SUSITNA HYDROELECTRIC PROJECT

ENERGY SIMULATION STUDIES TO SELECT PROJECT DRAWDOWN AND MITIGATION FLOWS

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ACRES

SUSITNA HYDROELECTRIC PROJECT

SUS 215

OFFICE MEMORANDUM

TO: John Hayden *Date:* October 4, 1982

FROM: Dave Crawford *File:* P5700.14.53

SUBJECT: HEP - Project Drawdown and Mitigation Flow Case

We have conducted studies to re-assess project drawdown and mitigation flow cases. These have led to the selection of 120 foot maximum drawdown at Watana and 50 foot drawdown at Devil Canyon. Case C (12,000 cfs. in August) has been selected as a practical compromise flow scenario for inclusion into license application.

A summary paper is attached which details the studies conducted to arrive at the above selections.

Encl: as

DC/kt

David Crawford

David Crawford

cc: w/enclosure

C. Debelius
W. Dyok
G. Krishnan

SUSITNA HYDROELECTRIC PROJECT
ENERGY SIMULATION STUDIES CONDUCTED TO SELECT PROJECT DRAWDOWN AND MITIGATION FLOW CASE.

I. Introduction

The objective of this paper is to provide the details behind the recommended project operation, drawdown and downstream mitigation flow. It is assumed that the reader is familiar with the intention of providing minimum downstream flows, basic project operation procedures and system cost determination. It is also assumed that the reader is familiar with results to date with respect to drawdown and downstream flows.

The incentive to redefine the costs associated with providing downstream minimum flows and greater drawdowns is a result of discussions stemming from review of the Feasibility Report and internal critiques of analyses conducted to date. These discussions have resulted in several developments and modifications in the energy simulation procedures which alter the conclusions on the preferred or recommended project drawdown, system costs, and costs associated with environmental mitigation flows.

Basically these changes were made to attempt to relate the historical streamflow record, which had an extreme dry year, with more normal design criteria. In addition, further refinements of project drawdowns and operation scenarios were required to assess the latest developments in those areas.

The procedural changes entailed modifying inflow hydrology by introducing a synthetic dry event to the record and in determining a regression relationship between system cost and project energy production.

Section 2 of this paper gives the change to inflow hydrology to reflect a more reasonable approach in determining firm energy. This section also contains the redefinitions of the downstream flow cases. Section 3 provides details of the derivation of system costs using a regression equation between present worth cost and project energies and includes the results of energy simulations to determine Watana drawdown using both historical and modified inflow hydrology plus simulations used in arriving at the recommended downstream flow case.

Section 4 contains miscellaneous simulations to assess the impact on drawdown and flow case selection of lower demand forecasts due to low load growth or the inclusion of small hydroelectric project production.

2. Study Input Changes

Modifications to basic input data have been made to attain project objectives and reflect the redefinition of inflow hydrology and quantity and timing of mitigation flows downstream. These changes are discussed below.

2.1 Modified Hydrology

A frequency plot (Figure 1) of annual average discharge at Gold Creek indicates that the driest year (1969) with an average annual discharge of 5600 cfs has approximately a 1:500 year recurrence interval. This extreme event (which is also followed by another dry year), has an abnormally large influence on project energy production and in particular firm energy production for a given project scenario. This large bias towards lower energy yields results in an annual firm energy production with about a 1:500 year return period. This is accepted as outside the normal limit used in generation and economic planning.

It has been proposed [by JWH and TL] that a more reasonable return period for firm energy used in system reliability tests would be 1:30 years. To achieve this goal two approaches can be followed. The first entails acceptance of the energy production with present restraints and submit the 1:30 year energy as the firm energy. The second (adopted here) is to modify the hydrology to reflect a less extreme event by insertion, in place of the extreme event, a 1:30 year event derived from flow statistics.

Figure 1 shows the plot of annual average flow at Gold Creek against probability of exceedance. This plot gives the 1:30 year event at about a flow of 7300 cfs. This translates to about 6100 cfs at Watana as indicated by Figure 2.

The monthly distribution of flows is assumed to be the same as that of the average monthly flows for the period of record. Table 1 gives the resultant 1:30 year monthly flows based on the ratio of the annual 1:30 year and average flows times the average monthly flow.

This synthetic hydrologic year is assumed to replace 1969 (year 20) in the inflow record used for energy simulation. This modified record is only used in assessing the economy of project operation and environmental mitigation. It will not be used in project flood frequency analysis or other analyses requiring inflow records.

2.2 Downstream Flows

A further change to project operation constraints is the

re-definition of summer downstream flow requirements in July and September. This change provides less water in July and more in September than has previously been supplied. The downstream flow requirements are given in Table 2 for Case A through Case D.

3. Energy Simulations

With the change in inflow hydrology it is required to determine the best Watana and Devil Canyon project operations particularly with respect to drawdowns, and to redefine the relative net benefit between the downstream flow scenarios under consideration.

The determination of best economic drawdown and the relative cost between flow cases are based on OGP runs. As time constrain's prohibit the running of the number of cases required it was necessary to determine a relationship between system present worth cost and the two key cost parameters of project average annual energy production and annual firm energy.

Based on 14 OGP runs made since April, 1982, the following relationship has been determined using a standard multi-linear regression technique:

$$PWC = 0.8154\ E_A - 0.1260 E_F + 13275$$

where:

PWC = Present worth cost ($82 X 10^6)
E_A= Average annual energy (GWH)
E_F= Annual firm energy (GWH)

The standard error of estimate is $\pm$ $23x10^6$

3.1 Drawdown

In the Feasibility Report the drawdown selected for Watana was 140 feet. This was based on an evaluation of the relative merit between production of additional firm energy at the expense of losing average energy. It was therefore necessary to further assess reservoir drawdown in terms of system costs to ensure proper accounting of energy values.

The drawdown for Devil Canyon was not re-evaluated due to the nature of Devil Canyon operation and the level of regulation provided at Watana.

To reduce the number of simulations it was assumed that Case C flows would, in terms of drawdown selection, be representative of all flow cases. However, some deviation is

to be expected from the "best" Case C drawdown with downstream flows. Case A would probably have a lower drawdown and Case D a higher drawdown.

Two drawdown studies were carried out; one with historical inflow record and the other with the modified record described in Section 1. The first study consisted of five drawdowns ranging from 140 feet to 220 feet in 20 foot increments. The second study ranged drawdown from 80 to 180 feet in 20 foot increments.

3.1.a Drawdown with Historical Inflow

The energies produced for Case C with the historical inflow record are given in Table 3. The intention of using three rule curves for the 140 foot drawdown case was to determine the relative merit of producing more or less firm energy at the expense of average energy and vice versa.

In all drawdowns, except as noted above, an attempt was made to adjust the rule curve until the average annual energy was about 6710 GWH. This requirement provides the value of producing more firm energy as a result of additional drawdown. The variation in firm energy with drawdown is given in Figure 3.

OGP analyses, details of which are contained in Attachment A, were made with the above energy simulations. The system costs range from $\$7225 \times 10^6$ for 140 foot drawdown to $\$7088 \times 10^6$ for 220 foot drawdown. The net benefit over the base case thermal scenario (assumed $\$8238 \times 10^6$) is plotted in Figure 4. This shows a clear break in net benefits around 180 foot drawdown.

In the OGP analyses it has been assumed that construction costs are those given in the Feasibility Report for the Watana/Devil Canyon development with 140 foot drawdown at Watana. Therefore, all benefits for drawdowns greater than 140 feet should be reduced by an amount commensurate with the additional cost for intake construction.

Geotechnical considerations have also been reviewed (Attachment B) with a conclusion that rock stability would be questionable and support costs would be excessive for drawdowns greater than 220 feet. This provides an upper limit drawdown.

The results of OGP analyses and the above considerations indicates that 180 foot drawdown has the best engineering and economic justification with historical inflow records as input to the energy simulations.

3.1.b Drawdown with Modified Inflow

The inclusion of a less extreme event into the hydrology will have the effect of increasing the firm energy obtainable from the project for a given drawdown and operation. As in Section 3.1.a, Case C has been assumed to determine any increase in benefit as a result of increased drawdown. As time has not allowed the running of the OGP model, the regression relationship determined above has been applied to the energy simulations. However, OGP analyses should be performed to verify these results.

The range of present worth costs is from $7351 million $7010 million for 80 and 180 foot drawdowns respectively. This translates to a net benefit range of $887 million to $1228 million for these two drawdowns. Energies, costs and benefits for the drawdowns considered are given in Table 4. This table also shows the impact on costs of variations in average and firm energy due to modifications to the rule curve. Net benefits for the "best" case rule curve are plotted against drawdown in Figure 5.

The benefits from increasing drawdown shows a marked change at approximately 100 foot drawdown, followed by a more gradual rise. The gain assessed to drawdowns above 120 feet are believed to be over-estimated due to an over-compensation for the value of firm energy. This has been adjusted as shown on Figure 5.

To the curve there must also be applied a cost penalty for drawdowns above 140 foot and a cost benefit for drawdowns below 140 foot. These adjustments are to reflect the change in intake costs.

With the above adjustments considered, it appears that the "best" drawdown is between 100 and 140 feet, therefore, with the current level of information it is recommended that 120 feet be selected as the drawdown at Watana.

It is, however, necessary to determine intake construction costs and to perform OGP analyses to verify this drawdown selection.

3.2 Energy Simulation with Mitigation Flow Scenarios

The objective of this part of the study is to quantify in dollar terms the impact of the seven downstream flow cases. Generally the higher the requirement for minimum flow quantities downstream of the project the greater the present worth cost. This is simply due to the release of water during the low energy demand summer months instead of storing and releasing during the higher demand winter months.

An analysis of this type was conducted in the Spring of 1982 and concluded that in all cases the project has a net benefit over the thermal alternative. The conclusion then was to select the best power operation case (Case A).

The analysis is repeated here to reflect the change in Watana drawdown and inflow hydrology. Due to time constraints no OGP analysis has been conducted and the present worth cost for each flow case is estimated using the regression equation given above.

The seven flow cases are defined by the minimum required monthly flow at Gold Creek given in Table 2. Energy simulations have been made with these requirements and system present worth costs determined. Due to the flexibility built into the simulation program, it is possible to produce a wide range of monthly energy distributions and to give additional or less firm or average energy. The importance of this variation in energies is negligible with respect to present worth cost determined by the regression equation. A subjective selection of the best combination of firm and average annual energy is required.

The energies produced for the simualtions undertaken are given in Table 5. The first simulation in each of the flow sets is recommended for use in any further OGP runs.

The variation in system present worth cost with the required minimum flow in August is given in Figure 6. Also shown in Figure 6 is a similar variation assuming 180 foot drawdown at Watana.

The impact of adopting Case D flows over Case A flows is a loss in net benefit of approximately $535 million. For Case A to Case C the loss in benefit is about $58 million. The loss in benefit from Case A for all flow cases is given in Table 6.

Given the accuracy associated with estimating the system present worth cost by a regression equation and the results presented above it is recommended that Case C mitigation flows be selected for inclusion into the license application.

Detailed energy simulation cutput for Watana alone and Watana/Devil Canyon for the selected drawdown and Case C flows is given in Attachment C.

4. Miscellaneous Studies

4.1 Firm Energy Return Period

The modification made to inflow hydrology will significantly effect the return periods associated with annual energy production. With historical inflow the return period of the

firm annual energy is of the order of 1:500 years. This is generally well outside the normal return period used in hydroelectric studies.

Figure 9 shown as plot of frequency with annual energy production for Case C and 120 foot drawdown at Watana assuming the modified hydrology. The firm annual energy with these conditions has a return period of 1:30 years.

4.2 Low Demand Forecast

The energy simulations made above have assumed that the medium load forecast is applicable as an upper limit to energy production from the project. In all runs the forecast for year 2010 of 7791 GWH has been assumed. This annual energy has been further broken down to a monthly value which is a constraint to energy production.

For Case C and the rule curve determined the load forecast of 870 GWH for December is met 20 of the 32 years simulated. Similar results are obtained for other months of the year. Because the project can meet projected demands on a more than regular basis the impact of a significant reduction in the forecasted energy demand is substantial. The reduction of forecasted demand would cause less energy production and a subsequent increase in the present worth cost.

To assess this impact simulation runs were made assuming the low load forecast of 6303 GWH. Case A, Case C and Case D flow scenarios were assumed with 120 foot drawdown at Watana and with modified inflow hydrology. The energies produced for the three flow cases are given in Table 9. The change in annual average energy for Case A under the two load forecasts is 588 GWH. For Case C the change in average annual energy is 582 GWH.

The cost impact of this lower forecast can only be accurately assessed by using the OGP model.

4.3 Medium Forecast Reduced by Small Hydroelectric Production

The inclusion of small hydroelectric production into the system results in the reduction in energy production from Susitna during those periods when Susitna is able to meet system demands. This has the result of reducing firm and average annual yields and will reduce the net benefit over the thermal alternative for a given flow case.

Annual energy production under Case C and 120 foot drawdown at Watana is reduced from an average of 6773 GWH to 6631 GWH. Firm energy is reduced by 98 GWH. The impact on system present worth costs is an increase of $84 million. Details of this simulation are given in Attachment C.

4.4 Energy Simulation with Failures

An energy simulation assuming the acceptance of both energy demand and mitigation flow failures has been made with the historical inflow record, and with the rule curves, demand failure and operation scenario selected above.

This simulation results in four months with energy production below minimum demand energy and two months with flows below target flows. The flow failure months are March and May; hence are not critical. Energy failures, however, are in February, March and April for one year and May of the following year. For this simulation the average annual energy is 6737 GWH, a reduction of 36 GWH, and a firm energy of 5354 GWH, a reduction of 174 GWH. Details of this run are included in Attachment C.

Table 1. Watana Monthly Flow (average and 1:30 year)

Month	Flow (cfs)	
	Average	1:30
Oct	4510	3450
Nov	2050	1570
Dec	1410	1070
Jan	1160	880
Feb	980	750
Mar	900	690
Apr	1110	850
May	10400	7940
Jun	22900	17500
Jul	20800	15900
Aug	18400	14100
Sept	10700	8150
Annual	7990	6100

Table 2. Downstream Flow Requirements at Gold Creek

MTH	FLOW (cfs)						
	A	A1	A2	C	C1	C2	D
O	2000	2000	2000	2000	2000	2000	2000
N	1000	1000	1000	1000	1000	1000	1000
D	1000	1000	1000	1000	1000	1000	1000
J	1000	1000	1000	1000	1000	1000	1000
F	1000	1000	1000	1000	1000	1000	1000
M	1000	1000	1000	1000	1000	1000	1000
A	1000	1000	1000	1000	1000	1000	1000
M	2000	4000	5000	6000	6000	6000	6000
J	2000	4000	5000	6000	6000	6000	6000
J[1]	2000	4320	5400	6480	6650	6810	7050
A	2000	8000	10000	12000	14000	16000	19000
S[2]	2000	6200	7750	9300	10400	11500	13150

Notes:

Derivation of transitional flows.
(July = July flow, June = June flow, etc.)

1. $\text{July} = \left(\text{June} \times 26 + 5\left[\frac{\text{June} + \text{August}}{2}\right]\right)\frac{1}{31}$

2. $\text{Sept} = \left(\text{August} \times 14 + 5\left[\frac{\text{June} + \text{August}}{2}\right] + \text{June} \times 11\right)\frac{1}{30}$

Table 3. Energy Production and System Cost - Case C
(with historical record)

DRAWDOWN (ft)	ENERGY (GWH) Average	ENERGY (GWH) Firm	PWC[1] ($ x 10^6)	BENEFIT[2] (x10^6$)
140				
.1[3]	6563	5327	7225	1013
.2	6710	4922	7197	1041
.3	6714	4920	7208	1030
160	6711	5369	7145	1093
180	6710	5654	7094	1144
200	6704	5778	7096	1142
220	6705	5884	7088	1150

Notes:

1. Present worth cost (PWC) obtained from OGP analysis
2. Based on thermal alternative with PWC of $8238 x 10^6
3. Refers to rule curve

Table 4. Energy Production with drawdown - Case C
(with modified record)

DRAWDOWN (ft)	ENERGY (GWH) Average	ENERGY (GWH) Firm	PWC[1] ($x10^6$)	BENEFIT[2] ($x10^6$)
80				
.1[3]	6399	5609	7351	887
.2	6419	5606	7335	903
90	6527	5525	7257	981
100	6748	5664	7059	1179
120				
.2	6771	5461	7066	1172
.3	6757	5566	7064	1174
140				
.1	6783	5553	7044	1194
.2	6751	5789	7041	1197
160				
.1	6773	5776	7025	1213
.2	6746	5946	7025	1213
180				
.1	6764	5938	7011	1227
.2	6738	6121	7010	1228

Notes:

1. Present worth cost (PWC) determined from regression relationship.
2. Based on thermal alternative with PWC of $8238 x 10^6
3. Refers to rule curve.

Table 5. Energy Production[1] with Downstream Flow Requirements.

Case	Rule Curve	ENERGY (GWH) Average O - A	Average M - S	Average Annual	Firm O - A	Firm M - S	Firm Annual	PWC[2] ($x10^6$)
A	1	4548	2263	6811	3622	2043	5665	7007
	2	4422	2377	6799	3682	2101	5783	7003
	3	4514	2292	6806	3582	2113	5695	7007
	4	4479	2310	6788	3600	2152	5752	7015
A1	1	4417	2380	6798	3631	2128	5759	7007
A2	1	4459	2340	6799	3455	2119	5574	7029
	2	4374	2418	6793	3512	2177	5689	7019
C	1	4466	2307	6773	3375	2153	5528	7056
	2	4448	2318	6765	3382	2121	5502	7065
	3	4291	2466	6758	3376	2189	5565	7064
	4	4402	2361	6763	3435	2128	5563	7060
C1	1	4302	2383	6685	3150	2141	5291	7157
	2	4185	2486	6672	3249	2182	5431	7150
C2	1	4169	2369	6538	3022	2099	5121	7298
	2	4057	2477	6534	3088	2106	5194	7293
D	1	3874	2378	6252	2966	2074	5041	7542
	2	3800	2462	6262	2818	2105	4923	7549
	3	3912	2348	6260	2747	2063	4810	7565

Notes:

1. Assuming 120' drawdown at Watana and modified hydrology.
2. Present worth cost (PWC) determined from regression relationship.

Table 6. Loss Benefit between Case A[1] and Other Flow Cases.

CASE	AUGUST FLOW (cfs)	PWC[2] ($ x 10^6)	NET BENEFIT[3] ($ x 10^6)	LOST BENEFIT[4] ($ x 10^6)
A	6400	7007	1231	0
A1	8000	7007	1231	0
A2	10000	7029	1209	22
C	12000	7056	1182	49
C1	14000	7157	1081	150
C2	16000	7298	940	291
D	19000	7542	696	535

Notes:

1. Based on modified hydrology record and 120' drawdown at Watana
2. Estimated by regression relationship.
3. Based on thermal alternative cost of $8238 million.
4. From Case A.

Table 7. Energy Production with Drawdown - Case C
(with modified hydrology and small hydro production)

D/DOWN	ENERGY (GWH)						PWC[1] ($x10^6$)
	Average			Firm			
	O - A	M - S	Annual	O - A	M - S	Annual	
80	4005	2257	6262	3328	2225	5553	7469
90	4206	2185	6391	3220	2180	5400	7383
100	4276	2328	6604	3255	2272	5527	7194
120	4336	2295	6631	3311	2119	5430	7184
140	4349	2317	6666	3404	2130	5534	7142
160	4344	2315	6658	3600	2125	5725	7124
180	4327	2320	6646	3715	2171	5886	7114

Notes:

1. Present Worth Cost (PWC) determined from regression relationship.

Table 8. Energy Production[1] with Demand Reduced by Small Hydro Production.

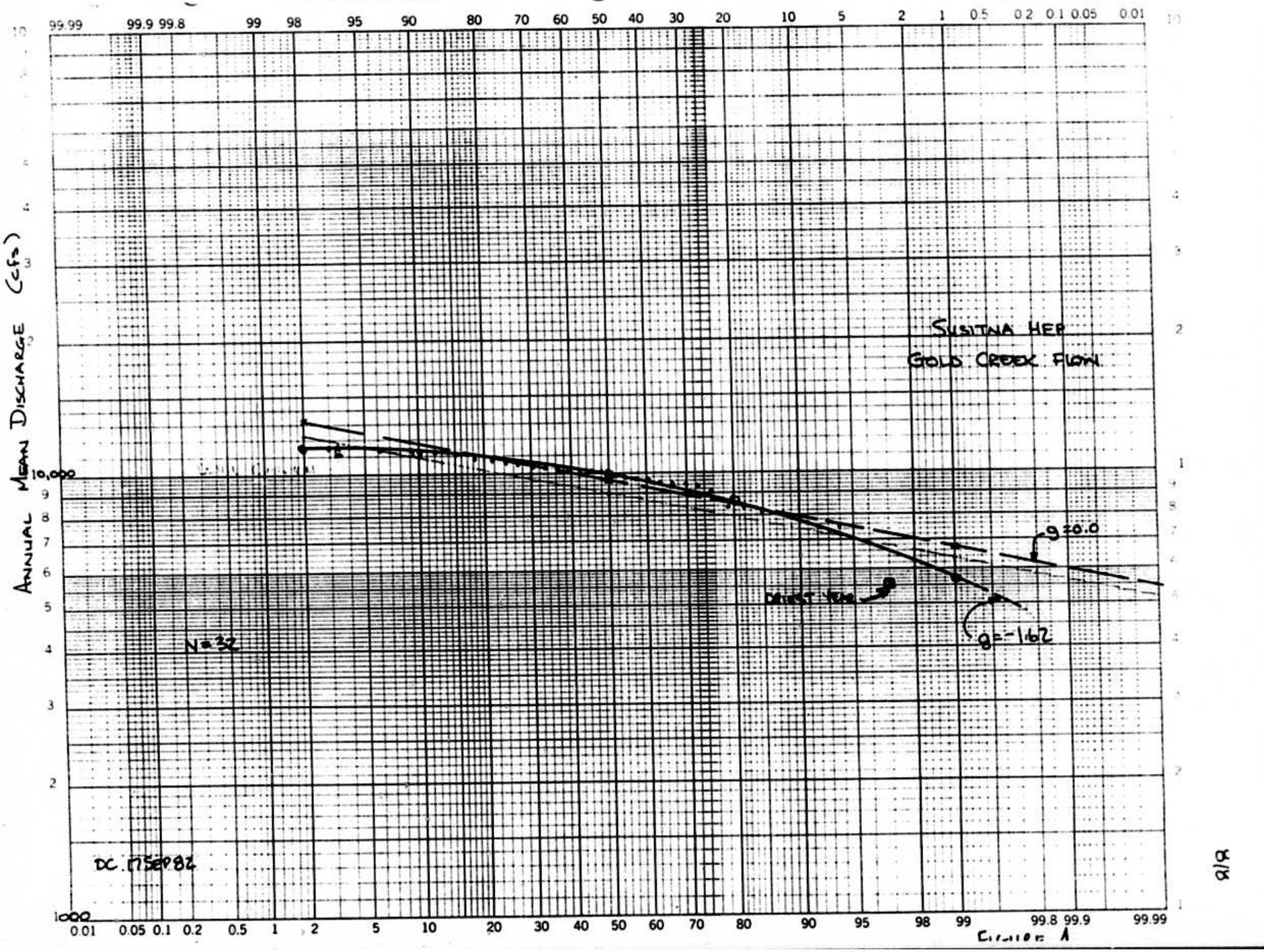
CASE	ENERGY (GWH)						PWC[2] ($x10^6$)
	Average			Firm			
	O - A	M - S	Annual	O - A	M - S	Annual	
A	4434	2245	6679	3632	2038	5670	7115
A1	4380	2295	6674	3600	2172	5772	7106
A2	4381	2295	6676	3455	2116	5571	7129
C	4336	2295	6631	3311	2119	5430	7184
C1	4258	2282	6540	3153	2037	5190	7289
C2	4152	2261	6412	3022	1956	5018	7414
D	3906	2230	6136	2966	1972	4938	7649

Notes:

1. Assuming 120' drawdown at Watana and modified hydrology record.
2. Present worth cost (PWC) determined from regression relationship.

Table 9. Energy Production with Low Load Forecast.

CASE	ENERGY (GWH)					
	Average			Firm		
	O - A	M - S	Annual	O - A	M - S	Annual
A	4058	2165	6223	3736	2106	5843
C	4019	2164	6183	3543	2032	5575
D	3792	2115	5907	3002	1952	4954


K-E PROBABILITY X 2 LOG CYCLES
KEUFFEL & ESSER CO
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99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
ANNUAL MEAN DISCHARGE (cfs)
10,000
1000
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
SUSITNA HEP
GOLD CREEK FLOW
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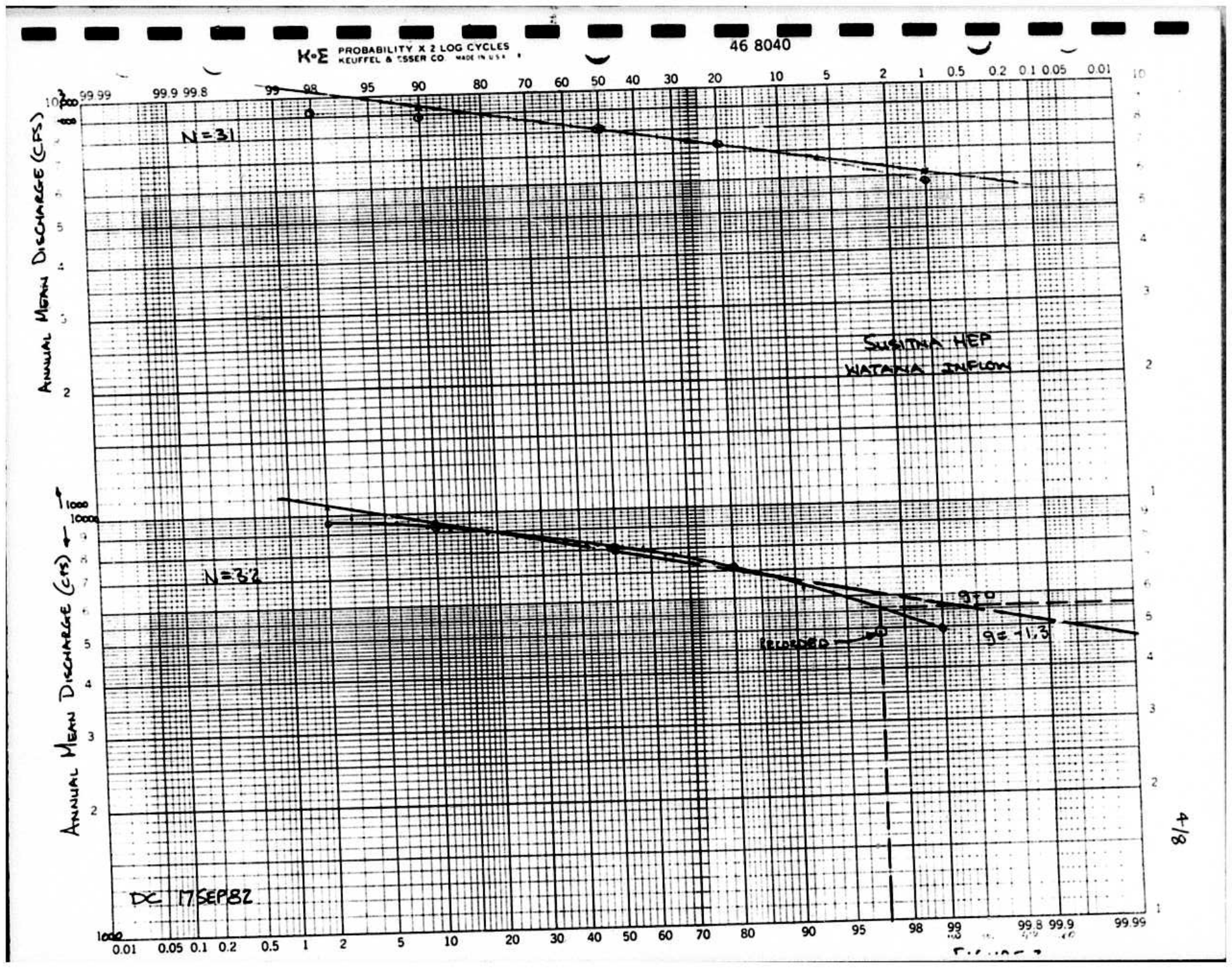
N=32
DC 17SEP82


K·E PROBABILITY X 2 LOG CYCLES
KEUFFEL & ESSER CO. MADE IN U.S.A.
46 8040
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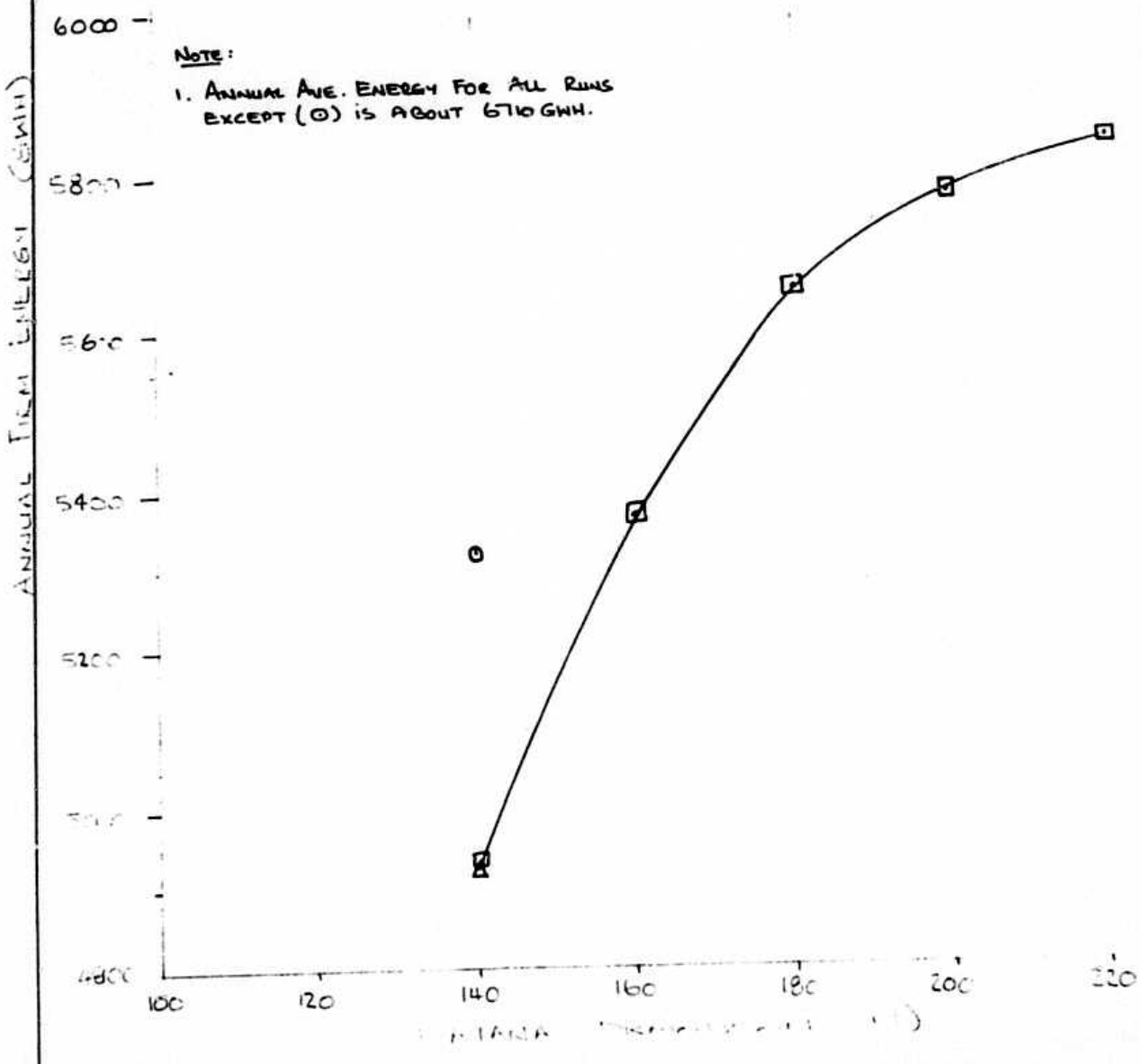
99.99 99.9 99.8 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01
N=31
SUSITNA HEP
WATANA INFLOW
ANNUAL MEAN DISCHARGE (CFS)
N=32
q=0
q=1.3
REVISED
DC 17SEP82
0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.8 99.9 99.99
4-8

Rev	By	Checked

WATANA DRAWDOWN

FIRM ENERGY PRODUCTION [1]

[ENERGY BASED ON 220 RULE WITH ADJUSTMENT TO APRIL]
[CASE "C" ASSUMED]



NOTE:

1. ANNUAL AVE. ENERGY FOR ALL RUNS EXCEPT (O) IS ABOUT 6710 GWH.

FIGURE 3

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Calculations
SUBJECT

By DC Date 1 SEP 82 Project No
Checked Date Calculation No
Page 1 of 3

Rev	By	Checked

WATANA DRAWDOWN [HISTORICAL RECORD]

OGP RESULTS

[ENERGY BASED ON 220 RULE WITH ADJUSTMENT FOR APRIL]
[CASE "C" ASSUMED]

