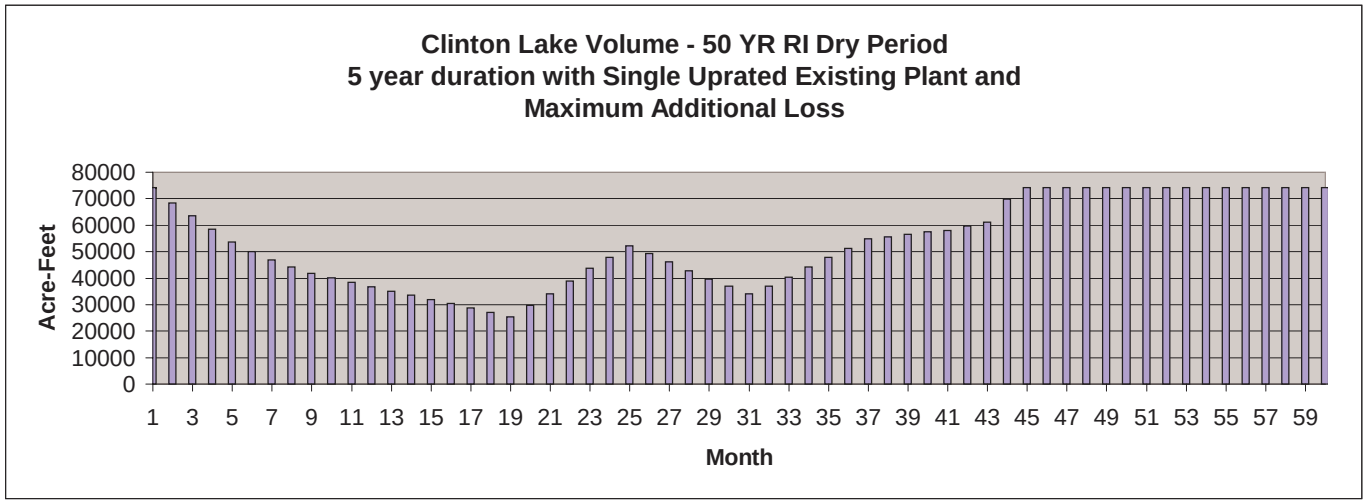
Clinton Lake Volume - 50 YR RI Dry Period - 5 year duration with Single Uprated Existing Plant (Forced Loss estimated based on Forced Loss due to two 992 MW Plants) and Maximum Additional Loss calculate

Month	No	Clinton Lake Elevation (ft)	Clinton Lake Volume (acre-ft)	Clinton Lake Area (acre)	Evaporation Minus Precipitation (in)	Evaporation Minus Precipitation (acre-ft)	Forced Loss due to two 992 MW Plants (acre-ft)	Uprated Plant Loss for single Existing Plant (acre-feet) (Estimated)	Maximum Additional Loss (acre-ft)	Minimum Downstream Discharge (acre-ft)	Seepage (acre-feet)	Total Loss (ac-ft)	Watershed Area (not including lake) (acres)	Runoff (in)	Inflow (acre-ft)	Net Gain/Loss (acre-ft)
Jan	1	690.0	74200	4895	6.97	2843	790	647	2003	298	371	6163	184545	0.03	461	-5701
Feb	2	688.8	68499	4712	5.23	2054	955	783	2003	298	342	5480	184728	0.03	462	-5018
Mar	3	687.6	63481	4550	5.00	1896	1070	877	2003	298	317	5391	184890	0.03	462	-4929
Apr	4	686.5	58552	4363	4.00	1454	1370	1123	2003	298	293	5171	185077	0.02	308	-4862
May	5	685.4	53690	4156	0.90	312	1500	1229	2003	298	268	4110	185284	0.03	463	-3647
Jun	6	684.5	50043	3985	-0.70	-232	1600	1311	2003	298	250	3630	185455	0.03	464	-3166
Jul	7	683.7	46877	3828	1.60	510	1680	1377	2003	298	234	4422	185612	0.11	1701	-2721
Aug	8	683.0	44156	3687	1.00	307	1540	1262	2003	298	221	4091	185753	0.12	1858	-2233
Sep	9	682.4	41922	3567	-1.00	-297	1500	1229	2003	298	210	3442	185873	0.11	1704	-1739
Oct	10	681.9	40184	3471	0.00	0	1300	1065	2003	298	201	3567	185969	0.11	1705	-1862
Nov	11	681.4	38321	3366	0.00	0	1050	860	2003	298	192	3353	186074	0.12	1861	-1492
Dec	12	680.9	36829	3280	1.00	273	865	709	2003	298	184	3467	186160	0.11	1706	-1761
Jan	13	680.4	35068	3177	3.50	927	790	647	2003	298	175	4050	186263	0.16	2484	-1567
Feb	14	679.9	33501	3084	3.50	900	955	783	2003	298	168	4151	186356	0.16	2485	-1666
Mar	15	679.3	31835	2984	2.00	497	1070	877	2003	298	159	3834	186456	0.16	2486	-1348
Apr	16	678.8	30487	2901	2.00	484	1370	1123	2003	298	152	4060	186539	0.15	2332	-1728
May	17	678.2	28759	2795	2.00	466	1500	1229	2003	298	144	4140	186645	0.16	2489	-1651
Jun	18	677.6	27108	2691	2.00	449	1600	1311	2003	298	136	4196	186749	0.16	2490	-1706
Jul	19	677.0	25402	2583	-0.50	-108	1680	1377	2003	298	127	3697	186857	0.52	8097	4400
