Section 6: Federal System Exhibits

Exhibit 1

Federal System Annual Energy Analysis Under 1937 Water Conditions for 10 Operating Years

Exhibit 1: Medium Loads

Loads and Resources - Federal System 2002 - 2011 Operating Years 1937 Water Year

Average Energy in Megawatts	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	
Non Ittlibe Obligations											
Non-Utility Obligations Federal Agencies 1981 PSC Sale	24	0	•	•			•				
USBR 1981 PSC Sale	11	0	0	0	0	0	0	0	0	0	
DSI 1981 PSC Sale	411	0	0	0	0	0	0	0	0	0	
Federal Agencies 2002 PSC Sale	102	126	131	133	0 134	0 91	0 83	0 84	0	0	
USBR 2002 PSC Sale	102	148	148	148	148	91 67			84	85	
DSI 2002 PSC Sale	400	839	1336	1435	1441		38	38	38	38	
DSI 2002 FSC Sale	400	039	1330	1430	1441	240	0	0	0	0	
Total Firm Non-Utility Obligations	1056	1112	1614	1716	1723	398	121	121	122	123	
Transfers Out											
NGP 1981 PSC Sale	385	0	0	0	0	0	0	0	0	0	
GPU 1981 PSC Sale	251	0	0	0	Ö	ō	ō	ō	ō	ŏ	
IOU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	
NGP 2002 PSC Sale	2173	2710	2840	2907	2953	2997	3032	3080	3120	3161	
GPU 2002 PSC Sale	1643	2072	2156	2176	2194	2467	2515	2523	2527	2531	
NGP Slice Sale	512	600	605	598	610	600	611	601	612	602	
GPU Slice Sale	853	999	1007	996	1016	1000	1018	1002	1019	1002	
IOU 2002 PSC Sale	292	377	382	382	382	1897	2200	2200	2200	2200	
Exports	1239	1225	1186	1124	1060	821	730	720	719	720	
Intra-Regional Transfers (Out)	1091	853	604	487	414	311	303	303	303	303	
Supp & Entitlement Capacity (Out)	46	28	0	0	0	0	0	0	0	0	
CSPE To West Group Utilities	94	62	0	0	0	0	0	0	0	0	
Federal Diversity	0	0	0	0	0	0	0	0	0	0	
Total Transfers Out	8579	8924	8780	8671	8629	10093	10410	10429	10501	10518	
Total Firm Obligations	9635	10037	10394	10387	10352	10491	10530	10550	10623	10641	
Hydro Resources											
Regulated Hydro	6334	6342	6349	6357	6364	6372	6379	6382	6382	6382	
Independent Hydro	405	`406	406	406	406	406	406	406	406	406	
Sustained Peaking Adjustment	0	0	0	0	0	0	0	0	0	0	
Non-Fed CER (CSPE)	21	14	. 0	. 0	0	0	0	0	0	0	
Non-Fed CER (Canada)	79	100	142	142	140	139	138	137	136	136	
Restoration	0	0	0	0	0	0	0	0	. 0	0	
Total Hydro Resources	6840	6862	6898	6905	6911	6917	6923	6925	6924	6924	
Other Resources											
Small Thermal & Misc.	0	0	0	0	0	0	0	0	0	0	
Combustion Turbines	0	0	0	0	0	0	0	0	0	0	
Renewables	29	29	29	29	29	29	29	29	29	29	
Cogeneration	0	0	0	0	0	0	0	0	0	0	
Imports	362	291	277	264	254	234	204	183	182	174	
Intra-Regional Transfers (In)	1824	1855	1616	1502	1352	486	206	206	206	206	
Supp & Entitlement Capacity (In)	46	28	4000	0	0	0	0	0	0	0	
Large Thermal Non-Utility Generation	1000	875	1000	875	1000	875	1000	875	1000	875	
Resource Acquisition	56 0	61 0	61 0	103 0	111	111	111	111	111	111	
					0	0	0	0	0	0	
Total Other Resources	3318	3139	2983	2773	2746	1734	1550	1404	1527	1395	
Total Resources	10157	10001	9880	9678	9657	8651	8472	8329	8452	8318	
Reserves & Maintenance Hydro Reserves	0	0	0	0		^	^	•	•		
Small Thermal & Misc. Reserves	0	0	0	0	. 0	0	0	0	0	0	
Large Thermal Reserves	0	0.	0	0	0	0	0	0	0	0	
Federal Hydro Maintenance	. 0	0	0	0	0	0	0	0	0	0	
Spinning Reserves	Ŏ	ŏ	0	0	0	0	0	0	0	0	
Federal Transmission Losses	-286	-282	-279	-273	-272	-244	-239	-235	-238	-235	
Total Reserves, Maintenance & Losses	-286	-282	-279	-273	-272	-244	-239	-235	-238	-235	
Total Net Resources	9871	9719	9602	9405	9385	8407	8234	8094	8213	8084	
Total Firm Surplus/Deficit	236	-318	-792	-982	-967	-2084	-2297	-2456	-2409	-2557	