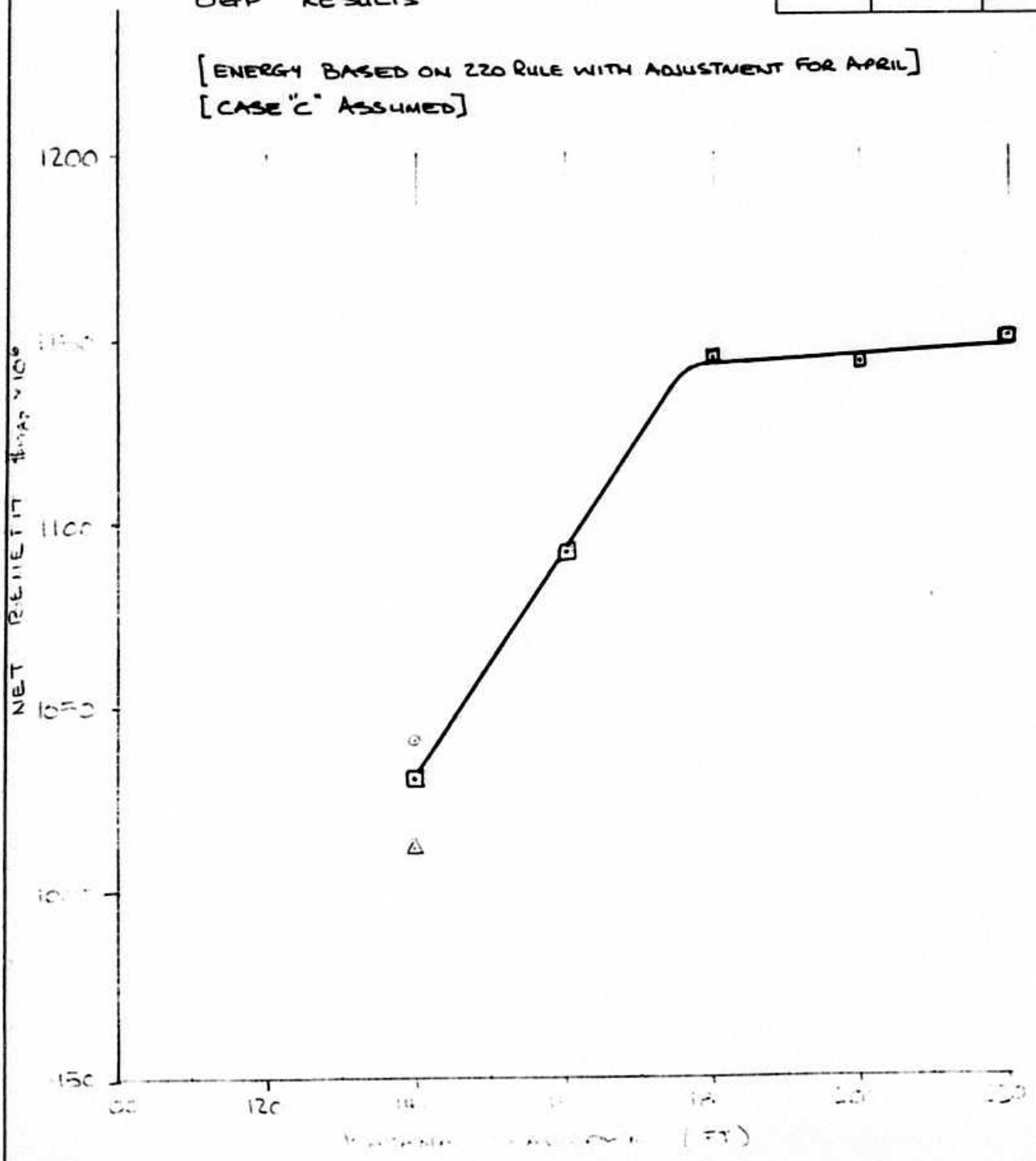


FIGURE 4

ACRES

Calculations

SUBJECT:

JOB NUMBER PS701-53
FILE NUMBER
SHEET OF
BY DC DATE 27SEP02
APP DATE

WATANA DRAWDOWN [MODIFIED HYDROLOGY]

BENEFIT BASED ON REGRESSION ANALYSIS

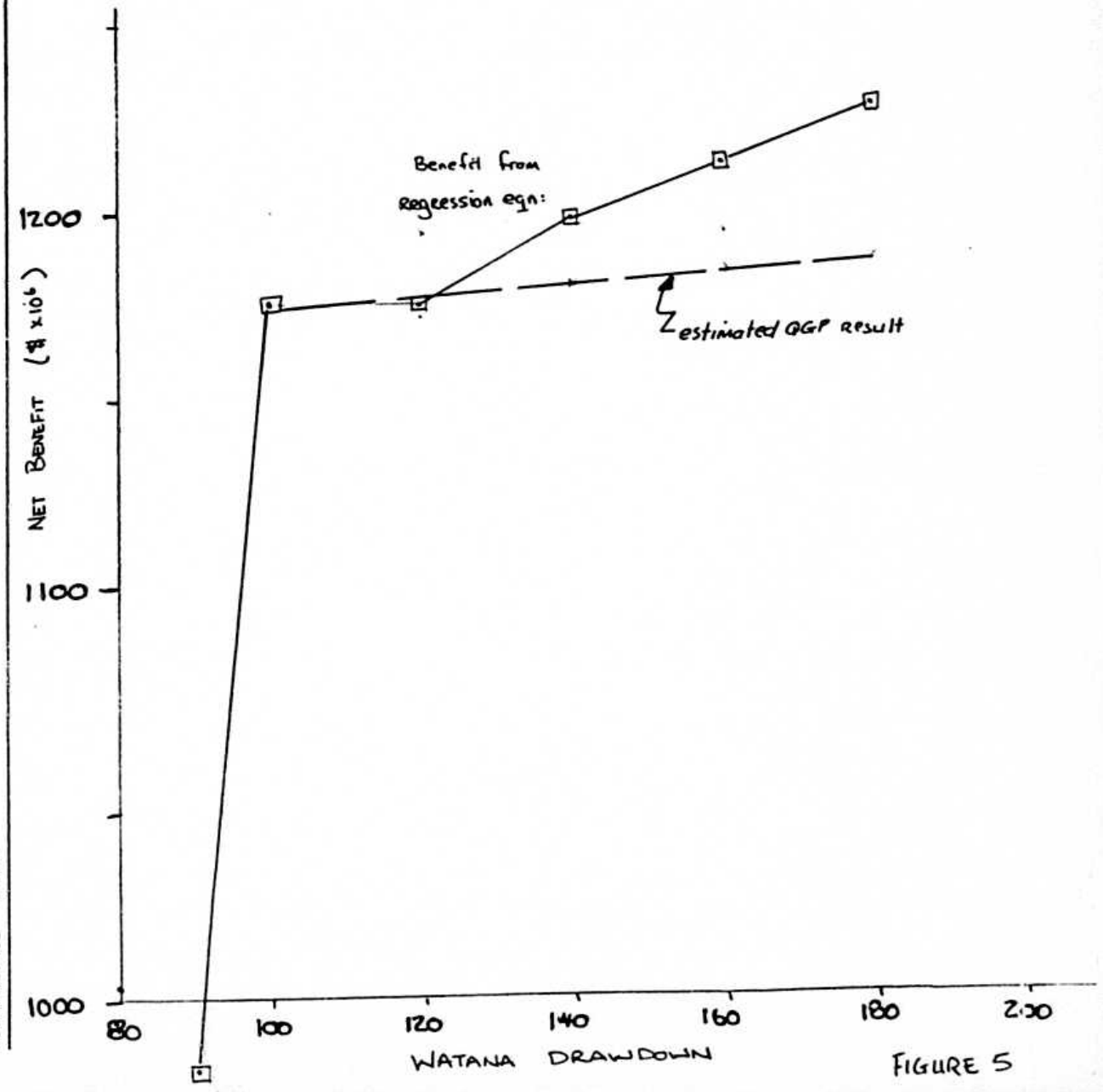


FIGURE 5

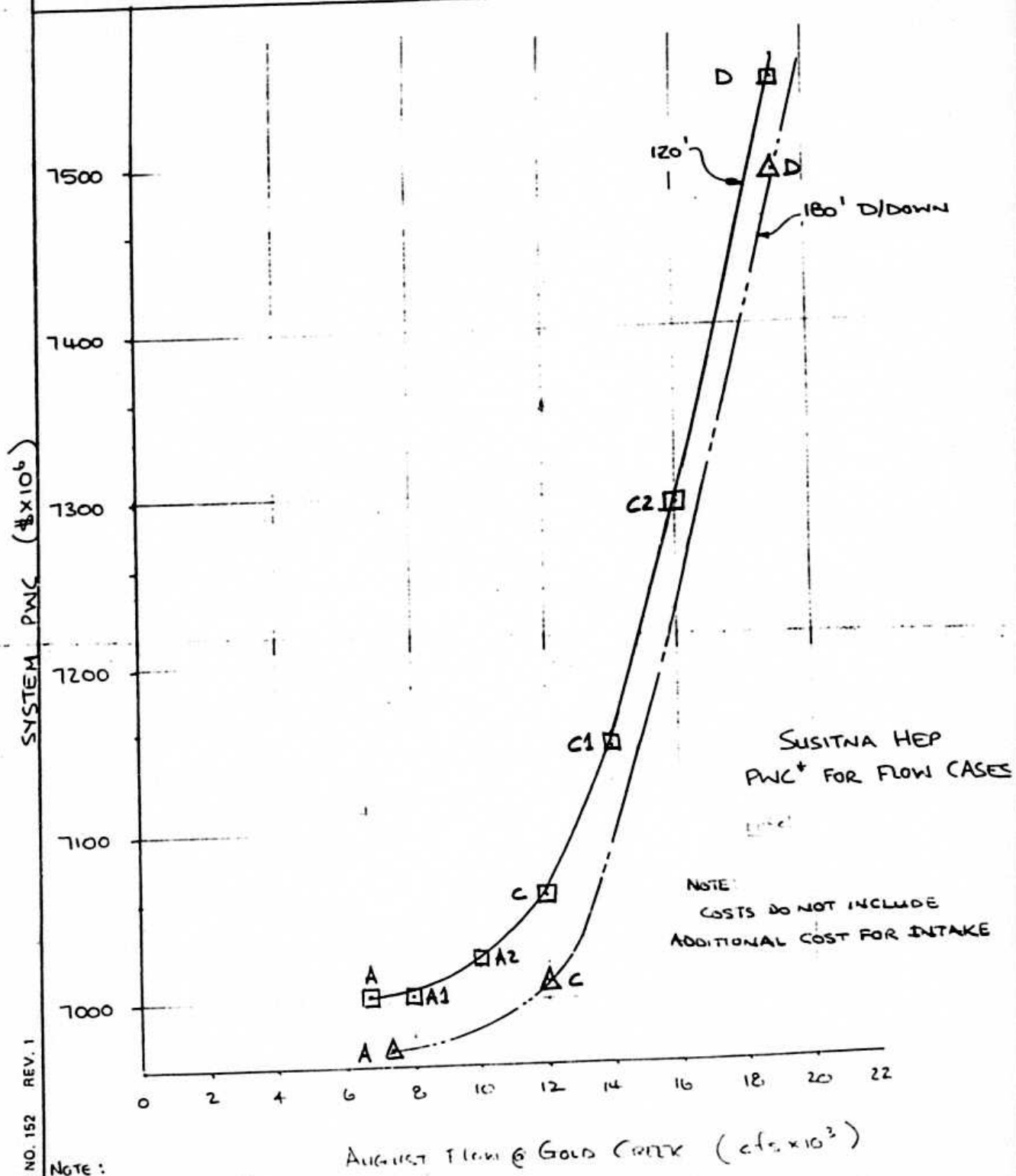
FORM NO. 152 REV. 1

ACRES

Calculations

SUBJECT:

JOB NUMBER 2321.52
FILE NUMBER
SHEET OF
BY DC DATE 21 Sept 82
APP DATE



NOTE:
* Determined from Regression

FORM NO. 152 REV. 1

ACRES

Calculations

SUBJECT:

JOB NUMBER PS701.53
FILE NUMBER
SHEET OF
BY DC DATE 7 SEP 92
APP DATE

WATANA DRAWDOWN [MODIFIED HYDROLOGY]

BENEFIT BASED ON REGRESSION ANALYSIS

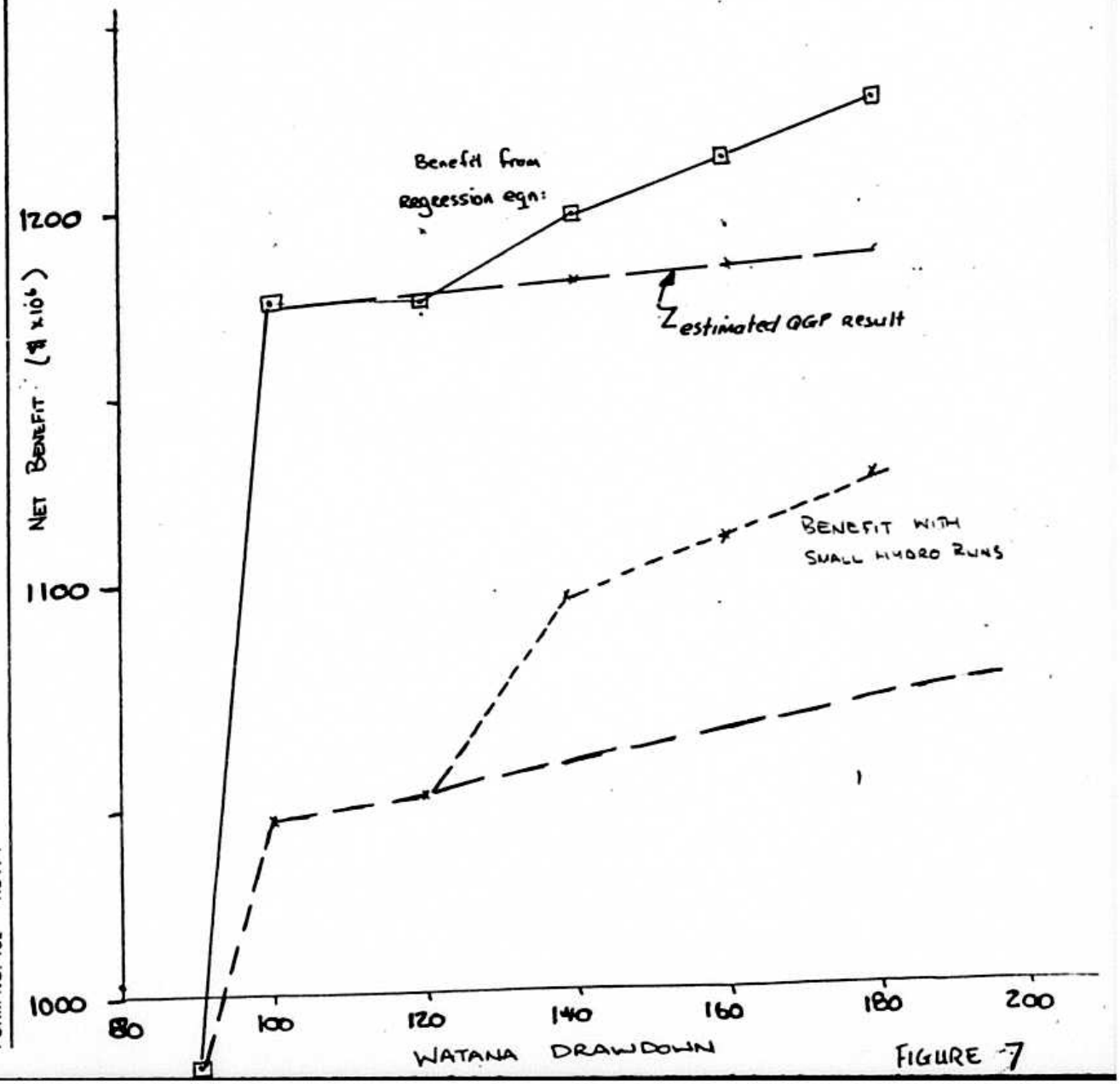


FIGURE 7

FORM NO. 152 REV. 1

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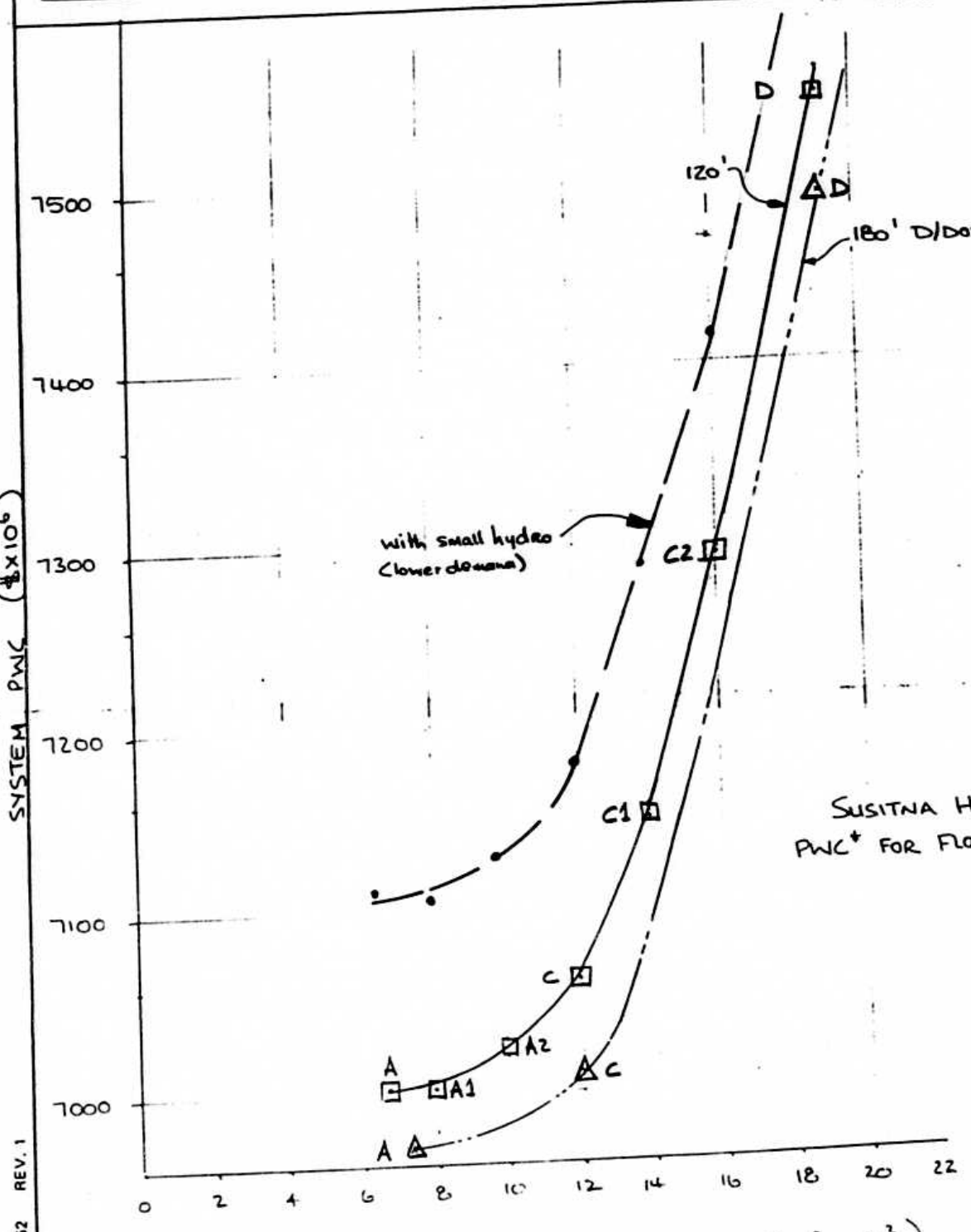
Calculations

SUBJECT:

JOB NUMBER 2501.53
FILE NUMBER
SHEET ____ OF ____
BY DC DATE 21 Sept 82
APP ____ DATE ____



NOTE:
* Determined from Regression

FIGURE 8

FORM NO. 152 REV. 1

FIGURE 2 AYKEL

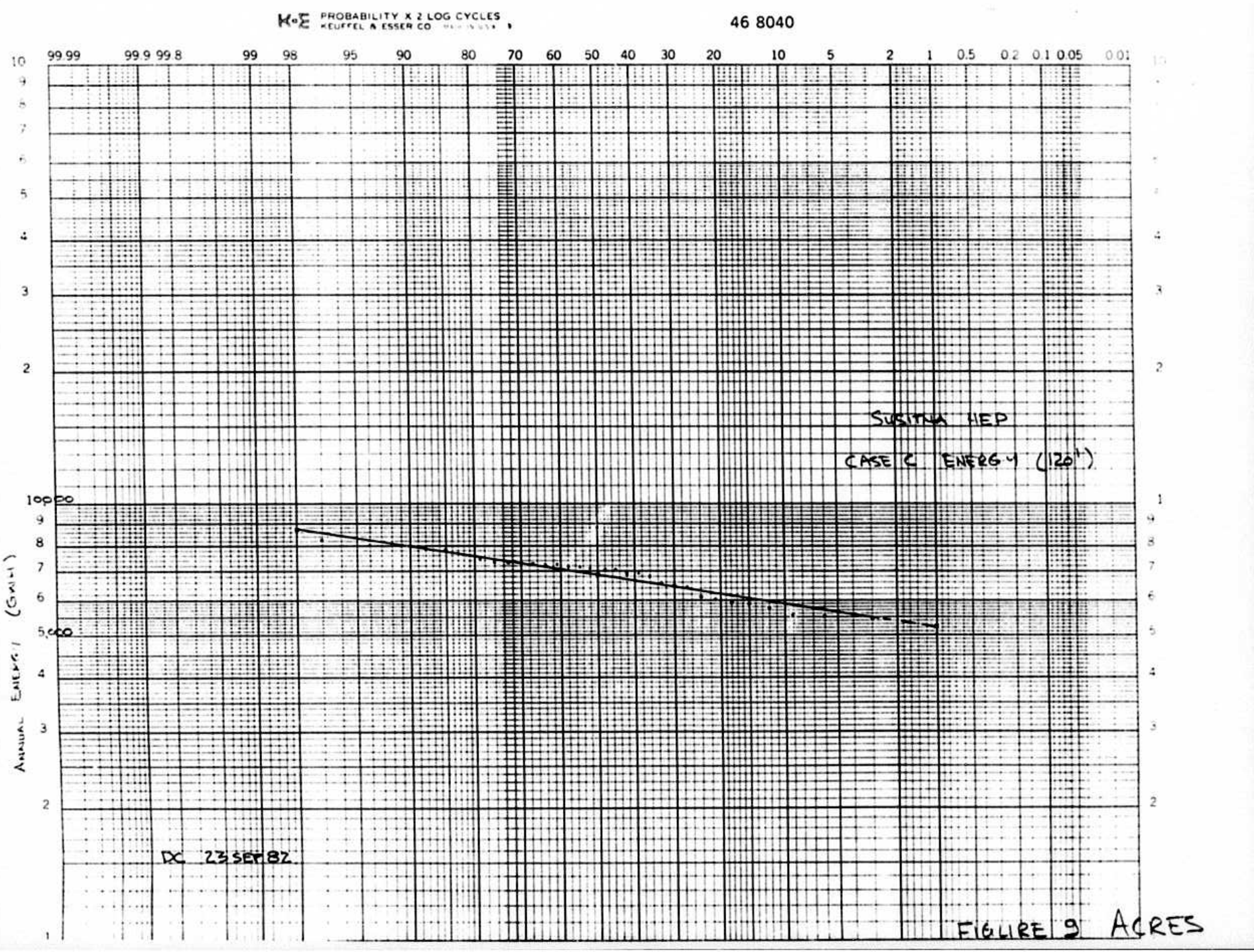


FIGURE 9 ACRES

ATTACHMENT A

ACHCS

OFFICE MEMORANDUM

TO: Dave Crawford

Date: September 2, 1982

File: P5700.14.57

FROM: Phil Hoover

cc: G. Krishnan

SUBJECT:

Attached are the results and OGP summaries as related by phone on September 1. C140 and C200 have some slightly unusual results due to our cut-off dates and methodology.

Please call if you have any questions.

Phil Hoover

PMH/pml

Attachments

ACRES

Calculations

SUBJECT: Generation Planning Study
Alternative Drawdowns
Summary Table

JOB NUMBER P5700.57
FILE NUMBER
SHEET ____ OF ____
BY PMH DATE 9/82
APP ____ DATE ____

CASE	C	C	C	C
Drawdown	140	160	180	200
August Flow ID	L5A7	L5A9	L5B1	L5B3
Available Energy (GWh)				
Ave	6714	6711	6710	6704
Firm	4920	5369	5654	5778
Usable Energy				
Ave	6671	6658	6640	6619
Firm	4883	5325	5604	5722
Costs	in $1,000,000			
1993-2010	$3207.3	$3192.5	$3186.8	$3185.0
2010	390.9	386.2	381.8	382.2
2010-2051	4000.3	3952.2	3907.2	3911.28
LTC	$7208	$7145	$7094	$7096.3
GT CAP	4x70	3x70	2x70	2x70
NB	$1030	$1093	$1144	$1142

Based on $8238 Alternative

FORM NO. 152 REV. 1

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML5A7 09/01/82

GENERATION SYSTEM

	NUKE	COAL	NGASGT	OIL GT	DIESEL	COMCYC	TYPES 7-10	
TYPE	1	2	3	4	5	6	***	
OPTMZING	0	1993	1993	0	0	1993		
PCT TRIM	0	0	0	0	0	0		
1992 MW	0	59	452	141	67	317	155	SUM= 1190

YR	YEARLY MW ADDITIONS							TOTAL CAPAB. + TIES	
**	******	******	******	******	******	******	*****	680*	1853
93									1822
94									1774
95									1704
96									1630
97									1575
98									1575
99									1531
0									1531
1								600*	2078
2									2025
3								1*	2026
4									2008
5		1X 70						1*	2056
6		1X 70							2056
7								1*	2101
8		1X 70							2170
9		1X 70						1*	2171
10									
								1284	SUM= 15
MW ADD	0	0	280	0	0	0		0	SUM= -5
MW RET	0	-46	-335	-141	-61	0			
								1439	SUM= 217
2010	0	13	396	0	6	317		66.3	SUM=100 PC
PCT TOT	0.	0.6	18.3	0.	0.3	14.6			
								0	SUM=
AUTO	0	0	280	0	0	0		0.	SUM=100 PC
PCT TOT	0.	0.	100.0	0.	0.	0.			

* COMMITTED MW

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML5A7 09/01/82
****

YEAR	LOAD	TOTAL CAPABILITY (INCLUDING TIES) YEAR END	TOTAL CAPABILITY (INCLUDING TIES) TIME OF PEAK	PCT. RES.	LOSS OF LOAD PROBABILITY D/Y	LOSS OF LOAD PROBABILITY H/Y	COST IN MILLION $ YEARLY COST	COST IN MILLION $ CUM. PW TOTAL
****	*****	*****	*****	****	******	******	*******	*******
1993	947	1853	1853	95.7	0.000	0.	249.7	180.4
1994	965	1822	1822	88.8	0.000	0.	253.4	356.1
1995	983	1774	1774	80.5	0.000	0.	256.9	533.1
1996	1003	1704	1704	69.9	0.000	0.	269.4	711.2
1997	1023	1630	1630	59.4	0.000	0.	274.2	887.2
1998	1044	1575	1575	50.8	0.004	0.	280.4	1061.9
1999	1064	1575	1575	48.0	0.007	0.	286.3	1235.2
2000	1084	1531	1531	41.2	0.038	0.	295.3	1408.6
2001	1121	1531	1531	36.6	0.074	0.	304.7	1582.4
2002	1158	2078	2078	79.5	0.000	0.	352.6	1777.6
2003	1196	2025	2025	69.3	0.003	0.	354.2	1968.0
2004	1233	2026	2026	64.3	0.008	0.	354.7	2153.2
2005	1270	2008	2008	58.1	0.025	0.	359.0	2335.0
2006	1323	2056	2056	55.4	0.021	0.	364.2	2514.2
2007	1377	2056	2056	49.3	0.060	0.	370.3	2691.0
2008	1430	2101	2101	46.9	0.066	0.	370.3	2862.7
2009	1484	2170	2170	46.2	0.033	0.	385.9	3036.5
2010	1537	2171	2171	41.2	0.076	0.	390.9	3207.3

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML5A7 09/01/82
****

YR	POOL PEAK (MW)	TOTAL ENERGY (GWH)	LOAD FACTOR	TOTAL COSTS (MIL.$)	YEARLY $/MWH INV.	FUEL	O+M	N.I.	TOTAL
93	947	4736	57.09	250	42.05	5.92	4.74	0.	52.72
94	965	4829	57.13	253	41.24	6.49	4.75	0.	52.48
95	983	4922	57.16	257	40.46	6.96	4.77	0.	52.20
96	1003	5031	57.10	269	39.59	9.24	4.73	0.	53.56
97	1023	5141	57.37	274	38.74	9.88	4.73	0.	53.35
98	1044	5250	57.40	280	37.94	10.72	4.74	0.	53.40
99	1064	5360	57.51	286	37.16	11.47	4.79	0.	53.42
0	1084	5469	57.44	295	36.42	12.78	4.81	0.	54.01
1	1121	5661	57.65	305	35.18	13.82	4.83	0.	53.83
2	1158	5852	57.69	353	50.23	4.54	5.47	0.	60.25
3	1196	6044	57.69	354	48.64	4.58	5.38	0.	58.60
4	1233	6235	57.57	355	47.15	4.44	5.31	0.	56.89
5	1270	6428	57.78	359	46.31	4.35	5.19	0.	55.85
6	1323	6701	57.82	364	44.98	4.26	5.11	0.	54.35
7	1377	6973	57.81	370	43.23	4.84	5.04	0.	53.10
8	1430	7246	57.69	370	42.14	4.03	4.94	0.	51.10
9	1484	7518	57.83	386	41.14	5.24	4.96	0.	51.34
10	1537	7790	57.86	391	39.70	5.56	4.91	0.	50.17

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZEROZ - 3%
JOB NUMBER 2ML5A9 09/01/82

****

GENERATION SYSTEM

	NUKE	COAL	NGASGT	OIL GT	DIESEL	COMCYC	TYPES	
TYPE	1	2	3	4	5	6	7-10	
OPTMZING	0	1993	1993	0	0	1993	***	
PCT TRIM	0	0	0	0	0	0		
1992 MW	0	59	452	141	67	317	155	SUM= 1190

****

YR	YEARLY MW ADDITIONS							TOTAL CAPAB. + TIES
**	*******	*******	*******	*******	*******	*******	*****	****** ****
93							680*	1853
94								1822
95								1774
96								1704
97								1630
98								1575
99								1575
0								1531
1								1531
2							600*	2078
3								2025
4							1*	2026
5								1938
6							1*	1916
7			1X 70					1986
8			1X 70				1*	2031
9								2030
10			1X 70				1*	2101
MW ADD	0	0	210	0	0	0	1284	SUM= 1494
MW RET	0	-46	-335	-141	-61	0	0	SUM= -583
******	******	******	******	******	******	******	****	**********
2010	0	13	326	0	6	317	1439	SUM= 2101
PCT TOT	0.	0.6	15.5	0.	0.3	15.1	68.5	SUM=100 PCT
AUTO	0	0	210	0	0	0	0	SUM= 210
PCT TOT	0.	0.	100.0	0.	0.	0.	0.	SUM=100 PCT

* COMMITTED MW

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML5A9 09/01/82
****

YEAR	LOAD	TOTAL CAPABILITY (INCLUDING TIES) YEAR END	TOTAL CAPABILITY (INCLUDING TIES) TIME OF PEAK	PCT. RES.	LOSS OF LOAD PROBABILITY D/Y	LOSS OF LOAD PROBABILITY H/Y	COST IN MILLION $ YEARLY COST	COST IN MILLION $ CUM. PW TOTAL
****	*****	*****	*****	****	******	******	*******	*******
1993	947	1853	1853	95.7	0.000	0.	249.7	180.4
1994	965	1822	1822	88.8	0.000	0.	253.4	358.1
1995	983	1774	1774	80.5	0.000	0.	256.9	533.1
1996	1003	1704	1704	69.9	0.000	0.	269.4	711.2
1997	1023	1630	1630	59.4	0.000	0.	274.2	887.2
1998	1044	1575	1575	50.8	0.004	0.	280.4	1061.9
1999	1064	1575	1575	48.0	0.007	0.	286.3	1235.2
2000	1084	1531	1531	41.2	0.038	0.	295.3	1408.6
2001	1121	1531	1531	36.6	0.074	0.	304.7	1582.4
2002	1158	2078	2078	79.5	0.000	0.	352.6	1777.(
2003	1196	2025	2025	69.3	0.000	0.	354.2	1968.(
2004	1233	2026	2026	64.3	0.001	0.	354.7	2153.:
2005	1270	1938	1938	52.6	0.017	0.	354.6	2332.(
2006	1323	1916	1916	44.8	0.078	0.	356.2	2508.
2007	1377	1986	1986	44.2	0.041	0.	366.4	2683.'
2008	1430	2031	2031	42.0	0.047	0.	366.6	2853.
2009	1484	2030	2030	36.8	0.089	0.	379.0	3023.
2010	1537	2101	2101	36.7	0.056	0.	386.2	3192.

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML5A9 09/01/82
****

YR	POOL PEAK (MW)	TOTAL ENERGY (GWH)	LOAD FACTOR	TOTAL COSTS (MIL.$)	YEARLY $/MWH INV.	FUEL	O+M	N.I.	TOTAL
**	******	*******	******	******	*****	*****	*****	*****	******
93	947	4736	57.09	250	42.05	5.92	4.74	0.	52.72
94	965	4829	57.13	253	41.24	6.49	4.75	0.	52.48
95	983	4922	57.16	257	40.46	6.96	4.77	0.	52.20
96	1003	5031	57.10	269	39.59	9.24	4.73	0.	53.56
97	1023	5141	57.37	274	38.74	9.88	4.73	0.	53.35
98	1044	5250	57.40	280	37.94	10.72	4.74	0.	53.40
99	1064	5360	57.51	286	37.16	11.47	4.79	0.	53.42
0	1084	5469	57.44	295	36.42	12.78	4.81	0.	54.00
1	1121	5661	57.65	305	35.18	13.82	4.83	0.	53.83
2	1158	5852	57.69	353	50.23	4.54	5.47	0.	60.25
3	1196	6044	57.69	354	48.64	4.58	5.38	0.	58.60
4	1233	6235	57.57	355	47.15	4.44	5.31	0.	56.89
5	1270	6428	57.78	355	45.73	4.30	5.14	0.	55.17
6	1323	6701	57.82	356	43.87	4.27	5.02	0.	53.15
7	1377	6973	57.81	366	42.71	4.84	4.99	0.	52.54
8	1430	7246	57.68	367	41.64	4.06	4.90	0.	50.60
9	1484	7518	57.83	379	40.13	5.40	4.89	0.	50.42
10	1537	7791	57.87	386	39.25	5.46	4.86	0.	49.57

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML5B1 09/01/82

GENERATION SYSTEM	NUKE	COAL	NGASGT	OIL GT	DIESEL	COMCYC	TYPES 7-10	
TYPE	1	2	3	4	5	6	***	
OPTMZING	0	1993	1993	0	0	1993		
PCT TRIM	0	0	0	0	0	0		
1992 MW	0	59	452	141	67	317	155	SUM= 1190

YR	YEARLY MW ADDITIONS						TOTAL CAPAB. + TIES	
**						680*	1853	
93							1822	
94							1774	
95							1704	
96							1630	
97							1575	
98							1575	
99							1531	
0							1531	
1						600*	2078	
2							2025	
3						1*	2026	
4							1938	
5						1*	1916	
6							1916	
7		1X 70				1*	1961	
8		1X 70					2030	
9						1*	2031	
10								
						0	1284	SUM= 1424
						0	0	SUM= -393
MW ADD	0	0	140	0	0	0	0	SUM=
MW RET	0	-46	-335	-141	-61	******	****	**********
******	******	******	******	******	******	******	1439	SUM= 2031
2010	0	13	256	0	6	317	70.9	SUM=100 PCT
PCT TOT	0.	0.6	12.6	0.	0.3	15.6		
							0	SUM= 140
AUTO	0	0	140	0	0	0	0.	SUM=100 PCT
PCT TOT	0.	0.	100.0	0.	0.	0.		

