
Exhibits 25 – 34

Regional Energy Surpluses and Deficits for 50 Historical Water Conditions

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Exhibit 25: OY 2003-04 Monthly 50-WY Energy

*Regional Surplus/Deficit by Water Year
PNW Loads and Resource Study
2003 - 2004 Operating Year
2002 White Book*

9/9/2003

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg
1929 Regional Surplus/Deficit	6639	2630	1473	2405	2746	850	1111	-2158	208	158	697	-1843	5603	4161	1635
1930 Regional Surplus/Deficit	3326	1663	870	2164	2337	559	-1763	67	216	822	738	-2414	4172	4166	1137
1931 Regional Surplus/Deficit	4028	2044	1134	2140	2400	352	-1474	-2230	-0.9	1076	211	-2223	3316	2913	834
1932 Regional Surplus/Deficit	3648	1135	922	1827	2175	436	-1251	-2041	2955	6931	10637	7094	10398	6711	3367
1933 Regional Surplus/Deficit	6703	4710	1544	2382	3062	2823	6357	4440	356	2929	4189	4389	14512	12011	5095
1934 Regional Surplus/Deficit	6338	6121	2874	5513	6149	10949	12667	9731	7122	11787	10754	6326	3801	5312	7329
1935 Regional Surplus/Deficit	2989	579	749	2170	3128	2113	5800	6390	-637	1843	5054	3317	8398	6686	3612
1936 Regional Surplus/Deficit	5544	2703	1180	2194	2344	417	-628	-1867	739	785	5114	9366	7722	4373	2743
1937 Regional Surplus/Deficit	4959	1868	1075	2146	2281	662	-1693	-2103	89	876	679	-1877	4586	3760	1093
1938 Regional Surplus/Deficit	4304	1157	941	2715	3135	1610	7130	1227	4567	5635	7350	8178	8996	6133	4488
1939 Regional Surplus/Deficit	3977	1504	1814	2485	2649	1049	2836	-1214	1360	2202	3944	5348	4647	4842	2636
1940 Regional Surplus/Deficit	5317	2007	1028	2612	2255	1492	1364	821	5106	3787	5197	2477	5088	2867	2772
1941 Regional Surplus/Deficit	3422	1316	843	2266	2125	1742	1944	-1640	293	-151	707	-1192	4528	2120	1306
1942 Regional Surplus/Deficit	3233	1428	1260	2016	1591	4978	6075	-501	-841	1234	2898	-2261	10356	7528	3260
1943 Regional Surplus/Deficit	6353	4604	1465	2199	2980	2215	5710	4856	5841	12097	10810	8182	10880	9093	5863
1944 Regional Surplus/Deficit	6623	4839	1737	2657	2708	1156	2028	-1633	-452	186	387	-2613	2910	1949	1372
1945 Regional Surplus/Deficit	3529	714	891	1506	1993	576	-1162	-849	-58	440	764	2934	8912	4856	1860
1946 Regional Surplus/Deficit	3832	2702	941	2777	3079	1672	4077	3875	6283	6987	9252	8916	9902	7853	5064
1947 Regional Surplus/Deficit	6848	4292	2110	2583	3332	7160	7686	6716	6771	4586	7626	6326	8904	6706	5831
1948 Regional Surplus/Deficit	6798	3034	1829	7453	5293	4575	7587	1817	3445	4510	8405	10174	15528	8751	6486
1949 Regional Surplus/Deficit	6502	7110	3529	3265	2953	2175	3120	1804	8269	4650	10242	8593	8914	3911	5065
1950 Regional Surplus/Deficit	4004	948	711	2729	3320	961	4652	7238	9737	9090	9334	6525	14291	9985	5986
1951 Regional Surplus/Deficit	6244	6565	2640	5175	6651	9533	10603	11561	7583	9011	10138	8892	8105	8954	7973
1952 Regional Surplus/Deficit	6421	6211	3144	6329	3661	5689	6869	4791	4922	8705	10211	10335	9389	5703	6384
1953 Regional Surplus/Deficit	6413	2769	1559	2210	2602	727	3526	6641	1312	465	4057	6410	13602	9378	4568
