EXHIBIT B

BLUE LAKE PROJECT OPERATION
and
RESOURCE UTILIZATION

MODE OF OPERATION

SITKA'S ELECTRICAL POWER SYSTEM

The Blue Lake Hydroelectric Project is a primary component of Sitka's electrical power generation system (" Sitka Power System" or "System"). Because the Blue Lake Project is operated in conjunction with (and to a large extent controls) all other elements of the System, it is necessary to understand the interactions among system components. Because Sitka is not interconnected with any other power source through a grid or inter-tie, the Sitka Power System is the only source of electrical power available to the City and Borough of Sitka.

The Sitka Power System has three primary generating components: 1) the Blue Lake Hydroelectric Project [FERC No. 2230, including two small hydro units, the Fish Valve Unit (FVU) and Pulp Mill Feeder Unit (PMFU) authorized under an amendment to the original Blue Lake license; 2) the Green Lake Hydroelectric Project (FERC No. 2818) and 3) a diesel-electric generating plant located in Sitka. In addition to these generating components, the System also has distribution switchyards and transmission and distribution systems.

The control center for all generation, transmission and distribution components of the System is located at the Blue Lake Control Center (BLCC) at the Blue Lake Powerhouse. The BLCC is manned 24 hours a day, seven days a week.

The Blue Lake Project is operated in conjunction with the Green Lake Project to meet the City's demand for electricity ("load"). Generally, the Blue Lake Project is operated as a "base-load" resource, that is, at a pre-set generation output. The Green Lake Project is used for "load-following" or at a continually changing generation output to meet the shifting load in addition to Blue Lake generation.

In the following descriptions of the various System components, elevations, denoted by the term "El" are relative to mean low sea level in Silver Bay.

Blue Lake Hydroelectric Project

As described in Exhibit A, the Blue Lake Hydroelectric Project consists of three generating units, 1) the 6.0 megawatt (mw) Blue Lake Unit (BLU), 2) the 0.67 mw Fish Valve Unit (FVU) and 3) the 0.87 mw Pulp Mill Feeder Unit (PMFU).

The BLU and PMFU are operated manually via controls at the Blue Lake and PMFU powerhouses. The FVU is operated automatically via a SCADA system. All Blue Lake Project component turbines operate at a maximum Blue Lake reservoir elevation of El 342. At this reservoir elevation, the operating head (difference in elevation between reservoir surface and component tailrace) for the various generating components are shown in Table B1.

Table B1. Operating head, in feet, for Blue Lake Unit, Pulp Mill Feeder Unit and Fish Valve Unit.

System Component	Head at minimum reservoir level (El 252)	Head at average reservoir level (El 327)	Head at maximum reservoir level (El 342)	Tailrace Elevation (El)
BLU	239	314	329	13
PMFU	104	179	194	148
FVU	105	180	195	147

Green Lake Hydroelectric Project

The Green Lake Hydroelectric Project has two 9.27 mw Francis turbines operating at a maximum Green Lake reservoir elevation of El 395. Because the Green Lake Project tailrace is essentially at sea level, operating head is the same as reservoir elevation.

One Green Lake Project generator is operated as the system "swing" generator. The other Green Lake generator is base loaded. Both Green Lake generators are operated and monitored remotely and manually from the BLCC.

Load Distribution

Over the last 3 fiscal years, 51% of Sitka's load has been distributed to the Green Lake Project and 49 % to the Blue Lake Project.

Reservoir Levels.

Blue Lake reservoir levels are determined by two major factors: 1) reservoir inflow, resulting from precipitation and/or snowmelt, and 2) water releases for hydroelectric generation, spill, instream flow needs, municipal water use and water sales. Hydroelectric generation is the largest of these releases, and has the greatest effect on Blue Lake reservoir levels.

At current loads and average annual precipitation, both reservoirs spill each year. As electrical loads increase the amount and frequency of spill will decrease.

BLUE LAKE PROJECT OPERATING CRITERIA and OBJECTIVES

OPERATING CRITERIA

Sawmill Creek Instream Flow Requirements

The City is required, under provisions of the original license, to release flows for instream purposes ("instream flows") at the FVU, which generates power from these releases. From May through November, the minimum instream flow requirement is 50 cubic feet per second (cfs), regardless of reservoir elevation. The license Amendment of 1977 provided that, from December through April, the 50 cfs flow could be reduced if the lake elevation dropped below certain critical levels (Table B2). Since the FVU was installed in 1992, the City has consistently exceeded the 50 cfs minimum instream flow requirement. The pre-project minimum instream flow was 9 cfs.

Table B2. Sawmill Creek minimum Instream Flow requirements allowed at various Blue Lake levels (FERC Order dated September 7, 1977 and FERC Order dated September 6, 1991.)

Month	Lake Surface Elevation (feet)	Minimum Flow (cfs)
December	336	37
January	324	22
February	311	22
March	295	22
April	274	22

An automatic bypass valve opens when the FVU is not operating to maintain the required flow of 50 cfs in the stream. The reservoir release valve (Howell Bunger valve) is used to maintain flow in the stream when the power conduit is out of service.

Commercial/Industrial Release Conditions

In addition to hydroelectric generation and instream flows, water is also released from Blue Lake reservoir for commercial uses, including bottled water and bulk water export operations located at or near the Sawmill Creek Industrial Park (SCIP). The State of Alaska's water right for bulk water export (State Water Right LAS 20526) requires that withdrawals for this purpose cease when reservoir elevations fall below the elevations listed in Table B3, to assure priority for instream flow releases. Since 1983 when the Green Lake Project came on line, instream flow releases to Sawmill Creek have been always been above 50 cfs; at no time has it been necessary to revert to the lower flows shown in Table B2.