* COMMITTED MW

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER: 2MLSB1 09/01/82
****

YEAR	LOAD	TOTAL CAPABILITY (INCLUDING TIES) YEAR END	TIME OF PEAK	PCT. RES.	LOSS OF LOAD PROBABILITY D/Y	H/Y	COST IN MILLION $ YEARLY COST	CUM. PW TOTAL
****	*****	*****	*****	****	******	******	*******	*******
1993	947	1853	1853	95.7	0.000	0.	249.7	180.4
1994	965	1822	1822	88.8	0.000	0.	253.4	358.1
1995	983	1774	1774	80.5	0.000	0.	256.9	533.1
1996	1003	1704	1704	69.9	0.000	0.	269.4	711.3
1997	1023	1630	1630	59.4	0.000	0.	274.2	887.2
1998	1044	1575	1575	50.8	0.004	0.	280.4	1061.9
1999	1064	1575	1575	48.0	0.007	0.	286.3	1235.2
2000	1084	1531	1531	41.2	0.038	0.	295.3	1408.6
2001	1121	1531	1531	36.6	0.074	0.	304.7	1582.4
2002	1158	2078	2078	79.5	0.000	0.	352.6	1777.6
2003	1196	2025	2025	69.3	0.000	0.	354.2	1968.0
2004	1233	2026	2026	64.3	0.000	0.	354.7	2153.2
2005	1270	1938	1938	52.6	0.005	0.	354.6	2332.8
2006	1323	1916	1916	44.8	0.023	0.	356.2	2508.1
2007	1377	1916	1916	39.2	0.064	0.	362.6	2681.3
2008	1430	1961	1961	37.1	0.073	0.	362.4	2849.3
2009	1484	2030	2030	36.8	0.038	0.	379.0	3019.9
2010	1537	2031	2031	32.1	0.082	0.	381.8	3186.8

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML5R1 09/01/82
****

YR	POOL PEAK (MW)	TOTAL ENERGY (GWH)	LOAD FACTOR	TOTAL COSTS (MIL.$)	YEARLY $/MWH INV.	FUEL	O+M	N.I.	TOTAL
**	******	******	******	******	*****	*****	*****	*****	******
93	947	4736	57.09	250	42.05	5.92	4.74	0.	52.72
94	965	4829	57.13	253	41.24	6.49	4.75	0.	52.48
95	983	4922	57.16	257	40.46	6.96	4.77	0.	52.20
96	1003	5031	57.10	269	39.59	9.24	4.73	0.	53.56
97	1023	5141	57.37	274	38.74	9.88	4.73	0.	53.35
98	1044	5250	57.40	280	37.94	10.72	4.74	0.	53.40
99	1064	5360	57.51	286	37.16	11.47	4.79	0.	53.42
0	1084	5469	57.44	295	36.42	12.78	4.81	0.	54.00
1	1121	5661	57.65	305	35.18	13.82	4.83	0.	53.83
2	1158	5852	57.69	353	50.23	4.54	5.47	0.	60.25
3	1196	6044	57.69	354	48.64	4.58	5.38	0.	58.60
4	1233	6235	57.57	355	47.15	4.44	5.31	0.	56.89
5	1270	6428	57.78	355	45.73	4.30	5.14	0.	55.17
6	1323	6701	57.82	356	43.87	4.27	5.02	0.	53.15
7	1377	6973	57.81	363	42.16	4.89	4.95	0.	52.01
8	1430	7246	57.69	362	41.11	4.05	4.85	0.	50.01
9	1484	7518	57.83	379	40.15	5.38	4.88	0.	50.42
10	1537	7791	57.87	382	38.75	5.45	4.82	0.	49.01

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML583 09/01/82
****

GENERATION SYSTEM

	NUKE	COAL	NGASGT	OIL GT	DIESEL	COMCYC	TYPES 7-10	
TYPE	1	2	3	4	5	6	***	
OPTMZING	0	1993	1993	0	0	1993		
PCT TRIM	0	0	0	0	0	0		
1992 MW	0	59	452	141	67	317	155	SUM= 1190

****

YR	YEARLY MW ADDITIONS							TOTAL CAPAB. + TIES
**	*******	*******	*******	*******	*******	*******	680*	1853
93								1822
94								1774
95								1704
96								1630
97								1575
98								1575
99								1531
0								1531
1							600*	2078
2								2025
3							1*	2026
4								1938
5							1*	1916
6								1916
7							1*	1961
8		1X 70						1960
9							1*	2031
10		1X 70						

****

MW ADD	0	0	140	0	0	0	1284	SUM= 1424
MW RET	0	-46	-335	-141	-61	0	0	SUM= -583
******	******	******	******	******	******	******	****	**********
2010	0	13	256	0	6	317	1439	SUM= 2031
PCT TOT	0.	0.6	12.6	0.	0.3	15.6	70.9	SUM=100 PCT

****

AUTO	0	0	140	0	0	0	0	SUM= 140
PCT TOT	0.	0.	100.0	0.	0.	0.	0.	SUM=100 PCT

* COMMITTED MW

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML583 09/01/82
****

YEAR	LOAD	TOTAL CAPABILITY (INCLUDING TIES) YEAR END	TOTAL CAPABILITY (INCLUDING TIES) TIME OF PEAK	PCT. RES.	LOSS OF LOAD PROBABILITY D/Y	LOSS OF LOAD PROBABILITY H/Y	COST IN MILLION $ YEARLY COST	COST IN MILLION $ CUM. PW TOTAL
****	*****	*****	*****	****	******	******	*******	*******
1993	947	1853	1853	95.7	0.000	0.	249.7	180.4
1994	965	1822	1822	88.8	0.000	0.	253.4	358.1
1995	983	1774	1774	80.5	0.000	0.	256.9	533.1
1996	1003	1704	1704	69.9	0.000	0.	269.4	711.2
1997	1023	1630	1630	59.4	0.000	0.	274.2	887.2
1998	1044	1575	1575	50.8	0.004	0.	280.4	1061.9
1999	1064	1575	1575	48.0	0.007	0.	286.3	1235.2
2000	1084	1531	1531	41.2	0.038	0.	295.3	1408.6
2001	1121	1531	1531	36.6	0.074	0.	304.7	1582.4
2002	1158	2078	2078	79.5	0.000	0.	352.6	1777.6
2003	1196	2025	2025	69.3	0.000	0.	354.2	1968.0
2004	1233	2026	2026	64.3	0.000	0.	354.7	2153.2
2005	1270	1938	1938	52.6	0.002	0.	354.6	2332.8
2006	1323	1916	1916	44.8	0.017	0.	356.2	2508.1
2007	1377	1916	1916	39.2	0.034	0.	362.6	2681.3
2008	1430	1961	1961	37.1	0.032	0.	362.2	2849.2
2009	1484	1960	1960	32.1	0.065	0.	374.9	3018.0
2010	1537	2031	2031	32.1	0.042	0.	382.2	3185.0

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML5B3 09/01/82
****

YR	POOL PEAK (MW)	TOTAL ENERGY (GWH)	LOAD FACTOR	TOTAL COSTS (MIL.$)	YEARLY $/MWH				
					INV.	FUEL	O+M	N.I.	TOTAL
**	******	*******	******	******	*****	*****	*****	*****	******
93	947	4736	57.09	250	42.05	5.92	4.74	0.	52.72
94	965	4829	57.13	253	41.24	6.49	4.75	0.	52.48
95	983	4922	57.16	257	40.46	6.96	4.77	0.	52.20
96	1003	5031	57.10	269	39.59	9.24	4.73	0.	53.56
97	1023	5141	57.37	274	38.74	9.88	4.73	0.	53.35
98	1044	5250	57.40	280	37.94	10.72	4.74	0.	53.40
99	1064	5360	57.51	286	37.16	11.47	4.79	0.	53.43
0	1084	5469	57.44	295	36.42	12.78	4.81	0.	54.00
1	1121	5661	57.65	305	35.18	13.82	4.83	0.	53.83
2	1158	5852	57.69	353	50.23	4.54	5.47	0.	60.25
3	1196	6044	57.69	354	48.64	4.58	5.38	0.	58.60
4	1233	6235	57.57	355	47.15	4.44	5.31	0.	56.89
5	1270	6428	57.76	355	45.73	4.30	5.14	0.	55.17
6	1323	6701	57.82	356	43.87	4.27	5.02	0.	53.15
7	1377	6973	57.81	363	42.16	4.89	4.95	0.	52.01
8	1430	7246	57.69	362	41.11	4.02	4.85	0.	49.98
9	1484	7518	57.83	375	39.62	5.40	4.84	0.	49.87
10	1537	7791	57.87	382	38.76	5.49	4.82	0.	49.06

ACHE

OFFICE MEMORANDUM

TO: Dave Crawford

Date: August 25, 1982

File: P5700.14.57

FROM: Phil Hoover

cc: G. Krishnan

SUBJECT: Results of GP Analysis - 2 Cases

Attached is a summary sheet and 3 sheet summaries from the OGP analysis of the 2 cases provided last week. Also included are 3 pages from each of the summary OGP printouts.

Please call if you have any questions.

Phil Hoover

PH/pml

Enclosures

ACRES

Calculations

SUBJECT: Operation Alternatives

JOB NUMBER P5700.57
FILE NUMBER
SHEET 1 OF 1
BY DATE
APP DATE

CASE	C 140' Drawdown	C 220' Drawdown
Run ID	L501	L573
August Flow		
Available	GWh	
Energy		
are	6710	6706
firm	4922	5845
Usable		
Energy		
are	6668	6634
firm	4896	5805
Dumped		
Energy		
are	42	72
firm	26	40
	$X1000	
1993-2010	3207.6	3186.6
2010 (10.2336)	389.9	381.2
2010-2051	3990.1	3901.0
LTC	$7197	7088
Gasturb Cap	4X70MW	2X70MW
NB based on ($8238)	$1040	1150

FORM NO. 152 REV. 1

GENERAL ELECTRIC COMPANY

OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT

CASE C
220' Drawdown

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML573 08/24/82

GENERATION SYSTEM

	NUKE	COAL	NGASGT	OIL GT	DIESEL	COMCYC	TYPES	
TYPE	1	2	3	4	5	6	7-10	
OPTMZING	0	1993	1993	0	0	1993	***	
PCT TRIM	0	0	0	0	0	0		
1992 MW	0	59	452	141	67	317	155	SUM= 1190

YR	YEARLY MW ADDITIONS							TOTAL CAPAB. + TIES	
**	*******	*******	*******	*******	*******	*******	*****	******	****
93							680*	1853	
94								1822	
95								1774	
96								1704	
97								1630	
98								1575	
99								1575	
0								1531	
1								1531	
2							600*	2078	
3								2025	
4							1*	2026	
5								1938	
6							1*	1916	
7								1916	
8			1X	70			1*	1961	
9								1960	
10			1X	70			1*	2031	
MW ADD	0	0	140	0	0	0	1284	SUM=	1424
MW RET	0	-46	-335	-141	-61	0	0	SUM=	-583
******	******	******	******	******	******	******	****	**********	
2010	0	13	258	0	6	317	1439	SUM=	2031
PCT TOT	0.	0.6	12.6	0.	0.3	15.6	70.9	SUM=100 PCT	
0010	0	0	140	0	0	0	0	SUM=	140
PCT TOT	0.	0.	100.0	0.	0.	0.	0.	SUM=100 PCT	

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML573 08/24/82
****

YEAR	LOAD	TOTAL CAPABILITY (INCLUDING TIES) YEAR END	TIME OF PEAK	PCT. RES.	LOSS OF LOAD PROBABILITY D/Y	H/Y	COST IN MILLION $ YEARLY COST	CUM. PW TOTAL
****	*****	*****	*****	****	*****	*****	*******	*******
1993	947	1853	1853	95.7	0.000	0.	249.7	180.4
1994	965	1822	1822	88.8	0.000	0.	253.4	358.1
1995	983	1774	1774	80.5	0.000	0.	256.9	533.1
1996	1003	1704	1704	69.9	0.000	0.	269.4	711.2
1997	1023	1630	1630	59.4	0.000	0.	274.2	887.2
1998	1044	1575	1575	50.8	0.004	0.	280.4	1061.9
1999	1064	1575	1575	48.0	0.007	0.	286.3	1235.2
2000	1084	1531	1531	41.2	0.038	0.	295.3	1408.6
2001	1121	1531	1531	36.6	0.074	0.	304.7	1582.4
2002	1158	2078	2078	79.5	0.000	0.	352.6	1777.6
2003	1196	2025	2025	69.3	0.000	0.	354.2	1968.0
2004	1233	2026	2026	64.3	0.000	0.	354.7	2153.2
2005	1270	1938	1938	52.6	0.001	0.	355.9	2333.5
2006	1323	1916	1916	44.8	0.014	0.	357.5	2509.3
2007	1377	1916	1916	39.2	0.030	0.	363.1	2682.8
2008	1430	1961	1961	37.1	0.027	0.	363.3	2851.2
2009	1484	1960	1960	32.1	0.054	0.	374.8	3020.0
2010	1537	2031	2031	32.1	0.029	0.	381.2	3186.6

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

GENERAL ELECTRIC COMPANY

OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT

****

ALASKA RAILBELT
ZEROZ - 3Z
JOB NUMBER 2ML573 08/24/82
****

YR	POOL PEAK (MW)	TOTAL ENERGY (GWH)	LOAD FACTOR	TOTAL COSTS (MIL.$)	YEARLY $/MWH INV.	FUEL	O+M	N.I.	TOTAL
**	******	*******	******	******	*****	*****	*****	*****	******
93	947	4736	57.09	250	42.05	5.92	4.74	0.	52.72
94	965	4829	57.13	253	41.24	6.49	4.75	0.	52.48
95	983	4922	57.16	257	40.46	6.96	4.77	0.	52.20
96	1003	5031	57.10	269	39.59	9.24	4.73	0.	53.56
97	1023	5141	57.37	274	38.74	9.88	4.73	0.	53.35
98	1044	5250	57.40	280	37.94	10.72	4.74	0.	53.40
99	1064	5360	57.51	286	37.16	11.47	4.79	0.	53.42
0	1084	5469	57.44	295	36.42	12.78	4.81	0.	54.00
1	1121	5661	57.65	305	35.18	13.82	4.83	0.	53.83
2	1158	5852	57.69	353	50.23	4.54	5.47	0.	60.25
3	1196	6044	57.69	354	48.64	4.58	5.38	0.	58.60
4	1233	6235	57.57	355	47.15	4.44	5.31	0.	56.89
5	1270	6428	57.78	356	45.73	4.49	5.14	0.	55.37
6	1323	6701	57.82	357	43.87	4.45	5.03	0.	53.35
7	1377	6973	57.81	363	42.16	4.96	4.96	0.	52.07
8	1430	7246	57.69	363	41.11	4.17	4.96	0.	50.14
9	1484	7518	57.83	375	39.62	5.39	4.84	0.	49.86
10	1537	7791	57.86	381	38.76	5.36	4.82	0.	48.93

GENERAL ELECTRIC COMPANY

OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT

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CASE C
140' Drawdown

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML501 08/24/82
****

GENERATION SYSTEM

	NUKE	COAL	NGASGT	OIL GT	DIESEL	COMCYC	TYPES	
TYPE	1	2	3	4	5	6	7-10	
OPTMZING	0	1993	1993	0	0	1993	***	
PCT TRIM	0	0	0	0	0	0		
1992 MW	0	59	452	141	67	317	155	SUM= 1190

****

YR	YEARLY MW ADDITIONS							TOTAL CAPAB. + TIES	
**	*******	*******	*******	*******	*******	*******	*****	******	****
93							680*	1853	
94								1822	
95								1774	
96								1704	
97								1630	
98								1575	
99								1575	
0								1531	
1								1531	
2							600*	2078	
3								2025	
4							1*	2026	
5			1X 70					2008	
6			1X 70				1*	2056	
7								2056	
8			1X 70				1*	2101	
9			1X 70					2170	
10							1*	2171	

****
****

MW ADD	0	0	280	0	0	0	1284	SUM= 1564
MW RET	0	-46	-335	-141	-61	0	0	SUM= -583
******	******	******	******	******	******	******	****	**********
2010	0	13	396	0	6	317	1439	SUM= 2171
PCT TOT	0.	0.6	18.3	0.	0.3	14.6	66.3	SUM=100 PCT

****

ADD	0	0	280	0	0	0	0	SUM= 280
PCT TOT	0.	0.	100.0	0.	0.	0.	0.	SUM=100 PCT

* COMMITTED MW

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
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ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML501 08/24/82
****

YEAR	LOAD	TOTAL CAPABILITY (INCLUDING TIES) YEAR END	TIME OF PEAK	PCT. RES.	LOSS OF LOAD PROBABILITY D/Y	H/Y	COST IN MILLION $ YEARLY COST	CUM. PW TOTAL
****	*****	*****	*****	****	******	******	*******	*******
1993	947	1853	1853	95.7	0.000	0.	249.7	180.4
1994	965	1822	1822	88.8	0.000	0.	253.4	358.1
1995	983	1774	1774	80.5	0.000	0.	256.9	533.1
1996	1003	1704	1704	69.9	0.000	0.	269.4	711.2
1997	1023	1630	1630	59.4	0.000	0.	274.2	887.2
1998	1044	1575	1575	50.8	0.004	0.	280.4	1061.9
1999	1064	1575	1575	48.0	0.007	0.	286.3	1235.2
2000	1084	1531	1531	41.2	0.038	0.	295.3	1408.6
2001	1121	1531	1531	36.6	0.074	0.	304.7	1582.4
2002	1158	2078	2078	79.5	0.000	0.	349.4	1775.9
2003	1196	2025	2025	69.3	0.003	0.	355.8	1967.2
2004	1233	2026	2026	64.3	0.008	0.	352.3	2151.1
2005	1270	2008	2008	58.1	0.026	0.	359.9	2333.4
2006	1323	2056	2056	55.4	0.021	0.	363.4	2512.2
2007	1377	2056	2056	49.3	0.060	0.	374.8	2691.2
2008	1430	2101	2101	46.9	0.065	0.	369.3	2862.5
2009	1484	2170	2170	46.2	0.033	0.	388.1	3037.1
2010	1537	2171	2171	41.2	0.075	0.	389.9	3207.6

3990.1
3207.6
7197.7

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ALASKA RAILBELT
ZERO% - 3%
JOB NUMBER 2ML501 08/24/82
****

YR	POOL PEAK (MW)	TOTAL ENERGY (GWH)	LOAD FACTOR	TOTAL COSTS (MIL.$)	YEARLY $/MWH				
					INV.	FUEL	O+M	N.I.	TOTAL
	******	*******	******	******	*****	*****	*****	*****	******
83	947	4736	57.09	250	42.05	5.92	4.74	0.	52.72
84	965	4829	57.13	253	41.24	6.49	4.75	0.	52.48
85	983	4922	57.16	257	40.46	6.96	4.77	0.	52.20
86	1003	5031	57.10	269	39.59	9.24	4.73	0.	53.56
87	1023	5141	57.37	274	38.74	9.88	4.73	0.	53.35
88	1044	5250	57.40	280	37.94	10.72	4.74	0.	53.40
89	1064	5360	57.51	286	37.16	11.47	4.79	0.	53.42
90	1084	5469	57.44	295	36.42	12.78	4.81	0.	54.00
91	1121	5661	57.65	305	35.18	13.82	4.83	0.	53.83
92	1158	5852	57.69	349	50.24	4.03	5.45	0.	59.71
93	1196	6044	57.69	356	48.64	4.85	5.39	0.	58.88
94	1233	6235	57.57	352	47.15	4.06	5.30	0.	56.51
95	1270	6428	57.78	360	46.31	4.49	5.20	0.	55.99
96	1323	6701	57.82	363	44.98	4.14	5.11	0.	54.23
97	1377	6973	57.81	375	43.23	5.45	5.08	0.	53.76
98	1430	7246	57.68	369	42.14	3.88	4.96	0.	50.97
99	1484	7518	57.83	388	41.14	5.49	4.99	0.	51.62
00	1537	7790	57.86	390	39.70	5.42	4.92	0.	50.05

GENERAL ELECTRIC COMPANY
OGP-5 GENERATION PLANNING PROGRAM-SUMMARY OUTPUT
****

ATTACHMENT B

[illegible]

[illegible]

8/31/82
7:30 A.M.

[illegible]

TELEX TO AHC
ATTN: J. HAYDEN

SUSITNA WATANA INCREASED DRAWDOWN
REFERENCE TO D. CRAWFORD REQUEST OF 8/23/82.

1. INCREASED COST OF INTAKE STRUCTURE FOR 220' DRAWDOWN INCLUDING APPROACH CHANNEL EXCAVATION WITH ROCK SLOPES AND ROCK SUPPORTS IN THE SAME ORDER AS IN PFR IS 95 MILLION DLRS. THIS ASSUMES OUTLET STRUCTURE ALSO TO BE LOWERED. IF OUTET STRUCTURE IS KEPT AT SAME LEVEL AS IN PFR, INCREASE IN COST IS 82 MILLION DLRS.

2. CURRENT GEOTECH ANALYSIS SEEMS TO INDICATE THAT ALLOWANCE IN PFR FOR ROCK SUPPORTS AS SLOPWE BATTER SHOULD BE AT LEAST 63 DEGREES TO HORIZONTAL TO REMOVE RISK OF FAILURE OF INTAKE STRUCTURE BACK FACE BY TOPPLING OR PLANE FAILURE. BILL LAWR WILL DISCUSS DETAILS OF POSSIBLE ALTERNATIVE SUPPORTS. A COST ESTIMATE CAN BE MADE ONLY AFTER THIS DECISION. PLEASE REQUEST BILL TO CALL LANCE DUNCAN OR DEREK O'NEILL TOMORROW WITH THE DECISION SO COST CAN BE ESTIMATED. No costs determined

3. INTERFERENCE OF REVISED BACKSLOPES MAY AFFECT HYDRAULICS OF INTAKE AND SPILLWAY CHANNELS. BUT THESE CANNOT BE QUANTIFIED IN TH E TIME AVAILABLE.

4. WITH TURBINE CHARACTERISTICS UNALTERED FROM PFR, MAXIMUM POWER CAPABILITY OF UNIT IN DECEMBER OF FIRM YEAR (GROSS HEAD 606 FT) IS 150 MW AS COMPARED TO 170 MW IN PFR.

5. EFFECT OF LOWER HEADS IN CASE OF 220' DRAWDOWN DO NOT AFFECT TURBINE OUTPUT SIGNIFICANTLY IN THE FIRM YEAR. THIS IS BASED ON DC'S DATA ON HEADS AND DISCHARGES GIVEN TO CK.

IF YOU HAVE ANY QUESTIONS, PLEASE LET US KNOW.

REGARDS.

LAWRENCE/KRISHNAN+
[illegible]
+
[illegible]
TECKYPOY

+
AI DL
[illegible] F
P

[illegible]

ACRES

OFFICE MEMORANDUM

TO: J. W. Hayden

Date: August 27, 1982

FROM: D. W. Lamb

File: P5700.14.06

SUBJECT: SUSITNA HYDROELECTRIC PROJECT
Watana Intake Structure & Drawdown

---

1. In consideration of the geotechnical consequences of lowering the intake sill level, the following considerations have been identified:
   a. Increased intake structure height which, in conjunction with increased adjacent rock face height, may magnify earthquake loadings;

   b. Increased intake structure rock wall height, which represents a significant increase in rock support to maintain a stable face against which to anchor the intake stuucture;

   c. Increased channel rock cut heights, requiring flatter slopes and increased support; and

   d. Increased channel cut depths and backslope distances, with consequential increase in total channel widths whixh may create interference between various civil features and with adverse geologic features.

The first problem identified cannot be accurately quantified without specific site response data which we do not have, but can be approximated by Civil Department using UBC and ACI codes. The other three are addressed below in a bi: more detail.

2. The increased heights of the rock faces abutting the intake structure would present significant additional costs in support. The attached calculation sheets (pgs. 1 and 2 of 3) show the locations of concern (D on page 1, including back ends of structure) and four alternatives for the extreme height of the faces (pg. 2). Five alternative designs are possible in conceptual form:

   (i) Free-standing vertical intake structure;

   (ii) Vertical intake, cut-back slopes backfilled with concrete (either solid or with several diaphragm walls) shown as (A) on pg. 2:

   (iii) Vertical intake, strongly reinforced tied-back rock faces ("B");

   (iv) Vertical intake, supported by post-tensioned or steel struts and bracing to a stable rock face ("C");

   (v) An inclined intake against a stable rock face ("D")

From the geotechnical point of view, the coice of a free-standing tower is best but, likewise, is the least desirable with respect to earthquake loading.

Of the four alternatives (i) through (iv), the most secure, (but not necessarily the cheapest), order of preference is choices (D), (A),(C), and (B) in that order. However, in recognition of the short lead time and restricted scope of this exercise, we have included as page 3 of the calculations, our estimate of support requirements for case (B) which reflects the current design in the feasibility report.

3. The increased heights of intake and spillway channel cuts is a critical factor for slope stability. With significant extent of faces in excess of 150 feet in height, we recommend use of overall slopes of 4 V to 1 H for all faces below 150 feet, and 1.7V to 1 H (60°) for all faces higher than that. While in actuality there may be gradational change in stable slope with increasing height, we feel these numbers represent a good basis for the necessary estimate.

4. The problem with increased channel cut depths causing possible conflict with arrangements is detailed below, keyed to the slopes marked on Page 1 of the clacualtion.

SLOPE

a. (A) - Backslope Encroaches on Heel of Dam

b. (B) - Backslopes Entail Extensive Cutting to Daylight, Cut into Support for Rock Abutting Slope "D"

c. (C) - Excess Cutting Involves Large Volumes of Excavation, Interferes with Arrangements and Inlet Flow of Spillways, May Encounter Shear Zones and Adverse Rock Conditions

d. (D) - Support of High Backslopes Becomes Critical to Cost of Intake Tower

e. (E) - Additional Depth of Power Intake Channel may Encroach on Emergency Spillway Location. Lateral Shift Restricted by Proximity of Relict Cahnnel at "E"

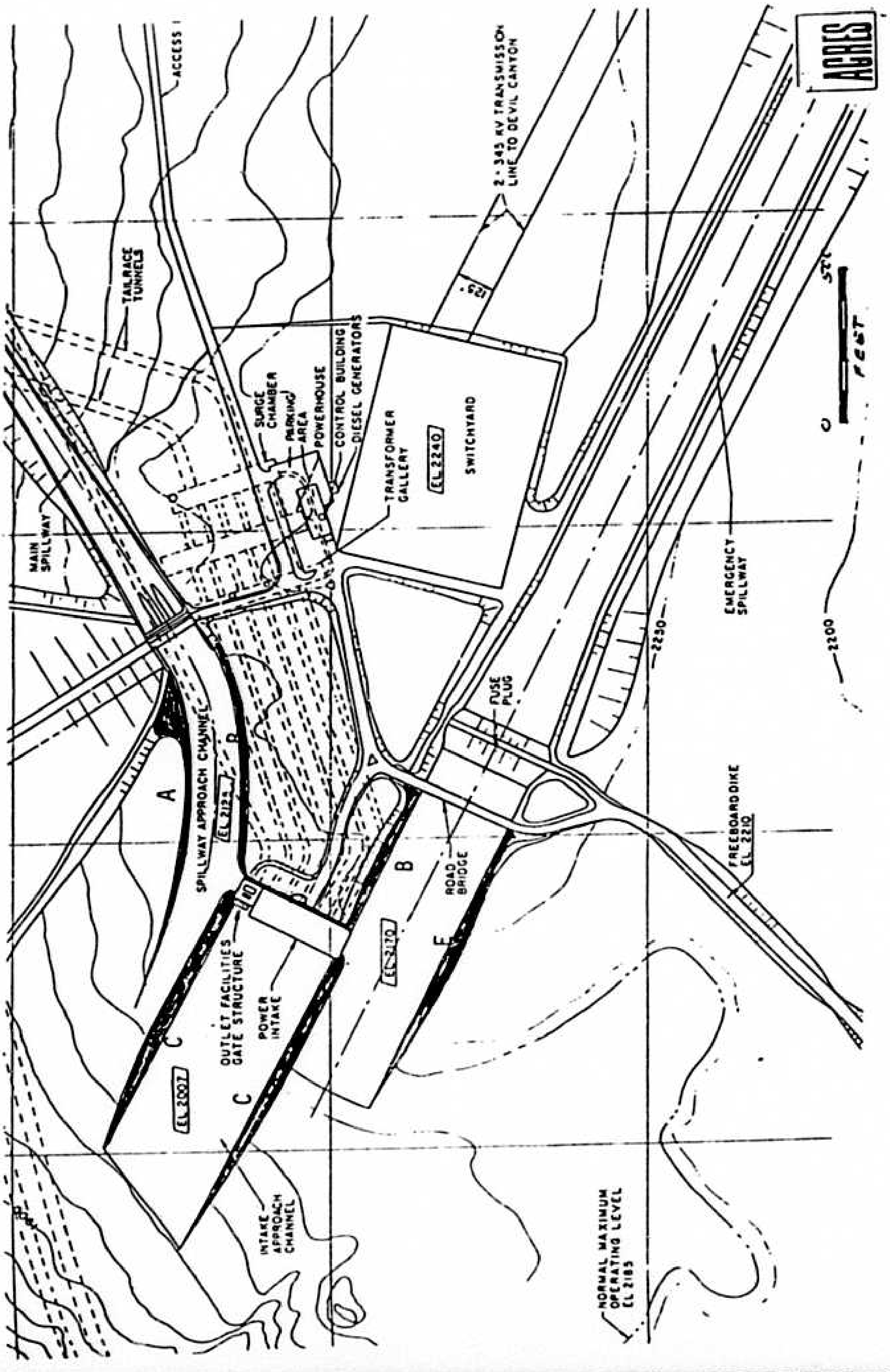
This sort of problem could be alleviated by introducing as additioanl "pilot" channel at the greater depth cut into the existing inlet channel, with a "drop cut" foresay.

5. In summary there are an absolute geotechnical constraints and lowering the power intake by 80 feet, but these will be substantize additional costs resulting from the for flattering slopes and/or rock anchor systems.

D. W. Lamb

DWL/dw
Attachments (3)

ACRES	**Calculations**
SUBJECT: WATANA DAMSITE EFFECT OF LOWERING INTAKE SILL ELEV.	JOB NUMBER P5700.55 FILE NUMBER P5700.14.06 SHEET E.1 OF 3 BY LLC DATE 8/26/82 APP ____ DATE ____



WATANA INTAKE ROCK CUTS

The lettered rock cuts indicated above are noted by the geotechnical factors which become critical in the event the cut increases in height, as described in Item 4 of the memo.