1954 Regional Surplus/Deficit	6935	4506	2160	3134	3359	4249	5796	7208	4439	7932	6650	7112	12708	11364	6212
1955 Regional Surplus/Deficit	8579	6848	7097	4283	4570	3753	1091	-853	-477	2562	1414	1965	14782	12881	4899
1956 Regional Surplus/Deficit	6529	6788	2040	4820	5539	8259	11587	5812	8529	9533	13024	10435	15555	9638	8346
1957 Regional Surplus/Deficit	7197	5624	2245	3877	2974	4586	4794	965	3654	9608	7004	9762	14257	5605	5620
1958 Regional Surplus/Deficit	4676	2031	1362	2666	2727	1591	4483	5038	4362	2873	7749	8681	11615	4905	4675
1959 Regional Surplus/Deficit	4686	2616	1636	2614	4525	5763	10336	7566	4307	7165	6293	5504	12448	10135	6268
1960 Regional Surplus/Deficit	6317	5121	7095	8710	7200	7009	6596	2239	4187	12336	9167	4812	9939	7092	6779
1961 Regional Surplus/Deficit	6813	2822	1737	2780	3782	2226	5400	6255	5587	6552	6427	5623	13681	6058	5370
1962 Regional Surplus/Deficit	4946	3162	968	2638	2829	1006	4676	67	271	9251	10336	4993	7947	7227	3873
1963 Regional Surplus/Deficit	6148	3896	1507	3748	4628	5742	4956	3953	2531	2779	3441	5954	8867	6697	4726
1964 Regional Surplus/Deficit	7098	4325	2265	2405	3393	1619	4742	1387	333	4589	4906	4262	15018	11915	4816
1965 Regional Surplus/Deficit	6795	6145	3628	4460	3423	8662	12328	10125	7441	6316	10330	8258	10765	6491	7531
1966 Regional Surplus/Deficit	6719	5818	2431	3505	3336	3648	6580	687	1145	7465	4575	4652	7111	7575	4413
1967 Regional Surplus/Deficit	6631	3985	1283	2427	2996	2732	7522	8750	2504	6136	3947	2921	13926	10133	5462
1968 Regional Surplus/Deficit	6362	5137	2340	3733	3440	3548	6668	5804	4828	214	3292	2436	10214	8989	4959
1969 Regional Surplus/Deficit	6554	5805	4497	5138	5417	5454	10089	7637	5289	11096	10541	10396	10111	7161	7349
1970 Regional Surplus/Deficit	6648	2875	1772	2869	3151	1868	5816	5248	1291	1261	4493	4727	11221	4038	4137
1971 Regional Surplus/Deficit	4413	2127	1196	2735	3423	1934	9230	12223	6900	7716	9235	10512	14515	10807	7102
1972 Regional Surplus/Deficit	7240	7236	2831	3158	3649	4094	8768	11501	12582	13075	7654	10135	15191	11450	8413
1973 Regional Surplus/Deficit	8203	6678	3710	3245	3074	4783	7030	-1028	319	-280	1127	-894	5005	3930	3086
1974 Regional Surplus/Deficit	3524	862	626	1856	2699	6411	13773	12425	9431	10712	11843	9326	15786	13958	8313
1975 Regional Surplus/Deficit	7482	7184	3521	2171	3015	2725	6278	3874	6388	4341	5379	6600	12275	11710	5896
1976 Regional Surplus/Deficit	5224	3809	2535	4388	6180	10789	10816	7819	5539	10398	8658	9433	8839	10779	7597
1977 Regional Surplus/Deficit	9853	8908	8158	3312	2604	1061	1952	-1747	-981	-690	-437	-1780	2149	1713	2105
1978 Regional Surplus/Deficit	3503	727	425	1121	2611	2031	4685	1870	6219	4620	6400	5923	7680	7918	4009
-Ranked Averages-															
Top Ten Percent	5752	5052	2134	3880	4943	7818	11109	9824	8733	10546	10263	9644	12695	10955	8128
Middle Eighty Percent	5899	3817	2275	3224	3373	3211	5364	3475	3450	5067	6220	5693	10152	7280	4833
Bottom Ten Percent	4472	2346	1131	2274	2370	894	-192	-1508	29	562	544	-2064	3902	2982	1148