Table B3. Blue Lake reservoir elevations below which bulk water export must be discontinued.

Month	Lake Surface Elevation (feet)
March	285
April	255
May	252
June	265
July	294
Aug-Feb	295

SYSTEM OPERATIONAL OBJECTIVES.

The primary operational objective of the Sitka Power System is to meet Sitka's entire electrical load with hydroelectric power, without the need to use supplemental diesel generation. Following is a summary of Blue Lake Project and System operation criteria used to manage system generation to satisfy this objective:

Blue Lake/Green Lake Reservoir Management

- Maintain maximum reservoir elevations at both hydroelectric Projects at all times with preference to the Green Lake reservoir. This provides maximum generation potential and maximum electrical system stability. System stability at both the Blue Lake and Green Lake Projects degrades when reservoir elevations fall below El 260 and El 310, respectively, because of head loss;

- Minimize the magnitude and frequency of Blue Lake spill events to prevent channel degradation and to protect fish rearing habitat in Sawmill Creek. Blue Lake spill frequency and magnitude are primarily functions of precipitation, but both may be reduced by 1) shifting electrical load to the Blue Lake Project (within other operational constraints); and 2) use of the Howell Bunger release valve and/or the FVU bypass valve;

- Operate Blue Lake above the levels shown in Table 3 to avoid water exports restriction;

- Maintain a minimum penstock pressure of 80 psi at the municipal water tap. This pressure is assured only at reservoir levels above El 262, depending on the pressure drop due to penstock flow.

Frequency Management

- Maintain a system frequency between 59.5 and 60.5 Hz. Below Blue Lake reservoir level of El 260, electrical frequency swings outside this range, in which case diesel operation should be used to stabilize the frequency.

- Operate as many hydroelectric generators as possible at a given time to provide system stability, but do not operate a turbine below 40 percent gate.

FVU Operations

The FVU is operated to provide continuous bypassed reach instream flow of at least 50 cfs. When Blue Lake reservoir is well above the rule curve, the FVU may be operated at a maximum release of 70 cfs to increase overall Blue Lake project generation, when the BLU generation is operating at full capacity.

PMFU Operations

The PMFU is operated 1) to augment generation when the BLU is running at maximum capacity; and 2) to obtain a desired system load distribution between the Blue Lake and Green Lake Projects. Water diverted to the PMFU may also be used for export or to meet industrial needs.

OPERATION DURING LOW, MEAN and HIGH WATER YEARS

Operational criteria are basically the same for adverse, mean and high water years, However, different factors limit system energy generation, as explained below.

MEAN WATER YEAR

During a mean water year (defined as a year composed of the average monthly flow for every month of the year, based on the 38 years of streamflow record.) the limiting factors controlling system generation are 1) water levels in Green Lake and 2) Blue Lake restrictions shown in Table B3 (defined by LAS 20526) regarding releases for bulk water export. During an average year, if both reservoirs were drafted to minimum permitted levels, both reservoirs would recover to spill.

LOW WATER YEAR

Operational objectives during a low water year (defined as hydrologic conditions seen in 1951, the driest year on in the hydrologic record) are the same as during a mean water year, but generation may be reduced depending on reservoir and system conditions.

The limiting factor during a low water year is the ability for Blue Lake and Green Lake reservoirs to refill to spill elevation prior to the following water year (October to October). Generation may need to be reduced or suspended: 1) when Blue Lake reservoir falls below about El 260 (to maintain 80 psi pressure at the municipal water tap) and 2) when Green Lake reservoir falls below about El 285, to assure consistent generating frequency or refilling of the reservoirs. When the reservoirs are at insufficient levels and hydro generation is reduced, diesel generation may be used to meet daily peaks and stabilize generating frequency.

If Blue Lake reservoir level falls below the relevant elevations described in tables B2 and B3, instream flow and bulk water releases may be decreased.

HIGH WATER YEAR

During a high water year (defined as hydrologic conditions in the water year 1936, a notably high precipitation year) Blue Lake spills prior to the rainy season in September and October. During such years, the Blue Lake Project may be loaded preferentially to create reservoir capacity below the spill level. Other water releases may also be used to create reservoir capacity below spill.

NAMEPLATE CAPACITY AND ANNUAL PLANT FACTOR

The Blue Lake Project has component nameplate capacities as follows:

FVU: 670 kW;
PMFU: 870 kW; and
BLU: 6000 kW.

Total of nameplate capacities is 7540 kW.

The average generation for the Blue Lake Project over the 4 fiscal years 2000-2001 through 2003-2004 was 5524 kW. Based on the total nameplate capacity of 7540 kW, the annual plant factor for the Blue Lake Project is 0.73. This calculation is based on gross generation and includes both BLU generators, the PMFU and the FVU.

DEPENDABLE CAPACITY and AVERAGE ANNUAL ENERGY

The following generation capacities are based on the 2003 monthly system load distribution, a single Blue Lake generator maximum continuous capacity of 3500 kW, or a total 7000 kW BLU capacity, and the current municipal and industrial water usage. As additional permitted water is utilized the water available for power production and the power produced will decrease.

DEPENDABLE CAPACITY

The dependable capacity of the entire Sitka Electrical System, based on simulated operations under hydrological conditions of the record low water year (1951), is 85,000 MWh.. The dependable Blue Lake Project capacity under the same hydrologic conditions is 46,400 MWh. Under 1951 flow conditions, diesel generation is required for system stability or peaking during periods of low reservoir elevation but not to meet unmet load.