FORM NO. 152 REV. 1

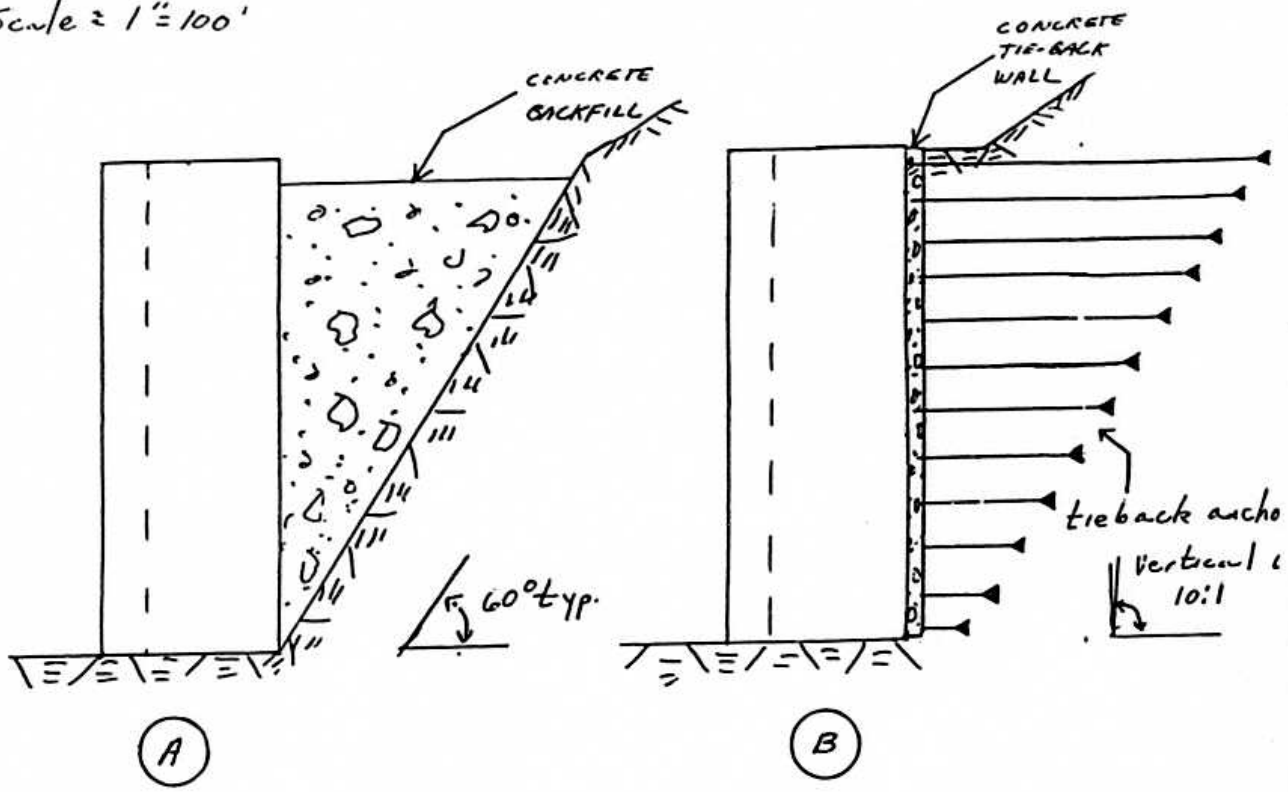
ACRES

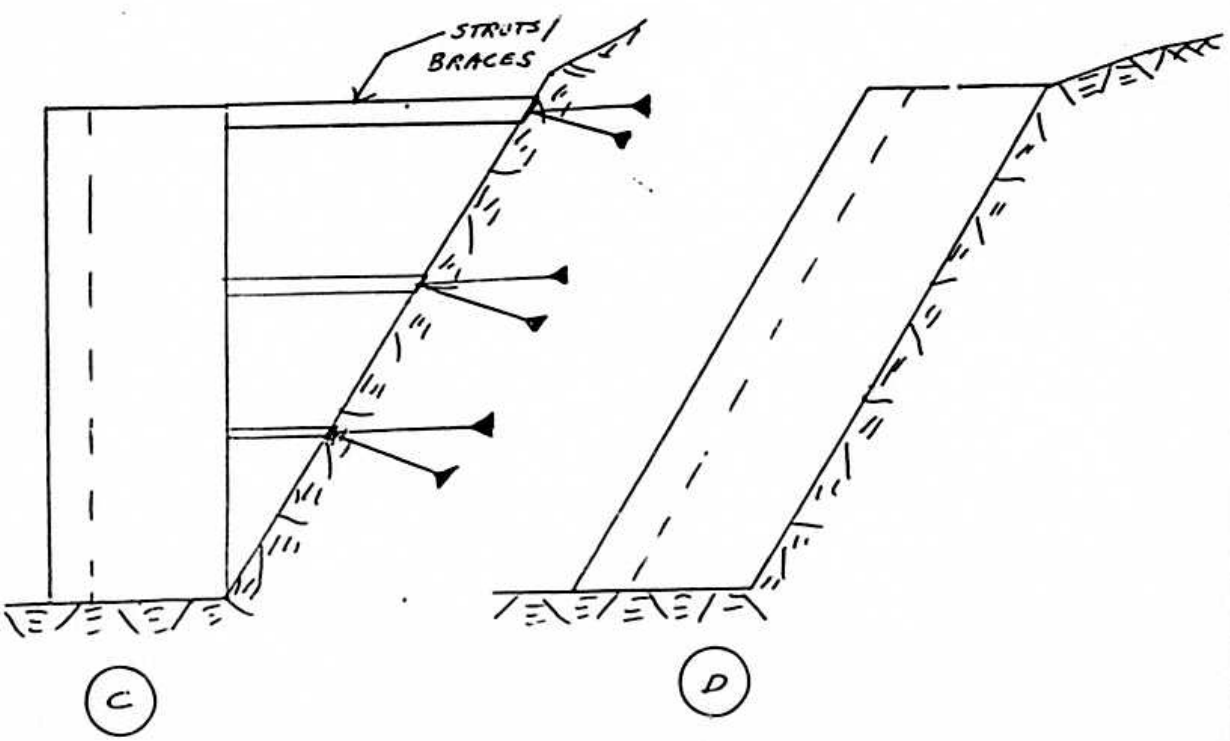
Calculations

SUBJECT: WATANA INTAKE TOWER
ALTERNATIVE ROCK SUPPORT

JOB NUMBER P5700.55
FILE NUMBER P5700/14.06
SHEET 12 OF 13
BY LCD DATE 8/26/82
AP _____ DATE _____

Scale = 1" = 100'





FORM NO. 152 REV. 1

ACRES | **Calculations**

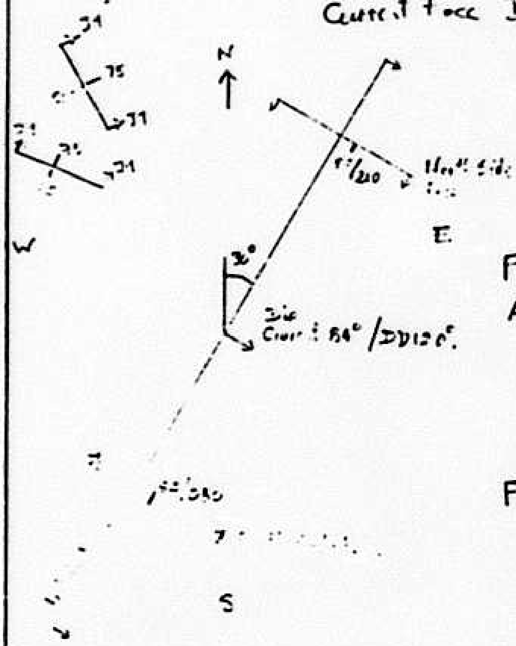
SUBJECT: Review of Intake Chann[illegible] Face. For potential Rock [illegible] on exist[illegible] or design Rock profile.

JOB NUMBER P5700
FILE NUMBER P5700 [illegible]
SHEET 3 OF 6
BY DCN DATE 21/8/82
APP ______ DATE ______

Watana Power intake: Mon Face Orientation 030 to 210° Face in terms of Dip/Dip Dim. = Dip/120.

Current Height: El 2170-2009 ie 161' Proposed New Height: 241'

Current Face Batter: 1 on 10 ie 84.28°



Requirements of Face Batter – To Cut Back face to sufficient angle to eliminate or reduce potential sliding wedges to manageable proportions by reducing effective length of wedge. Flatter – New wedge.

Four Joint Sets can combine to provide Unstable 2 plane [illegible]

As Table 6:2.
- I 290-330° Strike [illegible] NE – 80SW Dip
- II 045-080° Strike [illegible] SE – 80NW Dip
- III 310°-[illegible] Strike 45° E – 60SW Dip
- IV

For Sizing Of Possible Require —

(A) [illegible] Direction [illegible]

[illegible] Knowledge of [illegible] (C) Continuation of [illegible]

A → F1 [illegible] – B2 [illegible] Worst Case [illegible]

Define (1) All possible 2 plane [illegible]

[illegible] Dipping 20/F [illegible]

Refer [illegible] C049 / [illegible] BUG / RAW.

(3) [illegible]

[illegible]

[illegible]

Set II: 135° Dip Direction [illegible] face Dip Direction – [illegible] cut.

Set III: Dip Direction [illegible] to 120° ([illegible]) [illegible] failure [illegible] Plane failure [illegible]

Set IV: [illegible]

ACRES Calculations

SUBJECT: Review - [illegible] [illegible]

JOB NUMBER [illegible]
FILE NUMBER [illegible]
SHEET 4 OF [illegible]
BY [illegible] DATE [illegible]
APP DATE

WEDGE failure

JOINT SETS	TREND/PLUNGE OF INTERSECTION	MAIN FACE Dip 55° / Dip Dirn 120	SIDE SLOPES N.Side 54/210, S.Side [illegible]
Set I with Set III			
336/75NE ∧ 050/50SE	104° / 25 ESE	High risk to Main Face 15° off Dip Direction.	—
330/80SW ∧ [illegible]	212 / 74 SW	--	High Risk to North Side Side Slopes. [illegible]
330/[illegible] ∧ [illegible]	[illegible] / 72 SW		
230/[illegible] ∧ [illegible]	042 / 48 NNE		[illegible] Side Slopes. [illegible]
[illegible] ∧ 045/[illegible]	015 / [illegible] NNE		
Set IV with Set III			
		No [illegible]	
[illegible] ∧ [illegible]	204 / [illegible] SW		[illegible]
335/[illegible] ∧ [illegible]	[illegible] SW		[illegible] Dip Dirn.
045/[illegible] ∧ [illegible]	[illegible] NNE		[illegible]
Set II with Set III			
[illegible]	[illegible] 105° / [illegible]	Low Risk - [illegible]	[illegible]
[illegible]	[illegible]	[illegible]	
Set I with IV			
330/75NE ∧ [illegible]	105 / 20 SE	No Low risk [illegible]	No [illegible]
[illegible]	105 / [illegible] SE	[illegible]	
Set II with IV		[illegible]	
[illegible]	234 / [illegible]		Risk to [illegible]
Set [illegible] with [illegible]		[illegible]	
050/[illegible] ∧ [illegible]	[illegible] / 35 [illegible]		Low Risk [illegible]

FORM NO. 152 REV. 1

ACRES

Calculations

SUBJECT: Review Stability Intake Channel Dipping Watson

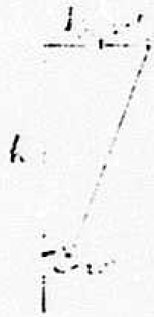
JOB NUMBER P-7-1c
FILE NUMBER P5711.14.cc
SHEET 5 OF -
BY DCN DATE 27/11/82
APP DATE

Toppling.	Main Face.	Side Slopes
	Dip 84° / 120	N Side 84/210 S Side 84/030
Set 1.	N S Risk.	30° off Dip Dir. V4 risk.
Set II 045-050 Strike / 85SE to 80 NW	Significant Risk at 045 orientation unless face battered to 85°.	N.S.R.
Set III Set IV	N.S.R.	NSR.

Conclusions:

MAIN FACE — No dimensional continuity has been given to any set, except sets I & II are stated as more continuous, & predominant than III & IV.

(A) To eliminate risk of toppling or plane failure arising from set II must batter face 80°, ie 5° shallower than currently shown.



Want [illegible]:
When h = 121' Current Max. Depth 80' = 10.58 ft.

When h = 241' Max. Depth 80' = 18.39 ft.

Maximum Anchor Length = 80' + [illegible] = 24 ft.

(B) To eliminate Wedge Failure —
Set I with II main risk.
Must batter face to at least 65° to eliminate wedge.

Want [illegible], if sets I & II have full continuity [illegible]
Currently [illegible]
[illegible] say [illegible]'
at 241' face = [illegible] say 85'.

(I) [illegible] (A) [illegible] — Implies [illegible] % Increase in [illegible]
if [illegible].

Anchor Density — will be dependent on Size of Wedge defined by dimensional continuity.
Currently continuity of set II unknown. I defined [illegible]
ie I assume >20'. [illegible] continuity of set II. to Defence Capacity.

Spacing : Set I 1 inch — '15 feet Set II 1 inch to 5'
(When present) Av 2' 2'

FORM NO. 152 REV. 1

ACRES

Calculations

SUBJECT: Rock stability Intake Channel

JOB NUMBER	[illegible]
FILE NUMBER	[illegible]
SHEET 6	OF 6
BY [illegible]	DATE [illegible]
APP	DATE

Current Factor Safety of Wedge Geometry — cf Hoek-Bray Slope Charts pp211-212.

$$F = A \tan \phi_{set I} + B \tan \phi_{set II}$$

	dip	dip dir	ϕ (Assumed).
Plane A = Set I	75	60	30
Plane B = Set II	80	170	40
	5°	110°	

Factors From Charts,

A = 0.4 0.3 0.35 B = 0.25 0.3[illegible] 0.2[illegible]

F = 0.35 tan 30 + 0.2375 tan 40

= 0.2[illegible] + 0.29

= 0.44.

Require Protection of F to 1.5.

As Wedge Geometry is tall & slender compared to width. Utilize close Horizontal Grid & Wider vertical [illegible]. [illegible] spacing to 6 feet.

Make Reinforcing Grid.

6' Horizontal 12' Vertical Staggered [illegible]

Length [illegible] for full contact [illegible]:

55 feet for 1[illegible] feet of [illegible] height.
8[illegible] feet for 2[illegible] feet face height.

Steel/Anchor Capacity to be determined.

FORM NO. 152 REV. 1

ATTACHMENT C

TY LDCRAWFORD.ENERGY.MONTHDW120.OUT

SUSITNA HEP
WATANA 2185
CASE C 120'-Lgh:R4:

EL	STORAGE
1900.0	2550000.0
1950.0	3330000.0
2000.0	4250000.0
2050.0	5340000.0
2100.0	6650000.0
2150.0	8189999.5
2200.0	10020000.0
2250.0	12210000.0

CASE C

WATANA

- 120' DRAWDOWN
- Modified Hydrology
- R4 Rule.

DC 30 Sep 82.

MINIMUM STORAGE= 5733000.0 MAXIMUM STORAGE 9654000.0

MAXIMUM P.H.Q = 19391.0 START WSEL=2185.0 TWEL=1455.0 PMAX= .10200E+07

MONTHLY BASELOAD DEMAND

0.297968E+06 0.337748E+06 0.382500E+06 0.349605E+06 0.300641E+06 0.304088E+06

0.262395E+06 0.244418E+06 0.229500E+06 0.226823E+06 0.238298E+06 0.250537E+06

MONTHLY DISCHARGE REQUIREMENT

2000.0 1000.0 1000.0 1000.0 1000.0 1000.0 1000.0 6000.0 6000.0 6484.0 12000.0 9300.0

MONTHLY WATER LEVEL

2184.0 2171.0 2154.0 2137.0 2122.0 2107.0 2093.0 2100.0 2135.0 2165.0 2180.0 2190.0

MONTHLY FLOW DISTRIBUTION

1.0 1.0 1.0 1.0 1.0 1.0 1.0 0.9 0.9 0.8 0.8 0.7

MONTHLY L.F. = 0.325

NO. YEARS OF SIMULATION = 32

PDS= 0 NSEC= 318 NDEF= 66 NDEF1= 0 NDSFL= 0

YEAR	TOTE	TOTSEC	TOTDEF
1	0.33717E+10	0.87162E+09	0.24103E+06
2	0.27670E+10	0.26989E+09	0.31611E+07
3	0.34132E+10	0.91294E+09	0.22797E+05
4	0.36156E+10	0.11153E+10	0.00000E+00
5	0.31830E+10	0.68311E+09	0.37742E+06
6	0.36494E+10	0.11511E+10	0.19579E+07
7	0.39160E+10	0.14457E+10	0.00000E+00
8	0.36573E+10	0.11570E+10	0.00000E+00
9	0.36947E+10	0.11944E+10	0.00000E+00
10	0.31765E+10	0.67861E+09	0.24329E+07
11	0.35618E+10	0.10645E+10	0.00000E+00
12	0.37044E+10	0.12041E+10	0.00000E+00
13	0.41957E+10	0.16954E+10	0.00000E+00
14	0.41354E+10	0.16351E+10	0.00000E+00
15	0.38732E+10	0.13729E+10	0.24889E+05
16	0.32976E+10	0.79900E+09	0.17246E+07
17	0.31867E+10	0.98778E+09	0.13662E+07
18	0.36868E+10	0.11893E+10	0.27825E+07
19	0.38594E+10	0.13593E+10	0.00000E+00
20	0.30244E+10	0.52784E+09	0.37512E+07
21	0.27114E+10	0.21258E+09	0.14333E+07
22	0.27529E+10	0.25585E+09	0.31947E+07
23	0.40703E+10	0.15700E+10	0.00000E+00
24	0.33210E+10	0.82235E+09	0.16606E+07
25	0.30137E+10	0.51844E+09	0.30281E+07
26	0.29076E+10	0.40827E+09	0.98166E+06
27	0.34785E+10	0.97820E+09	0.00000E+00
28	0.41772E+10	0.67993E+09	0.30018E+07
29	0.35385E+10	0.10382E+10	0.00000E+00
30	0.29781E+10	0.48066E+09	0.28034E+07
31	0.37669E+10	0.12666E+10	0.00000E+00
32	0.41730E+10	0.16728E+10	0.00000E+00

AVERAGE MONTHLY ENERGY AND POWER

MONTH	TOTAL POWER MW	PEAK POWER MW	OFFPEAK POWER MW	TOTAL ENERGY GWH	OFFPEAK ENERGY GWH	PEAK ENERGY GWH	DEFICIT MW	SEC MW
OCT	352.793	352.793	352.793	262.478	262.478	0.000	0.360	55.186
NOV	447.625	447.625	447.625	322.290	322.290	0.000	0.804	110.481
DEC	522.002	522.002	522.002	388.369	388.369	0.000	0.017	139.519
JAN	465.451	465.451	465.451	346.296	346.296	0.000	0.015	115.861
FEB	420.705	420.705	420.705	282.713	282.713	0.000	0.009	120.068
MAR	383.747	383.747	383.747	285.507	285.507	0.000	0.009	79.668
APR	346.805	346.805	346.805	249.700	249.700	0.000	0.007	84.417
MAY	346.974	346.974	346.974	258.149	258.149	0.000	0.232	102.788
JUN	315.152	315.152	315.152	226.910	226.910	0.000	0.000	85.652
JUL	276.051	276.051	276.051	205.384	205.384	0.000	0.000	19.232
AUG	501.703	501.703	501.703	373.267	373.267	0.000	0.000	263.406
SEP	380.197	380.197	380.197	273.742	273.742	0.000	0.000	129.660

AVERAGE MONTHLY DISCHARGES AND HEAD

MONTH	INFLOW	P.H.FLOW	PEAK	OFFPEAK	HEAD	SPILL	HLOSS
OCT	4522.81	6766.07	6766.07	6766.07	722.36	0.00	0.00
NOV	2059.05	8667.67	8667.67	8667.67	715.01	0.00	0.00
DEC	1414.81	10300.94	10300.94	10300.94	701.89	0.00	0.00
JAN	1165.55	9399.18	9399.18	9399.18	686.28	0.00	0.00
FEB	983.27	8685.35	8685.35	8685.35	671.40	0.00	0.00
MAR	898.33	8098.33	8098.33	8098.33	657.18	0.00	0.00
APR	1099.71	7478.08	7478.08	7478.08	643.20	0.00	0.00
MAY	10351.69	7519.61	7519.61	7519.61	629.76	0.00	0.00
JUN	23023.72	6628.34	6628.34	6628.34	659.07	0.00	0.00
JUL	20810.12	5549.63	5549.63	5549.63	689.41	0.00	0.00
AUG	18628.52	9778.77	9778.77	9778.77	711.24	0.00	0.00
SEP	10791.97	7310.72	7310.72	7310.72	721.58	0.00	0.00

AVERAGE ANNUAL ENERGY = 0.347180E+10 KWH

DELMASS = 0.18298725E+06

WAT ALONE

INFLOW CFS

YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4719.9	2083.6	1168.9	815.1	641.7	569.1	680.1	8655.9	16432.1	19193.4	16913.6	7320.4
2	3299.1	1107.3	906.2	808.0	673.0	619.8	1302.2	11649.8	18517.9	19786.6	16478.0	17205.5
3	4592.9	2170.1	1501.0	1274.5	841.0	735.0	803.9	4216.5	25773.4	22110.9	17356.3	11571.0
4	6285.7	2756.8	1281.2	818.9	611.7	670.7	1382.0	15037.2	21469.8	17355.3	16681.6	11513.5
5	4218.9	1599.6	1183.8	1087.8	803.1	638.2	942.6	11696.8	19476.7	16983.6	20420.6	9165.5
6	3859.2	2051.1	1549.5	1388.3	1050.5	886.1	940.8	6718.1	24881.4	23787.9	23537.0	13447.8
7	4102.3	1588.1	1038.6	816.9	754.8	694.4	718.3	12953.3	27171.8	25831.3	19153.4	13194.4
8	4208.0	2276.6	1707.0	1373.0	1189.0	935.0	945.1	10176.2	25275.0	19948.9	17317.7	14841.1
9	6034.9	2935.9	2258.5	1480.6	1041.7	973.5	1265.4	9957.8	22097.8	19752.7	18843.4	5978.7
10	3668.0	1729.5	1115.1	1081.0	949.0	694.0	885.7	10140.6	18329.6	20193.1	23940.4	12466.9
11	5165.5	2213.5	1672.3	1400.4	1138.9	961.1	1069.9	13044.2	13233.4	19506.1	19323.1	16085.6
12	6049.3	2327.8	1973.2	1779.9	1304.8	1331.0	1965.0	13637.9	22784.1	19839.8	19480.2	10146.2
13	4637.6	2263.4	1760.4	1608.9	1257.4	1176.8	1457.4	11333.5	36017.1	23443.7	19887.1	12746.2
14	5560.1	2508.9	1708.9	1308.9	1184.7	883.6	776.6	15299.2	20663.4	28767.4	21011.4	10800.0
15	5187.1	1789.1	1194.7	852.0	781.6	575.2	609.2	3578.8	42841.9	20082.8	14048.2	7524.2
16	4759.4	2368.2	1070.3	863.0	772.7	807.3	1232.4	10966.0	21213.0	23235.9	17394.1	16225.6
17	5221.2	1565.3	1203.6	1060.4	984.7	984.7	1338.4	7094.1	25939.6	16153.5	17390.9	9214.1
18	3269.8	1202.2	1121.6	1102.2	1031.3	889.5	849.7	12555.5	24711.9	21987.3	26104.5	13672.9
19	4019.0	1934.3	1704.2	1617.6	1560.4	1560.4	1576.7	12826.7	25704.0	22082.8	14147.5	7163.6
20	6447.0	1567.0	1073.0	884.0	748.0	686.0	850.0	7942.0	17509.0	15871.0	11078.0	8150.0
21	2403.1	1020.9	709.3	636.2	602.1	624.1	986.4	9536.4	14399.0	18410.1	16263.8	7224.1
22	3768.0	2496.4	1687.4	1097.1	777.4	717.1	813.7	2857.2	27612.8	21126.4	27446.6	12188.9
23	4979.1	2587.0	1957.4	1670.9	1491.4	1366.0	1305.4	15973.1	27429.3	19820.3	17509.5	10955.7
24	4301.2	1977.9	1246.5	1031.5	1000.2	873.9	914.1	7287.0	23859.3	16351.1	18016.7	8099.7
25	3056.5	1354.7	931.6	786.4	689.9	627.3	871.9	12889.0	14780.6	15971.9	13523.7	9786.2
26	3088.8	1474.4	1276.7	1215.8	1110.3	1041.4	1211.2	11672.2	26689.2	23430.4	15126.6	13075.3
27	5679.1	1601.1	876.2	757.8	743.2	690.7	1059.8	8938.8	19994.0	17015.3	18393.5	5711.5
28	2973.5	1926.7	1687.5	1348.7	1202.9	1110.8	1203.4	8569.4	31352.8	19707.3	16807.3	10613.1
29	5793.9	2645.3	1979.7	1577.9	1267.7	1256.7	1408.4	11231.5	17277.2	18385.2	13412.1	7132.6
30	3773.9	1944.9	1312.6	1136.8	1055.4	1101.2	1317.9	12369.3	22904.8	24911.7	16670.7	9096.7
31	6150.0	3525.0	2032.0	1470.0	1233.0	1177.0	1404.0	10140.0	23400.0	26740.0	18000.0	11000.0
32	6458.0	3297.0	1385.0	1147.0	971.0	889.0	1103.0	10406.0	17017.0	27840.0	31435.0	12026.0

POWERHOUSE FLOW CFS

YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5664.6	9716.3	11285.3	9705.6	8958.2	8080.8	7383.7	5632.5	4853.9	4617.4	9033.6	8301.0
2	5840.9	6640.7	7716.0	7189.9	6290.0	6468.3	5674.3	7874.1	4835.5	4778.1	8808.0	5265.5
3	7082.9	10164.1	11617.4	10165.0	9157.5	8246.7	7507.5	5326.8	5002.3	4797.2	8436.3	6391.0
4	8269.3	10750.7	11397.6	9709.4	8928.2	8182.4	8085.6	11375.6	4959.6	4560.9	8071.6	5543.5
5	5691.2	6591.6	11300.2	9978.3	9119.6	8149.9	7646.2	8369.3	4962.2	4590.8	6320.6	5545.5
6	5684.0	7246.1	11665.9	10278.8	9367.0	8397.8	7644.4	5258.9	5174.6	6849.6	14063.1	8457.8
7	7620.0	9582.1	11155.0	9707.4	9071.3	8206.1	7421.9	9500.1	9088.6	8818.7	10055.4	8275.0
8	7778.5	10270.5	11823.4	10263.5	9505.5	8446.7	7648.7	7000.7	7123.4	4748.4	8777.7	7254.1
9	9605.4	10929.9	12374.9	10371.1	9358.2	8485.2	7969.0	6804.2	4963.6	4755.7	8303.4	7550.0
10	5731.9	6512.7	7772.5	9971.5	9265.5	8205.7	7589.3	6968.7	4838.2	4780.9	8969.2	7390.3
11	8736.0	10207.4	11788.7	10290.9	9455.4	8472.8	7773.5	9581.9	4870.4	4812.9	7733.1	4875.6
12	6482.7	10321.7	12089.6	10670.4	9621.3	8842.7	8668.6	10116.3	5203.3	4747.4	9380.2	6076.2
13	6050.3	10257.3	11876.8	10499.4	9573.9	8688.5	8161.0	8042.3	16898.9	7579.4	11004.0	7286.0
14	9130.6	10502.9	11823.3	10199.4	9501.2	8395.3	7480.2	11611.1	4959.4	9515.9	12488.0	7780.0
15	6516.0	9783.1	11311.1	9742.5	9098.1	8086.9	7312.8	5333.1	18353.5	5020.1	9608.2	7253.2
16	5759.3	6535.8	7938.2	9560.5	9089.2	8319.0	7936.0	7711.6	4962.8	5167.4	8274.1	10381.7
17	8791.7	9559.3	11320.0	9950.9	9301.2	8496.4	8042.0	5258.9	6476.3	4555.1	7560.9	6764.1
18	5722.3	6504.8	7606.3	9992.7	9347.8	8401.2	7553.3	9142.1	6837.7	5559.2	16188.9	8753.5
19	7589.5	9928.2	11820.6	10508.1	9876.9	9072.1	8280.3	9286.2	7755.8	5705.5	8977.5	7647.6
20	5756.8	6543.1	7573.0	7636.5	9064.5	8197.7	7553.6	5258.9	4851.7	4629.7	9756.0	7674.0
21	5907.9	6809.4	7856.2	7330.4	6420.2	6619.0	5826.2	5428.1	4982.6	4747.2	8283.8	7403.1
22	5971.4	6790.2	7879.0	7336.3	6419.1	6614.8	5823.1	5501.8	5166.8	4938.7	8685.6	7048.9
23	7860.2	10580.9	12075.8	10561.4	9807.9	8877.7	8009.0	12218.0	9601.0	4742.3	10219.5	7855.7
24	5697.0	6589.5	11361.9	9922.0	9316.7	8585.6	7617.7	5258.9	4973.4	4585.1	9726.7	8325.7
25	5780.5	6573.2	7622.2	7091.7	6638.2	8139.0	7575.5	9442.3	4859.5	4654.8	9303.7	6836.2
26	5901.1	6782.7	7813.4	7274.2	6358.6	6537.0	5739.0	5346.7	7869.7	6791.1	9036.6	6065.3
27	7756.1	9595.1	10992.6	9648.3	9059.7	8202.4	7763.4	5887.1	4964.3	4587.9	10593.5	6881.0
28	5827.7	6628.1	7677.0	7135.9	6231.4	7593.1	7907.0	5554.6	12444.1	4745.4	9567.3	7273.1
29	5692.1	9188.0	12096.1	10468.4	9584.2	8768.4	8112.0	7950.3	4811.1	4608.1	9022.1	7825.6
30	5881.8	6683.9	7750.7	7215.6	6306.8	6477.9	5679.0	8309.9	5122.8	7742.0	8210.7	7626.7
31	5681.2	11305.1	12148.4	10360.5	9542.5	8688.7	8107.6	6968.2	5432.6	9231.9	9070.3	7020.0
32	9053.3	11290.9	11501.4	10037.5	9287.5	8400.7	7806.6	7207.6	4874.0	5632.0	19391.0	9316.0

SPILL CFS

YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

* DOES NOT INCLUDE SPILLAGE DUE TO INSUFFICIENT DEMAND

AVERAGE HEAD FT

YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUI	AUG	SEP
1	729.2	722.2	707.5	690.5	674.5	659.5	645.0	641.5	656.3	681.9	702.9	708.8
2	705.8	699.2	687.8	674.7	663.2	652.3	641.6	641.2	658.8	686.1	707.3	723.5
3	731.1	722.5	707.5	690.5	674.5	659.5	645.0	636.7	656.2	692.9	716.4	728.1
4	730.7	722.5	707.5	690.5	674.5	659.5	645.0	642.2	662.3	690.3	709.6	721.7
5	725.4	720.1	707.5	690.5	674.5	659.5	645.0	641.8	659.7	685.8	709.8	724.6
6	726.0	720.2	707.5	690.5	674.5	659.5	645.0	639.7	660.7	695.5	718.8	730.9
7	732.0	722.5	707.5	690.5	674.5	659.5	645.0	642.0	663.4	696.3	719.4	731.0
8	732.0	722.5	707.5	690.5	674.5	659.5	645.0	641.7	662.9	694.4	715.5	728.8
9	732.0	722.5	707.5	690.5	674.5	659.5	645.0	641.7	661.9	692.1	715.1	722.7
10	719.7	714.1	704.6	690.5	674.5	659.5	645.0	641.7	658.4	686.5	714.2	730.9
11	732.0	722.5	707.5	690.5	674.5	659.5	645.0	642.0	654.0	676.8	701.5	720.6
12	729.4	722.5	707.5	690.5	674.5	659.5	645.0	642.0	663.1	693.9	716.3	728.1
13	730.2	722.5	707.5	690.5	674.5	659.5	645.0	641.8	664.1	696.9	718.7	730.6
14	732.0	722.5	707.5	690.5	674.5	659.5	645.0	642.2	661.6	694.4	719.2	728.8
15	730.1	722.5	707.5	690.5	674.5	659.5	645.0	639.9	658.4	696.5	713.8	717.8
16	717.2	712.9	704.1	690.3	674.5	659.5	645.0	641.8	661.2	693.6	717.8	730.2
17	732.0	722.5	707.5	690.5	674.5	659.5	645.0	640.2	661.3	691.2	710.4	720.6
18	720.6	714.2	704.4	690.5	674.5	659.5	645.0	641.9	663.1	695.4	718.7	731.0
19	732.0	722.5	707.5	690.5	674.5	659.5	645.0	642.0	663.3	695.5	714.7	718.7
20	716.4	710.4	700.9	688.7	674.5	659.5	645.0	641.1	656.6	680.1	695.2	699.5
21	696.9	688.3	675.5	661.7	649.8	637.4	624.9	624.2	639.3	663.3	684.9	692.7
22	690.3	683.9	673.6	661.2	649.9	637.8	625.2	616.4	637.4	677.6	709.6	729.7
23	731.4	722.5	707.5	690.5	674.5	659.5	645.0	642.3	663.8	694.8	714.7	723.3
24	724.7	719.7	707.5	690.5	674.5	659.5	645.0	640.1	661.2	690.7	708.8	715.6
25	713.1	706.5	696.3	684.0	672.4	659.5	645.0	642.0	655.5	676.4	691.8	698.3
26	698.4	691.0	679.4	666.9	656.1	645.4	634.4	636.7	662.4	695.7	716.0	726.8
27	730.7	722.5	707.5	690.5	674.5	659.5	645.0	641.6	659.7	686.3	704.9	710.5
28	707.2	701.0	691.4	679.8	669.5	658.5	645.0	641.5	663.3	695.2	715.0	723.8
29	726.6	721.3	707.5	690.5	674.5	659.5	645.0	641.8	657.6	683.2	700.5	703.6
30	701.3	695.3	684.8	672.3	661.5	651.4	641.1	641.0	662.9	695.6	718.4	726.7
31	728.3	722.3	707.5	690.5	674.5	659.5	645.0	641.7	662.7	696.0	719.4	730.1
32	731.2	722.5	707.5	690.5	674.5	659.5	645.0	641.7	657.2	689.6	720.5	732.8

TOTAL ENERGY GWH

YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	221.4	364.1	428.0	359.3	292.6	285.7	247.1	193.7	165.3	168.8	340.4	305.2
2	221.0	240.9	284.5	260.1	202.0	226.2	188.9	270.7	165.3	175.8	334.0	197.6
3	277.6	381.0	440.6	376.3	299.1	291.6	251.2	181.8	170.3	178.2	324.0	241.4
4	323.9	403.0	432.3	359.4	291.6	289.3	270.6	391.6	170.1	168.8	407.1	207.6
5	221.3	246.2	428.6	369.4	297.9	288.1	255.9	288.0	169.8	168.8	240.5	208.5
6	221.2	270.8	402.5	380.5	305.9	296.9	255.8	180.1	177.4	255.1	542.0	320.7
7	299.0	359.2	423.1	359.3	296.3	290.1	248.4	327.0	312.8	329.2	387.8	313.8
8	305.3	385.0	448.5	379.9	310.5	298.6	256.0	240.8	245.0	176.8	336.7	274.3
9	376.9	409.7	469.1	383.9	305.6	300.0	266.7	234.1	170.1	176.5	318.5	283.1
10	221.2	241.3	293.6	369.1	302.6	290.1	254.0	239.7	165.3	176.0	343.4	280.2
11	342.8	382.6	447.1	380.9	308.8	299.6	260.1	329.8	165.3	171.6	290.8	182.3
12	253.5	386.9	458.6	395.0	314.2	312.6	290.1	348.2	179.0	176.6	360.2	229.5
13	236.8	384.5	450.5	388.7	312.7	307.2	273.1	276.7	582.2	283.2	424.0	276.2
14	458.3	393.7	448.5	377.6	310.3	296.8	250.3	399.8	170.2	351.2	481.5	291.2
15	255.0	366.7	429.0	360.6	297.2	285.9	244.7	181.8	626.9	187.4	367.7	270.1
16	221.4	241.7	284.5	353.8	296.9	294.1	265.6	265.3	170.3	192.1	318.4	393.3
17	345.0	358.3	429.4	368.4	303.8	300.4	269.1	180.5	222.2	168.8	288.0	252.9
18	221.1	241.0	287.3	369.9	305.3	297.0	252.8	314.6	235.2	206.9	623.7	332.0
19	297.8	372.2	448.3	389.0	322.6	320.8	277.1	323.0	266.9	212.7	344.0	285.2
20	221.1	241.1	284.5	282.0	296.1	289.8	252.8	180.8	165.3	168.8	363.6	278.5
21	220.7	243.1	284.5	260.0	202.0	226.2	188.9	181.7	165.3	168.8	304.2	266.0
22	221.0	240.9	284.5	260.1	202.0	226.2	188.9	181.8	170.9	179.4	330.4	266.8
23	308.2	396.6	468.0	391.0	320.3	313.9	268.0	420.7	330.6	176.6	391.6	291.8
24	221.3	246.1	431.0	367.3	304.3	296.5	254.9	180.5	170.6	169.8	369.6	309.1
25	221.0	241.0	284.5	260.1	216.1	287.8	253.5	325.0	165.3	168.8	345.1	247.7
26	220.9	243.2	284.5	260.1	202.0	226.2	188.9	182.5	270.4	253.3	346.9	228.7
27	303.8	359.7	416.9	357.2	295.9	290.0	259.8	202.5	169.9	168.8	400.5	[illegible]
28	220.9	241.0	284.5	260.1	202.0	268.0	261.6	191.0	428.5	176.7	[illegible]	[illegible]
29	221.7	343.8	458.8	387.5	313.0	310.0	271.5	273.6	165.3	168.8	338.8	285.7
30	221.1	241.1	284.5	260.1	202.0	226.2	188.9	285.5	176.2	288.7	316.2	287.5
31	221.8	423.7	460.8	383.5	311.9	307.2	271.3	239.7	186.8	344.5	519.8	265.9
32	354.9	423.2	436.2	371.6	303.3	297.0	261.2	248.0	166.2	208.2	749.0	354.2