Exhibit 26: OY 2004-05 Monthly 50-WY Energy

*Regional Surplus/Deficit by Water Year
PNW Loads and Resource Study
2004 - 2005 Operating Year
2002 White Book*

9/9/2003

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg
1929 Regional Surplus/Deficit	6445	2422	1149	3217	3011	1104	1412	-1863	510	-101	534	-2078	5273	4625	1751
1930 Regional Surplus/Deficit	3127	1455	545	2973	2605	813	-1465	364	519	564	572	-2649	3845	4632	1254
1931 Regional Surplus/Deficit	3831	1838	809	2949	2668	607	-1176	-1934	302	819	47	-2459	2992	3381	951
1932 Regional Surplus/Deficit	3450	927	598	2637	2442	688	-954	-1745	3259	6678	10470	6904	10081	7181	3488
1933 Regional Surplus/Deficit	6508	4506	1220	3194	3329	3076	6666	4747	661	2710	3997	4116	14320	12489	5223
1934 Regional Surplus/Deficit	6144	5922	2554	6328	6416	11213	12986	10043	7434	11621	10576	6069	3471	5779	7452
1935 Regional Surplus/Deficit	2790	371	426	2979	3394	2366	6107	6698	-330	1587	4876	3063	8068	7157	3728
1936 Regional Surplus/Deficit	5351	2496	857	3005	2611	672	-327	-1571	1043	555	5041	9181	7407	4840	2870
1937 Regional Surplus/Deficit	4761	1660	750	2956	2549	916	-1394	-1806	392	619	512	-2118	4255	4225	1208
1938 Regional Surplus/Deficit	4106	951	617	3526	3402	1864	7438	1529	4874	5414	7182	7957	8721	6603	4613
1939 Regional Surplus/Deficit	3779	1296	1491	3296	2915	1303	3142	-916	1665	1946	3771	5093	4319	5308	2751
1940 Regional Surplus/Deficit	5121	1800	703	3424	2522	1746	1665	1118	5415	3531	5024	2232	4759	3333	2888
1941 Regional Surplus/Deficit	3223	1109	518	3077	2392	1996	2244	-1344	597	-406	546	-1433	4198	2584	1422
1942 Regional Surplus/Deficit	3034	1221	935	2826	1857	5231	6389	-204	-538	977	2721	2009	10040	8001	3377
1943 Regional Surplus/Deficit	6160	4399	1141	3011	3246	2467	6017	5156	6150	11861	10676	7963	10687	9593	5998
1944 Regional Surplus/Deficit	6428	4636	1412	3468	2973	1408	2330	-1338	-151	-73	226	-2846	2580	2412	1488
1945 Regional Surplus/Deficit	3329	506	567	2316	2259	830	-865	-553	245	181	597	2797	8628	5325	1988
1946 Regional Surplus/Deficit	3631	2495	616	3587	3346	1925	4378	4176	6593	6740	9152	8691	9572	8324	5185
1947 Regional Surplus/Deficit	6655	4087	1787	3394	3598	7412	8001	7019	7081	4334	7426	6149	8564	7177	5953
1948 Regional Surplus/Deficit	6603	2827	1506	8271	5559	4832	7897	2116	3754	4275	8268	9983	15296	9229	6619
1949 Regional Surplus/Deficit	6308	6911	3206	4077	3219	2427	3425	2101	8581	4448	10121	8401	8580	4376	5191
1950 Regional Surplus/Deficit	3804	739	386	3539	3586	1215	4958	7540	10051	8934	9200	6272	14098	10458	6120
1951 Regional Surplus/Deficit	6048	6364	2316	5989	6916	9792	10919	11873	7893	8853	9992	8669	7767	9427	8099
1952 Regional Surplus/Deficit	6227	6010	2822	7145	3928	5944	7178	5095	5228	8485	10052	10155	9129	6172	6515
1953 Regional Surplus/Deficit	6219	2561	1235	3021	2868	982	3824	6947	1619	260	3848	6127	13399	9850	4693
1954 Regional Surplus/Deficit	6741	4302	1837	3947	3626	4503	6103	7514	4747	7710	6545	6865	12365	11840	6333
1955 Regional Surplus/Deficit	8389	6649	6781	5097	4836	4008	1393	-557	-175	2306	1251	1678	14554	13362	5023
1956 Regional Surplus/Deficit	6335	6588	1716	5634	5803	8517	11904	6117	8838	9336	12910	10341	15366	10112	8494
1957 Regional Surplus/Deficit	7003	5421	1921	4689	3240	4839	5100	1262	3961	9454	6854	9535	14060	6072	5754
1958 Regional Surplus/Deficit	4478	1822	1038	3477	2993	1844	4789	5338	4672	2609	7632	8503	11328	5371	4802
1959 Regional Surplus/Deficit	4487	2409	1312	3426	4790	6018	10649	7876	4613	6913	6100	5213	12207	10607	6389
1960 Regional Surplus/Deficit	6123	4919	6779	9528	7466	7268	6910	2541	4495	12132	8951	4538	9623	7562	6898
1961 Regional Surplus/Deficit	6620	2614	1414	3593	4049	2479	5707	6560	5898	6333	6244	5345	13346	6526	5485
1962 Regional Surplus/Deficit	4749	2956	644	3450	3095	1259	4982	368	574	8998	10253	4705	7620	7698	3989
1963 Regional Surplus/Deficit	5954	3690	1182	4561	4895	5997	5265	4256	2835	2525	3273	5746	8650	7167	4856
1964 Regional Surplus/Deficit	6904	4120	1942	3216	3659	1871	5048	1688	636	4424	4708	4026	14765	12395	4944
1965 Regional Surplus/Deficit	6602	5943	3306	5274	3691	8915	12646	10436	7750	6082	10268	8047	10520	6960	7666
1966 Regional Surplus/Deficit	6526	5616	2108	4318	3603	3900	6888	990	1448	7218	4404	4399	6783	8047	4530
1967 Regional Surplus/Deficit	6439	3777	959	3238	3262	2985	7831	9060	2812	5904	3816	2667	13732	10606	5593
1968 Regional Surplus/Deficit	6169	4935	2018	4546	3707	3800	6976	6110	5137	-44	3121	2184	9906	9460	5078
1969 Regional Surplus/Deficit	6361	5603	4177	5952	5683	5710	10403	7947	5597	10927	10425	10193	9777	7631	7477
1970 Regional Surplus/Deficit	6452	2668	1448	3682	3417	2120	6119	5552	1597	1052	4358	4514	11018	4505	4270
1971 Regional Surplus/Deficit	4215	1918	871	3546	3688	2187	9539	12535	7210	7538	9112	10382	14240	11281	7239
1972 Regional Surplus/Deficit	7048	7036	2508	3970	3915	4347	9076	11812	12898	12869	7440	9964	14972	11929	8549
1973 Regional Surplus/Deficit	8013	6479	3388	4057	3340	5037	7337	-731	622	-535	968	-1137	4678	4396	3204
1974 Regional Surplus/Deficit	3326	653	301	2665	2964	6664	14092	12739	9744	10554	11754	9120	15481	14438	8446
1975 Regional Surplus/Deficit	7290	6985	3199	2982	3281	2978	6585	4178	6696	4069	5166	6380	12005	12237	6023
1976 Regional Surplus/Deficit	5028	3605	2212	5202	6446	11049	11132	8127	5849	10244	8531	9244	8587	11254	7734
1977 Regional Surplus/Deficit	9667	8712	7845	4125	2870	1314	2255	-1452	-678	-949	-594	-2016	1822	2176	2223
1978 Regional Surplus/Deficit	3305	520	101	1930	2877	2281	4988	2168	6529	4365	6211	5679	7398	8389	4128
-Ranked Averages-															
Top Ten Percent	5557	4849	1811	4692	5209	8074	11425	10134	9044	10371	10126	9467	12435	11432	8264
Middle Eighty Percent	5704	3613	1952	4036	3639	3465	5671	3777	3757	4837	6065	5463	9870	7753	4958
Bottom Ten Percent	4274	2139	807	3085	2637	1148	108	-1212	332	305	380	-2301	3574	3447	1265

