples are:
	a. Cleaning ducts, manholes and sewer connections.
	b. Minor alterations of handholes, manholes or vaults.
	c. Refastening, repairing or moving of racks, ladders or hangers in manholes or vaults.
	d. Painting, plugging and shelving ducts.
	e. Replacing covers and frames; changing grades.
	Maintenance of Underground Conductors and Devices.
	a. Repairing oil circuit breakers, switches, cutouts and control wiring.
	b. Repairing grounds, conductors and splices.
	c. Retraining, reconnecting or transferring cables.
	d. Repairing or moving junction boxes and potheads.
	e. Refireproofing of cables and repairing supports.
	f. Repairing electrolysis preventative devices for cables.
	g. Sampling, testing, changing, purifying and replenishing insulating oil.
	h. Transferring loads; switching and reconnecting circuits and equipment for maintenance.
	i. Repairs to oil or gas equipment in high-voltage cable system.
573	**Maintenance of Miscellaneous Transmission Plant (Summary Account).**
	Includes the miscellaneous costs of maintaining owned or leased plant which is assigned to transmission operations.
	Maintenance of Mobile Radio Equipment.
	Includes the costs of maintaining the mobile radio equipment.
	Maintenance of Microwave Equipment.
	Includes the costs of maintaining the microwave equipment.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-OPERATION EXPENSES

NARUC Account Number	DESCRIPTION
580	**Operation Supervision and Engineering.** Includes the costs of general supervision and direction of the operation of the distribution system. Excludes charges for the direct supervision and general clerical work which can be identified with a more appropriate account.
581	**Load Dispatching.** Includes cost of labor, materials used and expenses in incurred in load dispatching operations pertaining to the distribution of electricity. Some examples are: a. Directing switching. b. Arranging and controlling clearances for construction, maintenance, test and emergency purposes. c. Controlling system voltages. d. Preparing operating reports. e. Obtaining reports on the weather and special events.
582	**Station Expenses (Summary Account).** Includes the costs of operating distribution substations. Some examples are: <u>Substation Operation</u>. a. Inspecting, testing and adjusting transformers, regulators, switchgear, circuit breakers, batteries and chargers, meters and station fences. b. Operating switching equipment. c. Changing station transformer taps. d. Telephone service. <u>Substation Groundskeeping</u>. Includes the costs for the care and maintenance of substation grounds. examples are: a. Sweeping, mopping and tidying station. b. Care of grounds, such as weeding, watering, cutting grass, fertilizing. c. Water bills.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-OPERATION EXPENSES

NARUC Account Number	DESCRIPTION
583	**Overhead Line Expense (Summary Account).** Includes the costs of operating the overhead distribution lines. Overhead Line Operation. Includes the costs of operating overhead distribution lines. Some examples are: a. Inspecting and testing lightning arrestors, circuit breakers, switches and grounds outside substations. b. Changing line transformer taps. c. Load tests and voltage surveys of feeders and circuits. d. Routing line inspection, termite prevention treatment and pole tests for rotten poles or termites. e. Switching overhead lines for operating purposes. Removing and Resetting Overhead Line Transformers. Includes the costs of relocating distribution overhead line transformers. Some examples are: a. Inspecting, testing, removing, resetting and changing line transformers or voltage regulators with or without changing capacity. b. Load tests and voltage surveys of line transformers.
584	**Underground Line Expenses (Summary Account).** Includes the costs of operating the underground distribution system. Underground Line Operation. Includes the costs of operating the underground distribution lines. Some examples: a. Inspecting and testing gas and oil distribution cables, potheads, splices and ground wires. b. Routine inspection and cleaning of manholes, conduit, network and transformer vaults. c. Routing voltage surveys. d. Electrolysis surveys. e. Regulation and addition of oil or gas in high-voltage cables systems. f. Termite control. Removing and Resetting Underground Line Transformers. Includes the costs of relocating distribution underground line transformers. Some examples are: a. Inspecting, testing, removing, resetting and changing underground line transformers, network transformers and protectors with or without changing capacity. b. Load tests and voltage surveys of underground line transformers.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-OPERATION EXPENSES

NARUC Account Number	DESCRIPTION
585	**Street Lighting and Signal System Expenses.** Includes the cost of labor, materials used and expenses incurred in: 1) the operation of street lighting and signal system plant which is owned or leased by the utility; and 2) the operation and maintenance of such plant owned by customers where such work is done regularly as a part of the street lighting and signal system service. Some examples are: a. Supervising street lighting and signal systems operation. b. Replacing lamps and incidental cleaning of glassware and fixtures in connection herewith. c. Routing patrolling for lamp outages, extraneous nuisances or encroachments, etc. d. Testing lines and equipment including voltage and current measurement. e. Winding and inspection of time switch and other controls.
586	**Meter Expenses (Summary Account).** Includes the costs of operating distribution meters and associated equipment. <u>Customer Meters</u>. Includes the cost of operating customer meters and associated equipment. Some examples: a. Clerical work on meter history and associated record cards, test cards and reports. b. Connecting, disconnecting and resetting meters. c. Meter locks and unlocks. d. Routine testing, inspecting and cleaning of meters. Excludes charges for the first setting and testing of meters which should be charged to account 370, Meters. Cost of removing meters due to discontinuance of service should be charged to jobs referencing account 108.11. <u>Other Distribution Meters</u>. Includes the cost of operating distribution meters and associated equipment for other than customer billing purposes. Some examples are: a. Installation of recorders and meters used to obtain survey data. b. Changing of recorder data cartridges. c. Translation of recorder data cartridges. d. Clerical work on recorder history and location files. e. Routine testing of survey recorders, meters and data cartridges. Excludes charges on meters installed permanently in transmission or distribution substations and generation stations which are station equipment and are charged to the respective equipment accounts.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-OPERATION EXPENSES

NARUC Account Number	DESCRIPTION
587	**Customer Installation Expenses.** Includes the costs of inspecting and servicing customers' installations. Some examples: a. Installing, removing, renewing and changing lamps and fuses. b. Testing, adjusting and repairing customers' fixtures and appliances. c. Investigating, locating and clearing grounds on customers' wiring. d. Replacing, connecting, removing or installing leased property on customers' premises. e. Cost of changing customers' equipment due to changes in service characteristics. f. Investigation of current diversion. g. Radio, television and similar interference work; erecting new aerials on customers' premises; patrolling lines, testing lightning arrestors, inspecting pole hardware and equipment to locate cause of interference. h. Investigating service complaints, including load test of motors and lighting power circuits on customers' premises; field investigations of complaints on bills or of voltage. i. Relocation of weather head, service entrance cable, installation of mast and guying and other adjustments to a customer's service facilities.
588	**Miscellaneous Distribution Expenses (Summary Account).** Includes the miscellaneous costs of operating the distribution system. <u>General records</u>. Physical characteristics of lies and substations, ground resistance, system voltage and loads; operating records covering poles, transformers, manholes, cables and other distribution facilities not provided for elsewhere. <u>Joint Pole Maps and Records</u>. <u>Preparing Other Maps and Prints</u>. <u>Service Interruption and Trouble Records</u>. <u>General Clerical</u>. Stenographic and office supplies not provided for elsewhere. Excludes clerical work chargeable to account 586, Meter Expenses.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-OPERATION EXPENSES

NARUC Account Number	DESCRIPTION
	Communications Services.
	Janitorial Services. Distribution office and storeroom structures.
	Building Services. Distribution office and storeroom structures.
	Other Distribution.
	Expense not provided for elsewhere.
	Security Guards.
589	**Rents.** Includes the rental of property utilized by the distribution system.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-MAINTENANCE EXPENSES

NARUC Account Number	DESCRIPTION
590	**Maintenance Supervision and Engineering.** Includes the costs of general supervision and direction of the maintenance of the distribution system. Excludes charges for the direct supervision and general clerical work which can be identified with a more appropriate account.
591	**Maintenance of Structures (Summary Account).** Includes the costs of maintaining distribution structures and improvements. <u>Maintenance of Substation Structures</u>. a. Repairing and repainting station buildings, fences and gates. b. Repairing sprinkler systems, ventilating equipment and controls. c. Replacing and repairing floodlights and station signs. d. Replacing lawns, shrubs and trees. e. Repairing sidewalks, curbs and roadways within station property. <u>Maintenance of Distribution Office and Storeroom Structures</u>. Includes the costs of maintaining the distribution office and storeroom structures. Some examples are: a. Repairing and repainting office and storeroom buildings, fences and gates. b. Repairing sidewalks, curbs and walls within company property. c. Repairing sprinkler, water and sewer systems. d. Repairing gas tanks, pumps, ventilating equipment and controls. e. Replacing lawns, shrubs and trees.
592	**Maintenance of Substation Equipment.** Includes the costs of maintaining the distribution substation plant. Some examples are: <u>Maintenance of Poles, Towers and Fixtures</u>. a. Replacing or removing additional clamps or strain insulators on guys in place. b. Moving line or guy pole while relocating the same pole or section of line. c. Painting poles, towers, crossarms or pole extensions. d. Readjusting and changing position of guys and braces. e. Realigning and straightening poles, crossarm braces and other pole fixtures. f. Relocating crossarms, racks, brackets and other pole fixtures. g. Repairing or realigning pins, racks or brackets. k. Supporting fixtures and conductors and transferring them to new poles during pole replacements. l. Repairing pole signs, stencils, tags, etc.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-MAINTENANCE EXPENSES

NARUC Account Number	DESCRIPTION
593	**Maintenance of Overhead Conductors and Devices.** Includes the costs of maintaining distribution overhead conductors and devices. Some examples are:

Maintenance of Poles, Towers and Fixtures.
Includes the costs of maintaining distribution poles, towers and fixtures.

a. Replacing or removing additional clamps or strain insulators on guys in place.
b. Moving line or guy pole while relocating the same pole or section of line.
c. Painting poles, towers, crossarms or pole extensions.
d. Readjusting and changing position of guys and braces.
e. Realigning and straightening poles, crossarm braces and other pole fixtures.
f. Relocating crossarms racks, brackets and other pole fixtures.
g. Repairing or realigning pins, racks or brackets.
h. Repairing pole-supported platforms.
i. Shaving, cutting rot or treating poles or crossarms in use or salvaged for reuse.
j. Stubbing poles already in service.
k. Supporting fixtures and conductors and transferring them to new poles during pole replacements.
l. Repairing pole signs, stencils, tags, etc.

Maintenance of Overhead Conductors and Devices.
Includes the costs of maintaining distribution overhead conductors and devices. Some examples are:

a. Overhauling and repairing ine cutouts, line switches, line breakers, etc.
b. Washing and/or siliconing insulators and bushings.
c. Re-fusing cutouts.
d. Repairing line oil circuit breakers, associated relays and control wiring.
e. Repairing grounds.
f. Resagging, retying or rearranging position or spacing of conductors as a permanent repair.
g. Sampling, testing changing, purifying and replenishing insulating oil.
h. Standing by phones, going to calls, cutting faulty lines clear, or similar activities during emergencies.
i. Transferring loads, switching and reconnecting circuits and equipment for maintenance.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-MAINTENANCE EXPENSES

NARUC Account Number	DESCRIPTION
	Maintenance of Overhead Services. Includes the costs of maintaining overhead services. Some examples are: a. Moving position of service, either on pole line or on customers' premises. b. Pulling slack and retying service wire. c. Refastening or tightening service bracket. d. Repairs to service lines up to weather head.
	Maintenance of Overhead Services - Tree Trimming. Includes the cost of maintaining distribution overhead line clearances; roads and trails. Some examples are: a. Trimming trees for line clearances. b. Repairing roads, trails, bridges, etc. c. Trimming trees and clearing brush to maintain roadway clearances.
	Maintenance of Overhead Lines - Storm Damage. Includes the costs of restoring the distribution system damaged by a storm.
594	**Maintenance of Underground Lines (Summary Account).** Includes the costs of maintaining underground distribution line facilities.
	Maintenance of Underground Conduit. Includes the costs of maintaining the distribution underground conduit. Some examples are: a. Cleaning ducts, manholes and sewer connections. b. Moving or changing position of conduit or pipe. c. Minor alterations of handholes, manholes or vaults. d. Refastening, repairing or moving of racks, ladders or hangers in manholes or vaults. e. Plugging and shelving ducts. f. Repairs to sewers, drains, walls, floors, rings and covers.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-MAINTENANCE EXPENSES

NARUC Account Number	DESCRIPTION
	Maintenance of Underground Conductors and Devices. Includes the cost of maintaining distribution underground conductors and devices. Some examples are: a. Repairing circuit breakers, switches, cutouts, network protectors, associated relays and control wiring. b. Repairing grounds. c. Retraining, reconnecting or transferring cables in manholes. d. Repairing conductors and splicers. e. Repairing or moving junction boxes and potheads. f. Refireproofing cables and repairing supports. g. Repairing electrolysis preventative devices for cables. h. Sampling, testing, changing, purifying and replenishing insulating oil. i. Transferring loads; switching and reconnecting circuits and equipment for maintenance purposes. j. Repairing oil or gas in high-voltage cable system.
	Maintenance of Underground Services. Includes the cost of maintaining distribution underground conductors and devices. Some examples are: a. Cleaning service ducts. b. Repairing underground wire.
595	**Maintenance of Line Transformers.** Includes the costs of maintaining distribution line transformers. Some examples are: a. Repairing transformers and network protectors. b. Sampling, adding and renewing oil. c. Internal and external connections. d. Servicing throat switches. e. Replacing primary bushings in cable and switch compartments. f. Painting vaults. g. Testing and adjusting after maintenance.
596	**Maintenance of Street Lighting and Signal Systems.** Includes the cost of labor, materials used and expense incurred in maintenance of plant, the book cost of which is includable in account 373, Street Lighting and Signal Systems.

HAWAIIAN ELECTRIC COMPANY, INC.
DISTRIBUTION-MAINTENANCE EXPENSES

NARUC Account Number	DESCRIPTION
597	**Maintenance of Meters (Summary Account).** Includes the costs of maintaining distribution meters and meter testing equipment. Maintenance of Customer Meters. Includes the cost of maintaining customer meters and associated equipment. Some examples are: a. Repairing of primary meter installations. b. Repairing meter grounds. c. Repairing sockets, boxes and enclosures. Maintenance of Other Distribution Meters. Includes the cost of maintaining distribution meters and associated equipment for other than customer billing purposes. Some examples are: a. Repairing survey meters, recorders and data cartridges. b. Repairing translator and peripheral equipment. Excludes charges on meters installed permanently in substations, transmission stations or generation stations. These meters are station equipment and are charged to the respective equipment accounts.
598	**Maintenance of Distribution Office Furniture and Equipment.** Includes the costs of maintaining the distribution office furniture and equipment.

Hawaiian Electric Company, Inc.
2009 TEST YEAR

T&D O&M EXPENSE VARIANCES BY ACCOUNTS
(Over $200,000 and 10%)

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
						2009			
				Expense	2007	Test Year	Variance		
	Account	RA	Activity*	Element**	Recorded	Estimate	$	%	
	Transmission Operations								
1	561	PRE	376	501	136,109	418,873	282,764	208	A
2	563	PDS	328	150	-	567,792	567,792	#DIV/0!	B
3	563	PDS	328	501	-	212,751	212,751	#DIV/0!	B
4	566	PYT	300	501	-	320,000	320,000	#DIV/0!	C
	Transmission Maintenance								
5	570	PRC	350	501	7,493	390,266	382,773	5,108	D
6	570	PRS	349	501	-	272,737	272,737	#DIV/0!	D
7	571	PDV	355	501	1,046,121	1,365,300	319,179	31	E
	Distribution Operations								
8	582	PRA	463	901	152,045	433,344	281,299	185	F
9	584	PDS	459	150	-	323,942	323,942	#DIV/0!	G
10	586	PWX	601	501	289,725	-	(289,725)	(100)	H
11	587	PWX	739	150	-	261,079	261,079	#DIV/0!	I
12	587	PWX	739	501	-	351,888	351,888	#DIV/0!	I
13	588	PDF	600	150	625,577	1,115,470	489,893	78	J

Source: Rate Case Variance Report V1pages 7-10; run date 5/20/08

Note: Figures may not total exactly due to rounding.

* Detailed activity descriptions can be found on pages 5-20 of this work paper, in the order in which they appear.

** Expense element descriptions can be found on page 21 of this work paper in the order in which they appear.

Hawaiian Electric Company, Inc.
2009 TEST YEAR

T&D O&M EXPENSE VARIANCES BY ACCOUNTS
(Over $200,000 and 10%)

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)
						2009			
				Expense	2007	Test Year	Variance		
	Account	RA	Activity*	Element**	Recorded	Estimate	$	%	
	Distribution Maintenance								
14	593	PDL	475	150	297,140	-	(297,140)	(100)	K
15	593	PDS	473	150	1,068	406,906	405,838	38,000	K
16	593	PDS	475	150	10,226	746,552	736,326	7,201	K
17	593	PDS	494	501	2,776,696	3,159,050	382,354	14	K
18	594	PDS	478	150	4,905	705,369	700,464	14,281	L
19	594	PDS	478	201	-	234,535	234,535	#DIV/0!	L
20	594	PDS	478	505	-	1,259,349	1,259,349	#DIV/0!	L
21	594	PDU	478	150	537,040	-	(537,040)	(100)	L
22	594	PDU	478	201	228,753	-	(228,753)	(100)	L
23	598	PDA	492	201	238,419	-	(238,419)	(100)	M
24	598	PDS	492	201	-	225,000	225,000	#DIV/0!	M

Source: Rate Case Variance Report V1pages 7-10; run date 5/20/08
Note: Figures may not total exactly due to rounding.
* Detailed activity descriptions can be found on pages 5-20 of this work paper, in the order in which they appear.
** Expense element descriptions can be found on page 21 of this work paper in the order in which they appear.

Hawaiian Electric Company, Inc.
2009 TEST YEAR
T&D O&M EXPENSE VARIANCES BY ACCOUNTS
(Over $200,000 and 10%)

A	282,764	Variance due to new EMS/OMS related 24/7 maintenance contracts for hardware, software and display boards technical support to take effect as warranty ends.
B	567,792	Variance is due to climbing inspections forecasted for 2009 based off of work plan developed by C&M Planning Division.
	212,751	Variance is due to an increase in program P0000361, Preventive Inspection of T&D System, for outside services for transmission overhead inspections. Amounts are forecasted into RA (DS) but charges are recorded to multiple RA's.
C	320,000	Variance represents increased activity for IRS (Interconnection Requirement Study) work for non-utility generation proposals and the Oahu Renewable Energy RFP. An IRS is performed when a developer proposes to interconnect a generation facility to the HECO system to 1) identify system requirements; 2) evaluate impacts to operation of the system; and 3) evaluate and refine performance requirements for the proposed facility. Actual cost of the IRS is borne by the developer and will be offset by a receivable.
D	382,773	Increase due to labor over demand transferring to outside contractors for communications work relating to mobile/portable repairs, air conditioning maintenance; tower maintenance, vegetation management, EME (electromagnetic) surveys required by FCC, preventive maintenance inspections.
	272,737	Increase due to labor over demand transferring to outside contractors for work relating to structural refurbishment, mobile sub refurbishment and laser leak detection.
E	319,179	Increase in scope of vegetation management program. See HECO-838 for details.
F	281,299	Variance due to partial year amortization of OMS software costs in '07 vs. full year in '09.
G	323,942	Variance is due to an increase in underground inspections to be performed during 2009 to enter information into a detailed inspection database and to incorporate infrared and VLF (very low frequency) testing of underground cables.
H	-289,725	Variance due to expense for AMI (Advanced Meter Infrastructure) business case analysis by outside consulting firm, KEMA, Inc. in 2007.
I	261,079	Variance represents the internal labor to perform preliminary engineering, sustain the pilot AMI system and develop the PUC application. Activities will be performed by staff in 5 positions, three of which are currently filled.
	351,888	Variance represents services of third party AMI technical and regulatory consultants.

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T&D O&M EXPENSE VARIANCES BY ACCOUNTS
(Over $200,000 and 10%)

J	489,893	Increase in staffing of Primary Troublemen for additional coverage and succession planning.
K	-297,140	Variance due to procedural reclassification from one Responsibility Area (RA) to another for program P0000123, Corrective Overhead Distribution Replacements . Amounts are forecasted into one RA (DS), but charges are recorded to multiple RA's. Work in this program is forecasted based off of historical trends.
	405,838	Variance is due to an increase in labor for program P340000, Preventive Overhead Distribution. Amounts are forecasted into one RA (DS), but charges are recorded to multiple RA's. Work in this program is forecasted based off of a work plan developed by the C&M Planning Division.
	736,326	Variance due to an increase in labor for program P0000123, Corrective Overhead Distribution Replacements. Amounts are forecasted into one RA (DS), but charges are recorded to multiple RA's. Work in this program is forecasted based off of historical trends.
	382,354	Increase in scope of vegetation management program as detailed in HECO-838..
L	700,464	Variance due to procedural reclassification from one Responsibility Area (RA) to another for program P0000122, Corrective Cable Failures. Amounts are forecasted into one RA (DS), but charges are recorded to multiple RAs.
	234,535	Variance due to procedural reclassification from one Responsibility Area (RA) to another for materials in program P0000122, Corrective Cable Failures . Amounts are forecasted into one RA (DS), but charges are recorded to multiple RAs.
	1,259,349	Increase due to over demand of labor so fault finding work will be transferred to outside contractors.
	-537,040	Variance due to procedural reclassification from one Responsibility Area (RA) to another for program P0000122, Corrective Cable Failures. Amounts are forecasted into one RA (DS), but charges are recorded to multiple RAs.
	-228,753	Variance due to procedural reclassification from one Responsibility Area (RA) to another materials for program P000122, Corrective Cable Failures. Amounts are forecasted into one RA (DS), but charges are recorded to multiple RAs.
M	-238,419	Variance due to procedural reclassification from one Responsibility Area (RA) to another for Construction and Maintenece Non Project materials. Amounts are forecasted into one RA (DS), but charges are recorded to multiple RAs.
	225,000	Variance due to procedural reclassification from one Responsibility Area (RA) to another for Construction and Maintenece Non Project materials. Amounts are forecasted into one RA (DS), but charges are recorded to multiple RAs.

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

376 GenTrSCADA

Process Group **Major Process** **Business Process**	TRANSMIT ELECTRICITY Operate & Maintain Transmission Facilities Dispatch Power	**Index:** **Date: 12/08/97**

Activity:	Dispatch & Monitor Generation, Transmission SCADA Resources	**Activity Code:**	376

Activity Description:
This activity includes all of the tasks associated with system operation transmission SCADA functions and generation control.

Major Work Performed:
Schedule generation resources for daily, weekly, monthly load requirements
Operate SCADA equipment to dispatch power
Ensure software & hardware functions
Collect data & display results
Update economic data

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

328 TrOHInsp

Process Group **Major Process** **Business Process**	TRANSMIT ELECTRICITY Operate & Maintain Transmission Facilities Operate Transmission Facilities	**Index:** **Date: 12/08/97**

Activity: Perform Transmission Overhead Line Inspection - Preventive/Predictive **Activity Code:** 328

Activity Description:
This activity involves all tasks associated with inspecting overhead transmission and subtransmission lines and structures. It excludes any documentation regarding transmission substations which are covered under a separate activity. These are planned/scheduled inspections which are not related to emergency/failure investigation/inspections. (Transmission line: after the deadend structure in the generation switchyard up to the deadend structure entering the transmission substation; and after the deadend structure exiting the transmission substation up to the deadend structure entering the distribution substation).

Major Work Performed:
Perform all planned inspections
Perform fault recorder/indicator analysis
Perform outage analysis
Support system design
Records maintenance & inspection
Travel to/from location
Inspect lines, equipment, risers, terminators
Perform electrical testing & monitoring

See Related Activities:
326 Compile & Update Transmission Maps & Prints

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

300 TrPlanStud

Process Group	TRANSMIT ELECTRICITY	**Index:**
Major Process	Plan, Engineer, Design & Construct Transmission System & Facilities	
Business Process	Plan, Engineer & Design Transmission System & Facilities	**Date: 06/10/99**

Activity: Perform Transmission Planning Studies **Activity Code: 300**

Activity Description:

This activity includes all tasks associated with performing planning and engineering studies that relate to the analysis of load flows, equipment, lawsuits, and general studies for the transmission and subtransmission systems and their associated facilities for the HECO, HELCO, and MECO systems. It includes all bulk transmission planning with interfaces with power plants, and the development of transmission access policies. Does not include tasks associated with responding to field operations or maintenance problems.

Major Work Performed:

Obtain field data (load, testing, spot readings, etc.)
Secure load information
Prepare conceptual transmission facility designs
Perform economic/financial analysis
Evaluate alternatives
Develop and review criteria
Document results/write report
Perform power systems analysis
Perform reliability analysis
Perform circuit analysis
Perform transmission upgrades
Perform cost estimate
Obtain circuit and voltage history
Provide engineering support
Prepare & issue single line diagrams
Perform relay coordination analysis

See Related Activities:

710 Develop & Manage Forecasts - Sales & Load

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

350 TrEqCorr

Process Group **Major Process** **Business Process**	TRANSMIT ELECTRICITY Operate & Maintain Transmission Facilities Maintain Transmission Facilities	**Index:** **Date: 06/10/99**

Activity: Maintain Substation Transmission Equipment - Corrective **Activity Code: 350**

Activity Description:

This activity includes all tasks associated with the planning, scheduling and execution involved in correcting failures, accidents and/or other problems with the transmission substation equipment. It involves repair/corrective work done on breakers, regulators, transformers and other substation equipment. (Transmission substation equipment: between the line drop entering the generation switchyard and the deadend structure exiting the switchyard; and between the line drop entering the substation and the deadend structure exiting the transmission substation, and the generator main (step up) transformer).

Major Work Performed:

Plan & schedule the work
Perform diagnostic testing
Record results
Analyze data
Obtain proper tools
Maintain equipment
Travel to/from location
Prepare & perform switching
Respond to emergency
Standby
Provide engineering & design support
Perform electrical & control equipment testing

See Related Activities:

362 Make Emergency Substation Transmission Equipment Repairs - Caused by External Party
366 Make Emergency Substation Transmission Equipment Repairs - Storm

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

349 TrEqPred

Process Group **Major Process** **Business Process**	TRANSMIT ELECTRICITY Operate & Maintain Transmission Facilities Maintain Transmission Facilities	**Index:** **Date: 06/10/99**

Activity: Maintain Substation Transmission Equipment - Predictive **Activity Code:** 349

Activity Description:

Predictive maintenance is performed based on analysis of remaining life (condition monitoring). This activity includes all tasks associated with statistically predicting failures and/or other problems with the transmission substation equipment. It includes work done on breakers, regulators, transformers, and other substation equipment. (Transmission substation facilities: between the line drop entering the generation switchyard and the deadend structure exiting the switchyard; and between the line drop entering the substation and the deadend structure exiting the transmission substation, and the generator main (step up) transformer).

Major Work Performed:

Plan & schedule maintenance work
Perform diagnostic testing
Record results
Analyze data
Maintain equipment
Obtain proper tools
Travel to/from location
Prepare and perform switching
Standby
Provide engineering & design support

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

355 TrVegMgmt

Process Group **Major Process** **Business Process**	TRANSMIT ELECTRICITY Operate & Maintain Transmission Facilities Maintain Transmission Facilities	**Index:** **Date: 12/08/97**

Activity: Perform Vegetation Management - Transmission **Activity Code:** 355

Activity Description:
This activity includes all vegetation management efforts to maintain and clear the right-of-way for the transmission and subtransmission system. This includes coordinating efforts with subcontract tree trimming crews and the costs for contract work. These are maintenance and upkeeping efforts, not R/W work for new transmission facility construction.

Major Work Performed:
Manage vegetation
Prepare bid
Write contracts
Attend pre-bid meetings
Respond to damage complaints
Dispatch crews
Plan & schedule work
Perform ground restoration (erosion)
Trim trees
Perform field inspections & survey/compliance/evaluation
Remove trees
Spray Trees
Secure land owners permission
Analyze performance
Dispatch crew for emergency work/special requests
Clear trails & work area

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

463 OpDsSub

Process Group **Major Process** **Business Process**	DISTRIBUTE ELECTRICITY Operate & Maintain Distribution Facilities Operate Distribution Facilities	**Index:** **Date: 12/08/97**

Activity: Operate Distribution Facilities - Substation **Activity Code:** 463

Activity Description:
This activity encompasses all tasks associated with the routine operation of the distribution substations including managing and monitoring load flows and performing routine switching.

Major Work Performed:
Perform switching
Maintain voltage & current charts
Monitor voltage & current levels
Provide technical support
Monitor alarms
Perform fault analysis
Prioritize and schedule resources

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

459 DsUGInsp

Process Group **Major Process** **Business Process**	DISTRIBUTE ELECTRICITY Operate & Maintain Distribution Facilities Operate Distribution Facilities	**Index:** **Date: 12/08/97**

Activity:	Perform Distribution Underground Line Inspection - Predictive/Preventive	**Activity Code:**	459

Activity Description:

This activity involves all tasks associated with inspecting underground distribution lines. (Distribution Line: After the deadend structure from the distribution substation to the secondary main). (These are planned/scheduled inspections which are not related to emergency failure investigation/inspection).

Major Work Performed:

Perform all inspection (including public safety inspection and line transformers)
Test line transformers
Perform manhole and handhold inspections
Fault recorder/indicator analysis
Perform outage analysis
Support system design
Records maintenance & inspection
Support mapping information systems
Travel to and from location
Install fault indicators
Fill out Repair Order

See Related Activities:

456 Compile & Update Distribution Maps & Prints

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

601 MeterWork

Process Group **Major Process** **Business Process**	PROVIDE CUSTOMER SERVICE Provide Customer Service - Regulated Provide Customer Account Service - Regulated	**Index:** **Date: 12/08/97**

Activity: Perform Meter Service Work **Activity Code: 601**

Activity Description:
This activity includes all task performed with regards to installing, removing, moving and exchanging residential, commercial, and industrial connections at the customer location. It begins after the order is dispatched and continues through until the work is completed and properly documented. It also includes shipping the defective meter back to the warehouse.

Major Work Performed:
Travel to/from site
Perform installs
Perform removals/replacements/moves
Perform exchanges
Perform upgrades
Document work performed
Ship meter to warehouse

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

739 CaptlFile

Process Group **Major Process** **Business Process**	MANAGE & SUPPORT THE BUSINESS Manage Government Relations Develop & Support Rates & Tariffs	**Index:** **Date: 01/01/00**

Activity: Prepare & Support PUC Capital Project Filings **Activity Code: 739**

Activity Description:
This activity includes tasks performed in the production and distribution of specific capital project filings in compliance with General Order No. 7 requirements and related routine reporting to the PUC

Major Work Performed:
- Prepare PUC application
- Develop strategy
- Gather data, solicit field input
- Update planning/economic studies
- Manage testimony, filing requirements, and legal notices
- File the case
- Discovery
- Testify at PUC hearing (including witness preparation
- Analyze other parties' position
- Support with written testimony in proceedings
- Implement outcome of the case
- Negotiate settlements
- Develop and disseminate case information (internal & PR)
- Obtain Decision and Order
- Respond to Information Requests (IR)

See Related Activities:

	Engineer, Design & Construct Generation Facilities Business Process
302	Engineer & Design Transmission Facilities - Overhead Line
303	Engineer & Design Transmission Facilities - Underground Line
304	Engineer & Design Transmission Facilities - Substation Equipment
305	Engineer & Design Transmission Facilities - Substation Structure
306	Engineer & Design Transmission SCADA System & Equipment
403	Engineer & Design Distribution Facilities - Overhead Line
404	Engineer & Design Distribution Facilities - Underground Line
405	Engineer & Design Distribution Facilities - Substation Equipment
406	Engineer & Design Distribution Facilities - Substation Structure
407	Engineer & Design Distribution SCADA System & Equipment

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

600 CustInq

Process Group **Major Process** **Business Process**	PROVIDE CUSTOMER SERVICE Provide Customer Service - Regulated Provide Customer Account Service - Regulated	**Index:** **Date: 12/08/97**

Activity: Respond to Customer Inquiries & Service Requests **Activity Code: 600**

Activity Description:
This activity includes all efforts to respond to customer inquiries and service requests received through phone calls, letters, and walk-ins. These inquiries include billing questions, requests for account balance information, account changes, and problems such as voltage, service, street light, and tree trimming.

Major Work Performed:
Determine customer concerns/complaints -walk in, mail, phone
Contact customer/gather information
Identify resolution
Coordinate with contractors/suppliers/crews
Verify customer satisfaction
Maintain documentation/records
Open order
Document contact
Perform credit check
Analyze account
Document contact
Determine cause of problem
Analyze customer complaints

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

475 MnDsOHCorr

Process Group **Major Process** **Business Process**	DISTRIBUTE ELECTRICITY Operate & Maintain Distribution Facilities Maintain Distribution Facilities	**Index:** **Date: 12/08/97**

Activity: Maintain Distribution Overhead Lines - Corrective **Activity Code:** 475

Activity Description:
This activity includes all tasks associated with correcting failures and other problems with distribution overhead line facilities. It includes repair/corrective work done on equipment such as poles, cables, regulators, etc., but excludes any transformer and meter work which are covered under separate activities. It includes emergency/failure investigation/inspection other than those cause by external parties or storms. (Distribution line: after the deadend structure from the distribution substation to the secondary main).

Major Work Performed:
Engineering functions & calculations
Install mobile station
Obtain permits other than environmental or land use
Maintain the equipment
Obtain construction access/trimming
Travel to/from site
Survey job/stake
Respond to emergency other than caused by external parties or storms
Prepare cost estimates
Inspection
Set up right-of-way clearing
Perform outage analysis
Plan & schedule the work/construction project management
Analyze data
Obtain proper material & equipment/tools
Provide engineering & design support
Field check
Prepare/perform switching
Install towers/station facilities/poles
Install & commission fixtures and equipment
String wire
Prepare metering scheme work
Install assoc. elect. equipment
Inspect job
Prepare as-builts
Manage correspondence/paperwork
Notify public (PR)
Close out jobs
Perform removals
Repair, replace cables/splices
Perform diagnostic testing
Record the results

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

473 MnDsOHPrev

Process Group **Major Process** **Business Process**	DISTRIBUTE ELECTRICITY Operate & Maintain Distribution Facilities Maintain Distribution Facilities	**Index:** **Date: 12/08/97**

Activity: Maintain Distribution Overhead Lines - Preventive **Activity Code:** 473

Activity Description:

Preventive maintenance is based on cycles or inspection identified replacement need. This activity includes all tasks in support of the preventive maintenance effort for distribution overhead line facilities. It includes work done on equipment such as poles, cables, regulators, insulators, etc., but excludes any transformer and meter work which are covered under separate activities. (Distribution line: after the deadend structure from the distribution substation to the secondary main).

Major Work Performed:

Plan & schedule distribution maintenance work
Obtain proper material & equipment/tools
Field check
Prepare/perform switching
Perform distribution maintenance work
Wash insulators
Travel to/from location
Provide engineering & design support

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

494 DsVegMgmt

Process Group	DISTRIBUTE ELECTRICITY	**Index:**
Major Process	Operate & Maintain Distribution Facilities	
Business Process	Maintain Distribution Facilities	**Date: 12/08/97**

Activity: Perform Vegetation Management - Distribution **Activity Code:** 494

Activity Description:
This activity includes all work performed for maintenance of vegetation along distribution lines. This includes coordinating efforts with subcontract tree trimming crews and the costs for contract work. (Distribution Line: after the deadend structure from the distribution substation to the secondary main).

Major Work Performed:
Calculate circuit miles
Prepare bid
Prepare contracts
Attend pre-bid meetings
Respond to damage complaints
Dispatch crews
Plan & schedule work
Perform ground restoration
Trim trees
Perform field inspections
Remove trees
Spray trees (herbicide)
Secure land owners permission
Maintain grass
Perform substation plant control
Perform land management
Perform switching
Standby

See Related Activities:

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

478 MnDsUGCorr

Process Group **Major Process** **Business Process**	DISTRIBUTE ELECTRICITY Operate & Maintain Distribution Facilities Maintain Distribution Facilities	**Index:** **Date: 12/08/97**

Activity: Maintain Distribution Underground Lines - Corrective **Activity Code:** 478

Activity Description:
This activity includes all tasks associated with correcting failures and other problems with distribution underground line facilities. It includes repair/corrective work done on equipment such as conduits, cables, regulators, etc., but excludes any transformer or meter work which are covered under separate activities. It includes emergency/failure investigation/inspection other than those cause by external parties or storms. (Distribution line: after the deadend structure from the distribution substation to the secondary main).

Major Work Performed:
Engineering functions & calculations
Install mobile station
Obtain permits other than environmental or land use
Maintain the equipment
Obtain construction access/trimming
Travel to/from site
Survey job/stake
Respond to emergency other than caused by external parties or storms
Prepare cost estimates
Set up right-of-way clearing
Perform outage analysis
Plan & schedule the work/construction project management
Analyze data
Obtain proper material & equipment/tools
Provide engineering & design support
Field check
Dig trenches/excavate
Prepare/perform switching
Install towers/station facilities/poles
Install & commission fixtures and equipment
String wire
Prepare metering scheme work
Install assoc. elect. equipment
Inspect job
Prepare as-builts
Manage correspondence/paperwork
Notify public (PR)
Close out jobs
Perform removals
Repair, replace cables/splices
Perform diagnostic testing
Record the results

See Related Activities:
470 Repair Distribution Data Recording Equipment

CODE BLOCK REFERENCE: ***ABM Activity Definitions***

492 MnDsTools

Process Group **Major Process** **Business Process**	DISTRIBUTE ELECTRICITY Operate & Maintain Distribution Facilities Maintain Distribution Facilities	**Index:** **Date: 12/08/97**

Activity: Maintain Distribution Tools & Equipment **Activity Code:** 492

Activity Description:
This activity includes all tasks in support of the maintenance of tools and equipment.

Major Work Performed:
Repair, test & calibrate equipment
Dielectric testing of rubber goods

See Related Activities:

T&D O&M EXPENSE ELEMENT DESCRIPTIONS

CODE	DESCRIPTION
501	Outside Services - General Outside services, which are not assignable to the other specific 500 or 600 series expense elements. Examples include audit fees, advertising outside printing, and registration fees for seminars and training classes. Cost type 550 should be used for services received from affiliated companies.
150	Labor Cost all labor hours for BU and Merit employees that are costed using standard rates. The payroll system will automatically generate this code and therefore, should not be entered on timesheets. However, for budgeting, this expense element must be input for all productive hours.
901	Amortization of Deferred Debits
506	Outside Services - Engineering Engineering consultant services and costs associated with the engineering study and design of facilities. This expense type includes rental transportation costs incurred by the contractor. Cost type 550 should be used for services received from affiliated companies.
451	IS Expense - Production & Development Information Services charges for usage and equipment (e.g. batch processing, disk storage, terminal lease rent, LAN connection fee, etc.) and in-house systems development work.
201	Material Issues/Purchases Materials purchased or issued through the ERP system (includes vehicles but not automotive supplies, etc.)
905	Other Operating Revenue, Nonreg Revenue & Other Credits
505	Outside Services - Construction Outside contractor costs incurred for the construction of facilities. This expense type includes rental transportation costs incurred by the contractor. Cost type 550 should be used for services received from affiliated companies.

Hawaiian Electric Company, Inc.
2009 Test Year

138kv OVERHEAD TRANSMISSION LINE AGE

	(A)	(B)	(C)	(D)		(E)		(F)		(G)		(H)		(I)		(J)		(K)		(L)		(M)		(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)
																												Based 2009			
	Circuit	Year Installed	Length	Cum Miles	2000	2000 Mi-Yrs	2001	2001 Mi-Yrs	2002	2002 Mi-Yrs	2003	2003 Mi-Yrs	2004	2004 Mi-Yrs	2005	2005 Mi-Yrs	Forecast 2006	2006 Mi-Yrs	Forecast 2007	2007 Mi-Yrs	Forecast 2008	2008 Mi-Yrs	Forecast 2009	2009 Mi-Yrs	30+ Yrs	25+ Yrs	20+ Yrs	15+ Yrs	10+ Yrs	5+ Yrs	0+ Yrs
1	Waiau-Koolau	1958	17.2	17.2	42	722.4	43	739.6	44	756.8	45	774.0	46	791.2	47	808.4	48	825.6	49	842.8	50	860	51	877.2	17.2						
2	Waiau-Koolau-Pukele	1960	19.4	36.6	40	776.0	41	795.4	42	814.8	43	834.2	44	853.6	45	873	46	892.4	47	911.8	48	931.2	49	950.6	19.4						
3	Waiau-Wahiawa	1960	12.2	48.8	40	488.0	41	500.2	42	512.4	43	524.6	44	536.8	45	549	46	561.2	47	573.4	48	585.6	49	597.8	12.2						
4	Kahe-Waiau	1961	18.8	67.6	39	733.2	40	752.0	41	770.8	42	789.6	43	808.4	44	827.2	45	846	46	864.8	47	883.6	48	902.4	18.8						
5	Kahe-Halawa#1	1962	20.6	88.2	38	782.8	39	803.4	40	824.0	41	844.6	42	865.2	43	885.8	44	906.4	45	927	46	947.6	47	968.2	20.6						
6	Kahe-Wahiawa	1963	17.6	105.8	37	651.2	38	668.8	39	686.4	40	704.0	41	721.6	42	739.2	43	756.8	44	774.4	45	792	46	809.6	17.6						
7	Koolau-Pukele	1965	6.3	112.1	35	220.5	36	226.8	37	233.1	38	239.4	39	245.7	40	252	41	258.3	42	264.6	43	270.9	44	277.2	6.3						
8	Kahe-Halawa#2	1971	11.6	123.7	29	336.4	30	348.0	31	359.6	32	371.2	33	382.8	34	394.4	35	406	36	417.6	37	429.2	38	440.8	11.6						
9	Halawa-Iwlei	1972	10.8	134.5	28	302.4	29	313.2	30	324.0	31	334.8	32	345.6	33	356.4	34	367.2	35	378	36	388.8	37	399.6	10.8						
10	Halawa-School	1972	5.4	139.9	28	151.2	29	156.6	30	162.0	31	167.4	32	172.8	33	178.2	34	183.6	35	189	36	194.4	37	199.8	5.4						
11	School-Iwilei	1972	0.6	140.5	28	16.8	29	17.4	30	18.0	31	18.6	32	19.2	33	19.8	34	20.4	35	21	36	21.6	37	22.2	0.6						
12	Waiau Gas Turbine	1972	0.3	140.8	28	8.4	29	8.7	30	9.0	31	9.3	32	9.6	33	9.9	34	10.2	35	10.5	36	10.8	37	11.1	0.3						
13	Halawa-Koolau	1972	9.6	150.4	28	268.8	29	278.4	30	288.0	31	297.6	32	307.2	33	316.8	34	326.4	35	336	36	345.6	37	355.2	9.6						
14	Halawa-Makalapa	1973	4	154.4	27	108.0	28	112.0	29	116.0	30	120.0	31	124.0	32	128	33	132	34	136	35	140	36	144	4.0						
15	Waiau-Makalapa	1975	4	158.4	25	100.0	26	104.0	27	108.0	28	112.0	29	116.0	30	120	31	124	32	128	33	132	34	136	4.0						
16	Kahe-CEIP#1	1977	4.2	162.6	23	96.6	24	100.8	25	105.0	26	109.2	27	113.4	28	117.6	29	121.8	30	126	31	130.2	32	134.4	4.2						
17	Kahe-CEIP#2	1977	4.4	167	23	101.2	24	105.6	25	110.0	26	114.4	27	118.8	28	123.2	29	127.6	30	132	31	136.4	32	140.8	4.4						
18	Iwilei-Makalapa	1985	7	174	15	105.0	16	112.0	17	119.0	18	126.0	19	133.0	20	140	21	147	22	154	23	161	24	168		7.0					
19	Kalaeloa-CEIP	1989	2.8	176.8	11	30.8	12	33.6	13	36.4	14	39.2	15	42.0	16	44.8	17	47.6	18	50.4	19	53.2	20	56			2.8				
20	AES-Kalaeloa	1991	0.6	177.4	9	5.4	10	6.0	11	6.6	12	7.2	13	7.8	14	8.4	15	9	16	9.6	17	10.2	18	10.8			0.6				
21	AES-HRRV	1991	0.2	177.6	9	1.8	10	2.0	11	2.2	12	2.4	13	2.6	14	2.8	15	3	16	3.2	17	3.4	18	3.6			0.2				
22	AES-CEIP	1991	2.2	179.8	9	19.8	10	22.0	11	24.2	12	26.4	13	28.6	14	30.8	15	33	16	35.2	17	37.4	18	39.6			2.2				
23	Waiau-Makalapa#2	1992	4.5	184.3	8	36.0	9	40.5	10	45.0	11	49.5	12	54.0	13	58.5	14	63	15	67.5	16	72	17	76.5			4.5				
24	CEIP-Ewa Nui (Part 1)	1995	6.5	190.8	5	32.5	6	39.0	7	45.5	8	52.0	9	58.5	10	65	11	71.5	12	78	13	84.5	14	91				6.5			
25	Kalaeloa-Ewa Nui (Part 1)	1995	8.3	199.1	5	41.5	6	49.8	7	58.1	8	66.4	9	74.7	10	83	11	91.3	12	99.6	13	107.9	14	116.2				8.3			
26	Waiau-Ewa Nui #1 (Part 2)	1995	7.2	206.3	5	36.0	6	43.2	7	50.4	8	57.6	9	64.8	10	72	11	79.2	12	86.4	13	93.6	14	100.8				7.2			
27	Waiau-Ewa Nui #2 (Part 2)	1995	7.3	213.6	5	36.5	6	43.8	7	51.1	8	58.4	9	65.7	10	73	11	80.3	12	87.6	13	94.9	14	102.2				7.3			
28	Total Mile Years					6209.2		6422.8		6636.4		6850.0		7063.6		7277.2		7490.8		7704.4		7918		8131.6	167.0	7.0	10.3	29.3	0.0	0.0	0.0
29	Average Age OH 138kV					29.1		30.1		31.1		32.1		33.1		34.1		35.1		36.1		47.4		48.7	78.2%	3.3%	4.8%	13.7%	0.0%	0.0%	0.0%

Hawaiian Electric Company, Inc.
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138kV UNDERGROUND TRANSMISSION LINE AGE

(A)	(B)	(C)	(D)		(E)		(F)		(G)		(H)		(I)		(J)		(K)		(L)		(M)		(N)	(O)	(P)	(Q)	(R)	(S)	(T)	(U)
																											Based 2009			
	Year		Cum		2000		2001		2002		2003		2004		2005		2006		2007	Fcst	2008	Fcst	2009	30+	25+	20+	15+	10+	5+	0+
	Installed	Length	Miles	2000	Mi-Yrs	2001	Mi-Yrs	2002	Mi-Yrs	2003	Mi-Yrs	2004	Mi-Yrs	2005	Mi-Yrs	2006	Mi-Yrs	2007	Mi-Yrs	2008	Mi-Yrs	2009	Mi-Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs
1 Iwilei-Archer (HPFF)	1989	2	2	11	22.0	12	24.0	13	26.0	14	28.0	15	30.0	16	32	17	34	18	36	19	38	20	40				2.0			
2 School-Archer (HPFF)	1989	2	4	11	22.0	12	24.0	13	26.0	14	28.0	15	30.0	16	32	17	34	18	36	19	38	20	40				2.0			
3 H-3 138kV UG (XLPE)	1992	0.12	4.12	8	1.0	9	1.1	10	1.2	11	1.3	12	1.4	13	1.56	14	1.68	15	1.8	16	1.92	17	2.04				0.1			
4 Airport 138kV UG#1 (XLPE)	1992	0.42	4.54	8	3.4	9	3.8	10	4.2	11	4.6	12	5.0	13	5.46	14	5.88	15	6.3	16	6.72	17	7.14				0.4			
5 Airport 138kV UG#2 (XLPE)	1994	0.42	4.96	6	2.5	7	2.9	8	3.4	9	3.8	10	4.2	11	4.62	12	5.04	13	5.46	14	5.88	15	6.3					0.4		
6 Iwilei 138kV T3 UG (XLPE)	1996	0.05	5.01	4	0.2	5	0.3	6	0.3	7	0.4	8	0.4	9	0.45	10	0.5	11	0.55	12	0.6	13	0.65					0.1		
7 Iwilei 138kV T4 UG (XLPE)	1996	0.07	5.08	4	0.3	5	0.4	6	0.4	7	0.5	8	0.6	9	0.63	10	0.7	11	0.77	12	0.84	13	0.91					0.1		
8 Archer-Kewalo #1 (HPFF)	2000	0.66	5.74	0	0.0	1	0.7	2	1.3	3	2.0	4	2.6	5	3.3	6	3.96	7	4.62	8	5.28	9	5.94						0.7	
9 Archer-Kewalo #2 (HPFF)	2001	0.66	6.4			0	0.0	1	0.7	2	1.3	3	2.0	4	2.64	5	3.3	6	3.96	7	4.62	8	5.28						0.7	
10 Kewalo-Kamoku (HPFF)	2002	1.89	8.29					0	0.0	1	1.9	2	3.8	3	5.67	4	7.56	5	9.45	6	11.34	7	13.23						1.9	
11 Miles in Service					5.7		6.4		8.3		8.3		8.3		8.3		8.3		8.3		8.3		8.3	-	-	-	4.5	0.5	3.2	-
12 Total Mile Years					51.3		57.1		63.5		71.8		80.0		88.3		96.6		104.9		113.2		121.5	0.0%	0.0%	0.0%	54.8%	6.5%	38.7%	0.0%
13 Average Age UG 138kV					8.9		8.9		7.7		8.7		9.7		10.7		11.7		12.7		13.7		14.7							

Hawaiian Electric Company, Inc.
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TRANSMISSION TRANSFORMER AGE

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)					(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
			PO													Based 2009					
			Date of										Fcst	30+	25+	20+	15+	10+	5+	0+	
	Description	Purchased	Repl	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
1	Waiau 3	12/1/1947	1/12/2004	53	54	55	56	0	1	2	3	**4**	**5**							1	**Repl 10/04**
2	Waiau 4	10/25/1950	5/9/2005	50	51	52	53	54	**55**	1	2	**3**	**4**							1	**Repl 8/06**
3	Honolulu 8	12/17/1954	**3/28/2007**	46	47	48	49	50	51	52	53	**1**	**2**							**1**	**Repl 2008**
4	Honolulu 9	11/7/1957		43	44	45	46	47	48	49	50	**51**	**52**	1							
5	Waiau 5	9/1/1959		41	42	43	44	45	46	47	48	**49**	**50**	1							
6	CEIP	11/25/1959		41	42	43	44	45	46	47	48	**49**	**50**	1							
7	CEIP	11/25/1959	**4/11/2003**	41	42	43	44	45	46	47	48	**5**	**6**						**1**		**Repl 4/08**
8	Kahe	11/25/1959		41	42	43	44	45	46	47	48	**49**	**50**	1							
9	Kahe	11/25/1959		41	42	43	44	45	46	47	48	**49**	**50**	1							
10	Waiau 6	6/23/1961		39	40	41	42	43	44	45	46	**47**	**48**	1							
11	Waiau	1/19/1962		38	39	40	41	42	43	44	45	**46**	**47**	1							
12	Koolau	1/30/1962		38	39	40	41	42	43	44	45	**46**	**47**	1							
13	Koolau	11/8/1962		38	39	40	41	42	43	44	45	**46**	**47**	1							
14	Waiau	11/8/1962		38	39	40	41	42	43	44	45	**46**	**47**	1							
15	Kahe 1	3/4/1963		37	38	39	40	41	42	43	44	**45**	**46**	1							
16	Kahe 2	9/15/1964		36	37	38	39	40	41	42	43	**44**	**45**	1							
17	Koolau	10/21/1964		36	37	38	39	40	41	42	43	**44**	**45**	1							
18	Halawa	3/15/1965		35	36	37	38	39	40	41	42	**43**	**44**	1							
19	Halawa	3/15/1965		35	36	37	38	39	40	41	42	**43**	**44**	1							
20	Pukele	3/15/1965		35	36	37	38	39	40	41	42	**43**	**44**	1							
21	Pukele	3/15/1965		35	36	37	38	39	40	41	42	**43**	**44**	1							
22	Waiau 7	10/9/1966	**9/22/2006**	34	35	36	37	38	39	40	41	**2**	**3**							**1**	**Repl 7/10/08**
23	Pukele	8/28/1968		32	33	34	35	36	37	38	39	**40**	**41**	1							
24	Wahiawa	8/28/1968		32	33	34	35	36	37	38	39	**40**	**41**	1							
25	Waiau 8	11/20/1968		32	33	34	35	36	37	38	39	**40**	**41**	1							
26	Kahe 3	8/29/1970		30	31	32	33	34	35	36	37	**38**	**39**	1							
27	Iwilei	8/4/1971		29	30	31	32	33	34	35	36	**37**	**38**	1							

Hawaiian Electric Company, Inc.
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TRANSMISSION TRANSFORMER AGE

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)					(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
			PO													Based 2009					
			Date of										Fcst	30+	25+	20+	15+	10+	5+	0+	
	Description	Purchased	Repl	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
28	Pukele	11/6/1971		29	30	31	32	33	34	35	36	37	38	1							
29	Kahe 4	6/25/1972		28	29	30	31	32	33	34	35	36	37	1							
30	School	11/27/1972		28	29	30	31	32	33	34	35	36	37	1							
31	Waiau 9	6/20/1973		27	28	29	30	31	32	33	34	35	36	1							
32	Waiau 10	12/12/1973		27	28	29	30	31	32	33	34	35	36	1							
33	Wahiawa	1/1/1974	11/25/1959	26	27	28	29	30	31	32	33	49	50	1							Repl 7/08
34	Makalapa	10/31/1974		26	27	28	29	30	31	32	33	34	35	1							
35	Makalapa	10/31/1974		26	27	28	29	30	31	32	33	34	35	1							
36	Kahe 5	12/30/1974		26	27	28	29	30	31	32	33	34	35	1							
37	Kahe 6	2/21/1981		19	20	21	22	23	24	25	26	27	28		1						
38	Archer	10/24/1988		12	13	14	15	16	17	18	19	20	21			1					
39	Archer	10/24/1988		12	13	14	15	16	17	18	19	20	21			1					
40	Archer	7/7/1992		8	9	10	11	12	13	14	15	16	17				1				
41	Koolau	10/19/1992		8	9	10	11	12	13	14	15	16	17				1				
42	Wahiawa	10/19/1992		8	9	10	11	12	13	14	15	16	17				1				
43	Ewa Nui	7/11/1994		6	7	8	9	10	11	12	13	14	15					1			
44	School B	11/27/1972	7/4/1994	6	7	8	9	10	11	12	13	14	15					1			Repl. 6/99
45	Makalapa 1	10/13/1974	3/17/2000	0	1	2	3	4	5	6	7	8	9						1		Repl. 12/00
46	Iwilei A	8/4/1971	3/21/2001	29	30	31	2	3	4	5	6	7	8						1		Repl. 1/03
47	CIP CT1	8/31/2007											2							1	
			Total Age	1377	1423	1469	1485	1474	1520	1511	1557	1481	1529								
			# of Tsfs	46	46	46	46	46	46	46	46	46	47	31	1	2	3	2	3	5	
			Avg. Age	29.9	30.9	31.9	32.3	32.0	33.0	32.8	33.8	32.2	32.5	66%	2%	4%	6%	4%	6%	11%	

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DISTRIBUTION SUBSTATION TRANSFORMER AGE

(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)			(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
			PO														Based on 2009					
		PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
1 MANOA 1 4KV	11/4	9/20/35		35	65	66	67	68	69	70	71	72	Removed									
2 **BWS - ALAPAI*	**11/4*	8/21/42		42	58	59	60	61	62	63	64	65	66	67	1							
3 IWILEI 1 4KV	11/4	10/22/43		43	57	58	59	60	61	62	63	64	65	66	1							
4 **BWS - WAHIAWA WELLS #2*	**46/4*	7/21/44		44	56	57	58	59	60	61	62	63	64	65	1							
5 **BWS - PUNALUU*	**46/4*	1/29/45		45	55	56	57	58	59	60	61	62	63	64	1							
6 **PAC. CONCRETE*	**46/11*	2/21/45		45	55	56	57	58	59	60	61	62	63	64	1							
7 KAILUA 1 4KV	46/4	3/19/45		45	55	56	57	58	59	60	61	62	63	64	1							
8 IWILEI 2 4KV	11/4	3/2/46		46	54	55	56	57	58	59	60	61	62	63	1							
9 MUSEUM PARK	11/4	3/2/46		46	54	55	56	57	58	59	60	61	62	63	1							
10 **BWS - MILILANI*	**46/4*	1/15/47		47	53	54	55	56	57	58	59	60	61	62	1							
11 LAELAE 1	46/4	1/15/47		47	53	54	55	56	57	58	59	60	61	62	1							
12 WOODLAWN 3	46/4	12/8/47		47	53	54	55	56	57	58	59	60	61	62	1							
13 AINA KOA 4KV	46/4	1/6/48		48	52	53	54	55	56	57	58	59	60	61	1							
14 KALAMA 2	46/4	5/6/49		49	51	52	53	54	55	56	57	58	59	60	1							
15 KAIMUKI 1	46/4	10/6/49		49	51	52	53	54	55	56	57	58	59	60	1							
16 AIKAHI 1	46/4	12/22/50		50	50	51	52	53	54	55	56	57	58	59	1							
17 AIKAHI 2	46/4	3/31/51		51	49	50	51	52	53	54	55	56	57	58	1							
18 KAMOHO 2	46/4	5/22/51		51	49	50	51	52	53	54	55	56	57	58	1							
19 AIKAHI 3	46/4	12/31/51		51	49	50	51	52	53	54	55	56	57	58	1							
20 KAHALA 1 4KV	46/4	12/31/51		51	49	50	51	52	53	54	55	56	57	58	1							
21 KAIMUKI 2	46/4	12/31/51		51	49	50	51	52	53	54	55	56	57	58	1							
22 KAILUA 2 4KV	46/4	5/14/52		52	48	49	50	51	52	53	54	55	56	57	1							
23 WAIALAE 2	46/4	7/10/52		52	48	49	50	51	52	53	54	55	56	57	1							
24 MANOA 2 4KV	11/4	8/12/52		52	48	49	50	51	52	53	54	55	Removed									
25 KAPIOLANI 1 4KV	46/4	12/16/52		52	48	49	50	51	52	53	54	55	56	57	1							
26 **BIG 3*	**46/4*	6/17/53		53	47	48	49	50	51	52	53	54	55	56	1							
27 WOODLAWN 1	46/4	6/17/53		53	47	48	49	50	51	52	53	54	55	56	1							
28 *WILSON TUNNEL 2	*46/4	8/21/53		53	47	48	49	50	51	52	53	54	55	56	1							

* = Single Customer

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(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)			(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
			PO														Based on 2009					
		PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
29 KUNIA	46/11	10/6/53	12/24/57	57	43	44	45	46	47	48	49	50	51	52	1							
30 PUUNUI 1	46/4	7/3/54		54	46	47	48	49	50	51	52	53	54	55	1							
31 **HONOULIULI*	**46/12*	2/14/55		55	45	46	47	48	49	50	51	52	53	54	1							
32 **HUNA*	**46/4*	2/14/55		55	45	46	47	48	49	50	51	52	53	54	1							
33 KALIHI 1	46/4	2/14/55		55	45	46	47	48	49	50	51	52	53	54	1							
34 KAPIOLANI 2 4KV	46/4	2/14/55		55	45	46	47	48	49	50	51	52	53	54	1							
35 QUARRY	46/12	2/14/55	1/23/57	57	43	44	45	46	47	48	49	50	51	52	1							
36 WOODLAWN 4	46/4	2/14/55		55	45	46	47	48	49	50	51	52	53	54	1							
37 KAMOHO 1	46/4	6/10/55		55	45	46	47	48	49	50	51	52	53	54	1							
38 IWILEI T2	46/11	9/23/55		55	45	46	47	48	49	50	51	52	53	54	1							
39 KALAMA 1	46/4	1/1/56		56	44	45	46	47	48	49	50	51	52	53	1							
40 PUUNUI 2	46/4	4/23/56		56	44	45	46	47	48	49	50	51	52	53	1							
41 WOODLAWN 2	46/4	4/23/56		56	44	45	46	47	48	49	50	51	52	53	1							
42 **CAMP CATLIN*	**46/11*	1/23/57	9/20/05	57	43	44	45	46	47	0	1	2	3	4							1	
43 **CAMP SMITH 1*	**46/11*	10/28/57		57	43	44	45	46	47	48	49	50	51	52	1							
44 WAIMANALO BCH 2	46/12	12/24/57	8/1/03	57	43	44	45	0	1	2	3	4	5	6						1		
45 LAELAE 2	46/4	3/10/58		58	42	43	44	45	46	47	48	49	50	51	1							
46 KALIHI 2	46/4	4/30/58		58	42	43	44	45	46	47	48	49	50	51	1							
47 MAPUNAPUNA 1	46/11	11/18/58		58	42	43	44	45	46	47	48	49	50	51	1							
48 WAHIAWA 1	46/12	11/18/58		58	42	43	44	45	46	47	48	49	50	51	1							
49 WAHIAWA 2	46/12	11/18/58		58	42	43	44	45	46	47	48	49	50	51	1							
50 NUUANU 1	46/12	4/2/59		59	41	42	43	44	45	46	47	48	49	50	1							
51 **HAWN CEMENT 1*	**46/4*	10/9/59		59	41	42	43	44	45	46	47	48	49	50	1							
52 WAIALAE 1	46/4	10/9/59		59	41	42	43	44	45	46	47	48	49	50	1							
53 MAKALAPA 2	46/11	10/26/59		59	41	42	43	44	45	46	47	48	49	50	1							
54 **STANDARD OIL 1*	**46/12*	10/27/59		59	41	42	43	44	45	46	47	48	49	50	1							
55 **STANDARD OIL 2*	**46/12*	10/27/59		59	41	42	43	44	45	46	47	48	49	50	1							
56 **FORT SHAFTER 2*	**46/12*	11/25/59		59	41	42	43	44	45	46	47	48	49	50	1							

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			PO														Based on 2009					
		PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
57 NUUANU 2	46/12	11/25/59		59	41	42	43	44	45	46	47	48	49	50	1							
58 WAIMANALO BCH 1	46/12	11/25/59		59	41	42	43	44	45	46	47	48	49	50	1							
59 WILIWILI	46/12	11/25/59		59	41	42	43	44	45	46	47	48	49	50	1							
60 WEST LOCH	46/11	5/13/60		60	40	41	42	43	44	45	46	47	48	49	1							
61 McCULLY 4	46/12	9/30/60		60	40	41	42	43	44	45	46	47	48	49	1							
62 EWA BEACH 1	46/12	10/10/60		60	40	41	42	43	44	45	46	47	48	49	1							
63 KAKAAKO 3	46/11	10/10/60		60	40	41	42	43	44	45	46	47	48	49	1							
64 KAPALAMA 1	46/11	10/10/60		60	40	41	42	43	44	45	46	47	48	49	1							
65 KEEHI 1	46/11	10/10/60		60	40	41	42	43	44	45	46	47	48	49	1							
66 MAKALAPA 1	46/11	10/10/60		60	40	41	42	43	44	45	46	47	48	49	1							
67 MAKALOA 2	46/12	10/10/60		60	40	41	42	43	44	45	46	47	48	49	1							
68 McCULLY 2	46/12	10/10/60		60	40	41	42	43	44	45	46	47	48	49	1							
69 KUILIMA 2	46/11	2/15/62		62	38	39	40	41	42	43	44	45	46	47	1							
70 SAND ISLAND 1	46/11	1/10/63		63	37	38	39	40	41	42	43	44	45	46	1							
71 WAIALUA 2	46/11	1/10/63		63	37	38	39	40	41	42	43	44	45	46	1							
72 WAIPIO	46/12	1/10/63		63	37	38	39	40	41	42	43	44	45	46	1							
73 KANEOHE 1	46/12	10/17/63		63	37	38	39	40	41	42	43	44	45	46	1							
74 KAPAHULU 2	46/12	10/17/63		63	37	38	39	40	41	42	43	44	45	46	1							
75 SAND ISLAND 2	46/11	10/17/63		63	37	38	39	40	41	42	43	44	45	46	1							
76 AIEA 1	46/11	12/8/64		64	36	37	38	39	40	41	42	43	44	45	1							
77 KAPAHULU 1	46/12	12/8/64		64	36	37	38	39	40	41	42	43	44	45	1							
78 WAHIAWA 3	46/12	12/8/64		64	36	37	38	39	40	41	42	43	44	45	1							
79 WAILUPE	46/12	12/8/64		64	36	37	38	39	40	41	42	43	44	45	1							
80 **MOKAPU 1*	**46/11*	11/8/65		65	35	36	37	38	39	40	41	42	43	44	1							
81 KAMILOIKI	46/12	11/8/65		65	35	36	37	38	39	40	41	42	43	44	1							
82 KAPAHULU 3	46/12	11/8/65		65	35	36	37	38	39	40	41	42	43	44	1							
83 WAIMANO 1	46/11	11/8/65	7/31/07	65	35	36	37	38	39	40	41	0	1	2							1	
84 WAIPAHU 1	46/12	11/8/65		65	35	36	37	38	39	40	41	42	43	44	1							

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			PO														Based on 2009					
		PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
85 KAPALAMA 2	46/11	7/27/66		66	34	35	36	37	38	39	40	41	42	43	1							
86 KOOLAU	46/12	7/27/66		66	34	35	36	37	38	39	40	41	42	43	1							
87 MAKALOA 3	46/12	7/27/66		66	34	35	36	37	38	39	40	41	42	43	1							
88 PIIKOI 1	46/12	7/27/66		66	34	35	36	37	38	39	40	41	42	43	1							
89 WAIALUA 3	46/11	7/27/66		66	34	35	36	37	38	39	40	41	42	43	1							
90 AIEA 2	46/11	4/27/67		67	33	34	35	36	37	38	39	40	41	42	1							
91 HOAEAE 1	46/12	4/27/67		67	33	34	35	36	37	38	39	40	41	42	1							
92 HOAEAE 2	46/12	4/27/67		67	33	34	35	36	37	38	39	40	41	42	1							
93 WAIAU DISTR (CB1229)	46/11	4/27/67		67	33	34	35	36	37	38	39	40	41	42	1							
94 WAIMANO 2	46/11	4/27/67		67	33	34	35	36	37	38	39	40	41	42	1							
95 IWILEI T1	46/11	10/17/67		67	33	34	35	36	37	38	39	40	41	42	1							
96 **EAST-WEST CTR 2*	**46/12*	1/12/68		68	32	33	34	35	36	37	38	39	40	41	1							
97 KAPAHULU 4	46/12	1/12/68		68	32	33	34	35	36	37	38	39	40	41	1							
98 MAKALOA 4	46/12	1/12/68		68	32	33	34	35	36	37	38	39	40	41	1							
99 MIKILUA 2	46/12	1/12/68		68	32	33	34	35	36	37	38	39	40	41	1							
100 MAKAKILO 2	46/12	10/1/68		68	32	33	34	35	36	37	38	39	40	41	1							
101 MALAKOLE 1	46/12	10/1/68		68	32	33	34	35	36	37	38	39	40	41	1							
102 WAIHEE 2	46/12	10/1/68		68	32	33	34	35	36	37	38	39	40	41	1							
103 AINA KOA	46/12	2/10/69		69	31	32	33	34	35	36	37	38	39	40	1							
104 KEEHI 2	46/11	2/10/69		69	31	32	33	34	35	36	37	38	39	40	1							
105 **FORT SHAFTER 1*	**46/12*	8/29/69		69	31	32	33	34	35	36	37	38	39	40	1							
106 KEOLU 2	46/12	8/29/69		69	31	32	33	34	35	36	37	38	39	40	1							
107 KEWALO 1	46/12	8/29/69		69	31	32	33	34	35	36	37	38	39	40	1							
108 MAPUNAPUNA 2	46/11	8/29/69		69	31	32	33	34	35	36	37	38	39	40	1							
109 HALEKAUWILA	11/4	9/16/69		69	31	32	33	34	35	36	37	38	39	40	1							
110 **MOKAPU 2*	**46/11*	2/10/70		70	30	31	32	33	34	35	36	37	38	39	1							
111 KAHE 1	46/12	2/10/70		70	30	31	32	33	34	35	36	37	38	39	1							
112 PIIKOI 2	46/12	2/10/70		70	30	31	32	33	34	35	36	37	38	39	1							