WSEL (MONTH END) FT

YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2183.4	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.1	2122.5	2151.3	2164.6	2163.0
2	2158.7	2149.6	2136.0	2123.3	2113.2	2101.5	2091.8	2100.6	2127.0	2155.9	2168.8	2188.2
3	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2090.4	2132.0	2163.9	2178.9	2187.3
4	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2101.4	2133.3	2157.4	2171.9	2181.6
5	2179.1	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.7	2128.7	2152.9	2176.6	2182.5
6	2179.4	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2096.4	2135.0	2165.9	2181.8	2189.9
7	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.9	2135.9	2166.7	2182.0	2190.0
8	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.4	2135.5	2163.3	2177.7	2190.0
9	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.3	2133.5	2161.3	2179.0	2176.4
10	2173.0	2165.2	2154.0	2137.0	2122.0	2107.0	2093.0	2100.4	2126.5	2156.6	2181.7	2190.0
11	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2101.0	2117.1	2146.5	2166.5	2184.7
12	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2101.1	2135.1	2162.8	2179.8	2186.4
13	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.6	2137.6	2166.2	2181.1	2190.0
14	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2101.4	2131.8	2167.0	2181.3	2186.2
15	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2088.9	2137.9	2165.1	2172.6	2173.0
16	2171.3	2164.5	2153.7	2137.0	2122.0	2107.0	2093.0	2100.5	2131.9	2165.2	2180.5	2190.0
17	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2097.3	2135.3	2157.1	2173.7	2177.6
18	2173.5	2164.9	2154.0	2137.0	2122.0	2107.0	2093.0	2100.9	2135.4	2165.3	2182.0	2190.0
19	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.9	2135.6	2165.4	[illegible]	
20	2169.4	2161.3	2150.4	2137.0	2122.0	2107.0	2093.0	2099.3	2123.9	[illegible]		
21	2148.9	2137.7	2123.4	2110.0	2099.5	2085.4	2074.4	2084.0	2104.6	2131.9	2147.8	2147.5
22	2143.1	2134.8	2122.4	2110.0	2099.8	2085.9	2074.5	2068.3	2116.4	2148.8	2180.5	2188.8
23	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2101.5	2136.0	2163.6	2175.8	2180.8
24	2178.5	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2097.8	2134.6	2156.8	2170.7	2170.4
25	2165.8	2157.3	2145.3	2132.7	2122.0	2107.0	2093.0	2100.9	2120.1	2142.7	[illegible]	
26	2151.0	2141.0	2127.9	2115.8	2106.3	2094.6	2084.3	2099.1	[illegible]			
27	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.1	2129.2	2153.4	2166.3	[illegible]
28	2159.8	2152.1	2140.6	2129.0	2119.9	2107.0	2093.0	2100.1	2136.6	[illegible]		
29	2181.6	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	[illegible]				
30	2154.5	2146.2	2133.3	2121.2	2111.7	2101.0	2091.3	2100.7	2135.0	2166.3	2180.3	[illegible]
31	2183.7	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.4	2130.1	[illegible]		
32	2184.0	2171.0	2154.0	2137.0	2122.0	2107.0	2093.0	2100.4	[illegible]			

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PRE-PROJECT FLOW @ D/S LOCATION [GOLD CREEK]

YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
	6335.0	2583.0	1439.0	1027.0	788.0	726.0	870.0	11510.0	19600.0	22600.0	19880.0	8301.0
	3848.0	1300.0	1100.0	960.0	820.0	740.0	1617.0	14090.0	20790.0	22570.0	19670.0	21240.0
	5571.0	2744.0	1900.0	1600.0	1000.0	880.0	920.0	5419.0	32370.1	26390.0	20920.0	14480.0
	8202.0	3497.0	1700.0	1100.0	820.0	820.0	1615.0	19270.0	27320.1	20200.0	20610.0	15270.0
	5604.0	2100.0	1500.0	1300.0	1000.0	780.0	1235.0	17280.0	25250.0	20360.0	26100.0	12920.0
	5370.0	2760.0	2045.0	1794.0	1400.0	1100.0	1200.0	9319.0	29860.0	27560.0	25750.0	11290.0
	4951.0	1900.0	1300.0	980.0	970.0	940.0	950.0	17660.0	33340.0	31090.1	24530.0	18330.0
	5806.0	3050.0	2142.0	1700.0	1500.0	1200.0	1200.0	13750.0	30160.0	23310.0	20540.0	19800.0
	8212.0	3954.0	3264.0	1965.0	1307.0	1148.0	1533.0	12900.0	25700.0	22880.0	22540.0	7550.0
	4811.0	2150.0	1513.0	1448.0	1307.0	980.0	1250.0	15990.0	23320.0	25000.0	31180.0	16920.0
	6558.0	2850.0	2200.0	1845.0	1452.0	1197.0	1300.0	15780.0	15530.0	22980.0	23590.0	20510.0
	7794.0	3000.0	2694.0	2452.0	1754.0	1810.0	2650.0	17360.0	29450.0	24570.0	22100.0	13370.0
	5916.0	2700.0	2100.0	1900.0	1500.0	1400.0	1700.0	12590.0	43270.0	25850.0	23550.0	15890.0
	6723.0	2800.0	2000.0	1600.0	1500.0	1000.0	830.0	19030.0	26000.0	34400.0	23670.0	12320.0
	6449.0	2250.0	1494.0	1048.0	966.0	713.0	745.0	4307.0	50580.0	22950.0	16440.0	9571.0
	6291.0	2799.0	1211.0	960.0	860.0	900.0	1360.0	12990.0	25720.0	27840.0	21120.0	19350.0
	7205.0	2098.0	1631.0	1400.0	1300.0	1300.0	1775.0	9645.0	32950.0	19860.0	21830.0	11750.0
	4163.0	1600.0	1500.0	1500.0	1400.0	1200.0	1167.0	15480.0	29510.0	26800.0	32620.0	16870.0
	4900.0	2353.0	2055.0	1981.0	1900.0	1900.0	1910.0	16180.0	31550.0	26420.0	17170.0	8816.0
	4272.0	1906.0	1330.0	1086.0	922.0	833.0	1022.0	9852.0	20523.0	18093.0	16322.0	9776.0
	3124.0	1215.0	866.0	824.0	768.0	776.0	1080.0	11380.0	18630.0	22660.0	19980.0	9121.0
	5288.0	3407.0	2290.0	1442.0	1036.0	950.0	1082.0	3745.0	32930.0	23950.0	31910.0	14440.0
	5847.0	3093.0	2510.0	2239.0	2028.0	1823.0	1710.0	21890.0	34430.0	22770.0	19290.0	12400.0
	4826.0	2253.0	1465.0	1200.0	1200.0	1000.0	1027.0	8235.0	27800.0	18250.0	20290.0	9074.0
	3733.0	1523.0	1034.0	874.0	777.0	724.0	992.0	16180.0	17870.0	18800.0	16220.0	12250.0
	3739.0	1700.0	1403.0	1516.0	1471.0	1400.0	1593.0	15330.0	32310.0	27720.0	18090.0	16310.0
	7739.0	1993.0	1081.0	974.0	950.0	900.0	1373.0	12620.0	24380.0	18940.0	19800.0	6881.0
	3874.0	2650.0	2403.0	1829.0	1618.0	1500.0	1680.0	12680.0	37970.0	22870.0	19240.0	12640.0
	7571.0	3525.0	2589.0	2029.0	1668.0	1605.0	1702.0	11950.0	19050.0	21020.0	16390.0	8607.0
	4907.0	2535.0	1681.0	1397.0	1286.0	1200.0	1450.0	13870.0	24690.0	28880.1	20460.0	10770.0
	7311.0	4192.0	2711.0	1748.0	1466.0	1400.0	1674.0	12060.0	29080.0	32660.0	20960.0	13280.0
	7725.0	3986.0	2773.1	1453.6	1235.6	1114.3	1367.5	13316.7	18143.0	32090.0	38538.0	13171.1

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POST-PROJECT FLOW @ D/S LOCATION CFS [Gold Creek]

YR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7279.7	10215.7	11555.4	9917.5	9104.5	8237.7	7573.6	8486.6	8021.8	8024.0	12000.0	9281.6
2	6389.8	6833.4	7909.8	7341.9	6437.0	6588.5	5989.1	10314.3	7107.6	7561.5	12000.0	9300.0
3	8061.0	10738.0	12016.4	10490.5	9316.5	8391.7	7623.6	6529.3	11599.0	9076.3	12000.0	9300.0
4	10185.6	11490.9	11816.4	9990.5	9136.5	8331.7	8318.6	15608.4	10809.9	7405.6	12000.0	9300.0
5	7076.3	7092.0	11616.4	10190.5	9316.5	8291.7	7938.6	13952.5	10735.5	7967.2	12000.0	9300.0
6	7194.8	7955.0	12161.4	10684.5	9716.5	8611.7	7903.6	7859.8	10153.2	10621.7	16276.1	9300.0
7	8468.7	9894.0	11416.4	9870.5	9286.5	8451.7	7653.6	14206.8	15256.8	14077.5	15432.0	13410.6
8	9376.5	11044.0	12258.4	10590.5	9816.5	8711.7	7903.6	10574.5	12008.4	8109.5	12000.0	12213.0
9	11782.5	11948.0	13380.4	10855.5	9623.5	8659.7	8236.6	9746.4	8565.8	7883.0	12000.0	9121.3
10	6874.9	6933.2	8170.4	10338.5	9624.5	8491.7	7953.6	12818.1	9828.6	9287.8	16208.8	11843.4
11	10128.5	10843.9	12316.4	10735.5	9768.5	8708.7	8003.6	12317.7	7167.0	8286.8	12000.0	9300.0
12	8227.4	10993.9	12810.4	11342.5	10070.5	9321.7	9353.6	13838.4	11869.2	9477.6	12000.0	9300.0
13	7328.7	10694.0	12216.4	10790.5	9816.5	8911.7	8403.6	9298.8	24151.8	9985.7	14666.9	10429.8
14	10293.5	10794.0	12116.4	10490.5	9816.5	8511.7	7533.6	15342.2	10296.0	15148.5	15146.6	9300.0
15	7777.9	10244.0	11610.4	9938.5	9282.5	8224.7	7448.6	6061.3	26091.6	7887.3	12000.0	9300.0
16	7290.9	6966.6	7678.9	9657.5	9176.5	8411.7	8063.6	9735.6	9469.8	9771.5	12000.0	13506.1
17	10775.5	10092.0	11747.4	10290.5	9616.5	8811.7	8478.6	7809.8	13486.7	8261.6	12000.0	9300.0
18	6615.5	6902.6	7984.7	10390.5	9716.5	8711.7	7870.6	12066.6	11635.8	10362.9	22704.4	11950.6
19	8470.5	10346.9	12171.4	10871.5	10216.5	9411.7	8613.6	12739.5	13601.8	10042.6	12000.0	9300.0
20	6581.8	6882.1	7830.0	7838.5	9238.5	8344.7	7725.6	7168.9	7865.7	6851.7	12000.0	9300.0
21	6628.8	7003.5	8012.9	7518.2	6586.1	6770.9	5919.8	7271.7	9213.6	8997.1	12000.0	9300.0
22	7491.4	7700.8	8481.6	7681.2	6677.7	6847.7	6091.4	6389.6	10484.0	7762.3	13149.0	9300.0
23	8728.1	11086.9	12626.4	11129.5	10344.5	9334.7	8413.6	18134.9	16601.7	7692.0	12000.0	9300.0
24	6221.8	6864.6	11581.4	10090.5	9516.5	8511.7	7730.6	6206.9	8914.3	6484.0	12000.0	9300.0
25	6457.0	6741.5	7724.6	7179.3	6725.3	8235.7	7695.6	12743.3	7948.9	7482.9	12000.0	9300.0
26	6551.3	7008.3	8137.7	7574.4	6719.3	6895.6	6120.8	9024.5	13490.5	11080.7	12000.0	9300.0
27	9816.0	9987.0	11197.4	9864.5	9266.5	8411.7	8076.6	9568.3	9350.3	6512.6	12000.0	8050.5
28	6728.2	7351.4	8392.5	7616.2	6616.5	7982.3	8383.6	9665.2	19061.3	7908.1	12000.0	9300.0
29	7469.2	10067.7	12705.4	10919.5	9984.5	9116.7	8405.6	8669.0	6616.9	7243.2	12000.0	9300.0
30	7014.9	7274.0	8119.1	7475.8	6537.4	6576.7	5811.1	9810.6	6908.0	11710.4	12000.0	9300.0
31	6842.2	11972.1	12532.4	10638.5	9782.5	8911.7	8373.6	8888.2	11112.6	15151.9	12030.3	9300.0
32	10320.3	11979.9	11889.5	10344.1	9552.1	8626.0	8071.1	10118.3	6000.0	9792.0	26494.0	10461.1

SUSITNA HEP
WATANA 2190 DC 1455
CASE C 120':min:R2:apr+:

CASE C

WATANA / DEVIL CANYON

- 120' DDOWN @ WATANA
- MODIFIED HYDROLOGY
- R2 + APR RULE
- FULL 2010 DEMAND

DC 30 SEP 82

EL	STORAGE	EL	STORAGE
1900.0	2550000.0	925.0	0.0
1950.0	3330000.0	1000.0	75000.0
2000.0	4250000.0	1050.0	25000.0
2050.0	5340000.0	1150.0	85000.0
2100.0	6650000.0	1200.0	132000.0
2150.0	8189999.5	1250.0	195000.0
2200.0	10020000.0	1300.0	292000.0
2250.0	12210000.0	1350.0	456000.0
-1.0	-1000000.0	1400.0	707000.0
-1.0	-1000000.0	1450.0	1046000.0
-1.0	-1000000.0	1500.0	1484000.0
MAX. STORAGE =	9654000.0 2190		1092000.0
MIN. STORAGE =	5733000.0		741000.0

MAXIMUM P.H.Q = 19391.0 START WSEL=2185.0 TWEL=1455.0 PMAX=.10200E+07
MAXIMUM P.H.Q = 13763.2 START WSEL=1455.0 TWEL= 850.0 PMAX=.60000E+06

MONTHLY WATER LEVEL

2185.0	2170.0	2150.0	2130.0	2112.0	2095.0	2080.0	2092.0	2125.0	2160.0	2180.0	2190.0
1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0

MONTHLY FLOW DISTRIBUTION

1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8	0.7
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0

MONTHLY FLOW REQD

2000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	6000.0	6000.0	6484.0	12000.0	9300.0

* YEARS OF SIMULATION - 32 TER - 0.0100

DEMAND FACTOR 0.460

MONTHLY POWER DEMAND

0.580311E+06	0.638012E+06	0.745200E+06	0.681113E+06	0.585727E+06	0.592434E+06
0.511207E+06	0.176183E+06	0.447120E+06	0.441904E+06	0.361260E+06	0.488106E+06

	UPPER RESERVOIR				LOWER RESERVOIR					
MTH	P.H.FLOW CFS	HEAD FT	POWER MW	ENERGY GWH	P.H.FLOW CFS	HEAD FT	POWER MW	ENERGY GWH	TOTAL ENERGY (GWH) PROD	USED
OCT	9764.4	723.5	507.8	377.8	7318.4	590.8	312.2	232.3	610.1	610.1
NOV	9112.6	713.2	469.8	338.2	9444.5	605.0	411.7	296.5	634.7	634.6
DEC	10881.2	699.1	549.7	409.0	11128.2	605.0	485.1	361.0	769.9	769.3
JAN	10287.5	681.9	506.6	376.9	10484.6	605.0	457.1	340.1	717.0	716.4
FEB	9924.6	664.8	476.3	320.1	10094.3	605.0	440.1	295.7	615.8	615.3
MAR	9059.2	648.2	423.6	315.1	9204.0	605.0	401.3	298.5	613.7	613.2
APR	7793.9	632.1	355.3	255.8	8005.7	604.8	348.9	251.2	507.0	507.0
MAY	5826.6	629.8	264.6	196.9	7656.6	604.7	333.7	248.2	445.1	445.0
JUN	5123.6	653.2	241.5	173.9	8146.1	604.9	355.1	255.6	429.5	429.4
JUL	4736.1	686.4	234.9	174.8	7094.4	604.9	309.2	230.1	404.8	404.7
AUG	5947.5	712.5	306.6	228.1	11128.1	591.5	474.5	353.0	581.1	519.9
SEP	7838.4	725.7	410.6	295.7	9424.8	577.4	393.9	283.6	579.3	508.0
ANN	8024.6	680.9	395.6	288.5	9094.2	600.3	393.6	287.2	6908.1	6772.7

	ENERGY (GWH)		
	OCT-MAY	MAY-SEP	ANNUAL
AVERAGE	4465.8	2306.9	6772.7
FIRM (YEAR 22)	3375.0	2152.6	5527.6

	ENERGY (GWH)												
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANNUAL
AVER	610.1	634.6	769.3	716.4	615.3	613.2	507.0	445.0	429.4	404.7	519.9	508.0	6772.7
FIRM YR 22	649.9	472.3	551.8	504.3	391.9	438.4	366.4	352.9	358.9	328.6	543.1	568.8	5527.6

PRESENT WORTH COST BASED ON REGRESSION ANALYSIS

R1 = -0.8134050 R2 = -0.1209790 R3 = 13274.9

PRESENT WORTH COST ($*10**6) = 7056.1

W/DC 1 2010

RESERVOIR 1 WATANA

INFLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4719.9	2083.6	1166.9	815.1	641.7	569.1	680.1	8605.9	16132.1	19193.4	16913.6	7320.4
2	3299.1	1107.3	906.2	808.0	673.0	619.8	1302.2	11649.8	18517.9	19786.6	16478.0	17205.5
3	4092.9	2170.1	1301.0	1274.5	841.0	735.0	803.9	4216.5	25773.4	22110.9	17356.3	11571.0
4	6285.7	2756.8	1281.2	816.9	611.7	670.7	1382.0	15037.2	21469.8	17355.3	16681.6	11513.5
5	4218.9	1599.6	1163.8	1087.8	803.1	638.2	942.6	11696.8	19476.7	16983.6	20420.6	9165.5
6	3809.2	2051.1	1378.5	1368.3	1050.5	886.1	940.8	6718.1	24881.4	23787.9	23537.0	13447.8
7	4102.3	1586.1	1038.6	816.9	754.8	694.4	718.3	12903.3	27171.8	25831.3	19153.4	13194.4
8	4206.0	2276.6	1707.0	1373.0	1189.0	935.0	945.1	10176.2	25275.0	19948.9	17317.7	14841.1
9	6034.9	2935.9	2238.5	1480.6	1041.7	973.5	1265.4	9957.8	22097.8	19752.7	18843.4	5978.7
10	3668.0	1729.5	1115.1	1081.0	949.0	694.0	885.7	10140.6	18329.6	20493.1	23940.4	12466.9
11	5165.5	2213.5	1672.3	1400.4	1138.9	961.1	1069.9	13044.2	13233.4	19506.1	19323.1	16085.6
12	6049.3	2327.8	1973.2	1779.9	1304.8	1331.0	1965.0	13637.9	22784.1	19639.6	19480.2	10146.2
13	4637.6	2263.4	1780.4	1608.9	1257.4	1176.8	1457.4	11333.5	36017.1	23443.7	19867.1	12746.2
14	5560.1	2506.9	1706.9	1308.9	1184.7	883.6	776.6	15299.2	20663.4	26767.4	21011.4	10800.0
15	5187.1	1789.1	1194.7	852.0	781.6	575.2	609.2	3578.8	42841.9	20082.8	14048.2	7524.2
16	4739.1	2368.2	1070.3	863.0	772.7	807.3	1232.1	10966.0	21213.0	23235.9	17394.1	16225.6
17	5221.2	1565.3	1203.6	1060.4	984.7	984.7	1338.4	7094.1	25939.6	16153.5	17390.9	9214.1
18	3269.8	1202.2	1121.6	1102.2	1031.3	889.5	849.7	12555.5	24711.9	21987.3	26104.5	13672.9
19	4019.0	1934.3	1704.2	1617.6	1560.4	1560.4	1576.7	12826.7	25704.0	22082.8	14147.5	7163.6
20	3447.0	1567.0	1073.0	884.0	748.0	686.0	850.0	7942.0	17509.0	15871.0	14078.0	8150.0
21	2403.1	1020.9	709.3	636.2	602.1	624.1	986.4	9536.4	14399.0	18410.1	16263.8	7224.1
22	3766.0	2496.4	1667.4	1097.1	777.4	717.1	813.7	2857.2	27612.8	21126.4	27446.6	12188.9
23	4979.1	2567.0	1957.4	1670.9	1491.4	1366.0	1305.4	15973.1	27429.3	19820.3	17509.5	10955.7
24	4301.2	1977.9	1246.5	1031.5	1000.2	873.9	914.1	7287.0	23859.3	16351.1	18016.7	8099.7
25	3056.5	1351.7	931.6	786.4	689.9	627.3	871.9	12869.0	14780.6	15971.9	13523.7	9786.2
26	3088.8	1474.4	1276.7	1215.8	1110.3	1041.4	1211.2	11672.2	26689.2	23430.4	15126.6	13075.3
27	3679.1	1601.1	876.2	757.6	743.2	690.7	1059.6	8938.8	17994.0	17015.3	16393.5	5711.5
28	2973.5	1926.7	1687.5	1348.7	1202.9	1110.8	1203.4	8569.4	31352.8	19707.3	16807.3	10613.1
29	5793.9	2645.3	1979.7	1577.9	1267.7	1236.7	1408.4	11231.5	17277.2	18365.2	13112.1	7132.6
30	3773.9	1944.9	1312.6	1136.8	1055.4	1101.2	1317.9	12369.3	22904.8	24911.7	16670.7	9096.7
31	6150.0	3525.0	2032.0	1470.0	1233.0	1177.0	1404.0	10140.0	23400.0	26740.0	18000.0	11000.0
32	6456.0	3297.0	1385.0	1147.0	971.0	869.0	1103.0	10406.0	17017.0	27840.0	31435.0	12026.0
AVE	4522.8	2059.1	1414.8	1165.5	983.3	898.3	1099.7	10354.7	23023.7	20810.1	18628.5	10792.0

POWERHOUSE FLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5561.1	10435.0	12314.6	11438.4	10785.8	8706.4	7282.9	6470.2	4011.0	3799.5	4080.9	7516.7
2	11900.0	6948.4	7941.1	7345.6	6377.0	6511.7	6823.8	6344.3	4283.0	3925.0	3994.0	6939.1
3	9061.9	9850.5	12276.3	11401.4	11021.6	9708.1	7406.7	4992.5	3198.6	3628.9	5170.1	5760.3
4	9261.1	10916.8	12249.2	11408.5	11003.3	9827.2	7984.8	7029.0	6219.1	3931.1	3767.8	4192.5
5	11477.9	6740.6	11760.1	11103.4	10782.9	8777.5	7545.4	6287.2	3312.1	3779.9	3263.4	4123.9
6	10206.6	6683.3	12250.1	11376.7	10961.5	10315.6	7543.6	4559.3	5182.4	5128.7	7015.6	12466.0
7	7077.7	10811.9	12317.2	11455.6	10734.6	8833.7	7321.1	6881.3	6114.0	5829.8	6243.3	13194.4
8	7183.4	10907.1	12248.1	11394.9	10967.3	10193.6	8572.1	4982.2	6537.0	3771.0	5121.8	8991.7
9	8805.9	10830.7	12188.6	11312.9	10942.6	10208.1	9197.8	6059.5	5625.0	3854.8	4418.0	5803.2
10	11673.8	6809.6	7783.9	9626.1	10928.8	8833.3	7468.5	4878.2	3432.3	3442.5	5550.2	10149.9
11	8140.9	10947.2	12222.0	11360.3	10967.0	10203.4	8619.3	7501.6	4273.2	3790.8	3700.2	4009.2
12	10336.7	10068.4	12172.4	11373.7	11003.6	10125.2	9074.4	7178.1	5969.3	4106.5	6898.7	4894.6
13	9420.4	9619.6	12347.8	11410.3	10991.6	10209.5	8945.7	6097.0	5751.8	6625.6	13868.6	12746.2
14	8035.5	11048.4	12289.7	11405.4	10966.2	10239.9	8272.6	7186.8	6377.5	5757.0	8597.1	10800.0
15	8162.5	11012.9	12305.9	11442.9	10999.7	8714.5	7212.0	5142.5	5707.4	6499.0	6927.4	5163.5
16	10477.4	8756.0	12303.0	11497.6	10752.5	8946.6	7835.2	5742.0	4736.9	4087.1	5402.3	10487.7
17	8196.6	10789.1	12267.8	11399.3	10978.1	9625.9	7941.2	4566.1	5895.8	3674.0	3623.9	4935.2
18	11738.4	6814.9	7793.1	9300.0	11011.1	9028.8	7452.5	7144.1	6562.7	5028.6	8676.3	13672.9
19	6994.4	11011.0	12386.3	11388.2	10961.3	10170.4	9185.3	7298.8	6230.0	6134.6	4013.0	6880.4
20	11765.1	6839.6	7834.0	8575.6	10727.8	8825.3	7452.8	4776.5	4079.7	4168.0	4335.2	7482.2
21	11900.7	7018.2	8039.4	7419.3	6448.0	6591.5	5109.4	6241.5	3729.0	3592.5	3913.5	6028.6
22	11695.6	6814.1	7897.6	7352.2	6397.3	6537.0	5682.1	4624.2	4462.9	3926.8	6383.9	8999.6
23	7954.5	10985.4	12209.5	11299.8	10869.5	10123.9	9154.2	6463.1	5819.1	6512.3	7118.4	9213.6
24	7715.4	10748.3	12329.9	11451.0	11014.3	9396.7	7516.9	5072.9	4338.0	4230.3	4381.1	8325.7
25	11644.1	6935.6	7936.1	7336.3	6370.2	8005.1	7474.7	7327.0	4024.9	3978.8	4185.4	6244.6
26	11900.1	6974.5	7942.4	7334.7	6337.0	6459.8	5607.7	5809.6	6308.3	6148.0	5613.0	7336.6
27	8654.5	10824.9	12333.9	11217.3	10723.0	8830.0	7662.6	4208.7	3625.2	4225.9	5226.4	8130.5
28	11801.3	6792.3	7775.9	7227.3	6272.0	8825.4	7806.2	4072.9	5981.5	6465.8	6985.7	5188.5
29	10178.6	10412.9	12205.4	11359.5	10940.1	10167.2	9199.9	6261.4	4439.9	4027.5	4074.8	7047.3
30	11758.0	6849.0	7805.9	7321.9	6356.0	6519.3	7233.4	7021.5	6458.3	6041.3	5072.9	4971.9
31	11642.2	8455.1	12272.0	11411.6	10992.6	10207.8	9084.8	5001.7	6626.9	5932.7	6652.7	7034.9
32	9433.4	10950.5	12287.0	11452.9	11003.6	10223.1	8723.2	5239.5	4642.9	5011.1	14043.2	12026.0
AVE	9764.4	9112.6	10881.2	10287.5	9924.6	9059.2	7793.9	5826.6	5123.6	4736.1	5947.5	7838.4

SPILLS (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEAD (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	729.3	721.6	705.6	665.8	666.1	648.5	632.5	629.9	647.6	675.7	702.2	713.1
2	705.7	693.1	680.8	667.2	655.6	644.0	631.3	631.2	651.8	681.7	707.8	726.7
3	731.2	721.2	705.9	667.0	667.8	649.3	632.5	624.1	646.6	667.6	715.3	730.3
4	732.5	723.4	707.5	668.0	668.1	649.5	632.5	634.1	658.6	686.1	710.3	727.1
5	726.9	716.7	703.7	665.0	666.0	648.5	632.5	631.3	653.9	683.1	710.6	729.1
6	727.9	718.8	706.0	667.2	668.5	649.8	632.5	627.5	650.2	686.0	719.5	731.2
7	732.5	722.5	705.5	665.5	666.0	648.5	632.5	632.1	660.0	698.7	725.8	735.0
8	732.5	723.0	707.1	668.6	670.0	651.8	633.7	631.1	655.9	689.8	715.2	730.2
9	732.7	723.9	709.2	691.7	673.5	655.3	637.2	632.8	653.9	685.7	713.1	725.3
10	718.7	707.9	697.9	683.5	666.0	648.5	632.5	631.2	652.3	683.8	715.8	733.1
11	732.5	722.9	706.9	668.1	669.9	651.6	633.6	631.5	647.2	672.1	701.5	725.0
12	731.2	721.3	706.4	668.6	670.5	652.9	636.0	635.5	659.5	690.6	715.9	730.7
13	731.0	721.0	706.1	667.6	669.3	651.3	633.5	631.1	667.0	710.8	729.9	735.0
14	732.5	723.1	707.2	668.6	670.0	651.6	633.5	634.5	657.9	693.0	724.6	735.0
15	732.5	722.5	705.7	665.9	666.2	648.5	632.5	623.2	658.8	707.8	725.2	733.1
16	730.2	720.2	705.5	665.5	666.0	648.5	632.5	631.1	653.8	687.9	715.6	730.3
17	732.5	722.5	705.7	686.2	667.0	649.0	632.5	628.0	651.4	684.1	708.0	723.0
18	719.4	707.7	697.3	683.2	666.0	648.5	632.5	631.4	655.8	689.8	720.4	735.0
19	732.5	722.6	706.3	667.7	669.7	652.6	635.3	633.1	658.8	692.8	716.0	724.8
20	718.0	706.7	696.4	682.7	666.0	648.5	632.5	628.7	646.3	671.9	692.7	702.3
21	691.1	679.6	666.5	652.4	639.5	626.4	614.7	613.9	629.9	657.0	684.2	697.4
22	690.8	679.0	666.6	656.2	644.4	632.0	619.7	612.1	635.0	677.1	712.1	732.4
23	732.5	723.2	707.7	689.9	672.2	655.0	637.5	639.4	671.0	703.3	723.4	733.6
24	732.1	722.1	705.7	686.1	666.8	648.9	632.5	627.6	650.2	682.2	705.8	717.2
25	709.6	697.5	685.6	672.3	660.6	647.7	632.5	631.5	649.0	671.9	692.6	701.2
26	699.4	686.4	674.5	661.7	650.9	639.9	626.6	630.5	657.7	693.8	717.7	730.3
27	732.5	722.5	705.4	680.4	666.0	648.5	632.5	630.6	652.6	681.8	705.7	714.8
28	705.4	693.6	681.1	671.2	660.7	648.1	632.5	630.3	660.8	697.8	717.9	730.6
29	731.3	721.3	706.4	688.3	670.1	652.3	634.5	631.5	650.3	677.6	700.0	708.2
30	701.5	690.0	677.7	666.0	655.0	644.3	631.7	631.3	651.0	688.2	715.8	728.9
31	727.6	719.0	706.4	688.1	669.7	651.7	633.7	631.0	653.9	690.1	719.0	731.8
32	732.5	723.8	708.4	689.3	670.4	651.8	633.7	631.1	649.7	684.0	720.4	735.0
AVE	723.5	713.2	699.1	681.9	664.8	648.2	632.1	629.8	653.2	686.4	712.5	725.7

WATER SURFACE AT START OF MONTH (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2185.0	2183.6	2170.0	2151.3	2130.3	2112.0	2095.0	2080.0	2089.8	2115.3	2146.1	2168.3
2	2167.9	2153.5	2142.8	2128.8	2115.7	2105.4	2092.5	2080.0	2092.5	2121.1	2152.3	2173.3
3	2190.0	2182.5	2170.0	2151.9	2132.0	2113.7	2095.0	2080.0	2078.2	2125.1	2160.1	2180.6
4	2190.0	2185.0	2171.7	2153.3	2132.8	2114.0	2095.0	2080.0	2098.8	2128.4	2164.4	2176.1
5	2188.0	2175.8	2167.5	2150.0	2130.0	2112.0	2095.0	2080.0	2092.7	2125.0	2151.2	2180.0
6	2188.2	2177.5	2170.0	2152.0	2132.5	2114.6	2095.0	2080.0	2085.1	2125.4	2160.6	2188.4
7	2190.0	2185.0	2170.0	2151.0	2130.0	2112.0	2095.0	2080.0	2094.3	2135.8	2171.7	2190.0
8	2190.0	2185.0	2171.0	2153.3	2133.9	2116.2	2097.3	2080.0	2092.2	2129.6	2160.0	2180.5
9	2190.0	2185.3	2172.5	2155.9	2137.4	2119.5	2101.1	2083.3	2092.4	2125.4	2156.0	2180.2
10	2180.4	2167.0	2158.7	2147.1	2130.0	2112.0	2095.0	2080.0	2092.4	2122.3	2155.3	2186.2
11	2190.0	2185.0	2170.8	2153.1	2133.8	2116.0	2097.2	2080.0	2093.0	2111.4	2142.8	2170.2
12	2189.8	2182.6	2170.0	2152.9	2134.2	2116.7	2099.0	2082.9	2098.1	2130.8	2160.3	2181.5
13	2190.0	2182.0	2170.0	2152.2	2133.1	2115.5	2097.0	2080.0	2092.3	2151.6	2179.9	2190.0
14	2190.0	2185.0	2171.1	2153.3	2133.8	2116.2	2097.0	2080.0	2099.0	2126.8	2169.1	2190.0
15	2190.0	2185.0	2170.0	2151.3	2130.4	2112.0	2095.0	2080.0	2076.3	2151.4	2174.2	2186.2
16	2190.0	2180.4	2170.0	2151.0	2130.0	2112.0	2095.0	2080.0	2092.3	2125.3	2160.5	2180.7
17	2190.0	2185.0	2170.0	2151.4	2131.0	2113.0	2095.0	2080.0	2085.9	2126.8	2151.4	2174.6
18	2181.5	2167.3	2158.2	2146.4	2130.0	2112.0	2095.0	2080.0	2092.7	2128.9	2160.7	2190.0
19	2190.0	2185.0	2170.2	2152.3	2133.2	2116.3	2098.9	2081.6	2094.6	2133.0	2162.5	2179.5
20	2180.0	2166.0	2157.5	2145.4	2130.0	2112.0	2095.0	2080.0	2087.4	2115.3	2138.6	2156.8
21	2157.9	2140.4	2128.8	2114.2	2100.6	2088.4	2074.3	2065.0	2072.7	2097.0	2127.0	2151.4
22	2153.1	2138.2	2129.8	2117.4	2104.9	2093.9	2080.2	2069.1	2065.0	2115.0	2149.3	2184.8
23	2190.0	2185.0	2171.3	2154.1	2135.7	2118.7	2101.3	2083.6	2105.1	2146.8	2169.7	2187.2
24	2190.0	2184.3	2170.0	2151.4	2130.8	2112.8	2095.0	2080.0	2085.2	2125.1	2149.3	2172.4
25	2172.0	2157.2	2147.8	2133.8	2120.7	2110.5	2095.0	2080.0	2093.1	2114.9	2138.8	2156.3
26	2162.1	2146.7	2136.1	2122.8	2110.6	2101.2	2088.6	2078.7	2092.4	2132.9	2164.7	2180.7
27	2190.0	2185.0	2170.0	2150.7	2130.0	2112.0	2095.0	2080.0	2091.1	2124.1	2149.6	2171.8
28	2167.9	2153.0	2144.2	2132.0	2120.3	2111.2	2095.0	2080.0	2090.6	2141.0	2164.7	2181.2
29	2190.0	2182.6	2170.0	2152.8	2133.8	2116.4	2098.3	2080.6	2092.3	2118.3	2146.9	2163.1
30	2163.2	2149.8	2140.5	2127.1	2114.8	2105.2	2093.4	2080.0	2092.6	2125.4	2161.0	2180.5
31	2187.2	2178.0	2170.0	2152.8	2133.5	2115.9	2097.4	2080.0	2092.1	2125.7	2161.5	2183.6
32	2190.0	2185.0	2172.6	2154.2	2134.4	2116.4	2097.3	2080.0	2092.1	2117.2	2160.8	2190.0
AVE	2183.0	2174.0	2162.3	2145.9	2127.9	2111.7	2094.7	2079.5	2090.1	2126.2	2156.7	2178.3