Exhibits 2 - 4

Federal System Monthly Energy Analysis Under Medium Loads for 1937 Water Conditions

Exhibit 2: OY 2001-02

Loads and Resources - Federal System 2001 - 2002 Operating Year 1937 Water Year

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg	
Non-Utility Obligations																
Federal Agencies 1981 PSC Sale	148	148	140	-	0	0	0	0	0	0	0	0	0	0	24	
USBR 1981 PSC Sale	83	83	52	0	0	0	0	0	0	0	0	0	0	Ŏ	11	
DSI 1981 PSC Sale	2465	2465	2465	0	0	0	0	0	0	0	0	Ō	ō	_	411	
Federal Agencies 2002 PSC Sale	0	0	0	109	126	138	140	136	124	115	114	108	109	-	102	
USBR 2002 PSC Sale	0	0	0	97	24	15	15		37	214	214	271	288	329	109	
DSI 2002 PSC Sale	Ō	Ö	Ō	330		330	326	326	326	662	662	662	662		400	
Total Firm Non-Utility Obligations	2696	2696	2657	536	480	483	481	475	487	991	991	1041	1059	1287	1056	
Transfers Out																
NGP 1981 PSC Sale	2405	2406	2210	0	0	0	0	0	0	0	0	0	0	0	385	
GPU 1981 PSC Sale	1495	1508	1506	Ö		ŏ	ŏ	ŏ	ŏ	ő	ŏ	ŏ	ŏ	ŏ	251	
IOU 1981 PSC Sale	0	0	0	Ō		ō	ō	ŏ	ő	ŏ	ŏ	ŏ	ŏ	ŏ	231	
NGP 2002 PSC Sale	0	0	Ö	2277	2582	2952	3053	2946	2558	2467	2460	2373	2418	2460	2173	
GPU 2002 PSC Sale	Ō	Ō	ō	1696	2073	2398	2433	2386	2186	1948	1942	1777	1368	1452		
NGP Slice Sale	ō	ō	ō	598	579	676	565	602	513	528	520	761			1643	
GPU Slice Sale	ŏ	ŏ	ő	996	965	1126	941	1003	854	880	866		647	684	512	
IOU 2002 PSC Sale	ŏ	ŏ	ŏ	350	350	350	350	350	350			1267	1077	1139	853	
Exports	1375	1375	1197	1150	1126	1149	1199			350	350	350	350	350	292	
Intra-Regional Transfers (Out)	1009	1008	1056	1193	1495			1196	1161	1285	1285	1301	1408	1322	1239	
Supp & Entitlement Capacity (Out)	48	48	48	48		1545	1155	1112	982	955	955	762	913	914	1091	
CSPE To West Group Utilities	95	95	-		48	48	48	48	48	42	42	42	42	42	46	
Federal Diversity	90	95	95 0	95	95	95	95	95	95	93	93	93	93	93	94	
· ————————————————————————————————————	U	U	U	0	0	0	0	0	0	0,	0	0	0	0	0	
Total Transfers Out	6427	6441	6111	8403	9311	10338	9838	9738	8747	8548	8513	8726	8315	8457	8579	
Total Firm Obligations	9123	9136	8768	8939	9791	10821	10319	10212	9234	9539	9504	9767	9374	9744	9635	
Hydro Resources																
Regulated Hydro	7034	6213	5897	6168	5943	7143	5856	6297	5140	5335	5154	7902	6507	7000	0004	
Independent Hydro	435	443	367	389	307	242	180	200	279	442	523	729		7292	6334	