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			PO														Based on 2009					
		PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
113 KANEOHE 2	46/12	4/30/70		70	30	31	32	33	34	35	36	37	38	39	1							
114 KUAPA 1	46/12	4/30/70		70	30	31	32	33	34	35	36	37	38	39	1							
115 KUHIO 1	46/12	4/30/70		70	30	31	32	33	34	35	36	37	38	39	1							
116 **EAST-WEST CTR 1*	**46/12*	5/13/70	10/14/04	70	30	31	32	33	0	1	2	3	4	5							1	
117 AIEA 3	46/11	5/13/70		70	30	31	32	33	34	35	36	37	38	39	1							
118 MAKAHA 1	46/12	5/13/70		70	30	31	32	33	34	35	36	37	38	39	1							
119 WAIPAHU 2	46/12	5/13/70		70	30	31	32	33	34	35	36	37	38	39	1							
120 EWA BEACH 2	46/12	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
121 KAILUA	46/12	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
122 KAKAAKO 2	46/11	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
123 KAPALAMA 3	46/11	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
124 KAPIOLANI 2	46/12	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
125 KEEHI 3	46/11	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
126 MILILANI 1	46/12	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
127 WAIHEE 1	46/12	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
128 WAIMANO 3	46/11	7/16/71		71	29	30	31	32	33	34	35	36	37	38	1							
129 IWILEI 1	138/11	10/6/71		71	29	30	31	32	33	34	35	36	37	38	1							
130 IWILEI 2	138/11	10/6/71		71	29	30	31	32	33	34	35	36	37	38	1							
131 KEEHI 4	46/11	6/16/72		72	28	29	30	31	32	33	34	35	36	37	1							
132 PUOHALA	46/12	6/16/72	5/11/07	72	28	29	30	31	32	33	34	0	1	2							1	
133 QUEENS	46/12	6/16/72		72	28	29	30	31	32	33	34	35	36	37	1							
134 SCHOOL ST 1	46/11	6/16/72	2/6/04	72	28	29	30	31	0	1	2	3	4	5							1	
135 SCHOOL ST 2	46/11	6/16/72		72	28	29	30	31	32	33	34	35	36	37	1							
136 UWAPO 1	46/12	6/16/72	12/3/04	72	28	29	30	31	0	1	2	3	4	5							1	
137 SCHOOL ST T2 4KV	46/4	9/18/72		72	28	29	30	31	32	33	34	35	36	37	1							
138 **BWS - WAIHEE*	**46/4*	9/20/72		72	28	29	30	31	32	33	34	35	36	37	1							
139 **KUAHUA T1*	**46/11*	10/3/72		72	28	29	30	31	32	33	34	35	36	37	1							
140 **BWS - KAM. IV*	**46/4*	10/27/72		72	28	29	30	31	32	33	34	35	36	37	1							

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				PO														Based on 2009					
			PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
	Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
141	MAKAHA 2	46/12	4/13/73		73	27	28	29	30	31	32	33	34	35	36	1							
142	**HICKAM 1*	**46/11*	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
143	**HICKAM 3*	**46/11*	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
144	HAUULA 1	46/11	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
145	HILA 1	46/11	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
146	KAONOHI 1	46/11	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
147	LAKESIDE 1	46/11	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
148	MANOA 1	46/12	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
149	PAUOA 1 12KV	46/12	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
150	PEARL CITY	46/11	4/18/73		73	27	28	29	30	31	32	33	34	35	36	1							
151	**PUULOA 1*	**46/11*	4/23/73		73	27	28	29	30	31	32	33	34	35	36	1							
152	**PUULOA 3*	**46/11*	4/23/73		73	27	28	29	30	31	32	33	34	35	36	1							
153	**ALIAMANU*	**46/12*	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
154	AHI 1	46/12	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
155	AHI 2	46/12	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
156	ENA 4	46/12	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
157	KAPAHULU 5	46/12	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
158	KUHIO 2	46/12	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
159	MILILANI 2	46/12	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
160	MOILIILI	46/12	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
161	WAIAKAMILO 1	46/11	3/15/74		74	26	27	28	29	30	31	32	33	34	35	1							
162	IWILEI 3	138/11	8/2/74		74	26	27	28	29	30	31	32	33	34	35	1							
163	KEOLU 1	46/12	3/15/75		75	25	26	27	28	29	30	31	32	33	34	1							
164	HILA 2	46/11	8/29/78		78	22	23	24	25	26	27	28	29	30	31	1							
165	KAPAHULU 6	46/12	8/29/78		78	22	23	24	25	26	27	28	29	30	31	1							
166	KUAPA 2	46/12	6/28/79		79	21	22	23	24	25	26	27	28	29	30		1						
167	WAIKIKI 2	46/12	9/10/79		79	21	22	23	24	25	26	27	28	29	30		1						
168	KANEOHE 3	46/12	4/30/80		80	20	21	22	23	24	25	26	27	28	29		1						

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				PO														Based on 2009					
			PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
	Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
169	MANOA 2	46/11	4/30/80		80	20	21	22	23	24	25	26	27	28	29		1						
170	SCHOOL ST 3	46/11	4/30/80		80	20	21	22	23	24	25	26	27	28	29		1						
171	**TRIPLER 1*	**46/11*	10/25/82		82	18	19	20	21	22	23	24	25	26	27		1						
172	HONOLULU 1	46/11	10/25/82		82	18	19	20	21	22	23	24	25	26	27		1						
173	HONOLULU 2	46/11	10/25/82		82	18	19	20	21	22	23	24	25	26	27		1						
174	KAHALA 1	46/12	4/19/83		83	17	18	19	20	21	22	23	24	25	26		1						
175	**TRIPLER 2*	**46/11*	2/26/86		86	14	15	16	17	18	19	20	21	22	23			1					
176	PUKELE 2	46/12	2/26/86		86	14	15	16	17	18	19	20	21	22	23			1					
177	KAHALA 2 4KV	46/4	6/9/86	2/5/04	86	14	15	16	17	0	1	2	3	4	5							1	
178	WAIAKAMILO 2	46/11	8/5/87		87	13	14	15	16	17	18	19	20	21	22		1						
179	ARCHER 1	46/11	3/11/88		88	12	13	14	15	16	17	18	19	20	21		1						
180	PIIKOI 3	46/12	12/19/88		88	12	13	14	15	16	17	18	19	20	21		1						
181	**BWS - WAHIAWA WELLS*	**46/4*	2/16/89		89	11	12	13	14	15	16	17	18	19	20			1					
182	**BWS - EWA WTR SYS*	**46/4*	4/21/89		89	11	12	13	14	15	16	17	18	19	20			1					
183	**BWS - MIL- MAUKA*	**46/4*	4/21/89		89	11	12	13	14	15	16	17	18	19	20			1					
184	FORT ST 4KV	46/4	4/21/89		89	11	12	13	14	15	16	17	18	19	20			1					
185	HELEMANO 2	46/12	10/10/89		89	11	12	13	14	15	16	17	18	19	20			1					
186	HILA 3	46/11	10/10/89		89	11	12	13	14	15	16	17	18	19	20			1					
187	LAGOON	46/11	10/10/89	8/10/06	89	11	12	13	14	15	16	0	1	2	3							1	
188	FORT ST 2 11KV	46/11	5/5/91		91	9	10	11	12	13	14	15	16	17	18				1				
189	IWILEI 1 11KV	46/11	5/5/91		91	9	10	11	12	13	14	15	16	17	18				1				
190	KAHALA 2	46/12	5/5/91		91	9	10	11	12	13	14	15	16	17	18				1				
191	KUNIA MAKAI 1	46/12	5/5/91		91	9	10	11	12	13	14	15	16	17	18				1				
192	MAKAKILO 1	46/12	5/5/91		91	9	10	11	12	13	14	15	16	17	18				1				
193	KAKAAKO 4	46/11	9/12/91		91	9	10	11	12	13	14	15	16	17	18				1				
194	AIRPORT 1	138/11	10/23/91		91	9	10	11	12	13	14	15	16	17	18				1				
195	AIRPORT 2	138/11	10/23/91		91	9	10	11	12	13	14	15	16	17	18				1				
196	**HAIKU (H3)*	**46/12*	3/23/92		92	8	9	10	11	12	13	14	15	16	17				1				

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		PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
197 KUNIA MAKAI 2	46/12	3/23/92		92	8	9	10	11	12	13	14	15	16	17				1				
198 MALAKOLE 2	46/12	3/23/92		92	8	9	10	11	12	13	14	15	16	17				1				
199 UPPER KIPAPA 1	46/12	3/23/92		92	8	9	10	11	12	13	14	15	16	17				1				
200 UPPER KIPAPA 2	46/12	3/23/92		92	8	9	10	11	12	13	14	15	16	17				1				
201 WAIPIOLANI 1	46/12	3/23/92		92	8	9	10	11	12	13	14	15	16	17				1				
202 WAIPIOLANI 2	46/12	3/23/92		92	8	9	10	11	12	13	14	15	16	17				1				
203 ARCHER 2	46/11	8/31/92		92	8	9	10	11	12	13	14	15	16	17				1				
204 WAIMALU 2	46/11	10/30/92		92	8	9	10	11	12	13	14	15	16	17				1				
205 **HALAWA (H3)*	**46/12*	5/17/93		93	7	8	9	10	11	12	13	14	15	16				1				
206 **IROQUOIS PT*	**46/11*	5/17/93		93	7	8	9	10	11	12	13	14	15	16				1				
207 **UH QUARRY 3*	**46/12*	5/17/93		93	7	8	9	10	11	12	13	14	15	16				1				
208 FORT WEAVER 1	46/12	5/17/93		93	7	8	9	10	11	12	13	14	15	16				1				
209 McCULLY 6	46/12	5/17/93		93	7	8	9	10	11	12	13	14	15	16				1				
210 *WILSON TUNNEL 1	*46/4	5/27/93		93	7	8	9	10	11	12	13	14	15	16				1				
211 **PENINSULA 1*	**46/11*	6/7/93		93	7	8	9	10	11	12	13	14	15	16				1				
212 **UH QUARRY 1*	**46/12*	6/7/93	11/8/06	93	7	8	9	10	11	12	0	1	2	3							1	
213 **UH QUARRY 2*	**46/12*	6/7/93		93	7	8	9	10	11	12	13	14	15	16				1				
214 **WHEELER*	**46/11*	6/7/93		93	7	8	9	10	11	12	13	14	15	16				1				
215 EWA NUI 1	46/12	6/7/93		93	7	8	9	10	11	12	13	14	15	16				1				
216 HALA 2	46/11	6/7/93		93	7	8	9	10	11	12	13	14	15	16				1				
217 KAKAAKO 1	46/11	6/7/93		93	7	8	9	10	11	12	13	14	15	16				1				
218 UWAPO 2	46/12	6/7/93		93	7	8	9	10	11	12	13	14	15	16				1				
219 WAIAWA 1	46/12	6/7/93		93	7	8	9	10	11	12	13	14	15	16				1				
220 IWILEI 3	138/25	7/1/94		94	6	7	8	9	10	11	12	13	14	15					1			
221 IWILEI 4	138/25	7/1/94		94	6	7	8	9	10	11	12	13	14	15					1			
222 McCULLY 5	46/12	5/10/95		95	5	6	7	8	9	10	11	12	13	14					1			
223 **HICKAM 2*	**46/11*	7/31/95	6/7/93	93	7	8	9	10	11	12	13	14	15	16				1				
224 ENA 3	46/12	7/31/95		95	5	6	7	8	9	10	11	12	13	14					1			

* = Single Customer

Hawaiian Electric Company, Inc.
2009 Test Year

DISTRIBUTION SUBSTATION TRANSFORMER AGE

(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)			(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
			PO														Based on 2009					
		PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
225 KAHUKU 1	46/11	7/31/95		95	5	6	7	8	9	10	11	12	13	14					1			
226 KAPIOLANI 1	46/12	7/31/95		95	5	6	7	8	9	10	11	12	13	14					1			
227 MIKILUA 1	46/12	7/31/95		95	5	6	7	8	9	10	11	12	13	14					1			
228 WAIKIKI 1	46/12	7/31/95		95	5	6	7	8	9	10	11	12	13	14					1			
229 WAIMEA 1	46/12	7/31/95		95	5	6	7	8	9	10	11	12	13	14					1			
230 CEIP 2	46/12	5/16/97		97	3	4	5	6	7	8	9	10	11	12					1			
231 KAMOKILA 1	46/12	6/23/97		97	3	4	5	6	7	8	9	10	11	12					1			
232 HALA 1	46/11	5/29/98		98	2	3	4	5	6	7	8	9	10	11					1			
233 PIIKOI 4	46/12	5/19/99		99	1	2	3	4	5	6	7	8	9	10						1		
234 WAIKIKI 3	46/12	10/27/99		99	1	2	3	4	5	6	7	8	9	10						1		
235 **GEIGER*	**46/12*	2/18/00		100	0	1	2	3	4	5	6	7	8	9						1		New
236 WAIMALU 1	46/11	4/30/70	3/23/00	100	0	1	2	3	4	5	6	7	8	9						1		
237 KAMOKU 1	138/25	3/24/00		100	0	1	2	3	4	5	6	7	8	9						1		New
238 KEWALO 3	138/25	7/28/00		100	0	1	2	3	4	5	6	7	8	9						1		
239 **KALAHEO 1*	**46/12*	7/27/66	12/11/00	100	0	1	2	3	4	5	6	7	8	9						1		
240 **HANUA*	**46/12*	12/20/00		100	0	1	2	3	4	5	6	7	8	9						1		New
241 **EAST-WEST CTR 3*	**46/12*	11/12/87	5/1/01	87	13	0	1	2	3	4	5	6	7	8						1		
242 LAKESIDE 2	46/11	8/5/87	6/8/01	87	13	0	1	2	3	4	5	6	7	8						1		
243 **KUAHUA 2*	**46/11*	7/1/01		101		0	1	2	3	4	5	6	7	8						1		New
244 **HAW METAL RECYC*	**46/4*	10/9/59	10/9/01	59	41	0	1	2	3	4	5	6	7	8						1		
245 **CAMP SMITH 2*	**46/11*	9/5/02		102			0	1	2	3	4	5	6	7						1		
246 ENA 1	46/12	8/5/87	5/31/03	87	13	14	15	0	1	2	3	4	5	6						1		
247 KAONOHI 2	46/11	12/19/88	9/16/03	88	12	13	14	0	1	2	3	4	5	6						1		
248 ENA 2	46/12	12/21/87	9/19/03	87	13	14	15	0	1	2	3	4	5	6						1		
249 KAMOKILA 2	46/12	10/17/03		103				0	1	2	3	4	5	6						1		New
250 FORT WEAVER 2	46/12	10/31/03		103				0	1	2	3	4	5	6						1		New
251 HELEMANO 1	46/12	10/10/89	1/19/04	89	11	12	13	14	0	1	2	3	4	5							1	
252 FORT ST 1 11KV	46/11	4/14/89	11/7/03	89	11	12	13	0	1	2	3	4	5	6						1		

* = Single Customer

Hawaiian Electric Company, Inc.
2009 Test Year

DISTRIBUTION SUBSTATION TRANSFORMER AGE

(A)	(B)	(C)	(D)		(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)			(M)	(N)	(O)	(P)	(Q)	(R)	(S)	(T)
			PO														Based on 2009					
		PO	Date of										Fcst	Fcst	30+	25+	20+	15+	10+	5+	0+	
Description	kV	Date	Repl. Tsf		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	Yrs	
253 KEWALO 2	46/12	10/10/89	12/10/03	89	11	12	13	0	1	2	3	4	5	6						1		
254 POHAKUPU 2	46/12	10/10/89	1/19/04	89	11	12	13	14	0	1	2	3	4	5							1	
255 WAIAWA 2	46/12	10/10/89	1/19/04	89	11	12	13	14	0	1	2	3	4	5							1	
256 Mokuone 1	46/12	2/6/04		104					0	1	2	3	4	5							1	
257 BP Tank Farm	46/4	5/7/03		103				0	1	2	3	4	5	6						1		
258 Ford Island 1	46/12	6/27/05		105						0	1	2	3	4							1	
259 Ford Island 2	46/12	6/27/05		105						0	1	2	3	4							1	
260 Ford Island 3	46/12	6/27/05		105						0	1	2	3	4							1	
261 Ford Island 4	46/12	6/27/05		105						0	1	2	3	4							1	
262 Ocean Pointe	46/12	10/18/05		105						0	1	2	3	4							1	
263 New Kuahua 1	46/12	5/26/05		105						0	1	2	3	4							1	
264 New Kuahua 2	46/12	7/6/01		101		0	1	2	3	4	5	6	7	8						1		
265 Mokapu 3	46/12	7/28/05		105						0	1	2	3	4							1	
266 Mamala 1	46/11	7/13/05		105						0	1	2	3	4							1	New
267 Mamala 2	46/11	7/21/06		106							0	1	2	3							1	New
268 Ewa Nui 2	46/12	11/8/06		106							0	1	2	3							1	New
269 Ko Olina	46/12	3/8/07		107								0	1	2							1	New
270 Mikilua #3	46/12	8/1/07		107								0	1	2							1	New
271 Kamokila #3	46/12	10/30/07		107								0	1	2							1	New
272 Ocean Pointe #2	46/12	10/30/07		107								0	1	2							1	New
273 BP Tank Farm #2	46/12	11/28/07		107								0	1	2							1	New
			Total Age	Total Age	6880	7061	7314	7447	7543	7753	7989	8180	8324	8595								
			# of Tsfs	No. Tsfs	251	253	254	257	258	265	265	268	271	271	156	12	8	32	12	23	28	
			Avg. Age	Ave. Age	27.4	27.9	28.8	29.0	29.2	29.3	30.1	30.5	30.7	31.7	58%	4%	3%	12%	4%	8%	10%	

* = Single Customer

Hawaiian Electric Company, Inc.
2009 TEST YEAR

TRANSMISSION AND DISTRIBUTION
OPERATION & MAINTENANCE EXPENSE
ADJUSTMENTS
($ Thousands)

		OPERATING ADJUSTMENT
1 **Transmission Expense**		
Transmission Operations Non-Labor		
Abandoned Projects expense	$	2
Removal of performance incentive costs	$	(59)
Removal of restricted stock costs	$	(8)
Transmission Maintenance Non-Labor		
Abandoned Projects expense	$	7
TOTAL TRANSMISSION EXPENSE	$	(58)
2 Distribution Expense		
Distribution Operations Non-Labor		
Abandoned projects expense	$	99
Removal of performance incentive costs	$	(143)
Distribution Maintenance Non-Labor		
Abandoned Projects expense	$	25
TOTAL DISTRIBUTION EXPENSE	$	(19)
TOTAL T&D ADJUSTMENTS:	$	(77)

2009 OMS AMORTIZATION SCHEDULE

	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	May-08	Jun-08	Jul-08	Aug-08	Sep-08	Oct-08	Nov-08	Dec-08	Dec-09
Deferred Beginning Balance	4,256,425	4,325,721	4,348,112	4,374,656	4,389,248	4,452,449	4,475,657	4,498,192	4,531,625	4,535,830	4,557,122	5,066,884	5,107,873	5,128,862	5,128,862	5,128,862	5,128,862	5,128,862
Additional Deferred costs	69,296	22,391	26,545	14,592	63,201	23,208	22,535	33,433	4,205	21,292	509,761	40,989	20,989	0	0	0	0	0
Total Amount Deferred	4,325,721	4,348,112	4,374,656	4,389,248	4,452,449	4,475,657	4,498,192	4,531,625	4,535,830	4,557,122	5,066,884	5,107,873	5,128,862	5,128,862	5,128,862	5,128,862	5,128,862	5,128,862
Accumulated Amortization	30,040	60,236	90,619	121,106	152,044	183,149	214,418	245,930	277,474	309,175	344,680	380,493	416,466	452,438	488,411	524,383	560,356	992,026
Unamortized Balance	4,295,681	4,287,876	4,284,037	4,268,142	4,300,405	4,292,508	4,283,774	4,285,695	4,258,357	4,247,948	4,722,204	4,727,380	4,712,396	4,676,424	4,640,451	4,604,479	4,568,506	4,136,837
12-yr / 144 mos amortization																		
divided by months	144	143	142	141	140	139	138	137	136	135	134	133	132	131	130	129	128	
	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	30,040	
		157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	157	
			187	187	187	187	187	187	187	187	187	187	187	187	187	187	187	
				103	103	103	103	103	103	103	103	103	103	103	103	103	103	
					451	451	451	451	451	451	451	451	451	451	451	451	451	
						167	167	167	167	167	167	167	167	167	167	167	167	
							163	163	163	163	163	163	163	163	163	163	163	
								244	244	244	244	244	244	244	244	244	244	
									31	31	31	31	31	31	31	31	31	
										158	158	158	158	158	158	158	158	
											3,804	3,804	3,804	3,804	3,804	3,804	3,804	
												308	308	308	308	308	308	
													159	159	159	159	159	
Monthly Amortization	30,040	30,196	30,383	30,487	30,938	31,105	31,268	31,512	31,543	31,701	35,505	35,813	35,972	35,972	35,972	35,972	35,972	

Total 2007 Amortization 152,044

Total 2008 Amortization 408,312

Annual amortization 2009 & beyond 431,670

($35,972.49 X 12 mos)

Inventory Calculations - 2008

1. 2007 year end value becomes 2008 starting Inventory Value $ 6,851,537

2. 2008 projected issued are based on extrapolation of actual issues from January to May 2008.

issues from January to May 2008	$ 3,130,076
average % issues during same time frame, past 4 years	39.0%
2008 projected issues	$ 8,025,836

3. 2008 projected receipts are based on extrapolation of actual receipts from January to May 2008.

receipts from January to May 2008	$ 3,877,387
average % receipts during same time frame, past 4 years	43.0%
2008 projected receipts	$ 9,017,179

4. 2008 T&D Materials Inventory Calculation

2007 year-end value	$ 6,851,537
+ projected receipts	$ 9,017,179
- projected issues	$ 8,025,836
projected 2008 year-end value	$ 7,842,880

5. 2008 average inventory value is based on the average of starting and ending inventory

2008 starting inventory	$ 6,851,537
2008 ending inventory	$ 7,842,880
2008 average inventory	$ 7,347,209

Inventory Calculations - 2009 TY

1. 2008 year end value becomes 2009 TY starting Inventory Value $ 7,842,880

2. 2009 projected year end inventory value is expected to increase by 9.4%, which is the historical average over the past 5 years

2008 ending inventory value	$ 7,842,880	
+ 9.4%	$ 737,231	
2009 projected ending inventory value		$ 8,580,111

3. 2009 projected issues are calculated based on an expected turns ratio of 1.28, which is the average from 2004 to 2008.

2009 projected average inventory	$ 8,211,496	
X projected turns ratio of 1.28		$ 10,510,714

4. 2009 projected receipts are projected to be 7% more than issues

2009 projected issues	$ 10,510,714	
projected increase 7 %	$ 737,231	
2009 projected receipts		$ 11,247,945

5. 2009 TY T&D Materials Inventory Calculation

2008 year-end value	$ 7,842,880	
+ projected receipts	$ 11,247,945	
- projected issues	$ 10,510,714	
projected 2009 TY year-end value		$ 8,580,111

6. 2009 average inventory value is based on the average of the starting and ending inventory

2009 starting inventory	$ 7,842,880	
2009 ending inventory	$ 8,580,111	
2009 average inventory		$ 8,211,496

TND Issues

	2004			2005			2006			2007			avg 04-07		
	issues	% of total	cum %	issues	% of total	cum %	issues	% of total	cum %	issues	% of total	cum %	%	cum %	
JAN	633585	8%	8%	334,881	5%	5%	614,318	7%	7%	754,695	8%	8%	**7.1%**	**7.1%**	
FEB	579864	7%	15%	495,124	8%	13%	457,020	5%	13%	725,860	7%	15%	**7.0%**	**14.0%**	
MAR	785329	10%	26%	632,232	10%	22%	817,014	10%	23%	774,685	8%	23%	**9.3%**	**23.3%**	
APR	478407	6%	32%	579,894	9%	31%	648,204	8%	30%	727,822	7%	30%	**7.5%**	**30.9%**	
MAY	479467	6%	38%	621,312	9%	40%	750,355	9%	39%	1,481,214	15%	46%	**9.9%**	**40.8%**	(a)
JUN	838986	11%	48%	519,043	8%	48%	744,429	9%	48%	686,073	7%	53%	**8.6%**	**49.4%**	
JUL	800751	10%	59%	550,937	8%	57%	608,018	7%	56%	630,126	6%	59%	**8.1%**	**57.5%**	
AUG	636448	8%	67%	558,227	8%	65%	738,103	9%	64%	758,566	8%	67%	**8.3%**	**65.8%**	
SEP	646,255	8%	75%	793,338	12%	77%	893,421	11%	75%	643,912	7%	73%	**9.4%**	**75.2%**	
OCT	845,841	11%	86%	556,373	8%	86%	740,275	9%	84%	593,308	6%	79%	**8.5%**	**83.7%**	
NOV	619,123	8%	94%	590,880	9%	95%	646,292	8%	92%	850,411	9%	88%	**8.3%**	**92.0%**	
DEC	494,160	6%	100%	350,009	5%	100%	684,488	8%	100%	1,179,474	12%	100%	**8.0%**	**100.0%**	
TOTAL	7,838,216	100%		6,582,250	100%		8,341,937	100%		9,806,146	100%				
2008	issues	CUM issues	avg % issues	projected issues											
JAN	561,736	561,736													
FEB	574,619	1,136,355													
MAR	700,253	1,836,608													
APR	629,113	2,465,721	30.9%	7,988,964											
MAY	664,355	3,130,076	40.8%	7,675,868	-313,095	-3.9%	4 yr avg (2004-2007) - NO adjustments								
			40.2%	7,786,259	110,390	1.4%	4 yr avg with -$726,111 issues in 2007 (114603 cable)								
			39.0%	8,025,836	349,967	4.6%	3 yr avg (2004-2006)								
			mth avg	7,512,182	-163,686	-2.1%	mth avg based on 5 mths actuals to date for 2008								

TND Receipts

	2004			2005			2006			2007			avg 04-07	
	receipts	% of total	cum %	receipts	% of total	cum %	receipts	% of total	cum %	receipts	% of total	cum %	%	cum %
JAN	532,070	8%	8%	747,819	10%	10%	638,227	8%	8%	566,348	6%	6%	**7.7%**	**7.7%**
FEB	468,215	7%	14%	662,729	8%	18%	310,809	4%	12%	1,091,017	11%	16%	**7.4%**	**15.1%**
MAR	705,349	10%	24%	591,029	8%	25%	701,750	9%	21%	898,040	9%	25%	**8.8%**	**23.9%**
APR	361,753	5%	29%	495,197	6%	32%	1,140,262	14%	35%	571,078	6%	31%	**7.9%**	**31.8%**
MAY	621,555	9%	38%	868,702	11%	43%	574,026	7%	43%	1,244,222	12%	43%	**9.8%**	**41.6%**
JUN	378,602	5%	43%	868,350	11%	54%	683,840	9%	51%	944,443	9%	52%	**8.6%**	**50.2%**
JUL	694,757	10%	53%	486,902	6%	60%	665,915	8%	60%	616,457	6%	58%	**7.6%**	**57.8%**
AUG	611,994	9%	62%	414,097	5%	65%	607,415	8%	67%	908,788	9%	67%	**7.6%**	**65.5%**
SEP	525,068	7%	69%	703,446	9%	74%	492,075	6%	74%	732,885	7%	74%	**7.5%**	**72.9%**
OCT	848,988	12%	81%	659,332	8%	83%	964,569	12%	86%	978,350	10%	84%	**10.6%**	**83.5%**
NOV	682,260	10%	91%	812,756	10%	93%	426,220	5%	91%	776,543	8%	92%	**8.3%**	**91.7%**
DEC	655,412	9%	100%	547,213	7%	100%	680,565	9%	100%	839,122	8%	100%	**8.3%**	**100.0%**
TOTAL	7,086,023	100%		7,857,572	100%		7,885,673	100%		10,167,293	100%			
2008	receipts	CUM receipts	avg % receipts	projected receipts										
JAN	882,195	882,195												
FEB	707,905	1,590,100												
MAR	919,884	2,509,984												
APR	653,851	3,163,835	31.8%	9,957,366										
MAY	713,552	3,877,387	41.6%	9,318,443	-638,924	-6.4%	4 yr avg - NO adjustments							
			40.8%	9,503,400	184,957	2.0%	4 yr avg - $557,045 receipts in 2007 (114603 cable)							
			43.0%	9,017,179	-301,263	-3.0%	3 yr avg (2005-2007)							
			mth avg	9,305,729	-12,714	-0.1%	mth avg based on 5 mths actuals to date for 2008							
(a)	use average from 2005-2007 = 43% vs 4 year average of 41.6%													

Hawaiian Electric Company, Inc.
2009 TEST YEAR

TRANSMISSION AND DISTRIBUTION MATERIAL INVENTORY

	RECORDED				FCST	TEST YEAR ESTIMATE
	(B)	(C)	(D)	(E)	(F)	(G)
	2004	2005	2006	2007	2008	2009
1. Year-End Value	$ 5,554,439	$ 6,645,048	$ 6,360,536	$ 6,851,537	$ 7,842,880	$ 8,580,111
2. Average Value	$ 5,237,827	$ 6,069,256	$ 6,580,201	$ 6,681,980	$ 7,347,209	$ 8,211,496
3. Total Issues	$ 7,838,220	$ 6,582,250	$ 8,341,937	$ 9,806,146	$ 8,025,836	$ 10,510,714
Total Receipts	$ 7,086,024	$ 7,857,576	$ 7,885,673	$ 10,167,293	$ 9,017,179	$ 11,247,945

EXPLANATION OF ACCOUNTS	SUBJECT CUSTOMER ACCOUNTS EXPENSES 90100 - 90400

90100 SUPERVISION

Includes the costs of general direction and supervision of the meter reading, customer accounting, and collecting activities.

Secretarial work, office supplies, and expenses for general supervisory personnel should also be charged to this account.

Excludes direct supervision and other expenses of specific activities which should be charged to the appropriate customer account (e.g., 90200 or 90300).

90200 METER READING EXPENSES

Includes the costs of reading customer KWH and demand meters.

Exceptions are:

a. Removing, resetting, sealing, locking, or unlocking meters by the Meter Divsion which should be charged to account 58600, Meter Expenses.
b. Meter reading of delinquent accounts, and disconnecting or reconnecting service by collectors should be charged to account 90300, Customer Records and Collection Expenses.

90300 CUSTOMER RECORDS AND COLLECTION EXPENSES

Includes the costs of processing customer applications, contracts, orders, credit investigations, bills, accounts, collections, and complaints.

Some examples are:

a. Routine processing of customer initiated orders for service, disconnections, transfers, and meter testing.
b. Customer credit investigations and fees paid to credit service bureaus.
c. Customer billing and accounting including rental and operation of processing facilities.
d. Customer collections including fees or commissions paid to others for customer collections.
e. Receiving, recording, and handling customer inquiries, complaints, and requests for investigations.
f. Handling and recording customer deposits.
g. Maintaining customer line-extensions and advances for construction records.
h. Final meter reading of delinquent accounts by collectors.
i. First and final meter readings when disconnecting or reconnecting service because of non-payment of bills.
j. Cash overages and shortages related to customer collections.

Excludes charges for processing customer-initiated inquiries, complaints, and orders for meter tests, services, disconnections, and transfers which should be charged to the appropriate account.

90400 UNCOLLECTIBLE ACCOUNTS

This account provides for losses from uncollectible revenues. Concurrent credits are made to account 14401, Accumulated Provision for Uncollectible Accounts - Credit.

Excludes charges for actual losses and credits for collection recoveries which should be in account 14401.

HAWAIIAN ELECTRIC COMPANY, INC.
CUSTOMER ACCOUNTS EXPENSE
Test Year 2009

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

($ THOUSANDS)

	A	B	C	D	E	F	G	H	I	J
	Account	RA	Activity	Project	Expense Element	2007 Recorded	2009 Test Year Budget	(G-F) $ Variance	(H/F) % Vari	
1	902	PCG	610	NPCZZZZZ	150	$236	$437	$201	85%	a
2	902	PCM	610	NPCZZZZZ	150	$1,482	$1,963	$481	32%	b
3	903	PCA	600	NPCZZZZZ	501	$30	$575	$546	1848%	c
4	903	PCA	600	NPCZZZZZ	901	$0	$1,025	$1,025	-	d
5	903	PCA	600	P0000571	501	-$8	$505	$512	-6459%	e
6	903	PCA	604	NPCZZZZZ	501	$3	$219	$217	8670%	f
7	903	PCA	614	NPCZZZZZ	501	$0	$322	$322	-	g
8	903	PCH	600	NPCZZZZZ	150	$1,227	$1,437	$210	17%	h
9	903	PCH	600	NPCZZZZZ	155	$271	$0	-$271	-100%	h
10	903	PCH	600	P0000694	501	$275	$0	-$275	-100%	j

a Increase reflects a revised workplan based on a five year historical average of field personnel.

b Increase due to 9 more meter readers in 2009 over 2007 to support operations during the Customer Information System (CIS) Project.

c Increase due to new Customer Information System (CIS) maintenace fee and IVR/IWR (interactive voice & web response) costs.

d Increase represents the amotization of the new CIS project beginning with June of 2009.

e Increase due to CIS Project outside consultant costs.

f Increase due to new CIS system support and functionality.

g Increase due to outsourcing of bill printing post go-live new CIS system.

h The $1,227 (line 8 column F), represents the recorded labor expense for 2007 and the $1,437 (line 8 column G), represents the test year budgeted labor expense for the Customer Asistance Center based on standard labor rates. The $271 (line 9 column F), represents the labor true-up for 2007 and is applied to recorded labor expense only. Labor true-up is not budgeted. The net difference between lines 8 & 9 column H is ($61) or (4%).

i Decrease due to consultant costs in 2007 to develop an on-line support/training system for Customer Service Department personnel.

Note: The source documents for the descriptions of RA's , Activities & Expense Elements shown below are in HECO-WP- for RA's; for Acitivity Codes & Descriptions; and for Expense Element Codes and Descriptions.

RA	Description
PCA	Customer Service Department - Administrative
PCG	Customer Service Department - Customer Field Services
PCH	Customer Service Department - Customer Assistance Center
PCM	Customer Service Department - Meter Reading
Activity	**Description**
600	Respond to Customer Inquiries & Service Requests
604	Maintain Customer Account Information
610	Read Billing Meters
614	Process, Verify & Mail Customer Bills
Exp. Ele.	**Description**
150	Labor
155	Labor True-Up
501	Outside Services - General
901	Amorization of Deferred Debits

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

	2003	2004	2005	2006	2007
JANUARY	4,542,477	5,096,061	5,075,469	5,461,661	6,518,843
FEBRUARY	4,530,123	5,124,279	5,099,965	5,596,777	6,600,316
MARCH	4,564,027	5,164,089	5,094,526	5,741,625	6,681,692
APRIL	4,590,389	5,161,650	5,116,575	5,798,289	6,681,665
MAY	4,616,784	5,139,280	5,148,162	5,828,493	6,721,780
JUNE	4,594,128	5,144,856	5,152,599	5,909,336	6,716,049
JULY	4,575,584	5,090,420	5,139,242	5,950,459	6,718,205
AUGUST	4,693,623	5,125,293	5,143,856	6,009,412	6,753,675
SEPTEMBER	4,812,854	5,124,987	5,179,767	6,077,225	6,754,462
OCTOBER	5,020,781	5,035,822	5,273,681	6,217,532	6,725,736
NOVEMBER	5,065,511	5,030,873	5,359,351	6,294,852	6,801,986
DECEMBER	5,071,972	5,065,653	5,387,270	6,368,722	6,800,761

Avg. annual % increase (2003 - 2007) 8.521%
Based on year end balances

					ESTIMATED YEAR-END BALANCE
2008	X	6,800,761 =	1.08521	(1)	7,380,254
2009	X	7,380,254 =	1.08521		**8,009,125**

(1) $\frac{\text{2007 YEAR END BALANCE - 2003 YEAR END BALANCE}}{\text{2003 YEAR END BALANCE}}$

$\frac{6{,}800{,}761 - 5{,}071{,}972}{5{,}071{,}972}$ = 34.085% / 4 Years = 8.521%

HAWAIIAN ELECTRIC COMPANY, INC
INTEREST ON CUSTOMER DEPOSITS
(Account 431.05)

	2003	2004	2005	2006	2007
JANUARY	22,415	25,360	25,328	26,936	31,844
FEBRUARY	22,712	25,480	25,377	27,308	32,594
MARCH	22,651	25,621	25,500	27,984	33,002
APRIL	22,820	25,820	25,473	28,708	33,408
MAY	22,952	25,808	25,583	28,991	33,408
JUNE	23,084	25,696	25,741	29,142	33,609
JULY	22,971	25,724	25,763	29,547	33,580
AUGUST	22,878	25,452	25,696	29,752	33,591
SEPTEMBER	23,468	25,626	25,719	30,047	33,768
OCTOBER	24,064	25,625	25,899	30,386	33,772
NOVEMBER	25,104	25,179	26,368	31,088	33,629
DECEMBER	25,328	25,154	26,797	31,474	34,010
TOTALS	280,446	306,548	309,244	351,365	400,216

				ESTIMATED ACCRUED INTEREST
2008	400,216 x	108.521%	=	434,318
2009	**434,318**	**108.521%**	**=**	**471,326**

9 Yamamoto\T-9 Exhibits & Workpapers\[HECO-902 & 903 HECO-WP 902 & 903_05-09-08.xls]DEP INT WP_903_2-29-08

Hawaiian Electric Company Inc.
REVENUE LAG DAYS

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

Hawaiian Electric Company Inc.
REVENUE LAG DAYS

	2005				2006			
	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D
Jan	68,644	93,145	37.9	37.9	81,126	111,654	37.6	37.6
Feb	60,762	81,833	38.1	38.0	72,401	107,027	36.1	36.8
Mar	58,862	80,812	37.6	37.9	70,737	105,582	35.9	36.5
Apr	56,407	83,813	36.0	37.4	71,065	107,205	35.7	36.3
May	60,443	90,815	35.7	37.1	75,972	109,051	36.7	36.4
Jun	64,771	100,659	35.1	36.7	78,741	117,696	35.8	36.3
Jul	68,453	99,919	36.3	36.6	84,460	122,177	36.5	36.3
Aug	69,187	110,331	34.6	36.3	85,398	122,999	36.6	36.4
Sep	71,600	111,474	35.0	36.1	84,762	123,619	36.3	36.4
Oct	75,209	114,822	35.4	36.1	84,300	122,048	36.5	36.4
Nov	78,934	116,384	36.1	36.1	88,773	109,509	40.1	36.7
Dec	80,115	110,046	37.6	36.2	81,567	101,468	39.9	36.9
	813,387	1,194,052			959,302	1,360,034		
	67,782	99,504	36.2		79,942	113,336	36.9	

Hawaiian Electric Company Inc.
REVENUE LAG DAYS

	2007			
	DAILY REC BAL	SALES REVENUES	LAG DAYS MONTH	LAG DAYS Y-T-D
Jan	80,191	105,415	38.6	38.6
Feb	77,507	97,090	39.8	39.2
Mar	74,603	98,275	38.6	39.0
Apr	67,272	97,444	36.5	38.4
May	74,125	105,245	36.9	38.1
Jun	78,092	112,616	36.6	37.8
Jul	82,482	113,738	37.5	37.8
Aug	83,794	124,513	36.0	37.5
Sep	86,231	130,893	35.5	37.2
Oct	91,840	135,585	36.1	37.1
Nov	94,904	130,080	37.7	37.2
Dec	92,188	127,906	37.4	37.2
	983,229	1,378,799		
	81,936	114,900	37.2	
		5 Year Avg	**36.8**	

NET WRITE-OFFS		SALES REVENUES		
Mo/Yr	12 Months Ending	Mo/Yr	12 Months Ending	% Write-off *
Jan-03	792,559	Sep-02	844,623.1	0.0938%
Feb-03	792,473	Oct-02	845,847.8	0.0937%
Mar-03	831,944	Nov-02	850,081.3	0.0979%
Apr-03	840,975	Dec-02	858,635.7	0.0979%
May-03	683,004	Jan-03	869,367.4	0.0786%
Jun-03	795,584	Feb-03	882,400.9	0.0902%
Jul-03	970,816	Mar-03	899,062.1	0.1080%
Aug-03	952,196	Apr-03	911,131.8	0.1045%
Sep-03	937,554	May-03	923,370.9	0.1015%
Oct-03	958,486	Jun-03	933,521.6	0.1027%
Nov-03	951,452	Jul-03	938,160.0	0.1014%
Dec-03	975,434	Aug-03	945,952.4	0.1031%
Jan-04	955,302	Sep-03	953,462.8	0.1002%
Feb-04	962,704	Oct-03	956,538.5	0.1006%
Mar-04	974,837	Nov-03	959,694.7	0.1016%
Apr-04	965,425	Dec-03	960,784.2	0.1005%
May-04	811,993	Jan-04	963,593.2	0.0843%
Jun-04	707,004	Feb-04	968,410.5	0.0730%
Jul-04	588,208	Mar-04	969,442.2	0.0607%
Aug-04	546,681	Apr-04	971,772.5	0.0563%
Sep-04	562,260	May-04	973,013.3	0.0578%
Oct-04	492,445	Jun-04	974,892.1	0.0505%
Nov-04	567,413	Jul-04	981,537.5	0.0578%
Dec-04	534,055	Aug-04	987,643.7	0.0541%
Jan-05	502,903	Sep-04	996,558.0	0.0505%
Feb-05	489,908	Oct-04	1,009,179.8	0.0485%
Mar-05	467,996	Nov-04	1,022,596.2	0.0458%
Apr-05	440,622	Dec-04	1,036,013.4	0.0425%
May-05	510,033	Jan-05	1,049,133.2	0.0486%
Jun-05	422,289	Feb-05	1,052,081.4	0.0401%
Jul-05	429,831	Mar-05	1,053,587.6	0.0408%
Aug-05	474,635	Apr-05	1,056,634.2	0.0449%
Sep-05	441,975	May-05	1,066,815.3	0.0414%
Oct-05	461,227	Jun-05	1,082,022.6	0.0426%
Nov-05	396,040	Jul-05	1,094,459.7	0.0362%
Dec-05	363,838	Aug-05	1,115,076.4	0.0326%

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

NET WRITE-OFFS		SALES REVENUES		
Mo/Yr	12 Months Ending	Mo/Yr	12 Months Ending	% Write-off *
Jan-06	476,683	Sep-05	1,132,603.5	0.0421%
Feb-06	526,614	Oct-05	1,152,725.6	0.0457%
Mar-06	537,946	Nov-05	1,175,402.6	0.0458%
Apr-06	607,739	Dec-05	1,194,052.4	0.0509%
May-06	670,901	Jan-06	1,212,561.8	0.0553%
Jun-06	774,884	Feb-06	1,237,755.6	0.0626%
Jul-06	805,193	Mar-06	1,262,525.3	0.0638%
Aug-06	764,398	Apr-06	1,285,917.3	0.0594%
Sep-06	834,697	May-06	1,304,153.2	0.0640%
Oct-06	917,004	Jun-06	1,321,190.5	0.0694%
Nov-06	978,511	Jul-06	1,343,448.9	0.0728%
Dec-06	999,378	Aug-06	1,356,117.0	0.0737%
Jan-07	981,265	Sep-06	1,368,261.4	0.0717%
Feb-07	936,020	Oct-06	1,375,487.1	0.0681%
Mar-07	1,368,528	Nov-06	1,368,611.9	0.1000%
Apr-07	1,311,603	Dec-06	1,360,004.9	0.0964%
May-07	1,250,936	Jan-07	1,353,765.5	0.0924%
Jun-07	1,214,436	Feb-07	1,343,828.3	0.0904%
Jul-07	1,224,528	Mar-07	1,336,521.7	0.0916%
Aug-07	1,243,159	Apr-07	1,326,759.7	0.0937%
Sep-07	1,178,164	May-07	1,322,953.1	0.0891%
Oct-07	1,133,862	Jun-07	1,317,873.3	0.0860%
Nov-07	1,103,643	Jul-07	1,309,434.1	0.0843%
Dec-07	1,067,804	Aug-07	1,310,948.8	0.0815%
Jan '03 - Dec '07	**47,459,993**		**66,030,002**	**0.0719%**

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

HAWAIIAN ELECTRIC COMPANY, INC.
2009 TEST YEAR

NON-SALES ELECTRIC UTILITY CHARGES

	AT PRESENT RATES			AT PROPOSED RATES		
	# of Transactions	Rate	Revenue $000s	# of Transactions	Rate	Revenue $000s
SERVICE ESTABLISHMENT CHARGES						
REGULAR	38,748	$20.00	$775	38,748	$20.00	$775
SAME DAY	8,218	$45.00	$370	8,218	$45.00	$370
TOTAL, SERVICE ESTB. CHARGES			$1,145			$1,145
FIELD COLLECTION CHARGES	5,284	$20.00	$106	5,284	$20.00	$106
RETURNED PAYMENT CHARGES	5,605	$16.00	$90	5605	$22.00	$123

Note: Present Rates based on Dkt 04-0113 PUC D&O 24171

2009 Non-Sales Electric Utility Charges TRANSACTION COUNT

	Gen. Led. Acct	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC	5 yr. avg. TOTAL
Field Collection (1)	45001	559	478	465	440	429	361	374	372	412	500	471	426	5,284
Retruned Check (2)	45002	508	406	395	391	418	422	494	489	501	537	505	538	5,605
Service Establishment (Regular) (3)	45103	2,980	2,916	2,916	3,078	3,125	3,420	3,710	3,692	3,592	3,350	3,058	2,911	38,748
Service Eestablishmen (Same day) (4)	45103	751	736	685	639	606	602	571	634	737	793	760	704	8,218
		4,798	4,535	4,461	4,549	4,579	4,805	5,148	5,187	5,242	5,179	4,794	4,579	57,856

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

FIELD COLLECTION		2003	2004	2005	2006	2007	5 yr. TOTAL
	J	622	491	373	671	636	2,793
	F	621	439	448	472	409	2,389
	M	421	439	447	505	511	2,323
	A	577	447	341	408	425	2,198
	M	535	350	411	484	367	2,147
	J	554	280	349	313	310	1,806
	J	424	202	349	425	468	1,868
	A	486	98	451	418	406	1,859
	S	547	226	385	472	428	2,058
	O	576	403	416	563	540	2,498
	N	529	305	408	536	575	2,353
	D	494	382	374	371	508	2,129
		6,386	4,062	4,752	5,638	5,583	26,421

RETURN CHECK		2003	2004	2005	2006	2007	5 year TOTAL
	J	456	462	478	560	586	2,542
	F	407	367	342	434	481	2,031
	M	346	361	383	458	429	1,977
	A	415	360	333	404	445	1,957
	M	433	357	341	472	487	2,090
	J	350	396	388	443	533	2,110
	J	495	397	440	524	616	2,472
	A	457	397	450	518	624	2,446
	S	422	541	451	546	545	2,505
	O	453	481	572	511	667	2,684
	N	433	449	482	506	653	2,523
	D	437	528	535	490	700	2,690
		5,104	5,096	5,195	5,866	6,766	28,027

SERVICE ESTABLISHMENT		2003	2004	2005	2006	2007	5 yr. TOTAL
SVY - Regular $15.00	J	3,157	3,026	2,962	2,933	2,822	14,900
	F	2,902	3,038	2,916	2,976	2,747	14,579
	M	3,083	3,152	3,141	3,021	2,986	15,383
	A	3,039	3,141	3,205	2,946	3,060	15,391
	M	2,973	3,202	3,254	3,083	3,112	15,624
	J	3,420	3,525	3,821	3,242	3,092	17,100
	J	3,701	3,835	4,037	3,634	3,341	18,548
	A	3,718	3,690	3,884	3,725	3,441	18,458
	S	3,600	3,649	3,816	3,556	3,340	17,961
	O	3,333	3,368	3,499	3,259	3,292	16,751
	N	3,130	2,935	3,192	2,858	3,176	15,291
	D	2,969	2,876	3,041	2,777	2,894	14,557
		39,025	39,437	40,768	38,010	37,303	194,543

SERVICE ESTABLISHMENT		2003	2004	2005	2006	2007	5 yr. TOTAL
SVS - Same day $25.0	J	164	208	221	212	225	1,030
	F	203	190	239	249	254	1,135
	M	180	217	219	260	291	1,167
	A	173	230	235	244	266	1,148
	M	193	219	181	212	240	1,045
	J	212	237	202	271	242	1,164
	J	206	213	216	254	260	1,149
	A	321	229	237	259	244	1,290
	S	324	212	250	293	276	1,355
	O	311	206	196	300	320	1,333
	N	315	231	194	266	316	1,322
	D	312	188	214	223	229	1,166
		2,914	2,580	2,604	3,043	3,163	14,304

RECONNECTION		2003	2004	2005	2006	2007	5 yr. TOTAL
RCS - Same Day $25.(	J	476	444	350	659	796	2,725
RCY - Regular $15.(	F	530	604	429	482	498	2,543
	M	306	439	471	541	500	2,257
	A	477	433	317	337	485	2,049
	M	461	308	327	446	445	1,987
	J	506	215	361	344	421	1,847
	J	459	180	297	326	443	1,705
	A	438	61	425	433	523	1,880
	S	513	241	408	602	568	2,332
	O	512	431	370	693	624	2,630
	N	501	290	417	607	664	2,479
	D	411	438	386	441	677	2,353
		5,590	4,084	4,558	5,911	6,644	26,787

Late Payment Fees vs. Total Bill Revenue

	2002	2003	2004	2005	2006	2007
Late pay fees	$813,383	$903,373	$937,137	$998,678	$1,167,208	$1,197,677
Total billed rev	$859,328,180	$960,792,442	$1,043,266,286	$1,194,269,885	$1,361,006,425	$1,378,732,181
	0.095%	0.094%	0.090%	0.084%	0.086%	0.087%
Avg. '02-'07						**0.089%**

Source:
Late pay fees - G/L account 45003000 Delinquent Payment

Rev 510 total billed revenue

CIS Amortization

actual deferred expense through Mar. '06 - Mar. '08	$8,645,813	
deferred expense Apr. '08 - Dec. '08	$3,122,786	
AFUDC Apr. '08 - Dec. '08	$634,708	**$12,403,307**
deferred expense Jan. '09 - May. '09	$3,084,428	
AFUDC Jan. '09 - May '09	$462,671	
amount to begin amortizing in Jun '09	**15,950,406**	
deferred expense Jun '09 - Sep '09	7,809,838	
TOTAL DEFERRED COST	**23,760,244**	

Beginning Bal Dec. '08	Jan-09	Feb-09	Mar-09	Apr-09	May-09	Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
$12,403,307		$12,848,964	$13,297,625	$14,105,971	$14,447,468	$15,950,406	$16,195,161	$16,212,625	$20,384,624	$23,760,243		
Forecast	360,843	360,843	716,306	245,595	1,400,841							
AFUDC	84,814	87,818	92,040	95,902	102,097							
Fore. post go live						244,756	17,464	4,171,999	3,375,619			

12 yr / 144 mos. amortization			Jun-09	Jul-09	Aug-09	Sep-09	Oct-09	Nov-09	Dec-09
Jun-09 beg.bal	Monthly forecast								
15,950,406	$110,767	divided by 144 mos:	$110,767	$110,767	$110,767	$110,767	$110,767	$110,767	$110,767
Jun-09	244,756	divided by 143 mos:		$1,712	$1,712	$1,712	$1,712	$1,712	$1,712
Jul-09	17,464	divided by 142 mos:			$123	$123	$123	$123	$123
Aug-09	4,171,999	divided by 141 mos:				$29,589	$29,589	$29,589	$29,589
Sep-09	3,375,619	divided by 140 mos:					$24,112	$24,112	$24,112
			$110,767	$112,478	$112,601	$142,190	$166,301	$166,301	$166,301

Total 2009 Amortization	$976,941

Annual amortization 2010 & beyond	$166,301 x 12 mos. =	$1,995,618

S:_Company\RegulatoryAffairs\HECO 2009 TY Rate Case\09 Direct Testimonies\09HECO T-9 Yamamoto\T-9 Exhibits & Workpapers\[HECO-WP-908 P. 1 Amortiz_1430hrs nd afudc CIS_rev.2.xls]H-WP-908_Amortiz

T-10 Workpapers.xls

Hawaiian Electric Company, Inc.
Fuel Price for ECAC Calculations

2009 Test Year - Direct Testimony

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
		Central Station							DG
	Description	Kahe	Waiau	Honolulu	WPP Diesel	CIP-1 Diesel	Biodiesel	Total	Diesel
1	MBtu Consumed	34,671,908	12,562,654	2,014,364	287,418	440,036	35,087	50,011,467	56,084
2	Fuel Price ($/bbl)	99.3149	99.3149	99.3149	138.6074	138.6074	232.0913		138.6074
3	Trucking cost per bbl	0.0000	0.0000	3.1065	0.0000	2.1542	0.0000		2.0944
4	Inspection Cost per bbl	0.0126	0.0126	0.0126	0.0423	0.0000	0.0000		0.0000
5	Fuel Additive Cost per bbl	0.0188	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
6	Heat Content (MBtu/bbl)	6.2	6.2	6.2	5.86	5.86	4.998		5.86
	Fuel Price at Present Rates								
7	Fuel Price ($/bbl)								
8	Fuel Oil	99.3149	99.3149	99.3149	138.6074	138.6074	232.0913		138.6074
9	Trucking	0.0000	0.0000	3.1065	0.0000	2.1542	0.0000		2.0944
10	Inspection	0.0126	0.0126	0.0126	0.0423	0.0000	0.0000		0.0000
11	Fuel Additive	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
12	Fuel Price ($/bbl)	99.3275	99.3275	102.4340	138.6497	140.7616	232.0913		140.7018
13	Fuel Price per MBtu (¢/MBtu)	1,602.06	1,602.06	1,652.16	2,366.04	2,402.08	4,643.68		2,401.05
	Fuel Price at Proposed Rates								
14	Fuel Price ($/bbl)								
15	Fuel Oil	99.3149	99.3149	99.3149	138.6074	138.6074	232.0913		138.6074
16	Trucking	0.0000	0.0000	3.1065	0.0000	2.1542	0.0000		2.0944
17	Inspection	0.0126	0.0126	0.0126	0.0423	0.0000	0.0000		0.0000
18	Fuel Additive	0.0188	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
19	Fuel Price ($/bbl)	99.3463	99.3275	102.4340	138.6497	140.7616	232.0913		140.7018
20	Fuel Price per MBtu (¢/MBtu)	1,602.36	1,602.06	1,652.16	2,366.04	2,402.08	4,643.68		2,401.05

Line 1: HECO-405, page 1
Line 2: HECO-501, pg 1, col B
Line 3: HECO-503, pg 2, col B
Line 4: HECO-503, pg 3, col B
Line 5: Additive $/bbl calculations:
Additive Expense [1] ÷ Kahe bbls consumed [2]
$105,000 ÷ 5,592,243 bbls = 0.0188

[1] HECO-503, pg 1, line 4
[2] HECO-501, pg 1, line 2(A)

T-10 Workpapers.xls

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

2009 Test Year - Direct Testimony
At Present and Proposed Rates

Line	Central Station Plant		(A) MBTU	(B) % to Total Central Station Plant	(C) Reference
1	Kahe		34,671,908	69.33	HECO-405 page 1
2	Waiau		12,562,654	25.12	HECO-405 page 1
3	Honolulu		2,014,364	4.03	HECO-405 page 1
4		LSFO total	49,248,926	98.48	
5	WPP-Diesel		287,418	0.57	HECO-405 page 1
6	CIP-Diesel		440,036	0.88	HECO-405 page 1
7		Diesel total	727,454	1.45	
8	Biodiesel		35,087	0.07	
9	Total Central Station Plant		50,011,467	100.00	HECO-405 page 1
10	DG		56,084		HECO-405 page 1
11	Total Generation		50,067,551		HECO-405 page 1

T-10 Workpapers.xls

Hawaiian Electric Company, Inc.
Net System Percent Mix

2009 Test Year - Direct Testimony
At Present and Proposed Rates

Line		(A) 2009 Mwh Energy	(B) % to Total System	(C) % to Total Central Station Generation	(D) Reference
	Central Station Generation				
1	Kahe	3,402,547			HECO-405 page 1
2	Waiau	1,107,544			HECO-405 page 1
3	Honolulu	159,441			HECO-405 page 1
4	subtotal LSFO	4,669,532	57.98	99.30	
5	WPP-Diesel	7,865			HECO-405 page 1
6	CIP-Diesel	23,147			HECO-405 page 1
7	subtotal Diesel	31,012	0.39	0.66	
8	Biodiesel	1,824	0.02	0.04	HECO-405 page 1
9	Total Central Station Generation	4,702,368	58.39	100.00	HECO-405 page 1
10	DG	5,388	0.07		HECO-405 page 1
11	Total Generation	4,707,756			HECO-405 page 1
	Purchased Power				
12	AES Hawaii, Inc.	1,529,476			HECO-405 page 6
13	Kalaeloa Partners	1,480,260			HECO-405 page 6
14	HPower	330,750			HECO-405 page 6
15	Tesoro	4,056			HECO-WP-606
16	Chevron	712			HECO-WP-606
17	Hoku Solar	305			HECO-405 page 6
18	Total Purchased Power	3,345,559	41.54		HECO-405 page 6
19	Total Net System	8,053,315	100.00		

T-10 Workpapers.xls

Hawaiian Electric Company, Inc.
Composite Cost of Generation

2009 Test Year - Direct Testimony
At Present Rates

Line	GENERATION COMPONENT	
	FUEL PRICES, ¢/mmbtu	
1	Kahe	1,602.06
2	Waiau	1,602.06
3	Honolulu	1,652.16
4	WPP Diesel	2,366.04
5	CIP Diesel	2,402.08
6	Biodiesel	4,643.68
	BTU MIX, %	
7	Kahe	69.33
8	Waiau	25.12
9	Honolulu	4.03
10	Diesel	0.57
11	CIP Diesel	0.88
12	Biodiesel	0.07
		100.00
13	COMPOSITE COST OF GENERATION, ¢/mmbtu	1,617.60

Line 13:
(Line 1x7 + line 2x8 + line 3x9 + line 4x10 + line5x11 + line6x12)

Reference:
HECO-WP-1036, p. 1, line 13
HECO-WP-1036, p. 2

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

2009 Test Year - Direct Testimony
At Present and Proposed Rates

	(A)	(B)	(C)	(D)	(E) (colD ÷ colC x 100)	(F) (colD ÷ colB x 100)
Line	DG Unit Location	Net to System (Kwh)	Fuel Consumed (Mbtu)	Fuel Expense ($)	Fuel Cost (¢/mbtu)	Fuel Cost (¢/kwh)
1	Substation DG	5,388,000	56,084	1,346,605	2401.05	24.993
2					0.00	0.000
3					0.00	0.000
4					0.00	0.000
5	Total	5,388,000	56,084	1,346,605	2401.05	24.993

6	Composite DG Fuel Cost	2401.05 ¢/mbtu
7	Composite Cost of DG Energy	24.993 ¢/kwh

Col B: HECO-405 page 7
Col C: HECO-405 page 7
Col D: HECO-501 page 2, line 10

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

2009 Test Year - Direct Testimony
At Present and Proposed Rates

	(A)	(B)	(C)	(D)	(E)	(F)
No.	Producer	Gwh Purchased	% to Total PP	Payment Rate (¢/kwh)	Weighted Cost (¢/kwh) [(colF ÷ colB) * colC * 1000]	Purch Pwr Fuel Expense ($ thous)
1	**Kalaeloa**					
	Fuel	1,480.3	44.25	14.824		219,439.0
	Additive			0.168		2,492.3
	Total	1,480.3		14.992	6.634	221,931.3
2	**AES**					
	Fuel	1,529.5	45.72	2.869	1.312	43,879.8
3	**HPower**					
	On Peak	192.9	5.76	17.132	0.987	33,054.1
	Off Peak	87.0	2.60	12.642	0.329	11,003.6
	On Peak - excess	0.0	0.00	0.000	0.000	0.0
	Off Peak - excess	50.8	1.52	12.642	0.192	6,418.6
	Total	330.7				50,476.3
4	**Tesoro**					
	On Peak	2.4	0.07	20.440	0.014	483.6
	Off Peak	1.7	0.05	14.990	0.007	253.3
	Total	4.1				736.9
5	**Chevron**					
	On Peak	0.4	0.01	20.440	0.002	84.9
	Off Peak	0.3	0.01	14.990	0.001	44.5
	Total	0.7				129.4
6	**Hoku Solar**	0.3	0.01	19.000	0.002	58.0
7	**Other**	-	-	0.000	0.000	-
8	Total	3,345.6	100.00		9.481	317,211.7
9	Composite Cost of Purchased Energy				9.481 ¢/kwh	

Line 1: HECO-WP-601, pg. 1
Line 2: HECO-WP-603, pg. 1
Line 3: HECO-WP-604, pg. 2
Lines 4&5: HECO-606
Line 6: HECO-WP-606
Line 8, col B: HECO-402, line 6

Hawaiian Electric Company, Inc.
Composite Cost of Central Station Generation

2009 Test Year - Direct Testimony
At Proposed Rates

Line	GENERATION COMPONENT Central Station and Other	
	FUEL PRICES, ¢/mmbtu	
1	Kahe	1,602.36
2	Waiau	1,602.06
3	Honolulu	1,652.16
4	WPP Diesel	2,366.04
5	CIP Diesel	2,402.08
6	Biodiesel	4,643.68
7	Other	0.00
	BTU MIX, %	
8	Kahe	69.33
9	Waiau	25.12
10	Honolulu	4.03
11	WPP Diesel	0.57
12	CIP Diesel	0.88
13	Biodiesel	0.07
14	Other	0.00
		100.00
14	COMPOSITE COST OF GENERATION, Central Stn + Other ¢/mmbtu	1,617.81

Line 14:

(Line 1x8 + line 2x9 + line 3x10 + line 4x11 + line 5x12 + line 6x13 + line 7x14)

Reference:

HECO-WP-1036, p. 1, line 20
HECO-WP-1036, p. 2

Hawaiian Electric Company, Inc.
Determination of Fixed Efficiency Factor or Sales Heat Rate (Mbtu / Kwh Sales)
2009 Test Year - Direct Testimony
At Proposed Rates

Line				Reference
	Total Central Station Fuel Sales Heat Rate			
1	Total Central Station Fuel Consumed	50,011,467	Mbtu	HECO-405 page 1
2	Sales	7,657.8	Gwh	HECO-402, line 1
3	% of Central Stn to Total System	58.39	Percent	HECO-402, line 7a
4	Kwh/Gwh Conversion	1,000,000	kwh/gwh	
5	Sales Heat Rate [line 1 ÷ (line 2 x line 3 x line 4)]	0.011185	Mbtu/Kwh Sales	
	LSFO Sales Heat Rate			
6	LSFO Fuel Consumed	49,248,926	Mbtu	HECO-WP-1036 p 2
7	Sales	7,657.8	Gwh	HECO-402, line 1
8	% of LSFO Fuel Generation to Total System	57.98	Percent	HECO-WP-1036 p 3
9	Kwh/Gwh Conversion	1,000,000	kwh/gwh	
10	Sales Heat Rate [line 6 ÷ (line 7 x line 8 x line 9)]	0.011092	Mbtu/Kwh Sales	
	Diesel Fuel Sales Heat Rate			
11	Diesel Fuel Consumed	727,454	Mbtu	HECO-WP-1036 p 2
12	Sales	7,657.8	Gwh	HECO-402, line 1
13	% of Diesel Fuel Generation to Total System	0.39	Percent	HECO-WP-1036 p 3
14	Kwh/Gwh Conversion	1,000,000	kwh/gwh	
15	Sales Heat Rate [line 11 ÷ (line 12 x line 13 x line 14)]	0.024358	Mbtu/Kwh Sales	
	Biodiesel Sales Heat Rate			
16	Biodiesel Fuel Consumed	35,087	Mbtu	HECO-WP-1036 p 2
17	Sales	7,657.8	Gwh	HECO-402, line 1
18	% of Biodiesel Fuel Generation to Total System	0.02	Percent	HECO-WP-1036 p 3
19	Kwh/Gwh Conversion	1,000,000	kwh/gwh	
20	Sales Heat Rate [line 16 ÷ (line 17 x line 18 x line 19)]	0.022909	Mbtu/Kwh Sales	
	HECO Other Sales Heat Rate			
21	Total Central Station Fuel Consumed	50,011,467	Mbtu	
22	Sales	7,657.8	Gwh	
23	% of Central Stn to Total System	58.39	Percent	
24	Kwh/Gwh Conversion	1,000,000	kwh/gwh	
25	Sales Heat Rate [line 16 ÷ (line 17 x line 18 x line 19)]	0.011185	Mbtu/Kwh Sales	

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

2009 Test Year - Direct Testimony
At Proposed Rates

Line			Reference
1	Net to System (gwh)	8,053.6	HECO-402, line 5
2	Sales (gwh)	7,657.8	HECO-402, line 1
3	DG & Purchase Power Loss Factor	1.052	Line 1 ÷ Line 2

Hawaiian Electric Company, Inc.
Calculation of Employee Benefits Expense related to CIP1

Test Year 2009

	Test Year Estimate		Additional Amount for Full Year	Full Year Amount
Employee Benefits				
Production Operation O&M hours	7,431	a	7,751	15,182
Production Maint O&M hours	4,816	a	6,127	10,943
	12,247		13,878	26,125
Adjusted Employee Benefits Rate /Hou	10.19	b	10.19	10.19
Related Employee Benefits	**124,797**		141,417	**266,214**

Note a: Per information from HECO T-7
Note b: Per HECO-1112

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

		Budget 2009	A	B	C	D	E	F	G	H	I	J	Normalization/ Rate Case Adjustment	Base Case Test Year 2009
			Adjustments											
	ADMINISTRATIVE													
920	A&G Expense - Labor	22,398		(372)	(2,616)	1	(52)	(6)	64				(2,981)	19,417
921	A&G Expense - Non labor	16,780	(272)	(16)		10	(1,108)	(55)		(103)	(34)		(1,578)	15,202
922	A&G Expenses Transferred	(3,487)										290	290	(3,197)
	Total Administrative	35,691	(272)	(388)	(2,616)	11	(1,160)	(61)	64	(103)	(34)	290	(4,269)	31,422
	OUTSIDE SERVICES													
923010	Outside Services - Legal	131											0	131
923020	Outside Services - Other	2,535											0	2,535
	Total Outside Services	2,666	0	0	0	0	0	0	0	0	0	0	0	2,666
	INSURANCE													
924	Property Insurance	3,142										(80)	(80)	3,062
925	Injuries & Damages - Employees	7,475										(283)	(283)	7,192
	Total Insurance	10,617	0	0	0	0	0	0	0	0	0	(363)	(363)	10,254
	EMPLOYEE BENEFITS													
926000	Employee Pensions and Benefits	24,051	(74)									(2,780)	(2,854)	21,197
926010	Employee Benefits - Flex Credits	11,210										(37)	(37)	11,173
926020	Employee Benefits Transfer	(9,655)										692	692	(8,963)
	Total Employee Benefits	25,606	(74)	0	0	0	0	0	0	0	0	(2,125)	(2,199)	23,407
	MISCELLANEOUS													
928	Regulatory Commission Expenses	760										(320)	(320)	440
9301	Inst. or Goodwill Advertising Expense	36											0	36
9302	Miscellaneous General Expenses	4,204	(104)	(3)								(240)	(347)	3,857
931	Rents Expense - A&G	3,026	22									14	36	3,062
932	Admin and General Maintenance	593					1,160					(188)	972	1,565
	Total Miscellaneous	8,619	(82)	(3)	0	0	1,160	0	0	0	0		341	8,960
TOTAL ADMINISTRATIVE & GENERAL EXPENSES		83,198	(428)	(391)	(2,616)	11	0	(61)	64	(103)	(34)	(2,198)	(6,490)	76,708

Totals may not add due to rounding

A. HEI charges
B Performance Incentive plans -restricted stock
C Performance Incentive plans-LTIP/EICP/Merit
D Abandoned Projects
E Reclassification of Maintenance expenses
F Service Awards
G Senior Rate Analyst (trf from acct. 910)
H IRP non-labor normalization adjustment
I HR suite adjustment
J Others, based above adjustments/other witnesses

Equity Allocation Factors

Actual results as of 12/31/07 (except as noted) used for determining HEI's 2008 & 2009 estimate of shared charges to HECO

(in thousands of dollars, except as noted)

	Ref	Source	HECO	RHI	UBC	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	TOTAL
Publicly-traded company related:														
Common equity	(1)	(A)	699,551	182	388	201,820	208,521	594,764	2,139	825	4,433	5,742	22	1,718,387
Common equity %			40.7%	0.0%	0.0%	11.8%	12.1%	34.6%	0.1%	0.1%	0.3%	0.3%	0.0%	100.0%
Preferred equity (publicly held)	(2)	(B)	8,793											8,793
Preferred equity %			100.0%											100.0%
Common + pref. (publicly held) equity	(1) + (2)		708,344	182	388	201,820	208,521	594,764	2,139	825	4,433	5,742	22	1,727,180
Common + pref. (publicly held) equity %			41.0%	0.0%	0.0%	11.7%	12.1%	34.4%	0.1%	0.1%	0.3%	0.3%	0.0%	100.0%
Common + pref. (publicly held) equity	(1) + (2)		708,344	182	388	201,820	208,521							1,119,255
Common + pref. (publicly held) equity %			63.3%	0.0%	0.1%	18.0%	18.6%							100.0%
AUD004 & AUD005 ONLY														

Source:

(A) Independent accountant's Consolidating Schedule - Balance Sheet Information.

(B) The publicly held preferred equity amount remained unchanged from the prior year actual. The amount was verified by the HECO Securities Administrator which agrees to the $8,793 shown on the schedule above.