HEAD (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	729.3	721.8	705.6	685.8	666.1	648.5	632.5	629.9	647.6	675.7	702.2	713.1
2	705.7	693.1	680.8	667.2	655.6	644.0	631.3	631.2	651.8	681.7	707.8	726.7
3	731.2	721.2	705.9	687.0	667.8	649.3	632.5	624.1	646.6	687.6	715.3	730.3
4	732.5	723.4	707.5	688.0	668.4	649.5	632.5	634.1	658.6	686.4	710.3	727.1
5	726.9	716.7	703.7	685.0	666.0	648.5	632.5	631.3	653.9	683.1	710.6	729.1
6	727.9	718.8	706.0	687.2	668.5	649.8	632.5	627.5	650.2	688.0	719.5	734.2
7	732.5	722.5	705.5	685.5	666.0	648.5	632.5	632.1	660.0	698.7	725.8	735.0
8	732.5	723.0	707.1	688.6	670.0	651.8	633.7	631.1	655.9	689.8	715.2	730.2
9	732.7	723.9	709.2	691.7	673.5	655.3	637.2	632.8	653.9	685.7	713.1	725.3
10	718.7	707.9	687.9	683.5	666.0	648.5	632.5	631.2	652.3	683.8	715.8	733.1
11	732.5	722.9	706.9	688.1	669.9	651.6	633.6	631.5	647.2	672.1	701.5	725.0
12	731.2	721.3	706.4	688.6	670.5	652.9	636.0	635.5	659.5	690.6	715.9	730.7
13	731.0	721.0	706.1	687.6	669.3	651.3	633.5	631.1	667.0	710.8	729.9	735.0
14	732.5	723.1	707.2	688.6	670.0	651.6	633.5	634.5	657.9	693.0	724.6	735.0
15	732.5	722.5	705.7	685.9	666.2	648.5	632.5	623.2	658.8	707.8	725.2	733.1
16	730.2	720.2	705.5	685.5	666.0	648.5	632.5	631.1	653.8	687.9	715.6	730.3
17	732.5	722.5	705.7	686.2	667.0	649.0	632.5	628.0	651.4	684.1	706.0	723.0
18	719.4	707.7	687.3	683.2	666.0	648.5	632.5	631.4	655.8	689.8	720.4	735.0
19	732.5	722.6	706.3	687.7	669.7	652.6	635.3	633.1	658.8	692.8	716.0	724.8
20	718.0	706.7	686.4	682.7	666.0	648.5	632.5	628.7	646.3	671.9	692.7	702.3
21	694.1	679.6	666.5	652.4	639.5	626.4	614.7	613.9	629.9	657.0	684.2	697.4
22	690.8	679.0	666.6	656.2	644.4	632.0	619.7	612.1	635.0	677.1	712.1	732.4
23	732.5	723.2	707.7	689.9	672.2	655.0	637.5	639.4	671.0	703.3	723.4	733.6
24	732.1	722.1	705.7	686.1	666.8	648.9	632.5	627.6	650.2	682.2	705.8	717.2
25	709.6	697.5	681.6	672.3	660.6	647.7	632.5	631.5	649.0	671.9	692.6	701.2
26	699.4	686.4	671.5	661.7	650.9	639.9	628.6	630.5	657.7	693.8	717.7	730.3
27	732.5	722.5	705.4	685.4	666.0	648.5	632.5	630.6	652.6	681.8	705.7	714.8
28	705.4	693.6	683.1	671.2	660.7	648.1	632.5	630.3	660.8	697.8	717.9	730.6
29	731.3	721.3	706.4	688.3	670.1	652.3	634.5	631.5	650.3	677.6	700.0	708.2
30	701.5	690.0	676.7	666.0	655.0	644.3	631.7	631.3	651.0	688.2	715.8	728.9
31	727.6	719.0	706.4	688.1	669.7	651.7	633.7	631.0	653.9	690.1	719.0	731.8
32	732.5	723.8	708.4	689.3	670.4	651.8	633.7	631.1	649.7	684.0	720.4	735.0
AVE	723.5	713.2	699.1	681.9	664.8	648.2	632.1	629.8	653.2	686.4	712.5	725.7

ENERGY FROM RESERVOIR 1 (GWH) WATANA

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	217.5	390.8	465.9	420.5	347.9	302.8	239.0	151.0	134.8	137.6	153.6	279.2	3240.5
2	450.2	249.9	289.8	262.8	202.4	224.8	223.5	214.7	144.8	143.4	151.6	261.6	2819.5
3	355.2	368.6	464.6	419.9	356.4	337.9	243.1	167.0	107.3	133.8	198.3	218.2	3370.4
4	363.7	409.7	464.6	420.8	356.1	342.2	262.0	239.1	212.5	144.7	143.5	156.1	3517.0
5	447.3	250.6	436.9	407.8	347.7	305.2	247.6	212.8	112.4	138.4	124.3	156.0	3187.0
6	398.4	249.2	463.7	419.1	354.8	359.3	247.5	153.1	174.8	169.2	270.6	474.8	3734.7
7	277.9	405.3	465.9	421.0	346.2	307.1	240.2	233.2	209.4	218.4	320.8	503.1	3948.5
8	282.1	409.1	464.3	420.6	355.8	356.2	281.8	166.6	222.4	139.4	196.4	340.7	3637.5
9	345.9	406.8	461.1	419.5	356.9	358.6	304.1	205.6	190.8	141.7	168.9	220.3	3580.1
10	449.8	250.1	291.2	352.7	352.4	307.1	245.7	165.1	116.2	126.2	213.0	386.1	3255.6
11	319.7	410.6	463.2	419.3	355.7	356.4	283.3	254.0	143.5	136.6	139.1	150.8	3432.2
12	405.2	376.8	461.0	419.8	357.3	354.4	299.4	244.5	204.2	152.0	264.8	185.6	3725.0
13	369.2	359.8	467.4	420.6	356.2	356.5	294.0	206.3	199.0	252.5	542.7	486.0	4310.3
14	335.2	414.5	466.0	421.0	355.8	357.7	271.9	244.5	217.7	213.9	333.9	411.8	4043.8
15	320.5	412.8	465.5	420.8	354.8	303.0	236.7	171.8	195.1	246.6	269.3	196.4	3593.3
16	410.1	327.2	467.2	422.5	346.8	311.0	257.1	194.3	160.7	169.2	207.2	397.4	3670.8
17	321.9	404.4	464.1	419.4	354.6	334.9	260.6	153.7	199.2	134.7	137.5	165.1	3370.2
18	402.7	250.2	291.3	340.6	355.1	313.9	244.6	241.8	223.3	186.0	335.1	521.4	3755.9
19	274.7	412.8	469.0	419.9	355.5	355.8	302.7	247.7	212.9	227.8	154.0	256.7	3691.6
20	402.9	250.8	292.5	313.9	346.0	306.8	244.6	161.0	136.8	150.1	161.0	272.6	3088.9
21	442.9	247.5	287.3	259.5	199.7	221.3	162.7	205.4	121.9	126.5	143.6	218.1	2636.2
22	433.1	240.0	283.1	206.6	199.6	221.5	182.7	151.7	147.0	142.5	243.7	342.0	2845.6
23	312.4	412.2	463.2	417.9	353.8	355.5	302.7	221.5	202.6	245.5	276.1	350.7	3914.1
24	302.8	402.7	466.5	421.2	355.6	326.9	246.7	170.7	146.3	134.7	165.8	309.8	3469.6
25	450.6	251.0	291.9	264.4	203.8	276.0	245.3	248.1	135.5	143.3	155.4	227.8	2894.9
26	446.2	248.4	287.2	260.2	199.7	221.6	182.9	196.4	215.2	228.7	216.0	276.0	2980.4
27	339.9	405.8	466.4	412.2	345.8	307.0	251.4	142.3	122.7	134.5	197.7	301.5	3447.2
28	446.3	244.4	284.8	260.0	200.7	306.6	256.2	137.6	205.1	241.9	268.9	196.7	3049.1
29	399.1	389.7	462.2	419.2	355.0	355.6	302.8	212.0	149.8	146.3	152.9	256.9	3603.4
30	442.2	245.2	287.6	261.4	201.6	225.2	237.1	237.6	219.1	222.9	194.7	186.0	2962.6
31	454.1	315.4	464.7	421.0	356.5	356.6	298.7	169.2	224.8	219.5	256.4	267.1	3804.0
32	370.4	411.2	466.7	423.3	357.2	357.2	286.8	177.3	156.5	183.8	542.4	156.6	4191.3
AVE	377.8	338.2	409.0	376.9	320.1	313.1	250.8	196.9	173.9	174.8	228.1	295.7	3462.2

RESERVOIR 2 DEVIL CANYON

INFLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6602.4	10736.1	12486.2	11574.6	10879.8	8809.3	7405.0	6305.0	6047.5	5989.5	5987.9	8177.1
2	12252.9	7072.3	8085.7	7443.3	6471.5	6589.0	7026.2	7913.0	5743.6	5714.3	6046.0	9532.7
3	9690.7	10219.4	12582.8	11610.6	11123.8	9801.3	7481.3	5765.5	7439.4	6379.7	7461.0	7630.4
4	10493.0	11392.6	12018.4	11589.2	11137.2	9923.2	8134.6	9750.1	9980.3	5760.1	6293.2	6607.4
5	12368.3	7062.3	11783.4	11239.8	10909.5	8868.7	7733.4	9876.4	7023.5	5950.5	6914.4	6537.5
6	11179.8	7139.0	12588.9	11637.5	11186.2	10453.1	7710.2	6222.3	8382.9	7553.6	8436.2	13007.4
7	7623.3	11012.4	12883.2	11540.4	10872.9	8991.6	7479.1	9907.0	10079.3	9210.5	11699.7	16195.8
8	8210.7	11404.3	12007.7	11605.1	11167.2	10364.0	8736.0	7279.6	9677.4	5931.7	7193.3	12179.6
9	10205.5	11485.2	12795.0	11624.3	11113.1	10320.3	9369.8	7950.9	7940.7	5865.2	6794.4	6863.3
10	12408.6	7079.9	8089.7	9862.0	11158.9	9017.2	7722.7	6638.5	6640.4	6339.8	10204.2	13012.6
11	9036.1	11356.4	12561.2	11646.1	11168.3	10355.1	8767.2	9260.3	5749.6	6024.0	6443.2	6853.5
12	11458.3	10500.5	12683.8	11805.8	11292.4	10433.1	9514.8	9579.9	10254.5	7147.3	8562.9	6967.0
13	10242.2	9900.3	12586.1	11597.4	11147.6	10353.0	9101.7	6904.7	10414.4	8172.5	16223.3	14767.2
14	9283.1	11235.5	12496.8	11592.5	11168.9	10314.7	8306.9	9585.2	9808.2	9378.0	10306.2	11777.2
15	8973.7	11309.2	12498.3	11568.9	11118.3	8803.1	7299.3	5610.6	10681.9	8342.2	8465.0	6179.3
16	11462.0	9034.9	12483.5	11559.9	10808.6	9006.2	7917.2	7043.1	7634.2	7546.9	7797.5	12496.3
17	9471.9	11131.6	12542.6	11617.6	11160.8	9828.6	8221.9	6206.0	10402.5	6056.7	6477.6	6565.4
18	12312.6	7070.6	8086.4	9555.7	11246.1	9228.4	7656.5	9024.1	9647.2	8122.5	12864.8	15726.2
19	7560.7	11280.2	12611.8	11621.8	11179.6	10368.7	9399.6	9454.5	9988.1	8922.8	5956.0	7942.7
20	12294.1	7055.6	7996.0	8703.6	10838.8	8919.3	7561.8	5988.5	5991.7	5588.0	5757.2	8520.2
21	12364.1	7143.0	8110.1	7540.0	6554.6	6689.2	5160.6	7426.7	6448.9	6324.6	6302.5	7248.0
22	12672.8	7399.5	8285.0	7573.9	6563.5	6686.7	5854.6	5194.9	7881.1	5742.0	9253.2	10446.7
23	8512.4	11310.7	12564.7	11665.0	11214.5	10417.7	9414.3	10266.8	10319.6	8408.5	8263.0	10142.1
24	8052.8	10925.2	12470.4	11559.3	11142.7	9477.8	7589.5	5682.3	6871.3	5451.0	5842.5	8952.0
25	12279.3	7043.8	8003.9	7392.6	6426.2	6067.3	7551.9	9442.6	6011.0	5796.9	5918.7	7818.5
26	12318.1	7119.5	8112.2	7527.7	6568.9	6670.3	5853.2	8173.9	9921.7	8905.6	7518.0	9416.0
27	9978.7	11076.8	12465.6	11356.3	10856.0	8964.5	7864.0	6575.2	6444.8	5463.2	6130.6	8862.3
28	12380.2	7257.3	8235.9	7536.0	6538.8	9070.6	8112.6	6715.4	10235.4	8199.0	8549.6	6191.5
29	11321.0	10978.4	12597.1	11649.5	11197.4	10391.1	9368.6	6723.3	5579.5	5721.3	5989.2	7995.1
30	12486.4	7228.4	8140.7	7489.2	6504.2	6582.8	7318.3	7986.2	7605.9	8592.4	7508.9	6047.6
31	12392.2	8885.1	12519.0	11590.6	11142.6	10351.8	9255.8	6238.7	9481.9	9194.7	8848.7	8376.9
32	10221.4	11352.5	12486.0	11592.9	11121.6	10331.1	8858.2	6509.5	5366.9	8407.1	17878.2	12762.0
AVE	10565.9	9444.3	11150.9	10484.0	10093.8	9202.9	7961.2	7662.2	8178.0	7078.2	8247.1	9460.0

POWERHOUSE FLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6602.4	10756.1	12481.7	11574.6	10887.0	8809.3	7405.0	6305.0	6047.5	5989.5	10940.6	8949.8
2	6552.5	7072.3	8065.7	7443.3	6471.5	6589.0	7026.2	7913.0	5743.6	5714.3	10860.0	7859.1
3	6489.8	10226.1	12526.3	11610.6	11123.8	9807.8	7481.3	5765.5	7439.4	6373.2	10727.2	8261.1
4	6623.0	11385.9	12518.4	11589.2	11137.2	9929.7	8134.6	9743.6	9980.3	5760.1	10597.0	7958.4
5	6757.0	7069.0	11763.4	11239.8	10909.5	8868.7	7733.4	9876.4	7023.5	5950.5	9971.6	7959.1
6	6746.9	7139.0	12562.4	11637.5	11186.2	10459.6	7710.2	6222.3	8382.9	7547.1	11209.6	10143.6
7	7629.8	11012.4	12478.7	11566.9	10872.9	8991.6	7479.1	9900.5	10079.3	9210.5	11699.7	13763.2
8	8217.2	11397.6	12527.7	11605.1	11167.2	10364.0	8742.8	7979.6	9670.7	5931.7	10849.2	8401.8
9	10205.5	11485.2	12775.0	11624.3	11113.1	10320.3	9369.8	7957.4	7940.7	5865.2	10679.8	8738.8
10	6706.1	7079.9	8039.7	9862.0	11158.9	9017.2	7722.7	8638.5	6640.4	6339.8	10197.7	13012.6
11	9042.6	11349.7	12561.2	11646.1	11168.3	10355.1	8774.0	9253.8	5756.3	6024.0	10476.1	7719.9
12	6580.5	10507.2	12629.3	11805.8	11292.4	10433.1	9514.8	9570.9	10251.5	7147.3	11064.1	8148.6
13	6617.2	9907.0	12559.6	11597.4	11147.6	10303.0	9108.4	6904.7	10407.7	8172.5	13763.2	13763.2
14	9289.6	11228.8	12476.8	11592.5	11168.9	10314.7	8313.6	9578.7	9808.2	9378.0	11050.5	11008.1
15	8980.2	11309.2	12491.8	11568.9	11125.5	8803.1	7299.3	5739.9	10541.6	8342.2	11145.8	8569.0
16	6758.8	9041.7	12437.0	11566.4	10808.6	9006.2	7917.2	7043.1	7634.2	7540.4	10669.3	9528.7
17	9478.4	11131.6	12536.1	11617.6	11180.8	9835.1	8221.9	6206.0	10395.8	6056.7	10414.6	8391.3
18	6612.1	7070.6	8036.4	9555.7	11248.1	9228.4	7656.5	9024.1	9640.5	8122.5	12664.8	13763.2
19	7567.2	11273.5	12611.8	11621.8	11179.6	10388.7	9399.6	9454.5	9968.1	8922.8	10920.5	8709.9
20	6593.6	7055.6	7998.0	8703.6	10838.8	8919.3	7561.8	5988.5	5991.7	5662.0	11178.0	8712.0
21	6663.6	7143.0	8140.1	7540.0	6554.6	6689.2	6544.4	6087.6	6448.9	6324.6	10672.8	8622.5
22	6972.3	7399.5	8285.0	7573.9	6563.5	6686.7	5854.6	6244.8	6796.2	5742.0	10405.9	9248.8
23	8518.9	11304.0	12564.7	11665.0	11214.5	10417.7	9414.3	10266.8	10319.6	8408.5	11364.1	8784.2
24	6265.8	10931.9	12463.9	11559.3	11142.7	9484.3	7589.5	5682.3	6871.3	5805.8	11188.1	8952.0
25	6378.8	7043.8	8003.9	7392.6	6426.2	8067.3	7551.9	9436.1	6017.8	5796.9	11037.0	8420.1
26	6617.7	7119.5	8152.2	7527.7	6568.9	6690.3	5853.2	8173.9	9915.0	8905.6	10941.6	8144.7
27	7791.9	11076.8	12439.1	11362.8	10856.0	8964.5	7864.0	6575.2	6444.8	5796.6	11497.7	8882.3
28	6679.8	7257.3	8230.9	7536.0	6538.8	9075.6	8112.6	6715.4	10228.7	8499.0	11131.2	8576.1
29	6722.0	10985.1	12590.6	11649.5	11197.4	10391.1	9388.6	6729.8	5579.5	5721.3	10936.5	8773.4
30	6785.9	7228.4	8140.7	7489.2	6504.2	6582.8	7318.3	7986.2	7605.9	8585.9	10646.7	8702.4
31	6685.2	8891.8	12512.5	11590.6	11142.6	10351.8	9262.5	6238.7	9481.9	9188.2	11236.0	8362.0
32	7855.0	11345.7	12478.0	11592.9	11121.6	10331.1	8864.9	6509.5	5598.0	8176.9	13763.2	12762.0
AVE	7318.4	9444.5	11128.2	10484.6	10094.3	9204.0	8005.7	7656.6	8146.1	7094.4	11128.1	9424.8

SPILLS (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2732.6
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2460.1	1004.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1965.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4115.0	0.0
AVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	205.5	176.2

DOES NOT INCLUDE SPILLAGE DUE TO INSUFFICIENT DEMAND.

HEAD (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	583.4	558.4
2	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	584.0	570.3
3	591.3	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.0	574.2
4	588.2	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	586.3	561.7
5	580.4	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.9	572.6
6	585.7	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	593.3	593.3
7	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
8	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	589.3	589.3
9	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	588.2	563.2
10	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
11	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	587.5	566.2
12	583.8	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.6	578.9
13	589.4	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
14	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	602.4	602.4
15	605.0	605.0	605.0	605.0	605.0	605.0	605.0	604.5	604.6	605.0	593.7	573.2
16	584.5	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	592.8	592.8
17	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	588.0	563.0
18	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
19	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	583.4	558.3
20	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	604.7	580.5	555.8
21	580.0	605.0	605.0	605.0	605.0	605.0	599.7	599.7	605.0	605.0	586.0	561.0
22	580.0	605.0	605.0	605.0	605.0	605.0	605.0	601.0	601.0	605.0	600.5	600.5
23	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.8	564.4
24	597.7	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	603.7	578.7	555.0
25	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	582.6	557.6
26	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	590.3	581.1
27	595.8	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	603.8	578.8	555.0
28	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	594.1	574.1
29	585.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	583.4	558.4
30	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.6	566.6
31	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	595.0	585.0
32	595.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	604.2	604.2	605.0	605.0
AVE	590.8	605.0	605.0	605.0	605.0	605.0	604.8	604.7	604.9	604.9	591.5	577.4

WATER SURFACE AT START OF MONTH (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1411.7
2	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1413.0
3	1427.6	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1427.0
4	1421.5	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1417.6
5	1405.8	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1428.8
6	1416.4	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1431.5
7	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
8	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1423.5
9	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1421.4
10	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
11	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1420.0
12	1412.5	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1434.1
13	1423.8	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
14	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1449.7
15	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1454.1	1455.0	1455.0	1432.3
16	1414.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1430.6
17	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1420.9
18	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
19	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1411.7
20	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1454.3	1406.7
21	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1444.3	1455.0	1455.0	1455.0	1417.0
22	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1446.9	1455.0	1455.0	1446.0
23	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1428.5
24	1440.3	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1452.5	1405.0
25	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1410.2
26	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1425.6
27	1436.7	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1452.6	1405.0
28	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1433.2
29	1415.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1411.8
30	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1426.2
31	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1434.9
32	1435.1	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1453.4	1455.0	1455.0
AVE	1426.7	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1454.7	1454.7	1455.0	1454.9	1426.2

ENERGY FROM RESERVOIR 2 (GWH) DEVIL CANYON

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	214.1	337.6	404.9	375.4	319.0	285.7	232.4	204.5	189.8	194.3	342.2	259.3	3359.2
2	203.7	222.0	261.6	241.4	189.6	213.7	220.5	256.7	180.3	185.3	340.9	232.5	2747.4
3	205.7	321.0	406.3	376.6	325.9	318.1	234.8	187.0	233.5	206.7	339.9	246.1	3401.7
4	208.9	357.4	406.1	375.9	326.3	322.1	255.3	316.9	313.3	186.8	333.1	231.9	3633.1
5	210.3	221.9	382.2	364.6	319.6	287.7	242.7	320.3	220.5	193.0	316.4	236.4	3315.5
6	211.9	224.1	407.5	377.5	327.7	339.3	242.0	201.8	263.1	244.8	356.5	312.2	3508.3
7	247.5	345.7	404.8	375.2	318.5	291.6	231.5	321.1	316.4	298.8	379.5	432.0	3965.5
8	266.5	357.8	406.4	376.4	327.2	336.2	274.4	236.1	303.6	192.4	342.7	256.9	3676.5
9	231.0	360.5	414.4	377.1	325.6	334.8	294.1	256.1	249.2	190.2	336.8	255.3	3727.1
10	208.6	222.2	260.8	319.9	326.9	292.5	242.4	280.2	208.4	200.6	330.8	408.5	3306.7
11	293.3	356.3	407.4	377.8	327.2	335.9	275.4	300.2	180.7	193.4	330.0	226.8	3606.2
12	205.9	329.8	409.6	382.9	330.8	338.4	298.7	310.4	321.9	231.8	352.7	244.7	3757.9
13	209.1	311.0	407.4	376.2	326.6	335.8	285.9	223.9	326.7	265.1	446.1	432.0	3946.1
14	301.3	352.5	404.7	376.0	327.2	334.6	261.0	310.7	307.9	304.2	356.9	344.0	3980.9
15	291.3	355.0	405.2	375.3	325.9	285.5	229.1	186.0	330.6	270.6	354.7	254.6	3664.1
16	211.6	283.6	403.4	375.2	316.6	292.1	218.5	226.1	239.6	241.6	339.1	293.1	3176.2
17	307.4	349.4	406.6	376.8	327.6	319.0	256.1	201.3	326.3	196.5	328.3	240.2	3642.5
18	205.6	221.9	260.7	309.9	329.5	299.3	240.3	292.7	302.6	263.5	417.3	432.0	3575.4
19	245.4	353.9	408.1	377.0	327.5	337.0	295.1	306.7	313.5	289.4	341.5	252.3	3848.4
20	205.0	221.5	258.4	282.3	317.5	269.3	237.4	194.2	188.1	184.2	347.9	251.2	2977.9
21	207.2	224.2	264.9	244.6	192.0	217.0	203.6	193.7	202.4	205.1	335.3	251.0	2742.1
22	216.8	232.3	265.7	245.7	192.3	216.9	183.8	201.2	211.9	186.2	335.0	288.2	2778.8
23	276.3	354.8	407.6	378.4	328.6	337.9	295.5	333.0	323.9	272.7	360.5	266.3	3935.6
24	200.8	343.1	404.3	374.9	326.5	307.6	238.2	184.3	215.7	187.9	347.1	257.8	3388.2
25	204.6	221.1	259.6	239.8	188.3	261.7	237.0	306.1	188.9	188.0	344.7	243.6	2883.3
26	205.8	223.5	264.4	244.2	192.4	217.0	183.7	265.1	311.2	288.9	346.3	245.6	2988.0
27	248.9	347.7	404.1	368.6	318.0	290.8	246.8	213.3	202.3	187.6	356.8	255.8	3440.6
28	207.7	227.8	267.1	244.4	191.6	294.4	254.6	217.8	321.1	275.7	354.5	255.4	3112.1
29	210.8	344.8	408.4	377.9	328.1	337.1	294.7	218.3	175.1	185.6	342.0	254.2	3476.9
30	211.0	226.9	264.0	242.9	190.5	213.5	229.7	259.0	238.7	276.5	337.7	255.8	2946.3
31	207.9	279.1	405.8	376.0	326.5	335.8	290.7	202.3	297.6	298.0	358.4	253.8	3631.9
32	250.6	356.1	404.1	376.0	325.8	335.1	278.3	211.1	175.5	264.9	446.4	400.6	3824.6
AVE	232.3	296.5	361.0	340.1	295.7	298.5	251.2	248.2	255.6	230.1	353.0	283.6	3445.9

TOTAL ENERGY PRODUCED (GWH)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	431.7	728.4	870.7	796.0	666.9	588.5	471.4	355.5	324.6	331.9	495.8	538.5	6599.7
2	653.9	471.9	551.4	504.2	392.0	438.5	444.0	471.3	325.1	328.8	491.6	494.1	5566.9
3	561.0	689.6	870.9	796.5	682.3	656.1	477.9	354.0	340.8	340.5	538.2	464.4	6772.1
4	572.5	767.1	870.7	796.7	682.4	664.3	517.4	555.1	325.8	331.5	476.6	390.1	7150.2
5	657.6	472.5	819.1	772.3	667.3	592.8	190.3	533.1	332.8	331.1	140.7	392.4	6502.5
6	610.2	473.3	871.1	796.6	682.6	698.6	489.6	354.9	438.0	434.0	627.1	787.0	7263.0
7	525.4	750.9	870.6	796.2	664.7	598.8	474.7	554.3	325.8	517.1	700.3	935.2	7914.0
8	548.6	766.9	870.7	797.1	683.0	692.4	556.2	404.7	326.0	331.9	539.1	597.5	7314.0
9	676.9	767.3	870.5	796.5	682.4	693.4	598.2	463.7	440.1	331.9	555.7	475.6	7307.3
10	658.4	472.3	552.0	672.6	679.4	599.6	488.1	445.2	324.6	331.8	543.7	794.5	6562.3
11	613.0	766.8	870.6	797.0	683.0	692.3	558.7	554.1	324.2	332.0	469.1	377.6	7038.4
12	611.1	706.6	870.6	802.8	688.1	692.8	598.1	555.0	326.1	363.9	617.4	430.3	7482.9
13	578.3	670.8	874.6	796.8	682.8	692.3	579.9	430.2	525.7	517.6	989.1	918.1	8256.4
14	636.5	766.9	870.7	797.0	683.0	692.3	532.9	555.2	525.6	518.1	690.8	755.9	8024.7
15	611.8	767.8	870.7	796.0	680.8	588.5	465.8	357.8	525.7	517.2	624.0	491.2	7257.4
16	622.0	611.1	870.6	797.7	663.4	603.2	555.6	422.7	400.3	413.7	546.3	690.4	7147.0
17	629.3	753.8	870.7	796.2	682.1	653.9	516.7	355.0	525.6	331.2	465.8	430.3	7012.7
18	658.3	472.2	552.0	650.6	684.6	613.2	484.9	554.5	525.9	449.4	752.4	955.4	7331.3
19	520.1	766.7	870.1	796.9	683.0	692.8	597.8	554.4	526.5	517.3	495.6	511.0	7540.0
20	657.9	472.2	551.9	596.2	663.5	596.1	481.9	355.2	324.9	334.3	568.9	523.9	6066.9
21	650.1	471.7	551.3	504.1	391.7	438.3	366.3	401.1	324.3	331.7	476.8	469.1	5376.3
22	649.9	472.3	551.8	504.3	391.9	438.4	366.1	352.9	358.9	328.8	578.7	650.1	5684.4
23	588.7	767.0	870.8	796.3	682.4	693.4	598.3	554.6	526.5	518.3	636.6	617.0	7849.8
24	503.6	745.8	870.7	796.1	682.1	634.5	484.9	355.0	362.0	342.6	512.9	567.5	6857.9
25	650.1	472.1	551.5	504.2	392.0	539.6	482.3	554.1	324.4	331.3	500.1	471.4	5778.2
26	652.0	471.8	551.6	504.3	392.2	438.6	366.6	461.5	526.5	517.5	562.2	523.5	5968.4
27	588.8	753.4	870.5	780.7	663.8	597.7	498.3	355.5	325.0	342.1	554.5	557.3	6887.8
28	654.0	472.2	551.9	504.5	392.2	601.0	510.8	455.4	526.1	517.6	623.1	452.1	6161.2
29	609.9	734.5	870.6	797.0	683.0	692.6	597.5	430.3	324.9	331.9	495.0	513.1	7080.3
30	653.2	472.1	551.6	504.3	392.1	438.7	466.8	496.7	457.9	501.4	532.3	443.8	5910.9
31	662.0	594.5	870.6	796.9	682.9	692.4	589.4	371.6	522.4	517.5	614.8	520.9	7436.0
32	621.0	767.3	870.8	799.3	683.0	692.1	565.0	386.4	332.0	448.6	988.8	859.2	8015.8
AVE	610.1	634.7	769.9	717.0	615.8	613.7	507.0	445.1	429.5	404.8	581.1	579.3	6906.1

TOTAL USABLE ENERGY (GWH)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	431.7	728.4	670.5	796.0	666.9	588.5	471.4	355.5	324.6	331.9	490.8	538.5	6599.5
2	653.9	471.9	701.4	504.2	392.0	438.5	444.0	471.3	325.1	328.8	491.6	494.1	5866.9
3	561.0	689.6	670.5	796.1	682.1	636.1	477.9	354.0	340.8	340.5	538.2	464.4	6771.0
4	572.5	766.8	670.5	796.1	682.1	664.3	517.4	554.3	525.6	331.5	476.6	390.1	7147.7
5	657.6	472.5	670.1	772.3	667.3	592.8	490.3	533.1	332.8	331.4	440.7	392.1	6502.5
6	610.2	473.3	670.5	796.1	682.1	691.9	489.6	354.9	438.0	434.0	543.1	568.8	6952.4
7	525.4	750.9	670.5	796.1	664.7	598.8	474.7	554.3	525.6	517.1	543.1	568.8	7390.0
8	548.6	766.8	670.5	796.1	682.1	691.9	556.2	404.7	525.6	331.9	539.1	568.8	7282.3
9	676.9	766.8	670.5	796.1	682.1	691.9	597.6	463.7	440.1	331.9	505.7	475.6	7298.8
10	658.4	472.3	702.8	672.8	679.4	599.6	488.1	445.2	324.6	331.8	543.1	568.8	6335.9
11	613.0	766.8	670.5	796.1	682.1	691.9	538.7	554.1	324.2	332.9	469.1	377.6	7036.0
12	611.1	706.6	670.5	796.1	682.1	691.9	597.6	554.3	525.6	383.9	543.1	430.3	7393.1
13	578.3	670.8	670.5	796.1	682.1	691.9	579.9	430.2	525.6	517.1	543.1	568.8	7454.4
14	636.5	766.8	670.5	796.1	682.1	691.9	532.9	554.3	525.6	517.1	543.1	568.8	7685.6
15	611.8	766.8	670.5	796.0	680.8	588.5	465.8	357.8	525.6	517.1	543.1	451.2	7175.0
16	622.0	611.1	670.5	796.1	663.4	603.2	505.6	422.7	400.3	413.7	543.1	568.8	7020.4
17	629.3	753.8	670.5	796.1	682.1	653.9	518.7	355.0	525.6	331.2	465.8	430.3	7012.3
18	658.3	472.2	702.8	650.6	682.1	613.2	484.9	531.5	525.6	449.4	543.1	568.8	6734.6
19	520.1	766.7	670.5	796.1	682.1	691.9	597.6	554.3	525.6	517.1	495.6	511.0	7528.5
20	657.9	472.2	651.9	596.2	663.5	596.1	481.9	355.2	324.9	334.3	508.9	523.9	6066.9
21	650.1	471.7	651.3	504.1	391.7	438.3	366.3	401.1	324.3	331.7	478.8	469.1	5378.3
22	649.9	472.3	651.8	504.3	391.9	438.4	366.4	352.9	358.9	328.8	543.1	568.8	5527.6
23	588.7	766.8	670.5	796.1	682.1	691.9	597.6	554.3	525.6	517.1	543.1	568.8	7702.5
24	503.6	745.8	670.5	796.1	682.1	634.5	484.9	355.0	362.0	342.6	512.9	567.5	6857.5
25	655.1	472.1	651.5	504.2	392.0	539.6	482.3	554.1	324.4	331.3	500.1	471.4	5778.2
26	652.0	471.8	651.6	504.3	392.2	438.6	366.6	461.5	525.6	517.1	543.1	523.5	5948.0
27	588.8	753.4	670.5	780.7	663.8	597.7	496.3	355.5	325.0	342.1	543.1	557.3	6876.3
28	654.0	472.2	651.9	504.5	392.2	601.9	510.8	355.4	525.6	517.1	543.1	492.1	6979.9
29	609.9	734.5	670.5	796.1	682.1	691.9	597.5	430.3	324.9	331.9	495.0	513.1	7077.6
30	653.2	472.1	651.6	504.3	392.1	438.7	466.8	496.7	457.9	501.4	532.3	443.8	5910.9
31	662.0	594.5	670.5	796.1	682.1	691.9	589.4	371.6	522.4	517.1	543.1	520.9	7361.6
32	621.0	766.8	670.5	796.1	682.1	691.9	565.0	388.4	332.0	446.6	543.1	568.8	7274.3
AVE	610.1	634.6	769.3	716.4	615.3	613.2	507.0	445.0	429.4	404.7	519.9	508.0	6772.7