Sustained Peaking Adjustment	0	0	0	0	0	0	0	200	0	442	523 0	729	775 0	471	405	
Non-Fed CER (CSPE)	21	21	21	21	21	21	21	21	21	21	21	_	_	0	0	
Non-Fed CER (Canada)	80	80	80	80	80	80	80	80	80	79		21	21	21	21	
Restoration	0	ő	ő	ő	0	0	0	0	0	79	79 0	79 0	79 0	79 0	79 0	
Total Hydro Resources	7569	6757	6365	6657	6351	7486	6136	6598	5520	5876	5776	8730	7381	7862	6840	
Other Resources									3323	00.0	0.70		7001	7002	0010	
Small Thermal & Misc.	0	0	0	0	0	0	0	0	0	•				•		
Combustion Turbines	ŏ	ŏ	ŏ	ŏ	ő	Ö	ő	ő	0	0	0	0	0	0	0	
Renewables	27	27	27	28	29	31	32	31	31	0	0	0	0	0	0	
Cogeneration	0	ō	Ž,	0	0	0	0	0	31	30	30	27	27	27	29	
Imports	261	260	301	489	561	621	597	373	328	0	0	0	0	0	0	
Intra-Regional Transfers (In)	1319	1320	1451	2231	2265	2263	2103			309	268	133	157	238	362	
Supp & Entitlement Capacity (In)	48	48	48	48	48	48	48	2104	2137	1804	1404	1140	1254	2020	1824	
Large Thermal	1000	1000	1000	1000	1000			48	48	42	42	42	42	42	46	
Non-Utility Generation	11	11	13	44	68	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Resource Acquisition	Ö	Ö	0	Õ	0	86 0	85 0	67 0	71 0	70 0	70 0	59 0	51 0	52 0	56 0	
Total Other Resources	2666	2666	2840	3839	3970	4049	3864	3623	3615	3256	2815	2402	2531	3379	3318	
Total Resources	10235	9422	9205	10496	10321	11534	10000	10221	9135	9132	8591	11132	9913	11241	10157	
Reserves & Maintenance													-5.0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Hydro Reserves	0	0	0	0			^	•		•		_	_	_	_	
Small Thermal & Misc. Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Large Thermal Reserves	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	
Federal Hydro Maintenance	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	
Spinning Reserves	0	0		0	0	0	0	0	0	0	0	0	0	0	0	
Federal Transmission Losses	-289	-266	-260	0 -296	0 -291	0 -325	0 -282	0 -288	0 -258	0 -258	0 -242	0 -314	-280	0 -317	0 -286	
Total Reserves, Maintenance & Losses																
	-289	-266	-260	-296	-291	-325	-282	-288	-258	-258	-242	-314	-280	-317	-286	
Total Net Resources	9947	9157	8946	10200	10030	11209	9718	9933	8878	8874	8349	10818	9633	10924	9871	
Total Firm Surplus/Deficit	824	20	178	1261	238	388	-601	-280	-357	-665	-1155	1051	259	1180	236	