Equity Allocation Factors

Actual results as of 12/31/07 (except as noted) used for determining HEI's 2008 & 2009 estimate of shared charges to HECO

(in thousands of dollars)

	Ref	Source	HECO	RHI	UBC	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	Note 1 HEIPC	HIG	TOTAL	Less: HEIPC & HIG	TOTAL (agrees to pg. 1)
Publicly-traded company related:																		
Common equity	(1)	(A)	699,551	182	388	201,820	208,521	594,764	2,139	825	4,433	5,742	22	71,633	38,911	1,828,931	(110,544)	1,718,387
Common equity %			38.3%	0.0%	0.0%	11.0%	11.4%	32.5%	0.1%	0.1%	0.3%	0.3%	0.0%	3.9%	2.1%	100.0%		
Preferred equity (publicly held)	(2)	(B)	8,793	-	-	-	-									8,793		8,793
Preferred equity %			100.0%	0.0%	0.0%	0.0%	0.0%									100.0%		
Common + pref. (publicly held) equity	(1) + (2)		708,344	182	388	201,820	208,521	594,764	2,139	825	4,433	5,742	22	71,633	38,911	1,837,724	(110,544)	1,727,180
Common + pref. (publicly held) equity %			38.6%	0.0%	0.0%	11.0%	11.4%	32.4%	0.1%	0.0%	0.2%	0.3%	0.0%	3.9%	2.1%	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 had made a policy decision to include HEIPC and HIG in the calculations of shareholder dependent costs since HEI must still theoretically report to all of its shareholders even with the exit from the international power business engaged in by HEIPC and with the loss of HIG. Examples of shareholder dependent costs include printing and mailing costs for the annual report and proxy and stock transfer costs See Source A for the support for HEIPC's adjusted equity and HIG's adjusted equity.

Source:

(A) Independent accountant's Consolidating Schedule - Balance Sheet Information.

(B) The publicly held preferred equity amount remained unchanged from the prior year actual. The amount was verified by the HECO Securities Administrator which agrees to the $8,793 shown on the schedule above.

Allocation Factors

Actual results as of 12/31/07 (except as noted) used for determining HEI's 2008 & 2009 estimate of shared charges to HECO

(in thousands of dollars, except as noted)

	Ref	Source	HECO	RHI	UBC	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	HEIPC	TOTAL	ADJ	HEI Corp. (and its financing sub HYCAP) & Elim	CONS.
Financing related:																		
Short-term debt		(A)	28,791												28,791		62,989	91,780
Long-term debt		(A)	567,657			145,811	171,631								885,099		357,000	1,242,099
Total debt			596,448			145,811	171,631								913,890		419,989	1,333,879
Debt (Long-term & short-term) %			65 3%			15.9%	18.8%							0.0%	100.0%			
Preferred equity		(A)	22,293			7,000	5,000								34,293			34,293
Preferred equity %			65.0%			20.4%	14.6%								100.0%			
Common equity		(A)	699,551	182	388	201,820	208,521	594,764	2,139	825	4,433	5,742	22		1,718,387	-	(442,960)	1,275,427
Common equity %			40 7%	0.0%	0.0%	11 8%	12.1%	34.6%	0.1%	0.1%	0.3%	0.3%	0.0%		100.0%			
Debt + Equity (pref. & common)			1,318,292	182	388	354,631	385,152	594,764	2,139	825	4,433	5,742	22		2,666,570	-	(22,971)	2,643,599
Debt + Equity (pref. & common) %			49 4%	0.0%	0.0%	13.3%	14.5%	22.3%	0.1%	0.0%	0.2%	0.2%	0.0%		100.0%			
Projected short-term borrowings		(H)	-												-		150,000	150,000
Projected short-term borrowings %			0.0%												0.0%		100.0%	100.0%
Employee related:																		
Gross payroll (excluding incentive compensation)		(C)	114,609			27,584	26,588	56,390					121		225,292		4,887	230,179
Gross payroll (excluding incentive compensation) %			49.8%			12.0%	11.5%	24.5%					0.1%		97.9%		2.1%	100.0%
# of employees		(D)	1,474			344	327	1,329					3		3,477		42	3,519
# of employees %			41 9%			9 7%	9.3%	37.8%					0.1%		98.8%		1.2%	100.0%
# of employees (only HUM005)		(D)	1,474			344	327						3		2,148		42	2,190
# of employees (excluding ASB) %			67 3%			15.7%	14.9%						0.2%		98 1%		1.9%	100.0%
Tax-related																		
Pretax income		(I)	51,334	83	47	13,040	18,849	83,989	42	518	3,587	1,579	81		173,149	(1,458)	(40,634)	131,057
Pretax income %			29.6%	0.1%	0.0%	7.5%	10.9%	48.5%	0.0%	0.3%	2.1%	0.9%	0.1%		100.0%			
General (3 factor formula):																		
Common equity			40.7%	0.0%	0 0%	11.8%	12.1%	34.6%	0.1%	0.1%	0.3%	0.3%	0.0%		100.0%			100.0%
Pretax income			29.6%	0.1%	0.0%	7.5%	10 9%	48 5%	0.0%	0.3%	2.1%	0.9%	0.1%		100.0%			100.0%
Gross payroll			49.8%	0.0%	0.0%	12.0%	11.5%	24.5%	0.0%	0.0%	0.0%	0.0%	0.1%		97.9%	0.0%	2.1%	100.0%
Average			40.0%	0.0%	0.0%	10.4%	11.5%	35.9%	0.0%	0.2%	0.8%	0.4%	0.1%		99.3%	0.0%	0.7%	100.0%

Note: Where the amount was negative, the absolute value was used since it would be illogical to allocate a negative amount.

Source:

(A) Independent accountant's Consolidating Schedule - Balance Sheet Information.
(B) Not used
(C) Gross payroll amounts provided by subsidiaries from their payroll registers. Incentive compensation was excluded based upon discussions with subsidiaries.
(D) HECO Human Resources department report.
(E) Not used.
(F) Not used.
(G) Not used.
(H) Board of Director Approval for Short-term Borrowing Authority for the current year.
(I) Independent accountant's Consolidating Schedule - Income (Loss) Information

Allocation Factors
Actual results as of 12/31/07 (except as noted) used for determining HEI's 2008 & 2009 estimate of shared charges to HECO

	Ref	Source	HECO	RHI	UBC	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	HEIPC	TOTAL	ADJ	HEI Corp. (and its financing sub HYCAP) & Elim	CONS.
Pension-related:																		
# of HEIRS participants		(F)	1,567			305	297	1,093	5				4		3,271		57	3,328
PEN005 HEIRS Admin.			47.1%			9.2%	8.9%	32.8%	0.2%				0.1%		98.3%		1.7%	100.0%
HEI Retirement Plan (market value of plan assets - actual $)																		
HEI Retirement plan	Pension Ref 1	(G)	590,178,215			120,066,937	99,656,225								809,901,377		18,505,339	828,406,716
Total			590,178,215			120,066,937	99,656,225	-	-	-			-		809,901,377	-	18,505,339	828,406,716
PEN007 HEI Retirement Plan%			71.3%			14.5%	12.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		97.8%	0.0%	2.2%	100.0%
Master pension trust calculation (market value of plan assets - actual $):																		
HEI Retirement plan	Pension Ref 1	(G)	590,178,215			120,066,937	99,656,225		-				-		809,901,377		18,505,339	828,406,716
HTB Salaried plan	Pension Ref 2 (not used)								-						-			-
American Savings Bank Retirement pla	Pension Ref 3							78,888,751							78,888,751			78,888,751
YB pension plan	Pension Ref 4 not used														-			-
Total			590,178,215			120,066,937	99,656,225	78,888,751	0	0			0	0	888,790,128	0	18,505,339	907,295,467
PEN009 Master Pension Trust %			65.1%	0.0%	0.0%	13.2%	11.0%	8.7%	0.0%	0.0%	0.0%	0.0%	0.0%		98.0%	0.0%	2.0%	100.0%
OPEB PEN024 (market value of plan assets w/ the exception of the executive life trust (cost) - actual $)																		
(Executive life trust - cost instead of market value of plan assets is being 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, Administrator of Finance & Investments)																		
HEI 401(h)	Pension Ref 5	(G)	18,482,131			5,556,809	3,762,807								27,801,747		1,480,357	29,282,104
HECO OPEB plan - NBU VEBA	Pension Ref 6		21,763,482			4,550,945	3,784,893								30,099,320		1,338,848	31,438,168
HECO OPEB plan - BU VEBA	Pension Ref 7		60,710,260			13,624,635	12,946,371								87,281,266			87,281,266
YB NBU VEBA	Pension Ref 8 not used														-			-
YB BU VEBA	Pension Ref 9 not used														-			-
Postretirement Executive Life Trust	Pension Ref 10		835,309			82,424	94,382								1,012,115		157,222	1,169,337
HEI Electric Discount Trust	Pension Ref 11		165,482			92,260	83,579								341,321			341,321
Total			101,956,664			23,907,073	20,672,032	-	-	-			-		146,535,769	-	2,976,427	149,512,196
PEN024 OPEB plan %			68.2%	0.0%	0.0%	16.0%	13.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		98.0%	0.0%	2.0%	100.0%
HECO OPEB NBU VEBA PEN025 (market value of plan assets - actual $):																		
HECO OPEB plan - NBU VEBA	Pension Ref 6		21,763,482	-		4,550,945	3,784,893	-	-	-	-	-	-	-	30,099,320		1,338,848	31,438,168
Total			21,763,482	-		4,550,945	3,784,893	-	-	-	-	-	-	-	30,099,320	-	1,338,848	31,438,168
PEN025 OPEB plan %			69.2%	0.0%		14.5%	12.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	95.7%	0.0%	4.3%	100.0%
OPEB Funding PEN026 (market value of plan assets - actual $):																		
HEI 401(h)	Pension Ref 5	(G)	18,482,131	-		5,556,809	3,762,807	-	-	-	-	-	-	-	27,801,747	-	1,480,357	29,282,104
HECO OPEB plan - NBU VEBA	Pension Ref 6		21,763,482	-		4,550,945	3,784,893	-	-	-	-	-	-	-	30,099,320	-	1,338,848	31,438,168
HECO OPEB plan - BU VEBA	Pension Ref 7		60,710,260	-		13,624,635	12,946,371	-	-	-	-	-	-	-	87,281,266	-	-	87,281,266
YB NBU VEBA	Pension Ref 8 not used														-			-
YB BU VEBA	Pension Ref 9 not used														-			-
HEI Electric Discount Trust	Pension Ref 11		165,482	-		92,260	83,579	-	-	-	-	-	-	-	341,321		-	341,321
Total			101,121,355			23,824,649	20,577,650	0	0	0			0	0	145,523,654	0	2,819,205	148,342,859
PEN026 OPEB Funding %			68.2%	0.0%		16.0%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.1%	0.0%	1.9%	100.0%

Allocation Factors
Actual results as of 12/31/07 (except as noted) used for determining HEI's 2008 & 2009 estimate of shared charges to HECO

	Ref	Source	HECO	RHI	UBC	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	HEIPC	TOTAL	ADJ	HEI Corp. (and its financing sub HYCAP) & Elim	CONS.
HECO OPEB PEN028 (market value of plan assets - actual $):																		
HEI 401(h)	Pension Ref 5	(G)	18,482,131	-		5,556,809	3,762,807	-	-	-	-	-	-	-	27,801,747		1,480,357	29,282,104
HECO OPEB plan - NBU VEBA	Pension Ref 6		21,763,482	-		4,550,945	3,784,893	-	-	-	-	-	-	-	30,099,320		1,338,848	31,438,168
HECO OPEB plan - BU VEBA	Pension Ref 7		60,710,260	-		13,624,635	12,946,371	-	-	-	-	-	-	-	87,281,266		-	87,281,266
Total			100,955,873			23,732,389	20,494,071	0	0	0			0	0	145,182,333	0	2,819,205	148,001,538
PEN028 HECO OPEB %			68.2%	0.0%		16.0%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.1%	0.0%	1.9%	100.0%
HEI Electric Discount Trust (market value of plan assets - actual $):																		
HEI Electric Discount Trust	Pension Ref 11	(G)	165,482			92,260	83,579	-	-	-			-		341,321		-	341,321
Total			165,482			92,260	83,579	-	-	-			-		341,321	-	-	341,321
PEN030 HEI Electric Discount Trust%			48.5%	0.0%		27.0%	24.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Postretirement Executive Life Trust Plan cost - actual $ (beg in 1997, cost should be used instead of plan assets since this plan is no longer being funded, per J. Haraga, Administrator of Finance & Investments)																		
Postretirement Executive Life	Pension Ref 10	(G)	835,309			82,424	94,382	0	0	0			0	0	1,012,115		157,222	1,169,337
Total			835,309			82,424	94,382	0	0	0			0	0	1,012,115	0	157,222	1,169,337
PEN031 Postretirement Executive Life Plan Trust%			71.4%	0.0%		7.0%	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	86.6%	0.0%	13.4%	100.0%
Directors Retirement Plan participants		(E)	1												1		7	8
PEN 020 Directors Retirement Plan participants %			12.5%												12.5%		87.5%	100.0%
Supplemental Executive Retirement Plan		(E)	2												2		4	6
PEN 022 Sup. Executive Retirement Plan participants %			33.3%												33.3%		66.7%	100.0%
@ 1/1/06 (projections only done @ 1/1)																		
Excess Plans																		
(Excess Pay SERP & Excess Benefit Plan combined)		(E)	11	-	-	-	-	2	1						14		4	18
PEN 027 Excess plan participants %			61.1%	0.0%		0.0%	0.0%	11.1%	5.6%						77.8%		22.2%	100.0%
@ 1/1/06 (projections only done @ 1/1)																		

Source:
(A) Not used.
(B) Not used
(C) Not used.
(D) Not used.
(E) HECO Benefits division, Phyllis Hanta.
(F) HECO Benefits division, Myra O'Brien.
(G) Final asset reconciliation statements and Watson Wyatt statements (received from Julie Haraga)

Equity Allocation Factors

Actual results as of 12/31/06 (except as noted) used for determining HEI's 2007 estimate of shared charges to HECO

(in thousands of dollars, except as noted)

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	TOTAL
Publicly-traded company related:													
Common equity	(1)	(A)	590,608	265	175,099	192,231	559,896	2,126	17,529	36,601	4,757	23	1,579,135
Common equity %			37.4%	0.0%	11.1%	12.2%	35.5%	0.1%	1.1%	2.3%	0.3%	0.0%	100.0%
Preferred equity (publicly held)	(2)	(B)	8,793										8,793
Preferred equity %			100.0%										100.0%
Common + pref. (publicly held) equity	(1) + (2)		599,401	265	175,099	192,231	559,896	2,126	17,529	36,601	4,757	23	1,587,928
Common + pref. (publicly held) equity %			37.8%	0.0%	11.0%	12.1%	35.3%	0.1%	1.1%	2.3%	0.3%	0.0%	100.0%
Common + pref. (publicly held) equity	(1) + (2)		599,401	265	175,099	192,231							966,996
Common + pref. (publicly held) equity %			62.0%	0.0%	18.1%	19.9%							100.0%
AUD004 & AUD005 ONLY													

Source:

(A) Independent accountant's Consolidating Schedule - Balance Sheet Information.

(B) The publicly held preferred equity amount remained unchanged from the prior year actual. The amount was verified by the HECO Securities Administrator which agrees to the $8,793 shown on the schedule above.

Equity Allocation Factors

Actual results as of 12/31/06 (except as noted) used for determining HEI's 2007 estimate of shared charges to HECO

(in thousands of dollars)

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	HEIPC (Note 1)	HIG (Note 1)	TOTAL	Less: HEIPC & HIG	TOTAL (agrees to pg. 1)
Publicly-traded company related:																	
Common equity	(1)	(A)	590,608	265	175,099	192,231	559,896	2,126	17,529	36,601	4,757	23	71,633	38,911	1,689,679	(110,544)	1,579,135
Common equity %			35.0%	0.0%	10.4%	11.4%	33.1%	0.1%	1.0%	2.2%	0.3%	0.0%	4.2%	2.3%	100.0%		
Preferred equity (publicly held)	(2)	(B)	8,793	-	-	-									8,793		8,793
Preferred equity %			100.0%	0.0%	0.0%	0.0%									100.0%		
Common + pref. (publicly held) equity	(1) + (2)		599,401	265	175,099	192,231	559,896	2,126	17,529	36,601	4,757	23	71,633	38,911	1,698,472	(110,544)	1,587,928
Common + pref. (publicly held) equity %			35.3%	0.0%	10.3%	11.3%	33.0%	0.1%	1.0%	2.2%	0.3%	0.0%	4.2%	2.3%	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 had made a policy decision to include HEIPC and HIG in the calculations of shareholder dependent costs since HEI must still theoretically report to all of its shareholders even with the exit from the international power business engaged in by HEIPC and with the loss of HIG. Examples of shareholder dependent costs include printing and mailing costs for the annual report and proxy and stock transfer costs. See Source A for the support for HEIPC's adjusted equity and HIG's adjusted equity.

Source:

(A) Independent accountant's Consolidating Schedule - Balance Sheet Information.

(B) The publicly held preferred equity amount remained unchanged from the prior year actual. The amount was verified by the HECO Securities Administrator which agrees to the $8,793 shown on the schedule above.

Allocation Factors

Actual results as of 12/31/06 (except as noted) used for determining HEI's 2007 estimate of shared charges to HECO

(in thousands of dollars, except as noted)

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	HEIPC	TOTAL	ADJ	HEI Corp. (and its financing sub HYCAP) & Elim	CONS.
Financing related:																	
Short-term debt		(A)	113,107											113,107		63,165	176,272
Long-term debt		(A)	481,240		131,046	153,899								766,185		367,000	1,133,185
Total debt			594,347		131,046	153,899								879,292		430,165	1,309,457
Debt (Long-term & short-term) %			67.6%	0.0%	14.9%	17.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%			
Preferred equity		(A)	22,293		7,000	5,000								34,293			34,293
Preferred equity %			65.0%		20.4%	14.6%								100.0%			
Common equity		(A)	590,608	265	175,099	192,231	559,896	2,126	17,529	36,601	4,757	23		1,579,135	-	(483,895)	1,095,240
Common equity %			37.4%	0.0%	11.1%	12.2%	35.5%	0.1%	1.1%	2.3%	0.3%	0.0%	0.0%	100.0%			
Debt + Equity (pref. & common)			1,207,248	265	313,145	351,130	559,896	2,126	17,529	36,601	4,757	23		2,492,720	-	(53,730)	2,438,990
Debt + Equity (pref. & common) %			48.4%	0.0%	12.6%	14.1%	22.4%	0.1%	0.7%	1.5%	0.2%	0.0%		100.0%			
Projected short-term borrowings		(H)	0	0	0	0	0	0	0	0	0	0	0	0		0	0
Projected short-term borrowings %			0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%
Employee related:																	
Gross payroll (excluding incentive compensation)		(C)	109,156		26,942	24,811	52,996					111		214,016		4,747	218,763
Gross payroll (excluding incentive compensation) %			49.9%	0.0%	12.3%	11.3%	24.2%	0.0%	0.0%	0.0%	0.0%	0.1%		97.8%		2.2%	100.0%
# of employees		(D)	1,438		340	307	1,318					3		3,406		41	3,447
# of employees %			41.7%	0.0%	9.9%	8.9%	38.2%	0.0%	0.0%	0.0%	0.0%	0.1%		98.8%		1.2%	100.0%
# of employees (only HUM005)		(D)	1,438		340	307						3		2,088		41	2,129
# of employees (excluding ASB) %			67.6%	0.0%	16.0%	14.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	98.1%		1.9%	100.0%
Tax-related																	
Pretax income		(I)	79,725	153	11,260	30,555	88,558	126	225	3,358	2,809	68		216,837	(6,510)	(39,272)	171,055
Pretax income %			36.8%	0.1%	5.2%	14.1%	40.8%	0.1%	0.1%	1.5%	1.3%	0.0%		100.0%			
General (3 factor formula):																	
Common equity			37.4%	0.0%	11.1%	12.2%	35.5%	0.1%	1.1%	2.3%	0.3%	0.0%		100.0%			100.0%
Pretax income			36.8%	0.1%	5.2%	14.1%	40.8%	0.1%	0.1%	1.5%	1.3%	0.0%		100.0%			100.0%
Gross payroll			49.9%	0.0%	12.3%	11.3%	24.2%	0.0%	0.0%	0.0%	0.0%	0.1%		97.8%	0.0%	2.2%	100.0%
Average			41.4%	0.0%	9.6%	12.5%	33.5%	0.1%	0.4%	1.3%	0.5%	0.0%		99.3%	0.0%	0.7%	100.0%

Note: Where the amount was negative, the absolute value was used since it would be illogical to allocate a negative amount.

Source:

(A) Independent accountant's Consolidating Schedule - Balance Sheet Information.
(B) Not used
(C) Gross payroll amounts provided by subsidiaries from their payroll registers. Incentive compensation was excluded based upon discussions with subsidiaries.
(D) HECO Human Resources department report.
(E) Not used
(F) Not used
(G) Not used.
(H) Board of Director Approval for Short-term Borrowing Authority for the current year.
(I) Independent accountant's Consolidating Schedule - Income (Loss) Information

Allocation Factors
Actual results as of 12/31/06 (except as noted) used for determining HEI's 2007 estimate of shared charges to HECO

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	HEIPC	TOTAL	ADJ	HEI Corp. (and its financing sub HYCAP) & Elim	CONS.
Pension-related:																	
# of HEIRS participants		(F)	1,530		299	302	1,041	5				3		3,180		58	3,238
PEN005 HEIRS Admin.			47.3%	0.0%	9.2%	9.3%	32.1%	0.2%				0.1%	0.0%	98.2%		1.8%	100.0%
HEI Retirement Plan (market value of plan assets - actual $)																	
HEI Retirement plan	Pension Ref 1	(G)	574,234,996		113,443,337	96,484,445								784,162,778		17,414,567	801,577,345
Total			574,234,996		113,443,337	96,484,445	0	0	0			0	0	784,162,778	0	17,414,567	801,577,345
PEN007 HEI Retirement Plan%			71.6%		14.2%	12.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		97.8%	0.0%	2.2%	100.0%
Master pension trust calculation (market value of plan assets - actual $):																	
HEI Retirement plan	Pension Ref 1	(G)	574,234,996		113,443,337	96,484,445		-				-		784,162,778		17,414,567	801,577,345
HTB Salaried plan	Pension Ref 2 (not used)							-						-			-
American Savings Bank Retirement pla	Pension Ref 3						73,700,297							73,700,297			73,700,297
YB pension plan	Pension Ref 4 not used													-			-
Total			574,234,996		113,443,337	96,484,445	73,700,297	0	0			0	0	857,863,075	0	17,414,567	875,277,642
PEN009 Master Pension Trust %			65.6%	0.0%	13.0%	11.0%	8.4%	0.0%	0.0%	0.0%	0.0%	0.0%		98.0%	0.0%	2.0%	100.0%
OPEB PEN024 (market value of plan assets w/ the exception of the executive life trust (cost) - actual $)																	
(Executive life trust - cost instead of market value of plan assets is being 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, Administrator of Finance & Investments)																	
HEI 401(h)	Pension Ref 5	(G)	17,295,867		5,166,765	3,553,040								26,015,672		1,368,948	27,384,620
HECO OPEB plan - NBU VEBA	Pension Ref 6		16,882,025		3,344,118	2,985,004								23,211,147		1,182,228	24,393,375
HECO OPEB plan - BU VEBA	Pension Ref 7		58,427,828		13,391,335	12,349,444								84,168,607			84,168,607
YB NBU VEBA	Pension Ref 8 not used													-			-
YB BU VEBA	Pension Ref 9 not used													-			-
Postretirement Executive Life Trust	Pension Ref 10		862,439		103,331	96,896								1,062,666		161,264	1,223,930
HEI Electric Discount Trust	Pension Ref 11		237,909		113,784	68,072								419,765			419,765
Total			93,706,068		22,119,333	19,052,456	0	0	0			0	0	134,877,857	0	2,712,440	137,590,297
PEN024 OPEB plan %			68.1%	0.0%	16.1%	13.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		98.0%	0.0%	2.0%	100.0%
HECO OPEB NBU VEBA PEN025 (market value of plan assets - actual $):																	
HECO OPEB plan - NBU VEBA	Pension Ref 6		16,882,025	-	3,344,118	2,985,004	-	-	-	-	-	-	-	23,211,147		1,182,228	24,393,375
Total			16,882,025	-	3,344,118	2,985,004	-	-	-	-	-	-	-	23,211,147	-	1,182,228	24,393,375
PEN025 OPEB plan %			69.2%	0.0%	13.7%	12.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	95.2%	0.0%	4.8%	100.0%
OPEB Funding PEN026 (market value of plan assets - actual $):																	
HEI 401(h)	Pension Ref 5	(G)	17,295,867	-	5,166,765	3,553,040	-	-	-	-	-	-	-	26,015,672	-	1,368,948	27,384,620
HECO OPEB plan - NBU VEBA	Pension Ref 6		16,882,025	-	3,344,118	2,985,004	-	-	-	-	-	-	-	23,211,147	-	1,182,228	24,393,375
HECO OPEB plan - BU VEBA	Pension Ref 7		58,427,828	-	13,391,335	12,349,444	-	-	-	-	-	-	-	84,168,607	-	-	84,168,607
YB NBU VEBA	Pension Ref 8 not used													-			-
YB BU VEBA	Pension Ref 9 not used													-			-
HEI Electric Discount Trust	Pension Ref 11		237,909	-	113,784	68,072	-	-	-	-	-	-	-	419,765		-	419,765
Total			92,843,629		22,016,002	18,955,560	0	0	0			0	0	133,815,191	0	2,551,176	136,366,367
PEN026 OPEB Funding %			68.1%	0.0%	16.1%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.1%	0.0%	1.9%	100.0%

Allocation Factors
Actual results as of 12/31/06 (except as noted) used for determining HEI's 2007 estimate of shared charges to HECO

	Ref	Source	HECO	RHI	HELCO	MECO	ASB	TOOTS	HEIDI	HEIII	HEIPI	PECS	HEIPC	TOTAL	ADJ	HEI Corp. (and its financing sub HYCAP) & Elim	CONS.
HECO OPEB PEN028 (market value of plan assets - actual $):																	
HEI 401(h)	Pension Ref 5	(G)	17,295,867	-	5,166,765	3,553,040	-	-	-	-	-	-	-	26,015,672		1,368,948	27,384,620
HECO OPEB plan - NBU VEBA	Pension Ref 6		16,882,025	-	3,344,118	2,985,004	-	-	-	-	-	-	-	23,211,147		1,182,228	24,393,375
HECO OPEB plan - BU VEBA	Pension Ref 7		58,427,828	-	13,391,335	12,349,444	-	-	-	-	-	-	-	84,168,607		-	84,168,607
Total			92,605,720		21,902,218	18,887,488	0	0	0			0	0	133,395,426	0	2,551,176	135,946,602
PEN028 HECO OPEB %			68.1%	0.0%	16.1%	13.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	98.1%	0.0%	1.9%	100.0%
HEI Electric Discount Trust (market value of plan assets - actual $):																	
HEI Electric Discount Trust	Pension Ref 11	(G)	237,909		113,784	68,072	-	-	-			-		419,765		-	419,765
Total			237,909		113,784	68,072	-	-	-			-		419,765	-	-	419,765
PEN030 HEI Electric Discount Trust%			56.7%	0.0%	27.1%	16.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%
Postretirement Executive Life Trust Plan cost - actual $ (beg in 1997, cost should be used instead of plan assets since this plan is no longer being funded, per J. Haraga, Administrator of Finance & Investments)																	
Postretirement Executive Life	Pension Ref 10	(G)	862,439		103,331	96,896	0	0	0			0	0	1,062,666		161,264	1,223,930
Total			862,439		103,331	96,896	0	0	0			0	0	1,062,666	0	161,264	1,223,930
PEN031 Postretirement Executive Life Plan Trust%			70.5%	0.0%	8.4%	7.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	86.8%	0.0%	13.2%	100.0%
Directors Retirement Plan participants		(E)	1											1		8	9
PEN 020 Directors Retirement Plan participants %			11.1%											11.1%		88.9%	100.0%
Supplemental Executive Retirement Plan		(E)	2											2		4	6
PEN 022 Sup. Executive Retirement Plan participants %			33.3%											33.3%		66.7%	100.0%
@ 1/1/06 (projections only done @ 1/1)																	
Excess Plans																	
(Excess Pay SERP & Excess Benefit Plan combined)		(E)	24	-	5	4	2	1						36		7	43
PEN 027 Excess plan participants %			55.8%	0.0%	11.6%	9.3%	4.7%	2.3%						83.7%		16.3%	100.0%
@ 1/1/06 (projections only done @ 1/1)																	

Source:
(A) Not used.
(B) Not used.
(C) Not used.
(D) Not used.
(E) HECO Benefits division, Phyllis Hanta.
(F) HECO Benefits division, Myra O'Brien.
(G) Final asset reconciliation statements and Watson Wyatt statements (received from Julie Haraga)

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							Conversion of Activity Based Management Code Blocks to NARUC Expense Categories							
PEZ	100	PHE	NE	NPSZZZZZ	451	70,116						70,116	B38	921
PEZ	110	PHE	NE	NPSZZZZZ	451	183,900			37,812			221,712	B37	910
PEZ	112	PHE	NE	NPSZZZZZ	451	237,624				83,316	(5,277)	315,663	B38	921
PEZ	122	PHE	NE	NPIZZZZZ	451	58,416						58,416	B38	921
PEZ	201	WST	NE	NPYZZZZZ	451	111,804						111,804	B30	500020
PEZ	211	WST	NC	NPYZZZZZ	451	348,672	(348,672)					-		
PEZ	211	WST	NE	NPYZZZZZ	451	5,112						5,112	B30	502020
PEZ	212	KST	NE	NPAVP4ZZ	451	11,472						11,472	B31	514030
PEZ	220	WST	NE	NPIZZZZZ	451	39,108						39,108	B20	501020
PEZ	240	WST	NC	NPYZZZZZ	451	117,612	(117,612)					-		
PEZ	240	WST	NE	NPIZZZZZ	451	326,640				128,064	(8,110)	446,594	B30	506020
PEZ	242	HST	NE	NPIZZZZZ	451	118,500						118,500	B30	502010
PEZ	242	KST	NE	NPIZZZZZ	451	196,128						196,128	B30	502030
PEZ	242	WST	NE	NPIZZZZZ	451	149,484						149,484	B30	502020
PEZ	245	KST	NE	NPAVP4ZZ	451	18,324						18,324	B30	502030
PEZ	246	KST	NE	NPAVP4ZZ	451	15,240						15,240	B30	505030
PEZ	256	HST	NE	NPIZZZZZ	451	7,824						7,824	B31	501410
PEZ	256	KST	NE	NPIZZZZZ	451	62,568						62,568	B31	514030
PEZ	256	WST	NE	NPIZZZZZ	451	481,560				87,948	(5,570)	563,938	B31	514020
PEZ	258	KST	NE	NPAVP4ZZ	451	23,184						23,184	B31	512030
PEZ	261	KST	NE	NPAVP4ZZ	451	13,908						13,908	B31	513030
PEZ	307	OAH	NC	NPBZZZZZ	451	714,288	(714,288)					-		
PEZ	307	OAH	NC	NPYZZZZZ	451	99,132	(99,132)					-		
PEZ	307	OAH	NE	NPAVP2ZZ	451	39,108						39,108	B32	566
PEZ	307	OAH	NE	NPBZZZZZ	451	12,780				87,948	(5,570)	95,158	B32	566
PEZ	320	OAH	NE	NPAVP4ZZ	451	34,080						34,080	B32	566
PEZ	325	OAH	NC	NPRZZZZZ	451	60,960	(60,960)					-		
PEZ	326	OAH	NE	NPRZZZZZ	451	74,412		67,596				142,008	B32	566
PEZ	331	OAH	NE	NPAVP4ZZ	451	3,972						3,972	B32	563
PEZ	333	OAH	NC	NPRZZZZZ	451	245,844	(245,844)					-		

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							Conversion of Activity Based Management Code Blocks to NARUC Expense Categories							
PEZ	333	OAH	NE	NPAVP4ZZ	451	4,104						4,104	B32	562
PEZ	343	OAH	NE	NPAVP4ZZ	451	5,436						5,436	B33	571
PEZ	347	OAH	NE	NPDZZZZZ	451	36						36	B33	572
PEZ	349	OAH	NE	NPAVP4ZZ	451	2,532						2,532	B33	570
PEZ	375	OAH	NC	NPRZZZZZ	451	195,780	(195,780)					-		
PEZ	376	OAH	NE	NPRZZZZZ	451	1,008						1,008	B32	561
PEZ	377	OAH	NE	NPRZZZZZ	451	216,036						216,036	B34	581
PEZ	402	OAH	NC	NPBZZZZZ	451	97,920	(97,920)					-		
PEZ	408	OAH	NC	NPBZZZZZ	451	457,656	(457,656)					-		
PEZ	408	OAH	NE	NPBZZZZZ	451	9,456						9,456	B34	588
PEZ	420	OAH	NE	NPAVP4ZZ	451	113,712						113,712	B35	598
PEZ	455	OAH	NC	NPBZZZZZ	451	41,532	(41,532)					-		
PEZ	455	OAH	NC	NPDZZZZZ	451	62,748	(62,748)					-		
PEZ	455	OAH	NE	NPDZZZZZ	451	815,076		1,296		322,464	(20,423)	1,118,413	B34	588
PEZ	456	OAH	NC	NPRZZZZZ	451	188,640	(188,640)					-		
PEZ	456	OAH	NE	NPRZZZZZ	451	78,276		64,356				142,632	B34	588
PEZ	461	OAH	NE	NPAVP4ZZ	451	5,316						5,316	B34	583
PEZ	462	OAH	NE	NPAVP4ZZ	451	5,868						5,868	B34	584
PEZ	463	OAH	NE	NPAVP4ZZ	451	6,024						6,024	B34	582
PEZ	465	OAH	NE	NPWZZZZZ	451	10,452						10,452	B34	586
PEZ	474	OAH	NE	NPAVP4ZZ	451	9,492						9,492	B35	593
PEZ	477	OAH	NE	NPAVP4ZZ	451	9,168						9,168	B35	594
PEZ	478	OAH	NE	NPDZZZZZ	451	132						132	B35	594
PEZ	486	OAH	NE	NPAVP4ZZ	451	3,060						3,060	B35	592
PEZ	600	OAH	NC	NPWZZZZZ	451	513,156	(513,156)					-		
PEZ	600	OAH	NE	NPCZZZZZ	451	47,160						47,160	B38	921
PEZ	600	OAH	NE	NPWZZZZZ	451	198,468		131,304	2,544			332,316	B38	921
PEZ	603	OAH	NE	NPWZZZZZ	451	87,204						87,204	B34	586
PEZ	610	OAH	NE	NPCZZZZZ	451	45,876						45,876	B36	902
PEZ	611	OAH	NE	NPCZZZZZ	451	126,720			77,196			203,916	B36	903

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							Conversion of Activity Based Management Code Blocks to NARUC Expense Categories							
PEZ	612	OAH	NE	NPAZZZZZ	451	8,736				231,432	(14,658)	225,510	B36	903
PEZ	614	OAH	NE	NPCZZZZZ	451	3,660						3,660	B36	903
PEZ	616	OAH	NE	NPCZZZZZ	451	68,568						68,568	B36	903
PEZ	700	OAH	NC	NPRZZZZZ	451	1,128	(1,128)					-		
PEZ	700	PHE	NE	NPAPRESI	451	55,044						55,044	B38	921
PEZ	700	PHE	NE	NPASVP7Z	451	141,144						141,144	B38	921
PEZ	700	PHE	NE	NPASVP8Z	451	62,568						62,568	B38	921
PEZ	700	PHE	NE	NPASVP9Z	451	15,648						15,648	B38	921
PEZ	700	PHE	NE	NPAVP3ZZ	451	35,784						35,784	B38	921
PEZ	700	PHE	NE	NPAVP5ZZ	451	15,648						15,648	B38	921
PEZ	700	PHE	NE	NPAVP7ZZ	451	15,648						15,648	B38	921
PEZ	701	OAH	NC	NPRZZZZZ	451	39,108	(39,108)					-		
PEZ	701	PHE	NC	NPKZZZZZ	451	20,652	(20,652)					-		
PEZ	701	PHE	NE	NPKZZZZZ	451	41,928						41,928	B38	921
PEZ	710	PHE	NE	NPSZZZZZ	451	46,740						46,740	B38	921
PEZ	711	PHE	NE	NPASVP7Z	451	55,872						55,872	B38	921
PEZ	713	PHE	NE	NPSZZZZZ	451	186,588			32,760			219,348	B37	910
PEZ	720	PHE	NS	NPCZZZZZ	451	1,312,020				231,432	(14,658)	1,528,794	B36	901
PEZ	722	PHE	NE	NPFZZZZZ	451	46,932						46,932	B38	921
PEZ	731	PPR	NE	NPASVP7Z	451	40,236						40,236	B30	549
PEZ	736	PHE	NE	NPSZZZZZ	451	44,160						44,160	B38	921
PEZ	738	PHE	NE	NPNPZZZZ	451	80,232						80,232	B38	921
PEZ	745	PHE	NE	NPNIZZZZ	451	15,648						15,648	B38	921
PEZ	750	PHE	NE	NPHZZZZZ	451	177,780			213,672			391,452	B38	921
PEZ	750	PHE	NE	NPQCZZZZ	451	88,584						88,584	B38	921
PEZ	750	PHE	NE	NPQEZZZZ	451	56,904						56,904	B38	921
PEZ	753	PHE	NE	NPQEZZZZ	451	50,988						50,988	B38	9302
PEZ	756	PHE	NE	NPKZZZZZ	451	4,692						4,692	B38	921
PEZ	760	PHE	NE	NPNAZZZZ	451	95,184						95,184	B38	921
PEZ	765	PHE	NE	NPFZZZZZ	451	54,756						54,756	B38	921

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PEZ	765	PHE	NE	NPNAZZZZ	451	8,796						8,796	B38	921
PEZ	765	PHE	NE	NPPZZZZZ	451	7,824						7,824	B38	921
PEZ	766	PHE	NE	NPAVP4ZZ	451	11,868						11,868	B38	921
PEZ	766	PHE	NE	NPAVP6ZZ	451	15,648						15,648	B38	921
PEZ	767	PHE	NE	NPFZZZZZ	451	70,392						70,392	B38	921
PEZ	775	PHE	NE	NPFZZZZZ	451	21,900						21,900	B38	921
PEZ	776	PHE	NE	NPFZZZZZ	451	81,804						81,804	B38	921
PEZ	777	PHE	NE	NPAVP2ZZ	451	4,248						4,248	B38	921
PEZ	777	PHE	NE	NPAVP4ZZ	451	370,788				112,632	(7,133)	476,287	B38	921
PEZ	777	PHE	NE	NPAZZZZZ	451	24,252						24,252	B38	921
PEZ	778	PHE	NE	NPFZZZZZ	451	47,184						47,184	B38	926010
PEZ	779	PHE	NE	NPFZZZZZ	451	12,192						12,192	B38	926000
PEZ	795	PHE	NE	NPFZZZZZ	451	118,248						118,248	B38	925
PEZ	805	PHE	NE	NPPZZZZZ	451	62,568						62,568	B38	921
PEZ	807	PHE	NE	NPAVP1ZZ	451	15,648						15,648	B38	921
PEZ	807	PHE	NE	NPQCZZZZ	451	101,676						101,676	B38	921
PEZ	815	PHE	NE	NPAZZZZZ	451	18,768						18,768	B38	921
PEZ	817	PHE	NE	NPAZZZZZ	451	46,932						46,932	B38	921
PEZ	818	PHE	NE	NPAVP2ZZ	451	6,636						6,636	B38	921
PEZ	818	PHE	NE	NPAVP4ZZ	451	582,972				175,884	(11,140)	747,716	B38	921
PEZ	818	PHE	NE	NPAZZZZZ	451	72,648						72,648	B38	921
PEZ	825	PHE	NE	NPKZZZZZ	451	16,428						16,428	B38	921
PEZ	826	PHE	NE	NPAVP4ZZ	451	39,108						39,108	B38	921
PEZ	826	PHE	NE	NPKZZZZZ	451	51,624						51,624	B38	921
PEZ	827	PHE	NE	NPKZZZZZ	451	31,284						31,284	B38	921
PEZ	842	PHE	NE	NPAVP4ZZ	451	30,120						30,120	B38	921
PEZ	842	PHE	NE	NPVZZZZZ	451	179,904						179,904	B38	921
PEZ	843	PHE	NE	NPAVP4ZZ	451	195,468						195,468	B38	921
PEZ	843	PHE	NE	NPAZZZZZ	451	58,668						58,668	B38	921
PEZ	850	PHE	NE	NPAVP4ZZ	451	75,600						75,600	B38	921

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							Conversion of Activity Based Management Code Blocks to NARUC Expense Categories							
PEZ	853	PHE	NC	NPVZZZZZ	451	287,256	(287,256)					-		
PEZ	875	HST	NE	NPJZZZZZ	451	54,756						54,756	B30	506010
PEZ	876	PHE	NE	NPJZZZZZ	451	198,432						198,432	B38	921
PEZ	891	PHE	NE	NPKZZZZZ	451	23,460						23,460	B38	921
PEZ	907	OAH	NC	NPBZZZZZ	451	28,008	(28,008)					-		
PEZ	907	PDO	NE	NPBZZZZZ	451	1,284						1,284	B34	588
PEZ	916	PHE	NC	NPRZZZZZ	451	54,756	(54,756)					-		
PEZ	926	PDO	NE	NPDZZZZZ	451	23,544						23,544	B34	588
PEZ	926	PHE	NE	NPNLZZZZ	451	14,256		15,600				29,856	B38	921
PEZ	928	PHE	NE	NPNLZZZZ	451	60,372						60,372	B38	921
PEZ	931	PHE	NE	NPHZZZZZ	451	104,424		4,548				108,972	B38	921
PEZ	932	PHE	NE	NPVZZZZZ	451	32,412						32,412	B38	921
PEZ	933	PHE	NE	NPHZZZZZ	451	226,188				81,768	(5,180)	302,776	B38	921
PEZ	940	PHE	NC	NPVZZZZZ	451	71,520	(71,520)					-		
PEZ	950	PHE	NE	NPKZZZZZ	451	39,108						39,108	B38	925
PEZ	951	PHE	NE	NPKZZZZZ	451	48,108						48,108	B38	924
PEZ	953	PHE	NE	NPFZZZZZ	451	23,460						23,460	B38	925
PEZ	960	PHE	NE	NPNCZZZZ	451	120,984						120,984	B38	921
PEZ	965	PHE	NE	NPEZZZZZ	451	264						264	B38	921
PEZ	966	PHE	NE	NPEZZZZZ	451	39,108						39,108	B38	921
						13,955,292	(3,646,368)	284,700	363,984	1,542,888	(97,719)	12,402,777		

This workpaper is a summary of the ITS Department costs that are allocated to the various NARUC functional accounts. Please refer to HECO-WP-11XX for the detail workpapers supporting this summary.

Hawaiian Electric Company, Inc.
ITS Department
2009 Budget Expenses

ITS Department costs are subdivided between core functions and non-core functions. Core ITS functions costs are charged into a clearing account and allocated to various functional areas of HECO. Non-Core ITS function costs are directly charged to HECO functional areas.

1a) **Charges into Clearing Account** (charged to various workorders by ITS core function)

ITS Department core function Labor and Non-Labor costs are charged into a clearing account. Core IT functions include the majority of costs in the following divisions: Administrative, Development Services, Infrastructure & Operations, and Customer Care deparments.

1b) **Allocated Charges out of Clearing Account** (Responsibility Area PEZ charges)

The ITS Costing System distributes charges in the clearing account to various functional areas within HECO.

2) **Direct Charges** (charged to various workorders by ITS non-core function)

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

Prepared by Blane Murakami, ITS Project Manager

A

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

HECO's core IT costs are allocated to functional area code blocks via the IT Costing System. The allocation entries are coded with the Responsibility Area (RA) code PEZ in HECO's financial system. The following is a general description of the PEZ budgeting methodology. Workpapers A-1 through A-5 show the detail allocation amounts for 2009.

Costs charged to IT Clearing Account (additions)

IT Non-Project and non-capital Project costs are charged to the IT Clearing Account. These costs are coded with Indicator NC (Non-billable clearing). For 2009, the costs charged to IT Clearing Account were estimated to be $17,365,616, as shown on workpaper A-1. Details of these costs are shown on workpapers B and C. Further details of the non-labor charges are included in Workpaper K.

IT Clearing Account Allocations (reductions)

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

1) HELCO IT Costing System Direct Charges (2009 Estimate - $155,014)
2) MECO IT Costing System Direct Charges (2009 Estimate - $106,574)
3) Intercompany Billings (2009 Estimate - $591,853)
4) EFMS Program Charges (2009 Estimate - $650,000)
5) Ebusiness Program Charges (2009 Estimate - $364,000)
6) Software Maintenance and Licenses (2009 Estimate - $1,542,888)
7) Other Functional Area Charges (2009 Estimate - $13,955,287)

Clearing Account Methodology

Clearing amounts to the first 3 items above (HELCO/MECO IT Direct Charges, Intercompany Billings) are directly identified. Workpapers D, and E show the basis for the amounts included in the 2009 budget.

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

Clearing amounts for Item 6 (Software Maintenance and License charges) represent IT costs which are cleared to expense only accounts. Expense account codes with the largest IT clearings in prior years are used to clear these Software Maintenance and License charges. Workpapers H show the determination of these amounts and the accounts used for the clearing.

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

A

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

PEZ Workpaper Index

A - PEZ Allocation Model
B - Non-Project "NC" Charges
C - Project "NC" Charges
D - HELCO IT Costing System Direct Charges
E - MECO IT Costing System Direct Charges
F - Intercompany Billable Estimates
G - EFMS, EBUS, and Software Maintenance Allocation Basis
H - Software Maintenance and License 2009 charges - detail
I - Determination of 2009 PEZ proration %'s
J - Detail of 2009 Non-Labor Expense charges

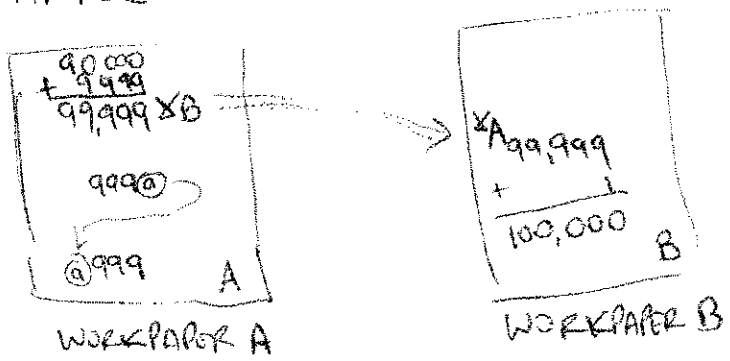
TICKMARK CROSS REFENCE CONVENSION

A-2 - WORKPAPER REFERENCE AT BOTTOM RIGHT OF PAGE

XA - CROSS REFERENCE BETWEEN WORKPAPERS

- XA 99,999 - X BEFORE NUMBER - CITES SOURCE OF 99,999 IS FROM WORKPAPER A
- 99,999 XB - X AFTER NUMBER - INDICATES 99,999 IS THE SUPPORT FOR A NUMBER ON WORKPAPER B

EXAMPLE



ⓐ - CROSS REFERENCE WITHIN A WORKPAPER

- ⓐ 999 - ⓐ BEFORE NUMBER - CITES SOURCE OF 999
- 999 ⓐ - ⓐ AFTER NUMBER - INDICATES 999 IS THE SUPPORT

A

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

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

The attached workpapers K and K-1 show the assumptions for 2009 Estimates for non-core IT functions. These costs are directly charged to functional area code block in the following areas:

- A & G Operation
- Customer Operations

Hawaiian Electric Company, Inc.
Information Technology & Services Department
PEZ Forecast Model for 2009B
PEZ Actuals Jan- Dec 2007

RA	Act	Loc	Ind	Project	EE	Jan-Dec 07	Proportions		Monthly 2009	12 2009
Total NC charges					LABOR	NON-LABOR				
NC per Non-Project						4,833,582 / 8,183,901		B		13,067,483
Non-Project on-cost						3,262,233 / —		B		3,262,233
NC per EFMS Project						— / 650,000		C		650,000
NC per EBUS Project						— / 364,000		C		364,000
NC per Other Projects						— / 21,900		C		21,900
Total NC charges						8,145,815 / 9,219,801			1,447,135	17,365,616
						REF TO HECO-1115				REF TO HECO-1115
Less: HELCO IT Costing System direct charge per D. Nakamura								D	12,918	155,014
Less: MECO IT Costing System direct charge per D. Nakamura								E	8,881	106,574
Less: Expense Element 451 charges by non-ITS PMs										-
									Subtotal	17,104,028
Less: InterCompany						587,325		F	49,321	591,853
Less: EFMS Allocations							G-1			
PEZ	211	WST	NC	NPYZZZZZ			2.5%		1,354	16,248
PEZ	307	OAH	NC	NPBZZZZZ			15.3%		8,288	99,456
PEZ	326	OAH	NE	NPRZZZZZ			10.4%		5,633	67,596
PEZ	408	OAH	NC	NPBZZZZZ			15.2%		8,233	98,796
PEZ	455	OAH	NC	NPBZZZZZ			20.5%		11,104	133,248
PEZ	455	OAH	NE	NPDZZZZZ			0.2%		108	1,296
PEZ	456	OAH	NE	NPRZZZZZ			9.9%		5,363	64,356
PEZ	600	OAH	NE	NPWZZZZZ			20.2%		10,942	131,304
PEZ	907	OAH	NC	NPBZZZZZ			2.7%		1,463	17,556
PEZ	926	PHE	NE	NPNLZZZZ			2.4%		1,300	15,600
PEZ	931	PHE	NE	NPNLZZZZ			0.7%		379	4,548
Total EFMS							100.0%		54,167	650,004
			NE	44%					NE	284,700
			NC	56%					NC	365,304
			Total	100%						650,004
Less: EBusiness Allocations							G-2			
PEZ	110	PHE	NE	NPNEZZZZ			10.4%		3,151	37,812

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Hawaiian Electric Company, Inc.
Information Technology & Services Department
PEZ Forecast Model for 2009B
PEZ Actuals Jan- Dec 2007

RA	Act	Loc	Ind	Project	EE	Jan-Dec 07	Proportions	Monthly 2009	12 2009
PEZ	600	OAH	NE	NPNEZZZZ			0.7%	212	2,544
PEZ	611	OAH	NE	NPNEZZZZ			21.2%	6,433	77,196
PEZ	713	PHE	NE	NPNEZZZZ			9.0%	2,730	32,760
PEZ	730	PHE	NE	NPNEZZZZ			0.0%	-	-
PEZ	750	PHE	NE	NPNEZZZZ			36.8%	11,164	133,968
PEZ	750	PHE	NE	NPNEZZZZ			21.9%	6,643	79,716
Total EBusiness							100.0%	30,333	363,996
Less: Software Maintenance							G-3		
PEZ	112	PHE	NE	NPSZZZZZ			5.4%	6,943	83,316
PEZ	240	WST	NE	NPIZZZZZ			8.3%	10,672	128,064
PEZ	256	WST	NE	NPIZZZZZ			5.7%	7,329	87,948
PEZ	307	OAH	NE	NPBZZZZZ			5.7%	7,329	87,948
PEZ	455	OAH	NE	NPDZZZZZ			20.9%	26,872	322,464
PEZ	612	OAH	NE	NPAZZZZZ			15.0%	19,286	231,432
PEZ	720	PHE	NS	NPCZZZZZ			15.0%	19,286	231,432
PEZ	777	PHE	NE	NPAVP2ZZ			7.3%	9,386	112,632
PEZ	818	PHE	NE	NPAVP2ZZ			11.4%	14,657	175,884
PEZ	933	PHE	NE	NPHZZZZZ			5.3%	6,814	81,768
Total Software Maintenance							100.0%	128,573	1,542,888
Total NC less Dir Chg, Interco, EFMS, EBUS, SW Maint								**1,162,941**	**13,955,287**
						I			
PEZ	100	PHE	NE	NPSZZZZZ	451	59,703	0.5%	5,843	70,116
PEZ	110	PHE	NE	NPSZZZZZ	451	156,599	1.3%	15,325	183,900
PEZ	112	PHE	NE	NPSZZZZZ	451	202,339	1.7%	19,802	237,624
PEZ	122	PHE	NE	NPIZZZZZ	451	49,743	0.4%	4,868	58,416
PEZ	201	WST	NE	NPYZZZZZ	451	95,200	0.8%	9,317	111,804
PEZ	211	WST	NC	NPYZZZZZ	451	296,901	2.5%	29,056	348,672
PEZ	211	WST	NE	NPYZZZZZ	451	4,355	0.0%	426	5,112
PEZ	212	KST	NE	NPAVP4ZZ	451	9,765	0.1%	956	11,472
PEZ	220	WST	NE	NPIZZZZZ	451	33,302	0.3%	3,259	39,108
PEZ	240	WST	NC	NPYZZZZZ	451	100,151	0.8%	9,801	117,612
PEZ	240	WST	NE	NPIZZZZZ	451	278,146	2.3%	27,220	326,640
PEZ	242	HST	NE	NPIZZZZZ	451	100,902	0.8%	9,875	118,500
PEZ	242	KST	NE	NPIZZZZZ	451	167,007	1.4%	16,344	196,128
PEZ	242	WST	NE	NPIZZZZZ	451	127,291	1.1%	12,457	149,484
PEZ	245	KST	NE	NPAVP4ZZ	451	15,603	0.1%	1,527	18,324
PEZ	246	KST	NE	NPAVP4ZZ	451	12,973	0.1%	1,270	15,240
PEZ	256	HST	NE	NPIZZZZZ	451	6,660	0.1%	652	7,824
PEZ	256	KST	NE	NPIZZZZZ	451	53,283	0.4%	5,214	62,568
PEZ	256	WST	NE	NPIZZZZZ	451	410,063	3.5%	40,130	481,560
PEZ	258	KST	NE	NPAVP4ZZ	451	19,740	0.2%	1,932	23,184
PEZ	261	KST	NE	NPAVP4ZZ	451	11,845	0.1%	1,159	13,908

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Hawaiian Electric Company, Inc.
Information Technology & Services Department
PEZ Forecast Model for 2009B
PEZ Actuals Jan- Dec 2007

RA	Act	Loc	Ind	Project	EE	Jan-Dec 07	Proportions	Monthly 2009	12 2009
PEZ	307	OAH	NC	NPBZZZZZ	451	608,238	5.1%	59,524	714,288
PEZ	307	OAH	NC	NPYZZZZZ	451	84,411	0.7%	8,261	99,132
PEZ	307	OAH	NE	NPAVP2ZZ	451	33,302	0.3%	3,259	39,108
PEZ	307	OAH	NE	NPBZZZZZ	451	10,881	0.1%	1,065	12,780
PEZ	320	OAH	NE	NPAVP4ZZ	451	29,020	0.2%	2,840	34,080
PEZ	325	OAH	NC	NPRZZZZZ	451	51,912	0.4%	5,080	60,960
PEZ	326	OAH	NE	NPRZZZZZ	451	63,360	0.5%	6,201	74,412
PEZ	331	OAH	NE	NPAVP4ZZ	451	3,386	0.0%	331	3,972
PEZ	333	OAH	NC	NPRZZZZZ	451	209,345	1.8%	20,487	245,844
PEZ	333	OAH	NE	NPAVP4ZZ	451	3,496	0.0%	342	4,104
PEZ	343	OAH	NE	NPAVP4ZZ	451	4,630	0.0%	453	5,436
PEZ	347	OAH	NE	NPDZZZZZ	451	29	0.0%	3	36
PEZ	349	OAH	NE	NPAVP4ZZ	451	2,159	0.0%	211	2,532
PEZ	375	OAH	NC	NPRZZZZZ	451	166,716	1.4%	16,315	195,780
PEZ	376	OAH	NE	NPRZZZZZ	451	860	0.0%	84	1,008
PEZ	377	OAH	NE	NPRZZZZZ	451	183,963	1.5%	18,003	216,036
PEZ	402	OAH	NC	NPBZZZZZ	451	83,377	0.7%	8,160	97,920
PEZ	408	OAH	NC	NPBZZZZZ	451	389,706	3.3%	38,138	457,656
PEZ	408	OAH	NE	NPBZZZZZ	451	8,057	0.1%	788	9,456
PEZ	420	OAH	NE	NPAVP4ZZ	451	96,826	0.8%	9,476	113,712
PEZ	455	OAH	NC	NPBZZZZZ	451	35,367	0.3%	3,461	41,532
PEZ	455	OAH	NC	NPDZZZZZ	451	53,432	0.4%	5,229	62,748
PEZ	455	OAH	NE	NPDZZZZZ	451	694,063	5.8%	67,923	815,076
PEZ	456	OAH	NC	NPRZZZZZ	451	160,635	1.4%	15,720	188,640
PEZ	456	OAH	NE	NPRZZZZZ	451	66,654	0.6%	6,523	78,276
PEZ	461	OAH	NE	NPAVP4ZZ	451	4,528	0.0%	443	5,316
PEZ	462	OAH	NE	NPAVP4ZZ	451	4,996	0.0%	489	5,868
PEZ	463	OAH	NE	NPAVP4ZZ	451	5,129	0.0%	502	6,024
PEZ	465	OAH	NE	NPWZZZZZ	451	8,898	0.1%	871	10,452
PEZ	474	OAH	NE	NPAVP4ZZ	451	8,083	0.1%	791	9,492
PEZ	477	OAH	NE	NPAVP4ZZ	451	7,805	0.1%	764	9,168
PEZ	478	OAH	NE	NPDZZZZZ	451	116	0.0%	11	132
PEZ	486	OAH	NE	NPAVP4ZZ	451	2,607	0.0%	255	3,060
PEZ	600	OAH	NC	NPWZZZZZ	451	436,967	3.7%	42,763	513,156
PEZ	600	OAH	NE	NPCZZZZZ	451	40,155	0.3%	3,930	47,160
PEZ	600	OAH	NE	NPWZZZZZ	451	169,001	1.4%	16,539	198,468
PEZ	603	OAH	NE	NPWZZZZZ	451	74,261	0.6%	7,267	87,204
PEZ	610	OAH	NE	NPCZZZZZ	451	39,066	0.3%	3,823	45,876
PEZ	611	OAH	NE	NPCZZZZZ	451	107,902	0.9%	10,560	126,720
PEZ	612	OAH	NE	NPAZZZZZ	451	7,435	0.1%	728	8,736
PEZ	614	OAH	NE	NPCZZZZZ	451	3,121	0.0%	305	3,660
PEZ	616	OAH	NE	NPCZZZZZ	451	58,391	0.5%	5,714	68,568
PEZ	700	OAH	NC	NPRZZZZZ	451	958	0.0%	94	1,128
PEZ	700	PHE	NE	NPAPRESI	451	46,869	0.4%	4,587	55,044
PEZ	700	PHE	NE	NPASVP7Z	451	120,185	1.0%	11,762	141,144
PEZ	700	PHE	NE	NPASVP8Z	451	53,283	0.4%	5,214	62,568

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Hawaiian Electric Company, Inc.
Information Technology & Services Department
PEZ Forecast Model for 2009B
PEZ Actuals Jan- Dec 2007

RA	Act	Loc	Ind	Project	EE	Jan-Dec 07	Proportions	Monthly 2009	12 2009
PEZ	700	PHE	NE	NPASVP9Z	451	13,321	0.1%	1,304	15,648
PEZ	700	PHE	NE	NPAVP3ZZ	451	30,474	0.3%	2,982	35,784
PEZ	700	PHE	NE	NPAVP5ZZ	451	13,321	0.1%	1,304	15,648
PEZ	700	PHE	NE	NPAVP7ZZ	451	13,321	0.1%	1,304	15,648
PEZ	701	OAH	NC	NPRZZZZZ	451	33,302	0.3%	3,259	39,108
PEZ	701	PHE	NC	NPKZZZZZ	451	17,583	0.1%	1,721	20,652
PEZ	701	PHE	NE	NPKZZZZZ	451	35,699	0.3%	3,494	41,928
PEZ	710	PHE	NE	NPSZZZZZ	451	39,802	0.3%	3,895	46,740
PEZ	711	PHE	NE	NPASVP7Z	451	47,581	0.4%	4,656	55,872
PEZ	713	PHE	NE	NPSZZZZZ	451	158,889	1.3%	15,549	186,588
PEZ	720	PHE	NS	NPCZZZZZ	451	1,117,223	9.4%	109,335	1,312,020
PEZ	722	PHE	NE	NPFZZZZZ	451	39,962	0.3%	3,911	46,932
PEZ	731	PPR	NE	NPASVP7Z	451	34,260	0.3%	3,353	40,236
PEZ	736	PHE	NE	NPSZZZZZ	451	37,599	0.3%	3,680	44,160
PEZ	738	PHE	NE	NPNPZZZZ	451	68,320	0.6%	6,686	80,232
PEZ	745	PHE	NE	NPNIZZZZ	451	13,321	0.1%	1,304	15,648
PEZ	750	PHE	NE	NPHZZZZZ	451	151,384	1.3%	14,815	177,780
PEZ	750	PHE	NE	NPQCZZZZ	451	75,432	0.6%	7,382	88,584
PEZ	750	PHE	NE	NPQEZZZZ	451	48,455	0.4%	4,742	56,904
PEZ	753	PHE	NE	NPQEZZZZ	451	43,418	0.4%	4,249	50,988
PEZ	756	PHE	NE	NPKZZZZZ	451	3,996	0.0%	391	4,692
PEZ	760	PHE	NE	NPNAZZZZ	451	81,052	0.7%	7,932	95,184
PEZ	765	PHE	NE	NPFZZZZZ	451	46,622	0.4%	4,563	54,756
PEZ	765	PHE	NE	NPNAZZZZ	451	7,495	0.1%	733	8,796
PEZ	765	PHE	NE	NPPZZZZZ	451	6,660	0.1%	652	7,824
PEZ	766	PHE	NE	NPAVP4ZZ	451	10,101	0.1%	989	11,868
PEZ	766	PHE	NE	NPAVP6ZZ	451	13,321	0.1%	1,304	15,648
PEZ	767	PHE	NE	NPFZZZZZ	451	59,943	0.5%	5,866	70,392
PEZ	775	PHE	NE	NPFZZZZZ	451	18,649	0.2%	1,825	21,900
PEZ	776	PHE	NE	NPFZZZZZ	451	69,663	0.6%	6,817	81,804
PEZ	777	PHE	NE	NPAVP2ZZ	451	3,618	0.0%	354	4,248
PEZ	777	PHE	NE	NPAVP4ZZ	451	315,738	2.7%	30,899	370,788
PEZ	777	PHE	NE	NPAZZZZZ	451	20,647	0.2%	2,021	24,252
PEZ	778	PHE	NE	NPFZZZZZ	451	40,179	0.3%	3,932	47,184
PEZ	779	PHE	NE	NPFZZZZZ	451	10,377	0.1%	1,016	12,192
PEZ	795	PHE	NE	NPFZZZZZ	451	100,690	0.8%	9,854	118,248
PEZ	805	PHE	NE	NPPZZZZZ	451	53,283	0.4%	5,214	62,568
PEZ	807	PHE	NE	NPAVP1ZZ	451	13,321	0.1%	1,304	15,648
PEZ	807	PHE	NE	NPQCZZZZ	451	86,584	0.7%	8,473	101,676
PEZ	815	PHE	NE	NPAZZZZZ	451	15,985	0.1%	1,564	18,768
PEZ	817	PHE	NE	NPAZZZZZ	451	39,962	0.3%	3,911	46,932
PEZ	818	PHE	NE	NPAVP2ZZ	451	5,651	0.0%	553	6,636
PEZ	818	PHE	NE	NPAVP4ZZ	451	496,419	4.2%	48,581	582,972
PEZ	818	PHE	NE	NPAZZZZZ	451	61,859	0.5%	6,054	72,648
PEZ	825	PHE	NE	NPKZZZZZ	451	13,987	0.1%	1,369	16,428
PEZ	826	PHE	NE	NPAVP4ZZ	451	33,302	0.3%	3,259	39,108

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Hawaiian Electric Company, Inc.
Information Technology & Services Department
PEZ Forecast Model for 2009B
PEZ Actuals Jan- Dec 2007

RA	Act	Loc	Ind	Project	EE	Jan-Dec 07	Proportions	Monthly 2009	12 2009
PEZ	826	PHE	NE	NPKZZZZZ	451	43,958	0.4%	4,302	51,624
PEZ	827	PHE	NE	NPKZZZZZ	451	26,641	0.2%	2,607	31,284
PEZ	842	PHE	NE	NPAVP4ZZ	451	25,647	0.2%	2,510	30,120
PEZ	842	PHE	NE	NPVZZZZZ	451	153,188	1.3%	14,992	179,904
PEZ	843	PHE	NE	NPAVP4ZZ	451	166,448	1.4%	16,289	195,468
PEZ	843	PHE	NE	NPAZZZZZ	451	49,953	0.4%	4,889	58,668
PEZ	850	PHE	NE	NPAVP4ZZ	451	64,373	0.5%	6,300	75,600
PEZ	853	PHE	NC	NPVZZZZZ	451	244,609	2.1%	23,938	287,256
PEZ	875	HST	NE	NPJZZZZZ	451	46,622	0.4%	4,563	54,756
PEZ	876	PHE	NE	NPJZZZZZ	451	168,970	1.4%	16,536	198,432
PEZ	891	PHE	NE	NPKZZZZZ	451	19,981	0.2%	1,955	23,460
PEZ	907	OAH	NC	NPBZZZZZ	451	23,847	0.2%	2,334	28,008
PEZ	907	PDO	NE	NPBZZZZZ	451	1,089	0.0%	107	1,284
PEZ	916	PHE	NC	NPRZZZZZ	451	46,622	0.4%	4,563	54,756
PEZ	926	PDO	NE	NPDZZZZZ	451	20,050	0.2%	1,962	23,544
PEZ	926	PHE	NE	NPNLZZZZ	451	12,137	0.1%	1,188	14,256
PEZ	928	PHE	NE	NPNLZZZZ	451	51,413	0.4%	5,031	60,372
PEZ	931	PHE	NE	NPHZZZZZ	451	88,922	0.7%	8,702	104,424
PEZ	932	PHE	NE	NPVZZZZZ	451	27,599	0.2%	2,701	32,412
PEZ	933	PHE	NE	NPHZZZZZ	451	192,606	1.6%	18,849	226,188
PEZ	940	PHE	NC	NPVZZZZZ	451	60,901	0.5%	5,960	71,520
PEZ	950	PHE	NE	NPKZZZZZ	451	33,302	0.3%	3,259	39,108
PEZ	951	PHE	NE	NPKZZZZZ	451	40,967	0.3%	4,009	48,108
PEZ	953	PHE	NE	NPFZZZZZ	451	19,981	0.2%	1,955	23,460
PEZ	960	PHE	NE	NPNCZZZZ	451	103,026	0.9%	10,082	120,984
PEZ	965	PHE	NE	NPEZZZZZ	451	222	0.0%	22	264
PEZ	966	PHE	NE	NPEZZZZZ	451	33,302	0.3%	3,259	39,108
						11,883,299	100.0%	1,162,941	13,955,292

WORKPAPER DESCRIPTION - (A-1 THROUGH A-5)
THIS WORKPAPER SHOWS THE CALCULATION OF ITS CLEARING ACCOUNT CHARGES TO CODE BLOCKS FOR DIFFERENT FUNCTIONAL AREAS OF HECO.

A-5

SUMMARY OF NON-PROJECT CHARGES INTO ITS CLEARING ACCOUNT

INDICATOR = NC

4/30/2008 **PR100 NPUpd - Summ...** 5:05PM

Pr...	Expense Cate...	FY08 ViewBud08	FY09 Upd08 RA
Non Project	Labor	$4,508,591	XB-2 $4,883,582 ⓐ
	Materials	$331,929	XB-3 $370,848
	On-Costs	$3,295,968	0 XB-3 2,247,182
	Other	$1,806,678	$3,541,949 XB-3 315,804 XB-4 19,289 XB-4 12,519
	Outside Svcs	$4,142,489	XB-1 $4,262,653 XB-4 698,036
	Transportation	$8,580	XB-3 $8,450 XB-4 249,119
		$14,094,235	$13,067,483 XA-1
Pr...	Labor	$0	0
	Materials	$0	0
	On-Costs	$0	0
	Other	$0	0
	Outside Svcs	$1,139,000	0
	Transportation	0	0
		$1,139,000	0
		$15,233,235	$13,067,483
		$15,233,235	$13,067,483

ⓐ 4,883,582 - NC LABOR
XB-1 66.8% - ON-COST %
ON-COST
3,262,233 XA-1
(a) 4,883,582 - NC LABOR
8,145,815 TOTAL LABOR
REF: TO HECO-1115

WORKPAPER DESCRIPTION-
THIS WORKPAPER SUMMARIZES THE NP CHARGES INTO CLEARING. IT INCLUDES AN ESTIMATE OF LABOR ON-COSTS.