FORECAST DEMAND ENERGY (GWH)

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
677.0	766.8	670.5	796.1	682.1	691.9	597.6	554.3	525.6	517.1	543.1	568.8	7790.9

PRE-PROJECT FLOW AT GOLD CREEK (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6335.0	2583.0	1437.0	1027.0	786.0	726.0	870.0	11510.0	19600.0	22600.0	19880.0	8301.0
2	3848.0	1300.0	1100.0	960.0	820.0	740.0	1617.0	14090.0	20790.0	22570.0	19670.0	21240.0
3	5571.0	2744.0	1900.0	1600.0	1000.0	880.0	920.0	5419.0	32370.1	26390.0	20920.0	14480.0
4	8202.0	3497.0	1700.0	1100.0	820.0	820.0	1615.0	19270.0	27320.1	20200.0	20610.0	15270.0
5	5604.0	2100.0	1500.0	1300.0	1000.0	780.0	1235.0	17280.0	25250.0	20360.0	26100.0	12920.0
6	5370.0	2760.0	2045.0	1794.0	1400.0	1100.0	1200.0	9319.0	29860.0	27560.0	25750.0	14290.0
7	4931.0	1900.0	1300.0	980.0	970.0	940.0	950.0	17660.0	33340.0	31090.1	24530.0	18330.0
8	5806.0	3050.0	2142.0	1700.0	1500.0	1200.0	1200.0	13750.0	30160.0	23310.0	20540.0	19800.0
9	8212.0	3954.0	3264.0	1965.0	1307.0	1146.0	1533.0	12900.0	25700.0	22880.0	22540.0	7550.0
10	4611.0	2150.0	1513.0	1446.0	1307.0	980.0	1250.0	15990.0	28320.0	25000.0	31180.0	16920.0
11	6558.0	2850.0	2200.0	1845.0	1452.0	1197.0	1300.0	15780.0	15030.0	22980.0	23590.0	20510.0
12	7794.0	3000.0	2694.0	2452.0	1754.0	1810.0	2650.0	17360.0	29450.0	24570.0	22100.0	13370.0
13	5916.0	2700.0	2100.0	1900.0	1500.0	1400.0	1700.0	12590.0	43270.0	25850.0	23550.0	15690.0
14	6723.0	2800.0	2000.0	1600.0	1500.0	1000.0	830.0	19030.0	26000.0	34400.0	23670.0	12320.0
15	6149.0	2250.0	1494.0	1048.0	966.0	713.0	745.0	4307.0	30380.0	22950.0	16140.0	9071.0
16	6291.0	2799.0	1211.0	960.0	860.0	900.0	1360.0	12990.0	25720.0	27640.0	21120.0	19350.0
17	7205.0	2098.0	1681.0	1400.0	1300.0	1300.0	1775.0	9645.0	32950.0	19860.0	21830.0	11750.0
18	4163.0	1600.0	1500.0	1500.0	1400.0	1200.0	1167.0	15480.0	29510.0	26800.0	32620.0	16870.0
19	4900.0	2353.0	2053.0	1981.0	1900.0	1900.0	1910.0	16180.0	31550.0	26420.0	17170.0	8816.0
20	4272.0	1906.0	1350.0	1086.0	922.0	833.0	1022.0	9852.0	20523.0	18093.0	16322.0	9776.0
21	3124.0	1215.0	866.0	824.0	768.0	776.0	1080.0	11360.0	18630.0	22660.0	19980.0	9121.0
22	5288.0	3407.0	2290.0	1442.0	1036.0	950.0	1082.0	3745.0	32930.0	23950.0	31910.0	14440.0
23	5847.0	3093.0	2510.0	2239.0	2028.0	1823.0	1710.0	21690.0	34430.0	22770.0	19290.0	12400.0
24	4826.0	2253.0	1465.0	1200.0	1200.0	1000.0	1027.0	8235.0	27800.0	18250.0	20290.0	9074.0
25	3733.0	1523.0	1034.0	674.0	777.0	724.0	992.0	16180.0	17870.0	18800.0	16220.0	12250.0
26	3739.0	1700.0	1603.0	1516.0	1471.0	1400.0	1593.0	10350.0	32310.0	27720.0	18090.0	16310.0
27	7739.0	1993.0	1061.0	974.0	950.0	900.0	1373.0	12620.0	24380.0	18940.0	19800.0	6881.0
28	3874.0	2650.0	2403.0	1829.0	1618.0	1500.0	1680.0	12680.0	37970.0	22870.0	19240.0	12640.0
29	7571.0	3525.0	2587.0	2029.0	1668.0	1605.0	1702.0	11950.0	19050.0	21020.0	16390.0	8607.0
30	4907.0	2535.0	1681.0	1397.0	1286.0	1200.0	1450.0	13870.0	24690.0	28880.1	20460.0	10770.0
31	7311.0	4192.0	2416.0	1748.0	1466.0	1400.0	1670.0	12060.0	29080.0	32660.0	20960.0	13280.0
32	7725.0	3986.0	1773.1	1453.6	1235.6	1114.3	1367.5	13316.7	16143.0	32000.0	38538.0	13171.1
AVE	5770.8	2577.1	1807.2	1474.1	1249.1	1123.7	1361.7	13240.0	27814.9	24445.1	22228.1	13320.9

POST-PROJECT FLOWS AT COLD CREEK (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7179.2	10934.4	12578.2	11650.3	10939.3	8865.3	7472.8	7324.3	7178.9	7206.1	12000.0	9300.0
2	6748.5	7141.1	8134.7	7897.6	6524.0	6631.9	7138.6	6784.5	6555.1	6708.4	12000.0	9300.0
3	6839.1	10431.1	12668.8	11726.9	11180.6	9859.6	7522.8	6195.0	9795.3	7901.5	12000.0	9300.0
4	7307.4	11650.3	12668.0	11689.6	11211.6	9983.0	8217.8	11255.3	12069.7	6776.1	12000.0	9300.0
5	7251.7	7247.7	11676.3	11315.6	10979.8	8919.3	7837.8	11870.4	9085.4	7156.4	12000.0	9300.0
6	7286.5	7392.2	12737.4	11782.4	11311.0	10536.0	7802.8	7151.2	10161.0	8894.3	12000.0	10444.4
7	7932.9	11123.8	12571.1	11625.2	10949.8	9079.3	7552.8	11581.5	12282.2	11088.6	13619.9	18330.0
8	8787.9	11673.8	12683.1	11721.9	11278.3	10456.6	8833.8	8556.0	11415.3	7132.1	12000.0	10172.8
9	10983.0	11848.8	13134.1	11797.3	11207.9	10382.6	9465.4	9008.2	9227.2	6782.1	12000.0	9300.0
10	7116.3	7230.1	8181.8	9993.1	11286.8	9119.3	7852.8	10727.6	8422.7	7949.4	12783.3	14603.0
11	9039.9	11577.0	12747.7	11804.9	11280.1	10439.3	8856.2	10230.9	6576.5	7264.7	12000.0	9300.0
12	7203.6	10747.3	12656.7	12045.8	11452.8	10604.2	9759.4	10900.2	12635.2	8836.7	12000.0	9300.0
13	7073.8	10062.9	12669.9	11701.4	11234.2	10432.7	9195.0	7353.5	12998.0	9031.9	17531.5	15890.0
14	9704.9	11332.8	12684.8	11696.5	11281.5	10356.3	8332.7	10911.1	11714.1	11389.6	12000.0	11550.9
15	9430.9	11473.8	12676.7	11638.9	11191.3	8852.3	7347.8	6000.0	13305.2	9366.2	12000.0	9300.0
16	7305.8	9195.6	12487.2	11601.1	10839.8	9039.3	7962.8	7766.0	9243.9	9184.7	12000.0	10644.5
17	10186.9	11321.8	12666.7	11738.9	11293.4	9947.7	8377.8	7117.0	12899.5	7360.5	12000.0	9300.0
18	6931.1	7212.7	8171.5	9697.8	11379.8	9339.3	7769.8	10068.6	11354.1	9841.3	15191.8	16870.0
19	7881.9	11423.0	12737.1	11751.6	11300.9	10510.0	9518.6	10652.1	12076.0	10471.8	12000.0	9300.0
20	6889.6	7178.6	8091.0	8777.6	10901.8	8972.3	7624.8	6686.5	7093.7	6484.0	12000.0	9300.0
21	6921.1	7212.3	8176.1	7607.1	6613.9	6743.4	6577.8	6746.0	7960.0	7842.4	12000.0	9300.0
22	7515.1	7724.7	8509.2	7697.1	6655.9	6769.9	5950.4	6561.9	8695.2	6750.4	12000.0	10052.8
23	8828.9	11484.7	12762.1	11867.9	11406.1	10580.9	9558.8	12360.0	12819.8	9462.0	12000.0	9300.0
24	6403.2	11030.1	12541.7	11619.5	11214.1	9529.3	7629.8	6020.9	8278.7	6484.0	12000.0	9300.0
25	6820.4	7103.9	8040.5	7423.9	6457.3	8101.8	7594.8	10611.5	7121.1	6806.9	12000.0	9300.0
26	6849.9	7200.1	8268.7	7634.9	6697.7	6818.4	5989.5	9487.4	11922.4	10437.6	12000.0	9300.0
27	8527.6	11216.8	12532.2	11440.0	10929.8	9039.3	7975.8	7869.9	8011.2	6484.0	12000.0	9300.0
28	7001.4	7515.6	8491.4	7707.6	6687.1	9214.6	8282.8	8183.5	12592.0	9628.5	12000.0	9300.0
29	7356.7	11299.3	12698.2	11810.6	11340.4	10515.5	9493.5	6986.4	6212.7	6662.3	12000.0	9300.0
30	7190.6	7439.1	8272.3	7582.1	6586.6	6618.1	7365.5	8522.2	8243.5	10003.2	12000.0	9300.0
31	7096.2	9128.8	12649.5	11669.6	11225.6	10430.8	9357.5	6921.7	12306.9	11846.2	12000.0	9300.0
32	8334.0	11632.7	12677.1	11759.5	11268.2	10448.4	8994.4	8130.2	6000.0	8940.9	21116.2	13171.1
AVE	7764.9	9630.8	11270.9	10396.7	10190.9	7285.6	8100.4	8706.3	9882.9	8367.3	12633.5	10510.3

SUSITNA HEP
WATANA 2190 DC 1455
CASE C 120'Dmh!R2!-SM. H

DC 29 SEP 82

. CASE C

- 120' D/DOWN @ WATANA
- Modified hydrology
- R2 Rule curve
- Demand 2010 less small hydro. production.

EL	STORAGE	EL	STORAGE
1900.0	2550000.0	[illegible]	0.0
1950.0	3330000.0	1000.0	7500.0
2000.0	4250000.0	1050.0	35000.0
2050.0	5340000.0	1150.0	95000.0
2100.0	6650000.0	1200.0	132000.0
2150.0	8189999.5	1250.0	195000.0
2200.0	10020000.0	1300.0	292000.0
2250.0	12210000.0	1350.0	450000.0
-1.0	-1000000.0	1400.0	707000.0
-1.0	-1000000.0	1450.0	1048000.0
-1.0	-1000000.0	1500.0	1484000.0
MAX. STORAGE =	9654000.0		1092000.0
MIN. STORAGE =	5733000.0		741000.0

MAXIMUM P.H.Q = 19391.0 START WSEL=2185.0 TWEL=1455.0 PMAX=.10200E+07
MAXIMUM P.H.Q = 13763.2 START WSEL=1455.0 TWEL= 850.0 PMAX=.60000E+06

MONTHLY WATER LEVEL

2183.5	2165.5	2146.0	2125.0	2106.0	2091.0	2078.0	2092.0	2120.0	2150.0	2180.0	2190.0
1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0

MONTHLY FLOW DISTRIBUTION

1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.8	0.7	1.0	1.0
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0

MONTHLY FLOW REQD

2000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	6000.0	6000.0	6484.0	12000.0	9300.0

YEARS OF SIMULATION = 32 TER = 0.0100

DEMAND FACTOR 0.460

MONTHLY POWER DEMAND

0.500511E+06	0.[illegible]30012E+06	0.745200E+06	0.681113E+06	0.595727E+06	[illegible]
0.511207E+06	0.476183E+06	[illegible]	[illegible]	[illegible]	[illegible]

	WATANA UPPER RESERVOIR				DEVIL CANYON LOWER RESERVOIR				TOTAL ENERGY (GWH)	
MON	P.H.FLOW CFS	HEAD FT	POWER MW	ENERGY GWH	P.H.FLOW CFS	HEAD FT	POWER MW	ENERGY GWH	PROD	USED
OCT	9594.5	723.8	499.4	371.5	7518.7	592.5	322.0	239.5	611.1	611.0
NOV	9035.9	713.7	466.0	335.5	9368.3	605.0	408.4	294.1	629.6	628.9
DEC	10611.5	699.9	536.4	399.1	10860.5	605.0	473.5	352.3	751.4	750.8
JAN	9859.0	683.5	486.5	362.0	10055.1	605.0	438.4	326.1	688.1	687.5
FEB	9484.3	667.3	456.8	307.0	9653.4	605.0	420.9	282.8	589.8	589.1
MAR	8897.9	651.3	418.1	311.1	9041.6	605.0	394.2	293.3	604.3	603.6
APR	7832.3	635.6	359.2	258.6	8083.9	604.7	352.3	253.6	512.3	511.6
MAY	5828.2	633.4	266.3	198.1	7693.4	604.2	335.0	249.2	447.4	447.0
JUN	5404.6	656.1	255.6	184.0	8345.1	604.6	363.6	261.8	445.8	445.6
JUL	4924.5	688.5	247.8	184.4	7349.7	604.9	320.4	238.4	422.8	422.3
AUG	5610.7	713.7	342.2	254.6	11316.9	592.2	493.3	367.4	621.7	486.9
SEP	6131.7	726.1	436.1	306.9	9500.3	529.8	398.7	297.0	593.9	491.9
ANN	7922.5	683.7	398.7	289.4	9065.6	600.7	392.5	286.5	6910.4	6676.2

	ENERGY (GWH) OCT-~~APR~~ APR	MAY-SEP	ANNUAL
AVERAGE	4382.5	2293.7	6676.2
FIRM (YEAR 22	3350.9	2131.3	5482.2

	ENERGY (GWH) OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANNUAL
AVER	611.0	628.9	750.8	687.5	589.1	603.6	511.6	447.0	445.6	422.3	486.9	491.9	6676.2
FIRM (YR 22	625.7	472.5	551.8	504.3	391.8	438.4	366.4	354.0	439.8	328.8	491.0	517.7	5482.2

PRESENT WORTH COST BASED ON REGRESSION ANALYSIS

R1 = -0.8154050 R2 = -0.1259790 R3 = 13274.9

PRESENT WORTH COST (**10**6) = 7140.4

WIDC - SW-H

RESERVOIR 1 WATANA

INFLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4719.9	2083.6	1168.9	815.1	641.7	569.1	680.1	8655.9	16432.1	19193.4	16713.6	7330.4
2	3299.1	1107.3	906.2	808.0	673.0	619.8	1302.2	11649.8	18517.9	19786.6	16478.0	17205.5
3	4592.9	2170.1	1501.0	1274.5	841.0	735.0	803.9	4216.5	25773.4	22110.9	[illegible]	11571.0
4	6285.7	2756.8	1281.2	818.9	611.7	670.7	1382.0	15037.2	21469.8	17355.3	[illegible]	11513.5
5	4218.9	1599.6	1183.8	1087.8	803.1	638.2	942.6	[illegible]	[illegible]	16983.6	[illegible]	[illegible]
6	3859.2	2051.1	1549.5	1388.3	1050.5	986.1	940.8	6718.1	24881.4	23787.9	23537.0	13447.9
7	4102.3	1528.1	1038.6	816.9	754.8	694.4	718.3	12953.3	27171.8	25831.3	[illegible]	[illegible]
8	4208.0	2275.6	1707.0	1373.0	1189.0	935.0	945.1	10176.2	[illegible]	19948.9	[illegible]	[illegible]
9	6034.7	2935.9	2258.5	1480.6	1041.7	973.5	1265.4	9957.8	[illegible]	19752.7	[illegible]	[illegible]
10	[illegible]	1729.5	1115.1	1081.0	949.0	[illegible]	805.7	[illegible]	18329.6	20493.1	[illegible]	[illegible]
11	5165.5	2213.5	1672.3	1400.4	[illegible]	961.1	[illegible]	13044.2	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	2327.8	1973.2	1779.9	1304.8	[illegible]	1965.0	13637.9	22784.1	19839.8	[illegible]	[illegible]
13	4637.6	2263.4	1760.4	1608.9	1257.4	1176.8	1457.4	11733.5	[illegible]	23443.7	[illegible]	[illegible]
14	5560.1	2508.9	1703.9	1303.9	1184.7	883.6	776.6	15299.2	20663.4	29767.4	21011.4	10900.0
15	5187.1	[illegible]	1174.7	852.0	781.6	575.2	609.2	3578.8	42841.9	20082.8	14048.2	7524.2
16	4759.4	2368.2	1070.3	863.0	772.7	807.3	1232.4	10966.0	21213.0	23235.9	[illegible]	16225.6
17	5221.2	1565.3	1203.6	1060.4	984.7	984.7	1338.4	7094.1	25939.6	16153.5	17390.9	9214.1
18	[illegible]	1202.2	1121.6	1102.2	1031.3	889.5	849.7	12555.5	24711.9	21987.3	26104.5	13672.9
19	4019.0	1934.3	1704.2	1617.6	1560.4	1560.4	1576.7	12826.7	25704.0	22082.8	14147.5	7163.6
20	3447.0	1567.0	1073.0	884.0	748.0	686.0	850.0	7942.0	17509.0	15871.0	14078.0	8150.0
21	2403.1	1020.9	709.3	636.2	602.1	624.1	986.4	9536.4	14399.0	18410.1	16763.8	7224.1
22	3768.0	2496.4	1687.4	1097.1	777.4	717.1	813.7	2857.2	27612.8	21126.4	27446.6	12188.9
23	4979.1	2587.0	1957.4	1670.9	1491.4	1366.0	1305.4	15973.1	27429.3	19820.3	17509.5	10955.7
24	4301.2	1977.9	1246.5	1031.5	1000.2	873.9	914.1	7287.0	23859.3	16351.1	18016.7	8099.7
25	3056.5	1354.7	931.6	786.4	689.9	627.3	871.9	12889.0	14780.6	15971.9	13523.7	9786.2
26	3088.8	1474.4	1276.7	1215.8	1110.3	1041.4	1211.2	11672.2	26689.2	23430.4	15126.6	13075.3
27	5679.1	1601.1	876.2	757.8	743.2	690.7	1059.8	8938.8	19994.0	17015.3	18393.5	5711.5
28	2973.5	1926.7	1687.5	1348.7	1202.9	1110.8	1203.4	8569.4	31352.8	19707.3	16507.3	10613.1
29	5792.9	2645.3	1979.7	1577.9	1267.7	1256.7	1408.4	11231.5	17277.2	18385.2	13417.1	7132.6
30	3773.9	1744.9	1312.6	1136.8	1055.4	1101.2	1317.9	12369.3	22904.8	24911.7	16670.7	9096.7
31	6150.0	7525.0	2032.0	1470.0	1233.0	1177.0	1404.0	10140.0	23400.0	26740.0	18000.0	11000.0
32	6458.0	3297.0	1385.0	1147.0	971.0	899.0	1103.0	10406.0	17017.0	27840.0	31435.0	12026.0
AVE	4522.8	2059.1	1414.8	1165.5	983.3	898.3	1099.7	10354.7	23023.7	20810.1	18628.5	10792.0

POWERHOUSE FLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5612.5	10205.4	11458.1	10595.6	10115.3	9421.5	8497.3	4464.9	4006.5	3795.9	4077.1	7550.6
2	11481.3	6939.0	7928.5	7333.6	7226.2	7458.4	7024.6	5524.4	4707.8	4584.4	3999.5	5794.1
3	10207.2	10191.6	11437.2	10574.0	10120.6	9430.0	8524.4	4990.3	5319.7	5457.8	3378.1	5207.9
4	10910.9	10148.3	11449.9	10615.3	10118.2	9437.5	8497.8	6297.7	5499.0	5871.7	3772.6	4177.6
5	11032.7	7389.0	11490.6	10645.1	10152.4	9445.2	7678.8	5415.0	5384.7	3791.7	3363.5	4131.5
6	10212.8	7371.5	11437.3	10583.1	10074.3	9414.7	8484.7	4552.5	5808.9	5603.3	4290.6	11807.1
7	7970.3	10260.5	11467.2	10617.9	10102.2	9398.3	8487.7	6145.9	5381.9	5087.6	10635.6	13174.4
8	8076.0	10161.0	11404.5	10549.3	10045.8	9333.5	8459.9	6482.9	5781.4	5701.1	6032.0	8691.9
9	8094.6	10013.2	11187.2	10461.9	10008.3	9302.3	8383.5	6653.1	6156.3	5771.3	5847.9	4713.8
10	11310.3	6782.4	11467.5	10609.1	10110.1	9405.8	6975.4	4079.6	4333.5	5015.6	4821.7	8320.5
11	8322.8	10138.1	11369.5	10506.3	10036.4	9334.4	8483.0	6737.9	4755.1	4355.0	3678.1	7916.9
12	8751.8	10122.8	11304.6	10425.9	9972.7	9240.1	8258.6	6374.4	5188.5	5236.8	8722.4	10146.2
13	8056.1	10224.4	11431.7	10557.9	10062.4	9341.2	8421.8	7200.0	4999.0	5870.2	18711.5	10746.2
14	8389.7	10235.0	11433.6	10547.3	10030.8	9366.9	8516.0	6395.4	5610.3	4972.9	15044.5	10900.0
15	8360.9	10261.3	11445.3	10595.8	10097.9	9423.1	8509.9	5131.6	4973.2	5766.8	7109.1	7504.2
16	8627.4	10225.6	11493.9	10628.6	10131.1	9439.6	8513.3	7018.1	5935.0	5352.6	4168.9	10076.4
17	8308.3	10197.4	11408.0	10552.0	10054.5	9328.6	8409.1	4784.3	5143.1	5604.6	3617.2	4942.1
18	11249.5	6768.0	9908.1	10599.8	10106.5	9397.4	7261.7	6271.2	5842.2	5273.5	9149.4	13672.9
19	7887.0	10229.1	11433.9	10542.1	10037.8	9306.3	8390.9	6539.0	5455.0	5354.4	6017.8	5299.3
20	10994.8	8833.1	11508.9	10650.1	10162.5	9446.8	7223.9	4784.3	4086.2	4173.7	4340.9	7470.4
21	11558.6	7023.6	9046.0	7425.6	6454.0	6598.4	4527.4	7542.2	3738.3	3601.4	3901.6	6020.3
22	11362.1	6824.3	7909.9	7363.9	6407.7	6549.7	5693.4	3572.1	6947.5	3941.6	5860.0	7247.6
23	8847.1	10185.4	11365.5	10469.3	9963.7	9258.2	8359.2	5700.9	5050.5	5728.9	11731.3	10955.7
24	8169.2	10271.3	11474.9	10608.9	10096.4	9427.7	8516.0	5057.9	6119.6	4231.2	4373.4	8325.7
25	11421.0	6933.1	7934.9	7333.3	9147.5	7465.9	6594.3	6537.3	4025.6	3979.2	4135.8	6234.2
26	11518.3	6970.8	7938.5	7331.0	6333.7	6456.4	6242.8	5484.6	5568.0	5397.3	6049.0	8450.3
27	8452.6	10208.0	11471.5	10590.9	10093.2	9402.4	8454.6	5172.4	5765.1	4236.0	5214.3	9130.5
28	11413.2	6801.9	7789.6	7240.3	7838.8	7949.4	6925.8	4079.6	5262.2	5744.3	6208.7	6568.9
29	9661.9	10075.7	11346.7	10502.5	10005.6	9293.9	8396.7	7361.8	6756.0	4143.0	4064.7	7051.1
30	11333.7	6830.7	7879.0	7298.3	8250.6	7939.8	7040.3	6180.6	6777.4	5539.5	5575.5	4700.7
31	11011.4	10169.8	11435.1	10576.9	10082.9	9357.9	8462.6	7004.1	5946.9	5173.1	5913.6	10148.2
32	8418.6	10125.9	11510.3	10555.0	10053.9	9340.3	8418.2	6967.5	6623.1	5152.6	15792.7	12026.0
AVE	9594.5	9035.9	10611.5	9859.0	9484.2	8897.9	7832.3	5828.2	5404.6	4984.5	6610.7	8126.9

SPILLS (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEAD (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	729.3	721.9	706.6	688.5	670.5	653.0	635.3	631.3	648.9	676.9	703.3	714.1
2	707.0	695.0	682.9	669.3	656.9	643.5	629.5	630.2	651.3	680.3	706.9	725.7
3	730.3	719.9	704.2	686.6	669.0	651.8	634.2	624.6	645.0	682.6	710.2	726.7
4	728.0	718.1	703.6	685.2	666.9	649.2	632.0	634.2	659.9	686.6	708.6	725.4
5	725.6	715.2	701.7	683.3	665.3	647.6	630.7	630.4	651.9	679.2	707.0	725.7
6	724.5	714.8	702.1	684.5	667.2	650.3	632.9	626.9	649.0	686.0	717.8	733.7
7	731.8	721.4	705.6	687.3	669.2	652.0	634.3	633.5	662.8	702.4	727.9	735.0
8	731.8	722.1	707.5	690.6	673.9	657.5	641.0	637.1	660.6	692.8	715.5	730.0
9	732.3	725.8	712.5	697.0	680.9	664.5	649.0	645.4	664.4	692.7	716.6	728.6
10	723.4	713.1	700.0	681.5	663.7	646.1	629.9	630.1	651.3	680.8	712.2	731.6
11	732.3	723.3	708.7	691.9	675.3	659.0	642.7	641.8	657.1	680.3	708.6	728.4
12	728.7	724.1	709.9	694.1	678.4	662.6	648.5	649.6	674.1	703.7	725.6	738.0
13	731.9	722.3	707.7	691.0	674.6	658.9	642.9	640.3	674.3	710.3	734.6	737.6
14	732.6	724.0	709.5	692.7	676.1	659.7	642.9	648.4	668.6	704.0	730.9	737.6
15	732.3	722.8	707.3	689.3	671.5	654.3	636.5	625.7	661.7	711.4	728.3	735.6
16	731.8	722.1	707.0	686.8	670.9	653.8	636.9	633.3	653.2	685.7	713.9	730.0
17	732.4	722.8	707.2	689.5	672.2	655.7	639.5	634.4	657.8	698.6	719.4	725.4
18	722.2	710.9	698.7	681.5	663.9	646.6	630.3	630.4	656.5	690.9	720.8	735.0
19	731.9	721.8	706.8	690.1	673.9	658.5	643.5	643.2	669.7	703.8	725.1	733.5
20	728.7	716.1	701.5	682.8	664.6	646.8	630.2	626.7	644.5	670.2	691.1	700.9
21	692.9	678.6	665.4	651.3	638.3	625.1	614.0	612.3	626.9	654.1	681.7	695.1
22	688.7	677.0	666.6	654.1	642.2	629.6	617.2	610.8	632.6	672.3	700.2	721.0
23	731.8	722.3	708.2	692.1	676.1	660.6	645.4	648.8	680.6	713.5	730.1	735.0
24	731.8	721.8	706.4	688.5	671.0	654.3	637.2	631.2	651.3	681.9	705.5	716.9
25	709.7	698.0	686.3	672.8	658.6	643.5	629.5	630.5	648.8	671.7	697.4	708.1
26	699.7	687.1	675.1	662.3	651.5	640.6	628.7	630.3	658.5	695.8	719.9	731.2
27	732.7	723.3	707.4	689.1	671.1	654.0	636.9	633.0	651.7	678.8	702.9	718.3
28	703.2	691.5	680.8	668.9	657.0	643.5	629.5	628.3	659.6	698.1	719.5	731.7
29	731.8	722.5	708.5	692.3	676.0	660.1	644.8	641.9	656.5	680.9	702.9	718.9
30	704.6	693.8	682.8	670.1	657.5	643.5	629.5	630.3	657.7	688.1	715.7	729.6
31	728.1	718.6	705.3	688.5	671.7	655.5	639.5	635.4	656.4	693.5	723.5	734.3
32	733.4	726.2	712.1	695.0	678.2	661.6	645.6	641.9	655.9	687.3	721.9	735.0
AVE	723.8	713.7	699.9	683.5	667.3	651.3	635.6	633.4	656.1	688.5	717.7	726.1

WATER SURFACE AT START OF MONTH (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2185.0	2183.5	2170.3	2153.0	2134.0	2116.9	2099.1	2081.4	2091.2	2116.5	2147.3	2169.3
2	2188.9	2185.2	2144.9	2130.9	2117.8	2106.9	2091.0	2078.0	2092.4	2120.2	2150.5	2171.4
3	2190.0	2180.6	2167.5	2150.8	2132.4	2115.7	2098.0	2080.5	2078.7	2121.4	2153.9	2176.5
4	2186.9	2179.1	2167.1	2150.0	2130.5	2113.3	2095.1	2078.9	2099.4	2130.4	2152.9	2174.5
5	2186.4	2174.9	2165.5	2147.8	2128.8	2111.9	2093.3	2078.0	2092.7	2121.1	2147.4	2176.6
6	2184.8	2174.2	2165.5	2148.7	2130.3	2114.0	2096.5	2079.3	2084.4	2123.6	2158.4	2187.3
7	2190.0	2183.5	2169.4	2151.9	2132.7	2115.8	2098.1	2080.5	2096.5	2139.1	2175.7	2190.0
8	2190.0	2183.5	2170.7	2154.4	2136.9	2120.9	2104.1	2087.8	2096.5	2134.7	2161.0	2180.0
9	2190.0	2186.5	2175.0	2160.0	2144.0	2127.8	2111.1	2096.9	2104.0	2134.8	2160.7	2182.5
10	2184.6	2172.2	2164.0	2146.0	2127.0	2110.5	2091.8	2078.0	2092.2	2120.4	2151.1	2193.3
11	2190.0	2184.7	2171.8	2155.5	2138.4	2122.3	2105.6	2089.7	2103.9	2120.3	2150.4	2176.7
12	2190.0	2185.5	2172.8	2157.1	2141.2	2125.5	2109.7	2097.2	2112.1	2146.1	2171.3	2190.0
13	2190.0	2183.8	2170.8	2154.6	2137.5	2121.7	2105.4	2090.5	2100.2	2158.5	2138.0	2190.0
14	2190.0	2185.2	2172.7	2156.3	2139.1	2123.1	2106.2	2089.7	2109.9	2138.1	2180.0	2190.0
15	2190.0	2184.7	2170.9	2153.7	2134.9	2118.1	2100.4	2082.6	2078.9	2154.4	2178.5	2190.0
16	2190.0	2183.5	2170.7	2153.2	2134.3	2117.4	2100.2	2083.7	2093.0	2123.5	2157.8	2180.0
17	2190.0	2184.8	2170.8	2153.6	2135.4	2119.0	2102.3	2086.7	2092.1	2133.5	2153.8	2177.0
18	2183.9	2170.5	2161.4	2146.0	2127.0	2110.7	2092.6	2078.0	2092.8	2139.3	2161.5	2190.0
19	2190.0	2183.5	2170.0	2153.7	2136.5	2121.2	2105.8	2091.3	2105.2	2144.3	2173.3	2187.0
20	2190.0	2177.3	2165.5	2147.6	2128.1	2111.1	2092.5	2078.0	2085.4	2113.5	2136.9	2155.3
21	2156.4	2139.4	2127.8	2113.1	2099.5	2087.1	2073.0	2065.0	2069.7	2093.9	2124.4	2149.0
22	2151.1	2136.2	2127.8	2115.4	2102.9	2091.5	2077.8	2066.7	2065.0	2110.2	2144.5	2182.0
23	2190.0	2183.5	2171.1	2155.3	2138.8	2123.5	2107.7	2093.1	2114.6	2156.6	2180.3	2190.0
24	2190.0	2183.5	2170.0	2152.8	2134.2	2117.8	2100.7	2083.6	2088.8	2124.8	2149.0	2172.1
25	2171.7	2157.7	2148.3	2134.3	2121.3	2106.0	2091.0	2078.0	2092.9	2114.8	2138.7	2156.2
26	2162.0	2147.4	2136.8	2123.5	2111.2	2101.8	2089.4	2078.0	2092.5	2134.5	2167.2	2182.5
27	2190.0	2185.3	2171.3	2153.5	2134.6	2117.7	2100.3	2083.6	2092.4	2121.0	2146.6	2169.2
28	2165.3	2151.1	2141.9	2129.7	2118.0	2106.0	2091.0	2078.0	2088.5	2140.7	2165.6	2183.4
29	2190.0	2183.5	2171.4	2155.7	2138.9	2123.2	2107.1	2092.5	2101.3	2121.7	2150.1	2165.8
30	2165.9	2153.2	2144.4	2131.3	2119.0	2106.0	2091.0	2078.0	2092.5	2124.8	2161.4	2180.0
31	2187.1	2179.0	2168.2	2152.4	2134.6	2118.7	2102.3	2086.7	2094.1	2128.7	2168.3	2188.6
32	2190.0	2186.7	2175.6	2158.6	2141.4	2125.0	2108.2	2093.0	2100.9	2121.0	2163.7	2190.0
AVE	2183.1	2174.5	2162.9	2146.9	2130.0	2114.6	2098.1	2083.2	2093.6	2128.7	2158.4	2178.9