Loads and Resources - Federal System 2005 - 2006 Operating Year 1937 Water Year

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg	
Non-Utility Obligations																
Federal Agencies 1981 PSC Sale	0	0	0	0						_	_	_				
USBR 1981 PSC Sale	0	ő	0	0	0	0			. 0	0	0	0	0	- 0	0	
DSI 1981 PSC Sale	0	0	0	0	0	0			0	0	0	0	0	-0	0	
Federal Agencies 2002 PSC Sale	127	127	123	-	-	0	-	-	0	0	. 0	0	0	0	0	
USBR 2002 PSC Sale	278	278	193	121 97	139	152			137	129	129	121	123	131	134	
DSI 2002 PSC Sale	1435	1435			24	15			37	214	214	271	288	329	148	
	1433	1433	1435	1442	1442	1442	1442	1442	1442	1442	1442	1442	1442	1442	1441	
Total Firm Non-Utility Obligations	1841	1841	1751	1660	1606	1609	1611	1605	1616	1785	1785	1835	1853	1901	1723	
Transfers Out													,			
NGP 1981 PSC Sale	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	
GPU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
IOU 1981 PSC Sale	0	. 0	. 0	. 0	0	. 0	0	0	0	0	0	0	0	0	0	
NGP 2002 PSC Sale	2784	2782	2596	2649	2994	3397	3501	3368	2942	2842	2835	2743	2789	2837	2953	
GPU 2002 PSC Sale NGP Slice Sale	1849	1850	1921	1954	2337	2637	2668	2609	2406	2237	2226	2121	1797	1799	2194	
GPU Slice Sale	662	594	565	596	578	675	563	599	510	526	518	759	644	681	610	
IOU 2002 PSC Sale	1102	989	941	993	962	1124	938	998	849	876	862	1264	1072	1134	1016	
Exports	382	382	382	382	382	382	382	382	382	382	382	382	382	382	382	
Intra-Regional Transfers (Out)	1144	1144	1134	990	987	995	995	993	986	1106	1106	1142	1174	1070	1060	
Supp & Entitlement Capacity (Out)	314	314	344	410	664	719	595	552	422	295	295	105	254	296	414	
CSPE To West Group Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Federal Diversity	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	0	0	
Total Transfers Out	8237	8055	7883	7973	8905	9928	9644	9500	8497	8265	8224	8515	8113	8199	8629	
Total Firm Obligations	10078	9895	9634	9633	10510	11537	11254	11106	10114	10051	10009	10350	9965	10101	10352	
Hydro Resources																
Regulated Hydro	7073	6242	5923	6195	5976	7180	5894	6320	5163	5370	5187	7938	6535	7314	6264	
Independent Hydro	442	450	375	389	307	242	180	200	279	442	523	729	775	471	6364 406	
Sustained Peaking Adjustment	0	0	0	0	0	0	0	-00	2,0	0	0	0	0	4/1	400	
Non-Fed CER (CSPE)	0	Õ	ŏ	ō	ŏ	ŏ	ŏ	ŏ	ő	ŏ	Ö	0	0	0	ŏ	
Non-Fed CER (Canada)	140	140	140	140	140	140	140	140	140	139	139	139	139	139	140	
Restoration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hydro Resources	7656	6832	6438	6724	6424	7562	6214	6660	5583	5950	5849	8805	7449	7924	6911	
Other Resources																
Small Thermal & Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Combustion Turbines	0	0	0	0	0	0	0	0	ō	ŏ	ŏ	ő	ŏ	ŏ	ŏ	
Renewables	27	27	27	28	29	31	32	31	31	30	30	27	27	27	29	
Cogeneration	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0	
Imports	192	192	225	257	324	384	357	313	283	284	243	108	132	213	254	
Intra-Regional Transfers (In)	1585	1585	1755	1752	1755	1697	1295	1296	1330	996	996	734	847	1185	1352	
Supp & Entitlement Capacity (In)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Large Thermal Non-Utility Generation	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Resource Acquisition	. 94	94	84 0	94 0	117 0	136 0	134 0	117 0	121 0	120 0	120	109	101	102	111	
Total Other Resources	2898	2898	3091								, 0	0	0	0	0	
				3132	3226	3247	2819	2758	2765	2430	2389	1978	2107	2527	2746	
Total Resources	10554	9730	9529	9856	9649	10809	9033	9418	8348	8381	8239	10783	9556	10451	9657	
Reserves & Maintenance Hydro Reserves	0	0	. 0	0	0	0	0	0		^	•					
Small Thermal & Misc. Reserves	Õ	ŏ	ŏ	ŏ	ŏ	0	0	-	0	0	0	0	0	0	0	
Large Thermal Reserves	0	ŏ	ŏ	ŏ	0	0	_	0	0	0	0	0	0	0	0	
Federal Hydro Maintenance	ő	ŏ	ŏ	Ö	0	Ö	0	0	0	0	0	0	0	0	0	
Spinning Reserves	ŏ	ŏ	ő	ő	0	0	0	0	0	0	0	0	0	0	0	
Federal Transmission Losses	-298	-274	-269	-278	-272	-305	-255	0 -266	0 -235	0 -236	0 -232	-304	0 -269	0 -295	0 -272	
Total Reserves, Maintenance & Losses	-298	-274	-269	-278	-272	-305	-255	-266	-235	-236	-232	-304	-269	-295	-272	
Total Net Resources	10256	9456	9261	9578	9377	10504	8778	9152	8112	8144	8006	10479	9287	10156		
Total Firm Surplus/Deficit	179	-440													9385	
our prour sould	1/9	440	-373	-56	-1133	-1033	-2476	-1953	-2001	-1906	-2003	129	-679	55	-967	