(Note that, in the original license and application material, 1951 hydrologic conditions were also used to determine Blue Lake Project dependable capacity, but with different results. These differences are explained by 1) the license amendment of 1977 reducing instream flow requirements at low reservoir elevations; 2) addition of the FVU and PMFU; and 3) changes in load and commercial and industrial water uses.)

AVERAGE ANNUAL ENERGY

The average annual energy generation of the Sitka Electric System is 124,000 MWh based on the mean hydrology for 38 years of record. The Blue Lake project average annual energy capability under this hydrology is 65,000 MWh. This estimate is based on the operation of both Green Lake and Blue Lake projects for maximum system output according to the criteria described in the Mode of Operation section, above. Diesel operation may be required for system stability and peaking but not unmet load.

The factors limiting energy production during an average year are 1) Green Lake minimum reservoir level and 2) Blue Lake reservoir elevation restrictions defined by LAS 20526. If maximum annual energy is produced during an average water year, Blue Lake Project generating units operate at close to maximum capacity. Since both reservoirs begin to spill in September or October during an average water year, additional energy could be produced in the fall given sufficient system load.

HIGH WATER CAPABILITY

High water generating capability for the Sitka Electric System, determined using the record high water year of 1936, is 135000 MWh. The Blue Lake Project generating capacity under these conditions is 74300 MWh. The limiting factor for the Blue Lake project is the maximum capacity of the project generators. Under high water conditions, both reservoirs begin to spill in July. As for the average water year simulations, additional energy could be produced in mid-summer given sufficient system load.

MAXIMUM HYDRAULIC CAPACITY OF THE PROJECT

The maximum hydraulic capacity of each Blue Lake generator is 185 cfs at a reservoir level of El 290. The maximum hydraulic capacity of the FVU is 70 cfs. The maximum hydraulic capacity of the PMFU is 77 cfs. The total maximum hydraulic capacity of the Blue Lake project is 517 cfs.

HYDROLOGY

Pre-project Sawmill Creek flows were monitored in 1921, 1922 and for the period 1929 through 1957 at US Geological Survey (USGS) gage No. 880 near the BLU location. For water years 1943-1945 when the Sawmill Creek gage was not operating, flows have been synthesized by correlation to USGS gage No. 400, Dorothy Creek near Juneau. Monthly inflows were not recorded or calculated from 1958 through 1993.

From 1994 through 2004, the following data has been utilized to estimate monthly Blue Lake inflows:

- Reservoir elevations available from generation records were used to establish the reservoir storage volume at the beginning and end of each month. From this data a monthly difference in storage volume was determined.

- The monthly BLU power generation water usage was estimated with available generation records.

- The monthly bypass reach flow, which included spill, FVU and PMFU discharges, was estimated using generation records, and staff gage readings.

- The monthly municipal water usage was obtained from the City of Sitka Water Department.

From 1994 through 2004, monthly Blue Lake inflow has been estimated with the above data in the following formula:

Difference in storage volume + BLU generation usage + bypass reach flow + municipal water usage = monthly inflow

No adjustments were made for evaporation and leakage as they were considered to be negligible.

In 1995 a staff gage was installed at the footbridge near the USFS campground (just downstream of the FVU) to verify the FVU instream flow release required under the original license and 1992 small hydro amendment. Since this gage has been observed only once per week (per requirements of the applicable FERC Amendment conditions), it does not represent a continuous flow record and is of limited value as a basis for hydrologic calculations or characterizations.

In September 1998, a continuous monitoring gage was installed in the same location as gage 880 to provide more accurate data. In May 2000, USGS began maintaining this gage under contract with Sitka. The gage has been assigned No. 15088000.

MONTHLY MINIMUM, MEAN, and MAXIMUM INFLOWS

The minimum, mean and maximum recorded Sawmill Creek flows at the location of the lower staff gage are:

Minimum	9.1 cfs
Mean monthly	441 cfs
Maximum	7100 cfs

Maximum and minimum average daily flows measured at USGS gage No. 880 are shown in Table B4.

Table B4. Maximum and Minimum Average Daily Flows in Sawmill Creek, by Month, for 29-year Period of Record. Original USGS Gage 15088000.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Max	2,270	2,410	1,250	1,050	1,640	1,780	2,170	4,940	4,980	5,500	4,430	3,770
Min	24	16	11	14	57	308	311	200	71	84	46	34

Three recent floods have had the following estimated flows:

Oct. 1972	12000 cfs
Aug. 1992	12000 cfs
Nov. 1993	10400 cfs

The streamflow duration curve based on water years 1921 and 1922 and the period 1929 through 1957, derived from USGS gage 15088000 is shown in Figure B1. Figure B2 shows average, minimum, and maximum monthly flows during the same data.

The minimum annual Blue Lake inflow recorded during the 1951 water year was 300 cfs. The maximum annual Blue Lake inflow recorded during the 1936 water year was 678 cfs. Mean monthly flows measured at the lower staff gage are in Appendix I.

OTHER WATER RELEASES

Water releases other than those associated with electrical generation are sometimes required as part of overall Blue Lake Project operations (Table B5). These releases may be necessary to 1) manage Blue lake reservoir levels to minimize flood events; 2) perform maintenance to structures and equipment; 3) provide Sawmill Creek flushing flows; and 4) perform equipment and stream gage testing. The following release mechanisms have been installed (total hydraulic capacity of the various mechanisms in parentheses):

1. Reservoir Release Valve (Howell-Bunger valve) (500 cfs);
2. FVU Bypass Valve (50 cfs);
3. PMFU Bypass Valve(77 cfs); and
4. Power Conduit Drain Valve (300 cfs)

The Reservoir Release Valve offers the greatest degree of release control because of its high capacity. When reservoir levels need to be changed rapidly for emergency or other purposes, this valve is actuated. (Function of the RRV is being improved through dredging and cleaning operations expected to occur during 2006).