B

4/30/2008 **PR100 NPUpd - Summ...** TOTAL 5:04PM

Pr...	Expense Cate...	FY08 ViewBud08	FY09 Upd08 RA
	On-Costs	0	$3,868,920 A)
	Other	0	$35,433
		0	$3,904,354
No...	Labor (b)	$5,803,546	$6,254,000 B)
	Materials	$344,729	$385,492
	On-Costs (c)	$3,874,084	0
	Other	$1,826,071	$3,558,892
	Outside Svcs	$4,549,427	$4,614,619
	Transportation	$38,387	$38,257
		$16,436,243	$14,851,259
Pr...	Labor	$566,230	0
	Materials	$23,700	0
	On-Costs	$405,100	0
	Other	-$209,004	0
	Outside Svcs	$1,178,996	0
	Transportation	0	0
		$1,965,022	0
		$18,401,265	$18,755,613
		$18,401,265	$18,755,613

WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE CALCULATION OF ESTIMATED LABOR ON-COST BASED ON "TOTAL COSTS" IN 2008 BUDGET

(c) 3,874,084 3,868,920 A)
(b) 5,803,546 6,254,000
66.8% 61.8%
÷ B REF. TO HECO-1115

B-1

WORKPAPER DESCRIPTION (B-2, B-3, B-4)
THIS WORKPAPER SHOWS THE LABOR AND NON-LABOR EXPENSES THAT ARE CHARGED TO CLEARING. LABOR EXPENSES ARE BASED ON THE HOURS SHOWN ON WORKPAPERS B5, B6 & B7 MULTIPLIED BY THE STANDARD LABOR RATE FOR EACH LABOR CLASS

Dept	*R...	*...	*L...	*I...	*Proj #	*E...	Line item	FY09 Upd08 RA	Expense C...
InfoTech	PEA	890	PHE	NC	NPEZZZZZ	150	PEA Enabler (1) dev-new 890	$144,192	Labor
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	150	PEA Implementor (1) 901 provide IT cust asst	$47,823	Labor
InfoTech	PEC	701	PHE	NC	NPEZZZZZ	150	PEC TC (1) 701 dev & mg fcst	$65,959	Labor
InfoTech	PEC	721	PHE	NC	NPEZZZZZ	150	PEC TC (1 CC Anyl) 721 Dev Meas & Anl Perf	$65,959	Labor
InfoTech	PEC	844	PHE	NC	NPEZZZZZ	150	PEC Implementor (2) 844 prepare contracts-clrg	$95,139	Labor
InfoTech	PEC	844	PHE	NC	NPEZZZZZ	150	PEC TC (1 FVM) 844 prep/mge contracts-clrg	$65,959	Labor
InfoTech	PEC	896	PHE	NC	NPEZZZZZ	150	PEC TC (1 Desktop)	$65,959	Labor
InfoTech	PEC	901	PHE	NC	NPEZZZZZ	150	PEC FS (1) 901 IT cust asst	$93,113	Labor
InfoTech	PEC	901	PHE	NC	NPEZZZZZ	150	PEC Implementor (4) 901 provide IT cust asst-clrg	$193,015	Labor
InfoTech	PEC	901	PHE	NC	NPEZZZZZ	150	PEC TC (3 BSC, 2 PM) 901 prov it cust assistance-clrg	$280,080	Labor
InfoTech	PED	891	PHE	NC	NPEZZZZZ	150	PED Fac Sup (1) 891 develop comp apps-enh	$93,113	Labor
InfoTech	PED	891	PHE	NC	NPEZZZZZ	150	PED TC (35) 891 main comp apps-enhanced	$1,736,916	Labor
InfoTech	PED	891	PHE	NC	NPEZZZZZ	150	PED TC 891 adds (3)	$198,297	Labor
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	150	PEI BUOC (5) 895 oper & main mainframe	$254,666	Labor
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	150	PEI TC (3) 895 oper & main mainframe	$197,456	Labor
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	150	PEI TCS (1) 895 oper & main mainframe	$65,981	Labor
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	150	PEI Fac Sup (1) 896 oper & main LAN	$93,113	Labor
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	150	PEI TC (1) 896 Oper & Main LAN -former I	$65,119	Labor
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	150	PEI TC (11) 896 oper & main LAN	$708,322	Labor
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	150	PEI TC (1) 900 op desk top offc telecom - former I	$67,219	Labor
InfoTech	PEI	906	PHE	NC	NPEZZZZZ	150	PEI TC (1) 906 plan the Sys Telecom	$65,959	Labor
InfoTech	PEJ	896	PHE	NC	NPEZZZZZ	150	PEJ Fac Sup (1) 896	$85,786	Labor
InfoTech	PEJ	896	PHE	NC	NPEZZZZZ	150	PEJ TC (2) 896	$134,438	Labor
						150		$4,883,583	
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	201	IT000012 - Department - Materials	$28,072	Materials
InfoTech	PED	891	PHE	NC	NPEZZZZZ	201	IT000006 - Development - Materials	$2,777	Materials
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	201	IT000004 - Data Center - Materials	$30,918	Materials
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	201	IT000005 - Infrastructure LAN - Materials	$124,293	Materials

X B-5 B6 B-7

REF TO HECO-1115

X B

X J

B-2

Dept	*R...	*...	*L...	*I...	*Proj #	*E...	Line item	FY09 Upd08 RA	Expense C...
InfoTech	PEI	897	PHE	NC	NPEZZZZZ	201	IT000007 - Desktop Business - Materials	$23,548	Materials
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	201	IT000011 - Infrastructure Comm - OS Svc	$7,302	Materials
InfoTech	PEI	915	PHE	NC	NPEZZZZZ	201	IT000184 - Telecom Equip Main - Material	$11,417	Materials
InfoTech	PEI	967	PHE	NC	NPEZZZZZ	201	IT000193 - Copiers/Printers/Fax - Materials	$142,522	Materials
						201		$370,848	XB
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	301	IT000012 - Department - Vehicles	$8,450	Transportat...
						301		$8,450	XB
InfoTech	PEA	891	PHE	NC	NPEZZZZZ	461	IT000014 - Consultant - CB Profile - IS Consult	$1,955,800	Other
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	461	IT000012 - Department - IS Consult	$97,900	Other
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	461	IT900012 - Outsource Support - Mainframe	$112,000	Other
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	461	IT900013 - Outside Support - Net Admin	$81,482	Other
						461		$2,247,182	XB
InfoTech	PED	891	PHE	NC	NPEZZZZZ	462	IT900001 - Development-SW License	$11,423	Other
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	462	IT900002 - Data Center - SW	$60,187	Other
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	462	IT900003 - Infrastructure LAN - SW License	$134,095	Other
InfoTech	PEI	897	PHE	NC	NPEZZZZZ	462	IT900004 - Desktop Business - PC SW	$69,243	Other
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	462	IT900006 - Infrastructure Comm - SW	$40,856	Other
						462		$315,804	XB
InfoTech	PEA	749	PHE	NC	NPEZZZZZ	501	IT000186 - M/L & Travel -OS Svc	$20,000	Outside Svcs
InfoTech	PEA	789	PHE	NC	NPEZZZZZ	501	IT000185 - Training Local External - OS Svc	$18,271	Outside Svcs
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	501	IT000012 - Department - OS Svc	$66,914	Outside Svcs
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	501	IT900011 - Computer Security Analysis	$216,100	Outside Svcs
InfoTech	PED	891	PHE	NC	NPEZZZZZ	501	IT000006 - Development - OS Svc	$10,450	Outside Svcs
InfoTech	PED	891	PHE	NC	NPEZZZZZ	501	IT900001 - Development - SW Maintenance	$217,837	Outside Svcs
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	501	IT000003 - HEI Internet Charges - OS Svc	$84,300	Outside Svcs
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	501	IT000004 - Data Center - OS Svc	$385,773	Outside Svcs
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	501	IT900002 - Data Center Software Maintenance	$709,010	Outside Svcs
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	501	IT000005 - Infrastructure LAN - OS Svc	$655,470	Outside Svcs

XJ

XB

Dept	*R...	*...	*L...	*I...	*Proj #	*E...	Line item	FY09 Upd08 RA	Expense C...
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	501	IT900003 - Infrastructure LAN - SW Maint	$443,108	Outside Svcs
InfoTech	PEI	897	PHE	NC	NPEZZZZZ	501	IT000007 - Desktop Business - OS Svc	$342,466	Outside Svcs
InfoTech	PEI	897	PHE	NC	NPEZZZZZ	501	IT900004 - Desktop Business - SW Maint	$412,380	Outside Svcs
InfoTech	PEI	898	PHE	NC	NPEZZZZZ	501	IT000008 - Desktop Technical - OS Svc	$99,200	Outside Svcs
InfoTech	PEI	898	PHE	NC	NPEZZZZZ	501	IT900005 - Desktop Technical - SW Maint	$241,744	Outside Svcs
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	501	IT000010 - Long Distance - OS Svc	$11,932	Outside Svcs
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	501	IT000011 - Infrastructure Comm - OS	$4,521	Outside Svcs
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	501	IT000195 - Interisland Circuit Charges - OS Svc	$70,051	Outside Svcs
InfoTech	PEI	915	PHE	NC	NPEZZZZZ	501	IT000184 - Telecom Equip Main - OS Svc	$191,387	Outside Svcs
InfoTech	PEI	967	PHE	NC	NPEZZZZZ	501	IT000193- Copiers/Printers/Fax - OS Svc	$61,738	Outside Svcs
						501		$4,262,653	XB
InfoTech	PEA	749	PHE	NC	NPEZZZZZ	520	IT000186 - M/L & Travel - ML Travel	$19,289	Other
						520		$19,289	XB
InfoTech	PEA	901	PHE	NC	NPEZZZZZ	522	IT000012 - Department - Interislel Trav	$12,519	Other
						522		$12,519	XB
InfoTech	PEI	895	PHE	NC	NPEZZZZZ	570	IT000004 - Data Center - Rents	$65,498	Other
InfoTech	PEI	896	PHE	NC	NPEZZZZZ	570	IT000005 - Infrastructure LAN - Rents	$240,011	Other
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	570	IT000009 - PABX Trunk Charges - OS Svc	$111,787	Other
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	570	IT000010 - Long Distance -Rents	$3,114	Other
InfoTech	PEI	900	PHE	NC	NPEZZZZZ	570	IT000195 - Interisland Circuit Charges - Rents	$81,804	Other
InfoTech	PEI	967	PHE	NC	NPEZZZZZ	570	IT000193 - Copiers/Printers/Fax - Rents	$195,821	Other
						570		$698,036	XB
InfoTech	PEI	967	PHE	NC	NPEZZZZZ	600	IT000193 Copiers/Printers/Fax - Eq Maint	$249,119	Other
						600		$249,119	XB
								$13,067,483	

XJ

NON-PROJECT "NC" HOURS

5/27/2008 » budget manager: PR110H NPUpd - Detail Hrs 4:00PM

*R...	*Ac...	*Lo...	*In...	*Proj #	*E...	*Lbr Class (XB-8)		Line item	FY09 Upd08 RA (HOURS employees)	
PEA	890	PHE	NC	NPEZZZZZ	150	__E		PEA Enabler (1) dev-new 890	2,400	
PEA	890	PHE	NC	NPEZZZZZ	150	__E	1	ITS CHIEF INFORMATION OFFICER	2,400	1
PEA	901	PHE	NC	NPEZZZZZ	150	__I		PEA Implementor (1) 901 provide IT cust asst	1,888	
PEA	901	PHE	NC	NPEZZZZZ	150	__I	2	ITS SECRETARY	1,888	1
PEC	701	PHE	NC	NPEZZZZZ	150	__TC	3	PEC TC (1) 701 dev & mg fcst	1,884	
PEC	701	PHE	NC	NPEZZZZZ	150	__TC		PROJECT MANAGER	1,884	1
PEC	721	PHE	NC	NPEZZZZZ	150	__TC	4	PEC TC (1 CC Anyl) 721 Dev Meas & Anl Perf	1,884	
PEC	721	PHE	NC	NPEZZZZZ	150	__TC		CUSTOMER CARE ANALYST	1,884	1
PEC	844	PHE	NC	NPEZZZZZ	150	__I	5	PEC Implementor (2) 844 prepare contracts-clrg	3,756	
PEC	844	PHE	NC	NPEZZZZZ	150	__I		FINANCE & VENDOR MANAGEMENT SPECIALISTS	3,756	2
PEC	844	PHE	NC	NPEZZZZZ	150	__TC	6	PEC TC (1 FVM) 844 prep/mge contracts-clrg	1,884	
PEC	844	PHE	NC	NPEZZZZZ	150	__TC		FINANCE & VENDOR MANAGEMENT ANALYST	1,884	1
PEC	896	PHE	NC	NPEZZZZZ	150	__TC		PEC TC (1 Desktop)	1,884	
PEC	896	PHE	NC	NPEZZZZZ	150	__TC	7	INFRASTRUCTURE ANALYST	1,884	1
PEC	901	PHE	NC	NPEZZZZZ	150	__FS		PEC FS (1) 901 IT cust asst	2,084	
PEC	901	PHE	NC	NPEZZZZZ	150	__FS	8	DIRECTOR - CUSTOMER CARE	2,084	1

WORKPAPER DESCRIPTION (B5, B6, B7)
THIS WORKPAPER SHOWS THE HEADCOUNT/ITS POSITION AND RELATED HOURS FOR EACH LABOR CLASS INCLUDED IN THE 2009 BUDGET. EACH ITEM IS MAPPED TO THE ITS ORGANIZATION CHART SHOWN ON WORKPAPER B-8

B-5

*R...	*Ac...	*Lo...	*In...	*Proj #	*E...	*Lbr Class (x B-8)	Line item	FY09 Upd08 RA (Hours)	Employees
PEC	901	PHE	NC	NPEZZZZZ	150	__I	PEC Implementor (4) 901 provide IT cust asst-clrg	7,620	
PEC	901	PHE	NC	NPEZZZZZ	150	__I	[9] DESKTOP SERVICES COORDINATOR (1) [10] DESKTOP TECHNICAL SPECIALISTS (3)	7,620	4
PEC	901	PHE	NC	NPEZZZZZ	150	__TC	PEC TC (3 BSC, 2 PM) 901 prov it cust assistance-clrg	8,000	
PEC	901	PHE	NC	NPEZZZZZ	150	__TC	[11] BUSINESS SOLUTIONS CONSULTANTS (3) [12] PROJECT MANAGER (1) [13] PROGRAM MANAGER (1)	8,000	5
PED	891	PHE	NC	NPEZZZZZ	150	__FS	PED Fac Sup (1) 891 develop comp apps-enh	2,084	
PED	891	PHE	NC	NPEZZZZZ	150	__FS	[14] DIRECTOR - DEVELOPMENT SERVICES	2,084	1
PED	891	PHE	NC	NPEZZZZZ	150	__TC	PED TC (35) 891 main comp apps-enhanced	49,612	35
PED	891	PHE	NC	NPEZZZZZ	150	__TC	PED TC 891 adds (3)	5,664	3
PED	891	PHE	NC	NPEZZZZZ	150	__TC	[15] [16] PROJECT MANAGERS (7), ANALYSTS (4) [17] SPECIALISTS (7)	55,276	
PEI	895	PHE	NC	NPEZZZZZ	150	__BUOC	PEI BUOC (5) 895 oper & main mainframe	9,506	
PEI	895	PHE	NC	NPEZZZZZ	150	__BUOC	[18] SR. DATA CENTER OPERATORS (5)	9,506	5
PEI	895	PHE	NC	NPEZZZZZ	150	__TC	PEI TC (3) 895 oper & main mainframe	5,640	
PEI	895	PHE	NC	NPEZZZZZ	150	__TC	[19] SR. IT TECHNICAL ANALYSTS (3)	5,640	3
PEI	895	PHE	NC	NPEZZZZZ	150	__TCS	PEI TCS (1) 895 oper & main mainframe	1,896	
PEI	895	PHE	NC	NPEZZZZZ	150	__TCS	[20] OPERATIONS & SERVICES SUPERVISOR (1)	1,896	1
PEI	896	PHE	NC	NPEZZZZZ	150	__FS	PEI Fac Sup (1) 896 oper & main LAN	2,084	
							[21] DIRECTOR - INFRASTRUCTURE & OPERATIONS		1

*R...	*Ac...	*Lo...	*In...	*Proj #	*E...	*Lbr Class	Line item	FY09 Upd08 RA	
PEI	896	PHE	NC	NPEZZZZZ	150	__FS		2,084	
PEI	896	PHE	NC	NPEZZZZZ	150	__TC	21 PEI TC (1) 896 Oper & Main LAN -former I	1,860	
PEI	896	PHE	NC	NPEZZZZZ	150	__TC	PEI TC (11) 896 oper & main LAN	20,232	
PEI	896	PHE	NC	NPEZZZZZ	150	__TC	23/24 PROGRAM MANAGER(1), PROJECT MANAGER(1), 25/26 SECURITY ADMINISTRATOR(1), TECHNICAL ANALYST(1), 12/22 SR. INFRASTRUCTURE ANALYST(2), INFRASTRUCTURE ANALYST(5)	22,092	12
PEI	900	PHE	NC	NPEZZZZZ	150	__TC	PEI TC (1) 900 op desk top offc telecom - former I	1,920	
PEI	900	PHE	NC	NPEZZZZZ	150	__TC	22 INFRASTRUCTURE ANALYST	1,920	1
PEI	906	PHE	NC	NPEZZZZZ	150	__TC	PEI TC (1) 906 plan the Sys Telecom	1,884	
PEI	906	PHE	NC	NPEZZZZZ	150	__TC	22 INFRASTRUCTURE ANALYST	1,884	1
PEJ	896	PHE	NC	NPEZZZZZ	150	__FS	PEJ Fac Sup (1) 896	1,920	
PEJ	896	PHE	NC	NPEZZZZZ	150	__FS	27 DIRECTOR- INFORMATION ASSURANCE	1,920	1
PEJ	896	PHE	NC	NPEZZZZZ	150	__TC	PEJ TC (2) 896	3,840	
PEJ	896	PHE	NC	NPEZZZZZ	150	__TC	28 INFORMATION ASSURANCE ANALYSTS	3,840	2
								141,426	84

COMPANY CONFIDENTIAL (for Internal Use Only)

INFORMATION TECHNOLOGY & SERVICES (ITS)

ITS Org Chart-One
Page Rev-2008-3-31

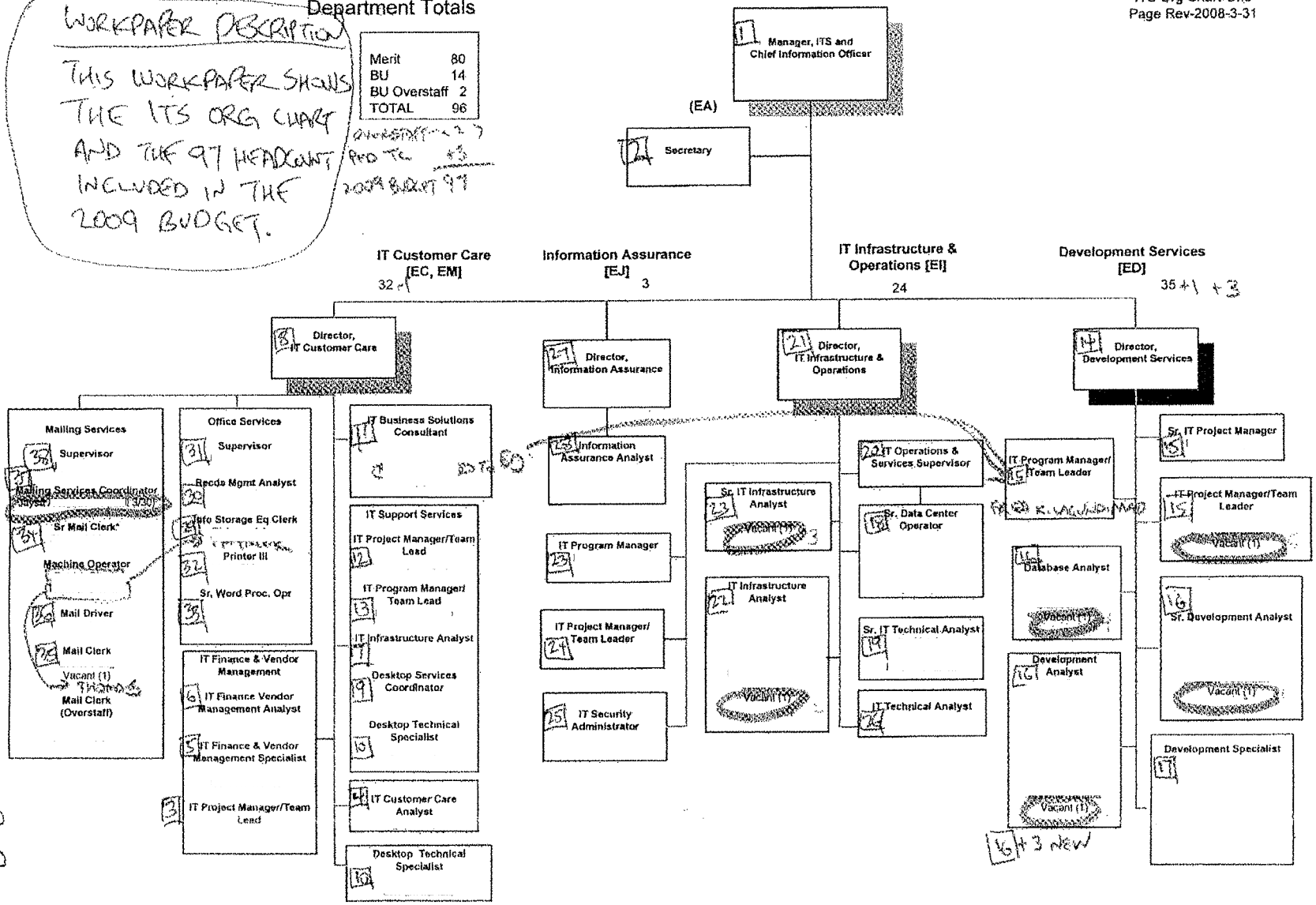
WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE ITS ORG CHART AND THE 97 HEADCOUNT INCLUDED IN THE 2009 BUDGET.

Department Totals

Merit	80
BU	14
BU Overstaff	2
TOTAL	96

OVERSTAFF 2 ?
PRO TEM +3
2009 BUDGET 97



3-8

HECO-WP-1115
DOCKET NO. 2008-0083
PAGE 23 OF 185

WORKPAPER DESCRIPTION
THIS WORKPAPER SHOWS THE NON-CAPITAL PROGRAM BUDGET ESTIMATES INCLUDED IN THE 2009 BUDGET

Murakami, Blane

From: Tobara, Bryce
Sent: Wednesday, March 05, 2008 5:31 PM
To: McCarter, Les; Harada, Irene; Eber, Richard; Uyehara, Dean; Stuller, Rick; Langley, Beverly; Doyle, Kevin; Barclay, David; Stuller, Rick; Murakami, Blane
Subject: 2009-2013 ITS Project Estimate: Pillar update due March 6, noon

Hi All,

I had distributed hardcopies of the Pillar reports last week and asked you to add your 2013 estimates and any other updates (2008-2012) at that time. Changes to the 2009-2013 RAW Pillar inputs are in red. Please let me know by tomorrow morning if there are additional changes to your estimates.

Kevin, your new estimates has been reduced to $364k/year. If the projection is inaccurate, please send me an itemized list so I can justify an increase.

Bev/Irene, the FA estimates were left out since I'm expecting revisions from you tomorrow.

Thanks,
Bryce
x7179

2009-2013 ITS Project Budget

*Project #	*RA #	*Act #	*Ind #	*BE #	Line item	FY09	FY10
P0000040	PED	891	NC	501	EPMS Program	650,000.00	650,000
P0000427	PEP	720	NC	201	E-Bus Program	0.00	0
P0000427	PEP	720	NC	501	E-Bus Program	364,000.00	364,000
P0000501	PEI	930	NI	201	Misc Office Equipment	19,200.00	19,200
P0000652	PEI	895	NI	201	Enterprise Computing	12,500.00	12,500
P0000653	PEA	897	NC	201	Collaborative Communications - Exp	21,900.00	21,100
P0000653	PEA	900	NI	201	Collaborate Communications - Materials	32,050.00	19,550
P0001166	PEI	896	NI	150	Shared HW - Labor	0.00	0
P0001166	PEI	896	NI	201	Shared HW - Hardware	0.00	0
P0001166	PEI	896	NI	462	Shared HW - Software	0.00	0
P0001166	PEI	896	NI	501	Shared HW - Outside Service	0.00	0
P0001405	PED	890	NC	150	Enterprise Report System - Labor	0.00	0
P0001405	PED	890	NC	462	Enterprise Report System - Software	0.00	0
P0001405	PED	890	NC	501	Enterprise Reporting System - O/S Svcs	0.00	0
P0001405	PED	890	NC	501	Enterprise Reporting System - S/W Maintenance	0.00	0
P0001405	PED	890	NI	201	Enterprise Report System - Hardware	0.00	0
P0001417	PEC	896	NI	201	Remedy 7.0 Upgrade - Hardware	0.00	0
P0001417	PEC	897	NE	501	Remedy 7.0 Upgrade - Consulting & Training	0.00	0
P1243000	PEI	896	NI	201	Servers & Network Equipment Acquisitions	282,000.00	70,000
P1243000	PEI	897	NI	201	Desktop Acquisitions	100,000.00	0
P1243000	PEI	898	NI	201	Technical Desktop Acquisitions	0.00	0
P1244000	PER	967	NI	201	Copiers, Faxes and Printers	40,000.00	40,000
P1251000	PEI	900	NI	201	Telecom Material Purchases	10,000.00	10,000

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Hawaiian Electric Company
ITS Department
2009 EFMS Budget Detail

Budget Item	Amount	Description
AM/FM System Contract Development/Support	$200,000.00	AM/FM System development support provided by Bruce Newfelt of TLD Inc. The work is both development and ongoing support. Critical enterprise system support needed to maintain existing application as well as developing new software.
Inspection System Development Support	$75,000.00	Contract development support needed to implement Underground inspection system. HECo developed underground inspection system will be re-written in 2009 with contract development needed.
Intergraph Technical Support	$50,000.00	Technical support provided by Intergraph Corp. to support Intergraph applications. Intergraph sustaining support meant to maintain and develop systems based on Gtechnolgy and Geopmedia software. Intergraph provides a high level expertise in the systems that HECo does not have.
CAD Systems Online Training Subscription	$37,000.00	Yearly subscription to online training for all Bentley Systems software. The EFMS Program provides for ongoing training in Bentley software.
CAD New User Training	$10,000.00	Computer Aided Design (Microstation) training for new employees. The EFMS Program provides for classroom training for new HECo employees.
Software Purchases to support program	$15,000.00	Additions to current licenses or new software licenses to support existing applications and new program initiatives.
Drawing Management System PM support	$50,000.00	Contract PM sopport provided by Kevin Yoshino of Peak2Peak to drive Projectwise implementations throughout HECo.
Bentley Systems Drawing Management technical support	$15,000.00	Technical support provided by Bentley Systems to support Bentley applications. Bentley supplements HECo personnel with high level expertise in Projectwise software.
Underground Inspection System PM support	$50,000.00	Contract PM sopport provided by Kevin Yoshino of Peak2Peak for Underground Inspection System. Project Management support needed for major Underground Inspection project.
Substation Facilities & Drawing Imaging Project	$75,200.00	Project to System Operation Service Division to record and maintain detailed HECO substation facilities data. The application will also support planning for scheduled maintenance. User-friendly environment provides ready access to electronically stored and managed substation facility construction drawings, digital camera images, manufacturers drawings, etc..
Transmission Line Fault Locator Interface Project	$76,400.00	Project envisioned for System Operations to use AM/FM data to pinpoint a fault on the Transmission System and interface with the EMS System for display.

Total $653,600.00
Rounded $650,000.00

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Hawaiian Electric Company
ITS Department
2009 EBUS Budget Detail

2009 Budget	2007 Actual	2006 Actual	
300,000			Annual maintenance and support for the eBusiness platform
	220,170	199,749	Vignette Content Management; Collaboration, Portal
	39,501	39,312	Checkfree
	20,109	16,375	Vignette BEA
	10,914	10,488	Verisign
	1,210	1,208	IPSwitch
	1,172	485	Other
64,000		59,170	Platform upgrades, portal and collaboration customization support and consulting. and technical services.
364,000	293,077	326,787	Total Ebusiness

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C-2

HECO IT Costing Estimates for 2009/2010
HELCO

2007 Actuals (Source: IT Costing Rpt #IT0004-001)

DIRECT CHARGES

Dist.		Account Code					Project #	WO #	2009 Estimate	2010 Estimate
HELC	H9P	700	HEL	NE	NHAPRES	451			1,916	1,916
HELC	HAA	701	HEL	NE	NHAZZZZ	451			2,751	2,751
HELC	HAA	818	HEL	NE	NHAZZZZ	451			2,751	2,751
HELC	HAC	818	HEL	NE	NHAZZZZ	451			1,842	1,842
HELC	HAP	817	HEL	NE	NHAZZZZ	451			1,916	1,916
HELC	HDA	420	HED	NC	NHDZZZZ	451			7,758	7,758
HELC	HDA	965	HED	NC	NHDZZZZ	451			247	247
HELC	HDC	603	HAH	NE	NHDZZZZ	451			18,423	18,423
HELC	HDK	604	HAK	NE	NHDZZZZ	451			958	958
HELC	HDR	455	HED	NC	NHDZZZZ	451			3,586	3,586
HELC	HDR	600	HAH	NE	NHDZZZZ	451			3,586	3,586
HELC	HGA	211	ANS	NS	NHGZZZZ	451			4,752	4,752
HELC	HNA	775	HEL	NE	NHNZZZZ	451			2,230	2,230
HELC	HNL	928	HEL	NE	NHNZZZZ	451			1,205	1,205
HELC	HES	112	HEL	NE	NHEZZZZ	451		CS000653	2,324	0
HELC	HEE	750	HEL	NE	NHEZZZZ	451		CS000662	399	0
HELC	HEB	711	HEL	NE	H0000004	451		CS000665	1,791	0
HELC	HCK	604	HAK	NE	NHCZZZZ	451		CS000762	8,178	0
HELC	HCH	604	HAH	NE	NHCZZZZ	451		CS000811	11,813	0
HELC	HCW	604	HAW	NE	NHCZZZZ	451		CS000844	3,194	0
HELC	HWA	408	HED	NC	NHWZZZZ	451		EE000629	50,166	50,166
HELC	HAC	818	HEL	NE	NHAZZZZ	451		FI000043	2,163	2,163
HELC	HNP	778	HEL	NE	NHNZZZZ	451		HR000258	9,523	9,523
HELC	HNP	779	HEL	NE	NHNZZZZ	451		HR000259	1,248	1,248
HELC	HNP	779	HEL	NE	NHNZZZZ	451		HR000260	534	534
HELC	HNP	776	HEL	NE	NHNZZZZ	451		HR000261	725	725
HELC	HNP	779	HEL	NE	NHNZZZZ	451		HR000264	410	410
HELC	HEI	714	HEL	NE	H0000002	451		C0011206	5,613	5,613
HELC	HEI	714	HEL	NE	H0000002	451		C0011214	3,011	3,011
					TOTAL				155,014	127,315

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WORKPAPER DESCRIPTION
THIS WORKPAPER SHOWS THE DETAIL DIRECT CHARGES TO HELCO WHICH REDUCES THE CLEARING ACCOUNT BALANCE.

D

HECO IT Costing Estimates for 2009/2010
MECO

2007 Actuals (Source: IT Costing Rpt #IT0004-001)

DIRECT CHARGES

Dist.		Account Code					Project #	WO #	2009 Estimate	2010 Estimate
MECO	M9P	700	MAU	NE	NMAZZZZ	451			343	343
MECO	MAA	612	MAU	NE	NMAZZZZ	451			1,916	1,916
MECO	MAA	818	MAU	NE	NMAZZZZ	451			1,552	1,552
MECO	MAB	612	MAU	NE	NMAZZZZ	451			1,670	1,670
MECO	MAG	612	MAU	NE	NMAZZZZ	451			1,916	1,916
MECO	MDA	700	MAU	NC	NMDZZZZ	451			5,818	5,818
MECO	MDK	620	MAU	NE	NMDZZZZ	451			3,586	3,586
MECO	MDM	603	MAU	NE	NMDZZZZ	451			5,995	5,995
MECO	MDR	618	MAU	NE	NMDZZZZ	451			9,828	9,828
MECO	MGA	700	NST	NC	NMGZZZZ	451			4,558	4,558
MECO	MSP	778	MAU	NE	NMSZZZZ	451			1,261	1,261
MECO	MWA	901	MAU	NC	NMWZZZZ	451			5,784	5,784
MECO	MWC	600	MAU	NC	NMWZZZZ	451			958	958
MECO	MWP	600	MAU	NC	NMWZZZZ	451			18,205	18,205
MECO	MWS	600	MAU	NC	NMWZZZZ	451			2,874	2,874
MECO	MCN	112	MAU	NE	NMCZZZZ	451		CS000027	13,471	0
MECO	MCT	604	MAM	NE	NMCZZZZ	451		CS000043	2,395	0
MECO	MCM	610	MAU	NE	NMCZZZZ	451		CS000096	2,281	0
MECO	MCA	604	MAU	NE	NMCZZZZ	451		CS000153	4,470	0
MECO	MCR	604	MAU	NE	NMCZZZZ	451		CS000158	3,605	0
MECO	MCZ	112	MAU	NE	NMCZZZZ	451		CS000286	901	0
MECO	MAA	898	MAU	NE	NMAZZZZ	451		FI000014	1,916	1,916
MECO	MSP	776	MAU	NE	NMSZZZZ	451		HR000060	653	653
MECO	MSP	779	MAU	NE	NMSZZZZ	451		HR000089	369	369
MECO	MSP	779	MAU	NE	NMSZZZZ	451		HR000144	1,267	1,267
MECO	MSP	778	MAU	NE	NMSZZZZ	451		HR000155	8,570	8,570
MECO	MSP	779	MAU	NE	NMSZZZZ	451		HR000232	411	411
					TOTAL				106,574	79,450

WORKPAPER DESCRIPTION
THIS WORKPAPER SHOWS THE DETAIL DIRECT CHARGES TO MECO WHICH REDUCES THE CLEARING ACCOUNT BALANCE.

X A-1

INTERCOMPANY PEZ CHARGES

4/30/2008 *ENTER: Direct RA Cost Mar07- nonlabor 6:05PM

PEZ-KCB

*R...	*A...	*Lo...	*I...	*Project #	*...	Line item	FY09	FY10
PEZ	614	HEL	BE	NPEZZZZZ	451	HEL Billable -Bill print and mail	0	0
PEZ	614	MAU	BE	NPEZZZZZ	451	MCR Billable - Bill print and mail	0	0
PEZ	775	HEI	BE	NPFZZZZZ	451	PFC HEI HR000241 Billable - Empl Comp PolPracP...	2,400	2,400
PEZ	775	HEL	BE	NPFZZZZZ	451	PFC HEL Billable - Empl Comp PolPracProc	2,675	2,675
PEZ	775	MAU	BE	NPFZZZZZ	451	PFC MAU Billable - Empl Comp PolPracProc	2,675	2,675
PEZ	776	HEI	BE	NPFZZZZZ	451	PFB - HEI R0001172 Billable - Ben Plan PolPracProc	96	96
PEZ	776	HPC	BE	NPFZZZZZ	451	PFB HPC Billable - Ben Plan PolPracProc	0	0
PEZ	776	PEC	BE	NPFZZZZZ	451	PFB PEC Billable - Ben Plan PolPracProc	12	12
PEZ	778	HEI	BE	NPFZZZZZ	451	PFB HEI R0001048 Billable - Adm Flexible Ben Pgm	1,200	1,200
PEZ	778	HPC	BE	NPFZZZZZ	451	PFB HPC Billable - Adm Flexible Ben Pgm	0	0
PEZ	778	PEC	BE	NPFZZZZZ	451	PFB PEC Billable - Adm Flexible Ben Pgm	48	48
PEZ	779	HEI	BE	NPFZZZZZ	451	PFB HEI R0001094 Billable - Adm Retirement Prog	444	444
PEZ	779	HPC	BE	NPFZZZZZ	451	PFB HPC Billable - Adm Retirement Pgm	0	0
PEZ	779	PEC	BE	NPFZZZZZ	451	PFB PEC Billable - Adm Retirement Pgm	12	12
PEZ	825	HEI	BE	NPKZZZZZ	451	PKT HEI F1000080 Billable - Manage Cash	2,400	2,400
PEZ	825	HEL	BE	NPKZZZZZ	451	HEL Billable	2,331	2,331
PEZ	825	MAU	BE	NPKZZZZZ	451	MAU Billable	2,331	2,331
PEZ	826	HEL	BE	NPKZZZZZ	451	HEL Billable	4,000	4,000
PEZ	826	MAU	BE	NPKZZZZZ	451	MAU Billable	1,229	1,229
PEZ	895	HEL	BE	NPAVP2ZZ	451	P2V HEL Billable - Op & Maint Mainframe	285,000	285,000
PEZ	895	MAU	BE	NPAVP2ZZ	451	P2V MAU Billable - Op & Maint Mainframe	285,000	285,000
PEZ							591,853	591,853
							591,853	591,853

SA-1

WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE DETAIL INTERCOMPANY BILLING CHARGES WHICH REDUCES THE CLEARING ACCOUNT BALANCE.

F

EFMS Allocation %'s

86-1a

Application	District	RA	CodeBlock	audit date	User Counts EAA	User Counts EAC	User Counts EAS	Proportions EAA	Proportions EAC	Proportions EAS	Weighted	Total
EAA	HECO	PBA	PBA307OAHNCNPBZZZZZ	6/26/2002	25	30	37	74%	13%	13%	27.2	15.3%
EAA	HECO	PBA	PBA408OAHNCNPBZZZZZ	6/26/2002	25	29	37	74%	13%	13%	27.1	15.2%
EAA	HECO	PBY	PBY907OAHNCNPBZZZZZ	6/26/2002	5	4	5	74%	13%	13%	4.9	2.7%
EAA	HECO	PDA	PDA455OAHNCNPDZZZZZ	6/26/2002	42	0	40	74%	13%	13%	36.3	20.4%
EAA	HECO	PNL	PNL926PHENENPNLZZZZ	6/26/2002	5	0	5	74%	13%	13%	4.4	2.4%
EAA	HECO	PRE	PRE326OAHNENPRZZZZZ	6/26/2002	20	5	24	74%	13%	13%	18.6	10.4%
EAA	HECO	PRE	PRE456OAHNENPRZZZZZ	6/26/2002	19	5	23	74%	13%	13%	17.7	9.9%
EAA	HECO	PWA	PWA600OAHNENPWZZZZZ	6/26/2002	37	24	43	74%	13%	13%	36.1	20.2%
EAA	HECO	PYA	PYA211WSTNCNPYZZZZZ	6/26/2002	2	3	20	74%	13%	13%	4.4	2.5%
EAC/EAS	HECO	PHF	PHF931PHENENPHZZZZZ	3/21/2005	0	5	5	74%	13%	13%	1.3	0.7%
EAS	HECO	PDV	PDV455OAHNENPDZZZZZ	6/26/2002	0	0	3	74%	13%	13%	0.4	0.2%
					180	105	242				178.2	100.0%

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WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE DERIVATION OF EFMS COST ALLOCATIONS TO BENEFITING HECO RESPONSIBILITY AREAS. THREE DIFFERENT EFMS ALLOCATIONS (EAA, EAC, EAS) ARE USED TO ALLOCATE EFMS COSTS.

EFMS 2007 Workorder Charges

WORK_ORDER	TRAN_AMOUNT		EAA	EAC	EAS	SWE
IT000156 Total	39,358.16	EAA	39,358.16			
IT000163 Total	37,055.82	EAA	37,055.82			
IT000164 Total	10,798.12	EAC		10,798.12		
IT000169 Total	11,275.61	EAA	11,275.61			
IT000172 Total	48,387.42	EAA	48,387.42			
IT000179 Total	41,005.24	EAS			41,005.24	
IT000180 Total	36,508.76	EAS			36,508.76	
IT000181 Total	61,420.23	EAA	61,420.23			
IT000187 Total	67,471.40	EAC		67,471.40		
IT000188 Total	30,288.58	EAA	30,288.58			
IT000189 Total	68,135.57	EAA	68,135.57			
IT000191 Total	148,494.72	EAA	148,494.72			
IT900010 Total	52,692.11	SWE				52,692.11
IT900201 Total	5,579.36	EAA	5,579.36			
IT900302 Total	229.00	EAC		229.00		
Grand Total	658,700.10		449,995.47	78,498.52	77,514.00	52,692.11
	Proportions EAx		74.3%	13.0%	12.8%	

8G-1

74.3% of charges allocated with EAA
13.0% of charges allocated with EAC
12.8% of charges allocated with EAS

WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE DERIVATION OF PROPORTIONS OF EFMS CHARGES ALLOCATED WITH EACH OF THREE EFMS ALLOCATIONS (EAA, EAC, EAS) BASED ON 2007 ACTUALS.

G-1A

ITS Department
Ebus Allocations

EBusiness Allocations				Allocation Basis:		
PEZ 110	PHE	NE	NPNEZZZZ	1,767	10.4%	A-1
PEZ 600	OAH	NE	NPNEZZZZ	119	0.7%	
PEZ 611	OAH	NE	NPNEZZZZ	3,607	21.2%	
PEZ 713	PHE	NE	NPNEZZZZ	1,531	9.0%	A-2
PEZ 730	PHE	NE	NPNEZZZZ	-	0.0%	
PEZ 750	PHE	NE	NPNEZZZZ	6,259	36.8%	
PEZ 750	PHE	NE	NPNEZZZZ	3,725	21.9%	
EBUS Allocations Total				17,008	100.0%	

WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE BASIS FOR EBUS CHARGE ALLOCATIONS WHICH ARE CONSISTENT WITH PRIOR YEAR ALLOCATION BASIS.

G-2

ITS Department
Recommended Software Allocation #2a based on 2005 Actuals - 8 Largest PEZ NE/NS + 2 additional NE Code B

CodeBlock	NARUC	NARUC Description	Allocation base	Proportion

Summary of allocated charges by NARUC

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

Detailed Code Blocks:

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

(b) 702,685

(e) 985,288

XA-2

WORK PAPER DESCRIPTION (G3, G3a-c)

THIS WORKPAPER SHOWS THE BASIS FOR SOFTWARE ALLOCATIONS BASED ON A STUDY OF 2005 ACTUALS.

G-3

ITS Department 2005 PEZ Actuals

*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE #	Net	Proportion	Proprotion subtotal	Re-Proportioned
PEZ	720	PHE	NS	NPCZZZZZ	451	1,010,211	12.3%		30.1%
PEZ	455	OAH	NE	NPDZZZZZ	451	702,685	8.6%		20.9%
PEZ	256	WST	NE	NPIZZZZZ	451	381,825	4.7%		11.4%
PEZ	818	PHE	NE	NPAVP2ZZ	451	381,808	4.7%		11.4%
PEZ	240	WST	NE	NPIZZZZZ	451	278,997	3.4%		8.3%
PEZ	777	PHE	NE	NPAVP2ZZ	451	244,997	3.0%		7.3%
PEZ	112	PHE	NE	NPSZZZZZ	451	180,240	2.2%		5.4%
PEZ	933	PHE	NE	NPHZZZZZ	451	178,243	2.2%	40.9%	5.3%
PEZ	713	PHE	NE	NPSZZZZZ	451	161,612	2.0%		100%
PEZ	110	PHE	NE	NPSZZZZZ	451	158,311	1.9%		
PEZ	842	PHE	NE	NPVZZZZZ	451	150,713	1.8%		
PEZ	242	KST	NE	NPIZZZZZ	451	141,598	1.7%		
PEZ	600	OAH	NE	NPWZZZZZ	451	132,367	1.6%		
PEZ	843	PHE	NE	NPAVP2ZZ	451	132,096	1.6%		
PEZ	750	PHE	NE	NPQCZZZZ	451	128,196	1.6%		
PEZ	876	PHE	NE	NPJZZZZZ	451	126,851	1.5%		
PEZ	611	OAH	NE	NPCZZZZZ	451	124,041	1.5%	15.3%	
PEZ	242	WST	NE	NPIZZZZZ	451	109,700	1.3%		
PEZ	326	OAH	NE	NPRZZZZZ	451	99,243	1.2%		
PEZ	616	OAH	NE	NPCZZZZZ	451	98,826	1.2%		
PEZ	960	PHE	NE	NPNCZZZZ	451	97,398	1.2%		
PEZ	700	PHE	NE	NPASVP7Z	451	97,114	1.2%		
PEZ	795	PHE	NE	NPFZZZZZ	451	95,537	1.2%		
PEZ	600	OAH	NE	NPCZZZZZ	451	90,667	1.1%		
PEZ	201	WST	NE	NPYZZZZZ	451	89,709	1.1%		
PEZ	778	PHE	NE	NPFZZZZZ	451	88,988	1.1%		
PEZ	242	HST	NE	NPIZZZZZ	451	86,996	1.1%	11.6%	
PEZ	750	PHE	NE	NPHZZZZZ	451	83,182	1.0%		
PEZ	931	PHE	NE	NPHZZZZZ	451	81,490	1.0%		
PEZ	807	PHE	NE	NPQCZZZZ	451	80,406	1.0%		
PEZ	420	OAH	NE	NPAVP2ZZ	451	76,593	0.9%		
PEZ	603	OAH	NE	NPWZZZZZ	451	74,552	0.9%		
PEZ	776	PHE	NE	NPFZZZZZ	451	70,453	0.9%		
PEZ	738	PHE	NE	NPNPZZZZ	451	64,563	0.8%		
PEZ	610	OAH	NE	NPCZZZZZ	451	63,548	0.8%		
PEZ	100	PHE	NE	NPSZZZZZ	451	59,961	0.7%		
PEZ	818	PHE	NE	NPAZZZZZ	451	58,329	0.7%		
PEZ	767	PHE	NE	NPFZZZZZ	451	56,762	0.7%		
PEZ	377	OAH	NE	NPRZZZZZ	451	55,628	0.7%		
PEZ	928	PHE	NE	NPNLZZZZ	451	52,044	0.6%		
PEZ	122	PHE	NE	NPIZZZZZ	451	52,032	0.6%		
PEZ	307	OAH	NE	NPAVP2ZZ	451	51,673	0.6%		

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ITS Department 2005 PEZ Actuals

*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE #	Net	Proportion	Proprotion subtotal	Re-Proportioned
PEZ	760	PHE	NE	NPNAZZZZ	451	51,575	0.6%		
PEZ	850	PHE	NE	NPAVP2ZZ	451	51,116	0.6%		
PEZ	750	PHE	NE	NPQEZZZZ	451	50,595	0.6%		
PEZ	805	PHE	NE	NPPZZZZZ	451	50,314	0.6%		
PEZ	456	OAH	NE	NPRZZZZZ	451	50,226	0.6%		
PEZ	700	PHE	NE	NPASVP8Z	451	48,306	0.6%		
PEZ	843	PHE	NE	NPAZZZZZ	451	48,150	0.6%		
PEZ	256	KST	NE	NPIZZZZZ	451	46,141	0.6%		
PEZ	875	HST	NE	NPJZZZZZ	451	45,958	0.6%		
PEZ	826	PHE	NE	NPKZZZZZ	451	45,153	0.6%		
PEZ	700	PHE	NE	NPAPRESI	451	44,380	0.5%		
PEZ	765	PHE	NE	NPFZZZZZ	451	43,922	0.5%		
PEZ	711	PHE	NE	NPASVP7Z	451	43,840	0.5%		
PEZ	951	PHE	NE	NPKZZZZZ	451	43,825	0.5%		
PEZ	753	PHE	NE	NPQEZZZZ	451	42,274	0.5%		
PEZ	710	PHE	NE	NPSZZZZZ	451	41,039	0.5%		
PEZ	736	PHE	NE	NPSZZZZZ	451	39,610	0.5%		
PEZ	817	PHE	NE	NPAZZZZZ	451	38,520	0.5%		
PEZ	875	PHE	NE	NPJZZZZZ	451	38,379	0.5%		
PEZ	701	PHE	NE	NPKZZZZZ	451	35,952	0.4%		
PEZ	722	PHE	NE	NPFZZZZZ	451	34,448	0.4%		
PEZ	966	PHE	NE	NPEZZZZZ	451	33,888	0.4%		
PEZ	700	PHE	NE	NPAVP3ZZ	451	31,754	0.4%		
PEZ	730	PHE	NE	NPASVP7Z	451	30,579	0.4%		
PEZ	950	PHE	NE	NPKZZZZZ	451	30,573	0.4%		
PEZ	220	WST	NE	NPIZZZZZ	451	30,064	0.4%		
PEZ	826	PHE	NE	NPAVP4ZZ	451	30,064	0.4%		
PEZ	932	PHE	NE	NPVZZZZZ	451	28,231	0.3%		
PEZ	836	PHE	NE	NPNAZZZZ	451	27,122	0.3%		
PEZ	827	PHE	NE	NPKZZZZZ	451	26,698	0.3%		
PEZ	775	PHE	NE	NPFZZZZZ	451	25,916	0.3%		
PEZ	779	PHE	NE	NPFZZZZZ	451	23,687	0.3%		
PEZ	320	OAH	NE	NPAVP2ZZ	451	22,996	0.3%		
PEZ	926	PDO	NE	NPDZZZZZ	451	22,839	0.3%		
PEZ	953	PHE	NE	NPFZZZZZ	451	22,371	0.3%		
PEZ	891	PHE	NE	NPKZZZZZ	451	21,296	0.3%		
PEZ	842	PHE	NE	NPAVP2ZZ	451	20,326	0.2%		
PEZ	777	PHE	NE	NPAZZZZZ	451	19,800	0.2%		
PEZ	465	OAH	NE	NPWZZZZZ	451	17,518	0.2%		
PEZ	825	PHE	NE	NPKZZZZZ	451	17,095	0.2%		
PEZ	258	KST	NE	NPAVP2ZZ	451	15,635	0.2%		
PEZ	815	PHE	NE	NPAZZZZZ	451	15,001	0.2%		

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ITS Department 2005 PEZ Actuals

*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE #	Net	Proportion	Proprotion subtotal	Re-Proportioned
PEZ	766	PHE	NE	NPAVP6ZZ	451	13,858	0.2%		
PEZ	700	PHE	NE	NPASVP9Z	451	12,840	0.2%		
PEZ	700	PHE	NE	NPAVP5ZZ	451	12,840	0.2%		
PEZ	807	PHE	NE	NPAVP1ZZ	451	12,840	0.2%		
PEZ	245	KST	NE	NPAVP2ZZ	451	12,342	0.2%		
PEZ	926	PHE	NE	NPNLZZZZ	451	11,483	0.1%		
PEZ	700	PHE	NE	NPAVP7ZZ	451	10,804	0.1%		
PEZ	745	PHE	NE	NPNIZZZZ	451	10,804	0.1%		
PEZ	246	KST	NE	NPAVP2ZZ	451	10,286	0.1%		
PEZ	765	PHE	NE	NPPZZZZZ	451	9,474	0.1%		
PEZ	261	KST	NE	NPAVP2ZZ	451	9,325	0.1%		
PEZ	614	OAH	NE	NPCZZZZZ	451	8,710	0.1%		
PEZ	766	PHE	NE	NPAVP2ZZ	451	7,864	0.1%		
PEZ	212	KST	NE	NPAVP2ZZ	451	7,744	0.1%		
PEZ	720	PHE	NE	NPASVP7Z	451	7,495	0.1%		
PEZ	256	HST	NE	NPIZZZZZ	451	7,438	0.1%		
PEZ	474	OAH	NE	NPAVP2ZZ	451	6,376	0.1%		
PEZ	477	OAH	NE	NPAVP2ZZ	451	6,208	0.1%		
PEZ	376	OAH	NE	NPRZZZZZ	451	5,822	0.1%		
PEZ	765	PHE	NE	NPNAZZZZ	451	5,402	0.1%		
PEZ	463	OAH	NE	NPAVP2ZZ	451	3,995	0.0%		
PEZ	461	OAH	NE	NPAVP2ZZ	451	3,851	0.0%		
PEZ	462	OAH	NE	NPAVP2ZZ	451	3,738	0.0%		
PEZ	343	OAH	NE	NPAVP2ZZ	451	3,678	0.0%		
PEZ	333	OAH	NE	NPAVP2ZZ	451	2,784	0.0%		
PEZ	331	OAH	NE	NPAVP2ZZ	451	2,675	0.0%		
PEZ	486	OAH	NE	NPAVP2ZZ	451	2,048	0.0%		
PEZ	349	OAH	NE	NPAVP2ZZ	451	1,679	0.0%		
PEZ	478	OAH	NE	NPDZZZZZ	451	1,190	0.0%		
PEZ	789	PHE	NE	NPVZZZZZ	451	567	0.0%		
PEZ	965	PHE	NE	NPEZZZZZ	451	350	0.0%		
PEZ	347	OAH	NE	NPDZZZZZ	451	298	0.0%		
PEZ	891	PHE	NE	NPEZZZZZ	451	(7,994)	-0.1%		
PEZ	Total					8,206,175	100.0%		

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Software Workorders

				2009
SWM allocations				
IT900001	462 Development	SW - Lic		11,423
IT900001	501 Development	SW - Main		217,837
IT900003	462 Infra LAN	SW - Lic		127,633
IT900003	501 Infra LAN	SW - Main		421,755
IT900004	462 Dsk Top Bus	SW - Lic		69,243
IT900004	501 Dsk Top Bus	SW - Main	B-3 B-4	412,380
IT900005	462 Dsk Top Tech	SW - Lic		-
IT900005	501 Dsk Top Tech	SW - Main		241,744
IT900006	462 Infra Comm	SW - Lic		40,856
IT900006	501 Infra Comm	SW - Main		-
IT900007	Other	SW - Other ITS	Rounding	-17
				1,542,888

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Note: IT900002 is not allocated with SWM

WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE SOFTWARE-RELATED CHARGES INCLUDED IN THE 2009 BUDGET. THESE CHARGES ARE ALLOCATED TO EXPENSE ONLY CODE BLOCKS.

H

2007 PEZ

*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE	FY07 Act06-07$RA	EFMS	EBUS	SWM	Residual
							(658,700)	(293,077)	(1,798,449)	
PEZ	100	PHE	NE	NPSZZZZZ	451	59,703				59,703
PEZ	102	PHE	NE	NPSZZZZZ	451	0				0
PEZ	110	PHE	NE	NPNEZZZZ	451	0				0
PEZ	110	PHE	NE	NPSZZZZZ	451	187,079		(30,480)		156,599
PEZ	112	PHE	NE	NPSZZZZZ	451	299,455			(97,116)	202,339
PEZ	122	PHE	NE	NPIZZZZZ	451	49,743				49,743
PEZ	201	WST	NE	NPYZZZZZ	451	95,200				95,200
PEZ	211	WST	NC	NPYZZZZZ	451	313,368	(16,468)			296,901
PEZ	211	WST	NE	NPYZZZZZ	451	4,355				4,355
PEZ	212	KST	NE	NPAVP4ZZ	451	9,765				9,765
PEZ	220	WST	NE	NPIZZZZZ	451	33,302				33,302
PEZ	240	WST	NC	NPYZZZZZ	451	100,151				100,151
PEZ	240	WST	NE	NPIZZZZZ	451	427,417			(149,271)	278,146
PEZ	242	HST	NE	NPIZZZZZ	451	100,902				100,902
PEZ	242	KST	NE	NPIZZZZZ	451	167,007				167,007
PEZ	242	WST	NE	NPIZZZZZ	451	127,291				127,291
PEZ	245	KST	NE	NPAVP4ZZ	451	15,603				15,603
PEZ	246	KST	NE	NPAVP4ZZ	451	12,973				12,973
PEZ	256	HST	NE	NPIZZZZZ	451	6,660				6,660
PEZ	256	KST	NE	NPEZZZZZ	451	0				0
PEZ	256	KST	NE	NPIZZZZZ	451	53,283				53,283
PEZ	256	WST	NE	NPEZZZZZ	451	0				0
PEZ	256	WST	NE	NPIZZZZZ	451	512,575			(102,512)	410,063
PEZ	258	KST	NE	NPAVP4ZZ	451	19,740				19,740
PEZ	261	KST	NE	NPAVP4ZZ	451	11,845				11,845
PEZ	307	OAH	NC	NPBZZZZZ	451	709,019	(100,781)			608,238
PEZ	307	OAH	NC	NPEZZZZZ	451	0				0
PEZ	307	OAH	NC	NPYZZZZZ	451	84,411				84,411
PEZ	307	OAH	NE	NPAVP2ZZ	451	33,302				33,302
PEZ	307	OAH	NE	NPBZZZZZ	451	113,393			(102,512)	10,881
PEZ	320	OAH	NE	NPAVP4ZZ	451	29,020				29,020
PEZ	325	OAH	NC	NPRZZZZZ	451	51,912				51,912
PEZ	326	OAH	NE	NPEZZZZZ	451	0				0
PEZ	326	OAH	NE	NPRZZZZZ	451	131,865	(68,505)			63,360
PEZ	331	OAH	NE	NPAVP4ZZ	451	3,386				3,386
PEZ	333	OAH	NC	NPRZZZZZ	451	209,345				209,345
PEZ	333	OAH	NE	NPAVP4ZZ	451	3,496				3,496
PEZ	343	OAH	NE	NPAVP4ZZ	451	4,630				4,630
PEZ	347	OAH	NE	NPDZZZZZ	451	29				29
PEZ	349	OAH	NE	NPAVP4ZZ	451	2,159				2,159
PEZ	375	OAH	NC	NPRZZZZZ	451	166,716				166,716
PEZ	376	OAH	NE	NPRZZZZZ	451	860				860
PEZ	377	OAH	NE	NPRZZZZZ	451	183,963				183,963
PEZ	402	OAH	NC	NPBZZZZZ	451	83,377				83,377
PEZ	408	OAH	NC	NPBZZZZZ	451	489,828	(100,122)			389,706
PEZ	408	OAH	NC	NPEZZZZZ	451	0				0
PEZ	408	OAH	NE	NPBZZZZZ	451	8,057				8,057
PEZ	420	OAH	NE	NPAVP4ZZ	451	96,826				96,826
PEZ	455	OAH	NC	NPBZZZZZ	451	35,367				35,367
PEZ	455	OAH	NC	NPDZZZZZ	451	188,465	(135,034)			53,432
PEZ	455	OAH	NC	NPEZZZZZ	451	0				0
PEZ	455	OAH	NE	NPDZZZZZ	451	1,071,256	(1,317)		(375,876)	694,063
PEZ	455	OAH	NE	NPEZZZZZ	451	0				0
PEZ	456	OAH	NC	NPRZZZZZ	451	160,635				160,635
PEZ	456	OAH	NE	NPEZZZZZ	451	0				0
PEZ	456	OAH	NE	NPRZZZZZ	451	131,865	(65,211)			66,654
PEZ	461	OAH	NE	NPAVP4ZZ	451	4,528				4,528
PEZ	462	OAH	NE	NPAVP4ZZ	451	4,996				4,996
PEZ	463	OAH	NE	NPAVP4ZZ	451	5,129				5,129
PEZ	465	OAH	NE	NPWZZZZZ	451	8,898				8,898
PEZ	474	OAH	NE	NPAVP4ZZ	451	8,083				8,083
PEZ	477	OAH	NE	NPAVP4ZZ	451	7,805				7,805
PEZ	478	OAH	NE	NPDZZZZZ	451	116				116
PEZ	486	OAH	NE	NPAVP4ZZ	451	2,607				2,607
PEZ	600	OAH	NC	NPWZZZZZ	451	436,967				436,967

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*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE	FY07 Act06-07$RA	EFMS	EBUS	SWM	Residual
							(658,700)	(293,077)	(1,798,449)	
PEZ	600	OAH	NE	NPCZZZZZ	451	42,207		(2,052)		40,155
PEZ	600	OAH	NE	NPEZZZZZ	451	0				0
PEZ	600	OAH	NE	NPNEZZZZ	451	0				0
PEZ	600	OAH	NE	NPWZZZZZ	451	302,058	(133,057)			169,001
PEZ	603	OAH	NE	NPWZZZZZ	451	74,261				74,261
PEZ	610	OAH	NE	NPCZZZZZ	451	39,066				39,066
PEZ	611	OAH	NE	NPCZZZZZ	451	170,034		(62,132)		107,902
PEZ	611	OAH	NE	NPNEZZZZ	451	0				0
PEZ	612	OAH	NE	NPAZZZZZ	451	277,202			(269,767)	7,435
PEZ	614	OAH	NE	NPCZZZZZ	451	3,121				3,121
PEZ	616	OAH	NE	NPCZZZZZ	451	58,391				58,391
PEZ	616	OAH	NE	NPEZZZZZ	451	0				0
PEZ	700	OAH	NC	NPRZZZZZ	451	958				958
PEZ	700	PHE	NE	NPAPRESI	451	46,869				46,869
PEZ	700	PHE	NE	NPASVP7Z	451	120,185				120,185
PEZ	700	PHE	NE	NPASVP8Z	451	53,283				53,283
PEZ	700	PHE	NE	NPASVP9Z	451	13,321				13,321
PEZ	700	PHE	NE	NPAVP3ZZ	451	30,474				30,474
PEZ	700	PHE	NE	NPAVP5ZZ	451	13,321				13,321
PEZ	700	PHE	NE	NPAVP7ZZ	451	13,321				13,321
PEZ	701	OAH	NC	NPRZZZZZ	451	33,302				33,302
PEZ	701	PHE	NC	NPKZZZZZ	451	17,583				17,583
PEZ	701	PHE	NE	NPKZZZZZ	451	35,699				35,699
PEZ	710	PHE	NE	NPSZZZZZ	451	39,802				39,802
PEZ	711	PHE	NE	NPASVP7Z	451	47,581				47,581
PEZ	713	PHE	NE	NPEZZZZZ	451	0				0
PEZ	713	PHE	NE	NPNEZZZZ	451	0				0
PEZ	713	PHE	NE	NPSZZZZZ	451	185,266		(26,377)		158,889
PEZ	720	PHE	NS	NPCZZZZZ	451	1,386,990			(269,767)	1,117,223
PEZ	722	PHE	NE	NPFZZZZZ	451	39,962				39,962
PEZ	730	PHE	NE	NPASVP7Z	451	0				0
PEZ	731	PPR	NE	NPASVP7Z	451	34,260				34,260
PEZ	736	PHE	NE	NPSZZZZZ	451	37,599				37,599
PEZ	738	PHE	NE	NPNPZZZZ	451	68,320				68,320
PEZ	745	PHE	NE	NPNIZZZZ	451	13,321				13,321
PEZ	750	PHE	NE	NPHZZZZZ	451	151,384				151,384
PEZ	750	PHE	NE	NPNEZZZZ	451	0				0
PEZ	750	PHE	NE	NPQCZZZZ	451	247,468		(172,036)		75,432
PEZ	750	PHE	NE	NPQEZZZZ	451	48,455				48,455
PEZ	753	PHE	NE	NPQEZZZZ	451	43,418				43,418
PEZ	756	PHE	NE	NPKZZZZZ	451	3,996				3,996
PEZ	760	PHE	NE	NPNAZZZZ	451	81,052				81,052
PEZ	765	PHE	NE	NPFZZZZZ	451	46,622				46,622
PEZ	765	PHE	NE	NPNAZZZZ	451	7,495				7,495
PEZ	765	PHE	NE	NPPZZZZZ	451	6,660				6,660
PEZ	766	PHE	NE	NPAVP4ZZ	451	10,101				10,101
PEZ	766	PHE	NE	NPAVP6ZZ	451	13,321				13,321
PEZ	767	PHE	NE	NPFZZZZZ	451	59,943				59,943
PEZ	775	PHE	NE	NPFZZZZZ	451	18,649				18,649
PEZ	776	PHE	NE	NPFZZZZZ	451	69,663				69,663
PEZ	777	PHE	NE	NPAVP2ZZ	451	134,905			(131,287)	3,618
PEZ	777	PHE	NE	NPAVP4ZZ	451	315,738				315,738
PEZ	777	PHE	NE	NPAZZZZZ	451	20,647				20,647
PEZ	778	PHE	NE	NPFZZZZZ	451	40,179				40,179
PEZ	779	PHE	NE	NPFZZZZZ	451	10,377				10,377
PEZ	789	PHE	NE	NPVZZZZZ	451	0				0
PEZ	795	PHE	NE	NPFZZZZZ	451	100,690				100,690
PEZ	805	PHE	NE	NPPZZZZZ	451	53,283				53,283
PEZ	807	PHE	NE	NPAVP1ZZ	451	13,321				13,321
PEZ	807	PHE	NE	NPQCZZZZ	451	86,584				86,584
PEZ	815	PHE	NE	NPAZZZZZ	451	15,985				15,985
PEZ	817	PHE	NE	NPAZZZZZ	451	39,962				39,962
PEZ	818	PHE	NE	NPAVP2ZZ	451	210,674			(205,023)	5,651
PEZ	818	PHE	NE	NPAVP4ZZ	451	496,419				496,419
PEZ	818	PHE	NE	NPAZZZZZ	451	61,859				61,859

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*RA #	*Act #	*Loc #	*Ind #	*Proj #	*EE	FY07 Act06-07$RA	EFMS	EBUS	SWM	Residual
							(658,700)	(293,077)	(1,798,449)	
PEZ	825	PHE	NE	NPKZZZZZ	451	13,987				13,987
PEZ	826	PHE	NE	NPAVP4ZZ	451	33,302				33,302
PEZ	826	PHE	NE	NPKZZZZZ	451	43,958				43,958
PEZ	827	PHE	NE	NPKZZZZZ	451	26,641				26,641
PEZ	842	PHE	NE	NPAVP4ZZ	451	25,647				25,647
PEZ	842	PHE	NE	NPVZZZZZ	451	153,188				153,188
PEZ	843	PHE	NE	NPAVP4ZZ	451	166,448				166,448
PEZ	843	PHE	NE	NPAZZZZZ	451	49,953				49,953
PEZ	850	PHE	NE	NPAVP4ZZ	451	64,373				64,373
PEZ	853	PHE	NC	NPVZZZZZ	451	244,609				244,609
PEZ	875	HST	NE	NPJZZZZZ	451	46,622				46,622
PEZ	876	PHE	NE	NPJZZZZZ	451	168,970				168,970
PEZ	891	PHE	NE	NPEZZZZZ	451	0				0
PEZ	891	PHE	NE	NPKZZZZZ	451	19,981				19,981
PEZ	907	OAH	NC	NPBZZZZZ	451	41,632	(17,785)			23,847
PEZ	907	PDO	NE	NPBZZZZZ	451	1,089				1,089
PEZ	907	PHE	NE	NPKZZZZZ	451	0				0
PEZ	916	PHE	NC	NPRZZZZZ	451	46,622				46,622
PEZ	926	PDO	NE	NPDZZZZZ	451	20,050				20,050
PEZ	926	PDO	NE	NPWZZZZZ	451	0				0
PEZ	926	PHE	NE	NPEZZZZZ	451	0				0
PEZ	926	PHE	NE	NPNLZZZZ	451	27,946	(15,809)			12,137
PEZ	928	PHE	NE	NPNLZZZZ	451	51,413				51,413
PEZ	931	PHE	NE	NPEZZZZZ	451	0				0
PEZ	931	PHE	NE	NPHZZZZZ	451	93,533	(4,611)			88,922
PEZ	932	PHE	NE	NPVZZZZZ	451	27,599				27,599
PEZ	933	PHE	NE	NPHZZZZZ	451	287,924			(95,318)	192,606
PEZ	940	PHE	NC	NPVZZZZZ	451	60,901				60,901
PEZ	950	PHE	NE	NPHZZZZZ	451	0				0
PEZ	950	PHE	NE	NPKZZZZZ	451	33,302				33,302
PEZ	951	PHE	NE	NPKZZZZZ	451	40,967				40,967
PEZ	953	PHE	NE	NPFZZZZZ	451	19,981				19,981
PEZ	960	PHE	NE	NPNCZZZZ	451	103,026				103,026
PEZ	965	PHE	NE	NPEZZZZZ	451	222				222
PEZ	966	PHE	NE	NPEZZZZZ	451	33,302				33,302
PEZ	967	PHE	NE	NPEZZZZZ	451	0				0
						14,573,820	(658,700)	(293,077)	(1,798,449)	11,883,297

WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE DERIVATION OF "RESIDUAL" PEZ CHARGES BASED ON 2007 ACTUALS. THESE RESIDUAL CHARGES ARE USED TO ALLOCATE 2009 PEZ (CLEARING ACCOUNT) CHARGES.

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NON-PROJECT NON-LABOR EXPENSE DETAILS

	ITS WORKORDER #	DESCRIPTION	RESPONSIBLE DIRECTOR	
J1	IT000003	HEI Internet Charges	McCarter	
J2	IT000004	Data Center	McCarter	
J4	IT000005	Infrastructure LAN	McCarter	
J8	IT000006	Development	Eber	
J9	IT000007	Desktop Business	McCarter	
J22	IT000008	Desktop Technical	McCarter	
J25	IT000009	PABX Trunk	McCarter	
J29	IT000010	Long Distance	McCarter	
J31	IT000011	Infrastructure Com	McCarter	
J32	IT000012	Department Misc	Stuller	
J41	IT000014	Consultants-Dev Svc	Eber	
J46	IT000184	Telecom Equip Main	McCarter	
J47	IT000185	Training/Travel	Stuller	
J48	IT000193	Copiers/Printers/Fax	Harada	
J77	IT000195	Interisland Circuit Charges	McCarter	
J78	IT000279	Dig Prnt, Wrd Proc, Rec	Harada	-DIRECT CHARGE TO EXPENSE
J96	IT000289	Mail Proc/Mach Room	Harada	-DIRECT CHARGE TO EXPENSE
J99	IT900001	Development - SW	Eber	
J101	IT900002	Data Center - SW	McCarter	
J103	IT900003	Infrastructure LAN - SW	McCarter	
J106	IT900004	Desktop Business - SW	McCarter	
J107	IT900005	Desktop Technical - SW	McCarter	
J108	IT900006	Infrastructure Com - SW	McCarter	
J109	IT900011	Computer Security Analysis	Benn	
J110	IT900012	Outsource Sup - Mainframe	McCarter	
J111	IT900013	Outsource Sup - Net Admin	McCarter	

WORKPAPER DESCRIPTION

THESE WORKPAPERS SHOW THE BASIS FOR 2009 BUDGET NON-PROJECT NON-LABOR ESTIMATES WHICH ARE CHARGED EITHER TO THE ITS CLEARING ACCOUNT OF DIRECTLY TO EXPENSE. ESTIMATES ARE GROUPED BY ITS WORKORDERS.
THE CHARGES ARE BASED ON 2007 ACTUALS WITH ADJUSTMENTS FOR 2009 INDICATED AT THE END OF EACH WORKORDER.