Exhibit 4: OY 2010-11

Loads and Resources - Federal System 2010 - 2011 Operating Year 1937 Water Year

Average Energy in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Avg	
Non-Utility Obligations																
Federal Agencies 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	•	^	
USBR 1981 PSC Sale	Ö	ŏ	ő	ŏ	ő	ő	ő	. 0	ő	Ö	_	_	-	0	0	
DSI 1981 PSC Sale	ŏ	ŏ	ő	ő	ő	0	0	0	ő		0	0	0	0	0	
Federal Agencies 2002 PSC Sale	79	79	76	-	-		-	-	-	0	0	0	0	0	0	
USBR 2002 PSC Sale				73	88	99	101	95	88	79	79	77	79	84	85	
	78	78	48	23	0	0	0	1.0	13	39	39	72	78	102	38	
DSI 2002 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Firm Non-Utility Obligations	157	157	124	96	88	99	101	96	101	118	118	149	157	186	123	
Transfers Out																
NGP 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GPU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
IOU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NGP 2002 PSC Sale	2996	2994	2791	2810	3241	3655	3757	3612	3113	3037	3029	2918	2966	3037	3161	
GPU 2002 PSC Sale	2093	2101	2250	2346	2743	3075	3083	3014	2780	2573	2567	2380	1997	2043	2531	
NGP Slice Sale	664	596	567	598	580	677	566	601	512	528	520	720	563	683	602	
GPU Slice Sale	1106	992	944	996	966	1127	942	1001	852	880	866	1199	938	1137	1002	
IOU 2002 PSC Sale	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	
Exports	743	743	733	685	693	705	703	700	694	707	707	737	768	770	720	
Intra-Regional Transfers (Out)	117	117	147	213	467	522	495	452	322	295	295	105	254	246	303	
Supp & Entitlement Capacity (Out)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CSPE To West Group Utilities	0	0	0	0	0	0	0	0	0	0	0	0	Õ	ŏ	ŏ	
Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö	ō	
Total Transfers Out	9920	9743	9632	9847	10890	11960	11745	11579	10473	10221	10184	10258	9687	10114	10518	
Total Firm Obligations	10077	9900	9756	9943	10978	12060	11846	11676	10573	10339	10301	10406	9843	10300	10641	
Hydro Resources																
Regulated Hydro	7097	6258	5938	6211	5995	7200	5915	6333	5176	5389	5206	7959	6552	7327	6382	
Independent Hydro	442	450	375	389	307	242	180	200	279	442	523	729	775	471	406	
Sustained Peaking Adjustment	0	0	0,0	0	0	272	0	200	0	0	0	729	0	4/1	406	
Non-Fed CER (CSPE)	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ő	ő	. 0	ő	0	0	
Non-Fed CER (Canada)	136	136	136	136	136	136	136	136	136	135	135	135	135	-	-	
Restoration	0	0	0		0	0	130	,30	0	133	133	133	133	135 0	136	
									Ū	U	U	·	v	U	0	
Total Hydro Resources	7675	6845	6449	6735	6438	7578	6231	6669	5591	5966	5864	8822	7462	7933	6924	
Other Resources																
Small Thermal & Misc.	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	
Combustion Turbines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Renewables	27	27	27	28	29	31	32	31	31	30	30	27	27	27	29	
Cogeneration	0	0	0	0	0	0	. 0	0	0	0	. 0	0	0	0	0	
Imports	103	103	136	168	238	292	266	222	192	193	167	75	93	124	174	
Intra-Regional Transfers (In)	104	104	275	273	275	217	217	217	250	217	217	104	217	104	206	
Supp & Entitlement Capacity (In)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Large Thermal	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	500	0	1000	875	
Non-Utility Generation	94	94	84	94	117	136	134	117	121	120	120	109	101	102	111	
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Other Resources	1329	1329	1522	1563	1659	1676	1649	1587	1594	1559	1534	815	438	1357	1395	
Total Resources	9004	8174	7971	8298	8097	9254	7880	8256	7185	7525	7398	9638	7899	9290	8318	
Reserves & Maintenance																
Hydro Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Small Thermal & Misc. Reserves	0	0 .	0	0	0	0	0	0	0	0	0	Ó	0	ō	ō	
Large Thermal Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	ō	ō	
Federal Hydro Maintenance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö	
Spinning Reserves	0	. 0	0	0	0	0	0	0	0	0	0	0	0	Ō	ō	
Federal Transmission Losses	-254	-230	-225	-234	-228	-261	-222	-233	-203	-212	-209	-272	-223	-262	-235	
Total Reserves, Maintenance & Losses	-254	-230	-225	-234	-228	-261	-222	-233	-203	-212	-209	-272	-223	-262	-235	
Total Net Resources	8750	7943	7746	8064	7869	8993	7658	8023	6983	7313	7190	9366	7677	9028	8084	
Total Firm Surplus/Deficit	-1327	-1957	-2010	-1879	-3109	-3067	-4188	-3653	-3591	-3026	-3111	-1041	-2167	-1272	-2557	