Bypass valves at the FVU and PMFU allow emergency releases in case of load rejection. The FVU bypass valve may have limited utility to augment instream flow releases at that point, but is not designed for continuous long-term use. The Power Conduit Drain Valve is used to flush or drain the power conduit.

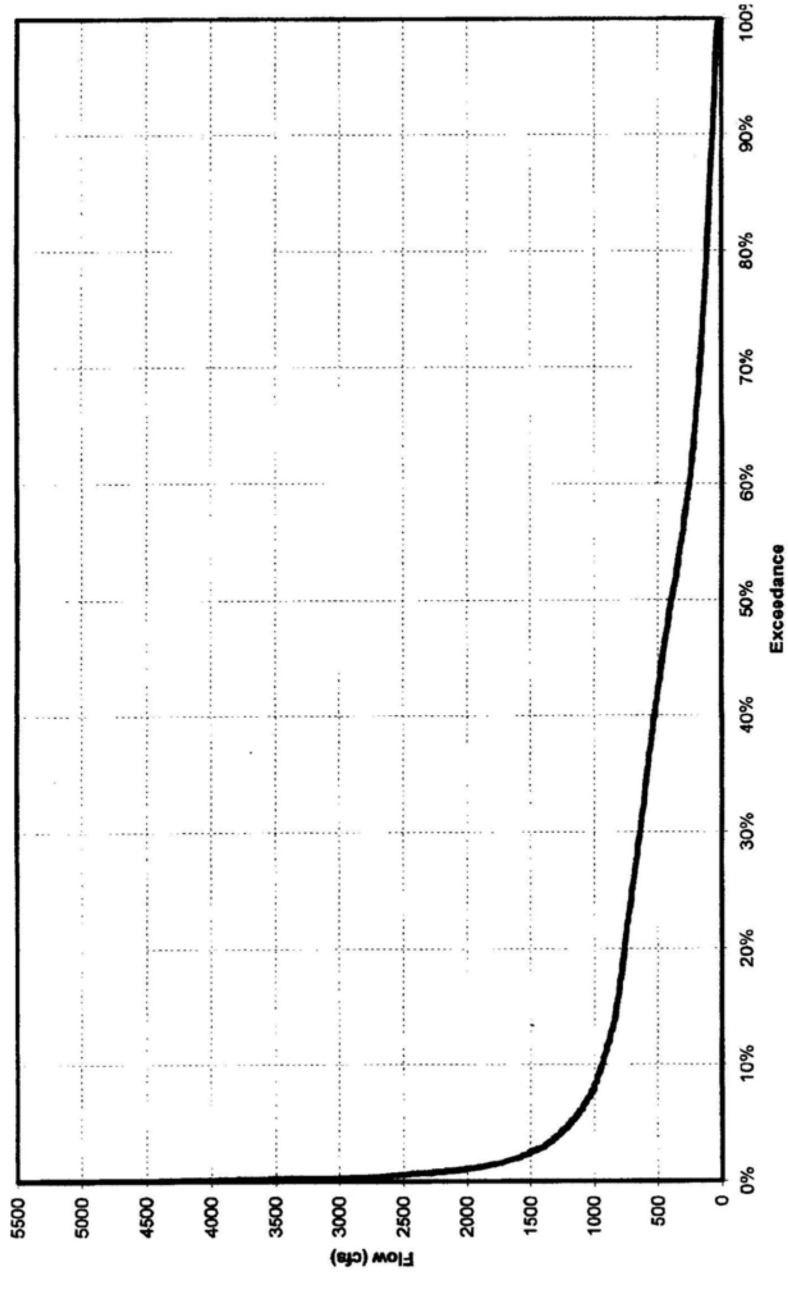

Figure B1. Flow Duration Curve, Sawmill Creek, 1921-1956 USGS Gage Records

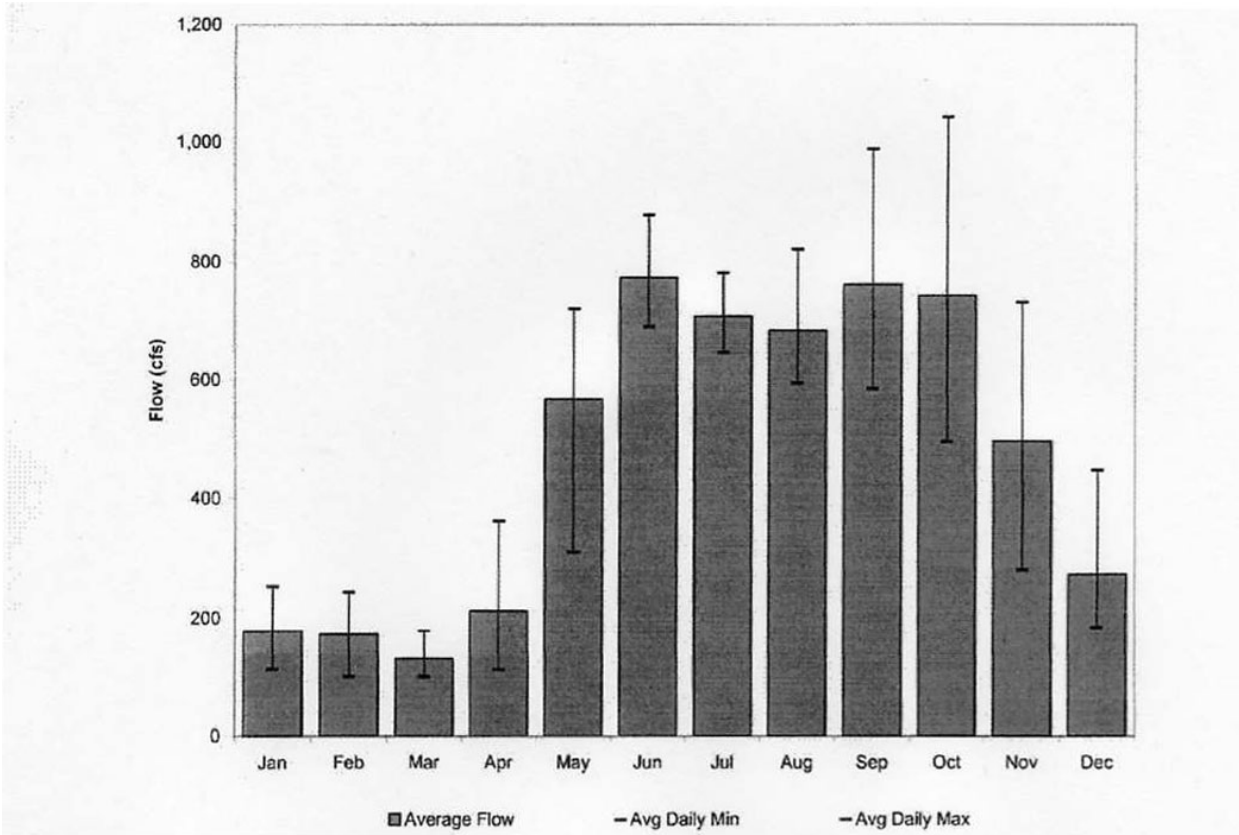

Figure B2. Average, Average Minimum and Average Maximum Streamflow, Sawmill Creek, Original USGS Gage

Table B5. Water Uses Associated with Blue Lake Project operations

USE	2003-2004 Actual Use
BLU	244 cfs
FVU	69 cfs
PMFU	33 cfs
Drinking Water	5.1 cfs
Industrial Water	0.18 cfs
Export Water	0.005 cfs
Total Blue Lake Project:	346 cfs

The City of Sitka has signed contracts to further develop and utilize Industrial and Export water. No adjustments have been made for leakage or evaporation. The average annual inflow to Blue Lake is 441 cfs.

AREA/CAPACITY AND RESERVOIR RULE CURVES

Figure B3 is the Blue Lake Reservoir Area-Capacity Curve. Areas and capacities were calculated based on topographic surveys performed to obtain the original license.

Figure B4 shows the Blue Lake operational rule curve. This rule curve defines the minimum reservoir levels that will allow the reservoir to refill during a mean water year. The lake levels referenced in Tables B2 and B3 are shown on the rule curve.

MONTHLY LOAD DISTRIBUTION

Monthly system load distribution during 2003 is shown in Table B6. The system load distribution is a function of business activity and ambient temperature. The system load is