J

Hawaiian Electric Company
ITS Department
IT000003

HEI Internet Charges
McCarter

FULL_PERIOD	ACCOUNT_CODE	exp_acct	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200701	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200702	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200703	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200704	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200705	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200706	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200706	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200708	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200708	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200710	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200711	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
200712	PEI895PHENCNPEZZZZZ501	501	IT000003	SPRINT HAWAII	2006 SPRINT EMAIL PROTECTION SERVICES	1,951.25
		501 Total				23,415.00
200701	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	4,800.78
200702	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	2,636.55
200703	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	2,637.14
200704	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	14,645.41
200705	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	10,360.86
200706	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	4,242.57
200707	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	3,469.82
200708	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	4,365.52
200709	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	1,563.12
200710	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	4,500.81
200711	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	4,288.46
200712	PEI895PHENCNPEZZZZZ550	550	IT000003		INTERNET ACCESS CHGS	3,415.39
		550 Total				60,926.43
		Grand Total		**IT000003 Total**		84,341.43

Adjustments for 2009 Estimates:

No adjustments required

0

Total 2009 estimates 84,341.43

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FULL PE RIOD	ACCOUNT CODE	exp ele	WORK O RDER	SUPPLIER NAME	desc	TRAN AMO UNT
200712	PEI895PHENCNPEZZZZZ201	201	IT000004	BOSS COMMUNICATION TECHNOLOGIES	SYBTU1-PLP Symmetra Battery Module	6,512.12
200707	PEI895PHENCNPEZZZZZ201	201	IT000004	ROSETTA TECHNOLOGIESCORP.	MICR toner cartridge for IBM 1332-35	(19.80)
200707	PEI895PHENCNPEZZZZZ201	201	IT000004	ROSETTA TECHNOLOGIESCORP.	MICR toner cartridge for IBM 1332-35	3,769.56
200707	PEI895PHENCNPEZZZZZ201	201	IT000004		ON COST CHG TO: 129939/001	474.21
200712	PEI895PHENCNPEZZZZZ201	201	IT000004		ON COST CHG TO: 135178/001	1,151.99
		201 Total				11,888.08
200701	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#001020	189.17
200701	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	THE RELIZON COMPANY	432.64
200701	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	THE RELIZON COMPANY	432.64
200701	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#286882	241.85
200701	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#287700	296.21
200702	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	THE RELIZON COMPANY	432.64
200702	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#387148	326.08
200702	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#526000	149.11
200702	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200702	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#990200	367.79
200702	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#649243	157.07
200702	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#830571	150.47
200702	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#673726	52.35
200703	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200703	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200703	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#144723	142.94
200703	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#165342	3.95
200703	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#352665	100.31
200703	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200703	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200704	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#664886	226.50
200704	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#681191	26.11
200704	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#878618	174.87
200704	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200705	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#203651	174.87
200705	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200705	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200705	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#514997	200.63
200705	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#557353	200.63
200706	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200706	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200706	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72
200707	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#192813	252.93
200707	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT IN 387504	200.63

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FULL PERIOD	ACCOUNT CODE	exp. a/c	WORK ORDER	SUPPLIER NAME	desc	TRAN AMOUNT	
200707	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT IN 504576	272.36	
200708	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72	
200708	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72	
200708	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72	
200708	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT IN 094624	206.18	
200709	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT IN 333216	380.64	
200709	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT IN 505622	241.47	
200709	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	434.72	
200709	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	450.92	
200709	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	450.92	
200710	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT IN 803722	197.70	
200711	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	450.92	
200711	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	450.92	
200711	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	450.92	
200711	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	450.92	
200711	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	450.92	
200711	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	450.92	
200711	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	WORKFLOWONE OH	631.70	
200712	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#053985	299.96	
200712	PEI895PHENCNPEZZZZZ205	205	IT000004	BANK ONE	OFFICEMAX CT*IN#115719	249.74	
		205 Total				17,540.30	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	BOSS COMMUNICATION TECHNOLOGIES	SYMMETRA PX ON-SITE SERVICE (4) UPS	2,591.62	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	BOSS COMMUNICATION TECHNOLOGIES	SYMMETRA PX ON-SITE SERVICE (4) UPS	2,591.62	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	BOSS COMMUNICATION TECHNOLOGIES	SYMMETRA PX ON-SITE SERVICE (4) UPS	2,591.62	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	BOSS COMMUNICATION TECHNOLOGIES	SYMMETRA PX ON-SITE SERVICE (4) UPS	2,068.06	
200712	PEI895PHENCNPEZZZZZ501	501	IT000004	C. INO DESIGN	SERVICE: NEGATIVE CREATION for 2006-2	(0.01)	
200712	PEI895PHENCNPEZZZZZ501	501	IT000004	C. INO DESIGN	SERVICE: NEGATIVE CREATION for 2006-2	0.01	
200711	PEI895PHENCNPEZZZZZ501	501	IT000004	CA, INC.	57 CA TRAINING UNITS GOOD THRU 10/31	34,845.53	
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	TELOS CORPORATION	LABOR TO INSTALL/SET-UP CAMERA SYS	4,466.04	
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	HAWAII ENERGY SYSTEMS, LLC	ALERTON EMCS-DDC SYSTEMS	754.00	
200705	PEI895PHENCNPEZZZZZ501	501	IT000004		BOSS COMMUNICATION TECHNOLOGIES	3,969.76	
200706	PED895PHENCNPEZZZZZ501	501	IT000004		BOSS CUMMUNICATION TECONOLOGIES	3,969.76	57,848.01
200701	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	1,039.60	
200701	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2006 IBM Hardware Maintenance for	1,675.28	
200702	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	3,147.47	
200702	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	26,073.57	
200702	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	5,079.51	
200702	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	IBM HARDWARE MAINTENANCE THRU 12/	4,691.63	
200702	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	IBM HARDWARE MAINTENANCE THRU 12/	6,717.21	

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FULL PERIOD	ACCOUNT CODE	exp. a/c	WORK ORDER	SUPPLIER NAME	detail	TRAN AMOUNT	
200703	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	2,041.89	
200703	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	6,294.41	
200704	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	7,216.69	
200704	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	2,041.89	
200704	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	2,787.06	
200704	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	26,073.57	
200704	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	IBM HARDWARE MAINTENANCE THRU 12/	4,691.63	
200705	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	5,503.52	
200705	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	5,977.28	
200706	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	2,729.24	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	IBM HARDWARE MAINTENANCE THRU 12/	4,656.47	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	2,787.07	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	22,154.65	
200709	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	2,041.89	
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	2,787.07	
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 (2H) IBM Hardware Maintenance for	23,017.57	
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	IBM HARDWARE MAINTENANCE THRU 12/	4,656.47	
200711	PEI895PHENCNPEZZZZZ501	501	IT000004	INTERNATIONAL BUSINESS	2007 IBM Hardware Maintenance for	2,041.89	
200706	PEI895PHENCNPEZZZZZ501	501	IT000004		51D IBM	(192.25)	
200701	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	2006/2007	729.16	178,461.44
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	ROSETTA TECHNOLOGIESCORP.	RENEW MAINT. ON (2) M1322-35NBD PRIN	933.33	933.33
200701	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200702	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200703	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200704	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200705	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200706	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200708	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200709	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200711	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	
200712	PEI895PHENCNPEZZZZZ501	501	IT000004	IBM CORPORATION	IBM - IT RECOVERY SERVICES (2007)	4,897.00	58,764.00
200703	PEI895PHENCNPEZZZZZ570	570	IT000004	CIT SYSTEMS LEASING	GATX PRINTER EQUIPMENT LEASE ORDE	2,315.00	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	6,450.57	
200707	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	3,918.92	
200708	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	6,866.03	
200708	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	3,662.59	

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FULL PE RIOD	ACCOUNT CODE	exp ele	WORK O RDER	SUPPLIER NAME	desc	TRAN AMO UNT	
200709	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	6,802.97	
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	6,420.25	
200710	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	4,054.16	
200711	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	7,707.08	
200712	PEI895PHENCNPEZZZZZ501	501	IT000004	INFOPRINT SOLUTIONS COMPANY, LLC	MAINT/USAGE CHARGES (2) IBM2785 PRI	6,614.34	54,811.91
		501 Total				350,818.69	350,818.69
200701	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	SHARK	4,587.34	
200701	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	SHARK	229.37	
200701	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	SHARK	206.43	
200701	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	SHARK	4,587.34	
200702	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200702	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200703	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200703	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200704	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200704	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200705	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200705	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200706	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200706	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200707	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200707	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200708	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200708	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200709	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200709	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200710	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200710	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200711	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200711	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	
200712	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	206.43	
200712	PEI895PHENCNPEZZZZZ570	570	IT000004	CALIFORNIA FIRST LEASING CORP	ENTERPRISE STORAGE SERVER (IBM SH	4,587.34	62,341.95
		570 Total				62,341.95	
		Grand Total		**IT000004 Total**		442,589.02	

Adjustments for 2009 Estimates:

1) IBM - IT recovery services	Covering both mainframe and UNIX DR (est)	70,000
2) CA Training	Less training each year	(30,000)
3) InfoPrint printer charges adjustment.	$54,812 (July-Dec 2007 charges) x 2 (full year impact) x 5/12 (Jan-May coverage) = $45,676.	(9,136)

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FULL_PERIOD	ACCOUNT_CODE	EXP_ELE	WORK_ORDER	SUPPLIER_NAME	Memo	TRAN_AMOUNT
	$45,676 - $54,812 (included in 2007 actuals) = $9,136					
	4) Eliminate fourth quarter IBM Hardware Maintenance $178K (2007 annual expense) x 1/4					(44,500)
	5) Mainframe disposal costs					30,000
						16,364
Total 2009 estimates						458,953

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FULL_PERIOD	ACCOUNT_CODE	exp_alle	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200703	PEI896PHENCNPEZZZZZ201	201	IT000005	BOSS COMMUNICATION TECHNOLOG	Green 50ft CAT5e patch cables (flexible)	190.24
200703	PEI896PHENCNPEZZZZZ201	201	IT000005	BOSS COMMUNICATION TECHNOLOG	Blue 10ft CAT5e patch cables (flexible)	207.07
200703	PEI896PHENCNPEZZZZZ201	201	IT000005	BOSS COMMUNICATION TECHNOLOG	Orange 25ft CAT5e patch cables (flexible	158.53
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	GRAYBAR ELECTRIC CO INC	BRADY Ribbons	46.39
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	GRAYBAR ELECTRIC CO INC	BRADY Labels	282.72
200712	PEI896PHENCNPEZZZZZ201	201	IT000005	GRAYBAR ELECTRIC CO INC	Yellow 2x2 VT Slotted Duct	128.67
200701	PEI896PHENCNPEZZZZZ201	201	IT000005	INSIGHT DIRECT, INC.	Kingston memory - 512 MB - DIMM 240-pin	149.93
200702	PEI896PHENCNPEZZZZZ201	201	IT000005	INSIGHT DIRECT, INC.	FUJIFILM DLTtape IV - DLT x 1 - 40 GB -	5,605.38
200705	PEI896PHENCNPEZZZZZ201	201	IT000005	INSIGHT DIRECT, INC.	Fujifilm DLTtape IV	6,270.00
200706	PEI896PHENCNPEZZZZZ201	201	IT000005	INSIGHT DIRECT, INC.	Sony SDX 1-25C - AIT 1 - 25 GB	416.85
200707	PEI896PHENCNPEZZZZZ201	201	IT000005	INSIGHT DIRECT, INC.	FUJIFILM DLTtape IV - DLT x 1 - 40GB	6,685.91
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	INSIGHT DIRECT, INC.	Kingston memory-1 GB-SO DIMM-200 pin	228.56
200710	PEI896PHENCNPEZZZZZ201	201	IT000005	INSIGHT DIRECT, INC.	FUJIFILM DLTtape IV-DLT x 1-40GB storage	6,701.44
200711	PEI896PHENCNPEZZZZZ201	201	IT000005	INSIGHT DIRECT, INC.	IBM 3590 Cleaning Cartridge-1 x Magstar	655.59
200704	PEI896PHENCNPEZZZZZ201	201	IT000005	PROGRESSIVE COMMUNICATIONS	Avaya IP Phone 4621D01A-2001	4,146.52
200704	PEI896PHENCNPEZZZZZ201	201	IT000005	PROGRESSIVE COMMUNICATIONS	Avaya IP Phone 4621D01A-2001	2,591.57
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	PACIFIC WIRELESS COMMUNICATION	WCS-APLOC-100 Option of WCS-Std-K9	5,086.08
200709	PEI896PHENCNPEZZZZZ201	201	IT000005	PACIFIC WIRELESS COMMUNICATION	AIR-AP1010-B-K9 1000 Series 802.11a/b/g	15,241.27
200709	PEI896PHENCNPEZZZZZ201	201	IT000005	PACIFIC WIRELESS COMMUNICATION	AIR-AP1010-B-K9 1000 Series 802.11a/b/g	1,693.47
200709	PEI896PHENCNPEZZZZZ201	201	IT000005	PACIFIC WIRELESS COMMUNICATION	AIR-WLC4402-50-K9 4400 Series WLAN	11,305.85
200701	PEI896PHENCNPEZZZZZ201	201	IT000005	CDW DIRECT, LLC	SECURE SAFEWORD 5U TOKEN PACK	412.78
200706	PEI896PHENCNPEZZZZZ201	201	IT000005	CDW DIRECT, LLC	SECURE SAFEWORD REMOTEACCESS-20U TO	1,514.21
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	CDW DIRECT, LLC	FUJI 1PK DLT CLEANING CARTRIDGE	261.25
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	CDW DIRECT, LLC	LOGITECH DESKTOP MICROPHONE	10.19
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	CDW DIRECT, LLC	SECURE SAFEWORD 5User TOKEN Pack	1,860.10
200711	PEI896PHENCNPEZZZZZ201	201	IT000005	CDW DIRECT, LLC	SECURE SAFEWORD 5User TOKEN Pack	1,860.10
200712	PEI896PHENCNPEZZZZZ201	201	IT000005	CDW DIRECT, LLC	SAFEWORD REMOTEACES-100U TOKEN PK	18,564.43
200701	PEI896PHENCNPEZZZZZ201	201	IT000005	AT & T CONNECTIVITY SOLUTIONS	Cisco ASA 5520 Appliance w/SW HA,4GE+IFE	5,072.03
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	AT & T CONNECTIVITY SOLUTIONS	Cisco Stackwise 3M Stacking Cable	(0.87)
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	AT & T CONNECTIVITY SOLUTIONS	Cisco Stackwise 3M Stacking Cable	127.75
200710	PEI896PHENCNPEZZZZZ201	201	IT000005	AT & T CONNECTIVITY SOLUTIONS	CISCO 10BASE-T SFP	252.72
200701	PEI896PHENCNPEZZZZZ201	201	IT000005	CORESYSTEMS HAWAII - A DIVISION	HP 2GB Reg PC2-3200 (2x1GB)	294.77
200708	PEI896PHENCNPEZZZZZ201	201	IT000005	CORESYSTEMS HAWAII - A DIVISION	Additional Option: Advanced Reporting	1,510.97
200703	PEI896PHENCNPEZZZZZ201	201	IT000005	OFFICEMAX CONTRACT, INC. DBA	Kingston DataTraveler Elite-Privacy Edn	68.06
200704	PEI896PHENCNPEZZZZZ201	201	IT000005	OFFICEMAX CONTRACT, INC. DBA	Kingston DTSP/1GB flash memory	265.96
200710	PEI896PHENCNPEZZZZZ201	201	IT000005	WAREFORCE CORP.	APC RBC7 replacment battery pack	1,326.36
200701	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 121022/001	32.25
200701	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 120329/001	554.88

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FULL_PERIOD	ACCOUNT_CODE	sub_sys	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200701	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 121662/002	16.40
200701	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 122292/004	45.16
200702	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 123878/001	675.45
200703	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 123361/001	19.10
200703	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 123361/002	22.92
200703	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 123361/003	24.95
200703	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 123882/004	8.20
200703	PEI896PHENCNPEZZZZZ201	201	IT000005		SECURE SAFEWORD USER TOKEN (5)	(457.94)
200703	PEI896PHENCNPEZZZZZ201	201	IT000005		SECURE SAFEWORD USER TOKEN (2)	183.18
200704	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 125550/001	33.46
200704	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 125893/002	326.02
200704	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 125893/003	521.63
200705	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 127039/001	788.77
200706	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 128477/001	190.49
200706	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 129264/001	52.44
200707	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 130575/001	841.09
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 128429/003	240.40
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 131025/001	44.98
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 131025/002	7.38
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 131752/002	1.62
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 131775/007	36.36
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 129880/003	809.20
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 129871/002	20.33
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 131765/001	41.56
200708	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 131675/001	295.94
200709	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 129880/001	2,424.89
200709	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 129880/002	1,798.76
200709	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 129880/001	269.43
200710	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 133559/001	42.61
200710	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 134103/002	223.62
200710	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 134106/001	1,129.86
200711	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 134101/001	329.05
200711	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 134967/001	115.97
200712	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 135592/001	22.76
200712	PEI896PHENCNPEZZZZZ201	201	IT000005		ON COST CHG TO: 136429/001	3,284.05
		201 Total				116,210.07
200702	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	IC SUPPLY	107.21
200702	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	BORDERS BOOKS 01000967	222.93

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FULL_PERIOD	ACCOUNT_CODE	exp_cls	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200704	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	BORDERS BOOKS 01000967	125.63
200705	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	BA PRODUCTS COMPANY, L	215.59
200706	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	IC SUPPLY	31.41
200706	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	EDP PRODUCTS CO INC	795.81
200707	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	GRAYBAR ELECTRIC	14.25
200707	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	GRAYBAR ELECTRIC	14.67
200708	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	COMMUNICATION CONSULTI	311.31
200709	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	IC SUPPLY	149.53
200711	PEI896PHENCNPEZZZZZ205	205	IT000005	BANK ONE	BORDERS BOOKS 01000967	188.45
200706	PEI896PHENCNPEZZZZZ205	205	IT000005		IC SUPPLY PROCARD 4/25- 5/8/07	109.84
200706	PEI896PHENCNPEZZZZZ205	205	IT000005		GRAYBAR PROCARD 4/25 - 5/8/07	21.57
200707	PEI896PHENCNPEZZZZZ205	205	IT000005		BA PRODUCTS CO/2000 ' CAT5 CBL, BLUE	(215.59)
		205 Total				2,092.61
200711	PEI896PHENCNPEZZZZZ461	461	IT000005	MICROSOFT SERVICES	ASSIST HECO WITH CREATION OF AN INFOPAT	36,039.96
200712	PEI896PHENCNPEZZZZZ461	461	IT000005	VERNON W MORIOKA	V.MORIOKA - 3/1-9/30/07 CONSULTING SVCS	21,780.10
200707	PEI896PHENCNPEZZZZZ461	461	IT000005	NETENTERPRISE, INC.	CONTRACT NETWK SECURITY ANALYST (R.CH	7,958.11
200712	PEI896PHENCNPEZZZZZ461	461	IT000005	SECURE TECHNOLOGY HAWAII, INC.	ASSIST HECO WITH UPGRADING WEBSENSE S	9,218.84
200704	PEI896PHENCNPEZZZZZ461	461	IT000005	PEPPERWEED CONSULTING, LLC	PEPPERWEED CONSULTING- MONITORING SY	8,605.67
200707	PEI896PHENCNPEZZZZZ461	461	IT000005	PEPPERWEED CONSULTING, LLC	PEPPERWEED CONSULTING- MONITORING SY	5,985.00
200707	PEI896PHENCNPEZZZZZ461	461	IT000005	ACCUVANT INC.	ACCUVANT -EXTERNAL IP WEB SCAN, PER HE	562.50
200707	PEI896PHENCNPEZZZZZ461	461	IT000005	ACCUVANT INC.	ACCUVANT -EXTERNAL IP WEB SCAN, PER HE	12,500.00
200701	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	8,614.29
200702	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	8,614.29
200703	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	8,614.29
200704	PEI896PHENCNPEZZZZZ461	461	IT000005		to adj amort for ppd MS Prem Sup fees	821.19
200704	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
200705	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
200706	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
200707	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
200708	PEI896PHENCNPEZZZZZ461	461	IT000005		NETENTERPRISE, INC INV#0100886-IN	(7,958.11)
200708	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
200709	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
200710	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
200711	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
200712	PEI896PHENCNPEZZZZZ461	461	IT000005		To rcd ppd MicrsftPrem Supp Svc Agree Y2	9,435.48
		461 Total				206,275.45
200712	PEI896PHENCNPEZZZZZ462	462	IT000005	BANK ONE	FOXIT SOFTWARE COMPANY	589.97
		462 Total				589.97

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FULL_PERIOD	ACCOUNT_CODE	exp_ele	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200707	PEI896PHENCNPEZZZZZ501	501	IT000005	BOSS COMMUNICATION TECHNOLOG	RACK PDU METERED & POWER WHIPS	3,541.38
200711	PEI896PHENCNPEZZZZZ501	501	IT000005	BOSS COMMUNICATION TECHNOLOG	WARD AVE. DATA CENTER ELECTRICAL WORK	1,874.34
200701	PEI896PHENCNPEZZZZZ501	501	IT000005	INSIGHT DIRECT, INC.	HP HARDWARE MAINTENANCE	3,801.20
200701	PEI896PHENCNPEZZZZZ501	501	IT000005	INSIGHT DIRECT, INC.	HP HARDWARE MAINTENANCE	7,684.30
200709	PEI896PHENCNPEZZZZZ501	501	IT000005	INSIGHT DIRECT, INC.	CANCELLATION OF MAINT ON 3 SERVERS	(1,007.70)
200710	PEI896PHENCNPEZZZZZ501	501	IT000005	INSIGHT DIRECT, INC.	CANCELLATION OF MAINT EFF 8/1/07	(168.30)
200711	PEI896PHENCNPEZZZZZ501	501	IT000005	INSIGHT DIRECT, INC.	HP HARDWARE DAY ONE ONSITE SUPPORT	94,462.01
200701	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	SVC PD 02/01/07 - 02/28/07	100.38
200703	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	SVC PD 03/01/07 - 03/31/07	100.38
200703	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	SVC PD 01/01/07 - 01/31/07	100.38
200703	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	SVC PD 04/01/07 - 04/30/07	100.38
200704	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	SVC PD 5/1/07 - 5/31/07	100.38
200705	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	CHARGES FOR 04/2007	97.47
200707	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	97.47
200709	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	329.80
200709	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	215.14
200709	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	100.38
200710	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGE	210.14
200711	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	ITS	210.14
200711	PEI896PHENCNPEZZZZZ501	501	IT000005	TIME WARNER ENTERTAINMENT CO	ITS	100.38
200702	PEI896PHENCNPEZZZZZ501	501	IT000005	VERNON W MORIOKA	VERNON W. MORIOKA	9,424.08
200704	PEI896PHENCNPEZZZZZ501	501	IT000005	VERNON W MORIOKA	VERNON W. MORIOKA	3,908.90
200702	PEI896PHENCNPEZZZZZ501	501	IT000005	AT & T CONNECTIVITY SOLUTIONS	SMARTNET COVERAGE: 3 YRS	2,662.95
200707	PEI896PHENCNPEZZZZZ501	501	IT000005	AT & T CONNECTIVITY SOLUTIONS	SMARTNET 8X5XNBD(SNT) ADDITIONS	1,579.00
200708	PEI896PHENCNPEZZZZZ501	501	IT000005	AT & T CONNECTIVITY SOLUTIONS	Smartnet 8x5xNBD Catalyst 3750 24 10/	592.36
200706	PEI896PHENCNPEZZZZZ501	501	IT000005	AT & T PROFESSIONAL SERVICES	INSTALLATN/CONSULTG FOR NEW MIDS SENS	12,479.99
200706	PEI896PHENCNPEZZZZZ501	501	IT000005	AT & T PROFESSIONAL SERVICES	MIDS SERVICE FEES @ $2500/MO PER SENSOR	8,406.67
200708	PEI896PHENCNPEZZZZZ501	501	IT000005	AT & T PROFESSIONAL SERVICES	MIDS SERVICE FEES 2/1/07 TO 6/31/07	15,600.00
200711	PEI896PHENCNPEZZZZZ501	501	IT000005	AT & T PROFESSIONAL SERVICES	MIDS SERVICE FEES 7/1/07 TO 3/1/08	23,400.00
200708	PEI896PHENCNPEZZZZZ501	501	IT000005	CORESYSTEMS HAWAII - A DIVISION	1 Year Aventail Platinum Support	12,413.78
200708	PEI896PHENCNPEZZZZZ501	501	IT000005	CORESYSTEMS HAWAII - A DIVISION	Aventail Customer Training	2,094.28
200709	PEI896PHENCNPEZZZZZ501	501	IT000005	CORESYSTEMS HAWAII - A DIVISION	HP 3y Support Plus 24 Service	1,528.83
200709	PEI896PHENCNPEZZZZZ501	501	IT000005	CORESYSTEMS HAWAII - A DIVISION	HP 3y Proactive 24 Service	1,313.53
200712	PEI896PHENCNPEZZZZZ501	501	IT000005	CORESYSTEMS HAWAII - A DIVISION	EVA FC 146GB/300GB HDD Support	34,838.19
200712	PEI896PHENCNPEZZZZZ501	501	IT000005	CORESYSTEMS HAWAII - A DIVISION	M5314A FC Drive Enclosure Support	2,144.53
200704	PEI896PHENCNPEZZZZZ501	501	IT000005	SCRIPTLOGIC CORPORATION	RENEW SECURITY EXPLORER MAINTENANCE	24.89
200704	PEI896PHENCNPEZZZZZ501	501	IT000005	SCRIPTLOGIC CORPORATION	RENEW SECURITY EXPLORER MAINTENANCE	553.08
200704	PEI896PHENCNPEZZZZZ501	501	IT000005	SCRIPTLOGIC CORPORATION	RENEW ENTERPRISE SECURITY REPORTER	21.32

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FULL_PERIOD	ACCOUNT_CODE	acct	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200704	PEI896PHENCNPEZZZZZ501	501	IT000005	SCRIPTLOGIC CORPORATION	RENEW ENTERPRISE SECURITY REPORTER	473.74
200706	PEI896PHENCNPEZZZZZ501	501	IT000005	MRV COMMUNICATIONS, INC	REPAIR TWO (2) NBASE FIBER MODULES	46.89
200706	PEI896PHENCNPEZZZZZ501	501	IT000005	MRV COMMUNICATIONS, INC	REPAIR TWO (2) NBASE FIBER MODULES	1,042.00
200701	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200702	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200703	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200703	PEI896PHENCNPEZZZZZ501	501	IT000005		HP TRAINING CLSSES	2,083.43
200703	PEI896PHENCNPEZZZZZ501	501	IT000005		HP 3Y SUPPORT PLUS F24	11,080.49
200703	PEI896PHENCNPEZZZZZ501	501	IT000005		HP TRAINING CLASSES	9,375.39
200703	PEI896PHENCNPEZZZZZ501	501	IT000005		HP 3Y SUPPORT PLUS F24	2,306.35
200703	PEI896PHENCNPEZZZZZ501	501	IT000005		HP TRAINING CLASSES	9,375.38
200703	PEI896PHENCNPEZZZZZ501	501	IT000005		HP 3 Y SUPPORT PLUS 24	2,306.35
200703	PEI896PHENCNPEZZZZZ501	501	IT000005		CISCO BLADE SWITCH	1,806.77
200704	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200705	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200706	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200707	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200708	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200709	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200710	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200711	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
200712	PEI896PHENCNPEZZZZZ501	501	IT000005		Amortize Cisco Smartnet mtce charges	9,257.02
		501 Total				396,017.46
200701	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHRG	16,914.14
200701	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	CHARGES FOR CURRENT MONTH	16,914.14
200703	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	CURRENT MONTH CHARGES	16,914.14
200705	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	SVC CHRGS FOR MARCH 2007	16,914.14
200705	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	SVC CHRGS FOR APRIL 2007	16,914.14
200706	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	16,914.14
200707	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	7,267.50
200707	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	3,242.50
200707	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	4,025.00
200707	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	869.92
200707	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	1,424.00
200707	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	85.22
200708	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	16,914.14
200709	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	16,910.94
200710	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	16,910.94

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FULL_PERIOD	ACCOUNT_CODE	exp_ele	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200710	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	OCTOBER CHARGES	16,910.94
200711	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	DATA	16,910.94
200712	PEI896PHENCNPEZZZZZ570	570	IT000005	TIME WARNER TELECOM OF HAWAII	CURRENT MONTH CHARGES	16,910.94
200701	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	LOCAL/INTNT CHGS 9/10-10/9/06	912.03
200701	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	LOCAL/INTRNT CHG 11/10-12/9/06	508.42
200701	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	MONTHLY CHRG	605.05
200701	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SVC PD 12/10/06 - 01/09/07	321.36
200703	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SVC PD 02/10/07 - 03/09/07	1,278.17
200704	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SVC PD 03/10/07 - 04/09/07	494.07
200704	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SVC PD 4/10/07 - 5/9/07	495.63
200706	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SERVICE PERIOD 5/10/07-6/9/07	495.63
200706	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SERVICE PERIOD 6/10/07-7/9/07	495.63
200707	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SERVICE PERIOD 7/10/07-8/9/07	495.33
200708	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SERVICE PERIOD 8/10/07-9/9/07	495.33
200709	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SERV PD 9/10/07-10/9/07	495.33
200710	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SERVICE PERIOD 10/10-11/09	495.09
200711	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SERVICE PERIOD 11/10-12/09	495.09
200712	PEI896PHENCNPEZZZZZ570	570	IT000005	HAWAIIAN TELCOM	SERVICE PERIOD 12/10-01/09/08	495.09
		570 Total				228,445.07
		Grand Total	**IT000005 Total**			949,630.63

Adjustments for 2009 Estimates:	
Moved to above IT000195 - Security	(20,000)
Less Microsoft premier support	(10,000)
Fewer Microsoft support contracting	(20,000)
Additional AT&T fees for IDS	30,000
Remove Pacific wireless - One time contact	(36,000)
Remove patial Secure Safeword - One time contact	(18,000)
SAN equip maint starting 2009 - The SAN (storage area network) is new hardware for storing the code and data used in our new enterprise projects and portions of the equipment will have new maintenance costs in 2009. Based on estimated quotes from vendor REF To HECO-1115	80,000
Unix hardward/os support REF To HECO-1115	55,000
true up on cisco support	60,000
increased HP server support	20,000
Adjust Aventail from purchase to maint	(30,000)
Transfer AT&T IDS to workorder IT900011	(60,000)

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FULL_PERIOD	ACCOUNT_CODE	exp ele	WORK_ORDER	SUPPLIER_NAME	DESC	TRAN_AMOUNT
Transfer Additional AT&T-IDS fees to workorder IT900011						(30,000)
						21,000
Total 2009 estimates						970,631

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FULL_PERIOD	ACCOUNT_CODE	exp_me	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200704	PED891PHENCNPEZZZZZ150	150	IT000006		DHinkle sign bonus & reloc allow repay	(20,000.00)
		150 Total				(20,000.00)
200710	PED891PHENCNPEZZZZZ201	201	IT000006	COMPUSA, INC.	Kingston 512MB PC3200 CL3 184 - Pin DIMM	61.40
200708	PED891PHENCNPEZZZZZ201	201	IT000006	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM-184	63.31
200711	PED891PHENCNPEZZZZZ201	201	IT000006	CORESYSTEMS HAWAII - A DIVISION	HP 16x/48x DVD-ROM w/+R read drive	67.01
200708	PED891PHENCNPEZZZZZ201	201	IT000006		ON COST CHG TO: 130570/003	10.07
200710	PED891PHENCNPEZZZZZ201	201	IT000006		ON COST CHG TO: 132162/002	10.35
200711	PED891PHENCNPEZZZZZ201	201	IT000006		ON COST CHG TO: 123611/001	11.85
		201 Total				223.99
200708	PED891PHENCNPEZZZZZ205	205	IT000006		SMART CARD/SMARTCARD READER	52.60
		205 Total				52.60
200707	PED891PHENCNPEZZZZZ461	461	IT000006	MICROSOFT SERVICES	MICROSOFT - 400 SR CONSULTANT HRS	9,969.30
200707	PED891PHENCNPEZZZZZ461	461	IT000006	MICROSOFT SERVICES	MICROSOFT - 400 SR CONSULTANT HRS	14,953.95
200710	PED891PHENCNPEZZZZZ461	461	IT000006	MICROSOFT SERVICES	MICROSOFT - 400 SR CONSULTANT HRS	19,938.60
		461 Total				44,861.85
200704	PED891PHENCNPEZZZZZ501	501	IT000006	BOSS COMMUNICATION TECHNOLOGIES	DATA CENTER - PRINTER RELOCATION	3,969.76
200710	PED891PHENCNPEZZZZZ501	501	IT000006	OS GROUP, LLC	RENEW COVALENT BUSINESS HOUR	10,000.00
200705	PED891PHENCNPEZZZZZ501	501	IT000006		BOSS COMMUNICATION TECHNOLOGIES	(3,969.76)
200706	PED891PHENCNPEZZZZZ501	501	IT000006		BOSS CUMMUNICATION TECONOLOGIES	(3,969.76)
200711	PED891PHENCNPEZZZZZ501	501	IT000006		026016-UTAX-7024	450.00
		501 Total				6,480.24
		Grand Total	**IT000006 Total**			31,618.68

Adjustments for 2009 Estimates:	
1) Dana Hinkle one-time credit	20,000.00
2) Reclassify Microsoft Service charges to IO	(44,861.85)
3) Reclassify Boss (Data center work) to IO	3,969.76
4) Miscellaneous costs for staff of 34 (RAM upgrades, smartcard/safeword tokens, technical books, jumpdrives, newspaper ads, etc.)	2,500.00
	(18,392.09)
Total 2009 estimates	13,226.59

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FULL_PERIOD	ACCOUNT_CODE	exp_dig	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200702	PEI897PHENCNPEZZZZZ201	201	IT000007	COMPUSA, INC.	Tripp Lite Protect It! 7Tel15 Surge Supp	760.82
200706	PEI897PHENCNPEZZZZZ201	201	IT000007	COMPUSA, INC.	Tripp Lite Protect It! 7Tel15 Surge Supp	1,070.56
200710	PEI897PHENCNPEZZZZZ201	201	IT000007	COMPUSA, INC.	Kingston 512MB PC3200 CL3 184 - Pin DIMM	61.40
200712	PEI897PHENCNPEZZZZZ201	201	IT000007	COMPUSA, INC.	Kensington keyboard for Life	290.26
200712	PEI897PHENCNPEZZZZZ201	201	IT000007	COMPUSA, INC.	Toshiba notebook battery M2, M3	94.16
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston memory - 512 MB - DIMM 240-pin	299.85
200702	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston memory: 512 MB,DIMM 240-pin,	145.32
200702	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM mem: 512 MB,DIMM 184	290.99
200702	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Plextor DVD RW (R DL) drive-Serial ATA	119.10
200702	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	KEYSPAN USB HIGH SPEED SERIAL ADAPTER	54.80
200703	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	NVIDIA Quadro NVS 285 - graphics adapter	272.49
200703	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Microsoft Natural Keyboard Elite	30.12
200703	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Plextor DVD RW USB/IEEE 1394 (firewire)	152.25
200705	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Axiom AX - Memory - 1 GB - DDR - 333 MHz	4,191.31
200705	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Cables Unlimited InMax -speakers-black	4.79
200705	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	EXTERNAL PX-716UFL 16X/8X/16X DVD+WRITE	207.51
200708	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM	89.88
200708	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-1GB-DIMM 184pin	134.39
200708	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM	119.84
200709	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Linksys ProConnect - KVM switch - 2ports	32.90
200709	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	IOGEAR MiniView Micro USB Plus KVM/	38.51
200709	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM 184	933.51
200710	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM 184	204.21
200710	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory - 512 MB	520.20
200710	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory - 512 MB	346.80
200712	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM	89.06
200712	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM	2,434.19
200712	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM	1,098.36
200712	PEI897PHENCNPEZZZZZ201	201	IT000007	INSIGHT DIRECT, INC.	Kingston ValueRAM memory-512 MB-DIMM	296.85
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	IC LOGIC, INC.	Pocket Jet 3/3 Plus 12v DC car adapter	17.87
200706	PEI897PHENCNPEZZZZZ201	201	IT000007	IC LOGIC, INC.	Power adapter (external) Panasonic	73.15
200707	PEI897PHENCNPEZZZZZ201	201	IT000007	IC LOGIC, INC.	AIRCARD 595 REFUND, 21 AIRCARDS @$25 EA	(23.63)
200707	PEI897PHENCNPEZZZZZ201	201	IT000007	IC LOGIC, INC.	AIRCARD 595 REFUND, 21 AIRCARDS @$25 EA	(525.00)
200712	PEI897PHENCNPEZZZZZ201	201	IT000007	CENTURY COMPUTERS, INC.	Roller Replacement Kit P/N S006043	354.97
200710	PEI897PHENCNPEZZZZZ201	201	IT000007	BD INCORPORATED	Hitachi 2.5" 0A28417 80GB 5400RPM	753.60
200710	PEI897PHENCNPEZZZZZ201	201	IT000007	BD INCORPORATED	Western Digital WD800BB 80GB 7200RPM	1,165.63
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	TRIPP SUPER SEVEN TEL PROTECT IT	296.90
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	TRIPP ISOBAR ULTRA SURGE SUP 8OUT	232.96
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	KOSS UR5 SP STEREO HEADPHONES	59.28
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	TRIPP SUPER SEVEN TEL PROTECT IT	420.61
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	MS WHEEL MOUSE OPTICAL 1.1 5PK	97.81
200702	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	TRIPP SUPER SEVEN TEL PROTECT IT	24.74

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FULL_PERIOD	ACCOUNT_CODE	exp_cat	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200703	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	MS WHEEL MOUSE OPTICAL 1.1 5PK	108.68
200703	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	TRIPP ISOBAR ULTRA SURGE SUP 8OUT	58.52
200704	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	MATROX DUAL HEAD2GO CONNECTOR BOX	877.80
200704	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	TRIPP SERIAL ATA (SATA) SIGNAL CABLE	23.51
200704	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	MICROSOFT INTELLIMOUSE EXPLORER 3.0	29.26
200707	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	MAXTOR DIAMONDMAX SATA 80GB 7.2K	117.94
200707	PEI897PHENCNPEZZZZZ201	201	IT000007	CDW DIRECT, LLC	ADAPTEC 1420SA SATA II 4PT RAID ROHS	99.28
200706	PEI897PHENCNPEZZZZZ201	201	IT000007	GNOME NETWORKING, INC.	MCAFEE HOME USER LICENSE, 1 YR	2.69
200706	PEI897PHENCNPEZZZZZ201	201	IT000007	GNOME NETWORKING, INC.	MCAFEE HOME USER LICENSE, 1 YR	(562.42)
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	CORESYSTEMS HAWAII - A	HP L1740 17-inch TFT Flat Panel monitor	1,174.92
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	PT1400 P-Touch label machine	139.05
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	Adapter for PT1400 P-Touch label machine	19.58
200701	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	Tapes for PT1400 P-Touch label machine	169.88
200703	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	P-Touch TZ 1/2 inch, Black on Yellow	133.51
200703	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	AC Adapter for Brother P-Touch PT-1400	22.25
200703	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	Brother P-Touch PT-1400 label machine	101.57
200704	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	P-Touch TZ Tape Cartridge, 1/2 in wide	267.01
200704	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	Kingston DTSP/1GB flash memory	66.49
200706	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	Kingston Value RAM 512MB PC3200 400mhz	795.80
200706	PEI897PHENCNPEZZZZZ201	201	IT000007	OFFICEMAX CONTRACT, INC. DBA	Kingston Value RAM 512MB PC3200 400mhz	251.30
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 121075/002	6.49
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 120519/001	15.21
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 120519/002	2.14
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 121499/004	46.01
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 121499/004	32.48
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 121499/005	25.49
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 120571/001	128.54
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 121662/001	32.80
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 122279/001	1.95
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 120519/003	18.58
200701	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 122292/002	10.70
200702	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 122282/001	91.68
200702	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 121499/004	2.98
200702	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 122745/004	6.60
200702	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 122957/001	14.35
200702	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 123622/001	17.51
200702	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 123622/002	35.06
200703	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 124510/001	13.10
200703	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 124510/002	7.05
200703	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 123882/001	12.24
200703	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 123882/002	2.68
200703	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 123882/003	16.09
200703	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO; 124564/005	18.35

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FULL PERIOD	ACCOUNT CODE	exp sta	WORK ORDER	SUPPLIER NAME	desc	TRAN AMOUNT
200703	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 124515/001	32.84
200703	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 124515/002	3.63
200704	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 125550/003	8.36
200704	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 126444/001	2.96
200704	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 126444/002	3.68
200704	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 126436/001	110.43
200704	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 125934/001	33.59
200705	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 126982/001	527.27
200705	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 127239/003	26.10
200705	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 127239/001	0.60
200706	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 128489/001	9.20
200706	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 127629/001	134.68
200706	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 126939/001	100.11
200706	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 126939/002	31.61
200706	PEI897PHENCNPEZZZZZ201	201	IT000007		6 UNIT @ $140.00 @ MATROX DUAL HEAD2GO	(877.80)
200706	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 126436/001	(110.43)
200706	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 092412/005	(70.75)
200707	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 130080/002	14.84
200707	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 130080/003	12.49
200708	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 130554/003	14.30
200708	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 130554/005	19.07
200708	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 130570/002	21.38
200709	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 132500/004	6.13
200709	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 132500/003	5.23
200709	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 132500/006	148.52
200710	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 133340/003	34.43
200710	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 133582/004	58.47
200710	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 133582/005	87.71
200710	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 132162/003	10.35
200710	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 133323/001	127.06
200710	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 133323/002	196.53
200712	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 135470/004	62.79
200712	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 135954/001	194.30
200712	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 135954/001	52.51
200712	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 135954/001	15.75
200712	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 135954/001	430.61
200712	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 135600/002	16.66
200712	PEI897PHENCNPEZZZZZ201	201	IT000007		ON COST CHG TO: 135600/004	51.35
		201 Total				23,334.58
200701	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	THE MEMORY PLACE	51.95
200701	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	SAMS	7.39
200702	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	THE MEMORY PLACE	31.47
200702	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	FISHER HAWAII/DT	54.16

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FULL_PERIOD	ACCOUNT_CODE	exp_cle	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200702	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	THE MEMORY PLACE	17.83
200702	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	FISHER HAWAII	4.39
200706	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	THE MEMORY PLACE	12.73
200706	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	PERSONAL TOUCH COMPUTE	104.70
200707	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	THE MEMORY PLACE	12.25
200708	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	SAMS	8.35
200708	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	THE MEMORY PLACE	15.63
200709	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	RF IDEAS, INC.	195.00
200709	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	INSIGHT DIRECT	68.61
200710	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	COMPUSA #793 M/O	28.10
200710	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	IC SUPPLY	228.27
200711	PEI897PHENCNPEZZZZZ205	205	IT000007	BANK ONE	RF IDEAS, INC.	(179.00)
200706	PEI897PHENCNPEZZZZZ205	205	IT000007		MEMORY PLACE PROCARD 4/25 - 5/8/07	42.07
200706	PEI897PHENCNPEZZZZZ205	205	IT000007		COMPUSA PROCARD 4/25 - 5/8/07	17.26
200708	PEI897PHENCNPEZZZZZ205	205	IT000007		PRP-CARD PURCHASE/AXALTO, INC.INV#33407	(565.44)
200708	PEI897PHENCNPEZZZZZ205	205	IT000007		SMART CARD/SMARTCARD READER	39.44
200708	PEI897PHENCNPEZZZZZ205	205	IT000007		UTAX-THE MEMORY PLACE/WPOMAILAU PCARD	0.70
200709	PEI897PHENCNPEZZZZZ205	205	IT000007		Utax-RF Ideas WPomaiLau pcard	8.78
200709	PEI897PHENCNPEZZZZZ205	205	IT000007		Utax-Insight Direct WPomailau pcard	3.08
200711	PEI897PHENCNPEZZZZZ205	205	IT000007		UTAX-THE MEMORY PLACE,WP LAU PCARD	5.23
		205 Total				212.95
200707	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (J. CHAN)	6,764.40
200708	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (J. CHAN)	8,356.02
200709	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (J. CHAN)	8,356.02
200709	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (B.VILLADOS)	5,570.68
200710	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (J. CHAN)	6,764.40
200710	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (B.VILLADOS)	6,615.18
200712	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (J. CHAN)	8,753.92
200712	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (B.VILLADOS)	8,554.97
200712	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (J. CHAN)	6,366.49
200712	PEI897PHENCNPEZZZZZ461	461	IT000007	NETENTERPRISE, INC.	CONTRACT DESKTOP SUPPORT (B.VILLADOS)	7,361.25
200708	PEI897PHENCNPEZZZZZ461	461	IT000007	AEROPRISE, INC.	CUSTOMIZE/IMPLEMENT AEROPRISE FOR HECO,	360.00
200708	PEI897PHENCNPEZZZZZ461	461	IT000007	AEROPRISE, INC.	CUSTOMIZE/IMPLEMENT AEROPRISE FOR HECO,	8,000.00
200708	PEI897PHENCNPEZZZZZ461	461	IT000007	AEROPRISE, INC.	OVERBILLED ON EXP REIM A.SAPP TRAVEL	(2.97)
200708	PEI897PHENCNPEZZZZZ461	461	IT000007	AEROPRISE, INC.	OVERBILLED ON EXP REIM A.SAPP TRAVEL	(65.94)
		461 Total				81,754.42
200704	PEI897PHENCNPEZZZZZ462	462	IT000007	BANK ONE	DR*SYMANTEC	196.00
200704	PEI897PHENCNPEZZZZZ462	462	IT000007	SOFTWARE SPECTRUM INC.	Deep River Mavis Beacon Teaches Typing	20.93
200705	PEI897PHENCNPEZZZZZ462	462	IT000007	SOFTWARE SPECTRUM INC.	LICENSE:RealNetWorks RealPlayer 50 seats	104.67
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D MICHAEL HO	2.00
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D MICHAEL HO	(2.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D MARCUS OBARA	(4.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D RUTHIE MATSUMOTO	(4.00)

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200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D RUTHIE MATSUMOTO	4.00
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D RUTHIE MATSUMOTO	(4.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D ANTHONY RAMELB	(2.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D BRANDON TENGAN	(2.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D JARRET K SOON	(2.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D RICHARD IGE	(2.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DARYL DULDULAO	(2.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D MICHAEL HO	(2.00)
200701	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200704	PEC897PHENCNPEZZZZZ462	462	IT000007		51D MCAFEE HOME USE	(4.00)
200704	PEC897PHENCNPEZZZZZ462	462	IT000007		51D MCAFEE HOME USE	(2.00)
200704	PEI897PHENCNPEZZZZZ462	462	IT000007		ON COST CHG TO: 125551/002	2.63
200705	PEI897PHENCNPEZZZZZ462	462	IT000007		ON COST CHG TO: 126943/001	13.17
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(20.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(4.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(2.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(2.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(2.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(2.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(2.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(2.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(2.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(2.00)

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FULL_PERIOD	ACCOUNT_CODE	exp_ele	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(10.00)
200707	PEC897PHENCNPEZZZZZ462	462	IT000007		51D DAVID NAKAMURA	(20.00)
200711	PEI897PHENCNPEZZZZZ462	462	IT000007		UTAX-DR SYMANTEC, WP LAU PCARD	8.82
		462 Total				30.22
200704	PEI897PHENCNPEZZZZZ501	501	IT000007	HAZTECH ENVIRONMENTAL SERVIC	3426 HAZTECH ENVIRONMENTAL SVC, INC	2,565.44
200708	PEI897PHENCNPEZZZZZ501	501	IT000007	HAZTECH ENVIRONMENTAL SERVIC	3426 HAZTECH ENVIRONMENTAL SVCS, INC.	1,735.27
200711	PEI897PHENCNPEZZZZZ501	501	IT000007	HAZTECH ENVIRONMENTAL SERVIC	3426 HAZTECH ENVIRONMENTAL SVCS, INC.	759.37
200711	PEI897PHENCNPEZZZZZ501	501	IT000007	HAZTECH ENVIRONMENTAL SERVIC	3426 HAZTECH ENVIRONMENTAL SVCS, INC.	3,108.29
200706	PEI897PHENCNPEZZZZZ501	501	IT000007	SOFTWARE SPECTRUM INC.	MAINT: RealNetWorks RealPlayer 50 seats	37.16
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	CENTURY COMPUTERS, INC.	Optional Extended Warranty for Year 1	895.30
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	CENTURY COMPUTERS, INC.	Optional year 2 and year 3 warranty	2,374.89
200701	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI TO PROVIDE IN-HOUSE DESKTOP	1,232.40
200703	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI TO PROVIDE IN-HOUSE DESKTOP	15,311.51
200705	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI TO PROVIDE IN-HOUSE DESKTOP	11,565.44
200706	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI TO PROVIDE IN-HOUSE DESKTOP	25,227.74
200706	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI TO PROVIDE IN-HOUSE DESKTOP	18,416.22
200707	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI - PROVIDE IN-HOUSE DESKTOP SRVCS	19,077.22
200708	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI - PROVIDE IN-HOUSE DESKTOP SRVCS	17,577.22
200710	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI - PROVIDE IN-HOUSE DESKTOP SRVCS	17,747.38
200711	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI - PROVIDE IN-HOUSE DESKTOP SRVCS	18,561.51
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI - PROVIDE IN-HOUSE DESKTOP SRVCS	15,913.61
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	P92659-14 EE010657 OMS	54.97
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI 10/07-1/08 - PROVIDE IN-HSE DSKTP	18,310.20
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI 10/07-1/08 - PROVIDE IN-HSE DSKTP	12,314.13
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	BD INCORPORATED	BDI 10/07-1/08 - PROVIDE IN-HSE DSKTP	20,689.78
200704	PEI897PHENCNPEZZZZZ501	501	IT000007	TOSHIBA AMERICA INFO SYSTEMS	Toshiba 3 Yr SystemGuard+Service Express	1,350.78
200711	PEI897PHENCNPEZZZZZ501	501	IT000007	TOSHIBA AMERICA INFO SYSTEMS	EXTENDED 1-YR COVERAGE:Toshiba Tecra M2	12,033.75
200711	PEI897PHENCNPEZZZZZ501	501	IT000007	TOSHIBA AMERICA INFO SYSTEMS	EXTENDED 1-YR COVERAGE:Toshiba Tecra M2	156.28
200711	PEI897PHENCNPEZZZZZ501	501	IT000007	TOSHIBA AMERICA INFO SYSTEMS	EXTENDED 1-YR COVERAGE:Toshiba laptops	5,938.73
200711	PEI897PHENCNPEZZZZZ501	501	IT000007	TOSHIBA AMERICA INFO SYSTEMS	EXTENDED 1-YR COVERAGE: Toshiba laptops	156.28
200709	PEI897PHENCNPEZZZZZ501	501	IT000007	CORESYSTEMS HAWAII - A DIVISION	Toshiba Warranty System Guard	2,425.55
200709	PEI897PHENCNPEZZZZZ501	501	IT000007	CORESYSTEMS HAWAII - A DIVISION	Toshiba Warranty System Guard - R500	404.26
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	CORESYSTEMS HAWAII - A DIVISION	Toshiba SystemGuard- 3YR+ServiceExpress	202.09
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	CORESYSTEMS HAWAII - A DIVISION	Toshiba SystemGuard- 3YR+ServiceExpress	202.09
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	CORESYSTEMS HAWAII - A DIVISION	Toshiba System Guard - 3 YR	4,446.84
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	CORESYSTEMS HAWAII - A DIVISION	Toshiba SystemGuard- 3YR+ServiceExpress	202.14
200712	PEI897PHENCNPEZZZZZ501	501	IT000007	CORESYSTEMS HAWAII - A DIVISION	Toshiba System Guard - 3 YR	10,104.88
200701	PEC897PHENCNPEZZZZZ501	501	IT000007		51D JULIANE INOUYE	(417.81)
		501				260,680.91
		Gra		**IT000007 Total**		366,013.08

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FULL PERIOD	ACCOUNT CODE	exp. ele.	WORK ORDER	SUPPLIER NAME	desc	TRAN AMOUNT
Adjustments for 2009 Estimates:						
	No adjustments required					
						0
Total 2009 estimates						366,013.08

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FULL_PERIOD	ACCOUNT_CODE	exp_cat	WORK_ORDER	SUPPLIER_NAME	Desc	TRAN_AMOUNT
200701	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,382.20
200702	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,424.08
200702	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200702	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200703	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200703	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200703	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200703	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200703	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200703	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200704	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200704	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200704	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200704	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200705	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,262.83
200705	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200705	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200705	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200705	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200706	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200706	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	280.63
200706	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	841.88
200707	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200707	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200707	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200707	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200707	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200708	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200708	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200708	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200708	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200709	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200709	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200709	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200709	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200710	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	982.20
200710	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200710	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200710	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200711	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14

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FULL PERIOD	ACCOUNT CODE	exp acct	WORK ORDER	SUPPLIER NAME	desc	TRAN AMOUNT
200711	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200711	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,122.51
200711	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	Onsite Desktop contractor/Specialist	1,403.14
200712	PEI898PHENCNPEZZZZZ461	461	IT000008	MAINTEC, INC.	CREDIT MEMO	(280.63)
		461	**Total**			55,283.70
200708	PEI898PHENCNPEZZZZZ501	501	IT000008	BANK ONE	HAWAIIAN IMAGING & SUP	452.62
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	BENTLEY SYSTEMS INCORPORATEI	RENEW (1) BENTLEY PROJECTWISE F	1,083.09
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	BENTLEY SYSTEMS INCORPORATEI	RENEW (1) BENTLEY WEB SERVER PF	1,437.27
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	BENTLEY SYSTEMS INCORPORATEI	RENEW (5) BENTLEY UCL PPA p/n 244:	1,275.67
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	BENTLEY SYSTEMS INCORPORATEI	RENEW (1) BENTLEY PUBLISHER SER	1,437.27
200701	PEI898PHENCNPEZZZZZ501	501	IT000008	MAINTEC, INC.	Maintec Services: Provide onsite	1,105.76
200701	PEI898PHENCNPEZZZZZ501	501	IT000008	MAINTEC, INC.	Maintec Services: Provide onsite	967.54
200701	PEI898PHENCNPEZZZZZ501	501	IT000008	MAINTEC, INC.	Maintec Services: Provide onsite	1,382.20
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (20) PANASONIC	9,640.00
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (3) PANASONIC (	65.07
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (3) PANASONIC (	1,446.00
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (10) PANASONIC	216.90
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (10) PANASONIC	4,820.00
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (5) PANASONIC (	108.45
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (5) PANASONIC (	2,410.00
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (1) PANASONIC (	21.69
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (1) PANASONIC (	482.00
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (2) PANASONIC (	43.38
200707	PEI898PHENCNPEZZZZZ501	501	IT000008	IC LOGIC, INC.	24MO EXT WARR ON (2) PANASONIC (	964.00
200701	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	MAINTENANCE ON XEROX PLOTTER	275.60
200702	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	MAINTENANCE ON XEROX PLOTTER (	276.93
200703	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	MAINTENANCE ON XEROX PLOTTER (	2,458.55
200704	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	MAINTENANCE ON XEROX PLOTTER (	553.85
200705	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	MAINTENANCE ON XEROX PLOTTER (	276.93
200706	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	MAINTENANCE ON XEROX PLOTTER (	2,447.01
200708	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	MAINTENANCE ON XEROX PLOTTER (	276.93
200708	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	MAINTENANCE ON XEROX PLOTTER (	276.93
200708	PEI898PHENCNPEZZZZZ501	501	IT000008	XEROX CORPORATION	SER#DT9-035317, CHRG 05/30/07-08/3(	(830.78)
200701	PEI898PHENCNPEZZZZZ501	501	IT000008	OCE NORTH AMERICA, INC.	OCE TDS600 PLOTTER HARDWARE	1,530.54
200705	PEI898PHENCNPEZZZZZ501	501	IT000008	OCE NORTH AMERICA, INC.	OCE TDS600 PLOTTER HARDWARE M/	1,540.44
200708	PEI898PHENCNPEZZZZZ501	501	IT000008	OCE NORTH AMERICA, INC.	OCE TDS600 PLOTTER HARDWARE M/	1,585.34
200710	PEI898PHENCNPEZZZZZ501	501	IT000008	OCE NORTH AMERICA, INC.	OCE TDS600 PLOTTER HARDWARE M/	1,622.33
200711	PEI898PHENCNPEZZZZZ501	501	IT000008	RICOH AMERICAS CORP.	2008 MAINTENANCE ON (3) LW310 CO!	615.51
200711	PEI898PHENCNPEZZZZZ501	501	IT000008	RICOH AMERICAS CORP.	2008 MAINTENANCE ON (3) LW310 CO!	615.51
200711	PEI898PHENCNPEZZZZZ501	501	IT000008	RICOH AMERICAS CORP.	2008 MAINTENANCE ON (3) LW310 CO!	615.51

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Hawaiian Electric Company, Inc.
ITS Department
IT000008

Desktop Technical

McCarter

FULL_PERIOD	ACCOUNT_CODE	exp ele	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200708	PEI898PHENCNPEZZZZZ501	501	IT000008		016482-UTAX-10026522	433.80
		501 Total				43,929.84
		Grand Total	**IT000008 Total**			99,213.54

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	99,213.54

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Hawaiian Electric Company, Inc.
ITS Department
IT000009

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FULL_PERIOD	ACCOUNT_CODE	exp_ele	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200701	ENCNPE	501	IT000009		TRUNK CHARGES 01/07	(2,000.00)
200702	PEI900PHI	501	IT000009		TRUNK CHARGES 02/07	(2,000.00)
200703	PEI900PHI	501	IT000009		TRUNK CHARGES 03/07	(2,000.00)
200704	PEI900PHI	501	IT000009		TRUNK CHARGES 04/07	(2,000.00)
200705	PEI900PHI	501	IT000009		TRUNK CHARGES 05/07	(2,000.00)
200705	PEI900PHI	501	IT000009		51D HAWAIIAN TELCOM	(112.00)
200706	PEI900PHI	501	IT000009		TRUNK CHARGES 06/07	(2,000.00)
200707	PEI900PHI	501	IT000009		TRUNK CHARGES 07/07	(2,000.00)
200708	PEI900PHI	501	IT000009		TRUNK CHARGES 08/07	(2,400.00)
200709	PEI900PHI	501	IT000009		TRUNK CHARGES 09/07	(2,550.00)
200710	PEI900PHI	501	IT000009		TRUNK CHARGES 10/07	(2,550.00)
200711	PEI900PHI	501	IT000009		TRUNK CHARGES 11/07	(2,550.00)
200712	PEI900PHI	501	IT000009		TRUNK CHARGES 12/07	(2,550.00)
		501 Total				(26,712.00)
200701	ENCNPE	570	IT000009	THE GAS COMPANY	PROPANE GAS TANK RENTAL, ACCT#48541-7	36.39
200702	PEI900PHI	570	IT000009	THE GAS COMPANY	PROPANE GAS TANK RENTAL, ACCT#48541-7	36.39
200703	PEI900PHI	570	IT000009	THE GAS COMPANY	PROPANE GAS TANK RENTAL, ACCT#48541-7	36.39
200704	PEI900PHI	570	IT000009	THE GAS COMPANY	PROPANE GAS TANK RENTAL, ACCT#48541-7	36.39
200705	PEI900PHI	570	IT000009	THE GAS COMPANY	PROPANE GAS TANK RENTAL, ACCT#48541-7	36.39
200707	PEI900PHI	570	IT000009	THE GAS COMPANY	PROPANE GAS TANK RENTAL, ACCT#48541-7	36.39
200701	ENCNPE	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHRG	5,864.34
200701	ENCNPE	570	IT000009	TIME WARNER TELECOM OF HAWAII	CHARGES FOR CURRENT MONTH	6,101.33
200703	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	CURRENT MONTH CHARGES	5,908.90
200705	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	SVC CHRGS FOR MARCH 2007	6,026.73
200705	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	SVC CHRGS FOR APRIL 2007	8,581.93
200706	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	7,008.21
200707	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	6,087.96
200707	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	(668.00)
200707	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	686.31
200707	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	320.40
200707	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	28.80
200707	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	22.68
200707	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	17.07
200708	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	6,717.79
200709	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	6,467.49
200710	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	6,712.95

Hawaiian Electric Company, Inc.
ITS Department
IT000009

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FULL_PERIOD	ACCOUNT_CODE	exp_co	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200710	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	OCTOBER CHARGES	8,354.30
200711	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	VOICE	6,476.09
200712	PEI900PHI	570	IT000009	TIME WARNER TELECOM OF HAWAII	CURRENT MONTH CHARGES	6,487.32
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	MONTHLY CHARGE	762.48
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	MONTHLY CHRG	762.48
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	MONTHLY CHRG	231.48
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	MONTHLY CHRG	303.62
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	SVC PD 12/25/06 - 01/24/07	296.46
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	SVC PD 12/28/06 - 01/27/07	762.48
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	SVC PD 01/10/07 - 02/09/07	2,414.69
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	SVC PD 12/10/06 - 01/09/07	2,463.55
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	SVC PD 01/16/07 - 02/15/07	764.16
200701	ENCNPE	570	IT000009	HAWAIIAN TELCOM	SVC PD 01/04/07 - 02/03/07	231.90
200703	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 01/25/07 - 02/24/07	297.69
200703	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 02/10/07 - 03/09/07	2,414.97
200703	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 02/04/07 - 03/03/07	231.90
200703	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 01/28/07 - 02/27/07	764.16
200703	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 02/16/07 - 03/15/07	764.16
200704	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 02/25/07 - 03/24/07	297.69
200704	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 03/04/07 - 04/03/07	231.90
200704	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 02/28/07 - 03/27/07	764.16
200704	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 03/16/07 - 04/15/07	764.16
200704	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 03/10/07 - 04/09/07	2,414.69
200704	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 3/25/07 - 4/24/07	297.69
200704	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 3/28/07 - 4/27/07	764.16
200704	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 4/4/07 - 5/3/07	232.68
200705	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 4/16/07 - 5/15/07	767.28
200705	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 4/10/07 - 5/9/07	2,422.13
200705	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SVC PD 4/28/07 - 5/27/07	767.28
200706	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 4/25/07-5/24/07	297.95
200706	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 5/10/07 - 6/9/07	2,422.13
200706	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 5/4/07-6/3/07	232.68
200706	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 5/16/07-6/15/07	767.28
200706	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 5/28/07-6/27/07	767.28
200706	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 5/25/07-6/24/07	297.95
200706	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	MONTHLY CHRG	232.68

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Hawaiian Electric Company, Inc.
ITS Department
IT000009

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FULL_PERIOD	ACCOUNT_CODE	exp_elp	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200706	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 6/10/07-7/9/07	2,422.13
200707	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 6/16/07-7/15/07	767.28
200707	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 6/28/07-7/27/07	767.28
200707	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 6/25/07-7/24/07	297.95
200707	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 7/4/07-8/3/07	232.53
200708	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 7/10/07-8/9/07	2,420.72
200708	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 7/16/07-8/15/07	766.68
200708	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 7/25/07-8/24/07	297.90
200708	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 7/28/07-8/27/07	766.68
200708	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 8/10/07-9/9/07	2,420.72
200708	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 10/10/06-11/09/06	3,977.34
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 8/16/07-9/15/07	766.68
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 4/19/07-5/18/07	234.56
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 6/19/07-7/18/07	234.56
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 8/19/07-9/18/07	234.56
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 3/19/07-4/18/07	1,322.56
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 7/19/07-8/18/07	234.56
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 8/4/07-9/3/07	232.53
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 5/19/07-6/18/07	234.56
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERV PD 8/25/07-9/24/07	297.90
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 8/28/07-9/27/07	766.68
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICES ON 09/04/07-10/03/07	232.53
200709	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICES ON 09/10/07-10/09/07	2,420.72
200710	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICES ON 09/25/07-10/24/07	297.90
200710	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICES ON 09/16/07-10/15/07	766.68
200710	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICES ON 09/28/07-10/27/07	766.68
200710	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICES ON 09/19/07-10/18/07	234.56
200710	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 10/04-11/03	232.41
200710	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 10/10-11/09	2,421.34
200710	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 10/16-11/15	766.20
200711	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 10/28-11/27	766.20
200711	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 10/25-11/24	305.19
200711	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 09/25-10/24	57.92
200711	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 11/10-12/09	2,421.34
200711	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 11/04-12/03	232.41
200711	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 11/16-12/15	766.20

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Hawaiian Electric Company, Inc.
ITS Department
IT000009

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McCarter

FULL_PERIOD	ACCOUNT_CODE	exp_ele	WORK_ORDER	SUPPLIER NAME	desc	TRAN_AMOUNT
200712	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 11/25-12/24	305.19
200712	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 11/28-12/27	766.20
200712	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 12/10-01/09/08	2,421.34
200712	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 12/04-01/03	232.41
200712	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 05/10/06-06/09/06	3,655.37
200712	PEI900PHI	570	IT000009	HAWAIIAN TELCOM	SERVICE PERIOD 12/16-01/15	766.20
200707	PEI900PHI	570	IT000009		51D GENERAL LEDGER	(809.75)
200708	PEI900PHI	570	IT000009		51D THE GAS COMPANY	(36.39)
200709	PEI900PHI	570	IT000009		FED 2006 POSTYE ADJ-TEL EXCISE TX REF	(20,221.00)
200712	PEI900PHI	570	IT000009		51D HAWAIIAN TELCOM	(1,968.00)
		570 Total				133,125.10
		Grand Total		**IT000009 Total**		106,413.10

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	106,413.10

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Hawaiian Electric Company, Inc.
ITS Department
IT000010

Long Distance
McCarter

FULL_PERIOD	ACCOUNT_CODE	exp_ale	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200701	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHRG	1,169.37
200701	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHARGES	17.96
200701	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	BILLING PD ENDING 12/31/06	15.68
200703	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	BILLING PERIOD ENDING 01/31/07	15.76
200703	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	BILLING PERIOD ENDING 01/31/07	19.15
200703	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	ACTIVITY THROUGH 01/27/07	2,167.38
200703	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	BILLING PD END 02/28/07	15.76
200703	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	BILLING PD END 02/28/07	18.05
200703	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	ACTIVITY THROUGH 02/27/07	186.45
200704	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SVC CHRGS FOR APRIL 2007	32.68
200704	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SVC CHRGS FOR APRIL 2007	18.05
200704	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SVC CHRGS FOR APRIL 2007	15.76
200705	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SVC CHRGS FOR APRIL 2007	359.29
200705	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	BILLING PERIOD ENDING 04/30/07	18.37
200705	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	BILLING PERIOD ENDING 04/30/07	16.04
200706	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHRG	16.04
200706	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHRG	18.37
200707	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHARGES	16.04
200708	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SERVICE PERIOD THRU 6/30/07	18.37
200708	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SERVICE THRU 7/27/07	158.83
200708	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SERVICE THRU 7/31/07	15.98
200708	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SERVICE THRU 7/31/07	18.30
200709	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SERVICE PERIOD 8/1/07-8/31/07	18.30
200709	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SERVICE PERIOD 8/1/07-8/31/07	15.98
200709	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SERVICES ON 7/28/07-08/27/07	174.76
200710	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHARGE	352.23
200710	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	PERIOD ENDING 09/30/07	16.18
200710	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	PERIOD ENDING 09/30/07	18.53
200711	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHARGES	17.83
200711	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHARGES	25.12
200712	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	SERVICE THROUGH 11/27	172.25
200712	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	BILLING PERIOD ENDING 11/30	18.50
200712	PEI900PHENCNPEZZZZZ501	501	IT000010	SPRINT	MONTHLY CHARGES	16.15
200705	PEI900PHENCNPEZZZZZ501	501	IT000010	TIME WARNER TELECOM OF HAWAII	SVC CHRGS FOR MARCH 2007	1,170.28
200705	PEI900PHENCNPEZZZZZ501	501	IT000010	TIME WARNER TELECOM OF HAWAII	SVC CHRGS FOR APRIL 2007	828.28
200706	PEI900PHENCNPEZZZZZ501	501	IT000010	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	702.02
200709	PEI900PHENCNPEZZZZZ501	501	IT000010	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	699.03
200710	PEI900PHENCNPEZZZZZ501	501	IT000010	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	687.45
200710	PEI900PHENCNPEZZZZZ501	501	IT000010	TIME WARNER TELECOM OF HAWAII	OCTOBER CHARGES	705.85
200711	PEI900PHENCNPEZZZZZ501	501	IT000010	TIME WARNER TELECOM OF HAWAII	LONG DISTANCE	713.72