Exhibit 27: OY 2005-06 Monthly 50-WY Energy

*Regional Surplus/Deficit by Water Year
PNW Loads and Resource Study
2005 - 2006 Operating Year
2002 White Book*

9/9/2003

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg
1929 Regional Surplus/Deficit	7013	2978	1755	3377	3165	1221	1386	-1882	488	625	1185	-2402	6483	4742	2019
1930 Regional Surplus/Deficit	3683	2012	1153	3130	2764	934	-1497	347	500	1288	1216	-2972	5065	4759	1523
1931 Regional Surplus/Deficit	4392	2397	1416	3104	2825	731	-1208	-1951	282	1545	697	-2777	4221	3514	1223
1932 Regional Surplus/Deficit	4011	1485	1207	2795	2598	805	-987	-1762	3234	7414	11150	6599	11311	7305	3761
1933 Regional Surplus/Deficit	7075	5068	1829	3354	3484	3196	6656	4753	646	3455	4658	3816	15545	12631	5503
1934 Regional Surplus/Deficit	6711	6494	3170	6497	6570	11344	12985	10057	7429	12363	11247	5783	4693	5911	7737
1935 Regional Surplus/Deficit	3351	929	1039	3137	3547	2484	6096	6708	-340	2316	5534	2749	9286	7289	4005
1936 Regional Surplus/Deficit	5919	3056	1467	3165	2769	796	-353	-1588	1021	1286	5685	8878	8640	4968	3145
1937 Regional Surplus/Deficit	5322	2216	1356	3115	2707	1039	-1424	-1821	374	1347	1162	-2447	5467	4350	1478
1938 Regional Surplus/Deficit	4667	1511	1225	3685	3561	1983	7425	1524	4858	6149	7839	7658	9938	6726	4889
1939 Regional Surplus/Deficit	4339	1848	2100	3456	3069	1418	3125	-930	1642	2673	4419	4781	5539	5433	3023
1940 Regional Surplus/Deficit	5687	2357	1310	3585	2682	1865	1638	1099	5400	4253	5689	1911	5977	3458	3160
1941 Regional Surplus/Deficit	3782	1666	1125	3237	2549	2117	2212	-1362	575	328	1210	-1749	5411	2699	1692
1942 Regional Surplus/Deficit	3590	1777	1539	2982	2009	5344	6386	-221	-560	1699	3369	1690	11262	8132	3648
1943 Regional Surplus/Deficit	6730	4961	1748	3171	3399	2579	5996	5135	6128	12592	11330	7666	11900	9711	6270
1944 Regional Surplus/Deficit	6991	5200	2015	3627	3127	1521	2303	-1359	-173	649	880	-3164	3791	2524	1756
1945 Regional Surplus/Deficit	3885	1060	1173	2472	2414	948	-901	-576	222	905	1243	2473	9842	5450	2255
1946 Regional Surplus/Deficit	4186	3052	1221	3743	3501	2040	4346	4161	6577	7478	9810	8397	10806	8449	5459
1947 Regional Surplus/Deficit	7224	4649	2394	3551	3749	7514	7995	7006	7070	5076	8090	5841	9797	7303	6228
1948 Regional Surplus/Deficit	7166	3381	2112	8442	5710	4954	7879	2096	3743	5013	8931	9680	16526	9366	6896
1949 Regional Surplus/Deficit	6874	7482	3815	4239	3373	2542	3406	2080	8563	5177	10787	8089	9806	4495	5464
1950 Regional Surplus/Deficit	4360	1291	991	3696	3740	1332	4942	7531	10042	9663	9864	5972	15326	10581	6395
1951 Regional Surplus/Deficit	6609	6931	2922	6151	7062	9913	10915	11873	7878	9586	10660	8373	8987	9557	8377
1952 Regional Surplus/Deficit	6793	6577	3433	7311	4083	6057	7163	5084	5208	9209	10703	9852	10348	6294	6790
1953 Regional Surplus/Deficit	6784	3114	1839	3179	3024	1100	3784	6940	1605	1000	4505	5824	14618	9974	4966
1954 Regional Surplus/Deficit	7308	4864	2445	4109	3782	4619	6086	7512	4735	8448	7198	6570	13607	11976	6612