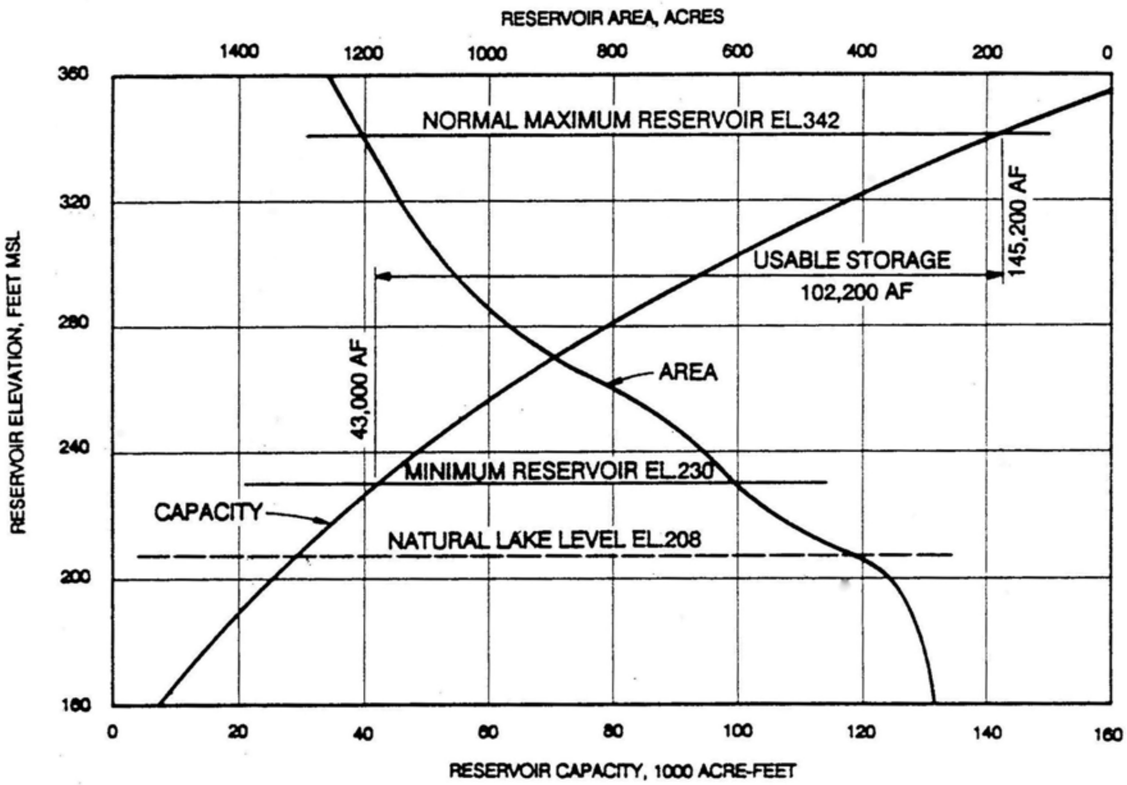

Figure B3. Area-Capacity Curves, Blue Lake Reservoir

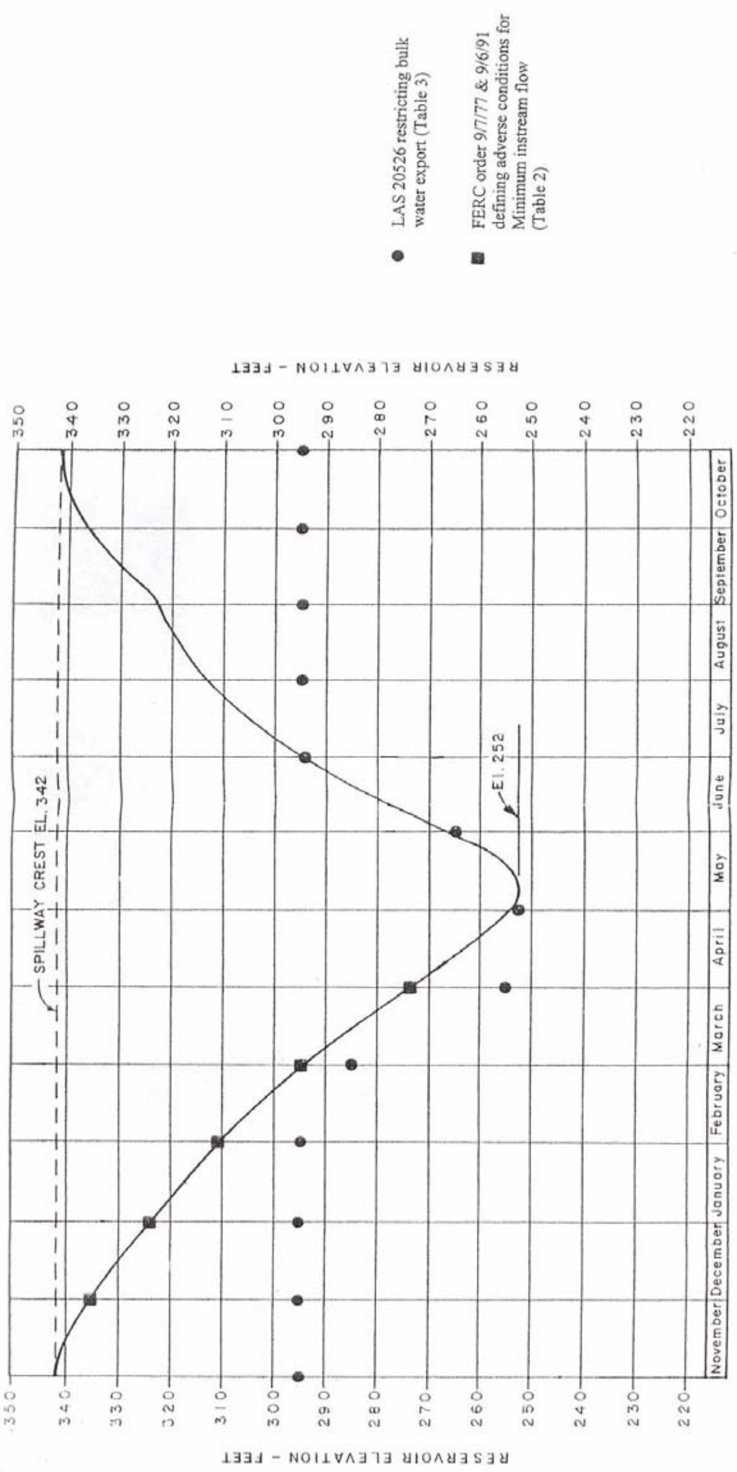

Figure B4. Rule Curve Showing Minimum Monthly Blue Lake Reservoir Elevations

distributed between the two projects according to criteria detailed in the Mode of Operation Section.

Table B6. Monthly, System Load and Blue Lake Project Loads during 2003

Month	Fraction of Annual Load	Actual System Load (MWh)	Blue Lake Project Load (MWh)
Jan.	.0944	9077	4393
Feb.	.0945	8061	3744
Mar.	.0847	9506	4227
April	.0919	7989	3923
May	.0767	6471	3168
June	.0784	7202	4033
July	.0744	8247	4813
Aug.	.0753	8177	4811
Sept.	.0805	7735	4458
Oct.	.0874	8129	4413
Nov.	.0727	9076	4644
Dec.	.0891	9620	4031
Totals	**1.00**	**99290**	**50658**

The above loads are based on net generation, and loses are 3.8 %. All power is sold to Sitka's utility customers.

TAILWATER CURVES

Tailwater curves for the FVU and BLU are shown in Figures B5 and B6. The BLU and FVU tailwater curves have not been modified to reflect channel alterations and effects of the floods described above. Following these floods, the BLU and FVU powerhouses and tailrace facilities were modified to protect them from flooding.