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Hawaiian Electric Company, Inc.
ITS Department
IT000010

Long Distance
McCarter

FULL_PERIOD	ACCOUNT_CODE	L_a_p_ac	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200712	PEI900PHENCNPEZZZZZ501	501	IT000010	TIME WARNER TELECOM OF HAWAII	CURRENT MONTH CHARGES	689.29
200704	PEI900PHENCNPEZZZZZ501	501	IT000010		CANCEL APCK#646289-SPRINT	(32.68)
		501 Total				11,356.75
200701	PEI900PHENCNPEZZZZZ570	570	IT000010	SPRINT	ACTIVITY THROUGH 12/27/06	1,145.93
200705	PEI900PHENCNPEZZZZZ570	570	IT000010	SPRINT	SVC CHRGS FOR MARCH 2007	377.56
200707	PEI900PHENCNPEZZZZZ570	570	IT000010	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	699.59
200708	PEI900PHENCNPEZZZZZ570	570	IT000010	TIME WARNER TELECOM OF HAWAII	MONTHLY CHARGES	741.21
		570 Total				2,964.29
		Grand Total		IT000010 Total		14,321.04

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	14,321.04

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Hawaiian Electric Company, Inc.
ITS Department
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Infrastructure Comm - Misc
McCarter

FULL PERIOD	ACCOUNT CODE	exp. ale	WORK ORDER	SUPPLIER NAME	desc	TRAN AMOUNT
200701	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	591.27
200702	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	590.47
200703	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	589.53
200704	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	588.39
200705	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	590.32
200707	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	1,064.34
200708	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	554.60
200709	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	554.69
200710	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	717.10
200711	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	554.69
200712	PEI900PHENCNPEZZZZZ205	205	IT000011	BANK ONE	SPRINTPCS AUTOPYMT RC1	554.67
		205 Total				6,950.07
200701	PEI900PHENCNPEZZZZZ501	501	IT000011	TIME WARNER ENTERTAINMENT CO	ROADRUNNER SERVICE TO HECO TRAINING RM	83.72
200703	PEI900PHENCNPEZZZZZ501	501	IT000011	TIME WARNER ENTERTAINMENT CO	ROADRUNNER SERVICE TO HECO TRAINING RM	83.72
		501 Total				167.44
200710	PEI900PHENCNPEZZZZZ515	515	IT000011	UTC, THE TELECOMMUNICATIONS	MEMBERSHIP FOR DIXSON LAU	4,135.00
		515 Total				4,135.00
		Grand Total		**IT000011 Total**		11,252.51

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	11,252.51

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Hawaiian Electric Company, Inc.
ITS Department
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Department Misc
Stuller

FULL_PERIOD	ACCOUNT_CODE	exp_date	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200711	PEA901PHENCNPEZZZZZ201	201	IT000012	INSIGHT DIRECT, INC.	Linksys ProConnect - KVM switch -2port	33.27
200705	PEA901PHENCNPEZZZZZ201	201	IT000012	CDW DIRECT, LLC	MS NATURAL KB ELITE PS2/USB	30.92
200702	PEA901PHENCNPEZZZZZ201	201	IT000012	OFFICEMAX CONTRACT, INC. DBA	Kingston DTEP/IGB, DataTraveler Elite -	34.03
200703	PEA901PHENCNPEZZZZZ201	201	IT000012	OFFICEMAX CONTRACT, INC. DBA	Kingston DTEP/IGB, DataTraveler Elite -	34.03
200705	PEA901PHENCNPEZZZZZ201	201	IT000012	OFFICEMAX CONTRACT, INC. DBA	Verbatim DVD-R Recordable Discs,4.75GB,	22.07
200706	PEA901PHENCNPEZZZZZ201	201	IT000012	OFFICEMAX CONTRACT, INC. DBA	Verbatim CD-Recordable Disc, 52x,700MB/	14.40
200706	PEA901PHENCNPEZZZZZ201	201	IT000012	OFFICEMAX CONTRACT, INC. DBA	Verbatim DVD-R Recordable Discs,4.75GB,	22.07
200702	PEA901PHENCNPEZZZZZ201	201	IT000012		ON COST CHG TO: 122962/001	4.10
200703	PEA901PHENCNPEZZZZZ201	201	IT000012		ON COST CHG TO: 122962/001	4.10
200705	PEA901PHENCNPEZZZZZ201	201	IT000012		ON COST CHG TO: 126440/005	3.89
200705	PEA901PHENCNPEZZZZZ201	201	IT000012		ON COST CHG TO: 126939/004	2.78
200706	PEA901PHENCNPEZZZZZ201	201	IT000012		ON COST CHG TO: 126939/003	1.81
200706	PEA901PHENCNPEZZZZZ201	201	IT000012		ON COST CHG TO: 126939/004	2.78
200711	PEA901PHENCNPEZZZZZ201	201	IT000012		ON COST CHG TO: 134444/002	5.89
		201 Total				216.14
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#907444	16.55
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR2049211	32.09
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	425.84
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	90.70
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	141.55
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	85.88
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	496.11
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#334718	181.48
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	224.93
200701	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR RT12	1,716.64
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#346737	3.64
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	139.19
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	90.71
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	86.84
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	102.61
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#643150	89.96
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#848123	153.50
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	418.93
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#966332	79.52
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	64.80
200702	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR RT12	353.27
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#849121	5.32
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	EDP PRODUCTS CO INC	142.41
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#121229	21.38
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	90.05

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Hawaiian Electric Company, Inc.
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Stuller

FULL_PERIOD	ACCOUNT_CODE	exp_sec	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	87.56
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	101.86
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	85.40
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	420.16
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#464709	98.17
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#673577	2.86
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	119.43
200703	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR RT12	892.28
200704	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#589942	133.31
200704	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#607830	(38.45)
200704	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	245.56
200704	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	96.09
200704	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	102.80
200704	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	93.49
200704	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	849.09
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	LONGS DRUG STORES #020	12.35
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	IC SUPPLY	109.94
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	THE MEMORY PLACE	97.85
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	GRAYBAR ELECTRIC	5.59
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	GRAYBAR ELECTRIC	11.18
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	GRAYBAR ELECTRIC	21.57
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	COMPUSA #793	209.40
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	COMPUSA #793 M/O	17.26
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	GRAYBAR ELECTRIC	62.64
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	GRAYBAR ELECTRIC	25.84
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	GRAYBAR ELECTRIC	177.34
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR RT12	663.43
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	119.43
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#121485	75.34
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	137.68
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	98.84
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#146361	13.82
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	103.13
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	86.62
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#392875	191.97
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	519.12
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#398677	11.32
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#647725	210.14
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	112.26
200705	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *994068276	664.87

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Hawaiian Electric Company, Inc.
ITS Department
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Department Misc
Stuller

FULL_PERIOD	ACCOUNT_CODE	exp cde	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	COMPUSA #793 M/O	109.87
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	COMPUSA #793 M/O	31.96
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	GRAYBAR ELECTRIC	24.05
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	514.15
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	94.16
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#820111	7.24
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	105.37
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR TLG AL HAWAII	103.45
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#893847	50.61
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#900643	(3.95)
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#988469	58.06
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#029538	41.75
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825978894	533.55
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#124425	144.44
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	152.55
200706	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *994068276	655.65
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#234570	13.19
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976756	657.36
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976950	94.85
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#037600	12.25
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#037601	17.49
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977097	91.64
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977111	103.79
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825978894	550.11
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	COMPUSA #793 M/O	18.06
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 569001	739.46
200707	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 586563	57.78
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 767240	175.54
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 797969	156.34
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 798119	(57.78)
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 798123	57.78
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *994068276	664.14
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	103.32
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976756	470.75
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976950	218.92
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977097	113.83
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977111	103.68
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 939277	3.44
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 058933	52.54
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825978894	709.54

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Hawaiian Electric Company, Inc.
ITS Department
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Stuller

FULL_PERIOD	ACCOUNT_CODE	Sub Acct	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 964366	9.95
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	109.33
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 059136	56.54
200708	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *994068276	648.27
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976756	239.25
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976950	83.25
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 399602	61.91
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977097	122.40
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977111	132.94
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 400119	59.17
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 567937	106.47
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825978894	533.74
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	98.10
200709	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 665838	78.48
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	ALPHA ELECTRIC-HONOLUL	149.48
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *994068276	607.60
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 569906	18.70
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 743659	39.95
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976756	337.16
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976950	70.40
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 892821	54.57
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977097	145.17
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977111	108.03
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT IN 068528	68.31
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	AT&T 0012	141.24
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825978894	517.67
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#193535	73.99
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#068644	6.57
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#068645	6.57
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#068646	4.46
200710	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *994068276	599.88
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	113.93
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#244749	20.35
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#266180	7.04
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#068647	1.73
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976756	270.79
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976950	96.40
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#386229	40.35
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977097	99.34
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977111	108.40

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200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	AT&T 0012	126.12
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	113.93
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#771471	109.42
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825978894	663.27
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *994068276	589.03
200711	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	ANSI	170.00
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#771695	5.47
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#821471	62.00
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#857911	132.03
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976756	211.83
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825976950	72.24
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977097	36.50
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *825977111	109.19
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	CINGULAR *877424521	62.01
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#868997	11.38
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	METROCALL/ARCH WIRE	112.67
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	OFFICEMAX CT*IN#157819	50.44
200712	PEA901PHENCNPEZZZZZ205	205	IT000012	BANK ONE	SAMS	33.28
200701	PEI901PHENCNPEZZZZZ205	205	IT000012		55D TAPE FOR NETWORK CABLES	14.35
200705	PEI901PHENCNPEZZZZZ205	205	IT000012		51D DALEN LEONG	(73.80)
200706	PEA901PHENCNPEZZZZZ205	205	IT000012		GRAYBAR PROCARD 4/25 - 5/8/07	62.64
200706	PEA901PHENCNPEZZZZZ205	205	IT000012		COMPUSA PROCARD 4/25 - 5/8/07	(738.51)
200707	PEA901PHENCNPEZZZZZ205	205	IT000012		PRO-CARD 05/25 - 06/08/07 GRAYBAR	(24.05)
200712	PEA901PHENCNPEZZZZZ205	205	IT000012		51D TODD CRAWFORD	(157.06)
		205 Total				27,855.63
200701	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	212.70
200701	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	496.14
200702	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	115.48
200702	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	427.62
200703	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	156.08
200703	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	700.51
200704	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	54.77
200704	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	443.39
200705	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	57.37
200705	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	539.23
200706	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	80.68
200706	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	496.28
200707	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	42.20
200707	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	392.99
200708	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	413.52

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200708	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	1,023.29
200709	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	61.54
200709	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	399.29
200710	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	69.16
200710	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	517.97
200711	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	47.55
200711	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	502.36
200712	PEA901PHENCNPEZZZZZ301	301	IT000012		HECO Pool Cost	59.02
200712	PEA901PHENCNPEZZZZZ301	301	IT000012		Vehicle Costing - SEDAN	424.60
		301 Total				7,733.74
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING AT PAUAHI, FOR FEB 2007	330.00
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING AT PAUAHI, FOR FEB 2007	220.00
200702	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING AT PAUAHI FOR MAR 2007	330.00
200702	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING AT PAUAHI FOR MAR 2007	220.00
200703	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR APRIL 2007	330.00
200703	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR APRIL 2007	220.00
200704	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR MAY 2007	330.00
200704	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR MAY 2007	220.00
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR JUNE 2007	330.00
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR JUNE 2007	220.00
200706	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR JULY 2007	350.00
200706	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR JULY 2007	230.00
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR AUG 2007	350.00
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR AUG 2007	230.00
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR SEPT 2007	350.00
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR SEPT 2007	230.00
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING VALIDATION STICKERS	520.00
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING VALIDATION STICKERS	130.00
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING AP PAUAHI, OCT 2007	350.00
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING AP PAUAHI, OCT 2007	230.00
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	HECO PARKING AT PAUAHI FOR NOV 2007	350.00
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	HECO PARKING AT PAUAHI FOR NOV 2007	230.00
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR DEC 2007	350.00
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PARKING FOR DEC 2007	230.00
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PKG PAUAHI JAN'08/ITS POOL CAR	350.00
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	STANDARD PARKING	PKG PAUSHI JAN'08/RSTULLER	230.00
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	GARTNER GROUP, INC.	GARTNER RESEARCH SVC AGMT: YR 3 OF 3	43,681.02
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHRG	83.72
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SVC PD 02/16/07 - 03/15/07	83.72
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SVC PD 02/16/07 - 03/15/07	83.72

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200703	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SERVICE PERIOD 03/16/07-04/15/07	83.72
200703	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SVC PD 04/16/07 - 05/15/07	83.72
200703	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SVC PD 04/16/07 - 05/15/07	83.72
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SVC PD 5/16/07 - 6/15/07	83.72
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SVC PD 5/16/07 - 6/15/07	83.72
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGE FOR 06/16/07 - 07/15/07	83.72
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGE FOR 06/16/07 - 07/15/07	83.72
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SERVICE PERIOD 7/16/07-8/15/07	83.72
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	SERVICE PERIOD 9/16/07-10/15/07	83.72
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	TIME WARNER ENTERTAINMENT CO	MONTHLY CHARGES	83.72
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	PAUAHI TOWER,5/FL	70.63
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	CPP, 13/FL, LEGAL	670.16
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	WARD 2 BLDG, 3RD FLR	670.16
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	WARD 2, 3RD FLR..PAUAHU TWR 5TH FLR	117.28
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	KING ST., BASEMENT RECORDS MGMT	167.54
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	5TH FL PAUAHI TOWER	117.28
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	5TH FL PAUAHI TOWER	117.28
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	PAUAHI TOWER	703.66
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	SVC FOR ITS DEPT DIRECTOR	1,558.11
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	WARD 2 BLD	100.52
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	WDI COMPANIES, INC.	WARD 2	67.02
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI	104.22
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI	53.15
200702	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	115.19
200702	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	90.05
200703	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	58.63
200703	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	89.01
200704	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	58.64
200704	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	99.47
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	73.29
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	48.17
200706	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	88.63

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200706	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	91.98
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	148.14
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	35.44
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	86.74
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	40.66
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	61.60
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	128.62
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	45.90
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	104.01
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	149.56
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	92.32
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	55.62
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	ROYAL HAWAIIAN WATER COMPANY	BOTTLED WATER SERVICE FOR PAUAHI TOV	5.09
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	PROFESSIONAL IMAGE	6 Each oversize Color posters. Dimension	164.14
200702	PEA901PHENCNPEZZZZZ501	501	IT000012	PROFESSIONAL IMAGE	4 EACH OVERSIZE COLORED POSTERS. DIMI	97.38
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	RESORTQUEST AT THE EXECUTIVE	Timothy Crouch 11/12-15/06 <PEC>	417.81
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION	Background checks for Nov 2006	66.15
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION	Background checks for Nov 2006	1,470.00
200702	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	Background checks for Dec 2006	61.76
200702	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	Background checks for Dec 2006	1,372.50
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	ITS Div background checks for March	8.19
200705	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	ITS Div background checks for March	182.00
200706	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	ITS bg checks - (4)	18.63
200706	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	ITS bg checks - (4)	414.00
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	May background checks for	22.19
200707	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	May background checks for	493.00
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	June 2007 bg checks for ITS Dept	5.54
200708	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	June 2007 bg checks for ITS Dept	123.00
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	July bg checks for ITS (3)	11.30
200709	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	July bg checks for ITS (3)	251.00
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	ITS Div bg checks for August (7)	38.25
200710	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	ITS Div bg checks for August (7)	850.00
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	ITS background chks for Sept (1)	3.56
200711	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	ITS background chks for Sept (1)	79.00
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	October bg checks- ITS (1)	4.10
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	BACKGROUND INFORMATION SERVICE	October bg checks- ITS (1)	91.00
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	COMMUNICATE, INC	Technical Report Writing - Instruction	841.80
200701	PEA901PHENCNPEZZZZZ501	501	IT000012		55D RICK STULLER	9.50
200703	PEI901PHENCNPEZZZZZ501	501	IT000012		55D L MCCARTER	2.00
200703	PEI901PHENCNPEZZZZZ501	501	IT000012		55D L M CCARTER	5.00

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200703	PEI901PHENCNPEZZZZZ501	501	IT000012		55D REID WATANABE	10.00
200704	PEI901PHENCNPEZZZZZ501	501	IT000012		55D LES MCARTHUR	29.14
200712	PEI901PHENCNPEZZZZZ501	501	IT000012		55D LES MCCARTER	12.00
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	REID WATANABE	EMPLOYEE EXPENSE REIMB	125.82
200712	PEA901PHENCNPEZZZZZ501	501	IT000012	RICK STULLER	EMPLOYEE REIMBURSEMENT	125.00
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	BM	EMPLOYEE EXPENSE REIMB	34.92
200701	PEA901PHENCNPEZZZZZ501	501	IT000012	BM	EMPLOYEE EXPENSE REIMB	23.28
200703	PEA901PHENCNPEZZZZZ501	501	IT000012	BM	EMPLOYEE EXPENSE REIMB	46.56
200703	PEA901PHENCNPEZZZZZ501	501	IT000012	BM	EMPLOYEE EXPENSE REIMB	69.84
200706	PEA901PHENCNPEZZZZZ501	501	IT000012	BM	EMPLOYEE EXPENSE REIMB	69.84
200706	PEA901PHENCNPEZZZZZ501	501	IT000012	BM	EMPLOYEE EXPENSE REIMB	23.28
200706	PEA901PHENCNPEZZZZZ501	501	IT000012	BM	EMPLOYEE EXPENSE REIMB	58.20
		501 Total				66,913.59
200710	PEA901PHENCNPEZZZZZ515	515	IT000012	ARMA INTERNATIONAL	MEMBERSHIP FOR DEBBIE NUESCA	180.00
200712	PEA901PHENCNPEZZZZZ515	515	IT000012	ARMA INTERNATIONAL	MEMBERSHIP FOR GAIL HORIMOTO	205.00
		515 Total				385.00
200712	PEA901PHENCNPEZZZZZ516	516	IT000012	IEEE	MEMBERSHIP FOR RICK STULLER	113.00
200703	PEA901PHENCNPEZZZZZ516	516	IT000012	DAVID BARCLAY	EMPLOYEE EXPENSE REIMB	125.00
200703	PEA901PHENCNPEZZZZZ516	516	IT000012	BEVERLY LANGLEY	EMPLOYEE EXPENSE REIMB	30.41
200711	PEA901PHENCNPEZZZZZ516	516	IT000012	BEVERLY LANGLEY	EMPLOYEE REIMBURSEMENT	139.00
		516 Total				407.41
200707	PEA901PHENCNPEZZZZZ520	520	IT000012	RICK STULLER	EMPLOYEE EXPENSE REIMB	450.14
200709	PEA901PHENCNPEZZZZZ520	520	IT000012	RICK STULLER	EMPLOYEE EXPENSE REIMB	1,116.00
		520 Total				1,566.14
200703	PEA901PHENCNPEZZZZZ522	522	IT000012	BANK ONE	ALOH AI 2155846606	89.80
200707	PEA901PHENCNPEZZZZZ522	522	IT000012	BANK ONE	HAWAIIAN 17321062841785	69.80
		522 Total				159.60
		Grand Total	**IT000012 Total**			105,237.25

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	105,237.25

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FULL_PERIOD	ACCOUNT_CODE	Seq	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
	Outsource Suppt - CB Profile		**IT000014 Total**			561,820.00
	Outsource Suppt - FLEX Admin		**IT000017 Total**			28,200.00
200701	PED891PHENCNPEZZZZZ461	4	IT000087	TYC CONSULTING RESOURCES	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	440.00
200703	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	1,280.00
200703	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	320.00
200704	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	520.00
200706	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	440.00
200706	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	200.00
200708	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	400.00
200708	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	480.00
200710	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	480.00
200711	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	360.00
200711	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	280.00
200712	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	560.00
200712	PED891PHENCNPEZZZZZ461	46	IT000087	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT - HEIRS ADMIN	80.00
	Outsource Suppt - HEIRS		**IT000087 Total**			5,840.00
200701	PED891PHENCNPEZZZZZ461	4	IT000091	TYC CONSULTING RESOURCES	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	120.00
200703	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	680.00
200703	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	160.00
200704	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	280.00
200706	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	120.00
200706	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	80.00
200708	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	1,520.00
200708	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	520.00
200710	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	200.00
200711	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	160.00
200711	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	320.00
200712	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	560.00
200712	PED891PHENCNPEZZZZZ461	46	IT000091	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (LTC/FBL)	320.00
	Outsource Suppt - LTC		**IT000091 Total**			5,040.00
200712	PED891PHENCNPEZZZZZ501	50	IT000125	LEAD DOG SYSTEMS, INC	LEAD DOG SYSTEMS - MICROSTATION XM	536.91
200712	PED891PHENCNPEZZZZZ501	50	IT000125	LEAD DOG SYSTEMS, INC	LEAD DOG SYSTEMS - MICROSTATION XM	11,931.28
	Labor CADD Svcs		**IT000125 Total**			12,468.19
200701	PED891PHENCNPEZZZZZ461	4	IT000127	TYC CONSULTING RESOURCES	BENEFITS SYSTEMS SUPPORT (SYS MGMT/FBS)	120.00
200703	PED891PHENCNPEZZZZZ461	46	IT000127	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (SYS MGMT/FBS)	120.00
200710	PED891PHENCNPEZZZZZ461	46	IT000127	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (SYS MGMT/FBS)	120.00
200712	PED891PHENCNPEZZZZZ461	46	IT000127	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (SYS MGMT/FBS)	120.00
	Outsource Suppt - System Manager		**IT000127 Total**			480.00
200701	PED891PHENCNPEZZZZZ461	4	IT000130	TYC CONSULTING RESOURCES	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	120.00
200703	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	400.00

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FULL_PERIOD	ACCOUNT_CODE	Hrs	WORK_ORDER	SUPPLIER_NAME	Desc	TRAN_AMOUNT
200703	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	160.00
200704	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	200.00
200706	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	160.00
200706	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	80.00
200708	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	400.00
200708	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	160.00
200710	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	200.00
200711	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	160.00
200711	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	240.00
200712	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	240.00
200712	PED891PHENCNPEZZZZZ461	46	IT000130	TYC CONSULTING RESOURCES INC	BENEFITS SYSTEMS SUPPORT (PENSION/FP)	40.00
	Outsource Suppt - Pension		**IT000130 Total**			2,560.00
200703	PED890PHENCNPEZZZZZ461	46	IT900401	TYC CONSULTING RESOURCES INC	TYC - DARS NEW DEVELOPMENT SUPPORT	80.00
200710	PED890PHENCNPEZZZZZ501	50	IT900401	TYC CONSULTING RESOURCES INC	TYC - DARS NEW DEVELOPMENT SUPPORT	3,680.00
200711	PED890PHENCNPEZZZZZ501	50	IT900401	TYC CONSULTING RESOURCES INC	TYC - DARS NEW DEVELOPMENT SUPPORT	3,240.00
200711	PED890PHENCNPEZZZZZ501	50	IT900401	TYC CONSULTING RESOURCES INC	TYC - DARS NEW DEVELOPMENT SUPPORT	1,920.00
200712	PED890PHENCNPEZZZZZ501	50	IT900401	TYC CONSULTING RESOURCES INC	TYC - DARS NEW DEVELOPMENT SUPPORT	1,920.00
200712	PED890PHENCNPEZZZZZ501	50	IT900401	TYC CONSULTING RESOURCES INC	TYC - DARS NEW DEVELOPMENT SUPPORT	1,360.00
	Outsource Suppt - DARs new dev		**IT900401 Total**			12,200.00
200701	PED891PHENCNPEZZZZZ461	4	IT900402	TYC CONSULTING RESOURCES	TYC - DARS MAINTENANCE SUPPORT	3,350.00
200703	PED891PHENCNPEZZZZZ461	46	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	7,985.00
200703	PED891PHENCNPEZZZZZ461	46	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	10,895.00
200704	PED891PHENCNPEZZZZZ461	46	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	14,665.00
200705	PED891PHENCNPEZZZZZ461	46	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	16,760.00
200706	PED891PHENCNPEZZZZZ461	46	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	19,200.00
200708	PED891PHENCNPEZZZZZ501	50	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	18,480.00
200708	PED891PHENCNPEZZZZZ501	50	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	16,040.00
200710	PED891PHENCNPEZZZZZ501	50	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	19,360.00
200711	PED891PHENCNPEZZZZZ501	50	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	7,760.00
200711	PED891PHENCNPEZZZZZ501	50	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	10,520.00
200712	PED891PHENCNPEZZZZZ501	50	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	7,400.00
200712	PED891PHENCNPEZZZZZ501	50	IT900402	TYC CONSULTING RESOURCES INC	TYC - DARS MAINTENANCE SUPPORT	2,640.00
	Outsource Suppt - DARs maint		**IT900402 Total**			155,055.00
200701	PED891PHENCNPEZZZZZ461	4	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	2,094.24
200703	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	3,337.70
200703	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	2,356.02
200704	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	3,664.92
200705	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	3,141.36
200707	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	3,403.14
200707	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	3,403.14

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200708	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	3,141.36
200710	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	1,636.13
200711	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	3,337.70
200711	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	3,664.92
200712	PED891PHENCNPEZZZZZ461	46	IT900403	THE DATABASE CENTER	SQL SERVER SUPPORT AS DESCRIBED IN HECO	5,791.88
	Outsource Suppt - SQL Server Sup	**IT900403 Total**				38,972.51
200710	PED890PHENCNPEZZZZZ501	50	IT900404	COLLABNET, INC	SUBVERSION CONSULTING & TRAINING	450.00
200710	PED890PHENCNPEZZZZZ501	50	IT900404	COLLABNET, INC	SUBVERSION CONSULTING & TRAINING	10,000.00
	Outsource Suppt - Subversion Softv	**IT900404 Total**				10,450.00
200708	PED891PHENCNPEZZZZZ461	46	IT900405	THE DATABASE CENTER	TDC - JULY 2007 DATABASE SUPPORT	9,835.87
200705	PED891PHENCNPEZZZZZ501	50	IT900405	THE DATABASE CENTER	TDC - ORACLE DATABASE CONSULTING AND	3,534.06
200707	PED891PHENCNPEZZZZZ501	50	IT900405	THE DATABASE CENTER	TDC - ORACLE DATABASE CONSULTING AND	7,962.88
200707	PED891PHENCNPEZZZZZ501	50	IT900405	THE DATABASE CENTER	TDC - ORACLE DATABASE CONSULTING AND	5,448.26
200707	PED891PHENCNPEZZZZZ501	50	IT900405	THE DATABASE CENTER	TDC - ORACLE DATABASE CONSULTING AND	1,413.61
200710	PED891PHENCNPEZZZZZ501	50	IT900405	THE DATABASE CENTER	TDC - AUGUST 2007 DATABASE SUPPORT	16,805.73
200711	PED891PHENCNPEZZZZZ501	50	IT900405	THE DATABASE CENTER	TDC - SEPT 2007 DATABASE SUPPORT	4,358.94
200712	PED891PHENCNPEZZZZZ501	50	IT900405	THE DATABASE CENTER	TDC - OCT 2007 DATABASE SUPPORT	7,972.32
200712	PED891PHENCNPEZZZZZ501	50	IT900405	THE DATABASE CENTER	TDC - NOV 2007 DATABASE SUPPORT	565.52
	Outsource Suppt - Misc DBA Work	**IT900405 Total**				57,897.19
200708	PED891PHENCNPEZZZZZ461	46	IT900406	THE DATABASE CENTER	TDC - JULY 2007 DATABASE SUPPORT	4,958.34
200707	PED891PHENCNPEZZZZZ501	50	IT900406	THE DATABASE CENTER	TDC - ORACLE DATABASE CONSULTING AND	2,567.87
200707	PED891PHENCNPEZZZZZ501	50	IT900406	THE DATABASE CENTER	TDC - ORACLE DATABASE CONSULTING AND	2,934.38
200710	PED891PHENCNPEZZZZZ501	50	IT900406	THE DATABASE CENTER	TDC - AUGUST 2007 DATABASE SUPPORT	197.55
200711	PED891PHENCNPEZZZZZ501	50	IT900406	THE DATABASE CENTER	TDC - SEPT 2007 DATABASE SUPPORT	4,456.87
200712	PED891PHENCNPEZZZZZ501	50	IT900406	THE DATABASE CENTER	TDC - OCT 2007 DATABASE SUPPORT	6,125.29
200712	PED891PHENCNPEZZZZZ501	50	IT900406	THE DATABASE CENTER	TDC - NOV 2007 DATABASE SUPPORT	2,992.33
	Outsource Suppt - GIS DBA Work	**IT900406 Total**				24,232.63
200705	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - SYSTEMS DEVELOPMENT SUPPOR	4,745.55
200705	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	4,146.60
200706	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	13,913.08
200706	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - SYSTEMS DEVELOPMENT SUPPOR	20,707.85
200707	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	8,988.22
200707	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - SYSTEMS DEVELOPMENT SUPPOR	19,143.97
200708	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	10,408.37
200708	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - SYSTEMS DEVELOPMENT SUPPOR	15,935.33
200709	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	17,381.14
200709	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - SYSTEMS DEVELOPMENT SUPPOR	19,832.98
200710	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	13,501.57
200710	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - SYSTEMS DEVELOPMENT SUPPOR	15,962.30
200711	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	16,098.42

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200711	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	18,982.19
200712	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	15,315.18
200712	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	6,471.20
200712	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	7,119.11
	Outsource Suppt - eBus Dev		**IT900407 Total**			228,653.06
200707	PED891PHENCNPEZZZZZ501	50	IT900408	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS MAINTENANCE	115.18
200708	PED891PHENCNPEZZZZZ501	50	IT900408	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS MAINTENANCE	107.85
200712	PED891PHENCNPEZZZZZ501	50	IT900408	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS MAINTENANCE	1,267.02
	Outsource Suppt - eBus Maint		**IT900408 Total**			1,490.05
200710	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS AMERICA - MIDDLEWARE CONSULTING SRVC	405.00
200710	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS AMERICA - MIDDLEWARE CONSULTING SRVC	9,000.00
200712	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS - MIDDLEWARE CONSULTING SERVICES	961.88
200712	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS - MIDDLEWARE CONSULTING SERVICES	21,375.00
200712	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS - MIDDLEWARE CONSULTING SERVICES	495.00
200712	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS - MIDDLEWARE CONSULTING SERVICES	11,000.00
	Outsource Suppt - EAI Support		**IT900409 Total**			43,236.88
200711	PED891PHENCNPEZZZZZ501	50	IT900410	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	310.81
200712	PED891PHENCNPEZZZZZ501	50	IT900410	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	527.49
200712	PED891PHENCNPEZZZZZ501	50	IT900410	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	446.34
200712	PED891PHENCNPEZZZZZ501	50	IT900410	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	500.71
	Outsource Suppt - FileNet SU		**IT900410 Total**			1,785.35
200711	PED891PHENCNPEZZZZZ501	50	IT900411	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	310.81
200712	PED891PHENCNPEZZZZZ501	50	IT900411	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	527.48
200712	PED891PHENCNPEZZZZZ501	50	IT900411	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	446.33
200712	PED891PHENCNPEZZZZZ501	50	IT900411	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	500.70
	Outsource Suppt - FileNet JP		**IT900411 Total**			1,785.32
			Grand Total			1,192,166.18

Adjustments for 2009 Estimates:

1) Reclassify CADD services to EFMS $ (12,468.19)
2) 8 months of FLEX Admin (Tesseract) goes away as HRMS live in April $ (18,800.00)
3) Subversion support was a one time cost $ (10,450.00)
4) Additional EAI support will not be needed $ (43,236.88)
5) HRMS support: SI estimates at $4.5K/month for app DBA and 1 FTE for developer (use $120/hr). April go-live so need for 8 months REF TO HECO 1115 $ 202,400.00
6) Need equivalent of at least 5 FTEs to support beyond internal staff of 3 to support CIS. Direct Energy has 10 for same system. $ 1,248,000.00
(Even 5 may be too few considering OMS, MWM, Business Objects, Mobious, Harvest, etc. also need support.) Used $120/hr. 128,000
7) Adjust 5 FTEs to June through Dec (7/12) coverage assuming CIS implementation May 2009 $ (520,000.00)
8) Adjust TYC support costs for CB in IT000014 from 561,800 to 480,000 (47K x 5 + 35K x 7) REF TO HECO 1115 $ (81,800.00)

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FULL_PERIOD	ACCOUNT_CODE	exp	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200711	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	18,982.19
200712	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	15,315.18
200712	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	6,471.20
200712	PED890PHENCNPEZZZZZ501	50	IT900407	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS DEVELOPMENT	7,119.11
	Outsource Suppt - eBus Dev		**IT900407 Total**			228,653.06
200707	PED891PHENCNPEZZZZZ501	50	IT900408	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS MAINTENANCE	115.18
200708	PED891PHENCNPEZZZZZ501	50	IT900408	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS MAINTENANCE	107.85
200712	PED891PHENCNPEZZZZZ501	50	IT900408	DATAHOUSE CONSULTING, INC.	DATAHOUSE - eBUSINESS MAINTENANCE	1,267.02
	Outsource Suppt - eBus Maint		**IT900408 Total**			1,490.05
200710	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS AMERICA - MIDDLEWARE CONSULTING SRVC	405.00
200710	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS AMERICA - MIDDLEWARE CONSULTING SRVC	9,000.00
200712	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS - MIDDLEWARE CONSULTING SERVICES	961.88
200712	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS - MIDDLEWARE CONSULTING SERVICES	21,375.00
200712	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS - MIDDLEWARE CONSULTING SERVICES	495.00
200712	PED890PHENCNPEZZZZZ501	50	IT900409	TCS AMERICA	TCS - MIDDLEWARE CONSULTING SERVICES	11,000.00
	Outsource Suppt - EAI Support		**IT900409 Total**			43,236.88
200711	PED891PHENCNPEZZZZZ501	50	IT900410	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	310.81
200712	PED891PHENCNPEZZZZZ501	50	IT900410	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	527.49
200712	PED891PHENCNPEZZZZZ501	50	IT900410	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	446.34
200712	PED891PHENCNPEZZZZZ501	50	IT900410	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	500.71
	Outsource Suppt - FileNet SU		**IT900410 Total**			1,785.35
200711	PED891PHENCNPEZZZZZ501	50	IT900411	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	310.81
200712	PED891PHENCNPEZZZZZ501	50	IT900411	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	527.48
200712	PED891PHENCNPEZZZZZ501	50	IT900411	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	446.33
200712	PED891PHENCNPEZZZZZ501	50	IT900411	CENTURY COMPUTERS, INC.	FILENET APPLICATION SUPPORT	500.70
	Outsource Suppt - FileNet JP		**IT900411 Total**			1,785.32
			Grand Total			1,192,166.18

Adjustments for 2009 Estimates:

1)	Reclassify CADD services to EFMS	$ (12,468.19)
2)	8 months of FLEX Admin (Tesseract) goes away as HRMS live in April	$ (18,800.00)
3)	Subversion support was a one time cost	$ (10,450.00)
4)	Additional EAI support will not be needed	$ (43,236.88)
5)	HRMS support: SI estimates at $6.8K/month for app DBA and 1 FTE for developer (use $120/hr). April go live so need for 8 months	$ 202,400.00
6)	Need equivalent of at least 5 FTEs to support beyond internal staff of 3 to support CIS. Direct Energy has 10 for same system. (Even 5 may be too few considering OMS, MWM, Business Objects, Mobious, Harvest, etc. also need support.) Used $120/hr.	$ 1,248,000.00
7)	Adjust 5 FTEs to June through Dec (7/12) coverage assuming CIS implementation May 2009	$ (520,000.00)
8)	Adjust TYC support costs for CB in IT000014 from 561,800 to 480,000 (47K x 5 + 35K x 7)	$ (81,800.00)

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Hawaiian Electric Company, Inc.
ITS Department
IT000014

Consultants - Development Svc
Eber

FULL_PERIOD	ACCOUNT_CODE	PP	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
						763,644.93
Total 2009 estimates						1,955,811.11

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Hawaiian Electric Company, Inc.
ITS Department
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Telecom Equip Main
McCarter

FULL_PERIOD	ACCOUNT_CODE	exp_ele	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200702	PEI915PHENCNPEZZZZZZ201	201	IT000184	PROGRESSIVE COMMUNICATIONS	MM CAL LIC 1 STE ENT UNIFD 300+	10,188.28
200702	PEI915PHENCNPEZZZZZZ201	201	IT000184		ON COST CHG TO: 121857/001	1,227.69
		201 Total				11,415.97
200708	PEI915PHENCNPEZZZZZZ501	501	IT000184	PROGRESSIVE COMMUNICATIONS	FURNISH/INSTALL AVAYA ASAI PLUS SW/SVCS	9,860.21
200711	PEI915PHENCNPEZZZZZZ501	501	IT000184	PROGRESSIVE COMMUNICATIONS	AVAYA CONVERSANT MAINTENANCE	8,456.89
200701	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200702	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200703	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200704	PEI915PHENCNPEZZZZZZ501	501	IT000184		51D HAWAIIAN TELECOM	(738.08)
200704	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200705	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200706	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200707	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200708	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200709	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200710	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200711	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	13,909.43
200712	PEI915PHENCNPEZZZZZZ501	501	IT000184		Amortize ppd telephone maint.	11,580.80
		501 Total				182,163.55
		Grand Total		**IT000184 Total**		193,579.52

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	193,579.52

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Hawaiian Electric Company, Inc.
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Training Travel
Stuller

FULL_PERIOD	ACCOUNT_CODE	exp ele	WORK_ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200703	PEA789PHENCNPEZZZZZ501	501	IT000185	PMI HONOLULU CHAPTER	REGISTRATION FOR 7 EMPLOYEES, 5/2/07	875.00
200705	PEA789PHENCNPEZZZZZ501	501	IT000185	ARMA-HAWAII CHAPTER	REGISTRATION FOR GAIL HORIMOTO, 5/9/07	99.00
200705	PEA789PHENCNPEZZZZZ501	501	IT000185	ARMA-HAWAII CHAPTER	REGISTRATION FOR DEBBIE NUESCA, 5/9/07	99.00
200705	PEA789PHENCNPEZZZZZ501	501	IT000185	FRED PRYOR SEMINARS	REGISTRATION FOR RICH EBER, 6/26/07	148.96
200705	PEA789PHENCNPEZZZZZ501	501	IT000185	GAIL HORIMOTO	EMPLOYEE EXPENSE REIMB	78.00
200707	PED789PHENCNPEZZZZZ501	501	IT000185		51D GENERAL LEDGER	(148.96)
200710	PEA789PHENCNPEZZZZZ501	501	IT000185	ELIZABETH OEI	EMPLOYEE EXPENSE REIMB	25.00
200712	PEA789PHENCNPEZZZZZ501	501	IT000185	IBM CORPORATION	T14A1 IBM Complete WebSphere MQ	261.78
200712	PEA789PHENCNPEZZZZZ501	501	IT000185	IBM CORPORATION	T14B1 IBM WebSphere MQ Administration	382.20
200712	PEA789PHENCNPEZZZZZ501	501	IT000185	SECURE TECHNOLOGY HAWAII, INC.	VMWare Training for KUyeoka & DYamamoto	6,900.52
200704	PED788PHENCNPEZZZZZ501	501	IT000185	HEWLETT PACKARD CO.	U3983X UNIX TRAINING 3/5-9/07 AT HECO	1,811.40
200703	PEA749PHENCNPEZZZZZ501	501	IT000186	SANS INSTITUTE	REGISTRATION FOR HARLAN MATTOS	2,350.00
200703	PEA749PHENCNPEZZZZZ501	501	IT000186	DAVID BARCLAY	EMPLOYEE EXPENSE REIMB	808.00
200704	PEA749PHENCNPEZZZZZ501	501	IT000186	EXPERIENT/FBO IBM IMPACT 2007	REGISTRATION FOR CAMILLE AU, 5/20-25	2,200.00
200706	PEA749PHENCNPEZZZZZ501	501	IT000186	LES MCCARTER	EMPLOYEE EXPENSE REIMBURSEMENT	395.00
200706	PEA749PHENCNPEZZZZZ501	501	IT000186	RENNA TYLER	EMPLOYEE EXPENSE REIMB	195.00
200708	PEA749PHENCNPEZZZZZ501	501	IT000186	VIGNETTE VILLAGE REGISTRATION	REGISTRATION FOR DORA NAKAMUAR,10/29-31	1,170.00
200710	PEA749PHENCNPEZZZZZ501	501	IT000186	RICK STULLER	EMPLOYEE EXPENSE REIMB	621.77
		501 Total				18,271.67
200703	PEA749PHENCNPEZZZZZ520	520	IT000186	DAVID BARCLAY	EMPLOYEE EXPENSE REIMB	1,885.08
200705	PEA749PHENCNPEZZZZZ520	520	IT000186	RICK STULLER	EMPLOYEE EXPENSE REIMB	353.96
200705	PEA749PHENCNPEZZZZZ520	520	IT000186	HARLAN MATTOS	EMPLOYEE EXPENSE REIMBURSEMENT	1,714.82
200705	PEA749PHENCNPEZZZZZ520	520	IT000186	LES MCCARTER	EMPLOYEE EXPENSE REIMBURSEMENT	1,135.93
200705	PEA749PHENCNPEZZZZZ520	520	IT000186	DALEN LEONG	EMPLOYEE EXPENSE REIMB	704.59
200706	PEA749PHENCNPEZZZZZ520	520	IT000186	REID WATANABE	EMPLOYEE EXPENSE REIMB	1,106.71
200706	PEA749PHENCNPEZZZZZ520	520	IT000186	CAMILLE AU	EMPLOYEE EXPENSE REIMBURSEMENT	1,694.54
200706	PEA749PHENCNPEZZZZZ520	520	IT000186	LES MCCARTER	EMPLOYEE EXPENSE REIMBURSEMENT	758.91
200706	PEA749PHENCNPEZZZZZ520	520	IT000186	RENNA TYLER	EMPLOYEE EXPENSE REIMB	1,574.99
200706	PEA749PHENCNPEZZZZZ520	520	IT000186	NORMAN LAU	EMPLOYEE EXPENSE REIMBURSEMENT	1,922.56
200708	PEA749PHENCNPEZZZZZ520	520	IT000186	GAYLORD TEXAN RESORT &	HOTEL RESERVATION FOR DORA NAKAMURA	1,058.40
200708	PEA749PHENCNPEZZZZZ520	520	IT000186	REID WATANABE	EMPLOYEE EXPENSE REIMB	374.19
200708	PEA749PHENCNPEZZZZZ520	520	IT000186	DALEN LEONG	EMPLOYEE EXPENSE REIMB	324.56
200710	PEA749PHENCNPEZZZZZ520	520	IT000186		51D RICK STULLER	(396.81)
200710	PEA749PHENCNPEZZZZZ520	520	IT000186	RICK STULLER	EMPLOYEE EXPENSE REIMB	1,084.75
200710	PEA749PHENCNPEZZZZZ520	520	IT000186	RICK STULLER	EMPLOYEE EXPENSE REIMB	39.00
200710	PEA749PHENCNPEZZZZZ520	520	IT000186	DORA NAKAMARU	EMPLOYEE EXPENSE REIMB	733.32
200711	PEA749PHENCNPEZZZZZ520	520	IT000186	DORA NAKAMARU	EMPLOYEE EXPENSE REIMB	43.00
		520 Total				16,112.50
200703	PEA749PHENCNPEZZZZZ521	521	IT000186	MARRIOTT REDMOND TOWN CENTER	HOTEL RESERVATION FOR HARLAN MATTOS	1,335.30
200703	PEA749PHENCNPEZZZZZ521	521	IT000186	THE FAIRMONT SAN JOSE	HOTEL RESERVATION FOR HARLAN MATTOS	962.50

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Hawaiian Electric Company, Inc.
ITS Department
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Training Travel
Stuller

FULL_PERIOD	ACCOUNT_CODE	exp type	WORK ORDER	SUPPLIER_NAME	desc	TRAN_AMOUNT
200703	PEA749PHENCNPEZZZZZ521	521	IT000186	DAVID BARCLAY	EMPLOYEE EXPENSE REIMB	172.62
200705	PEA749PHENCNPEZZZZZ521	521	IT000186	HARLAN MATTOS	EMPLOYEE EXPENSE REIMBURSEMENT	129.25
200706	PEA749PHENCNPEZZZZZ521	521	IT000186	CAMILLE AU	EMPLOYEE EXPENSE REIMBURSEMENT	56.15
200706	PEA749PHENCNPEZZZZZ521	521	IT000186	LES MCCARTER	EMPLOYEE EXPENSE REIMBURSEMENT	31.91
200706	PEA749PHENCNPEZZZZZ521	521	IT000186	RENNA TYLER	EMPLOYEE EXPENSE REIMB	84.32
200706	PEA749PHENCNPEZZZZZ521	521	IT000186	NORMAN LAU	EMPLOYEE EXPENSE REIMBURSEMENT	55.85
200708	PEA749PHENCNPEZZZZZ521	521	IT000186	REID WATANABE	EMPLOYEE EXPENSE REIMB	140.24
200710	PEA749PHENCNPEZZZZZ521	521	IT000186	RICK STULLER	EMPLOYEE EXPENSE REIMB	158.65
200710	PEA749PHENCNPEZZZZZ521	521	IT000186	RICK STULLER	EMPLOYEE EXPENSE REIMB	10.21
200711	PEA749PHENCNPEZZZZZ521	521	IT000186	DORA NAKAMARU	EMPLOYEE EXPENSE REIMB	38.95
		521 Total				3,175.95
		Grand Total	**IT000185 Total**		**IT000186 Total**	37,560.12

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	37,560.12

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Hawaiian Electric Company, Inc.
ITS Department
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PERIOD	ACCOUNT CODE	alc	ORDER	SUPPLIER NAME	desc	TRAN AMO
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	HAWAIIAN IMAGING SUPPLY	Copy Paper; Part# 45-111	54.45
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	INSIGHT DIRECT, INC.	Tripp Lite Isobar 8 Ultra surge suppress	162.42
200701	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	(219.43)
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	475.40
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP35/45/55 Staples	95.10
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	220.48
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Imaging Unit	1,793.16
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Carrera Staple Refills	95.10
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	661.45
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox 8850 Dry Ink	372.02
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP2128 Staple Refills	97.19
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	220.48
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Transfer Roller	307.17
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Fuser Unit	220.48
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Nuvera Staple Refills	97.19
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	658.29
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	219.43
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	438.86
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	NCR 2pt paper	146.07
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	135.18
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP200 series staples	283.92
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox Phaser 6250 Fuser Unit	438.86
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	438.86
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	219.43
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	202.77
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox White 5 pos tabs, pos 2/4	87.61
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Nuvera Staples	96.72
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox Phaser 6250 Transfer Roller	152.85
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox C2336 Staples	96.72
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox Phaser 6250 Transfer Roller	50.95
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox C2336 Staples	189.28
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox Carrera Staples	94.64
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP35/45/55 Staples	378.56
200703	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox White 5 pos tabs, pos 3	87.61
200705	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	440.97
200705	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP35/45/55 Staples	95.10
200705	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	440.97
200705	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Fuser Unit	440.97
200705	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	8-1/2 x 11 24# Digital Opaque Paper	121.12
200705	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	661.45

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Hawaiian Electric Company, Inc.
ITS Department
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PERIOD	ACCOUNT CODE	Line	ORDER	SUPPLIER NAME	DESC	TRAN_AMO
200705	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	339.57
200705	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Imaging Unit	597.72
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8550 Yellow Solid Ink	98.23
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Carrera Staple Cart	190.19
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Staple Cart	86.74
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	695.94
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	695.94
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Imaging Unit	319.76
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8550 Black Solid Ink	61.66
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8550 Cyan Solid Ink	98.23
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	White Tabs, 3HD 9 position	440.15
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Booklet Maker Staple Refill	518.32
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	927.92
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	C2128 Staple Cart	97.19
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8550 Black Solid Ink	98.23
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	WCP35/45/55 Staples	95.10
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8550 Magenta Solid Ink	98.23
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	490.03
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Transfer Roller	53.28
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	C2128 Staple Cart	291.56
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Fuser Unit	440.97
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP2636 Staples	97.19
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	203.74
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP35/45/55 Staples	95.10
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Transfer Roller	153.58
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	220.48
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	440.97
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP2636 Staples	86.74
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	220.48
200706	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox WCP2636 Staples, ext	161.98
200707	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	1,159.90
200707	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8550 Std Cap Maint Kit	110.77
200707	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Fuser Unit	231.98
200707	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	210.01
200707	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	463.96
200707	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	WCP35/45/55 Staple Cart	95.10
200707	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Imaging Unit	959.28
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	4110 Staple Cart	323.95
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	231.98
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Carrera Staple Cart	95.10

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PERIOD	ACCOUNT CODE	ele	ORDER	SUPPLIER NAME	desc	TRAN AMO
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	1,623.86
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	420.03
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 110V Fuser	463.96
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	463.96
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Transfer Roller	53.28
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8560 Waste Tray	87.76
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Staples for WCP3545	98.23
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Imaging Unit	1,598.80
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Transfer Roller	213.14
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8550 Maintenance Kit	221.54
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	C2636 Staple Cart. Refills	97.19
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	1,623.86
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	700.05
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 110V Fuser	231.98
200709	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	695.94
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	231.98
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	210.01
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8500 Cyan Solid Ink	98.23
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	231.98
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Imaging Unit	639.52
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Transfer Roller	159.85
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8560 Std Maintenance Kit	775.39
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8560 Waste Tray	219.40
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Xerox 11 White Tabs, 3HD	94.15
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	463.96
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8500 Magenta Solid Ink	98.23
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	7665 Staple Cart	107.64
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	231.98
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	9 x 11 Tabs, 3HD	282.46
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Carrera Staple Cart	300.96
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8500 Yellow Solid Ink	98.23
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	210.01
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Imaging Unit	1,279.04
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 110V Fuser	231.98
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 8650 Maintenance Kit	221.54
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 110V Fuser	463.96
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	463.96
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Black	140.01
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	9X11 Std Tabs, 3HD	94.15
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Cyan	231.98

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200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	463.96
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Yellow	463.96
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Transfer Roller	106.57
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Hi Cap Toner, Magenta	231.98
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	Phaser 6250 Imaging Unit	959.28
200711	PEI967PHENCNPEZZZZZ201	201	IT000193	XEROX CORPORATION	8560 Std Maintenance Kit	221.54
200712	PEI967PHENCNPEZZZZZ201	201	IT000193	CDW DIRECT, LLC	BROTHER INTELLIFAX-2820 LASER FAX	191.24
200712	PEI967PHENCNPEZZZZZ201	201	IT000193	CDW DIRECT, LLC	BROTHER TN350 TONER BLK	89.74
200701	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 117686/002	(24.01)
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/001	79.32
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/002	26.44
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/003	52.88
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/004	16.29
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/005	34.21
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/006	18.42
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/007	52.88
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/008	11.40
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122443/009	11.65
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/001	52.88
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/002	26.44
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/003	24.43
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/004	45.62
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/005	6.14
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/006	17.60
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/007	10.56
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/008	10.56
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/009	11.65
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 122669/010	22.81
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124445/001	6.56
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124515/003	19.57
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/001	79.70
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/002	26.57
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/003	57.29
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/004	26.57
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/005	11.46
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/006	216.08
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/007	37.01
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/008	26.57
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/009	44.83
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/010	11.71

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200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/011	11.46
200703	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 124519/012	11.71
200705	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 125947/001	83.21
200705	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 125947/002	55.47
200705	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 125947/003	55.47
200705	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 125947/004	42.72
200705	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 125947/005	11.96
200705	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 125947/006	75.19
200705	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 125947/007	55.47
200705	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 125947/008	15.24
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/001	27.74
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/002	27.74
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/003	55.47
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/004	25.63
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/005	11.96
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/006	19.32
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/007	55.47
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/008	20.38
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/009	12.23
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 127042/010	10.91
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/001	116.73
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/002	87.55
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/003	87.55
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/004	12.23
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/005	61.65
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/006	11.96
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/007	40.23
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/008	6.70
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/009	7.76
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/010	12.36
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/011	12.36
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/012	12.36
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/013	12.36
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/014	55.37
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/015	65.20
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/016	23.93
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/017	36.68
200706	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 129345/018	10.91
200707	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 130694/001	145.92
200707	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 130694/002	58.37

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200707	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 130694/003	26.42
200707	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 130694/004	11.96
200707	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 130694/005	120.68
200707	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 130694/006	13.93
200707	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 130694/007	29.18
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/001	258.36
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/002	258.36
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/003	73.82
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/004	111.38
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/005	8.48
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/006	13.96
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/007	36.91
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/008	51.54
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132526/009	15.63
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/001	36.91
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/002	110.72
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/003	66.83
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/004	254.37
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/005	33.91
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/006	35.25
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/007	73.82
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/008	15.13
200709	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 132504/009	15.46
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 134763/001	41.04
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 134763/002	82.07
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 134763/003	82.07
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 134763/004	37.15
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 134763/005	226.26
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 134763/006	18.85
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 134763/007	39.19
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 134763/008	82.07
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/001	82.07
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/002	41.04
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/003	41.04
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/004	24.77
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/005	169.70
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/006	39.19
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/007	41.04
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/008	16.66
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/009	49.97

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200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 133111/010	53.24
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/001	41.04
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/002	41.04
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/003	82.07
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/004	37.15
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/005	113.13
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/006	28.28
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/007	17.38
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/008	17.38
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/009	17.38
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/010	137.17
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/011	38.81
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/012	16.66
200711	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 135603/013	19.04
200712	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 136449/002	15.88
200712	PEI967PHENCNPEZZZZZ201	201	IT000193		ON COST CHG TO: 136449/001	33.83
		201	**Total**			48,601.24
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	313.54
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#137128	69.27
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#137128	179.16
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#198404	(83.28)
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#371396	103.35
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#089725	139.20
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#092321	225.02
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#205434	61.20
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#895957	148.33
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#173594	187.45
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#174082	15.54
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#235191	296.66
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#949500	225.90
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#021666	259.58
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#179269	259.58
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#356600	62.89
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#021086	148.33
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#056429	356.09
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#237952	242.29
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#239938	89.58
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#098065	(139.20)
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#099477	139.20
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#924079	96.19

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PERIOD	ACCOUNT_CODE	ole	ORDER	SUPPLIER_NAME	desc	TRAN_AMO
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#250508	115.95
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#135357	222.50
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#102064	139.20
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#109859	222.50
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#169971	435.31
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#170661	593.33
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#087306	74.16
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#334718	246.54
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#921732	259.58
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#137676	138.23
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#138145	259.58
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#312919	260.83
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#109103	58.77
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#212129	185.42
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#213800	16.79
200701	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	LANIER WORLDWIDE	400.31
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#637144	30.10
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#467568	74.55
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#504656	74.56
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#549802	103.42
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#962024	313.26
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#551223	422.13
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#534048	298.22
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#651078	(90.05)
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#908568	438.54
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#908575	270.16
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#961726	100.60
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#002164	372.77
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#626223	260.94
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#880372	260.94
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#561749	449.05
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#946995	74.55
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#575593	92.32
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#772918	111.84
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#876336	96.69
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#610662	260.94
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#520778	372.77
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#557853	65.95
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#622166	43.66
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#980804	146.42

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PERIOD	ACCOUNT CODE	ale	ORDER	SUPPLIER NAME	DESC	TRAN AMO
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#532661	149.11
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	CLASSIC GROUP INTERNAT	81.68
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#507381	42.53
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#686207	298.22
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#561716	160.85
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#848123	57.42
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	79.58
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#966332	328.17
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#849118	125.27
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#600667	326.00
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#943824	61.52
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#573434	149.11
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#470250	121.78
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#919467	149.11
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#515540	138.96
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#406777	52.35
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#679219	358.45
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#800689	111.83
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#800689	6.27
200702	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#984360	290.77
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#308531	292.35
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#401517	149.11
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#149565	111.83
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#023217	83.99
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#060921	223.67
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#255751	544.52
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#412816	539.13
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#094800	337.27
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#121229	87.43
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	FISHER HAWAII	60.63
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#206699	201.88
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#040295	111.83
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#243002	74.56
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#494749	74.55
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#152149	87.43
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#235384	14.17
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#400227	111.84
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#439300	239.65
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#530837	260.94
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#530855	131.36

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PERIOD	ACCOUNT CODE	ele	ORDER	SUPPLIER NAME	desc	TRAN AMO
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#048717	4.72
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#135112	299.95
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#321669	233.70
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#411789	260.94
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#163899	298.22
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#076819	186.39
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#079982	83.71
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	ALPHA ELECTRIC SUPPLY	14.35
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#158461	103.35
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#262970	394.73
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#368857	(213.19)
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#396237	158.45
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#144301	246.62
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#395058	298.22
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#345591	174.87
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#479283	111.83
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	315.18
200703	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#084547	83.72
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#413953	57.07
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#856805	149.11
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#705533	372.77
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#663865	70.79
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#761360	111.83
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#943653	124.43
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#775652	298.22
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#763979	186.39
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#664678	176.89
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#636897	260.94
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#811068	260.94
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#878131	87.44
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#020603	223.67
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#913226	204.01
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#552986	67.85
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#901925	280.11
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#996346	87.44
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#673318	111.83
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	ALPHA ELECTRIC SUPPLY	70.73
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#785095	111.83
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#614439	87.44
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#653148	(87.44)

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PERIOD	ACCOUNT CODE	ele	ORDER	SUPPLIER NAME	desc	TRAN AMO
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#733827	745.55
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#995877	475.66
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#838156	223.66
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#808173	186.39
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#808309	372.77
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#884488	438.54
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#943177	363.35
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#943180	81.99
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#829259	74.56
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#786163	96.69
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#809947	223.67
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#635766	74.16
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#881457	118.80
200704	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#055540	136.07
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	EDP PRODUCTS CO INC	325.53
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	EDP PRODUCTS CO INC	325.53
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#388736	111.83
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#461157	223.66
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	369.63
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#545235	22.36
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#242671	262.31
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#447263	372.77
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#462017	372.77
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#486035	372.77
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#565343	(372.77)
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#562726	83.41
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#190044	149.11
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#484609	111.83
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#203820	92.32
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#132353	139.93
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#250881	111.83
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#501652	96.70
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#597303	111.83
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#128160	149.11
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#500284	260.94
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#447653	111.83
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#491935	111.84
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#598244	221.20
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#599948	180.11
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#121096	111.83

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200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#253983	169.17
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#561034	149.11
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#132364	87.43
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#448832	10.70
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#599101	298.22
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#249512	260.94
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#547583	53.30
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#266730	241.36
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#421913	223.67
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#608241	149.11
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#398473	37.27
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#581329	186.39
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#188292	298.22
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#190456	104.72
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#643713	325.86
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#132365	74.55
200705	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#461525	41.47
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#855848	74.16
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#855910	122.20
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#691803	395.18
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#103124	174.87
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#917412	114.46
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#991409	244.40
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#017622	136.77
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#938189	427.95
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#735396	267.78
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#001894	325.86
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#911475	87.44
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#725079	35.39
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#157006	176.89
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#965044	99.46
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#856547	8.15
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#179162	122.20
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#050308	244.15
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#751377	244.39
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#132316	244.39
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#712687	81.50
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#941722	81.47
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#844419	203.66
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#687010	162.93

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ERDOC	ACCOUNT CODE	##	ORDER	SUPPLIER NAME	DESC	TRAN AMO
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#719314	80.52
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#820268	190.07
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#019259	203.66
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#037757	9.38
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#422067	88.21
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#828698	244.91
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#994677	122.20
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#699547	67.28
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#159984	40.73
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#083512	488.80
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#859363	81.46
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#887853	253.56
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#820111	325.86
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#988469	189.90
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#725057	122.20
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#910405	122.20
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#173427	103.35
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#762715	285.13
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#906131	87.43
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#666064	295.16
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#762601	87.44
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#868938	261.55
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#037833	244.39
200706	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#608066	(204.18)
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 532061	306.23
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#234570	356.96
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 452867	120.11
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 515583	162.94
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#304968	443.93
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#316480	325.86
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 425736	233.70
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 451619	28.59
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 602870	290.10
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 452974	166.44
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 482104	162.53
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#376281	83.72
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 511964	113.87
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 630885	83.35
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 434581	203.66
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	ALPHA ELECTRIC-HONOLUL	27.96

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PERIOD	ACCOUNT CODE	Loc	ORDER	SUPPLIER NAME	desc	TRAN AMO
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#322997	55.30
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#323046	122.20
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	163.35
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	455.50
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 541721	407.33
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 625262	262.31
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 489748	107.03
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#321265	131.04
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#323204	90.05
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#185346	139.93
200707	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#308673	210.47
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 080764	125.02
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 957439	101.54
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 715995	125.02
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 644147	291.73
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 921895	276.59
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 939186	29.85
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 939187	24.87
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 801034	186.54
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 743559	30.10
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 749533	4.98
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 894751	9.95
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 147626	163.68
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 156258	9.95
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 860096	87.44
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 926108	63.28
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 095762	63.28
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 156318	26.17
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 673390	333.40
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	CLASSIC GROUP INTERNAT	78.54
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 669723	475.60
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 669736	362.05
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 669977	250.05
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 916406	121.78
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 133848	416.75
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 154088	343.04
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 844298	83.35
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 787696	208.38
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 918477	469.01
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 723733	750.16

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PERIOD	ACCOUNT CODE	Leg	ORDER	SUPPLIER NAME	desc	TRAN AMO
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 939277	250.05
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 058933	202.83
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 832007	170.16
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 867571	208.38
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 867552	(170.16)
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 012123	166.70
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 662885	333.40
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 951991	291.73
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 071165	87.43
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 427478	221.97
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 691405	99.37
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 691505	99.37
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 690352	(337.94)
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 812458	291.73
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 094998	291.73
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 806287	333.40
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 883946	181.03
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 674542	166.70
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 733891	181.87
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 879537	53.09
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 883139	(88.48)
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 045958	252.62
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 699005	333.40
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 774256	296.70
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 094045	136.13
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 144681	166.70
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 657224	275.13
200708	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 921366	250.05
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 517138	398.10
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 262231	125.03
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 691796	273.36
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 485600	431.41
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 364167	101.08
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	217.80
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 333173	129.42
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 494047	116.49
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 612846	372.77
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 498061	201.93
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 644346	129.42
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 683698	156.34

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PERIOD	ACCOUNT CODE	SUB	ORDER	SUPPLIER NAME	DESC	TRAN AMO
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 309863	215.70
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 260792	291.73
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 445829	118.58
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 633788	21.57
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 657727	215.70
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 350613	172.57
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 531452	78.50
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 570223	87.44
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 310809	258.85
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 569705	316.91
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 619379	99.37
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 288564	90.51
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 292505	333.40
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 665727	90.51
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	163.35
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 634867	243.83
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 503534	345.13
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 419205	88.74
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 637078	84.51
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 131727	(136.13)
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 485051	101.21
200709	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 201623	348.49
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	XEROX SUPPLY TEXAS	396.06
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 111088	197.77
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 969958	129.43
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 758564	475.60
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 901672	181.02
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 980304	431.41
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 829662	82.40
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#154845	129.42
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 904241	101.54
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 709722	1,004.55
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	EDP PRODUCTS CO INC	131.31
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 792355	62.60
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 838746	43.00
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 743142	226.76
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 091634	129.42
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 754097	258.85
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#213699	243.07
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 754662	368.64

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PERIOD	ACCOUNT CODE	Ele	ORDER	SUPPLIER NAME	DESC	TRAN AMO
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 718036	172.57
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#159525	234.30
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#242657	173.72
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 055109	181.03
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 813319	518.85
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 942468	11.85
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 982458	345.13
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 705477	301.98
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 995436	86.28
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 059834	4.98
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 792886	329.35
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 010403	99.37
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 043717	258.85
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 743662	68.45
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 889691	345.13
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 111381	336.20
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 918738	43.14
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#232677	247.80
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 763784	56.70
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 980051	122.01
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 059396	518.03
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#995649	130.64
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 716571	86.28
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 944903	258.85
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 781952	51.73
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 861629	123.35
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 995117	25.88
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 010861	258.85
200710	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT IN 741838	172.57
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#341080	270.70
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#439421	99.37
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#560415	301.98
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#759779	287.44
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#302296	301.65
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#535453	5.22
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#607074	61.11
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#665942	63.11
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#624128	86.29
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#583177	215.70
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#602166	310.26

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PERIOD	ACCOUNT CODE	Bal	ORDER	SUPPLIER NAME	DESC	TRAN AMO
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#602257	224.01
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#602277	306.56
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#503490	51.73
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#545189	224.29
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#298614	27.36
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#685842	215.70
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#744478	21.15
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#470289	129.25
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#690376	258.85
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#528466	101.55
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#450077	156.34
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#507151	296.06
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#480840	483.14
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#571701	104.87
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#338499	43.14
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#386229	86.28
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#533941	172.57
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#704579	188.69
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#365821	345.13
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	HAWAIIAN IMAGING & SUP	467.02
200711	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#352638	431.41
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#817503	475.60
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#858591	215.71
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#017910	54.73
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#018234	172.57
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#095299	(9.12)
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#901067	172.57
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#089505	129.25
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#960919	129.42
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#807533	215.70
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#144829	258.85
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#144911	1,121.68
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#157664	178.93
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#853435	178.93
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#038837	217.65
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#896378	172.57
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#911067	345.13
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#852111	129.42
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#946519	(129.42)
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#054153	215.70

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200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#968249	204.06
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#105699	43.15
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#097532	309.37
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#847448	86.28
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#944505	(178.93)
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#842933	247.73
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#899595	99.37
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#041479	301.98
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#203594	258.85
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#213495	99.37
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#918468	172.57
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#979414	129.09
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#026892	129.09
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#163787	229.56
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#804069	345.13
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#777535	(34.51)
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#850960	68.06
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#027211	172.56
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#092853	258.85
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#873147	258.85
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#091555	51.73
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	BANK ONE	OFFICEMAX CT*IN#036424	219.37
200712	PEI967PHENCNPEZZZZZ205	205	IT000193	OFFICEMAX CONTRACT, INC. DBA	SUPPLIES	350.10
200704	PEI967PHENCNPEZZZZZ205	205	IT000193		HAWAIIAN IMAGING & SUP	(313.54)
200705	PEI967PHENCNPEZZZZZ205	205	IT000193		OFFICEMAX	74.55
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		OFFICEMAX CT*IN#23292	244.39
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANS DATE: 1/9/07 OFFICE MAX INV#416515	285.72
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANS DATE: 1/9/07 OFFICE MAX INV#417740	195.54
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANS DATE: 1/9/07 OFFICE MAX INV#514230	490.47
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANS DATE: 1/9/07 OFFICE MAX INV#515666	272.86
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANS DATE: 1/9/07 OFFICE MAX INV#561445	285.72
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANS DATE: 1/9/07 OFFICE MAX INV#820093	285.72
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANS DATE: 1/9/07 OFFICE MAX INV#820098	204.76
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANS DATE: 1/9/07 OFFICE MAX INV#470094	303.06
200708	PEI967PHENCNPEZZZZZ205	205	IT000193		STATIONARY CHRGS-PURCHASING CARD	125.03
200710	PEI967PHENENPEZZZZZ205	205	IT000193		XEROX PAPER F/KING ST 1ST FLOOR	416.75
200710	PEI967PHENENPEZZZZZ205	205	IT000193		XEROX PAPER FOR KING ST 1ST FLR	(416.75)
200710	PEI967PHENCNPEZZZZZ205	205	IT000193		XEROX PAPER FOR KING ST 1ST FLR	416.75
200712	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANSFER OF CHARGE	229.57
200712	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANSFER OF ACCOUNTS	229.57

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200712	PEI967PHENCNPEZZZZZ205	205	IT000193		TRANSFER OF ACCOUNTS	79.27
200712	PEI967PHENCNPEZZZZZ205	205	IT000193		OFFICEMAX CT*IN#501247	87.44
		205	**Total**			93,341.14
200703	PEI967PHENCNPEZZZZZ220	220	IT000193	BANK ONE	OFFICEMAX CT*IN#073189	71.20
		220	**Total**			71.20
200704	PEI967PHENCNPEZZZZZ221	221	IT000193	BANK ONE	OFFICEMAX CT*IN#020278	265.44
		221	**Total**			265.44
200709	PEI967PHENCNPEZZZZZ223	223	IT000193	BANK ONE	OFFICEMAX CT IN 483931	243.41
		223	**Total**			243.41
200710	PEI967PHENCNPEZZZZZ463	463	IT000193	BANK ONE	OFFICEMAX CT IN 112708	118.58
		463	**Total**			118.58
200710	PEI967PHENCNPEZZZZZ501	501	IT000193	BANK ONE	OFFICEMAX CT IN 930471	86.28
200701	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	PRINTER MAINTENANCE SERVICES	4,498.01
200701	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	162.30
200701	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	94.24
200701	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	293.19
200701	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	235.60
200701	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	219.90
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	314.14
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	308.90
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	4,498.01
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	115.18
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	4,498.01
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	94.24
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	115.18
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	94.24
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	193.72
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	289.01
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	193.72
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	193.72
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	460.73
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	4,498.01
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	219.90
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	324.61
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	109.95
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	109.95
200704	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	137.43
200705	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	4,391.41
200705	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	94.24
200705	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	249.21