1955 Regional Surplus/Deficit	8962	7219	7406	5263	4992	4132	1367	-575	-193	3035	1913	1366	15792	13507	5302
1956 Regional Surplus/Deficit	6902	7159	2324	5798	5954	8633	11899	6110	8818	10077	13574	10039	16598	10243	8773
1957 Regional Surplus/Deficit	7570	5986	2528	4850	3393	4952	5082	1240	3942	10183	7518	9233	15293	6191	6028
1958 Regional Surplus/Deficit	5036	2375	1643	3635	3148	1956	4769	5321	4665	3341	8289	8191	12565	5486	5075
1959 Regional Surplus/Deficit	5045	2965	1918	3586	4941	6132	10640	7882	4596	7657	6769	4918	13441	10737	6667
1960 Regional Surplus/Deficit	6691	5484	7399	9697	7618	7394	6909	2532	4476	12883	9630	4239	10848	7690	7179
1961 Regional Surplus/Deficit	7188	3168	2024	3755	4205	2596	5694	6556	5889	7079	6911	5057	14592	6656	5766
1962 Regional Surplus/Deficit	5312	3516	1250	3611	3249	1376	4965	355	552	9728	10928	4405	8842	7825	4264
1963 Regional Surplus/Deficit	6522	4249	1789	4720	5047	6114	5253	4241	2813	3258	3937	5428	9866	7295	5129
1964 Regional Surplus/Deficit	7472	4679	2551	3376	3812	1987	5033	1680	616	5143	5368	3716	15987	12536	5219
1965 Regional Surplus/Deficit	7168	6510	3916	5440	3848	9017	12635	10429	7733	6814	10926	7740	11728	7072	7939
1966 Regional Surplus/Deficit	7092	6176	2714	4478	3759	4011	6873	987	1427	7959	5066	4092	8007	8181	4806
1967 Regional Surplus/Deficit	7010	4334	1566	3398	3417	3102	7819	9065	2803	6653	4482	2356	14961	10734	5872
1968 Regional Surplus/Deficit	6737	5502	2627	4706	3862	3913	6958	6102	5125	682	3785	1865	11133	9588	5353
1969 Regional Surplus/Deficit	6930	6168	4790	6116	5835	5829	10388	7948	5574	11666	11093	9895	11015	7755	7756
1970 Regional Surplus/Deficit	7016	3226	2055	3843	3573	2234	6087	5540	1581	1790	5034	4201	12226	4621	4541
1971 Regional Surplus/Deficit	4774	2470	1472	3702	3839	2296	9514	12530	7188	8267	9776	10078	15460	11409	7511
1972 Regional Surplus/Deficit	7617	7607	3116	4129	4068	4459	9054	11809	12887	13617	8111	9661	16197	12072	8827
1973 Regional Surplus/Deficit	8585	7049	3997	4217	3492	5149	7317	-750	601	197	1630	-1459	5899	4519	3476
1974 Regional Surplus/Deficit	3886	1209	907	2819	3113	6770	14083	12741	9730	11288	12418	8813	16706	14578	8722
1975 Regional Surplus/Deficit	7857	7556	3810	3140	3433	3090	6567	4172	6677	4808	5827	6073	13216	12365	6297
1976 Regional Surplus/Deficit	5590	4162	2819	5361	6594	11166	11121	8127	5831	10978	9195	8938	9801	11390	8009
1977 Regional Surplus/Deficit	10245	9285	8471	4288	3024	1429	2230	-1471	-698	-221	65	-2326	3041	2300	2498
1978 Regional Surplus/Deficit	3864	1077	709	2085	3029	2385	4959	2145	6516	5110	6881	5376	8611	8511	4399
-Ranked Averages-															
Top Ten Percent	6121	5414	2418	4852	5358	8188	11414	10132	9029	11109	10792	9165	13658	11568	8542
Middle Eighty Percent	6269	4173	2561	4196	3794	3581	5653	3766	3740	5571	6727	5157	11094	7879	5233
Bottom Ten Percent	4834	2698	1413	3243	2794	1268	77	-1229	312	1032	1033	-2622	4791	3569	1535

Exhibit 28: OY 2006-07 Monthly 50-WY Energy

*Regional Surplus/Deficit by Water Year
PNW Loads and Resource Study
2006 - 2007 Operating Year
2002 White Book*