PROPOSED PROJECT MODIFICATIONS

The original FERC Blue Lake Project License stipulates a three phase development of the project, Phases one and two have been completed. The third phase includes the raising of the dam to provide a maximum pool level of El 365', and a maximum storage of 176,500 acre feet, and the addition of a third turbine at BLU. At this time, the City does not propose to raise the dam elevation because projected system loads and generating revenue do not justify permitting and construction costs. The city will investigate the possibility of increasing the Blue Lake Project capacity during the term of the license. Additional generation capacity will enable the City to accommodate load growth, reservoir management, and spill regulation during the term of the license. The City will examine the feasibility of all potential sources of additional generation, including but not limited to raising the Blue Lake dam.

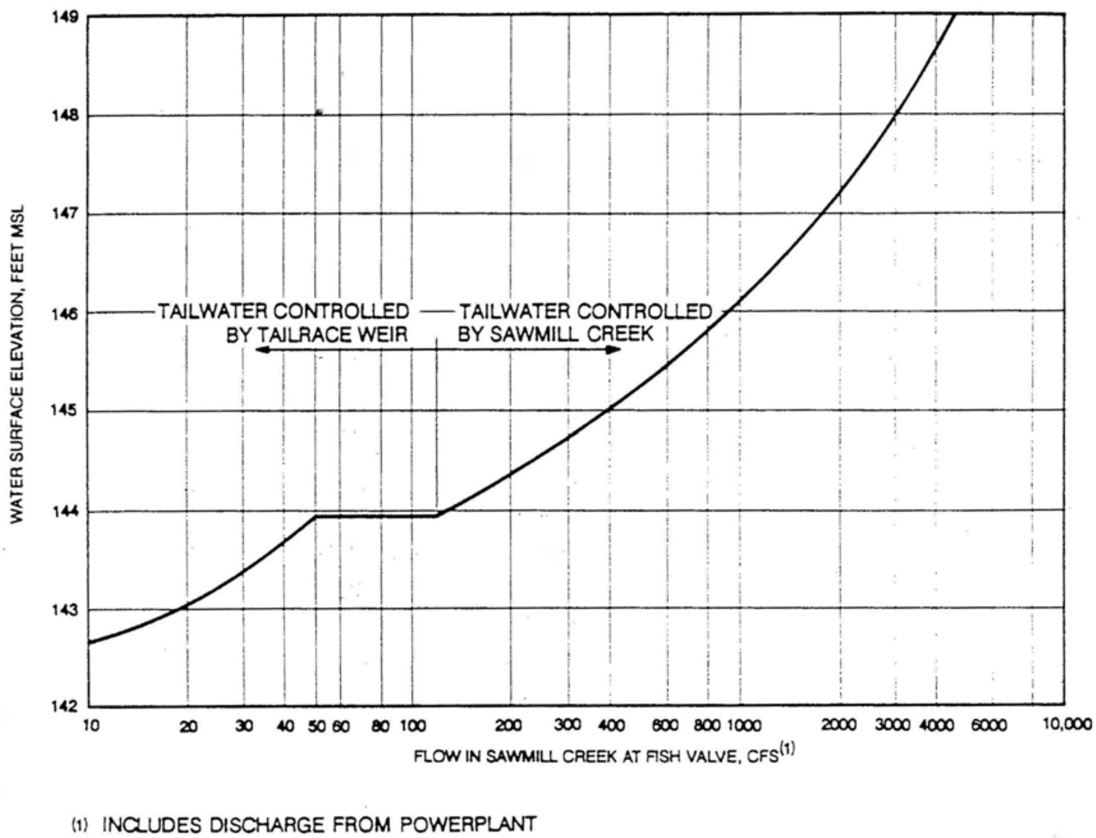

Figure B5. Tailwater Rating Curve for Fish Valve Unit.