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200705	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	324.61
200706	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	4,116.86
200706	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	APRIL MAINTENANCE	(274.55)
200706	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	109.95
200706	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	261.78
200706	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	94.24
200706	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	193.72
200707	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	193.72
200707	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	271.20
200707	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	301.57
200707	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	298.43
200707	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	4,116.86
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	291.10
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	4,077.07
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	CREDIT, JULY MAINTENANCE	(316.44)
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	291.10
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	403.14
200709	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	3,526.91
200709	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	301.57
200709	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	116.86
200709	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	109.95
200709	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	280.63
200710	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	280.63
200710	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	3,643.77
200710	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	120.42
200710	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	1,403.14
200710	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007 PRINTER MAINTENANCE SERVICES	312.04
200711	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007-2008 PRINTER MAINTENANCE SERVICES	3,631.62
200711	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007-2008 PRINTER MAINTENANCE SERVICES	308.90
200712	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007-2008 PRINTER MAINTENANCE SERVICES	308.90
200712	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007-2008 PRINTER MAINTENANCE SERVICES	3,600.21
200712	PEI967PHENCNPEZZZZZ501	501	IT000193	MAINTEC, INC.	2007-2008 PRINTER MAINTENANCE SERVICES	214.66
200701	PEI967PHENCNPEZZZZZ501	501	IT000193	INC.	2006 CANON COPIER MAINTENANCE	218.83
200701	PEI967PHENCNPEZZZZZ501	501	IT000193	INC.	2006 CANON COPIER MAINTENANCE	71.36
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	HAWAII BUSINESS EQUIPMENT, IN	2007 CANON COPIER MAINTENANCE	240.89
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	HAWAII BUSINESS EQUIPMENT, IN	2007 CANON COPIER MAINTENANCE	78.51
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	HAWAII BUSINESS EQUIPMENT, IN	2007 CANON COPIER MAINTENANCE	240.89
200703	PEI967PHENCNPEZZZZZ501	501	IT000193	HAWAII BUSINESS EQUIPMENT, IN	2007 CANON COPIER MAINTENANCE	78.51
200707	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	16.72
200707	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	16.72

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PERIOD	ACCOUNT CODE	c/c	ORDER	SUPPLIER NAME	DESC	TRAN AMO
200707	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	16.72
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	BASE CHARGE 06/01/07 - 04/30/08	(172.43)
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	BASE CHARGE 06/01/07 - 04/30/08	(172.43)
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	BASE CHARGE 06/01/07 - 04/30/08	(172.43)
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	317.86
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	317.86
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	317.86
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	BASE CHARGE 06/01/07 - 03/30/08	(261.25)
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	BASE CHARGE 06/01/07 - 03/30/08	(261.25)
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	BASE CHARGE 06/01/07 - 03/30/08	(261.25)
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	BASE CHARGE 06/01/07 - 03/30/08	(261.25)
200708	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	BASE CHARGE 06/01/07-03/30/08	(261.25)
200709	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200709	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200709	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200712	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX RELOCATION CHARGES (IT000193)	415.91
200712	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX RELOCATION CHARGES (IT000193)	196.23
200712	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX RELOCATION CHARGES (IT000193)	205.46
200712	PEI967PHENCNPEZZZZZ501	501	IT000193	XEROX CORPORATION	XEROX RELOCATION CHARGES (IT000193)	242.42
200705	PEI967PHENCNPEZZZZZ501	501	IT000193	BACKGROUND INFORMATION SER	ITS Div background checks fr	3.78
200705	PEI967PHENCNPEZZZZZ501	501	IT000193	BACKGROUND INFORMATION SER	ITS Div background checks fr	84.00
		501 Total				61,358.67
200703	PEI967PHENCNPEZZZZZ522	522	IT000193	BANK ONE	OFFICEMAX CT*IN#291201	260.94
		522 Total				260.94
200701	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	10,466.08
200701	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DC470C COPIER LEASE/MAINTENANCE	397.87
200701	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	858.76
200701	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	1,524.53
200701	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	121.47
200702	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	3,976.40
200702	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	96.48
200702	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	460.25
200702	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	9,217.93
200703	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DC470C COPIER LEASE/MAINTENANCE	399.78
200703	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DC470C COPIER LEASE/MAINTENANCE	758.16
200703	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	5,609.24
200703	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	460.25

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PERIOD	ACCOUNT CODE	Sub.	ORDER	SUPPLIER NAME	desc	TRAN AMO
200703	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	2,025.40
200703	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	93.00
200704	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	7,329.54
200704	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	496.47
200704	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	2,184.78
200704	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	100.32
200705	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	14,749.14
200705	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DC470C COPIER LEASE/MAINTENANCE	129.39
200705	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	496.47
200705	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,921.51
200705	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	941.37
200705	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	8,708.99
200706	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	496.47
200706	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,184.78
200706	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	100.32
200707	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	11,708.26
200707	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	22,083.81
200709	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	12,988.16
200710	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	12,944.10
200710	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	564.65
200710	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,484.82
200710	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	114.10
200710	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	564.65
200710	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,484.82
200710	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	271.41
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	564.65
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,484.82
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	114.10
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	114.10
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	564.65
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,484.82
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	114.10
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	25,206.30
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	13,842.78
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	564.65
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,484.82
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	564.65
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,892.44
200712	PEI967PHENCNPEZZZZZ570	570	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	310.53
		570 Total				195,821.34

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200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	4,274.88
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DC470C COPIER LEASE/MAINTENANCE	64.77
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	10.40
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.80
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	350.76
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	622.69
200701	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	49.61
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	10.45
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	6,523.73
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	158.28
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	755.09
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90

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PERIOD	ACCOUNT CODE	site	ORDER	SUPPLIER NAME	desc	TRAN_AMO
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200702	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	15,123.06
200703	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DC470C COPIER LEASE/MAINTENANCE	65.08
200703	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DC470C COPIER LEASE/MAINTENANCE	123.42
200703	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	9,202.59
200703	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	755.09
200703	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	3,322.91
200703	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	152.58
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	10,613.03
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	50.10
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	124.60
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	28.62
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	39.26
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	73.89
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	58.77
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	38.04
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	45.01
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	76.37
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	79.79
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	178.22
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	6.11
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	6.11
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90

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PERIOD	ACCOUNT CODE	ele	ORDER	SUPPLIER NAME	desc	TRAN AMO
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	10.45
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	50.04
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	23.15
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	20.90
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	42.54
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	75.36
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	9.75
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	64.60
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	718.87
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	3,163.53
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT	145.26
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	CANCELLATION INVOICE/CUST. 710589086	(10.16)
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	CANCELLATION INV/CUST 710589086	4.38
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	CANCELLATION INV/CUST 710589144	(48.07)
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	CANCELLATION INVOICE/CUST #710589151	(48.07)
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	CANCELLATION INV/CUST #710589375	(23.31)
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	CANCELLATION INVOICE/CUSTOMER 710589417	(15.31)
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	CANCELLATION INVOICE/CUST #710589433	(2.77)
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	CANCELLATION INV/CUST 710613449	(48.07)
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	14.11
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	14.11
200704	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	14.11
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	21,356.46
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	323.09
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	321.34
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	323.95
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DC470C COPIER LEASE/MAINTENANCE	21.06
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	718.87
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	4,230.29
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	1,363.08
200705	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	12,610.44
200706	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	718.87
200706	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	3,163.53
200706	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	145.26

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PERIOD	ACCOUNT CODE	Cate	ORDER	SUPPLIER NAME	Desc	TRAN AMO
200707	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	16,953.34
200707	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	25,449.15
200708	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINT/SVC on equipment purchased 11/06:	30.57
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	14,967.42
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINTENANCE ON V02296 PURCHASED XEROX	323.95
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINTENANCE ON V02296 PURCHASED XEROX	323.95
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINTENANCE ON V02296 PURCHASED XEROX	188.10
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINTENANCE ON V02296 PURCHASED XEROX	188.10
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINTENANCE ON V02296 PURCHASED XEROX	188.10
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	322.20
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	323.09
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	322.20
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	321.34
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	323.09
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	323.09
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	318.73
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	318.73
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	318.73
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	318.73
200709	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	316.98
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	14,916.65
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	650.69
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,863.49
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	131.48
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	6.11
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	6.11
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	6.11
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINTENANCE ON V02296 PURCHASED XEROX	8.61
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	48.54
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	6.11
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	10.45
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	10.45
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	330.92
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	330.92
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	10.45
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	650.69
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,863.49

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PERIOD	ACCOUNT CODE	Acct	ORDER	SUPPLIER NAME	desc	TRAN AMO
200710	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	312.78
200711	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	6.11
200711	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	6.11
200711	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200711	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200711	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200711	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200711	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200711	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	650.69
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,863.49
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	131.48
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	PRE-DSA MAINTENANCE ON 8560DN PURCHASE	17.24
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	(CONT. V05567-4) XEROX MAINTENANCE ON	15.68
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX MAINTENANCE ON ABOVE UNITS UNTIL	15.68
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	131.48
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	PRE-DSA MAINTENANCE ON WCM20I PURCHAS	331.79
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	6.11
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	Pre-DSA maint. on 2 Xerox 5500s purchasd	6.11
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	MAINTENANCE ON V02296 PURCHASED XEROX	8.80
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	650.69
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,863.49
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	131.48
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	29,047.47
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	15,952.26
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	650.69
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	2,863.49
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	650.69
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	3,333.22
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	XEROX DOCUMENT SERVICES AGREEMENT 20(	357.86
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	PRE-DSA MAINTENANCE ON WCM20I PURCHAS	325.70
200712	PEI967PHENCNPEZZZZZ600	600	IT000193	XEROX CORPORATION	PRE-DSA MAINTENANCE ON WCM20I PURCHAS	325.70
200705	PEI967PHENCNPEZZZZZ600	600	IT000193		CANCEL APCK#647593-XEROX CORP	(968.38)
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)

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PERIOD	ACCOUNT CODE	cele	ORDER	SUPPLIER NAME	desc	TRAN_AMO
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)
200708	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CORPORATION USA	(27.17)
200709	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CAPITOL SERVICES	(27.17)
200711	PEI967PHENCNPEZZZZZ600	600	IT000193		51D XEROX CAPITAL SVCS	(94.04)
		600 Total				249,119.12
		Grand Total	**IT000193 Total**			649,201.08

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	649,201.08

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Interisland Circuit Charges
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PERIOD	ACCOUNT CODE	ale	ORDER	SUPPLIER NAME	desc	TRAN AMO
200706	PEI900PHENCNPEZZZZZ501	501	IT000195	HAWAIIAN TELCOM	MONTHLY CHARGES	7,479.40
200711	PEI900PHENCNPEZZZZZ501	501	IT000195	HAWAIIAN TELCOM	SERVICE PERIOD 10/01-10/31	44,286.85
200704	PEI900PHENCNPEZZZZZ501	501	IT000195	HAWAIIAN TELCOM	SVC CHRGS 2006/2007	18,284.35
		501 Total				70,050.60
200701	0	570	IT000195	PACIFIC LIGHTNET	MONTHLY CHARGES	1,801.74
200703	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	MONTHLY CHARGES	1,801.74
200703	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	MONTHLY SVC CHARGES	3,603.48
200705	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	CHRGS FOR 808-791-4125/791-4139/791-4165	1,801.74
200707	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	SERVICE CHARGES	1,801.74
200707	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	MONTHLY CHARGES	1,818.74
200708	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	MONTHLY CHARGES	1,900.08
200709	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	SERVICE PERIOD 8/26/07-9/25/07	1,818.74
200710	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	MONTHLY SERVICE	1,818.74
200711	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	SERVICE CHARGES	1,818.74
200712	PEI900PHENCNPEZZZZZ570	570	IT000195	PACIFIC LIGHTNET	SERVICE CHARGES	1,818.74
		570 Total				21,804.22
		Grand Total				91,854.82

Adjustments for 2009 Estimates:		
1) HaTel - Data Meco/Helco	Due to HaTel billing error, this was not reflected in 2007	60,000
		60,000
Total 2009 estimates		151,855

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Hawaiian Electric Company, Inc.
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Digital Printing, Word Processing Records Center
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PERIOD	ACCOUNT CODE	ale	ORDER	SUPPLIER NAME	desc	TRAN AMO
200710	PEC965PHENENPEZZZZZ20	201	IT000279		ON COST CHG TO: 133858/001	80.77
200710	PEC965PHENENPEZZZZZ20	201	IT000279		ON COST CHG TO: 133860/001	15.85
200710	PEC965PHENENPEZZZZZ20	201	IT000279		ON COST CHG TO: 133860/002	29.55
200710	PEC965PHENENPEZZZZZ20	201	IT000279	PAPERSOURCE HAWAII, INC.	PAPER, CLASSIC LINEN WRITING	94.03
200710	PEC965PHENENPEZZZZZ20	201	IT000279	PAPERSOURCE HAWAII, INC.	SPRINGHILL, 110 LB. INDEX, BLUE, 8.5x11"	175.24
200710	PEC965PHENENPEZZZZZ20	201	IT000279	XPEDX	Strathmore 88lb wove Paperstock	479.06
200711	PEC965PHENENPEZZZZZ20	201	IT000279	PAPERSOURCE HAWAII, INC.	SPRINGHILL, 110 LB. INDEX, BLUE, 8.5x11"	(157.61)
200711	PEC965PHENENPEZZZZZ20	201	IT000279		ON COST CHG TO: 133860/001	149.71
200711	PEC965PHENENPEZZZZZ20	201	IT000279		ON COST CHG TO: 133860/002	21.83
200711	PEC965PHENENPEZZZZZ20	201	IT000279	PAPERSOURCE HAWAII, INC.	SPRINGHILL, 110 LB. INDEX, BLUE, 8.5x11"	123.43
200711	PEC965PHENENPEZZZZZ20	201	IT000279	PAPERSOURCE HAWAII, INC.	PAPER, CLASSIC LINEN WRITING	846.27
200712	PEC965PHENENPEZZZZZ20	201	IT000279		ON COST CHG TO: 135616/001	11.11
200712	PEC965PHENENPEZZZZZ20	201	IT000279		ON COST CHG TO: 135618/001	13.71
200712	PEC965PHENENPEZZZZZ20	201	IT000279	C. INO DESIGN	Negative for Business Letterhead for	77.49
200712	PEC965PHENENPEZZZZZ20	201	IT000279	C. INO DESIGN	Negative for Executive Letterhead (SUSAN	62.83
		201	IT000279			2,023.27
200701	PEI967PHENENPEZZZZZ205	205	IT000279	BANK ONE	OFFICEMAX CT*IN#227199	472.65
200704	PEI967PHENENPEZZZZZ205	205	IT000279	BANK ONE	OFFICEMAX CT*IN#653876	360.52
200705	PEI967PHENENPEZZZZZ205	205	IT000279	BANK ONE	OFFICEMAX CT*IN#592996	360.52
200707	PEI967PHENENPEZZZZZ205	205	IT000279	BANK ONE	OFFICEMAX CT*IN#318782	536.92
		205	IT000279			1,730.61
200706	PEI967PHENENPEZZZZZ462	462	IT000279		to trnsfr csts to WO/Proj MEA lic/mnt	320.89
		462	IT000279			320.89
200705	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	298.43
200705	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	795.81
200705	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	251.31
200705	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	214.66
200705	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	87.96
200706	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	225.13
200706	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	49.21
200706	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	95.29
200706	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	95.29
200706	PEI967PHENENPEZZZZZ501	501	IT000279		to trnsfr csts to WO/Proj MEA lic/mnt	232.66
200709	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	315.82
200710	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	172.77
200711	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	387.43
200712	PEI967PHENENPEZZZZZ501	501	IT000279	ANDROWEN	ISLAND PRINTING CTR - IT000279 (ITS)	136.13
		501	IT000279			3,357.90
200704	PEI968PHENENPEZZZZZ205	205	IT000283	BANK ONE	OFFICEMAX CT*IN#627680	490.47
200704	PEI968PHENENPEZZZZZ205	205	IT000283	BANK ONE	OFFICEMAX CT*IN#627894	285.72
200704	PEI968PHENENPEZZZZZ205	205	IT000283	BANK ONE	OFFICEMAX CT*IN#627971	332.02
		205	IT000283			1,108.21
200702	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 123596/001	7.57
200702	PEC965PHENENPEZZZZZ20	201	IT000285	C. INO DESIGN	Negative for letterhead for	62.83
200703	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 123624/001	408.50

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200703	PEC965PHENENPEZZZZZ20	201	IT000285	COMMERCIAL SHELVING INC	20 EACH - SECTIONS OF OPEN TYPE METAL	3,390.00
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/001	63.39
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/002	121.02
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/003	15.15
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/004	25.37
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/005	1.82
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/006	19.33
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/007	9.61
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/008	8.62
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/009	5.30
200708	PEC965PHENENPEZZZZZ20	201	IT000285		ON COST CHG TO: 126286/010	11.60
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	PIR REX (P/N DS160) FOR RECORDS CENTER	159.45
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	3/4" RECESSED DOOR CONTACTS N1178CT/ST	11.46
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	#18/4 CONDUCTOR COMM CABLE PLENUM	60.41
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	#22/4 CONDUCTOR CONTROL CABLE PLENUM	33.33
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	HID PROX READER HID5355AGN00	398.43
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	ACS JUNCTION BOX 8"X 8" X6" INCLD HARDWR	121.51
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	HARDWARE/TERMINATION MATERIALS	72.91
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	HES ELECTRIC STRIKE (DRK BRONZE)	760.66
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	HES SMART PACK II (P/N 2005)	95.22
200708	PEC965PHENENPEZZZZZ20	201	IT000285	TELOS CORPORATION	#18/4 CONDUCTOR POWER CABLE PLENUM	54.16
		201	IT000285			5,917.65
200701	PEC965PHENENPEZZZZZ20	205	IT000285	BANK ONE	OFFICEMAX CT*IN#151484	494.79
200703	PEC965PHENENPEZZZZZ20	205	IT000285	BANK ONE	OFFICEMAX CT*IN#107278	76.69
200703	PEC965PHENENPEZZZZZ20	205	IT000285	BANK ONE	OFFICEMAX CT*IN#110315	22.80
200704	PEC965PHENENPEZZZZZ20	205	IT000285	BANK ONE	OFFICEMAX CT*IN#615388	252.04
200704	PEC965PHENENPEZZZZZ20	205	IT000285	BANK ONE	OFFICEMAX CT*IN#668031	(3.75)
200704	PEC965PHENENPEZZZZZ20	205	IT000285	BANK ONE	OFFICEMAX CT*IN#653894	86.04
		205	IT000285			928.61
200706	PEC965PHENENPEZZZZZ46	462	IT000285		to trnsfr csts to WO/Proj MEA lic/mnt	90.80
		462	IT000285			90.80
200701	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	RECORDS STORAGE/SERVICES (PRO-FILE)	3,844.85
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	36.87
200701	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	898.94
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	31.46
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	7.08
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	10.21
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	1.88
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	8.54
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	16.46
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	6.67
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	60.73
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	180.10
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	98.43
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	7.54

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200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	34.55
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	11.94
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	8.59
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	11.94
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	33.30
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	9.63
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	17.38
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	123.35
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	13.19
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	185.97
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	49.42
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	5.65
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	27.23
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	32.46
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	9.84
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	20.73
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	12.15
200701	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	34.35
200701	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(36.87)
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	15.08
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	58.43
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	2.09
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	84.40
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	68.48
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	15.29
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	41.47
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	5.65
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	293.40
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	29.53
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	10.26
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	19.90
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	6.49
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	11.31
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	49.84
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	33.30
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	61.78
200702	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,980.99
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	16.67
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	43.35
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	14.87
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	15.08
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	150.62
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	8.80
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	31.41
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	29.74

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200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	16.54
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	12.77
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	37.07
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	40.84
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	73.30
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	43.35
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	21.15
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	126.91
200702	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	26.60
200703	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	816.20
200703	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	581.00
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	10.89
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	14.66
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	8.59
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	31.20
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	67.23
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	86.28
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	14.45
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	2.51
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	150.16
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	80.00
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	17.17
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	66.39
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	54.66
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	7.12
200703	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,707.90
200703	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	903.65
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	21.36
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	10.26
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	9.84
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	56.34
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	19.06
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	32.88
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	41.47
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	11.52
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	4.61
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	19.06
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	10.68
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	1.47
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	17.17
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	49.21
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	58.22
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	53.61
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.10
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.63

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200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.77
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	29.11
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.49
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	172.77
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	85.65
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	39.58
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	51.52
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	33.09
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.08
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	38.32
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	28.90
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.94
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.84
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	2.30
200703	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	21.99
200703	PEC965PHENENPEZZZZZ50	501	IT000285	ADVANCED MICRO-IMAGE	RENEW AMI READER PRINTER MAINTENANCE	1,046.24
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	79.00
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	781.43
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	72.25
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	4,350.78
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	35.18
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	36.02
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	5.65
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	84.82
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	86.91
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	40.63
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	28.69
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	104.29
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	28.48
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	10.89
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	8.80
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	10.26
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	6.49
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	46.28
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	82.09
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	29.74
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	11.52
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	12.77
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	43.77
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	47.75
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	15.50
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	42.51
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	23.87
200703	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	6.07
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.07

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200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	23.87
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	82.09
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	43.77
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.50
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	47.75
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	42.51
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	29.74
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.77
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Confidential Records Management Svcs	11.52
200704	PEC965PHENENPEZZZZZ50	501	IT000285	BACKGROUND INFORMATION SERVICE	February 2007 background checks	3.56
200704	PEC965PHENENPEZZZZZ50	501	IT000285	BACKGROUND INFORMATION SERVICE	February 2007 background checks	79.00
200704	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,995.59
200704	PEC965PHENENPEZZZZZ50	501	IT000285	ADVANCED MICRO-IMAGE	AMI - MICROFILMING SERVICES IN 2005	1,345.81
200704	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	781.43
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	28.48
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.89
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.80
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.26
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.49
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	86.91
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	5.65
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	84.82
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	40.63
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	46.28
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	28.69
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	104.29
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	35.18
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	36.02
200704	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	1,328.00
200704	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	1,008.00
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	81.47
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.08
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	117.70
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	45.86
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.36
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.07
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.70
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.49
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	41.26
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	72.25
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	1.26
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.71
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.59
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.70
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.98

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200704	PEC965PHENENPEZZZZZ50	501	IT000285	ADVANCED MICRO-IMAGE	RENEW AMI READER PRINTER MAINTENANCE	72.25
200704	PEC965PHENENPEZZZZZ50	501	IT000285	ALEXANDER BROTHERS LTD	SHREDDER MAINTENANCE 12/1/06-11/30/07	4,350.78
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.94
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	40.42
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	13.19
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	46.70
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	65.76
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	5.65
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.07
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.49
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.59
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	39.16
200704	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	103.46
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(82.09)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(29.74)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(11.52)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(12.77)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(43.77)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(47.75)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(15.50)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(42.51)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(23.87)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(6.07)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(4,350.78)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(35.18)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(36.02)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(5.65)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(84.82)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(86.91)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(40.63)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(28.69)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(104.29)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(28.48)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(10.89)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(8.80)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(10.26)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(6.49)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(46.28)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(79.00)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(781.43)
200704	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(72.25)
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	48.80
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	5.86
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	13.61
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.84

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200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.05
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.24
200705	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	805.17
200705	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,876.49
200705	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	35.60
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	30.79
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	25.76
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	61.57
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	59.27
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	1.47
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	22.83
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.24
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.80
200705	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	705.50
200705	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	768.00
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	77.70
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	43.77
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	3.98
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.80
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.96
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.10
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	2.51
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.08
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	29.74
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	116.86
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	125.86
200705	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	1.26
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	64.71
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	2.72
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	26.39
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	87.54
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	29.74
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.80
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.36
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	13.19
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.24
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	126.28
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	60.52
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	51.73
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.42
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	89.84
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	99.27
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.08

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200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	17.59
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.24
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.96
200706	PEC965PHENENPEZZZZZ50	501	IT000285	ADVANCED MICRO-IMAGE	AMI - MICROFILMING SERVICES	1,912.26
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	75.60
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	21.36
200706	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	4,181.41
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	108.06
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	45.24
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.42
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.84
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.59
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	33.93
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.80
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	28.27
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.17
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	137.59
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	89.84
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.08
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	32.25
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.10
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	5.45
200706	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	784.81
200706	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	622.50
200706	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	1,296.00
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.69
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.05
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.21
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.17
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.91
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.15
200706	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.05
200706	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	2,135.15
200706	PEC965PHENENPEZZZZZ50	501	IT000285		to trnsfr csts to WO/Proj MEA lic/mnt	65.94
200706	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	810.96
200707	PEC965PHENENPEZZZZZ50	501	IT000285	ADVANCED MICRO-IMAGE	AMI - MICROFILMING SERVICES	2,135.15
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.77
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	49.63
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	1.68
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.50
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	28.48
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.05
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	43.35
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.07
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	40.63

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200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	13.19
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	37.91
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	32.67
200707	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,850.31
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	50.05
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.21
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	44.19
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	44.61
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.24
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.15
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.05
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.36
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	43.98
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	90.47
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	76.44
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.84
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	22.41
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.08
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.54
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.75
200707	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.12
200707	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	810.96
200707	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(2,135.15)
200707	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(810.96)
200708	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	1,162.00
200708	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	1,568.00
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.29
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	44.19
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	37.28
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	181.10
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.21
200708	PEC965PHENENPEZZZZZ50	501	IT000285	ADVANCED MICRO-IMAGE	AMI - MICROFILMING SERVICES	2,478.81
200708	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,932.24
200708	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	805.17
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	17.17
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	186.81
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	37.07
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.84
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	35.39
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	20.52
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.80
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	5.65
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	4.40
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	70.58
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	72.46

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200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	36.02
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.21
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.73
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.68
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	65.34
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	44.19
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.21
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	56.34
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	23.66
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	89.63
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	16.13
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.89
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	32.46
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	17.38
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.49
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	17.17
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	41.40
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.92
200708	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	46.28
200708	PEC965PHENENPEZZZZZ50	501	IT000285	TELOS CORPORATION	LABOR TO INSTALL ABOVE MATERIALS OF CARD	3,923.01
200708	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	1,245.00
200708	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	1,520.00
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	42.72
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.29
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.15
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	28.06
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	28.90
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	20.10
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	65.34
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	75.81
200709	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,959.65
200709	PEC965PHENENPEZZZZZ50	501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	460.50
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	60.31
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	16.96
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	16.34
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.73
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.08
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	108.69
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	67.23
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	84.19
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.77
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.45
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	18.22
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	3.14
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	44.19

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200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	23.46
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	13.19
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	41.05
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.31
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	45.65
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	5.65
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.54
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	22.83
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.03
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.29
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.50
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	22.83
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	59.27
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	35.18
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	4.40
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	17.59
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	135.29
200709	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	45.45
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	3,038.59
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	558.75
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	42.00
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	1,680.00
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	9.84
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	5.65
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	10.89
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	76.44
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	7.96
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	4.61
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	19.27
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	52.15
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	7.54
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	913.00
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	34.76
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	39.37
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	19.90
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	205.24
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	40.21
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	18.43
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	1.83
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	198.32
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	7.12
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	44.40
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	44.61
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	14.03

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200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	19.69
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	19.27
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	13.61
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	38.12
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	69.32
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	16.96
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	19.27
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	47.75
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	41.47
200709	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	158.32
200710	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	913.00
200710	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	1,680.00
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	4.61
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.96
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	5.65
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.84
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.54
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	52.15
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	76.44
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	34.76
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.89
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	205.24
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	39.37
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.90
200710	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,884.97
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	1.83
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	41.47
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	47.75
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	16.96
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	158.32
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	69.32
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	38.12
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	13.61
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	44.61
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	18.43
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.03
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.69
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	198.32
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	44.40
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.12
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	34.76
200710	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.84

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200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.94
200710	PEC965PHENENPEZZZZZ50 501	IT000285	BACKGROUND INFORMATION SERVICE	ITS background checks for Aug (1)	1.89
200710	PEC965PHENENPEZZZZZ50 501	IT000285	BACKGROUND INFORMATION SERVICE	ITS background checks for Aug (1)	42.00
200710	PEC965PHENENPEZZZZZ50 501	IT000285	FILEMINDERS OF HAWAII LLC	ACCESS INFO MGMT: RECORDS STORAGE SVCS	558.75
200710	PEC965PHENENPEZZZZZ50 501	IT000285	FILEMINDERS OF HAWAII LLC	ACCESS INFO MGMT: RECORDS STORAGE SVCS	3,038.59
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	40.21
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	117.91
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	34.76
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	52.77
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	3.56
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.49
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.07
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	16.96
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200710	PEC965PHENENPEZZZZZ50 501	IT000285	ALEXANDER BROTHERS LTD	SHREDDER MAINTENANCE 12/1/07-11/30/08	4,078.53
200710	PEC965PHENENPEZZZZZ50 501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	41.88
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	1.47
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.05
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	33.72
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	63.66
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.92
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	39.16
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	40.00
200710	PEC965PHENENPEZZZZZ50 501	IT000285	TRANSPACIFIC MOVING & STORAGE	2006 SERVICES - CROWN RECORDS	119.80
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.50
200710	PEC965PHENENPEZZZZZ50 501	IT000285	ADVANCED MICRO-IMAGE	AMI - MICROFILMING SERVICES	3,203.75
200710	PEC965PHENENPEZZZZZ50 501	IT000285	TRANSPACIFIC MOVING & STORAGE	INPUT ERROR	(41.88)
200710	PEC965PHENENPEZZZZZ50 501	IT000285	TRANSPACIFIC MOVING & STORAGE	CREDIT	(41.88)
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	30.16
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.07
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.24
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	37.49
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.29
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.59
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.63
200710	PEC965PHENENPEZZZZZ50 501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	98.60
200710	PEC965PHENENPEZZZZZ50 501	IT000285		accrue unpaid invoices at quarter end	(1,680.00)
200710	PEC965PHENENPEZZZZZ50 501	IT000285		accrue unpaid invoices at quarter end	(9.84)
200710	PEC965PHENENPEZZZZZ50 501	IT000285		accrue unpaid invoices at quarter end	(5.65)
200710	PEC965PHENENPEZZZZZ50 501	IT000285		accrue unpaid invoices at quarter end	(10.89)
200710	PEC965PHENENPEZZZZZ50 501	IT000285		accrue unpaid invoices at quarter end	(76.44)
200710	PEC965PHENENPEZZZZZ50 501	IT000285		accrue unpaid invoices at quarter end	(7.96)
200710	PEC965PHENENPEZZZZZ50 501	IT000285		accrue unpaid invoices at quarter end	(4.61)
200710	PEC965PHENENPEZZZZZ50 501	IT000285		accrue unpaid invoices at quarter end	(19.27)

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200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(52.15)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(7.54)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(913.00)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(34.76)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(39.37)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(19.90)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(205.24)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(40.21)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(18.43)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(1.83)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(198.32)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(7.12)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(44.40)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(44.61)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(14.03)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(19.69)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(19.27)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(13.61)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(38.12)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(69.32)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(16.96)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(19.27)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(47.75)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(41.47)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(158.32)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(3,038.59)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(558.75)
200710	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	(42.00)
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	16.34
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	25.97
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	96.96
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	45.24
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	128.59
200711	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	1,494.00
200711	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	1,488.00
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	3.35
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	13.19
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	17.38
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	22.20
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	86.28
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.92
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.71
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.71
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	191.20
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.24

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200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	39.16
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	47.96
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	33.93
200711	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,940.52
200711	PEC965PHENENPEZZZZZ50	501	IT000285	ADVANCED MICRO-IMAGE	RENEW AMI READER PRINTER MAINTENANCE	1,053.40
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	17.17
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.98
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.73
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.27
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	18.22
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	60.94
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	22.83
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	36.86
200711	PEC965PHENENPEZZZZZ50	501	IT000285	WDI COMPANIES, INC.	IT DEPT, BUILD SHELVING	3,979.06
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	91.73
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	8.59
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	38.32
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	140.31
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	44.61
200711	PEC965PHENENPEZZZZZ50	501	IT000285	FILEMINDERS OF HAWAII LLC	ACCESS INFO MGMT: RECORDS STORAGE SVCS	936.49
200711	PEC965PHENENPEZZZZZ50	501	IT000285	ADVANCED MICRO-IMAGE	AMI - MICROFILMING SERVICES	3,745.37
200711	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	1,867.50
200711	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	800.00
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.57
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.42
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	21.15
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.52
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	19.90
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.15
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	37.49
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	3.77
200711	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	38.95
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	29.11
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.98
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	42.72
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	14.24
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	25.55
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.54
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	24.29
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	7.75
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	10.68
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	3.77
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	21.15
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	27.64
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	4.40

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200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	33.93
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	25.55
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	12.77
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.94
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.91
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	39.16
200712	PEC965PHENENPEZZZZZ50	501	IT000285	FILEMINDERS OF HAWAII LLC	ACCESS INFO MGMT: RECORDS STORAGE SVCS	1,545.55
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	9.84
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	16.54
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	109.53
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	5.03
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	114.97
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	23.87
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	6.07
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	21.57
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	30.58
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	11.94
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	15.08
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	21.36
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	46.91
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	92.57
200712	PEC965PHENENPEZZZZZ50	501	IT000285	SHREDEX CRD, LLC	Secured & Confidential Shredding Srvices	0.84
200712	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	RECORDS MANAGEMENT CONSULTING SERVICES	954.50
200712	PEC965PHENENPEZZZZZ50	501	IT000285	TYC CONSULTING RESOURCES INC.	ROSALIE BRISSETTE - RECORDS MGMT SVCS	1,056.00
200712	PEC965PHENENPEZZZZZ50	501	IT000285	PRO-FILE RECORD SYSTEMS	2007 RECORDS STORAGE/SERVICES (PRO-FILE)	3,811.67
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	1,545.55
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	5.86
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	56.75
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	23.46
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	9.84
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	8.59
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	23.66
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	7.54
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	23.66
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	8.59
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	12.15
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	5.45
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	38.12
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	49.63
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	10.68
200712	PEC965PHENENPEZZZZZ50	501	IT000285		accrue unpaid invoices at quarter end	11.73
		501	IT000285			133,650.55
		Grand Total		IT000279, IT000283, IT000285		149,128.49

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Hawaiian Electric Company, Inc.
ITS Department
IT000279+

Digital Printing, Word Processing Records Center
Harada

PERIOD	ACCOUNT CODE	ele	ORDER	SUPPLIER NAME	desc	TRAN AMO
Adjustments for 2009 Estimates:						
1) Telos - card reader installation effort (labor/non labor)						(5,690.55)
2) Commercial Shelving - Records Center storage expansion (non-labor)						(3,390.00)
3) WDI - Records Center storage expansion (labor)						(3,979.06)
						(13,059.61)
Total 2009 estimates						136,068.88

Hawaiian Electric Company, Inc.
ITS Department
IT000289+

Mail Processing/Delivery Machine Room
Harada

PERIOD	ACCOUNT CODE	Ele	ORDER	SUPPLIER NAME	Desc	TRAN AMO
200701	PEM966PHENENPEZZZZZ201	201	IT000289		55D LETA WAKAMATSU	12.57
200701	PEM966PHENENPEZZZZZ201	201	IT000289		55D L HIROMOTO	8.26
200702	PEM966PHENENPEZZZZZ201	201	IT000289		55D D MYADE	39.78
200702	PEM966PHENENPEZZZZZ201	201	IT000289		51D PITNEY BOWES	(1,030.58)
200703	PEM966PHENENPEZZZZZ201	201	IT000289	PITNEY BOWES INC	PITNEY BOWES EQUIPMENT MAINTENANCE	404.42
200703	PEM966PHENENPEZZZZZ201	201	IT000289	PITNEY BOWES INC	PITNEY BOWES EQUIPMENT MAINTENANCE	536.09
200704	PEM966PHENENPEZZZZZ201	201	IT000289		55D L HIROMOTO	21.97
200705	PEM966PHENENPEZZZZZ201	201	IT000289		51D GENERAL LEDGER	(388.08)
200709	PEM966PHENENPEZZZZZ201	201	IT000289		55D L. HIROMOTO	0.75
		201	IT000289			(394.82)
200701	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES SUPPLY	487.90
200701	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES SUPPLY	487.90
200702	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	OFFICEMAX CT*IN#546178	54.48
200705	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES TELEMRKTG	353.84
200705	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	HAWAII STATIONERY - AO	29.95
200706	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	ZEE MEDICAL SE03630Q05	140.67
200706	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES TELEMRKTG	354.37
200706	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	ZEE MEDICAL SE03630Q05	(140.67)
200706	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	ZEE MEDICAL SE03630Q05	140.60
200706	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	OFFICEMAX CT*IN#871359	79.53
200707	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	OFFICEMAX CT IN 475930	61.63
200708	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES SUPPLY	353.79
200708	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	OFFICEMAX CT IN 165586	119.45
200708	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES SUPPLY	375.82
200710	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES SUPPLY	457.77
200710	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	OFFICEMAX CT IN 707518	82.45
200711	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES SUPPLY	353.79
200712	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	OFFICEMAX CT*IN#005257	54.42
200712	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	PITNEY BOWES SUPPLY	419.33
200712	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	OFFICEMAX CT*IN#009784	114.77
200712	PEM966PHENENPEZZZZZ205	205	IT000289	BANK ONE	FISHER HAWAII	10.02
		205	IT000289			4,391.81
200701	PEM966PHENENPEZZZZZ501	501	IT000289	SERVICES,	Background check for Nov 2006	2.12
200701	PEM966PHENENPEZZZZZ501	501	IT000289	SERVICES,	Background check for Nov 2006	47.00
200701	PEM966PHENENPEZZZZZ501	501	IT000289		accrue unpaid invoices at quarter end	(47.00)
200701	PEM966PHENENPEZZZZZ501	501	IT000289		51D PITNEY BOWES-OVERPAYMENT O	(195.96)
200703	PEM966PHENENPEZZZZZ501	501	IT000289	NORTH MAIL INC.	MARTIN YALE LETTER OPENER MAINTENANCE	104.17
200705	PEM966PHENENPEZZZZZ501	501	IT000289	STAR BULLETIN * MIDWEEK	04/01/07 Star Bulletin Office/Clerical &	6.55

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Hawaiian Electric Company, Inc.
ITS Department
IT000289+

Mail Processing/Delivery Machine Room
Harada

PERIOD	ACCOUNT_CODE	ele	ORDER	SUPPLIER_NAME	desc	TRAN_AMO
200705	PEM966PHENENPEZZZZZ501	501	IT000289	STAR BULLETIN * MIDWEEK	04/01/07 Star Bulletin Office/Clerical &	130.37
200706	PEM966PHENENPEZZZZZ501	501	IT000289	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	22.85
200706	PEM966PHENENPEZZZZZ501	501	IT000289	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	49.16
200706	PEM966PHENENPEZZZZZ501	501	IT000289	PITNEY BOWES INC	PITNEY BOWES EQUIPMENT MAINTENANCE	387.17
200708	PEM966PHENENPEZZZZZ501	501	IT000289	PITNEY BOWES INC	PITNEY BOWES EQUIPMENT MAINTENANCE	387.17
200708	PEM966PHENENPEZZZZZ501	501	IT000289	PITNEY BOWES INC	PITNEY BOWES EQUIPMENT MAINTENANCE	585.65
200709	PEM966PHENENPEZZZZZ501	501	IT000289	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	282.62
200709	PEM966PHENENPEZZZZZ501	501	IT000289	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	627.29
200709	PEM966PHENENPEZZZZZ501	501	IT000289	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	756.16
200709	PEM966PHENENPEZZZZZ501	501	IT000289		accrue unpaid invoices at quarter end	104.71
200709	PEM966PHENENPEZZZZZ501	501	IT000289		accrue unpaid invoices at quarter end	612.40
200710	PEM966PHENENPEZZZZZ501	501	IT000289	NORTH MAIL INC.	LETTER OPENER ANNUAL MAINTENANCE	104.71
200710	PEM966PHENENPEZZZZZ501	501	IT000289	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	612.40
200710	PEM966PHENENPEZZZZZ501	501	IT000289		accrue unpaid invoices at quarter end	(104.71)
200710	PEM966PHENENPEZZZZZ501	501	IT000289		accrue unpaid invoices at quarter end	(612.40)
200711	PEM966PHENENPEZZZZZ501	501	IT000289	PITNEY BOWES INC	PITNEY BOWES EQUIPMENT MAINTENANCE	363.35
200711	PEM966PHENENPEZZZZZ501	501	IT000289	PITNEY BOWES INC	PITNEY BOWES EQUIPMENT MAINTENANCE	367.32
200712	PEM966PHENENPEZZZZZ501	501	IT000289	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	765.41
200712	PEM966PHENENPEZZZZZ501	501	IT000289	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	772.01
200712	PEM966PHENENPEZZZZZ501	501	IT000289		ON COST CHG TO: 126242/001	96.77
200712	PEM966PHENENPEZZZZZ501	501	IT000289	PITNEY BOWES INC	USPS RATE CHANGE SOFTWARE UPDATE	547.04
		501	IT000289			6,774.33
200702	PEM966PHENENPEZZZZZ600	600	IT000289		51D PITNEY BOWS 1 ELMCROFT RD	(65.80)
		600	IT000289			(65.80)
200702	PEM614OAHNENPEZZZZZ201	201	IT000291		55D T STENNET	26.16
200702	PEM614OAHNENPEZZZZZ201	201	IT000291		55D LETA WAKAMATSU	31.92
200702	PEM614OAHNENPEZZZZZ201	201	IT000291		55D MISC SUPPLIES FOR INSERTER	4.54
200707	PEM614OAHNENPEZZZZZ201	201	IT000291		55D REIMB TOM STENNET FOR SUPP	13.31
200707	PEM614OAHNENPEZZZZZ201	201	IT000291		55D LYLE HIROMOTO	23.02
200709	PEM614OAHNENPEZZZZZ201	201	IT000291		55D L HIROMOTO	39.14
200709	PEM614OAHNENPEZZZZZ201	201	IT000291		55D L. HIROMOTO	4.82
200709	PEM614OAHNENPEZZZZZ201	201	IT000291		55D L HIROMOTO	28.64
200709	PEM614OAHNENPEZZZZZ201	201	IT000291		55D L. HIROMOTO	49.95
		201	IT000291			221.50
200707	PEM614OAHNENPEZZZZZ205	205	IT000291	BANK ONE	PITNEY BOWES SUPPLY	418.90
		205	IT000291			418.90
200705	PEM614OAHNENPEZZZZZ501	501	IT000291	STAR BULLETIN * MIDWEEK	04/01/07 Star Bulletin Office/Clerical &	6.55
200705	PEM614OAHNENPEZZZZZ501	501	IT000291	STAR BULLETIN * MIDWEEK	04/01/07 Star Bulletin Office/Clerical &	130.37

Hawaiian Electric Company, Inc.
ITS Department
IT000289+

Mail Processing/Delivery Machine Room
Harada

PERIOD	ACCOUNT CODE	BUS	ORDER	SUPPLIER NAME	DESC	TRAN AMO
200706	PEM614OAHNENPEZZZZZ501	501	IT000291	BOWE BELL + HOWELL COMPANY	RENEW SUPPORT ON MAILSTAR 500 #23997A	6,366.65
200706	PEM614OAHNENPEZZZZZ501	501	IT000291	BOWE BELL + HOWELL COMPANY	RENEW SUPPORT ON MAILSTAR 500 #23997A	6,366.65
200709	PEM614OAHNENPEZZZZZ501	501	IT000291	BOWE BELL + HOWELL COMPANY	RENEW SUPPORT ON MAILSTAR 500 #23997A	6,366.65
200712	PEM614OAHNENPEZZZZZ501	501	IT000291	BOWE BELL + HOWELL COMPANY	RENEW SUPPORT ON MAILSTAR 500 #23997A	6,366.67
		501	IT000291			25,603.54
		Grand Total				36,949.46

Adjustments for 2009 Estimates:			
1) Bill Print Insertion sourcing - reduce 75%	BOWE BELL + HOWELL COMPANY	RENEW SUPPORT ON MAILSTAR 500 #23997A	(19,100.00)
2) Bill Print Insertion sourcing - reduce 75% (of 50% for inserter)	PITNEY BOWES INC	PITNEY BOWES EQUIPMENT MAINTENANCE	(1,100.00)
3) Bill Print Insertion sourcing - reduce 75%	BANK ONE	PITNEY BOWES SUPPLY	(2,500.00)
4) Bill Print Insertion sourcing - reduce 75% (of 66% for bills)	HAWAII PRESORT MAIL SERVICE,	HAWAII PRESORT - MAIL SERVICES FOR HECO	(1,900.00)
			(24,600.00)
Total 2009 estimates			12,349.46

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Hawaiian Electric Company, Inc.
ITS Department
IT900001

Development-Software
Eber

PERIOD	ACCOUNT_CODE	file	ORDER	SUPPLIER_NAME	desc	TRAN_AMO
200702	PED891PHENCNPEZZZZZ46	462	IT900001	SOFTWARE SPECTRUM INC.	Quest Toad for Oracle Std Edn (ESD) soft	867.63
200704	PED891PHENCNPEZZZZZ46	462	IT900001	SOFTWARE SPECTRUM INC.	Hummingbird Exceed 2007 1 user + Maint	505.56
200705	PED891PHENCNPEZZZZZ46	462	IT900001	SOFTWARE SPECTRUM INC.	Hummingbird Connectivity Secure Shell+	67.96
200712	PED891PHENCNPEZZZZZ46	462	IT900001	SOFTWARE SPECTRUM INC.	Hummingbird Connectivity Secure Shell 07	36.06
200712	PED891PHENCNPEZZZZZ46	462	IT900001	SOFTWARE SPECTRUM INC.	Hummingbird Exceed 2007	290.98
200705	PED891PHENCNPEZZZZZ46	462	IT900001	BUSINESS OBJECTS AMERICAS	BUSINESS OBJECTS LICENSE	73,150.00
200702	PED891PHENCNPEZZZZZ46	462	IT900001		ON COST CHG TO: 123177/001	104.55
200704	PED891PHENCNPEZZZZZ46	462	IT900001		ON COST CHG TO: 125992/001	63.60
200705	PED891PHENCNPEZZZZZ46	462	IT900001		ON COST CHG TO: 126509/001	8.55
200705	PED891PHENCNPEZZZZZ46	462	IT900001		ON COST CHG TO: 125077/001	9,202.27
200706	PED891PHENCNPEZZZZZ46	462	IT900001		to trnsfr csts to WO/Proj MEA lic/mnt	90.80
200706	PED891PHENCNPEZZZZZ46	462	IT900001		to trnsfr csts to WO/Proj MEA lic/mnt	127.60
200712	PED891PHENCNPEZZZZZ46	462	IT900001		ON COST CHG TO: 135599/001	6.38
200712	PED891PHENCNPEZZZZZ46	462	IT900001		ON COST CHG TO: 135599/003	51.47
		462 Total				84,573.41
200706	PED891PHENCNPEZZZZZ50	501	IT900001	CAMELLIA SOFTWARE CORPORAT	RENEW BATCH JOB SERVR SUPPORT TO 7/10/0	29.25
200706	PED891PHENCNPEZZZZZ50	501	IT900001	CAMELLIA SOFTWARE CORPORAT	RENEW BATCH JOB SERVR SUPPORT TO 7/10/0	650.00
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (1) WBS ADP F/JDBC	12,583.14
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (1) WBS ADP F/FLAT	12,583.14
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (3) WBS BUS INTG SVR	40,682.81
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MNT: (100) WBS MSG BRKR VU	8,340.31
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MNT: (200) WBS DAT INTCH VU	23,382.19
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MNT: (100) WBS DAT INTCH VU	8,767.54
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (100) WBS MQ LIN VU	559.16
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (1700) WBS MQ VU	14,258.63
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (200) WBS MQ VU	1,156.02
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (200) WBS MQ VU	418.85
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (600) TIVOLI ACC VU	2,205.23
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (3) RATL ROSE VIS ST	1,359.52
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (1) RATL ROBOT FLOAT	1,455.20
200707	PED891PHENCNPEZZZZZ50	501	IT900001	COMPUSA, INC.	RENEW IBM SW MAINT: (1) RATL ROBOT FLT	374.81
200707	PED891PHENCNPEZZZZZ50	501	IT900001	SOFTWARE SPECTRUM INC.	(1) QUEST TOAD FOR ORACLE W/QUEST DBA	398.93
200707	PED891PHENCNPEZZZZZ50	501	IT900001	SOFTWARE SPECTRUM INC.	(4) QUEST TOAD FOR ORACLE STD ED MAINT	912.69
200707	PED891PHENCNPEZZZZZ50	501	IT900001	SOFTWARE SPECTRUM INC.	(2) QUEST DBA MODULE FOR TOAD MAINT	351.68
200709	PED891PHENCNPEZZZZZ50	501	IT900001	SOFTWARE SPECTRUM INC.	RENEW ANN MNT ON (67) HUMM CVL CONN SS	51.94
200709	PED891PHENCNPEZZZZZ50	501	IT900001	SOFTWARE SPECTRUM INC.	RENEW ANN MNT ON (67) HUMM EXCEED LIC	412.47
200710	PED891PHENCNPEZZZZZ50	501	IT900001	SYBASE	RENEW (2) SYBASE POWERBUILDER ENTERPRI	1,290.00
200710	PED891PHENCNPEZZZZZ50	501	IT900001	BEA SYSTEMS, INC.	WEBLOGIC WORKGROUP RENEWAL (QTY 2)	64.80
200710	PED891PHENCNPEZZZZZ50	501	IT900001	BEA SYSTEMS, INC.	WEBLOGIC WORKGROUP RENEWAL (QTY 2)	1,440.00
200710	PED891PHENCNPEZZZZZ50	501	IT900001	BEA SYSTEMS, INC.	WEBLOGIC SERVER ADVANTAGE RENEWAL (2)	189.00
200710	PED891PHENCNPEZZZZZ50	501	IT900001	BEA SYSTEMS, INC.	WEBLOGIC SERVER ADVANTAGE RENEWAL (2)	4,200.00
200708	PED891PHENCNPEZZZZZ50	501	IT900001	WILSON WINDOW WARE, INC.	RENEW WINBATCH+COMPILER MAINT FOR T.H(	4.55

Hawaiian Electric Company, Inc.
ITS Department
IT900001

Development-Software
Eber

EPHCID	ACCOUNT CODE	Leg	ORDER	SUPPLIER NAME	desc	TRAN AMO
200708	PED891PHENCNPEZZZZZ50	501	IT900001	WILSON WINDOW WARE, INC.	RENEW WINBATCH+COMPILER MAINT FOR T.H(	101.00
200708	PED891PHENCNPEZZZZZ50	501	IT900001	WILSON WINDOW WARE, INC.	RENEW WINBATCH+COMPILER MNT FOR R.TYL	4.55
200708	PED891PHENCNPEZZZZZ50	501	IT900001	WILSON WINDOW WARE, INC.	RENEW WINBATCH+COMPILER MNT FOR R.TYL	101.00
200712	PED891PHENCNPEZZZZZ50	501	IT900001	BOWE BELL + HOWELL COMPANY	2008 TRANSFORMER SOFTWARE MAINTENANCI	16,589.38
200705	PED891PHENCNPEZZZZZ50	501	IT900001	BUSINESS OBJECTS AMERICAS	BUSINESS OBJECTS MAINTENANCE (qty 2)	14,630.00
200712	PED891PHENCNPEZZZZZ50	501	IT900001	BUSINESS OBJECTS AMERICAS	BUSINESS OBJECTS 2008 RENEWAL	42,641.92
200710	PED891PHENCNPEZZZZZ50	501	IT900001	SEAGULL SOFTWARE	SEAGULL SOFTWARE ANNUAL RENEWAL	72.86
200710	PED891PHENCNPEZZZZZ50	501	IT900001	SEAGULL SOFTWARE	SEAGULL SOFTWARE ANNUAL RENEWAL	1,619.00
200706	PED891PHENCNPEZZZZZ50	501	IT900001		to trnsfr csts to WO/Proj MEA lic/mnt	65.94
200706	PED891PHENCNPEZZZZZ50	501	IT900001		to trnsfr csts to WO/Proj MEA lic/mnt	92.62
200711	PED891PHENCNPEZZZZZ50	501	IT900001		014002-UTAX-SYB639019	58.05
		501 Total				214,098.18
		Grand Total	**IT900001 Total**			298,671.59

Adjustments for 2009 Estimates:	
1) Business Objects license purchase only occurs once, maintenance only thereafter	(73,150.00)
2) Bell & Howell Transformer maintenance not required after mainframe retired	(16,589.38)
3) Hostfront maintenance not required after mainframe retired	(1,691.86)
4) Mobius maintenance from ASG (PO V07700 in 2007)	$ 22,020.00
5) Mincom web services @ $20K/10-pack or $4K/web-service. Own 10. Need 14 when CIS & OMS live. Plantview, etc. interfaces coming	$ 20,000.00
	$ (49,411.24)
Total 2009 estimates	249,260.35

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Hawaiian Electric Company, Inc.
ITS Department
IT900002

Data Center-Software
McCarter

PERIOD	ACCOUNT CODE	cle	ORDER	SUPPLIER NAME	desc	TRAN AMOU	
200711	PEI895PHENCNPEZZZZZ462	462	IT900002	CA, INC.	30-USER CA HARVEST CHANGE MANAGER FIXE	59,627.70	
200710	PEI895PHENCNPEZZZZZ462	462	IT900002	TELOS CORPORATION	NETWORK CLIENT SOFTWARE FOR ITS DATA	478.85	
200710	PEI895PHENCNPEZZZZZ462	462	IT900002		ON COST CHG TO: 133312/007	80.73	
		462 Total				60,187.28	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	COMPUSA, INC.	RENEW IBM SW MAINT: (25) DB2 CONNECT ENT	1,731.58	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	COMPUSA, INC.	RENEW IBM SW MAINT: (25) DB2 CONN UNLTD	672.25	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	COMPUSA, INC.	RENEW IBM SW MAINT: DB2 CONN UNLTD HOST	12,202.58	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	COMPUSA, INC.	RENEW IBM SW MAINT: (28) DB2 UDB WKGP ED	1,727.20	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	COMPUSA, INC.	RENEW IBM SW MAINT: (3) HOST ACC CLT PKG	121.76	16,455.37
200701	PEI895PHENCNPEZZZZZ50	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	4,097.72	
200701	PEI895PHENCNPEZZZZZ50	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	55,986.39	
200701	PEI895PHENCNPEZZZZZ50	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	19,772.64	
200701	PEI895PHENCNPEZZZZZ50	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	43,765.50	
200702	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	19,593.68	
200702	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	1,538.60	
200704	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	3,956.41	
200704	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	17,929.47	
200704	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	55,986.39	
200704	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	19,772.64	
200704	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	43,765.50	
200704	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	17,929.47	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	56,010.45	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	19,781.13	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2006/2007 IBM Software Maintenance	43,784.31	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2007 (2H) IBM Software Maintenance	17,937.18	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2007 (2H) IBM Software Maintenance	56,010.45	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2007 (2H) IBM Software Maintenance	19,781.13	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2007 (2H) IBM Software Maintenance	43,784.31	
200711	PEI895PHENCNPEZZZZZ501	501	IT900002	INTERNATIONAL BUSINESS	2007 (2H) IBM Software Maintenance	17,937.18	579,120.55
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	CICS/MESSAGE ANNUAL MAINTENANCE	2.25	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	CICS/MESSAGE ANNUAL MAINTENANCE	50.00	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	CICS CEMT FROM BATCH ANNUAL MAINTENANC	4.28	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	CICS CEMT FROM BATCH ANNUAL MAINTENANC	95.00	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	ISPF VSAM UTILITY ANNUAL MAINTENANCE	20.25	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	ISPF VSAM UTILITY ANNUAL MAINTENANCE	450.00	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	RENEW VTAM VIRTUAL PRINTER (VVP) ANNUAL	72.00	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	RENEW VTAM VIRTUAL PRINTER (VVP) ANNUAL	1,600.00	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	RENEW JES QUEUE CLIENT FOR PRINTERS	225.00	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002	MACKINNEY SYSTEMS, INC.	RENEW JES QUEUE CLIENT FOR PRINTERS	5,000.00	7,518.78
200712	PEI895PHENCNPEZZZZZ501	501	IT900002	COMPUWARE CORPORATION	2008 COMPUWARE SOFTWARE MAINTENANCE	16,595.65	16,595.65

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Hawaiian Electric Company, Inc.
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Data Center-Software
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PERIOD	ACCOUNT CODE	Fels	ORDER	SUPPLIER NAME	desc	TRAN AMOU	
200711	PEI895PHENCNPEZZZZZ501	501	IT900002	ALLEN SYSTEMS GROUP, INC.	RENEW ASG-TMON FOR CICS TS FOR z/OS	379.82	
200711	PEI895PHENCNPEZZZZZ501	501	IT900002	ALLEN SYSTEMS GROUP, INC.	RENEW ASG-TMON FOR CICS TS FOR z/OS	8,440.55	8,820.37
200711	PEI895PHENCNPEZZZZZ501	501	IT900002	CA, INC.	30-USER CA HARVEST CHANGE MANAGER FIXE	35,776.62	35,776.62
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	GROUP 1 SOFTWARE, INC.	CODE-1 PLUS ANNUAL MAINTENANCE RENEWA	11,077.00	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002	GROUP 1 SOFTWARE, INC.	US POSTAL DATABASE ANNUAL MAINT RENEW/	11,077.00	22,154.00
200711	PEI895PHENCNPEZZZZZ501	501	IT900002	SYNCSORT INCORPORATED	RENEW SYNCSORT FOR Z/OS LICENSE - 1 YR	5,906.00	5,906.00
200701	PEI895PHENCNPEZZZZZ50	501	IT900002		Amort ppd Comp Assoc software maint	11,093.17	
200702	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,093.17	
200703	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,093.17	
200704	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	
200705	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	
200706	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	
200707	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	
200708	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	
200709	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	
200711	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	
200712	PEI895PHENCNPEZZZZZ501	501	IT900002		Amort ppd Comp Assoc software maint	11,815.17	139,616.04
200708	PEI895PHENCNPEZZZZZ501	501	IT900002		to properly record ppd Oracle fees	5,806.00	
200708	PEI895PHENCNPEZZZZZ501	501	IT900002		to properly record ppd Oracle fees	3,550.00	
200708	PEI895PHENCNPEZZZZZ501	501	IT900002		to properly record ppd Oracle fees	3,550.00	
200708	PEI895PHENCNPEZZZZZ501	501	IT900002		to amort ppd Oracle sftwre maint fees	1,775.00	
200709	PEI895PHENCNPEZZZZZ501	501	IT900002		to amort ppd Oracle sftwre maint fees	1,775.00	
200710	PEI895PHENCNPEZZZZZ501	501	IT900002		to amort ppd Oracle sftwre maint fees	1,775.00	
200711	PEI895PHENCNPEZZZZZ501	501	IT900002		to amort ppd Oracle sftwre maint fees	1,775.00	
200712	PEI895PHENCNPEZZZZZ501	501	IT900002		to amort ppd Oracle sftwre maint fees	1,775.00	
200712	PEI895PHENCNPEZZZZZ501	501	IT900002		023110-UTAX-07110197	265.77	22,046.77
		501 Total				854,010.15	854,010.15
		Grand Total	**IT900002 Total**			914,197.43	

Adjustments for 2009 Estimates:	
1) Eliminate fourth quarter IBM software maintenance $580K x 1/4. Assumes Jan-July coverage required for mainframe operations. IBM payments are made quarterly. All other mainframe software paid annually.	(145,000)
	(145,000)
Total 2009 estimates	769,197

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Hawaiian Electric Company, Inc.
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Infrastructure LAN-software
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PERIOD	ACCOUNT CODE	ale	ORDER	SUPPLIER NAME	Desc	TRAN_AMO
200707	PEI896PHENCNPEZZZZZ462	462	IT900003	SOFTWARE SPECTRUM INC.	NTP SOFTARE STORAGE M&A FOR SAN, 32 BIT	3,727.38
200707	PEI896PHENCNPEZZZZZ462	462	IT900003	SOFTWARE SPECTRUM INC.	NTP SOFTWARE QFS FOR SAN, 32-BIT WINDOW	5,890.93
200707	PEI896PHENCNPEZZZZZ462	462	IT900003	SOFTWARE SPECTRUM INC.	NTP SOFTWARE STORAGE M&A ANALYSIS SER'	4,666.23
200712	PEI896PHENCNPEZZZZZ462	462	IT900003	SOFTWARE SPECTRUM INC.	MCAFEE ANTI-SPYWARE PLUG-IN LICENSE	9,825.43
200707	PEI896PHENCNPEZZZZZ462	462	IT900003	CENTURY COMPUTERS, INC.	EZ-Presentation Server 4.x Enterprise-x	17,503.75
200706	PEI896PHENCNPEZZZZZ462	462	IT900003	CORESYSTEMS HAWAII - A DIVISIC	Aventail EX-2500	38,027.79
200708	PEI896PHENCNPEZZZZZ462	462	IT900003	CORESYSTEMS HAWAII - A DIVISIC	Optional: Spike Pricing	2,055.98
200706	PEI896PHENCNPEZZZZZ462	462	IT900003		ON COST CHG TO: 128429/001	4,783.90
200706	PEI896PHENCNPEZZZZZ462	462	IT900003		to trnsfr csts to WO/Proj MEA lic/mnt	35,087.46
200707	PEI896PHENCNPEZZZZZ462	462	IT900003		ON COST CHG TO: 128081/001	741.08
200707	PEI896PHENCNPEZZZZZ462	462	IT900003		ON COST CHG TO: 128081/002	468.90
200707	PEI896PHENCNPEZZZZZ462	462	IT900003		ON COST CHG TO: 128081/003	587.01
200707	PEI896PHENCNPEZZZZZ462	462	IT900003		ON COST CHG TO: 129413/001	2,201.97
200708	PEI896PHENCNPEZZZZZ462	462	IT900003		ON COST CHG TO: 128429/004	327.11
200712	PEI896PHENCNPEZZZZZ462	462	IT900003		ON COST CHG TO: 136140/001	1,738.12
		462 Total				127,633.04
200707	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	N183525 SUPSTDQFSWI LIC	(978.57)
200707	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	N183526 SUPSTDMAWIN	(1,467.33)
200707	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	SUPSTDQFSWI LIC	2,446.04
200707	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	1-YEAR SUPPORT: NTP SOFTWARE QFS FOR W	934.14
200707	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	1-YEAR SUPPORT: NTP SOFTWARE STORAGE M	1,401.22
200709	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	RENEW ANN MNT ON (67) HUMM CVL CONN SS	13.01
200709	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	RENEW ANN MNT ON (67) HUMM EXCEED LIC	103.29
200712	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	EXTEND MCAFEE ANTI-SPYWARE PLUG-IN LICN	1,036.17
200712	PEI896PHENCNPEZZZZZ501	501	IT900003	SOFTWARE SPECTRUM INC.	CO-TERM 120 EXISTING MCAFEE ANTI-SPYWAR	189.03
200709	PEI896PHENCNPEZZZZZ501	501	IT900003	VERISIGN, INC.	(25) VERISIGN MPKI FOR SSL PREMIUM UNITS	201.42
200709	PEI896PHENCNPEZZZZZ501	501	IT900003	VERISIGN, INC.	(25) VERISIGN MPKI FOR SSL PREMIUM UNITS	4,476.00
200709	PEI896PHENCNPEZZZZZ501	501	IT900003	EEYE DIGITAL SECURITY DIVISION	RETINA 256 IP PACK MAINTENANCE RENEWAL	220.46
200709	PEI896PHENCNPEZZZZZ501	501	IT900003	EEYE DIGITAL SECURITY DIVISION	RETINA 256 IP PACK MAINTENANCE RENEWAL	4,899.00
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	CDW DIRECT, LLC	RENEW (2) ANNUAL NSI DOUBLETAKE SUP/MNT	848.57
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	CDW DIRECT, LLC	RENEW (12) ANNUAL NSI DOUBLETAKE SUP/MN	5,091.21
200711	PEI896PHENCNPEZZZZZ501	501	IT900003	SECURE TECHNOLOGY HAWAII, IN	RENEW WEBSENSE SECURITY SUITE FOR 3 YR	75,554.74
200708	PEI896PHENCNPEZZZZZ501	501	IT900003	PEPPERWEED CONSULTING, LLC	SALES TAX ON OVERPYMT ON INVOICE	(476.84)
200709	PEI896PHENCNPEZZZZZ501	501	IT900003	PEPPERWEED CONSULTING, LLC	8/1/07-1/31/08 Pepperweed/HP SW Maint	2,988.00
200709	PEI896PHENCNPEZZZZZ501	501	IT900003	PEPPERWEED CONSULTING, LLC	8/1/07-1/31/08 Pepperweed/HP SW Maint	1,650.00
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (1)QUICK RECOVERY PKG	128.91
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (1)QUICK RECOVERY PKG	2,864.70
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (1) DUAL VAULT	77.35

Hawaiian Electric Company, Inc.
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PERIOD	ACCOUNT CODE	sic	ORDER	SUPPLIER NAME	desc	TRAN AMO
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (1) DUAL VAULT	1,718.82
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (82)ADDITIONAL AGENTS	179.70
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (82)ADDITIONAL AGENTS	3,993.40
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (79) OTM LICENSE	33.95
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (79) OTM LICENSE	754.45
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (11) SVR AGENTS	28.36
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (11) SVR AGENTS	630.23
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (2) EXO RECOVERY	17.15
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (2) EXO RECOVERY	381.00
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (1) OFM LICENSE	4.17
200703	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	EVAULT SUPT/MAINT: (1) OFM LICENSE	92.67
200712	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	RENEW ALL EVAULT SUPPORT/MAINT ONE YEA	704.37
200712	PEI896PHENCNPEZZZZZ501	501	IT900003	EVAULT, INC.	RENEW ALL EVAULT SUPPORT/MAINT ONE YEA	15,652.76
200710	PEI896PHENCNPEZZZZZ501	501	IT900003	CENTRIFY CORPORATION	RENEW CENTRIFY ANNUAL STD MAINT/SVC	65.70
200710	PEI896PHENCNPEZZZZZ501	501	IT900003	CENTRIFY CORPORATION	RENEW CENTRIFY ANNUAL STD MAINT/SVC	1,460.00
200702	PEI896PHENCNPEZZZZZ501	501	IT900003	GFI, INC.	RENEW 2 YEARS 2000 USERS WEBMONMC MAII	128.25
200702	PEI896PHENCNPEZZZZZ501	501	IT900003	GFI, INC.	RENEW 2 YEARS 2000 USERS WEBMONMC MAII	2,850.00
200702	PEI896PHENCNPEZZZZZ501	501	IT900003	GFI, INC.	RENEW 2 YEARS 2000 USERS VIRUREN MAINT	67.16
200702	PEI896PHENCNPEZZZZZ501	501	IT900003	GFI, INC.	RENEW 2 YEARS 2000 USERS VIRUREN MAINT	1,492.50
200701	1	501	IT900003		to adj amort of prepaid MEA costs	(1,085.74)
200701	1	501	IT900003		Amort of prepaid MEA maint fees	5,428.66
200702	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,342.92
200703	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,342.92
200704	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
200705	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
200706	PEI896PHENCNPEZZZZZ501	501	IT900003		to trnsfr csts to WO/Proj MEA lic/mnt	21,950.56
200706	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
200707	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
200708	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
200709	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
200710	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
200711	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
200712	PEI896PHENCNPEZZZZZ501	501	IT900003		Amort of prepaid MEA maint fees	4,368.99
		501 Total				206,755.39
		Grand Total	**IT900003 Total**			334,388.43
						330,661.05

Adjustments for 2009 Estimates:

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Hawaiian Electric Company, Inc.
ITS Department
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Desktop Business-Software
McCarter

PERIOD	ACCOUNT_CODE	cle	ORDER	SUPPLIER_NAME	desc	TRAN_AMO
200709	PEC897PHENCNPEZZZZZ45	451	IT900004		2007 REMEDY SOFTWARE MAINT/SUPPORT	(2,167.50)
		451 Total				(2,167.50)
200706	PEC897PHENCNPEZZZZZ46	462	IT900004		to trnsfr csts to WO/Proj MEA lic/mnt	69,242.69
		462 Total				69,242.69
200703	PEC897PHENCNPEZZZZZ50	501	IT900004	SOFTWARE SPECTRUM INC.	MCAFEE ACTIVE VIRUS DEFENSE	44,252.98
200703	PEC897PHENCNPEZZZZZ50	501	IT900004	SOFTWARE SPECTRUM INC.	MCAFEE ACTIVE VIRUS DEFENSE	17,690.31
200703	PEC897PHENCNPEZZZZZ50	501	IT900004	SOFTWARE SPECTRUM INC.	MCAFEE VIRUSSCAN CONSUMER HOME USE	530.34
200703	PEC897PHENCNPEZZZZZ50	501	IT900004	SOFTWARE SPECTRUM INC.	MCAFEE VIRUSSCAN CONSUMER HOME USE	530.34
200705	PEC897PHENCNPEZZZZZ50	501	IT900004	AEROPRISE, INC.	RENEW AEROPRISE EXPRESS SUPPORT &	145.80
200705	PEC897PHENCNPEZZZZZ50	501	IT900004	AEROPRISE, INC.	RENEW AEROPRISE EXPRESS SUPPORT &	3,240.00
200701	1	501	IT900004		to adj amort of prepaid MEA costs	(4,424.60)
200701	1	501	IT900004		Amort of prepaid MEA maint fees	22,123.02
200702	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	17,698.42
200703	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	17,698.42
200704	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
200705	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
200706	PEC897PHENCNPEZZZZZ50	501	IT900004		to trnsfr csts to WO/Proj MEA lic/mnt	51,550.22
200706	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
200707	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
200708	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
200709	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
200710	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
200711	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
200712	PEI897PHENCNPEZZZZZ501	501	IT900004		Amort of prepaid MEA maint fees	18,482.76
		501 Total				337,380.09
		Grand Total				404,455.28
			IT900004 Total			406,622.78