Exhibits 5 – 7

Federal System Monthly Capacity Analysis Under Medium Loads for 1937 Water Conditions

Exhibit 5: OY 2001-02

Loads and Resources - Federal System 2001 - 2002 Operating Year 1937 Water Year

Capacity in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	
Non-Utility Obligations															
Federal Agencies 1981 PSC Sale	198	198	188	0	0	0	0					_	_		
USBR 1981 PSC Sale	32	32	20	0	0	-	-	0	0	0	0	0	0	0	
DSI 1981 PSC Sale	2467	2467	2467	0	0	0	0	0	0	0	0	0	0	0	
Federal Agencies 2002 PSC Sale	2407		2407	178	_	0	0	0	0	0	0	0	0	0	
USBR 2002 PSC Sale	0	-	0	96	186 24	206	205	242	212	195	195	203	195	204	
DSI 2002 PSC Sale	ő	-	0	330		15	15	12	54	222	222	252	240	267	
D31 2002 F3C 3016	U	U	U	330	330	330	326	326	326	662	662	662	662	842	
Total Firm Non-Utility Obligations	2697	2697	2675	605	541	551	545	580	592	1079	1079	1117	1097	1313	
T															
Transfers Out															
NGP 1981 PSC Sale	3447	3448	3426	0	0	0	0	0	0	0	0	0	0	0	
GPU 1981 PSC Sale	1567	1515	1689	0	0	0	0	0	0	0	0	0	0	0	
IOU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NGP 2002 PSC Sale	0	0	0	3659	4007	4396	4623	4448	4099	3862	3861	3733	3486	3536	
GPU 2002 PSC Sale	0	0	0	2177	2396	2814	2854	2831	2683	2328	2328	2116	1607	1666	
NGP Slice Sale	0	0	0	1209	1148	1325	1008	1136	1050	1066	957	1303	1105	1258	
GPU Slice Sale IOU 2002 PSC Sale	0	0	0	2014	1912	2207	1678	1891	1748	1775	1593	2171	1840	2095	
Exports	0	0	0	350	350	350	350	350	350	350	350	350	350	350	
Intra-Regional Transfers (Out)	2157	2157	1983	1975	1896	1904	1933	1935	1923	2038	2038	2131	2184	2116	
Supp & Entitlement Capacity (Out)	1733	1733	1780	2031	2336	2391	1885	1841	1731	1724	1724	1552	1657	1670	
CSPE To West Group Utilities	84	84	84	84	84	84	84	84	84	74	74	74	74	74	
Federal Diversity	187	187	187	187	187	187	187	187	187	167	167	167	167	167	
redetal Diversity	-682	-675	-692	-732	-660	-519	-538	-526	-703	-659	-659	-755	-717	-736	
Total Transfers Out	8494	8449	8456	12954	13656	15140	14065	14177	13151	12725	12433	12843	11753	12196	
Total Firm Obligations	11191	11146	11132	13559	14197	15691	14610	14757	13743	13804	13512	13960	12849	13509	
Hydro Resources															
Regulated Hydro	16253	16247	16286	16279	16594	18093	18140	17974	17484	17349	17336	17450	17702	16304	
Independent Hydro	757	769	751	774	737	703	674	790	850	875	875	914	916	792	
Sustained Peaking Adjustment	-100	-1388	-2284	-1238	-2278	-1439	-5404	-3768	-4440	-4152	-5497	-1310	-4029	-700	
Non-Fed CER (CSPE)	43	43	43	43	43	43	43	43	43	38	38	38	38	38	
Non-Fed CER (Canada)	138	136	149	137	143	148	142	139	142	136	136	141	142	141	
Restoration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Hydro Resources	17091	15807	14944	15995	15239	17548	13595	15177	14078	14245	12889	17232	14768	16574	
Other Resources															
Small Thermal & Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Combustion Turbines	ō	ō	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ő	ŏ	ő	ŏ	ŏ	
Renewables	27	27	27	28	29	31	32	31	31	30	30	27	27	27	
Cogeneration	0	0	0	0	0	0	0	Ö	0	0	0	-0	ō	0	
Imports	160	160	189	456	514	570	523	299	257	240	240	100	118	184	
Intra-Regional Transfers (In)	1164	1164	1188	2046	2111	2138	1826	1826	1827	1526	1126	976	978	1877	
Supp & Entitlement Capacity (In)	0	0	0	. 0	0	0	0	0 '	0	0	0	0	0	0	
Large Thermal	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	
Non-Utility Generation	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Other Resources	2517	2517	2570	3697	3820	3905	3547	3322	3281	2962	2562	2269	2289	3254	
Total Resources	19608	18324	17514	19691	19059	21453	17142	18499	17360	17207	15450	19501	17057	19828	
Reserves & Maintenance															
Hydro Reserves	-851	-851	-852	-853	-867	-940	-941	-938	-917	-911	-911	-918	-931	-855	
Small Thermal & Misc. Reserves	-1.6	-1.6	-1.6	-1.6	-1.7	-1.8	-1.8	-1.8	-1.8	-1.7	-1.7	-1.6	-1.6	-1.6	
Large Thermal Reserves	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	
Federal Hydro Maintenance	-3263	-2761	-2770	-2752	-2705	-1866	-1408	-1883	-1915	-2061	-1805	-1756	-1635	-2785	
Spinning Reserves	-359	-341	-320	-346	-329	-403	-320	-347	-320	-321	-294	-399	-343	-359	
Federal Transmission Losses	-501	-476	-449	-521	-502	-605	-4 79	-508	-470	-460	-411	-544	-468	-524	
Total Reserves, Maintenance & Losses	-5150	-4604	-4566	-4647	-4578	-3991	-3324	-3852	-3798	-3929	-3597	-3794	-3553	-4698	
Total Net Resources	14458	13720	12948	15044	14481	17462	13818	14647	13562	13278	11854	15708	13504	15130	
Total Firm Surplus/Deficit	3266	2574	1816	1485	284	1772	-792	-110	-182	-526	-1659	1748	655	1621	