9/9/2003

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg
1929 Regional Surplus/Deficit	7062	3012	1834	3297	3033	1045	1105	-2143	468	496	995	-3107	5887	4755	1830
1930 Regional Surplus/Deficit	3718	2045	1232	3047	2636	760	-1787	92	481	1163	1025	-3679	4470	4776	1334
1931 Regional Surplus/Deficit	4431	2434	1494	3019	2697	558	-1497	-2211	263	1422	503	-3480	3628	3532	1033
1932 Regional Surplus/Deficit	4052	1523	1286	2712	2469	625	-1278	-2023	3220	7303	10987	5916	10729	7327	3576
1933 Regional Surplus/Deficit	7117	5104	1909	3275	3355	3021	6390	4517	632	3339	4476	3122	14973	12665	5323
1934 Regional Surplus/Deficit	6755	6538	3256	6425	6441	11191	12736	9831	7430	12266	11087	5105	4091	5928	7563
1935 Regional Surplus/Deficit	3391	968	1121	3053	3418	2306	5828	6474	-352	2196	5357	2052	8694	7313	3822
1936 Regional Surplus/Deficit	5965	3094	1547	3085	2642	623	-635	-1848	1003	1159	5508	8195	8052	4986	2959
1937 Regional Surplus/Deficit	5360	2251	1434	3034	2580	865	-1712	-2080	356	1221	971	-3157	4865	4365	1288
1938 Regional Surplus/Deficit	4707	1550	1304	3603	3435	1809	7156	1278	4850	6034	7664	6976	9347	6748	4707
1939 Regional Surplus/Deficit	4375	1874	2181	3377	2939	1242	2854	-1185	1627	2553	4239	4091	4941	5449	2836
1940 Regional Surplus/Deficit	5729	2393	1389	3506	2555	1691	1356	844	5395	4133	5522	1215	5381	3473	2974
1941 Regional Surplus/Deficit	3819	1704	1204	3157	2422	1944	1927	-1621	556	209	1032	-2448	4815	2710	1504
1942 Regional Surplus/Deficit	3623	1810	1617	2899	1881	5170	6128	-476	-581	1577	3188	994	10679	8159	3464
1943 Regional Surplus/Deficit	6774	4995	1827	3091	3269	2402	5729	4888	6124	12489	11164	6985	11315	9735	6090
1944 Regional Surplus/Deficit	7028	5235	2092	3548	2995	1345	2023	-1621	-195	520	693	-3866	3192	2533	1565
1945 Regional Surplus/Deficit	3919	1092	1252	2388	2284	772	-1192	-836	201	777	1049	1781	9255	5471	2066
1946 Regional Surplus/Deficit	4217	3082	1300	3660	3372	1866	4067	3915	6575	7364	9641	7719	10222	8472	5277
1947 Regional Surplus/Deficit	7268	4685	2475	3471	3620	7339	7740	6768	7068	4959	7916	5156	9215	7325	6049
1948 Regional Surplus/Deficit	7206	3410	2192	8375	5581	4786	7617	1845	3738	4894	8759	9006	15958	9401	6720
1949 Regional Surplus/Deficit	6913	7523	3898	4161	3243	2365	3134	1824	8565	5062	10619	7405	9216	4509	5282
1950 Regional Surplus/Deficit	4393	1321	1068	3614	3611	1159	4672	7289	10048	9554	9696	5287	14753	10609	6216
1951 Regional Surplus/Deficit	6644	6969	3002	6078	6932	9751	10662	11650	7878	9476	10494	7695	8394	9585	8202
1952 Regional Surplus/Deficit	6833	6615	3516	7241	3956	5886	6899	4845	5198	9100	10536	9178	9762	6316	6612
1953 Regional Surplus/Deficit	6823	3140	1918	3097	2895	926	3498	6706	1596	878	4323	5133	14039	10001	4783
1954 Regional Surplus/Deficit	7348	4898	2526	4032	3654	4443	5819	7279	4728	8335	7021	5889	13031	12008	6434
1955 Regional Surplus/Deficit	9010	7259	7502	5189	4864	3961	1086	-833	-213	2916	1740	665	15222	13545	5121
1956 Regional Surplus/Deficit	6944	7201	2405	5724	5823	8469	11647	5875	8817	9972	13415	9364	16028	10272	8599
1957 Regional Surplus/Deficit	7611	6022	2609	4773	3263	4778	4811	984	3934	10073	7346	8560	14720	6208	5847
1958 Regional Surplus/Deficit	5070	2402	1722	3555	3019	1779	4498	5076	4662	3220	8115	7507	11990	5501	4893
1959 Regional Surplus/Deficit	5078	2997	1998	3508	4812	5962	10384	7654	4586	7545	6593	4232	12866	10763	6489
1960 Regional Surplus/Deficit	6733	5521	7494	9631	7491	7229	6652	2287	4468	12787	9462	3547	10262	7712	7002
1961 Regional Surplus/Deficit	7232	3198	2106	3677	4077	2418	5424	6319	5887	6966	6731	4374	14019	6675	5587
1962 Regional Surplus/Deficit	5353	3554	1328	3532	3118	1198	4694	106	532	9615	10767	3714	8252	7849	4081
1963 Regional Surplus/Deficit	6564	4284	1868	4645	4919	5944	4988	4000	2795	3140	3761	4736	9283	7318	4948
1964 Regional Surplus/Deficit	7515	4711	2633	3296	3682	1810	4761	1434	597	5022	5187	3023	15415	12572	5037
1965 Regional Surplus/Deficit	7208	6546	4001	5368	3722	8845	12385	10203	7731	6698	10760	7059	11144	7092	7763
1966 Regional Surplus/Deficit	7129	6206	2797	4402	3632	3835	6606	744	1409	7854	4891	3402	7416	8205	4624
1967 Regional Surplus/Deficit	7057	4368	1644	3318	3287	2927	7555	8836	2795	6540	4299	1661	14389	10762	5692
1968 Regional Surplus/Deficit	6780	5540	2710	4629	3734	3737	6692	5867	5120	556	3607	1164	10554	9611	5172
1969 Regional Surplus/Deficit	6973	6205	4878	6043	5706	5660	10133	7720	5567	11561	10929	9220	10436	7777	7581
1970 Regional Surplus/Deficit	7055	3260	2134	3766	3443	2057	5812	5302	1569	1667	4860	3507	11640	4638	4358
1971 Regional Surplus/Deficit	4808	2495	1548	3621	3708	2121	9252	12307	7185	8154	9609	9403	14886	11440	7334
1972 Regional Surplus/Deficit	7658	7647	3198	4051	3939	4283	8790	11583	12897	13518	7940	8986	15625	12109	8654
1973 Regional Surplus/Deficit	8630	7090	4081	4140	3363	4975	7051	-1008	582	74	1449	-2163	5305	4534	3290
1974 Regional Surplus/Deficit	3925	1244	985	2734	2983	6595	13835	12519	9735	11184	12258	8134	16136	14617	8548
1975 Regional Surplus/Deficit	7897	7596	3894	3060	3302	2913	6299	3933	6671	4693	5648	5385	12634	12400	6117
1976 Regional Surplus/Deficit	5625	4190	2902	5287	6465	11008	10868	7896	5829	10875	9026	8260	9210	11422	7834
1977 Regional Surplus/Deficit	10293	9327	8571	4213	2893	1254	1951	-1731	-720	-350	-121	-3028	2441	2311	2311
1978 Regional Surplus/Deficit	3903	1115	787	2001	2898	2205	4683	1894	6515	4998	6705	4688	8017	8535	4215
-Ranked Averages-															
Top Ten Percent	6159	5450	2498	4775	5228	8021	11160	9905	9031	11005	10627	8488	13079	11601	8367
Middle Eighty Percent	6309	4208	2643	4118	3665	3407	5384	3522	3730	5455	6552	4469	10511	7902	5051
Bottom Ten Percent	4871	2734	1491	3161	2666	1095	-209	-1488	292	907	845	-3326	4194	3583	1345