Aug	20	678.6	29802	2859	-0.50	-119	1540	1262	2003	298	149	3593	186581	0.51	7930	4337
Sep	21	680.1	34139	3122	-1.50	-390	1500	1229	2003	298	171	3311	186318	0.52	8074	4763
Oct	22	681.6	38902	3399	-1.50	-425	1300	1065	2003	298	195	3136	186041	0.52	8062	4926
Nov	23	682.9	43828	3670	1.50	459	1050	860	2003	298	219	3839	185770	0.51	7895	4056
Dec	24	684.0	47884	3879	1.50	485	865	709	2003	298	239	3734	185561	0.52	8041	4307
Jan	25	685.1	52191	4087	2.50	851	790	647	2003	298	261	4061	185353	0.07	1081	-2980
Feb	26	684.3	49212	3945	2.50	822	955	783	2003	298	246	4151	185495	0.07	1082	-3069
Mar	27	683.6	46142	3791	2.50	790	1070	877	2003	298	231	4198	185649	0.06	928	-3270
Apr	28	682.7	42872	3618	2.50	754	1370	1123	2003	298	214	4392	185822	0.07	1084	-3308
May	29	681.8	39564	3436	0.00	0	1500	1229	2003	298	198	3728	186004	0.07	1085	-2643
Jun	30	681.0	36922	3286	0.00	0	1600	1311	2003	298	185	3797	186154	0.06	931	-2866
Jul	31	680.1	34056	3117	1.00	260	1680	1377	2003	298	170	4108	186323	0.45	6987	2879
Aug	32	681.0	36935	3286	-1.00	-274	1540	1262	2003	298	185	3474	186154	0.45	6981	3507
Sep	33	682.0	40442	3485	-1.50	-436	1500	1229	2003	298	202	3297	185955	0.45	6973	3677
Oct	34	683.0	44119	3685	-1.50	-461	1300	1065	2003	298	221	3126	185755	0.45	6966	3840
Nov	35	684.0	47958	3883	0.50	162	1050	860	2003	298	240	3563	185557	0.45	6958	3395
Dec	36	684.9	51354	4048	0.50	169	865	709	2003	298	257	3435	185392	0.45	6952	3517
Jan	37	685.7	54871	4208	3.00	1052	790	647	2003	298	274	4275	185232	0.33	5094	819
Feb	38	685.9	55690	4244	3.00	1061	955	783	2003	298	278	4423	185196	0.34	5247	824
Mar	39	686.1	56514	4279	2.00	713	1070	877	2003	298	283	4174	185161	0.33	5092	918
Apr	40	686.3	57433	4318	2.00	720	1370	1123	2003	298	287	4430	185122	0.33	5091	661
May	41	686.4	58093	4345	-0.50	-181	1500	1229	2003	298	290	3640	185095	0.34	5244	1605
Jun	42	686.8	59698	4409	-0.50	-184	1600	1311	2003	298	298	3727	185031	0.33	5088	1362

Jul	43	687.1	61059	4461	0.00	0	1680	1377	2003	298	305	3983	184979	0.83	12794	8811
Aug	44	689.1	69871	4751	0.00	0	1540	1262	2003	298	349	3912	184689	0.84	12928	9016
Sep	45	690.1	74200	4860	-0.50	-203	1500	1229	2003	298	371	3699	184580	0.83	12767	9068
Oct	46	690.1	74200	4860	-0.50	-203	1300	1065	2003	298	371	3535	184580	0.83	12767	9232