Loads and Resources - Federal System 2005 - 2006 Operating Year 1937 Water Year

Capacity in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul
Non-Utility Obligations														
Federal Agencies 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0		•	•	•
USBR 1981 PSC Sale	ő	Ö	0	0	Ö	0	0	0	0	0	0	0	0	0
DSI 1981 PSC Sale	ŏ	ő	ő	ő	ő	ő	ő	0	0	0	0	0	0	0
Federal Agencies 2002 PSC Sale	207	207	180	192	202	221	220	258	227	210	210	218	210	0 219
USBR 2002 PSC Sale	227	227	161	96	24	15	15	12	54	222	222	252	240	267
DSI 2002 PSC Sale	1435	1435	1435	1442	1442	1442	1442	1442	1442	1442	1442	1442	1442	1442
													1116	****
Total Firm Non-Utility Obligations	1869	1869	1776	1731	1668	1678	1677	1712	1723	1875	1875	1912	1891	1928
Transfers Out														
NGP 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GPU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	Ō	Ö	Ö
IOU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	Ō	ō
NGP 2002 PSC Sale	3850	3848	3803	4153	4539	4949	5203	5002	4621	4362	4362	4224	3960	4006
GPU 2002 PSC Sale	2006	2006	2206	2528	2699	3094	3137	3098	2936	2636	2636	2510	2074	2048
NGP Slice Sale	1299	1201	1132	1215	1155	1331	1008	1140	1048	1063	955	1304	1106	1256
GPU Slice Sale IOU 2002 PSC Sale	2163	2000	1885	2023	1924	2217	1678	1898	1745	1770	1591	2171	1841	2091
Exports	382 2058	382	382	382	382	382	382	382	382	382	382	382	382	382
Intra-Regional Transfers (Out)	793	2058 793	2049 822	1839 888	1765 1105	1774 1159	1777	1781	1766	1876	1876	1989	2016	1928
Supp & Entitlement Capacity (Out)	733	750	022	0	0	1139	1028 0	984 0	874 0	747 0	747	575	680	743
CSPE To West Group Utilities	ő	ŏ	ő	ŏ	ő	ŏ	0	0	Ö	ŏ	0	0	0	0
Federal Diversity	-818	-817	-825	-836	-746	-580	-600	-586	-784	-743	-743	-864	-843	0 -850
Total Transfers Out														
	11733	11470	11455	12192	12822	14326	13613	13699	12588	12092	11805	12290	11216	11604
Total Firm Obligations	13602	13339	13230	13922	14490	16004	15290	15410	14312	13967	13680	14202	13107	13532
Hydro Resources														
Regulated Hydro	16253	16247	16286	16279	16594	18093	18140	17974	17484	17349	17336	17450	17702	16304
Independent Hydro	775	787	769	774	737	703	674	790	850	875	875	914	916	792
Sustained Peaking Adjustment Non-Fed CER (CSPE)	-100 0	-1313 0	-2200	-1166	-2178	-1354	-5404	-3702	-4440	-4152	-5497	-1270	-3973	-700
Non-Fed CER (Canada)	243	241	0 253	0 251	0 253	0 251	0 261	0 246	0	0	0	0	0	0
Restoration	0	0	0	0	233	0	0	0	242 0	240	261 0	249 0	241 0	259 0
Total Hydro Resources	17172	15962	15107	16138	15406	17692	13671	15307	14135	14312	12976	17342	14885	16655
Other Resources														
Small Thermal & Misc.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Combustion Turbines	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Renewables Cogeneration	27	27	27	28	29	31	32	31	31	30	30	27	27	27
Imports	0 138	0 138	0 167	0 203	0 256	0	0	0	0	0	0	0	0	0
Intra-Regional Transfers (In)	1481	1481	1539	1536	1539	310 1480	284 1080	240 1079	212 1080	215 780	215	75	93	159
Supp & Entitlement Capacity (In)	0	0	0	1000	0	0	0	0	0001	760	780 0	630 0	631 0	1082 0
Large Thermal	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162
Non-Utility Generation	54	54	54	54	54	54	54	54	54	54	54	54	54	54
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Other Resources	2862	2862	2949	2983	3040	3037	2612	2566	2539	2241	2241	1948	1967	2484
Total Resources	20034	18824	18056	19121	18445	20730	16283	17873	16674	16553	15216	19290	16852	19138
Reserves & Maintenance Hydro Reserves	054	050	0.50	0.50										
Small Thermal & Misc. Reserves	-851 -4	-852 -4	-853 -4	-853 -4.1	-867	-940	-941	-938	-917	-911	-911	-918	-931	-855
Large Thermal Reserves	-174	-174	-4 -174	-4.1 -174	-4.1 -174	-4.2 -174	-4.3 -174	-4.2 174	-4.2 474	-4.2 474	-4.2 474	-4	-4	-4
Federal Hydro Maintenance	-3263	-2761	-2770	-2752	-2705	-174	-174 -1408	-174 -1883	-174 -1915	-174 -2061	-174 -1805	-174	-174	-174
Spinning Reserves	-361	-344	-324	-348	-332	-406	-322	-350	-321	-322	-1805 -296	-1756 -401	-1635 -345	-2785 -360
Federal Transmission Losses	-515	-492	-467	-502	-481	-581	-450	-487	-447	-438	-403	-537	-345 -461	-501
Total Reserves, Maintenance & Losses	-5169	-4627	-4591	-4633	-4564	-3972	-3299	-3836	-3778	-3911	-3592	-3791	-3551	-4679
Total Net Resources	14864	14197	13465	14488	13882	16758	12984	14037	12896	12642	11624	15499	13302	14460
Total Firm Surplus/Deficit	1262	858	235	566	-609	753	-2306	-1373	-1416	-1325	-2057	1297	194	928