Exhibit 29: OY 2007-08 Monthly 50-WY Energy

*Regional Surplus/Deficit by Water Year
PNW Loads and Resource Study
2007 - 2008 Operating Year
2002 White Book*

9/9/2003

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg
1929 Regional Surplus/Deficit	7140	3067	1884	3014	2573	477	701	-2410	121	131	593	-2831	6235	4409	1637
1930 Regional Surplus/Deficit	3780	2102	1282	2759	2183	197	-2202	-171	139	798	617	-3403	4830	4438	1142
1931 Regional Surplus/Deficit	4501	2493	1543	2729	2242	-1.8	-1911	-2476	-81	1059	99	-3197	3998	3195	843
1932 Regional Surplus/Deficit	4120	1579	1338	2425	2013	56	-1694	-2288	2873	6959	10629	6224	11105	6997	3391
1933 Regional Surplus/Deficit	7194	5171	1961	2993	2897	2455	6011	4289	296	3000	4088	3427	15351	12359	5147
1934 Regional Surplus/Deficit	6834	6621	3318	6155	5983	10648	12372	9615	7114	11938	10724	5432	4448	5591	7394
1935 Regional Surplus/Deficit	3457	1023	1179	2766	2957	1737	5445	6251	-681	1839	4971	2341	9053	6986	3640
1936 Regional Surplus/Deficit	6046	3155	1601	2802	2188	62	-1041	-2113	658	799	5106	8505	8426	4649	2774
1937 Regional Surplus/Deficit	5429	2307	1483	2748	2127	303	-2123	-2341	14	859	568	-2890	5212	4022	1095
1938 Regional Surplus/Deficit	4775	1610	1355	3317	2982	1242	6772	1033	4516	5686	7277	7292	9705	6418	4526
1939 Regional Surplus/Deficit	4443	1927	2234	3093	2480	673	2464	-1444	1283	2192	3838	4386	5299	5110	2648
1940 Regional Surplus/Deficit	5805	2449	1439	3225	2103	1125	950	579	5064	3768	5147	1498	5739	3132	2787
1941 Regional Surplus/Deficit	3884	1761	1254	2873	1967	1381	1515	-1886	212	-144	650	-2161	5167	2363	1313
1942 Regional Surplus/Deficit	3685	1867	1664	2610	1420	4598	5760	-737	-927	1210	2788	1279	11047	7838	3277
1943 Regional Surplus/Deficit	6858	5062	1878	2808	2808	1828	5338	4626	5787	12146	10782	7302	11675	9401	5906
1944 Regional Surplus/Deficit	7104	5307	2138	3264	2534	773	1619	-1890	-542	152	297	-3582	3540	2182	1372
1945 Regional Surplus/Deficit	3981	1145	1301	2099	1825	205	-1611	-1106	-147	410	640	2063	9612	5140	1873
1946 Regional Surplus/Deficit	4278	3142	1348	3371	2913	1296	3658	3661	6245	7019	9260	8040	10601	8145	5094
1947 Regional Surplus/Deficit	7351	4750	2527	3185	3159	6757	7370	6520	6743	4616	7536	5460	9595	6998	5870
1948 Regional Surplus/Deficit	7280	3467	2243	8109	5119	4227	7232	1583	3411	4546	8380	9322	16344	9094	6543
1949 Regional Surplus/Deficit	6993	7606	3952	3881	2784	1793	2742	1559	8237	4708	10246	7706	9582	4166	5098
1950 Regional Surplus/Deficit	4455	1371	1115	3326	3152	592	4284	7041	9731	9204	9321	5599	15134	10288	6036
1951 Regional Surplus/Deficit	6717	7046	3052	5800	6465	9193	10295	11424	7551	9130	10124	8014	8754	9267	8027
1952 Regional Surplus/Deficit	6913	6692	3571	6970	3499	5317	6516	4597	4860	8747	10150	9493	10125	5986	6432
1953 Regional Surplus/Deficit	6901	3196	1965	2811	2439	361	3078	6466	1264	530	3931	5438	14409	9679	4599
1954 Regional Surplus/Deficit	7429	4966	2578	3752	3198	3874	5431	7044	4399	7990	6628	6207	13422	11696	6259