Nov	47	690.1	74200	4860	1.50	608	1050	860	2003	298	371	4140	184580	0.84	12921	8781
Dec	48	690.1	74200	4860	1.50	608	865	709	2003	298	371	3988	184580	0.83	12767	8778
Jan	49	690.1	74200	4860	2.00	810	790	647	2003	298	371	4129	184580	0.33	5076	947
Feb	50	690.1	74200	4860	2.00	810	955	783	2003	298	371	4265	184580	0.34	5230	965
Mar	51	690.1	74200	4860	0.50	203	1070	877	2003	298	371	3751	184580	0.33	5076	1325
Apr	52	690.1	74200	4860	0.50	203	1370	1123	2003	298	371	3997	184580	0.33	5076	1079
May	53	690.1	74200	4860	2.00	810	1500	1229	2003	298	371	4711	184580	0.34	5230	519
Jun	54	690.1	74200	4860	2.00	810	1600	1311	2003	298	371	4793	184580	0.33	5076	283
Jul	55	690.1	74200	4860	-1.50	-608	1680	1377	2003	298	371	3441	184580	1.17	17997	14555
Aug	56	690.1	74200	4860	-1.50	-608	1540	1262	2003	298	371	3326	184580	1.16	17843	14516
Sep	57	690.1	74200	4860	-1.00	-405	1500	1229	2003	298	371	3496	184580	1.17	17997	14500
Oct	58	690.1	74200	4860	-1.00	-405	1300	1065	2003	298	371	3332	184580	1.17	17997	14664
Nov	59	690.1	74200	4860	-0.50	-203	1050	860	2003	298	371	3330	184580	1.16	17843	14513
Dec	60	690.1	74200	4860	-0.50	-203	865	709	2003	298	371	3178	184580	1.17	17997	14818
5-year Totals						20586	76100	62357	120180	17880	16028	237032			370262	
Percent of Total Loss						9%	32%	26%	51%	8%	7%	100%				
Min Level		677.0														

Note 1: Evaporation Loss is from USAR Table 2.4-21.
Note 2: Forced Loss Existing Plant is from USAR Table 2.4-22.
Note 3: Forced Loss due to Uprated Plant estimated based on procedure described in memo.
Note 4: Minimum Downstream Discharge is 5.0 cfs (=298 acre-ft/month).
Note 5: Seepage = 0.5% of lake volume (USAR P. 2.4-29).
Note 6: Runoff Flows are from USAR Table 2.4-20 and Table 2.4-24.
Note 7: Lake Elevation - Area capacity and Volume capacity relationship is from ER Figure 2.4-6.
Note 8: 50-YR and 100-YR droughts are 5-year duration events assummed to begin during the month of January.



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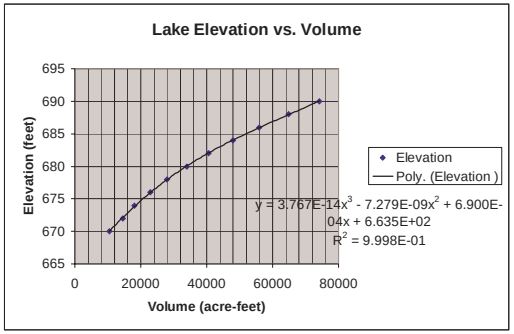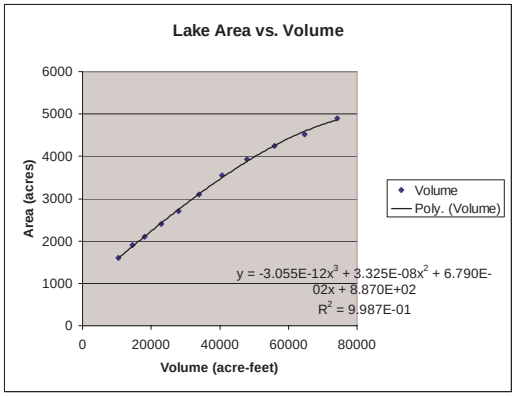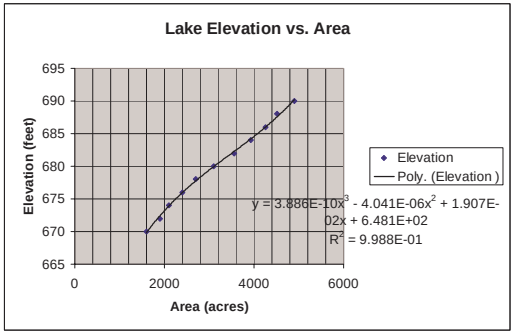
Area	Volume	Elevation
1600	10500	670
1900	14500	672
2100	18000	674
2400	23000	676
2700	28000	678
3100	33900	680
3550	40600	682
3930	48000	684
4250	56000	686
4520	64800	688
4895	74200	690