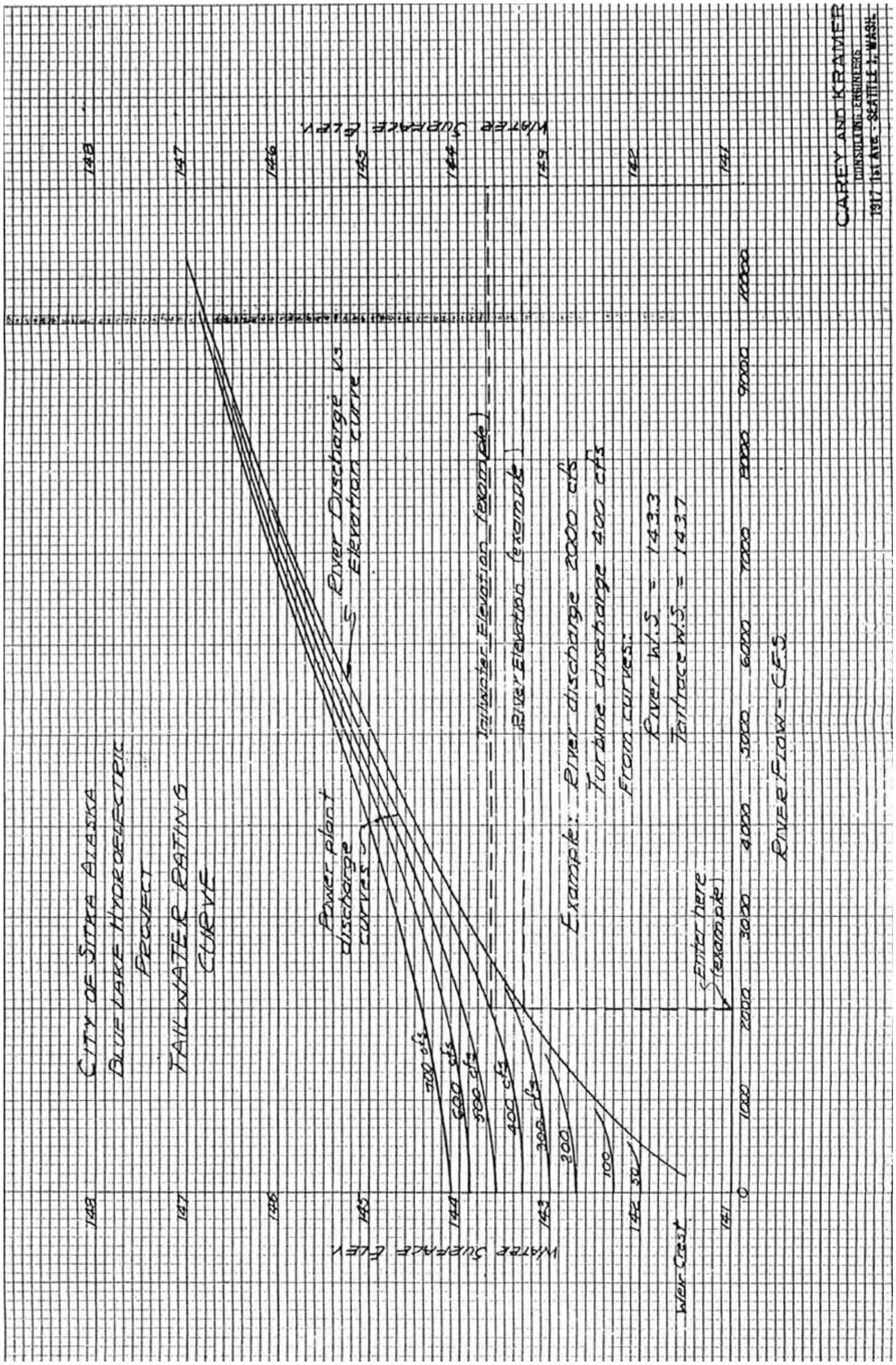

Figure B6. Tailwater Rating Curve for Blue Lake Unit

APPENDIX I
Mean monthly flows, January through June, Sawmill Creek gage records
1929-2002

Year	Jan	Feb	Mar	Apr	May	Jun
1929	340	137	244	182	569	792
1930	79	190	132	277	535	732
1931	225	325	101	281	594	767
1932	216	145	126	284	528	816
1933	121	128	54	159	634	682
1934	231	350	171	344	554	662
1935	133	612	147	207	721	982
1936	264	96	336	628	816	1118
1937	265	151	133	190	474	816
1938	205	254	202	173	554	585
1939	245	169	130	194	415	740
1940	164	157	123	264	454	507
1941	181	216	204	306	339	555
1942	472	208	110	233	668	520
1943	255	368	36	121	378	628
1944	163	201	106	347	490	778
1945	245	88	66	82	598	838
1946	107	51	69	92	611	783
1947	156	94	346	283	632	557
1948	343	72	50	58	637	739
1949	230	77	124	157	534	860
1950	47	43	43	71	336	776
1951	70	31	44	154	487	739
1952	63	67	56	175	500	674
1953	100	128	124	204	648	751
1954	110	379	54	61	434	708
1955	150	138	134	109	303	723
1956	28	62	52	147	660	632
1957	135	78	53	129	470	646
1994	172	215	139	375	366	410
1995	137	285	83	294	570	508
1996	137	162	287	219	294	499
1997	137	214	125	294	548	510
1998	75	79	101	161	245	279
1999	140	135	131	274	458	870
2000	192	196	300	355	441	663
2001	243	208	198	198	379	715
2002	217	177	108	122	520	718
Ave.	179	176	133	216	510	692

APPENDIX I (Cont.)
Mean monthly flows, July through December, Sawmill Creek Gage Records
1929-2002

Year	Jul	Aug	Sep	Oct	Nov	Dec
1929	714	668	512	720	421	398
1930	682	622	756	881	751	236
1931	699	688	694	626	526	776
1932	687	648	893	835	336	141
1933	753	842	427	690	346	137
1934	656	792	518	673	784	118
1935	926	969	985	771	320	208
1936	852	762	1083	569	947	668
1937	620	903	628	1413	1610	522
1938	545	543	780	1143	257	353
199	816	1172	962	649	440	382
1940	457	698	717	1022	473	325
1941	510	269	340	604	442	248
1942	650	635	664	855	507	114
1943	619	551	425	449	386	264
1944	748	487	658	637	514	263
1945	732	678	397	781	297	84
1946	579	530	567	1035	289	121
1947	442	522	1221	722	736	88
1948	736	574	1156	573	605	210
1949	677	589	658	604	805	106
1950	759	524	545	912	555	118
1951	564	426	522	363	157	48
1952	819	540	1040	403	295	157
1953	611	766	693	986	620	192
1954	589	464	705	1005	289	287
1955	845	677	691	460	510	580
1956	696	829	524	502	235	50
1957	515	403	624	514	582	509
1994	418	665	732			
1995	444	397	474	759	525	90
1996	577	477	814	574	457	97
1997	638	516	569	494	182	141
1998	260	362	315	350	160	270
1999	695	342	322	421	0	179
2000	668	870	1092	328	203	351
2001	686	582	980	747	432	248
2002	693	1118	729	877	223	150
Ave.	647	634	695	701	465	249