1955 Regional Surplus/Deficit	9100	7341	7578	4915	4408	3402	682	-1098	-555	2559	1358	953	15612	13242	4943
1956 Regional Surplus/Deficit	7023	7281	2457	5448	5358	7906	11279	5634	8484	9637	13047	9680	16414	9956	8426
1957 Regional Surplus/Deficit	7692	6095	2660	4492	2803	4207	4422	718	3597	9723	6968	8876	15106	5871	5666
1958 Regional Surplus/Deficit	5137	2455	1771	3271	2561	1205	4106	4819	4341	2865	7728	7808	12376	5159	4709
1959 Regional Surplus/Deficit	5143	3054	2047	3227	4350	5393	10011	7431	4250	7208	6216	4548	13251	10442	6313
1960 Regional Surplus/Deficit	6814	5594	7566	9364	7031	6675	6286	2038	4131	12467	9100	3854	10631	7384	6829
1961 Regional Surplus/Deficit	7314	3252	2160	3397	3620	1849	5039	6080	5565	6629	6350	4698	14415	6341	5411
1962 Regional Surplus/Deficit	5424	3615	1377	3251	2658	628	4304	-148	187	9263	10407	4020	8615	7524	3898
1963 Regional Surplus/Deficit	6645	4346	1917	4363	4459	5379	4607	3748	2450	2787	3378	5024	9645	6991	4764
1964 Regional Surplus/Deficit	7596	4775	2686	3013	3222	1240	4373	1185	253	4655	4798	3319	15793	12267	4855
1965 Regional Surplus/Deficit	7290	6621	4057	5094	3267	8264	12014	9969	7401	6347	10380	7368	11499	6754	7584
1966 Regional Surplus/Deficit	7211	6277	2848	4122	3176	3262	6221	502	1065	7518	4508	3703	7782	7881	4443
1967 Regional Surplus/Deficit	7142	4424	1694	3035	2828	2359	7174	8611	2468	6207	3915	1956	14772	10445	5516
1968 Regional Surplus/Deficit	6863	5616	2764	4348	3276	3165	6304	5625	4792	193	3224	1446	10932	9286	4990
1969 Regional Surplus/Deficit	7058	6280	4940	5768	5245	5097	9756	7493	5228	11226	10561	9538	10822	7449	7408
1970 Regional Surplus/Deficit	7130	3319	2184	3485	2986	1485	5405	5054	1234	1316	4491	3799	11994	4297	4171
1971 Regional Surplus/Deficit	4877	2548	1592	3333	3246	1546	8860	12078	6849	7801	9236	9718	15260	11118	7153
1972 Regional Surplus/Deficit	7742	7729	3251	3768	3478	3709	8399	11353	12581	13195	7569	9301	16004	11803	8480
1973 Regional Surplus/Deficit	8719	7173	4135	3859	2902	4403	6661	-1273	237	-282	1063	-1886	5667	4193	3103
1974 Regional Surplus/Deficit	3993	1297	1034	2441	2518	6016	13465	12295	9413	10844	11889	8444	16516	14311	8372
1975 Regional Surplus/Deficit	7980	7679	3951	2775	2841	2339	5910	3691	6336	4348	5261	5688	12993	12083	5937
1976 Regional Surplus/Deficit	5699	4254	2953	5006	5999	10448	10495	7665	5498	10535	8650	8572	9565	11108	7656
1977 Regional Surplus/Deficit	10390	9414	8652	3934	2432	683	1549	-1998	-1065	-714	-512	-2737	2797	1962	2125
1978 Regional Surplus/Deficit	3969	1171	837	1711	2436	1620	4278	1628	6189	4662	6330	4996	8369	8206	4028
-Ranked Averages-															
Top Ten Percent	6235	5522	2549	4492	4764	7455	10787	9674	8705	10668	10256	8802	13451	11289	8192
Middle Eighty Percent	6386	4273	2697	3837	3206	2838	4994	3273	3395	5105	6170	4772	10881	7574	4869
Bottom Ten Percent	4940	2794	1540	2874	2211	530	-621	-1753	-52	545	446	-3047	4549	3240	1153