Exhibit 7: OY 2010-11

Loads and Resources - Federal System 2010 - 2011 Operating Year 1937 Water Year

Capacity in Megawatts	Aug1	Aug16	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul
Non Ittliby Obligations														
Non-Utility Obligations					_	_	_	_						
Federal Agencies 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
USBR 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DSI 1981 PSC Sale	0	. 0	0	. 0	0	0	0	0	0	0	0	0	0	0
Federal Agencies 2002 PSC Sale	138	138	118	128	133	149	148	187	158	142	142	155	147	153
USBR 2002 PSC Sale	27	27	16	22	0	0	0	0	30	47	47	53	30	40
DSI 2002 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Firm Non-Utility Obligations	165	165	134	150	133	149	148	187	188	189	189	208	177	193
Transfers Out														
NGP 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GPU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	0	0	0	Õ
IOU 1981 PSC Sale	0	0	0	0	0	0	0	0	0	0	Ō	Ō	Ö	ō
NGP 2002 PSC Sale	4168	4166	4114	4457	4896	5347	5580	5370	4941	4690	4690	4508	4251	4292
GPU 2002 PSC Sale	2426	2426	2639	3015	3254	3714	3739	3684	3470	3160	3160	2882	2348	2383
NGP Slice Sale	1300	1204	1135	1217	1159	1334	1007	1142	1047	1062	956	1309	1027	1255
GPU Slice Sale	2164	2005	1891	2027	1930	2222	1677	1902	1744	1769	1592	2179	1710	2090
IOU 2002 PSC Sale	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200			
Exports	1521	1521	1511	1453	1428	1439	1441	1447	1427	1430		2200	2200	2200
Intra-Regional Transfers (Out)	588	588	617	683	900	954	928	884			1430	1500	1533	1541
Supp & Entitlement Capacity (Out)	0	0	017	003					774	747	747	575	680	693
CSPE To West Group Utilities	0	-	-	-	0	0	0	0	0	0	0	0	0	0
Federal Diversity	-	0	0	0	0	0	0	0	0	0	. 0	.0	0	0
reucial Diversity	-879	-878	-895	-915	-828	-645	-663	-647	-860	-804	-804	-912	-881	-893
Total Transfers Out	13488	13230	13212	14138	14938	16566	15910	15983	14744	14254	13970	14242	12868	13562
Total Firm Obligations	13654	13396	13346	14288	15071	16715	16058	16170	14932	14443	14159	14450	13045	13755
Hydro Resources														
Regulated Hydro	16253	16247	16286	16279	16594	18093	18140	17974	17484	17349	17336	17450	17702	16304
Independent Hydro	775	787	769	774	737	703	674	790	850	875	875	914	916	
Sustained Peaking Adjustment	-100	-1268	-2153	-1125	-2122	-1306	-5404	-3665	-4440	-4152				792
Non-Fed CER (CSPE)	0	-1200	-2133	-1125	-2122	-1306	-5404	-3000			-5497	-1247	-3941	-700
Non-Fed CER (Canada)	255	233	244	243	244	243	_	-	0	0	0	0	0	0
Restoration	0	233	0	0	0	243	253 0	238 0	234 0	233 0	234 0	251 0	234 0	251 0
Total Hydro Resources	17183	15999	15146	16171	15454	17732	13663	15337	14127	14305	12949	17368	14911	16647
Other Resources												200		
Small Thermal & Misc.	0	0	0	0	0	•								
Combustion Turbines	0	ŏ	0	0		0	0	0	0	0	0	0	0	0
Renewables	27				0	0	0	0	0	0	0	0	0	0
Cogeneration	0	27	27	28	29	31	32	31	31	30	30	27	27	27
Imports	-	0	0	0	0	0	0	0	0	0	. 0	0	0	0
	88	88	117	153	206	260	234	190	162	165	165	75	93	109
Intra-Regional Transfers (In)	0	0	58	56	58	. 0	0	0	0	0	0	0	0	0
Supp & Entitlement Capacity (In)	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0 .
Large Thermal	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	1162	0	1162
Non-Utility Generation	54	54	54	54	54	54	54	_ 54	54	54	54	54	54	54
Resource Acquisition	0	0	0	0	0	0	0	0	0	0	0	0	0	Ö
Total Other Resources	1331	1331	1418	1453	1509	1507	1482	1437	1409	1411	1411	1318	174	1352
Total Resources	18514	17330	16564	17624	16962	19239	15144	16773	15536	15716	14359	18686	15085	17999
Reserves & Maintenance									,					
Hydro Reserves	-851	-852	-853	-853	-867	-940	-941	-938	-917	-911	-911	-918	-931	-855
Small Thermal & Misc. Reserves	-4	-4	-4	-4.1	-4.1	-4.2	4.3	-4.2	-4.2	-4.2	-4.2	-4	-4	-4
Large Thermal Reserves	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	-174	Ö	-174
Federal Hydro Maintenance	-3263	-2761	-2770	-2752	-2705	-1866	-1408	-1883	-1915	-2061	-1805	-1756	-1635	-2785
Spinning Reserves	-361	-345	-325	-349	-334	-408	-322	-350	-321	-322	-261	-367	-346	-360
Federal Transmission Losses	-464	-442	417	-452	-431	-531	-412	-450	-409	-410	-375	-518	-408	-360 -463
Total Reserves, Maintenance & Losses	-5118	-4578	-4542	-4584	-4515	-3923	-3260	-3800	-3740	-3883	-3530	-3738	-3324	-4641
							-					-3738		
Total Reserves, Maintenance & Losses Total Net Resources Total Firm Surplus/Deficit	-5118 13396 -258	-4578 12752 -644	-4542 12022 -1324	-4584 13040 -1248	-4515 12447 -2624	-3923 15316 -1399	-3260 11884 -4174	-3800 12973	-3740 11796	-3883 11833	-3530 10829	-3738 14949	-3324 11761	-4641 13358