Adjustments for 2009 Estimates:	
1) MSFT contract always goes higher	75,000
	75,000
Total 2009 estimates	481,623

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Hawaiian Electric Company, Inc.
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Infrastructure LAN-software
McCater

ERIOD	ACCOUNT_CODE	ele	ORDER	SUPPLIER_NAME	desc	TRAN_AMO
1) CA Unix util costs estimates - We had to add in the matching enterprise services of job scheduling (management of automated IT events) and controlling the integrity of software code into the UNIX environment. These capabilities are being paid for on the mainframe and these two new software utilites are being added in to support the UNIX environment. Based on quotes from vendor					REF: TO HECO-1115	85,000
2) CA fees for UNIX - See explanation above					REF: TO HECO-1115	90,000
3) Vmware software & support						40,000
						215,000
Total 2009 estimates						549,388

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Desktop Technical-Software
McCarter

PERIOD	ACCOUNT CODE	sic	ORDER	SUPPLIER NAME	desc	TRAN AMO
200710	PEC898PHENCNPEZZZZZ50	501	IT900005	AXIOM INTERNATIONAL	FILEFIXER MAINTENANCE RENEWAL	121.43
200710	PEC898PHENCNPEZZZZZ50	501	IT900005	AXIOM INTERNATIONAL	FILEFIXER MAINTENANCE RENEWAL	2,698.50
200710	PEC898PHENCNPEZZZZZ50	501	IT900005	AXIOM INTERNATIONAL	MICROSTATION PRODUCTIVITY TOOLKIT	343.56
200710	PEC898PHENCNPEZZZZZ50	501	IT900005	AXIOM INTERNATIONAL	MICROSTATION PRODUCTIVITY TOOLKIT	7,634.63
200712	PEC898PHENCNPEZZZZZ50	501	IT900005	BENTLEY SYSTEMS INCORPORATE	BENTLEY SELECT AGREEMENT RENEWAL	90,432.17
200712	PEC898PHENCNPEZZZZZ50	501	IT900005	ADVANTICA, INC.	ADVANTICA RENEWAL - SynerGEE Electric	6,688.93
200712	PEC898PHENCNPEZZZZZ50	501	IT900005	ADVANTICA, INC.	ADVANTICA RENEWAL - Optimal Switching	815.34
200712	PEC898PHENCNPEZZZZZ50	501	IT900005	ADVANTICA, INC.	ADVANTICA RENEWAL - MiddleLink Electric	1,214.60
200702	PEC898PHENCNPEZZZZZ50	501	IT900005	INTERGRAPH MAPPING &	2007 INTERGRAPH SOFTWARE MAINTENANCE	88,477.78
200707	PEC898PHENCNPEZZZZZ50	501	IT900005	PEPPERWEED CONSULTING, LLC	HP Software 1-Year 8x5 Support on (2)	500.72
200707	PEC898PHENCNPEZZZZZ50	501	IT900005	INTELLIGENT SEARCH TECHNOLO	CORRECTADDRESS ANNUAL MAINTENANCE	89.99
200707	PEC898PHENCNPEZZZZZ50	501	IT900005	INTELLIGENT SEARCH TECHNOLO	CORRECTADDRESS ANNUAL MAINTENANCE	1,999.75
200701	1	501	IT900005		to adj amort of prepaid MEA costs	(971.25)
200701	1	501	IT900005		Amort of prepaid MEA maint fees	4,856.27
200702	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,885.02
200703	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,885.02
200704	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
200705	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
200706	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
200707	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
200708	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
200709	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
200710	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
200711	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
200712	PEI898PHENCNPEZZZZZ501	501	IT900005		Amort of prepaid MEA maint fees	3,230.19
		501 Total				241,744.17
		Gran	**IT900005 Total**			241,744.17

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	241,744.17

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Hawaiian Electric Company, Inc.
ITS Department
IT900006

Infrastructure Comm-Software
McCarter

PERIOD	ACCOUNT CODE	ale	ORDER	SUPPLIER NAME	Desc	TRAN AMO
200707	PEI900PHENCNPEZZZZZ462	462	IT900006	PROGRESSIVE COMMUNICATIONS	CTC V7 Unlimited License (HECO NetMerge)	20,104.32
200708	PEI900PHENCNPEZZZZZ462	462	IT900006	PROGRESSIVE COMMUNICATIONS	FURNISH/INSTALL AVAYA ASAI PLUS SW/SVCS	18,223.55
200707	PEI900PHENCNPEZZZZZ462	462	IT900006		ON COST CHG TO: 129289/001	2,529.12
		462 Total				40,856.99
		Gran IT900006 Total				40,856.99

Adjustments for 2009 Estimates:	
No adjustments required	
	0
Total 2009 estimates	40,856.99

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Hawaiian Electric Company, Inc.
ITS Department
IT9000011

Computer Security Analysis
Benn

PRIOD	ACCOUNT CODE	Sub	ORDER	SUPPLIER NAME	desc	TRAN AMO
200704	PEA901PHENCNPEZZZZZ50	501	IT900011	GOODENOW ASSOCIATES, INC.	EGAIN SERVER COMPUTER FORENSIC ANALYS	6,121.98
		501 Total				6,121.98
		Gran IT900011 Total				6,121.98
						6,121.98

Adjustments for 2009 Estimates:	
1) Increase security services (for Accuvant Vulnerability Assessment)	20,000
2) Transfer AT&T-IDS from workorder IT000005	60,000
3) Transfer AT&T-IDS increase from workorder IT000005	30,000
4) Managed Security Event and Information Management Services (SEIM)	90,000
5) Other Security tools (Managed Penetration Testing Tool and Trade Group Memberships)	10,000
	210,000
Total 2009 estimates	216,122

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Hawaiian Electric Company, Inc.
ITS Department
IT9000012

Outsource Support-Mainframe
McCarter

EFFCD	ACCOUNT CODE	sec	ORDER	SUPPLIER NAME	desc	TRAN AMO
200708	PEI895PHENCNPEZZZZZ461	461	IT900012	CORNERSTONE SYSTEMS, INC.	MAINFRAME TECHNICAL SUPPORT THRU 06/20(	495.00
200708	PEI895PHENCNPEZZZZZ461	461	IT900012	CORNERSTONE SYSTEMS, INC.	MAINFRAME TECHNICAL SUPPORT THRU 06/20(	11,000.00
200708	PEI895PHENCNPEZZZZZ461	461	IT900012	CORNERSTONE SYSTEMS, INC.	MAINFRAME TECHNICAL SUPPORT THRU 06/20(	2,493.86
200709	PEI895PHENCNPEZZZZZ461	461	IT900012	CORNERSTONE SYSTEMS, INC.	MAINFRAME TECHNICAL SUPPORT THRU 06/20(	11,000.00
200710	PEI895PHENCNPEZZZZZ461	461	IT900012	CORNERSTONE SYSTEMS, INC.	MAINFRAME TECHNICAL SUPPORT THRU 06/20(	11,000.00
200711	PEI895PHENCNPEZZZZZ461	461	IT900012	CORNERSTONE SYSTEMS, INC.	MAINFRAME TECHNICAL SUPPORT THRU 06/20(	11,000.00
200712	PEI895PHENCNPEZZZZZ461	461	IT900012	CORNERSTONE SYSTEMS, INC.	MAINFRAME TECHNICAL SUPPORT THRU 06/20(	13,500.00
		461 Total				60,488.86
		Grand Total				60,488.86

Adjustments for 2009 Estimates:	
1) Cornerstone mainframe support -During the transition from enterprise mainframe computing ot enterprise UNIX computing to support the new S-project applications, ITS needs to provide technical support for both the mainframe and UNIX. We have elected to dedicate our staff to the UNIX systems (which is our future state) and use outsourced support services to keep the mainframe running in 2009.	240,000.00
2) Adjust Cornerstone support to $112K ($16K for Jan-Jul) Mainframe operations based on May 2009 CIS implementation	(188,488.86)
	51,511.14
Total 2009 estimates	112,000.00

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Hawaiian Electric Company, Inc.
ITS Department
IT9000013

Outsource Support-Net Admin
McCarter

PERIOD	ACCOUNT CODE	ale	ORDER	SUPPLIER NAME	desc	TRAN AMO
200712	PEI896PHENCNPEZZZZZ461	461	IT900013	VERNON W MORIOKA	PROVIDE IT NETWORK SECURITY ADMIN SUPP(	11,518.32
200708	PEI896PHENCNPEZZZZZ461	461	IT900013	NETENTERPRISE, INC.	CONTRACT NETWK SECURITY ANALYST (R.CHC	8,356.02
200709	PEI896PHENCNPEZZZZZ461	461	IT900013	NETENTERPRISE, INC.	CONTRACT NETWK SECURITY ANALYST (R.CHC	8,753.92
200710	PEI896PHENCNPEZZZZZ461	461	IT900013	NETENTERPRISE, INC.	CONTRACT NETWK SECURITY ANALYST (R.CHC	7,560.21
200712	PEI896PHENCNPEZZZZZ461	461	IT900013	NETENTERPRISE, INC.	CONTRACT NETWK SECURITY ANALYST (R.CHC	8,753.92
200712	PEI896PHENCNPEZZZZZ461	461	IT900013	NETENTERPRISE, INC.	CONTRACT NETWK SECURITY ANALYST (R.CHC	3,581.15
200708	PEI896PHENCNPEZZZZZ461	461	IT900013		NETENTERPRISE, INC INV#0100886-IN	7,958.11
		461 Total				56,481.65
		Grand Total	**IT900013 Total**			56,481.65

Adjustments for 2009 Estimates:	
1) Addition for contact security (ells assistance)- fullmyear	25,000
	25,000
Total 2009 estimates	81,482

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WORKPAPER DESCRIPTION

THIS WORKPAPER SHOWS THE LABOR AND NON-LABOR EXPENSES THAT ARE CHARGED DIRECTLY TO EXPENSE. LABOR EXPENSES ARE BASED ON THE HOURS SHOWN ON WORKPAPER K-1 MULTIPLIED BY THE STANDARD LABOR RATE FOR EACH LABOR CLASS.

Dept	*R...	*A...	*Lo...	*I...	*Proj #	*E...	Line item	Expense Category	FY09 Upd08 RA
InfoTech	PEA	795	PHE	NE	NPFZZZZZ	201	IT00none - Safety Shoes - OS Svc	Materials	$800
InfoTech	PEA								$800
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	150	PEC BUOC (2) 965 Provide Records Mgmt Svcs	Labor	$101,159
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	150	PEC TC (1) 965 Provide Records Mgmt Svcs	Labor	$65,959
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	150	PEC TCS (1) 965 Provide Records Mgmt Svcs	Labor	$65,563
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	201	IT000285 - Records Center - Materials	Materials	$6,846
InfoTech	PEC	965	PHE	NE	NPEZZZZZ	501	IT000285 - Records Center - OS Svc	Outside Svcs	$120,681
InfoTech	PEC	967	PHE	NE	NPEZZZZZ	150	PEC BUOC (1) 967 Provide Printing Svcs	Labor	$50,580
InfoTech	PEC	968	PHE	NE	NPEZZZZZ	150	PEC BUOC (1) 968 Prov Word Proc Svcs	Labor	$50,580
InfoTech	PEC								$461,367
InfoTech	PEI	967	PHE	NE	NPEZZZZZ	201	IT000279 - Digital Printing - Materials	Materials	$3,754
InfoTech	PEI	967	PHE	NE	NPEZZZZZ	501	IT000279 - Digital Printing - OS Svc	Outside Svcs	$3,679
InfoTech	PEI	968	PHE	NE	NPEZZZZZ	201	IT000283 - Word Processing - Materials	Materials	$1,108
InfoTech	PEI								$8,541
InfoTech	PEM	614	OAH	NE	NPNEZZZZ	201	IT000291 - Machine Room - Materials	Materials	$200
InfoTech	PEM	614	OAH	NE	NPNEZZZZ	501	IT000291 - Machine Room - OS Svc	Outside Svcs	$6,503
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM BUOC (4) 966 Handle & Deliver Mail	Labor	$203,175
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM BUTC (1) Handle & Deliver Mail 966	Labor	$61,552
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM I (1) 966 Handle & Deliver Mail	Labor	$48,026
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	150	PEM TCS (1) 966 Handle & Deliver Mail	Labor	$65,981
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	201	IT000289 - Mail Processing & Delivery - Materi...	Materials	$1,936
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	301	IT00none - Mailing Services - Vehicle	Transportation	$29,807
InfoTech	PEM	966	PHE	NE	NPEZZZZZ	501	IT000289 - Mail Process&Deliv - OS Svc	Outside Svcs	$3,661
InfoTech	PEM								$420,840
									$891,549

5/27/2008 » budget manager: PR110H NPUpd - Detail Hrs 4:30PM

WORKPAPER DESCRIPTION
THIS WORKPAPER SHOWS THE HEADCOUNT/ITS POSITION AND PRINTED HOURS FOR EACH LABOR CLASS INCLUDED IN THE 2009 BUDGET. EACH POSITION IS MAPPED TO WORKPAPER B-8

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*R...	*Ac...	*Lo...	*In...	*Proj #	*E...	*Lbr Class	Line item	FY09 Upd08 RA (HOURS)	(EMPLOYEES)
PEC	965	PHE	NE	NPEZZZZZ	150	__BUOC	PEC BUOC (2) 965 Provide Records Mgmt Svcs	3,776	
PEC	965	PHE	NE	NPEZZZZZ	150	__BUOC [29]	INFO STORAGE EQ CLERK (2)	3,776	2
PEC	965	PHE	NE	NPEZZZZZ	150	__TC	PEC TC (1) 965 Provide Records Mgmt Svcs	1,884	
PEC	965	PHE	NE	NPEZZZZZ	150	__TC [30]	RECORDS MGMT ANALYST	1,884	1
PEC	965	PHE	NE	NPEZZZZZ	150	__TCS	PEC TCS (1) 965 Provide Records Mgmt Svcs	1,884	
PEC	965	PHE	NE	NPEZZZZZ	150	__TCS [31]	OFFICE SERVICES SUPERVISOR	1,884	1
PEC	967	PHE	NE	NPEZZZZZ	150	__BUOC	PEC BUOC (1) 967 Provide Printing Svcs	1,888	
PEC	967	PHE	NE	NPEZZZZZ	150	__BUOC [32]	PRINTER III	1,888	1
PEC	968	PHE	NE	NPEZZZZZ	150	__BUOC	PEC BUOC (1) 968 Prov Word Proc Svcs	1,888	
PEC	968	PHE	NE	NPEZZZZZ	150	__BUOC [33]	SR WORD PROC OPERATOR	1,888	1
PEM	966	PHE	NE	NPEZZZZZ	150	__BUOC	PEM BUOC (4) 966 Handle & Deliver Mail	7,584	
PEM	966	PHE	NE	NPEZZZZZ	150	__BUOC [34] [35]	SR MAIL CLERK (1), MAIL CLERK (3)	7,584	4
PEM	966	PHE	NE	NPEZZZZZ	150	__BUTC	PEM BUTC (1) Handle & Deliver Mail 966	1,908	
PEM	966	PHE	NE	NPEZZZZZ	150	__BUTC [36]	MAIL DRIVER	1,908	1
PEM	966	PHE	NE	NPEZZZZZ	150	__I	PEM I (1) 966 Handle & Deliver Mail	1,896	
PEM	966	PHE	NE	NPEZZZZZ	150	__I [37]	MAILING SERVICES COORDINATOR	1,896	1
PEM	966	PHE	NE	NPEZZZZZ	150	__TCS	PEM TCS (1) 966 Handle & Deliver Mail	1,896	
PEM	966	PHE	NE	NPEZZZZZ	150	__TCS [38]	MAILING SERVICES SUPERVISOR	1,896	1
								24,604	13

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Hawaiian Electric Company, Inc.
ITS Department
Non-Labor Workorder Charges

Workorder	Workorder Name	Responsible	2007	2009	Incr<decr>	Significant change	Explanation of Significant change
IT000003	HEI Internet Charges	McCarter	84,341	84,300	(41)		
IT000004	Data Center	McCarter	442,589	459,000	16,411		
IT000005	Infrastructure LAN	McCarter	949,631	970,600	20,969	20,969	SAN equip maintenance - $80K, Unix Hardware/OS support $55,000, less $90K trasferred to IT900011
IT000006	Development	Eber	31,619	13,200	(18,419)		
IT000007	Desktop Business	McCarter	366,013	366,000	(13)		
IT000008	Desktop Technical	McCarter	99,214	99,200	(14)		
IT000009	PABX Trunk	McCarter	106,413	106,400	(13)		
IT000010	Long Distance	McCarter	14,321	14,300	(21)		
IT000011	Infrastructure Com	McCarter	11,253	11,300	47		
IT000012	Department Misc	Stuller	203,178	203,100	(78)		
IT000014	Consultants-Dev Svc	Eber	1,192,166	1,955,800	763,634	763,634	OS Support CIS-$728K/HRMS support-$202K. Less TYC Legacy CIS support - <$82K>, Less EAI support - <$43K>
IT000184	Telecom Equip Main	McCarter	193,580	193,600	20		
IT000185	Training/Travel	Stuller	37,560	37,600	40		
IT000193	Copiers/Printers/Fax	Harada	649,201	649,200	(1)		
IT000195	Interisland Circuit Charges	McCarter	91,855	151,900	60,045		
IT900001	Development - SW	Eber	298,672	249,300	(49,372)		
IT900002	Data Center - SW	McCarter	914,197	769,200	(144,997)		
IT900003	Infrastructure LAN - SW	McCarter	334,388	549,400	215,012	215,012	Unix Utility - $85K, CA fees - $90K, and Vmware - $40K
IT900004	Desktop Business - SW	McCarter	406,623	481,600	74,977		
IT900005	Desktop Technical - SW	McCarter	241,744	241,700	(44)		
IT900006	Infrastructure Com - SW	McCarter	40,857	40,900	43		
IT900011	Computer Security Analysis	Benn	6,122	216,100	209,978	209,978	Managed Security Even and Information Management Services -$80K, $90K AT&T IDS transferred from IT000005
IT900012	Outsource Sup - Mainframe	McCarter	60,489	112,000	51,511		
IT900013	Outsource Sup - Net Admin	McCarter	56,482	81,500	25,018		
Total Charges to Clearing			6,832,507	8,057,200	1,224,693	1,209,593	
IT000279	Dig Prnt, Wrd Proc, Rec	Harada	149,128	136,100	(13,028)		
IT000289	Mail Proc/Mach Room	Harada	36,949	12,300	(24,649)		
Total Non-Labor Workorder Charges			7,018,585	8,205,600	1,187,015		

Hawaiian Electric Company, Inc.
ITS Department
2009 Budget Adustments to 2007 Actuals

Work Order	Work Order Name	2007 Base	2009 change	Description	Detail	2009
IO updates Prepared by L McCarter on 3/10/2009						
IT000003	HEI Internet Charges	84,341.43	$ -			84,300
IT000004	Data Center		$ 70,000	IBM - IT recovery services	Covering both mainframe and UNIX DR (est)	
				IBM - IT recovery services	Only Unix; but more complex and expensive (est)	
			$ (44,500)	IBM Hardware maintenance	Mainframe retired	
			$ (30,000)	CA Training	Less training each year	
			$ (9,136)	InfoPrint	Stop printr charges once we go off site	
			$ 30,000	Mainframe Disposal Costs		
				Cal First Leasing	Discontinue mainframe shark / shark	
		442,589.02	$ 16,364			459,000
IT000005	Infrastructure LAN		$ (20,000)	Moved to above IT000195 - Security		
			$ (10,000)	Less Microsoft premier support		
			$ (20,000)	Fewer Microsoft support contracting		
			$ 30,000	Additional AT&T fees for IDS		
			$ (36,000)	Remove Pacific wireless - One time contact		
			$ (18,000)	Remove patial Secure Safeword - One time contact		
			$ 80,000	SAN equip maint starting 2009		
			$ 55,000	Unix hardward/os support		
			$ 60,000	true up on cisco support		
			$ 20,000	increased HP server support		
			$ (30,000)	Adjust Aventail from purchase to maint		
			$ (60,000)	Transfer AT&T-IDS to workorder IT900011		
			$ (30,000)	Transfer AT&T-IDS to workorder IT900011		
		949,630.63	$ 21,000			970,600
IT000007	Desktop Business	366,013.08	$ -			366,000
IT000008	Desktop Technical	99,213.54	$ -			99,200
IT000009	PABX Trunk	106,413.10	$ -			106,400

Hawaiian Electric Company, Inc.
ITS Department
2009 Budget Adustments to 2007 Actuals

Work Order	Work Order Name	2007 Base	2009 change	Description	Detail	2009
IT000010	Long Distance	14,321.04	$ -			14,300
IT000011	Infrastructure Com	11,252.51	$ -			11,300
IT000012	Department Misc	105,237.25	$ -			105,200
IT000602	Consultant-Bearing I	97,940.88	$ -			97,900
IT000184	Telecom Equip Main	193,579.52	$ -	Note that we will have reduction in IVR maintenance, but support may grow elsewhere		193,600
IT000185	Training/Travel	37,560.12	$ -			37,600
IT000193	Copiers/Printers/Fax	649,201.08	$ -	While we renogtiating a lower contract, there may be additional charges in future years		649,200
IT000195	Interisland Circuit Ch	91,854.82	$ 60,000	HaTel - Data Meco/Helco	Due to HaTel billing error, this was not reflected in 2007	151,900
IT900002	Data Center - SW	914,197.43	$ (145,000)	Remove IBM software chgs due to shutting down mainframe(09-4Q IBM Main)		769,200
IT900003	Infrastructure LAN - SW		$ 85,000	CA Unix util costs estimates		
				Oracle maint fees		
			$ 90,000	CA fees for UNIX		
			$ 40,000	Vmware software & support		
		334,388.43	$ 215,000			549,400
IT900004	Desktop Business -	406,622.78	$ 75,000	MSFT contract always goes higher		481,600
IT900005	Desktop Technical -	241,744.17	$ -			241,700
IT900006	Infrastructure Com -	40,856.99	$ -			40,900
IT900011	Computer Security Analysis		$ 20,000	Increase security services		
			$ 60,000	Transfer AT&T-IDS from workorder IT000005		
			$ 30,000	Transfer AT&T-IDS increase from workorder IT000006		
			$ 90,000	Managed Security Event and Information Management Services (SEIM)		

Hawaiian Electric Company, Inc.
ITS Department
2009 Budget Adustments to 2007 Actuals

Work Order	Work Order Name	2007 Base	2009 change	Description	Detail	2009
			$ 10,000	Other Security tools (Managed Penetration Testing Tool and Trade Group Memberships)		
		6,121.98	$ 210,000			**216,100**
IT900012	Outsource Sup - Mainframe		$ 240,000	Cornerstone mainframe support		
			$ (188,489)	Adjust Cornerstone support to $112K ($16K for Jan-Jul) Mainframe operations based on May 2009 CIS implemen		
		60,488.86	$ 51,511			**112,000**
IT900013	Outsource Sup - Nel	56,481.65	$ 25,000	Addition for contact security (ellis assistance)- fullmyear		**81,500**
	Grand Total I/O		$ 580,386			
DS Updates	Prepared by R. Eber on 3/6/2008					
IT000006	Development		$ 20,000	Dana Hinkle one-time credit		
			$ (44,862)	Microsoft Service charges should have hit DS		
			$ 3,970	Boss (Data center work) shouldn't have hit DS		
			$ 2,500	Miscellaneous costs for staff of 34 (RAM upgrades, smartcard/safeword tokens, technical books, jumpdrives, newspaper ads, etc.)		
		31,618.68	$ (18,392)			**13,200**
IT000014	Consultants-Dev Svc		$ (12,468)	CADD services should have hit GIS budget		
			$ (18,800)	in 2009, 8 months of FLEX Admin (Tesseract) goes away as HRMS live in April in 2010 full year		
			$ (10,450)	Subversion support was a one time cost will not see again		
			$ (43,237)	Not forecasting additional EAI support will be needed		
			$ 202,400	HRMS support: SI estimates at $4.5K/month for app DBA and 1 FTE for developer (use $120/hr). April go-live so need for 8 months. 2010 full year		
			$ 1,248,000	Need equivalent of at least 5 FTEs to support beyond internal staff of 3 to support CIS. Direct Energy has 10 for same system.		
			$ (520,000)	Adjust 5 FTEs to June through Dec (7/12) coverage assuming CIS implementation May 2009		
			$ (81,800)	Adjust TYC support costs for CB in IT000014		
				(Even 5 may be too few considering OMS, MWM, Business Objects, Mobious, Harvest, etc. also need support.) Used $120/hr.		
				Estimate 1 FTE for IT support needs for MDMS		
		1,192,166.18	$ 763,645			**1,955,800**
IT900001	Development - SW		$ (73,150)	Business Objects license purchase only occurs once, maintenance only thereafter		
			$ (16,589)	Bell & Howell Transformer maintenance not required after mainframe retired		
			$ (1,692)	Hostfront maintenance not required after mainframe retired		

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Hawaiian Electric Company, Inc.
ITS Department
2009 Budget Adustments to 2007 Actuals

Work Order	Work Order Name	2007 Base	2009 change	Description	Detail	2009
			$ 22,020	Mobius maintenance from ASG (PO V07700 in 2007)		
			$ 20,000	Minrom web services @ $20K/10-pack or $4K/web-service. Over 10. Need 14 when CIS & OMS live. Plantview, etc. interfaces coming		
		298,671.59	$ (49,411)			**249,300**
EC Updates - Prepared by I. Harada on 3/5/2008						
IT000279+	Dig Prnt, Wrd Proc, Rec		$ (5,691)	Telos - card reader installation effort (labor/non labor)		
			$ (3,390)	Commercial Shelving - Records Center storage expansion (non-labor)		
			$ (3,979)	WDI - Records Center storage expansion (labor)		
		149,128.49	$ (13,060)			**136,100**
IT000289+	Mail Proc/Mach Room		$ (19,100)	RENEW SUPPORT ON MAILSTAR 500 #23997A	Bill Print Insertion sourcing - reduce 75%	
			$ (1,100)	PITNEY BOWES EQUIPMENT MAINTENANCE	Bill Print Insertion sourcing - reduce 75% (of 50% for inserter)	
			$ (2,500)	PITNEY BOWES SUPPLY	Bill Print Insertion sourcing - reduce 75%	
			$ (1,900)	HAWAII PRESORT - MAIL SERVICES FOR HECO	Bill Print Insertion sourcing - reduce 75% (of 66% for bills)	
		36,949.46	$ (24,600)			**12,300**
		7,018,584.71	$ 1,187,057			8,205,600

Hawaiian Electric Company, Inc.
Facilities Attachment Program
Outside Services

HECO maintains a Facilities Attachment Program to manage requests by wireline and wireless telecommunication carriers to utilize poles, ducts, and other utility owned property for the attachment of telecom cables, fiber and wireless antennas. The regulatory requirements of the Program are based on the Telecommunications Act of 1996. Under this Act, HECO is required by law to evaluate all requests from telecom providers who wish to install their equipment on HECO owned facilities. HECO must accommodate requests for access to our facilities unless it jeopardizes safety, the reliability of our network, or negatively impacts core utility services.

Two contractors provide Facilities Attachment Program management services for HECO:

1) $ 100,000 Services performed under the Data House Master Services Agreement (based on services described in Work Authorization No. EC-01/Purchase order V09656/Contract No. MSTR ED-07-02) XM-2

2) 39,996 Services performed under the PATDI, Inc. Master Services Agreement (based on services described in Work Authorization No. EC-01/Purchase order V09656/Contract No. MSTR ED-07-02) XM-3

XM-1 $ 139,996 Total Facilities Attachment Program Outside Services

WORKPAPER DESCRIPTION

THIS WORKPAPER DESCRIBES THE FACILITIES ATTACHMENT PROGRAM AND SHOWS THE OUTSIDE SERVICES COST BUDGET.

M

WORKPAPER DESCRIPTION
THIS WORKPAPER SHOWS THE COMPONENTS OF THE FACILITIES ATTACHMENT PROGRAM BUDGET.

ITS Department
Facilities Attachment Program
2009 Budget inputs

*Project #	*RA	*Act	*Loc	*Ind	*EE	*Labor Class #	Line item	Hours	Dollars
Non-billable Labor hours:									
P0000527	PBE	112	PHE	NE	150	B_TNDENG	Engr - Trans & Distrib Nonbill 112	20	703
P0000527	PEC	112	PHE	NE	150	__TC	ITS PMBO - Prog Mgr - Nonbill 112	120	4,207
P0000527	PKF	112	PHE	NE	150	__TC	Financial Analysis - Non Bill 112	36	1,262
P0000527	PNC	112	PHE	NE	150	__F	Legal - Nonbill 112	144	7,194
P0000527	PWF	112	PHE	NE	150	W_CUENGR	CID - Plng & Design Nonbill 112	10	411
Non-billable Expense/Revenue dollars:									
P0000527	PEC	112	PHE	NE	501		Outside Services		139,996
P0000527	PEI	025	OUT	BO	905		Facilities Attachment Revenues		(209,004)
Billable Labor hours:									
P0000527	PBE	112	OUT	BE	150	B_TNDENG	Engr - Trans & Distrib Billable 112	180	6,327
P0000527	PBT	112	OUT	BE	150	B_STRENG	Engr - Structural - Billable 112	400	15,360
P0000527	PBT	112	OUT	BE	150	B_SURVEY	Engr - Survey Billable 112	0	0
P0000527	PBY	112	OUT	BE	150	B_SSENG	Engr - Substation Billable 112	200	7,578
P0000527	PBZ	112	OUT	BE	150	B_TECENG	Engr - Tech Svc Billable 112	0	0
P0000527	PDH	112	OUT	BE	150	__TCS-ED	C & M - Customer Demand Billable 112	84	3,278
P0000527	PDS	112	OUT	BE	150	D_OHCREW	C & M - Koolau OH Billable	12	455
P0000527	PDS	112	OUT	BE	150	D_OHCREW	C & M - Ward Overhead Billable	12	455
P0000527	PDS	112	OUT	BE	150	D_OHCREW	C & M - West Overhead	12	455
P0000527	PEC	112	OUT	BE	150	__TC	ITS PMBO - Proj Mgr - Billable 112	120	4,207
P0000527	PFS	112	OUT	BE	150	__TC	Safety - Billable 112	20	701
P0000527	PKT	112	OUT	BE	150	__TC	Securities - Billable 112	24	841
P0000527	PNC	112	OUT	BE	150	__F	Legal - Billable 112	24	1,199
P0000527	PNL	112	OUT	BE	150	__TC	Land ROW - Billable 112	20	701
P0000527	PNP	112	OUT	BE	150	__TC	Regulatory - Billable 112	12	421
P0000527	PNP	112	OUT	BE	150	__TC	Regulatory - Nonbill 112	36	1,262
P0000527	PRC	112	OUT	BE	150	R_COMTEC	Sys Op - Tech Svc Comm Shop Billable 112	24	892
P0000527	PWF	112	OUT	BE	150	W_CUENGR	CID - Plng & Design Billable 112	20	822
Billable Expense dollars:									
P0000527	PEC	112	OUT	BE	201		Materials		2,400
Total								1,530	(7,877)

3-1

Source: Upd08PBED-Feb08-ITS.PLN Pillar update file

WORK AUTHORIZATION NO. **EC-01**
Under Purchase Order No. V09656 /Contract No. **MSTR ED-07-02**

I. Request for Quote

Under the terms and conditions of the Consultant Services Master Agreement, dated June 1, 2007, by and between DATAHOUSE CONSULTING, INC. DBA DATAHOUSE ("Consultant") and Hawaiian Electric Company, Inc. ("Company"), Company hereby requests a proposal from Consultant to perform the following Work:

Consultant agrees to furnish all labor, tools, materials, equipment, meals, lodging, transportation, and supervision necessary to complete the following work in a workmanlike manner, in accordance with the attached Special Conditions at Attachment A, and to the reasonable satisfaction of Company: (hereinafter "Work"). The Special Conditions at Attachment A shall take precedence over any conflicting provisions found in this Contract.

The minimum insurance limits specified in the Consultant Services Master Agreement shall be modified for this Work Authorization only (blanks indicate that no change is intended for this Work):

Commercial General Liability
Section 8.2 - $_____ per occurrence
$_____ general aggregate

Automobile Liability
Section 8.3 - $_____ per accident

Professional Errors and Omissions
Section 8.4 - $_____ per each claim
$_____ per aggregate

Pollution Liability and/or Asbestos Abatement Liability and/or Lead Abatement Liability
Section 8.5 - $_____ per occurrence

Marine
Section 8.6 - $_____ per occurrence

Dated: 8/24/2007

Company

Richard H. Stuller
Chief Information Officer

M-2

II. Consultant's Proposal

Consultant hereby proposes to perform the Work described above in Section I, under said terms and conditions, for the following hourly amount: **$110.00 per hour**.

Total not-to-exceed cost of this Work Authorization is **$100,000.00**.

Work will begin no later than **July 1, 2007** and be completed on or before **June 30, 2008**.

Clyde Shiigi will act as Consultant's Designated Representative during the performance of this Work.

Dated: 8/31/07

Consultant

Clyde K Shiigi
Name

President/CEO
Title

III. Work Authorization

Consultant's foregoing Proposal is accepted. Consultant is authorized to perform the Work as proposed. Company's Designated Representative for this Work Authorization shall be Beverly Langley.

Dated: 9/4/2007

Company

Richard H. Stuller
Chief Information Officer

M-2

Attachment A

Scope of Work – Facilities Attachment Program (FAP)

The scope of work shall be defined by HECO and may include but not limited to the following functions.

- Liaison and negotiations with the requesting entity (for attachments);
- Liaison and negotiations with all relevant HECO departments providing FAP related services (e.g., regulatory, land & rights of way, engineering, legal, and operations);
- Liaison and administrative reporting to the HECO ITS department;
- Coordination and participation for on site inspections for all attachment requests;
- Coordination and participation for meetings between applicable HECO departments and requesting entities;
- Coordination for fee processing, semi-annual and annual billings with requesting entity and appropriate HECO staff;
- Preparation (using standard MLA and SLA templates; editing, negotiations, etc.) of Master License Agreements and Site License Agreements as applicable;
- Travel to HECO or other locations needed to conduct the FAP management;
- Progress/status reporting on a twice-monthly basis.
- Attend meetings on behalf of HECO FAP
- Other FAP related tasks as requested by HECO.

Support

As part of the proposed FAP services, the service provider must respond to various support requests and conditions.

- Regulatory Compliance – Ensure that FAP services being provided in accordance with FCC, PUC, and any other regulatory guidelines. Escalate problems to the ITS management contact if appropriate HECO services are not being provided that jeopardize regulatory compliance.
- HECO ITS Management Requests – Acknowledgment to HECO ITS communications (telephone or email) within one business day. Responses to HECO communications in a manner timely to the particular FAP issues at hand.
- Twice-monthly Status Reporting – Provide a status summary to the HECO ITS administrative contact that includes the FAP requests presently being handled (in progress, open and closed within recent period), stage of request and enough detail for HECO to discern accurate status. Items in jeopardy or in some type of escalation should be properly denoted.

Pricing Guidelines - Contract Period, Invoicing and Expense Accounting Terms

State compliance with or suggest alternatives for all of the following pricing and related administration requirements.

- The term of the contract will be for one year, with HECO's option to extend for a second year.
- Payment will be in arrears based on actual hours worked in the previous billing interval and adjusted for contended performance issues, if any, until mutually resolved.
- Service provider will be compensated on a flat hourly basis for all hours worked for FAP services to HECO. All worked hours should be tracked to the specific work

Attachment A

request (requested attachment); HECO ITS will provide a work request reference number. The service provider's invoice shall include: the work request reference number; the FAP short name description; the number of hours per work reference in the billing period and the cumulative billing to date for the reference; and a short description of services rendered within the period. The preferred medium for invoice support is a spreadsheet or similar vehicle.

- HECO reserves the right to audit the invoices in accordance with internal HECO accounting standards, which may include requests by the attachment requester.
- Hourly billing rates are not to be increased during the contract period.
- Authorized travel expenses shall be submitted with invoices within a month of being incurred; copies of all items requested for reimbursement (air travel, vehicle/gas, reasonable parking). No other expenses are covered, unless mutually agreed upon by the service provider and HECO ITS.

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SERVICE ORDER NO. **V10983**
CONTRACT NO. **EC-07-12**

CONSULTANT SERVICES AGREEMENT

THIS CONSULTANT SERVICES AGREEMENT (hereinafter "Agreement" or "Contract") is made on October 16, 2007, by and between HAWAIIAN ELECTRIC COMPANY, INC. (hereinafter "Company"), a Hawaii corporation, whose principal place of business and address is 900 Richards Street, Honolulu, Hawaii 96813 and whose mailing address is P. O. Box 2750, Honolulu, Hawaii 96840-0001 and **PATDI, INC.** (hereinafter "Consultant"), whose principal place of business and mailing address is **65-1158 Mamalahoa Highway, Suite 22A, Kamuela, Hawaii,** doing business in Hawaii.

W I T N E S S E T H :

WHEREAS, Company is in the business of generation, transmission, and distribution of electrical power on the Island of Oahu, State of Hawaii; and

WHEREAS, Company requires certain professional consulting work to be accomplished in order to maintain reliable electrical power for its customers; and

WHEREAS, Consultant is in the business of performing professional consulting work such as that needed by Company; and

WHEREAS, Consultant represents that it is equipped and has the expertise necessary to perform the particular professional consulting work required under this Agreement,

NOW, THEREFORE, in consideration of these premises and of the mutual promises herein contained, Company and Consultant hereby agree that Consultant will perform professional consulting work for Company under the following terms and conditions:

M-3

I. SCOPE OF WORK

1.1 Project Description - Consultant agrees to furnish all labor, tools, materials, equipment, meals, lodging, transportation, and supervision necessary to complete the following work in a workmanlike manner, and as more specifically described in Attachment A, and to the reasonable satisfaction of Company: FACILITIES ATTACHMENT PROGRAM (FAP) MANAGEMENT (hereinafter "Work"). Any special terms and conditions set forth in Attachment A shall take precedence over any conflicting provisions found in this Contract.

1.2 Term - The Term of this Contract shall be **for one year**, beginning on **November 1, 2007**, and ending on **October 31, 2008**, unless extended by written amendment hereto.

II. COMPENSATION

2.1 Time and Expenses - Compensation for Work performed and expenses incurred under this Contract shall be on a time and expenses basis. The hourly rates and particular expenses which Consultant may invoice to Company under this Contract are stated in Attachment B. No other rates or expenses may be charged by Consultant unless agreed to by the parties in an amendment hereto. However, in no event shall the total time and expenses invoiced under this Contract exceed the sum of **$50,000.00**.

2.2 Invoicing - Upon completion of each month's Work, Consultant will submit its invoice for all Work rendered and all allowable expenditures incurred during that month. Failure to submit invoices on a timely basis shall be grounds to deny payment of such invoices. Such invoice shall be in a form approved by Company and shall at a minimum show the total hours of Work for that month by each Consultant employee, the hourly rate for each employee, and an itemized list of all allowable expenditures made during the month. Upon request by Company, Consultant shall provide supporting documentation, including but not limited to invoices and receipts, as evidence of such expenditures. The invoice shall reference the Company's Designated Representative, the Company purchase order or Service Contract number, if any, and any additional information required as part of the Scope of Work hereunder. All invoices should be addressed as follows:

Hawaiian Electric Company, Inc.
P. O. Box 2750
Honolulu, Hawaii 96840-0001
Attention: Accounts Payable
Service Order No. **V10983**
Contract No. **EC-07-12**

NOTE: Do not include the name of the Company's Designated Representative in the address.

The ORIGINAL invoice, without attachments, must be sent directly to the Accounts Payable address listed above. ALL REQUIRED SUPPORTING DOCUMENTATION must be sent SEPARATELY to the Company's Designated Representative. Failure to follow this procedure may cause a delay in payment.

2.3 Payments - Payment of a properly submitted monthly invoice will be made within thirty (30) days after receipt and approval by Company.

2.4 Final Payment - Final payment of all remaining amounts due Consultant, including any and all retentions, shall be paid within sixty (60) days after all Work is completed, accepted by Company, and a proper final invoice submitted; provided, however, that payment shall be made within thirty (30) days if Company is satisfied by bond or otherwise that there are no outstanding third-party claims against the Work.

2.5 Withholding of Payments; Set-off - All payments, including the final payment, are subject to adjustment during or after termination of the Work on the basis of any final accounting which may be made by Company. Company may withhold from any payment, including the final payment: (1) any amount incorrectly invoiced; (2) any amount in dispute either because Company has found the invoice excessive, or the Work performed unacceptable; or (3) an amount sufficient to completely protect Company from any loss, damage or expense arising out of assertions by other parties of any claim or lien against Company because of Consultant's performance of this Contract. Company further reserves the right to set-off any amounts due from Consultant to Company against any amounts payable at any time by Company in connection with this Agreement.

III. STATUS OF THE PARTIES

3.1 Independent Contractor - Consultant will act solely as an independent contractor of Company, and not as Company's agent or servant for any purpose. All employees of Consultant will work under the supervision of Consultant and not act as Company's agents or servants for any purpose.

3.2 Subletting or Assigning Contract - Consultant shall not assign nor sublet any portion of the Work under this Contract without first submitting the proposed subcontract or assignment to Company's Designated Representative and receiving written consent from such Representative to subcontract or assign, which consent may be granted or withheld in Company's sole discretion. A request to sublet or assign must contain the name and location of individuals or firms to whom Work would be transferred or

delegated, information on the qualifications and experience of those individuals or firms to perform the transferred or delegated Work, and an estimate of the cost of Work to be performed by the subcontractor or assignee. Subcontracted work must comply with the terms and conditions of this Agreement and Consultant shall be responsible for any material deviation therefrom by its subcontractors. Consultant shall indemnify and hold Company harmless from any loss caused by a failure of Consultant to comply with the provisions of this Section 3.2. Company's consent to subletting or assignment shall not relieve Consultant of responsibility for the performance of the Work in accordance with the terms and conditions of this Contract, and any amendments thereto. Consent to an assignment may be conditioned upon the assignee executing an agreement to assume all of Consultant's past, present and future obligations under this Agreement.

IV. POINTS OF CONTACT

4.1 Company's Designated Representative - As used in this Contract, "Company's Designated Representative" shall be **Irene Harada**. Company's Designated Representative shall be the point of contact for and have the authority to speak on behalf of Company concerning all matters related to this Contract, except that she shall not have the authority to amend the Contract.

4.2 Consultant's Designated Representative - As used in this Contract, "Consultant's Designated Representative" shall mean **Patricia Provalenko**. During the performance of the Work hereunder, [he/she] can be reached at the Consultant offices in **Kamuela, Hawaii**. She shall be the point of contact for and have the authority to speak on behalf of Consultant concerning all matters related to this Contract, except that she shall not have the authority to amend the Contract.

V. PERFORMANCE STANDARDS AND WARRANTY

5.1 Performance Standards - In selecting employees to undertake the Work under this Contract, Consultant shall select only those persons who are qualified by the necessary education, training and experience to provide high quality performance of the particular Work for which each such employee is responsible. Consultant shall accomplish all Work in a professional manner and to the reasonable satisfaction of Company. Consultant's personnel shall exercise that degree of skill and care required by the highest level of accepted professional standards in Consultant's field, and shall indemnify and hold Company harmless from any loss, including but not limited to reasonable attorneys' fees and costs, incurred by Company as a result of the professional acts, errors or omissions of Consultant or any of Consultant's personnel.

5.2 Technological Developments and Remedies - Consultant shall promptly advise Company of all reasonably available technological advances and remedies which are known or become known to Consultant over the course of performance of its obligations under this Agreement that will likely result in the Work having added value (i.e. better performance, design, material, longer useful life, etc.) to Company. Should Company elect to incorporate such advances it shall do so pursuant to a Change Order mutually agreeable to the parties.

5.3 Warranty - Correction of Defective or Substandard Work - Consultant acknowledges its absolute responsibility for insuring that the procedures used in the performance of this Contract are sufficient to satisfactorily accomplish the Work, and that review and approval by Company of any drawings, specifications or other documents prepared by Consultant in the performance of the Work shall not relieve Consultant or any of its subcontractors or vendors of its professional responsibility for the Work. Consultant warrants that it shall promptly correct without expense to Company all Work which is not completed to the reasonable satisfaction of Company or which does not meet the performance standards established herein. Consultant shall make such corrections of defective work upon written notice thereof anytime such defects appear within one year of Company's acceptance of the Work performed hereunder ("Warranty Period").

5.4 Right to Reject - Due to the critical nature of Company's operations, Consultant agrees that if Company, in its sole discretion and after reasonable consultation with Consultant, determines that any Consultant employee provided under this Contract shall be unsuitable for the performance of the Work, or that the continued presence of such employee on Company property is not consistent with the best interests of Company, then in such an instance Company may request that Consultant remove such employee from the Work and Consultant shall forthwith comply with this request. Consultant will then immediately replace such employee with an employee who fully meets the standards under this Contract and will do so at no cost to Company.

VI. INSURANCE AND INDEMNITY

6.1 Workers' Compensation - Consultant and anyone acting under its direction or control or on its behalf shall at its own expense procure and maintain in full force at all times during the term of this Contract, Workers' Compensation, Temporary Disability, and other similar insurance required by state or federal laws. In the event that Consultant fails to maintain such insurance as required by law, Consultant acknowledges and agrees that it will not seek or be entitled to any coverage under Owner's insurance. Permissible self-insurance will be acceptable subject to submission of a copy of appropriate governmental authorization and qualification by Consultant.

In addition, Consultant and anyone acting under its direction or control or on its behalf shall at its own expense procure and maintain in full force at all times during the term of this Contract, Employers Liability insurance with minimum limits for bodily injury from accident of FIVE HUNDRED THOUSAND DOLLARS ($500,000) - each accident; for bodily injury from disease of FIVE HUNDRED THOUSAND DOLLARS ($500,000) - each employee; and for bodily injury from disease of FIVE HUNDRED THOUSAND DOLLARS ($500,000) - each policy limit.

If there is an exposure or injury to Consultant's employees under the U.S. Longshoremen's and Harbor Workers' Compensation Act, the Jones Act or other laws, regulations or statutes applicable to maritime employees, coverage shall be included for such injuries or claims.

6.2 Commercial General Liability Insurance - Consultant and anyone acting under its direction or control or on its behalf shall at its own expense procure and maintain in full force at all times during the term of this Contract, Commercial General Liability insurance with a bodily injury and property damage combined single limit of liability of at least TWO MILLION DOLLARS ($2,000,000) for any occurrence. Such insurance will include coverage in like amount for products/completed operations, contractual liability, and personal and advertising injury. "Claims made" policies are not acceptable.

6.3 Automobile Liability Insurance - Consultant and anyone acting under its direction or control or on its behalf shall at its own expense procure and maintain in full effect at all times during the term of this Contract, Automobile Liability insurance with a bodily injury and property damage combined single limit of at least ONE MILLION DOLLARS ($1,000,000) per accident.

6.4 Real Estate Errors and Omissions Insurance - Consultant and anyone acting under its direction or control or on its behalf shall at its own expense procure and maintain in full effect at all times during the term of this Contract so specifying and for THREE (3) years thereafter, Real Estate Errors and Omissions

Insurance covering liabilities of at least TWO HUNDRED FIFTY THOUSAND DOLLARS ($250,000).

6.5 Consultant's Pollution Liability Insurance and/or Asbestos Abatement Liability Insurance and/or Lead Abatement Liability Insurance - In the event that Company so specifies or as Consultant may determine based upon Consultant's assessment of the Work, if the Work involves Pollution Cleanup Services, Asbestos Abatement and/or Lead Abatement, the Consultant shall provide proof of insurance coverage as applicable with a combined single limit of at least ONE MILLION DOLLARS ($1,000,000) per occurrence.

6.6 Marine Insurance - If Consultant and anyone acting under its direction or control or on its behalf charters a marine vessel for performance during the term of this Contract, Consultant shall first provide to the Company proof of Charterers Legal Liability Insurance to be in effect during the term of the charter and insuring liabilities arising out of charter agreements on form CL 345 N/E or equivalent, with limits of liability of at least FIVE MILLION DOLLARS ($5,000,000).

6.7 Waiver of Subrogation - Consultant and anyone acting under its direction will cause its insurers (except for Workers' Compensation and Professional Errors and Omissions insurance) to waive all rights of subrogation which Consultant or its insurers may have against Company, Company's agents, or Company's employees.

6.8 Company as Additional Insured - Insurance policies (except Workers' Compensation, Automobile Liability, and Professional Errors and Omissions) providing the insurance coverage required in this Article will name Company, Company's agents, and/or Company's employees as an additional insured, as appropriate. Coverage must be primary in respect to the additional insured. Any other insurance carried by the Company will be excess only and not contribute with this insurance.

6.9 Certificates of Insurance - Within ten (10) days of the date of this Contract, Consultant shall file with the Company's Designated Representative certificates of insurance certifying that each of the foregoing insurance coverages is in force, and further providing that the Company will be given thirty (30) days' written notice of any material change in, cancellation of, or intent not to renew any of the policies. Receipt of any certificate showing less coverage than requested is not a waiver of the Consultant's obligation to fulfill the requirements.

6.10 Indemnity - Consultant and anyone acting under its direction or control or on its behalf shall indemnify, defend and hold harmless Company from and against all losses, damages, claims and actions, and all expenses incidental to such losses, damages, claims or actions, including but not limited to

reasonable attorneys' fees and costs, based upon or arising out of damage to property or injuries to persons, or other tortious acts caused or contributed to by Consultant or anyone acting under its direction or control or in its behalf in the course of its performance under this Contract; provided Consultant's aforesaid indemnity and hold harmless obligation shall not be applicable to any liability based upon the sole negligence of Company, and provided further that Consultant's indemnity and hold harmless obligation pursuant to this paragraph shall not be applicable to any liability based upon professional acts, errors or omissions of Consultant. Furthermore, Consultant shall indemnify and hold Company harmless for any loss, including but not limited to reasonable attorneys' fees and costs, incurred by Company as a result of Consultant's failure to comply with the provisions of this Article VI.

VII. OWNERSHIP OF MATERIALS, INFORMATION, COPYRIGHTS AND DISCOVERIES; CONFIDENTIALITY AND NON-DISCLOSURE

7.1 Ownership of Materials. Except as otherwise provided, any and all drawings, specifications, technical information, reports, studies, documents, materials and business information of any type whatsoever provided to Consultant by Company, or prepared or developed by Consultant for or on behalf of Company in the performance of this Agreement (except as provided below), are Company's exclusive property. Upon Company's request, Consultant shall return to Company all copies of all materials relating to the Work.

7.2 Discoveries and Inventions; Exceptions. Except as provided below, Consultant agrees that all ideas, creations, inventions, discoveries and improvements, whether or not patentable or copyrightable and whether or not fixed in any mode of expression or reduced to practice (collectively referred to as "Discoveries") that Consultant conceives of, alone or jointly with others, or which are suggested by or result from any Work performed under this Agreement, or which relate to the actual or anticipated business of Company, or the actual or anticipated research and development of Company, or which result from the use of Company facilities, equipment, supplies, or information, are also the sole and exclusive property of Company, and Company shall have the right to use such Discoveries and to obtain patent, copyright, and/or trade secret protection or any other form of legal protection for such Discoveries. Consultant shall disclose promptly in writing to Company all Discoveries made or conceived as a result of Work performed under this Agreement.

This section shall not apply to discoveries made or conceived of and set forth in a tangible medium of expression by Consultant prior to the execution of this Agreement ("Previous Discoveries"). Consultant agrees to provide Company with

satisfactory written evidence or documentation of any such Previous Discoveries upon Company's request.

7.3 Assignment of Copyright and Discoveries. Consultant agrees to assist Company in every way (at Company's expense) to obtain, and from time to time to enforce its legal rights to such Discoveries in the United States or other countries.

Consultant agrees to execute at Company's request, for no additional compensation, all assignments of rights and other documents necessary to confirm ownership by Company of such copyrights or Discoveries and to obtain patents, copyrights and any other forms of legal protection. All copies of all such information and materials relating to the Work must be returned to Company and all necessary assignments executed by Consultant before final payment will be made by Company.

7.4 Confidentiality and Non-Disclosure. Each party may have a proprietary interest or other need for confidentiality in information that may be furnished to the other pursuant to this Agreement or any Work performed hereunder ("Confidential Information"). The party disclosing such information shall be referred to in this section as the "Disclosing Party," and the party receiving such information shall be referred to as the "Receiving Party."

The Receiving Party will hold in confidence and, without the consent of the Disclosing Party, will not use, reproduce, distribute, transmit, or disclose, directly or indirectly, the Confidential Information of the Disclosing Party except as permitted herein. The Receiving Party may only disclose the Confidential Information to its officers, directors, employees, professional advisors and independent contractors and consultants with a direct need to know the information for the implementation or exercise of rights and/or performance of obligations under or arising from this Agreement, provided that such persons/entities are bound by written confidentiality agreements with terms and conditions that are no less restrictive than those contained in this section. Without limiting the foregoing, the Receiving Party agrees that it will exercise at least the same standard of care in protecting the confidentiality of the Disclosing Party's Confidential Information as it does with its own Confidential Information of a similar nature, but in any event, no less than reasonable care.

Confidential Information for purposes of this Agreement shall not include information if and only to the extent that the Receiving Party establishes that the information: (i) is or becomes a part of the public domain through no act or omission of the Receiving Party; (ii) was in the Receiving Party's lawful possession prior to the disclosure and had not been obtained by the Receiving Party either directly or indirectly from the Disclosing Party; or (iii) is lawfully disclosed to the Receiving

Party by a third party without restriction on disclosure. Confidential Information may also be disclosed by the Receiving Party pursuant to a requirement of a governmental agency, regulatory body or by operation of law, provided that the recipient shall disclose only that part of the Confidential Information that it is required to disclose and shall notify the Disclosing Party prior to such disclosure in a timely fashion in order to permit the Disclosing Party to lawfully attempt to prevent or restrict such disclosure should it so elect, and shall take all other reasonable and lawful measures to ensure the continued confidential treatment of the same by the party to which the Confidential Information is disclosed.

Company may disclose Confidential Information, as necessary and appropriate, to the State of Hawaii Public Utilities Commission ("PUC") with notice to, but without need of prior consent by, Consultant, provided that Company takes reasonable steps to ensure appropriate confidential treatment of the same by the PUC.

VIII. TERMINATION FOR CAUSE

8.1 Conditions Allowing Termination - If any of the following conditions occur during the term of this Contract, then in such case, Company shall have the right to terminate this Contract as provided in this Article:

(1) Consultant fails or is unable to perform its obligations under this Contract to the reasonable satisfaction of Company;

(2) Consultant becomes involved in a labor problem which in the opinion of Company unacceptably impedes or slows down the Work;

(3) Consultant fails to commence correction of defective Work immediately after notification of defect and to continuously and vigorously pursue correction of defect until the Work is completed to the full satisfaction of Company;

(4) Consultant makes a general assignment for the benefit of its creditors;

(5) Consultant has a receiver appointed because of insolvency; or

(6) Consultant files bankruptcy or has a petition for involuntary bankruptcy filed against it.

8.2 Notice Required Before Termination - Before terminating this Agreement for cause, Company shall give written notice to

Consultant of the existence of grounds ("default") allowing termination for cause and of Company's intention to exercise its termination rights if the default is not cured to the satisfaction of Company within fifteen (15) days of such notice or such other time as shall be stated in the notice. Consultant shall have the right to cure the default during the stated time period.

8.3 Company's Rights Upon Termination - If Consultant fails to cure the default within fifteen (15) days or such other time as has been specified, Company may terminate this Agreement and secure such substitute services as it deems necessary to complete the Work. In the event Company acquires substitute services under this provision, Consultant agrees to pay Company upon demand, the difference between what the substitute services actually costs Company and what Consultant would have been paid had it completed the Work itself. This provision shall survive termination of this Agreement.

IX. TERMINATION FOR CONVENIENCE

9.1 Company's Rights - Notwithstanding Article VIII above, Company shall have the right to terminate this Contract at any time for Company's convenience, which shall include any reason or no reason at all, by giving written notice of such to Consultant. **Consultant shall also have the right to terminate this Contract at any time by giving written notice of such to Company.** Upon **receiving/giving** notice of termination, Consultant shall discontinue the Work on the date and to the extent specified in the notice and place no further orders for subservices except as needed to continue any portion of the Work which was not terminated. Consultant shall also make every reasonable effort to cancel, upon terms satisfactory to Company, all orders or subcontracts related to the terminated Work.

9.2 Termination Prior to Commencement of Work - If this Contract is terminated prior to Consultant's having commenced any Work or preparation for Work, no payment shall be made to Consultant.

9.3 Termination After Commencement of Work - If this Contract is terminated for Company's convenience after Consultant has commenced any Work, mobilization or other off-site activities under this Contract, Consultant will be paid its actually incurred costs, including administrative and general overhead costs and demobilization costs, determined in accordance with generally accepted accounting principles consistently applied, plus an amount equal to ten percent (10%) of those costs to account for profit; provided that, if compensation under this Contract is on a time and materials basis, Consultant will be compensated at the rates and profit level specified in the Contract for Work actually accomplished prior to the notice of

termination. Notwithstanding the above, Company, as determined solely in its reasonable discretion, shall not pay for time and/or costs which are excessive, given the total Work actually completed prior to notice of termination.

9.4 Consultant's Duty to Mitigate - Consultant agrees that it has an affirmative duty to mitigate all damages to it upon termination of this Contract for convenience of Company.

X. FORCE MAJEURE

10.1 Excuse of Performance - Notwithstanding anything in this Contract to the contrary, neither party shall be liable nor responsible for failure to carry out any of its obligations under this Contract caused by Force Majeure. A party rendered unable to fulfill any obligation under this Contract by reason of Force Majeure shall make reasonable efforts to remove such inability in the shortest possible time, and the other party shall be excused from performance of its obligations until the party relying on Force Majeure shall again be in full compliance with its obligations under this Contract.

10.2 Definition - The term "Force Majeure" as used herein shall mean any cause beyond the control of the party affected, and which by reasonable efforts the party affected is unable to overcome, including without limitation the following: acts of God; fire, flood, landslide, lightning, earthquake, hurricane, tornado, storm, freeze, volcanic eruption or drought; blight, famine, epidemic or quarantine; act or failure to act of the other party; theft; casualty; war; invasion; civil disturbance; explosion; acts of public enemies; or sabotage.

XI. LAWS, REGULATIONS AND PUBLIC ORDINANCES

11.1 Compliance - Consultant shall comply with applicable federal, state, and local statutes, regulations and public ordinances of any nature governing the Work, including without limitation, those statutes specifically referred to in this Article. In addition, Consultant, at its expense, shall obtain any and all licenses and permits required for the Work. Consultant shall indemnify and defend Company from any liability, fines, damages, costs, or expenses arising from Consultant's failure to comply with this Article.

11.2 Taxes - Consultant assumes exclusive liability for all contributions, taxes or payments required to be made because of persons hired, employed or paid by Consultant by the federal and state Unemployment Compensation Act, Social Security Acts and all amendments, and by all other current or future acts, federal or state, requiring payment by the Consultant on account of the person hired, employed, or paid by Consultant for Work performed

under this Contract. Sales, use and excise taxes applicable to the value or use of any property incorporated, furnished, or otherwise supplied by Consultant shall be stated separately from the price or rates specified in Article II (COMPENSATION), and shall not be included in any computation of profit allowed by this Contract. Consultant assumes exclusive liability for all such taxes charged or chargeable upon any such goods or materials supplied by Consultant pursuant to this Contract.

11.3 Safety and Health Regulations - Consultant shall comply with all applicable federal, state and local laws and regulations pertaining to health, safety, sanitary facilities, and waste disposal. Consultant shall meet all requirements of the Occupational Safety and Health Act of 1970 (OSHA) including all amendments. Consultant shall also comply with any standards, rules, regulations and orders promulgated under OSHA and particularly with the agreement for State development and enforcement of Occupational Health and Safety Standards as authorized by Section 18 of the Act.

11.4 Drawings and Specifications - It is the intent of Company to have all drawings and specifications for the Work comply with all applicable statutes, regulations, and ordinances. If Consultant discovers any discrepancy or conflict between the drawings and specifications and applicable legal requirements, Consultant shall immediately report the problem in writing to Company's Designated Representative.

11.5 Equal Employment Opportunity - (Applicable to all contracts of $10,000 or more in the whole or aggregate. 41 CFR 60-1.4 and 41 CFR 60-741.5.) Consultant is aware of and is fully informed of Consultant responsibilities under Executive Order 11246 (reference to which include amendments and orders superseding in whole or in part) and shall be bound by and agrees to the provisions as contained in Section 202 of said Executive Order and the Equal Opportunity Clause as set forth in 41 CFR 60-1.4 and 41 CFR 60-741.5(a), which clauses are hereby incorporated by reference.

11.6 Employment of Disabled Veterans and Veterans of the Vietnam Era - (Applicable to all contracts of $10,000 or more in the whole or aggregate. 41 CFR 60-250.4 and 41 CFR 60-741.5.) Consultant agrees that it is and will remain in compliance with the rules and regulations promulgated under The Vietnam Era Veterans Readjustment Assistance Act of 1974, The Affirmative Action Clause set forth in 41 CFR 60-250.4, the Rehabilitation Act of 1973 and the Equal Opportunity Clause set forth in 41 CFR 60-741.5, which clauses are incorporated by reference herein.

11.7 Notice of Employee Rights Concerning Payment of Union Dues or Fees - (Applicable to all contracts exceeding $100,000) Consultant agrees that it shall comply with Executive Order 13201 and 29 CFR Part 470 regarding notice of employee rights

concerning payment of union dues or fees, which are incorporated by reference herein.

XII. MISCELLANEOUS

12.1 Patents and Copyrights - Consultant agrees that in performing Work under this Contract, it will not use any process, program, design, device, or material which infringes on any United States patent or copyright or any trade secret agreement. Consultant agrees to indemnify, defend and hold harmless Company from and against all losses, damages, claims, fees and costs, including but not limited to reasonable attorneys' fees and costs, arising from or incidental to any suit or proceeding brought against Company for patent, copyright or trade secret infringement arising out of Consultant's Work. Company shall promptly notify Consultant of any such suit or proceeding and shall assist Consultant in defending the action by providing any necessary information.

12.2 Security and Company Rules - When on Company premises or carrying out Consultant's duties for Company, Consultant personnel shall comply with all applicable provisions of Company's Corporate Code of Conduct, Company's security regulations, information resource policies and all other applicable Company policies and practices that Company personnel and consultants are now or during the Work are asked to follow. Such policies and practices have been provided to Consultant before commencement of Work or shall be provided to Consultant at any time upon Consultant's request. Consultant shall advise its employees of these practices and procedures and secure their consent to abide by these procedures. Unless otherwise agreed to by the parties, Consultant's personnel shall observe the working hours of Company while working on Company's premises. Consultant agrees to cooperate fully and to provide any assistance necessary to Company in investigation of any security breaches which may involve Consultant or Consultant's employees or sub-consultants.

12.3 Amendments - This Contract may be amended or supplemented by and only by written instrument duly executed by each of the parties.

12.4 Severability of Provisions - In the event a court or other tribunal of competent jurisdiction at any time holds that any provision of this Contract is invalid, the remainder of this Contract shall not be affected thereby and shall continue in full force and effect.

12.5 Entire Contract - This Contract shall constitute the entire understanding between the parties, superseding any and all previous understandings, oral or written, pertaining to the subject matter contained herein. The parties have entered into this Contract in reliance upon the representations and mutual

undertakings contained herein and not in reliance upon any oral or written representation or information provided to one party by any representative of the other party. Neither party shall claim at any time that it entered into this Contract in whole or in part based on any representation not stated in this Contract.

12.6 Applicable Law/Forum - This Contract is made under and shall be governed by and construed in accordance with the laws of the State of Hawaii. Each party agrees and consents that any dispute arising out of this Contract, however defined, shall be brought in the State of Hawaii in a court of competent jurisdiction, provided, however, that Company, at its option may elect to submit any such dispute to binding arbitration pursuant to the commercial arbitration rules of the American Arbitration Association then in effect.

12.7 No Waiver - The failure at any time of either party to enforce any of the provisions of this Contract, or to require at any time performance by the other party of any of the provisions hereof, shall in no way be construed to be a waiver of such provisions, nor in any way construed to affect the validity of this Contract or any part hereof, or the right of any party thereafter to enforce each and every such provision.

12.8 Access to Records - Upon request, Consultant shall make available for inspection and audit by Company in Honolulu, Hawaii any and all records and/or documents relating to Work performed under this Contract during the performance of the Work and for a period of up to two (2) years from the completion of all Work under this Contract.

12.9 Regulatory Approvals - This Contract shall be contingent upon any and all required governmental and regulatory approvals, including those of the Public Utilities Commission.

12.10 Gender and Number - The terms "Company" and "Consultant," as and when used herein, or any pronouns used in place thereof, shall mean and include the masculine, feminine and neuter, the singular or plural number, individuals, partnerships, trustees or corporations and their and each of their respective successors, heirs, personal representatives, successors in trust and assigns, according to the context thereof. All covenants and obligations undertaken by two or more persons shall be deemed to be joint and several unless a contrary intention is clearly expressed elsewhere herein.

12.11 Attorneys' Fees and Costs - If there is a dispute between the parties and either party institutes a lawsuit, arbitration, mediation, or other proceeding to enforce, declare, or interpret the terms of this Agreement, the prevailing party shall be awarded its reasonable attorneys' fees and costs.

12.12 Survival of Obligations - All defense, hold harmless and indemnity obligations hereunder shall survive termination of this Contract.

XIII. COUNTERPARTS CLAUSE

The parties agree that this Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which shall together constitute one and the same instrument binding all parties notwithstanding that all of the parties are not signatories to the same counterparts. For all purposes, duplicate unexecuted and unacknowledged pages of the counterparts may be discarded and the remaining pages assembled as one document.

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be signed by appropriate representatives of each as of the date indicated.

HAWAIIAN ELECTRIC COMPANY, INC.
("Company")

By Irene Hosada

Its Director, IT Customer Care

Date: 10/17/07

PATDI, INC.
("Consultant")

By Patricia Prosalento

Its President

Date: 10-16-07

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ATTACHMENT A

FACILITIES ATTACHMENT PROGRAM (FAP) MANAGEMENT
Scope of Work

The scope of work shall be defined by HECO and may include but not limited to the following functions.

- Liaison and negotiations with the requesting entity (for attachments).
- Liaison and negotiations with all relevant HECO departments providing FAP related services (e.g., regulatory, land & rights of way, engineering, legal, and operations).
- Liaison and administrative reporting to the HECO ITS department;
- Coordination and participation for on site inspections for all attachment requests.
- Coordination and participation for meetings between applicable HECO departments and requesting entities.
- Coordination for fee processing, semi-annual and annual billings with requesting entity and appropriate HECO staff.
- Preparation (using standard MLA and SLA templates; editing, negotiations, etc.) of Master License Agreements and Site License Agreements as applicable.
- Travel to HECO or other locations needed to conduct the FAP management.
- Progress/status reporting on a twice-monthly basis.
- Attend meetings on behalf of HECO FAP.
- Regulatory Compliance - Ensure that FAP services being provided in accordance with FCC, PUC, and any other regulatory guidelines. Escalate problems to the ITS management contact if appropriate HECO services are not being provided that jeopardize regulatory compliance.
- HECO ITS Management Requests - Acknowledgment to HECO ITS communications (telephone or email) within one business day. Responses to HECO communications in a manner timely to the particular FAP issues at hand.
- Twice-monthly Status Reporting - Provide a status summary to the HECO ITS administrative contact that includes the FAP

requests presently being handled (in progress, open and closed within recent period), stage of request and enough detail for HECO to discern accurate status. Items in jeopardy or in some type of escalation should be properly denoted.

- Other FAP related tasks as requested by HECO.

ATTACHMENT B

Compensation

Payment will be in arrears based on actual hours worked in the previous billing interval and adjusted for contended performance issues, if any, until mutually resolved.

Consultant will be compensated on a flat hourly basis for all hours worked for FAP services to HECO. All worked hours should be tracked to the specific work request; HECO ITS will provide a work request reference number. The service provider's invoice shall include: the work request reference number; the FAP short name description; the number of hours per work reference in the billing period and the cumulative billing to date for the reference; and a short description of services rendered within the period. The preferred medium for invoice support is a spreadsheet or similar vehicle.

HECO reserves the right to audit the invoices in accordance with internal HECO accounting standards, which may include requests by the attachment requester

Hourly billing rate: **$65.00 per hour plus GE tax.** This rate will not be increased during the contract period.

Authorized travel expenses shall be submitted with invoices within a month of being incurred; copies of all items requested for reimbursement (air travel, vehicle/gas, reasonable parking). No other expenses are covered, unless mutually agreed upon by the service provider and HECO ITS.