ENERGY FROM RESERVOIR 1 (GWH) WATANA

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	219.4	382.2	434.1	391.1	328.4	329.9	280.1	151.1	134.9	137.8	153.7	279.7	3222.4
2	435.2	250.2	290.3	263.2	229.9	257.3	229.4	186.6	159.1	167.2	151.4	218.2	2037.9
3	399.6	380.2	431.8	389.2	327.9	329.5	280.5	167.1	178.0	199.7	147.7	196.2	3427.4
4	425.8	378.1	431.9	390.0	326.7	328.5	278.6	214.1	188.3	216.1	143.3	158.0	3479.4
5	429.2	274.2	432.2	389.9	327.1	327.9	251.2	183.0	182.1	138.1	123.7	155.7	3214.1
6	396.7	273.4	430.5	388.4	325.5	328.2	278.6	153.0	195.6	206.1	242.1	449.4	3667.3
7	312.7	384.0	433.8	391.2	327.4	328.5	279.3	208.7	185.1	191.6	415.0	503.1	3960.1
8	316.8	380.7	432.6	390.6	327.8	329.0	281.3	221.4	198.1	211.8	231.4	329.2	3650.7
9	318.2	377.0	427.3	390.9	330.0	332.1	282.3	230.2	212.2	214.3	224.7	178.2	3517.5
10	427.0	250.9	430.4	387.6	324.9	325.8	228.0	137.8	146.4	183.1	194.1	315.8	3341.8
11	326.8	380.4	431.9	389.7	328.2	329.8	282.8	231.8	162.1	158.8	139.7	299.2	3461.3
12	343.8	380.3	430.3	388.0	327.6	328.3	277.8	222.0	181.5	197.6	223.9	386.9	3787.7
13	327.9	383.1	433.7	391.1	328.7	329.8	280.9	247.2	174.9	226.0	336.3	486.0	4349.7
14	329.5	384.4	434.9	391.7	328.4	331.3	284.1	220.9	194.6	187.7	588.8	111.8	4088.1
15	328.3	384.8	434.0	391.5	328.3	330.5	281.0	172.1	170.7	219.7	281.1	286.9	3609.0
16	338.4	383.1	435.6	392.5	329.1	330.9	281.3	238.3	201.1	196.8	159.6	301.6	3668.3
17	326.2	382.5	432.5	390.0	327.3	327.9	279.0	162.7	175.5	206.9	137.8	196.0	3334.3
18	435.6	250.7	371.1	387.3	324.9	325.8	237.5	211.9	199.0	195.3	353.5	521.4	3814.7
19	309.4	383.0	433.3	390.0	327.5	328.5	280.1	225.5	189.5	202.0	233.9	201.6	3504.3
20	429.5	328.3	432.8	389.9	327.0	327.6	236.2	160.7	136.6	150.0	160.8	271.6	3351.1
21	329.4	247.3	287.0	259.3	199.5	221.1	144.2	247.6	121.6	126.3	143.3	217.1	2643.6
22	419.5	239.7	282.7	258.2	199.2	221.1	192.3	117.0	228.0	142.1	214.9	274.9	2779.5
23	347.1	381.7	431.5	388.4	326.2	327.9	279.9	198.3	178.7	219.1	459.2	417.9	3955.4
24	328.5	384.6	434.6	391.6	328.1	330.7	281.5	171.2	206.3	154.7	165.4	338.7	3679.4
25	434.5	251.1	292.0	264.5	291.7	257.6	215.4	221.0	135.5	143.3	185.4	227.7	3307.6
26	332.0	249.5	287.3	260.3	199.9	221.7	203.6	185.3	190.3	201.3	233.4	320.6	3284.3
27	332.0	383.1	435.1	391.2	328.0	329.7	279.4	175.5	194.9	154.2	136.6	300.5	3500.1
28	430.3	248.0	284.3	259.6	249.4	274.2	226.2	137.4	180.1	215.0	239.5	249.6	3393.4
29	379.0	377.7	431.0	389.8	327.5	328.9	280.9	253.3	230.1	151.2	153.2	260.0	3562.8
30	428.1	245.9	288.4	262.2	262.7	273.9	229.9	208.8	229.8	204.3	213.9	177.7	3025.8
31	429.8	379.1	432.4	390.4	327.9	328.9	280.8	238.6	202.5	192.3	229.4	386.6	3819.3
32	331.0	381.5	439.4	393.3	330.2	331.3	291.9	239.9	225.4	189.9	310.8	458.6	4212.9
AVE	371.5	335.5	399.1	362.0	307.0	311.1	258.6	198.1	184.0	184.4	254.6	306.8	3472.1

RESERVOIR 2 DEVIL CANYON

INFLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6650.8	10526.5	11631.7	10731.8	10209.3	9522.4	8619.4	6299.7	6043.0	5985.9	5984.1	8181.0
2	11834.2	7062.9	8053.1	7431.3	7320.7	7535.7	7227.0	7093.1	6168.4	6373.7	6051.5	8787.7
3	10036.0	10560.5	11693.7	10783.2	10222.8	9523.2	8599.0	5763.3	9560.5	8208.6	6119.0	7074.0
4	12142.8	10624.1	11719.1	10796.0	10252.1	9533.5	8647.6	9018.8	9259.9	7700.4	6298.0	6612.5
5	11923.1	7710.7	11693.9	10781.5	10279.0	9536.4	7866.8	9004.2	9096.1	5962.2	6714.5	6548.1
6	11184.0	7927.2	11755.8	10843.9	10299.0	9552.2	8651.3	6224.5	9009.3	8028.2	7713.2	12348.5
7	8515.9	10461.0	11635.2	10722.7	10240.5	9556.2	8636.7	9171.6	9347.[illegible]	8468.3	[illegible]	16495.8
8	9103.3	10658.2	11684.1	10759.5	10245.7	9503.9	8623.8	8780.3	9921.8	7961.8	8103.5	11879.8
9	9494.2	10667.7	11833.6	10773.3	10178.8	9434.5	8555.5	9544.5	8472.0	7781.7	8214.7	5773.9
10	11745.1	7052.7	11723.3	10845.0	10340.2	9589.7	7209.6	7839.9	7511.9	7912.9	9475.7	11133.2
11	9218.0	10547.3	11708.7	10792.1	10237.7	9486.1	8630.9	9495.7	6271.5	6588.2	[illegible]	[illegible]
12	9073.4	10551.9	11768.0	10858.0	10261.5	9548.0	8699.0	8767.2	[illegible]	8277.6	[illegible]	[illegible]
13	9177.9	10505.1	11650.0	10745.0	10218.4	9484.7	8577.8	8907.7	9661.4	7417.1	[illegible]	11767.2
14	9137.3	10422.1	11620.7	10734.4	10233.5	9441.7	8550.3	8793.8	9041.0	8593.9	16753.6	11777.2
15	9172.1	10557.6	11637.7	10721.8	10216.5	9511.7	8597.2	5599.7	9947.7	7604.0	8726.7	8840.0
16	9612.0	10502.5	11584.4	10690.9	10187.2	9499.2	8595.3	8319.2	8832.3	8312.4	6564.1	13085.0
17	9583.6	10541.9	11682.8	10770.3	10257.2	9531.3	8689.8	6424.2	9649.3	7987.3	6470.9	6572.3
18	11823.7	7053.7	10151.4	10855.5	10343.5	9597.0	7465.7	8151.2	8926.7	8367.5	13337.9	15728.2
19	8453.3	10498.3	11659.4	10775.7	10256.1	9524.6	8605.2	8694.7	9213.1	8142.6	7960.8	6360.6
20	11523.8	9049.1	11672.9	10778.1	10273.5	9540.8	7332.9	5996.3	5998.3	5593.7	5762.9	8508.4
21	12022.0	7148.4	8146.7	7546.3	6560.6	6696.1	4587.6	8727.4	6458.2	6333.5	6310.6	7239.7
22	12339.3	7409.7	8297.3	7585.6	6573.9	6699.4	5865.9	4142.8	10365.7	5756.8	8529.3	8694.7
23	9405.0	10510.7	11720.7	10834.5	10308.7	9552.0	8619.3	9504.6	9551.0	7625.1	12875.9	11984.2
24	8506.6	10448.2	11615.4	10717.2	10224.8	9508.8	8588.6	5667.3	8652.9	5451.9	5835.0	8952.0
25	11855.9	7041.3	8000.7	7389.6	9203.5	7528.1	6671.5	8652.9	6011.7	5797.3	5919.1	7818.1
26	11936.3	7115.8	8148.3	7524.0	6565.6	6686.9	6488.3	7848.9	9131.4	8154.9	7954.0	10529.6
27	9776.8	10459.9	11603.2	10729.9	10226.2	9536.9	8656.0	7538.9	8584.7	5473.3	6120.5	8882.3
28	11992.1	7266.9	8249.6	7549.0	8105.6	8199.6	7232.2	6722.1	9516.1	7777.5	7772.6	7871.9
29	10804.3	10641.2	11738.4	10792.5	10262.9	9517.8	8585.4	7823.7	7895.6	5836.8	5979.1	7998.9
30	12062.1	7210.1	8115.8	7465.6	8398.8	8003.3	7125.2	7145.3	7925.0	8090.6	8011.5	5776.4
31	11761.4	10599.8	11682.1	10755.9	10232.9	9501.9	8633.6	8241.1	8801.9	8435.1	8109.6	11490.2
32	9206.6	10527.9	11679.3	10695.0	10171.9	9448.3	8553.2	8237.5	7347.1	8548.6	19617.7	12762.0
AVE	10396.0	9367.6	10861.2	10055.5	9653.4	9041.6	7999.6	7663.8	8459.0	7326.6	8910.4	9748.5

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POWERHOUSE FLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6650.8	10519.8	11631.7	10731.8	10209.3	9522.4	9619.4	6306.3	6043.0	5985.9	10940.6	8949.8
2	6127.2	7069.6	8053.1	7431.3	7320.7	7535.7	7227.0	7093.1	6168.4	6367.2	10860.0	7859.1
3	6539.1	10560.5	11693.7	10783.2	10222.8	9523.2	8599.0	5769.9	9553.8	9208.6	10722.2	8361.1
4	6435.8	10624.1	11719.1	10796.0	10252.1	9533.5	8647.6	9018.8	9259.9	7700.4	10597.0	7958.4
5	6321.6	7717.4	11687.4	10781.5	10279.0	9536.4	7873.5	9004.2	9096.1	5962.2	9971.6	7959.1
6	6761.4	7827.2	11749.3	10843.9	10299.0	9552.2	8651.3	6231.0	9002.5	8028.2	11209.6	8999.2
7	8267.3	10454.3	11635.2	10722.7	10240.5	9556.2	8636.7	9171.6	9347.2	8468.3	13763.2	13763.2
8	9109.8	10651.4	11684.1	10759.5	10245.7	9503.9	8623.8	8780.3	8921.9	7861.8	10849.2	8942.6
9	9494.2	10667.7	11833.6	10773.3	10178.8	9434.5	8555.5	8544.9	8472.0	7781.7	10879.8	8738.9
10	6371.9	7059.4	11723.3	10838.5	10340.2	9589.7	7216.3	7939.9	7541.9	7906.4	9475.7	11183.2
11	9218.0	10547.3	11708.7	10792.1	10237.7	9486.1	8630.9	8495.7	6238.2	6581.7	10936.1	7719.9
12	8781.7	10554.9	11768.0	10858.0	10261.5	9548.0	8699.0	8767.2	9473.7	8277.6	11764.4	11125.6
13	9177.9	10505.1	11650.0	10745.0	10218.4	9484.7	8577.8	8007.7	9661.4	7417.1	13763.2	13763.2
14	9137.3	10422.1	11620.7	10734.4	10233.5	9441.7	8550.3	8793.8	9041.0	8593.9	13763.2	11777.2
15	9172.1	10557.6	11637.7	10721.8	10216.5	9511.7	8597.2	5739.9	9802.8	7604.0	11145.8	8569.0
16	7461.7	10495.8	11584.4	10690.9	10187.2	9499.2	8595.3	8325.7	8825.6	8312.4	10669.3	8184.2
17	9253.4	10541.9	11682.8	10770.3	10257.2	9531.3	8689.8	6430.7	9643.1	7987.3	10414.6	8394.3
18	6116.7	7060.4	10151.4	10849.0	10343.5	9597.0	7472.4	8151.2	8920.0	8367.5	13337.9	13763.2
19	8459.9	10491.6	11659.4	10775.7	10256.1	9524.6	8605.2	8694.7	9213.1	8142.6	10920.5	8709.5
20	8980.5	9055.9	11666.3	10778.1	10273.5	9540.8	7339.6	5996.3	5998.3	5682.0	11178.0	8712.0
21	6315.0	7155.1	8146.7	7546.3	6560.6	6696.1	7256.3	6144.8	6458.2	6333.5	10672.8	8622.5
22	6632.4	7416.4	8297.3	7585.6	6573.9	6699.4	5865.9	7484.8	6912.4	5756.8	10405.9	8496.0
23	7720.7	10504.0	11720.7	10834.5	10308.7	9552.0	8619.3	9504.6	9551.0	7625.1	12875.9	11884.2
24	8513.2	10441.5	11615.4	10717.2	10224.8	9508.8	8588.6	5673.8	8646.1	5805.8	11108.1	8552.0
25	6149.0	7048.0	8000.7	7389.6	9203.5	7528.1	6671.5	9652.9	6011.7	5797.3	11037.0	8420.1
26	6229.3	7122.5	8148.3	7524.0	6565.6	6686.9	6488.3	7848.9	9174.7	8154.9	10941.6	8141.7
27	7997.2	10459.9	11603.2	10729.9	10226.2	9536.9	8656.0	7545.4	8584.7	5796.6	11497.7	8832.3
28	6285.2	7273.6	8249.6	7549.0	8105.6	8199.6	7232.2	6722.1	9509.4	7777.5	11131.2	8576.1
29	6770.7	10634.5	11738.4	10792.5	10262.9	9517.8	8585.4	7823.7	7895.6	5836.8	10936.5	8773.4
30	8355.2	7216.9	9115.8	7465.6	8398.8	8003.3	7125.2	7145.3	7918.3	8090.6	10646.7	8702.4
31	6294.7	10599.9	11682.1	10755.9	10232.9	9501.9	8633.6	8241.1	8001.8	8435.1	11236.0	8367.0
32	9107.5	10507.9	11679.3	10695.0	10171.9	9448.3	8553.2	8237.5	7353.3	8542.0	13763.2	10762.0
AVE	7518.7	9368.3	10860.5	10055.1	9653.4	9041.6	8083.9	7693.4	8345.1	7349.7	11316.9	9500.3

SPILLS (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	338.0	1733.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7782.0	1084.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3754.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1715.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5854.5	0.0
AVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	514.9	178.3

NOTE: SPILLS DO NOT INCLUDE THOSE DUE TO INSUFFICIENT DEMAND.

HEAD (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	593.3	558.3
2	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	594.1	565.4
3	586.4	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	595.0	580.0
4	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	586.4	561.8
5	580.5	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.9	572.7
6	585.8	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	590.0	589.1
7	604.1	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
8	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	593.4	593.4
9	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	594.7	571.2
10	581.5	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
11	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	587.5	553.2
12	600.7	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	601.0	601.0
13	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
14	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
15	605.0	605.0	605.0	605.0	605.0	605.0	605.0	604.6	604.6	605.0	594.8	585.8
16	596.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	597.2	586.1
17	603.9	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	588.0	562.9
18	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
19	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	592.4	569.5
20	582.2	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	604.7	580.6	555.9
21	580.0	605.0	605.0	605.0	605.0	605.0	594.1	594.1	605.0	605.0	586.0	561.0
22	580.0	605.0	605.0	605.0	605.0	605.0	605.0	590.6	590.6	605.0	597.2	590.3
23	598.1	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
24	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	603.8	578.8	555.0
25	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	582.6	557.6
26	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	592.3	589.9
27	602.6	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	603.9	578.9	555.0
28	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	590.6	573.1
29	587.5	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	583.4	558.4
30	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	593.9	569.9
31	581.1	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.7	591.3
32	604.7	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
AVE	592.5	605.0	605.0	605.0	605.0	605.0	604.7	604.2	604.6	604.9	592.2	579.8

WATER SURFACE AT START OF MONTH (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1411.7
2	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1413.1
3	1417.7	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1415.3
4	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1417.7
5	1405.9	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1428.8
6	1416.5	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1424.9
7	1453.2	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1435.0
8	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1431.7
9	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1434.3
10	1408.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
11	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1419.9
12	1446.4	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1446.9
13	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
14	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
15	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1454.1	1455.0	1455.0	1434.6
16	1407.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1419.4
17	1452.7	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1430.9
18	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
19	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1429.9
20	1409.3	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1454.4	1406.8
21	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1433.1	1455.0	1455.0	1455.0	1417.1
22	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1426.3	1455.0	1455.0	1439.5
23	1441.2	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
24	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1452.3	1405.0
25	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1410.2
26	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1429.5
27	1450.3	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1452.7	1405.0
28	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1426.2
29	1420.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1411.7
30	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1432.7
31	1407.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1428.3
32	1454.3	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
AVE	1430.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1454.3	1454.1	1455.0	1454.9	1429.6

ENERGY FROM RESERVOIR 2 (GWH) DEVIL CANYON

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	215.7	330.2	377.3	348.1	299.1	308.9	270.6	204.5	189.7	194.2	342.3	259.3	3339.7
2	190.5	221.9	261.2	241.0	214.5	244.4	226.8	230.1	193.6	206.5	340.0	230.5	2801.3
3	205.6	331.5	379.3	349.8	299.5	308.9	269.9	187.1	299.9	266.3	336.5	240.1	3474.4
4	209.1	333.5	380.1	350.2	300.4	309.2	271.5	292.5	290.7	249.8	333.1	332.0	3543.1
5	196.7	242.2	379.1	349.7	301.2	309.3	247.1	292.0	285.5	193.4	316.4	236.5	3349.2
6	212.3	245.7	381.1	351.7	301.7	309.8	271.6	202.1	282.6	260.4	354.6	275.0	3448.7
7	267.8	329.2	377.4	347.8	300.0	310.0	271.1	297.5	293.4	274.7	446.4	432.0	3946.3
8	295.5	334.3	379.0	349.0	300.2	308.3	270.7	284.8	280.1	255.0	345.1	278.4	3680.3
9	308.0	334.9	383.8	349.5	298.2	306.0	268.6	277.2	265.9	252.4	340.5	258.9	3643.9
10	199.6	221.6	380.2	351.6	302.9	311.1	226.5	254.3	236.7	256.4	307.4	351.0	3398.4
11	299.0	331.1	379.8	350.1	299.9	307.7	270.9	275.6	195.8	213.5	329.9	233.6	3456.9
12	302.2	331.3	381.7	352.2	300.6	309.7	273.1	284.4	297.4	268.5	356.5	316.9	3734.7
13	[illegible]	329.8	377.9	348.5	299.4	307.7	269.3	259.7	303.3	240.6	446.4	432.0	3812.7
14	296.4	327.2	376.9	348.2	299.8	306.7	268.4	295.2	283.8	278.8	446.4	369.7	3857.1
15	297.5	331.4	377.5	347.8	299.3	308.5	269.9	186.0	307.5	246.6	355.4	360.4	3587.7
16	238.4	329.5	375.8	346.8	298.5	308.1	269.8	270.0	377.0	269.6	335.9	348.8	3548.3
17	299.6	330.9	379.0	349.4	300.5	309.2	272.8	208.6	302.7	259.1	328.3	243.2	3583.0
18	190.2	221.6	329.3	351.9	303.0	311.7	234.6	264.4	380.0	271.4	472.6	432.0	3622.7
19	274.6	329.3	378.2	349.5	300.5	308.3	270.1	282.0	295.7	361.1	346.8	357.3	3650.5
20	196.3	304.3	378.4	349.6	301.0	309.5	230.4	194.5	188.7	184.2	347.9	351.2	3215.6
21	196.9	224.6	264.2	244.8	192.2	217.2	223.6	195.7	202.7	205.4	335.3	251.0	2753.1
22	216.2	232.8	269.1	246.0	192.6	217.3	184.1	237.0	211.8	186.7	333.2	260.2	2777.1
23	247.6	329.7	380.2	351.4	302.0	309.8	270.6	308.3	299.3	247.3	417.7	373.1	3837.5
24	[illegible]	327.8	376.8	347.6	299.6	308.1	269.6	184.0	271.4	187.9	347.1	357.8	3434.1
25	[illegible]	[illegible]	259.5	239.7	269.6	244.2	209.4	280.6	189.7	188.0	344.7	343.6	2880.5
26	[illegible]	223.6	264.3	244.0	192.3	216.9	203.7	254.6	289.0	264.5	347.4	245.3	2842.2
27	203.9	328.3	376.4	348.0	299.6	309.3	271.7	244.7	269.5	187.7	356.8	255.8	3541.7
28	195.4	228.3	267.6	244.8	237.5	265.9	227.0	219.0	298.5	252.3	352.4	255.0	3043.3
29	213.3	333.8	380.8	350.1	300.7	308.7	269.5	253.9	247.8	189.3	342.1	254.2	3444.0
30	197.6	226.5	263.2	242.1	246.0	259.6	223.6	231.8	248.5	262.4	339.0	337.2	2987.5
31	196.1	332.7	378.9	348.9	299.5	308.2	271.0	267.3	276.3	273.6	356.4	356.5	3565.3
32	295.2	330.5	379.8	346.9	295.0	306.5	268.5	267.2	330.3	277.1	446.4	400.6	[illegible]
AVE	237.5	291.1	352.3	326.1	282.8	293.3	253.6	249.2	261.8	238.4	355.6	307.0	[illegible]

TOTAL ENERGY PRODUCED (GWH)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	435.1	712.4	811.4	739.2	627.3	638.7	550.6	355.7	324.6	331.9	[illegible]	[illegible]	[illegible]
2	425.7	472.1	551.4	504.2	444.3	501.7	456.3	416.7	352.7	373.7	491.4	448.7	5639.0
3	606.3	711.7	811.1	739.0	627.4	638.4	550.4	354.3	477.8	466.0	484.3	436.3	6901.8
4	426.9	711.6	812.0	740.1	627.1	637.7	550.1	506.6	478.9	465.9	476.4	389.9	7022.4
5	425.9	516.4	811.3	739.7	628.2	637.2	498.4	475.0	467.4	331.5	440.1	392.1	6563.6
6	409.0	519.1	811.6	740.1	627.2	638.0	550.2	355.1	478.2	466.5	596.6	734.5	7116.3
7	589.6	711.2	811.2	739.6	627.4	638.5	550.4	506.2	478.5	466.3	861.1	935.2	7906.7
8	612.2	715.0	811.6	739.6	628.0	637.3	552.0	506.2	478.2	466.8	576.5	607.6	7931.0
9	426.2	711.9	811.2	740.4	628.2	638.1	550.9	507.4	478.1	466.8	768.1	877.1	7141.3
10	425.1	472.5	810.6	739.2	627.9	636.9	454.5	392.1	383.7	439.5	491.5	606.9	6740.7
11	625.0	711.5	811.7	739.8	628.1	637.5	553.8	507.9	357.9	373.3	433.7	532.7	6910.7
12	426.0	711.6	812.0	740.2	628.2	638.0	550.9	506.4	478.5	466.1	690.5	773.8	7073.1
13	425.6	712.9	811.6	739.7	628.1	637.4	550.2	506.9	478.1	466.6	1102.7	918.1	8057.9
14	426	711.6	811.8	739.8	628.1	637.5	550.5	506.2	478.4	466.5	1035.2	781.5	7975.1
15	425.0	716.2	811.5	739.3	627.7	637.4	550.9	358.2	478.2	466.4	633.5	547.4	7196.9
16	425.8	711.5	811.4	739.2	627.6	637.0	551.1	508.3	478.3	466.4	695.1	630.5	7036.5
17	425.9	711.4	811.5	739.4	627.8	637.1	551.8	371.3	478.2	466.0	486.6	431.2	6819.3
18	423.8	472.1	700.4	739.2	627.9	637.1	472.0	476.3	479.6	466.7	786.2	953.1	7436.3
19	603.2	717.4	811.5	739.6	628.0	637.5	550.3	507.5	478.7	466.1	580.8	479.0	7155.1
20	425.8	612.6	811.3	739.5	628.0	637.0	466.6	355.2	324.9	334.2	508.7	502.9	6566.7
21	425.7	471.9	551.3	504.0	391.7	478.3	367.9	443.3	324.7	331.7	479.6	448.1	5374.7
22	425.7	472.5	551.8	504.3	391.8	438.4	366.4	354.0	439.8	328.9	518.1	535.1	5556.4
23	424.1	711.4	811.7	739.9	628.2	637.7	550.5	506.6	478.1	466.5	876.5	790.6	7782.5
24	396.6	712.4	811.3	739.2	627.6	639.1	551.1	355.2	478.3	342.6	513.4	567.4	6993.3
25	425.7	472.3	551.5	504.2	561.4	501.7	424.8	501.6	324.2	331.3	500.1	471.3	5770.1
26	425.9	472.1	551.6	504.3	392.2	438.6	407.3	439.9	478.1	465.9	586.3	569.8	5923.9
27	425.9	711.4	811.4	739.3	627.6	639.0	551.1	420.2	464.4	341.8	553.4	556.2	7041.9
28	425.7	472.3	551.9	504.5	486.8	540.2	453.2	355.4	478.6	467.3	591.9	504.4	6032.3
29	592.3	711.5	811.8	739.9	628.2	637.6	550.4	507.1	478.0	340.6	495.2	514.2	7006.7
30	425.7	472.4	551.7	504.3	508.7	533.5	453.6	440.6	478.4	466.8	552.9	433.6	6023.6
31	425.9	711.9	811.3	739.3	627.7	637.1	551.8	505.9	478.8	465.9	585.7	643.1	7384.4
32	426.2	712.0	818.2	740.2	628.2	637.8	550.4	507.0	456.2	466.9	1057.2	859.2	8059.5
[illegible]	111.1	829.6	751.4	688.1	589.8	604.3	512.3	447.4	445.8	422.8	614.2	593.8	6910.4

TOTAL USABLE ENERGY (GWH)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	435.1	711.4	811.0	738.8	627.0	636.9	550.1	355.7	324.6	331.9	491.0	517.7	6531.0
2	625.7	472.1	551.4	504.2	444.3	501.7	456.3	416.7	352.7	373.7	491.0	448.7	5638.6
3	625.2	711.4	811.0	738.8	627.0	636.9	550.1	354.2	477.9	465.7	484.2	436.3	6898.6
4	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	476.4	389.9	7016.9
5	625.7	516.4	811.0	738.8	627.0	636.9	498.4	475.0	467.6	331.5	440.1	392.1	6560.5
6	609.0	519.1	811.0	738.8	627.0	636.9	550.1	355.1	478.1	465.7	491.0	517.7	6799.4
7	530.4	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7113.9
8	612.3	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7145.9
9	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7145.9
10	625.7	472.5	810.6	738.8	627.0	636.9	454.5	392.1	383.2	439.5	491.0	437.1	7078.6
11	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	357.9	372.3	469.7	517.7	6589.4
12	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	6924.2
13	625.4	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7159.2
14	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7159.1
15	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7159.2
16	625.7	711.4	811.0	738.8	627.0	636.9	550.1	358.2	478.1	465.7	491.0	517.7	7011.5
17	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7110.4
18	625.7	472.8	700.4	738.8	627.0	636.9	550.1	371.3	478.1	465.7	466.0	431.2	6913.1
19	587.8	711.4	811.0	738.8	627.0	636.9	472.0	476.3	478.1	465.7	491.0	517.7	6702.0
20	625.7	610.6	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	459.0	7058.8
21	625.7	471.9	551.3	504.0	391.7	438.3	367.9	443.3	324.3	331.7	479.6	448.1	5396.7
22	625.7	472.5	551.9	504.3	391.8	438.4	366.4	354.0	439.3	328.8	491.0	517.7	5482.2
23	594.6	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7128.1
24	596.6	711.4	811.0	738.8	627.0	636.9	550.1	355.2	478.1	342.6	491.0	517.7	6856.2
25	625.7	472.3	551.5	504.2	561.4	501.7	424.8	501.6	324.2	331.3	491.0	471.3	5761.0
26	625.7	472.1	551.6	504.3	392.2	439.6	407.3	439.9	478.1	465.7	491.0	517.7	5784.2
27	625.7	711.4	811.0	738.8	627.0	636.9	550.1	420.3	464.4	341.8	491.0	517.7	6935.9
28	625.7	472.3	551.9	504.5	486.8	540.2	453.2	355.4	478.1	465.7	491.0	504.4	5929.3
29	592.3	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.0	340.6	491.0	514.2	6997.0
30	625.7	472.4	551.7	504.3	508.7	533.5	453.6	440.6	478.1	465.7	491.0	435.0	5960.4
31	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7159.2
32	625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	456.2	465.7	491.0	517.7	7137.3
AVE	611.0	626.9	750.8	687.5	589.1	603.6	511.6	447.0	445.6	422.3	486.9	491.9	6676.2

FORECAST DEMAND ENERGY (GWH) [YEAR 2010 less small hydro. production]

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
625.7	711.4	811.0	738.8	627.0	636.9	550.1	505.9	478.1	465.7	491.0	517.7	7159.2

PRE PROJECT FLOW AT GOLD CREEK (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6335.0	2583.0	1439.0	1027.0	788.0	726.0	870.0	11510.0	19600.0	22600.0	19880.0	8301.0
2	3848.0	1300.0	1100.0	960.0	820.0	740.0	1617.0	14090.0	20790.0	22570.0	19670.0	21240.0
3	5571.0	2744.0	1900.0	1600.0	1000.0	880.0	920.0	5419.0	32370.1	26390.0	20920.0	14480.0
4	8202.0	3497.0	1700.0	1100.0	820.0	820.0	1615.0	19270.0	27320.1	20200.0	20610.0	15270.0
5	5604.0	2100.0	1500.0	1300.0	1000.0	780.0	1235.0	17280.0	25250.0	20360.0	26100.0	12920.0
6	5370.0	2760.0	2045.0	1794.0	1400.0	1100.0	1200.0	9319.0	29860.0	27560.0	25750.0	14290.0
7	4951.0	1900.0	1300.0	980.0	970.0	940.0	950.0	17660.0	33340.0	31090.1	24530.0	18330.0
8	5206.0	3050.0	2142.0	1700.0	1500.0	1200.0	1200.0	13750.0	30160.0	23310.0	20540.0	19800.0
9	8212.0	3954.0	3264.0	1965.0	1307.0	1148.0	1533.0	12900.0	25700.0	22880.0	22540.0	7550.0
10	4811.0	2150.0	1513.0	1448.0	1307.0	980.0	1250.0	15990.0	23320.0	25000.0	31100.0	16920.0
11	5558.0	2850.0	2200.0	1845.0	1452.0	1197.0	1300.0	15780.0	15530.0	22980.0	23590.0	20510.0
12	7714.0	3000.0	2694.0	2452.0	1754.0	1810.0	2650.0	17360.0	29450.0	24570.0	22100.0	17770.0
13	[illegible]	2700.0	2100.0	1900.0	1500.0	1400.0	1700.0	12590.0	43070.0	35850.0	23550.0	15890.0
14	6723.0	2800.0	2000.0	1600.0	1500.0	1000.0	900.0	19030.0	26000.0	34400.0	[illegible]	10320.0
15	6440.0	2250.0	1494.0	1049.0	966.0	713.0	745.0	4307.0	50580.0	22950.0	16340.0	9571.0
16	6291.0	2799.0	1211.0	960.0	860.0	900.0	1360.0	12990.0	25720.0	27840.0	21120.0	17330.0
17	7205.0	2093.0	1631.0	1400.0	1300.0	1300.0	1775.0	9645.0	32950.0	19860.0	21830.0	11750.0
18	4163.0	1600.0	1500.0	1500.0	1400.0	1200.0	1167.0	15480.0	29510.0	26800.0	32620.0	16870.0
19	[illegible]	1653.0	2055.0	1981.0	1900.0	1900.0	1910.0	16180.0	31550.0	26420.0	17170.0	9816.0
20	4292.0	1906.0	1330.0	1086.0	922.0	933.0	1022.0	9852.0	20523.0	18093.0	16322.0	9776.0
21	2124.0	1215.0	866.0	824.0	768.0	776.0	1090.0	11380.0	18630.0	22660.0	19990.0	9121.0
22	5288.0	3407.0	2290.0	1442.0	1036.0	950.0	1082.0	3745.0	32930.0	23950.0	31910.0	14440.0
23	5847.0	3093.0	2510.0	2239.0	2028.0	1823.0	1710.0	21890.0	34430.0	22770.0	19290.0	12400.0
24	4826.0	2253.0	1465.0	1200.0	1200.0	1000.0	1027.0	8235.0	27800.0	18250.0	20290.0	9074.0
25	3733.0	1523.0	1034.0	874.0	777.0	724.0	992.0	16180.0	17870.0	18800.0	16220.0	12250.0
26	[illegible]	1700.0	1603.0	1516.0	1471.0	1400.0	1593.0	15350.0	32310.0	27720.0	18090.0	16310.0
27	7739.0	1993.0	1081.0	974.0	950.0	900.0	1373.0	12620.0	24380.0	18940.0	19800.0	6881.0
28	3874.0	2650.0	2403.0	1829.0	1618.0	1500.0	1680.0	12680.0	37970.0	22870.0	19240.0	12640.0
29	7571.0	3525.0	2589.0	2029.0	1668.0	1605.0	1702.0	11950.0	19050.0	21020.0	16390.0	8607.0
30	4907.0	2535.0	1681.0	1397.0	1286.0	1200.0	1450.0	13870.0	24690.0	28880.1	20460.0	10770.0
31	7311.0	4192.0	2416.0	1748.0	1466.0	1400.0	1670.0	12060.0	29080.0	32660.0	20960.0	13280.0
32	[illegible]	3986.0	1773.1	1453.6	1235.6	1114.3	1367.5	13316.7	18143.0	32000.0	38538.0	13171.1
[illegible]	5570.8	2577.1	1807.2	1474.1	1249.1	1123.7	1361.7	13240.0	27814.9	24445.1	22228.1	13330.9

POST-PROJECT FLOWS AT GOLD CREEK (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7227.6	[illegible]	11728.2	10807.5	10261.6	9578.4	8687.2	7325.5	7174.4	7203.5	12000.0	9300.0
2	[illegible]	7138.4	8122.3	7485.6	7373.2	7578.6	7339.4	7964.6	6979.9	7361.3	12000.0	9300.0
3	[illegible]	10765.5	11936.2	10899.5	10279.6	9575.0	8640.5	6199.4	11909.7	9736.9	12000.0	9300.0
4	7120.0	10888.5	11868.7	10896.4	10326.5	9586.9	8730.8	10530.5	11349.3	8716.4	12000.0	9300.0
5	6816.3	7996.1	11800.3	10857.3	10349.3	9587.0	7977.9	10998.2	11158.0	7168.1	12000.0	9300.0
6	7301.0	8080.4	11926.3	10988.8	10423.8	9628.6	8743.9	7159.9	10780.6	9375.4	12000.0	9300.0
7	8570.4	10565.7	11728.6	10781.0	10317.4	9643.9	8719.4	10852.6	11550.1	10346.4	16012.2	15330.0
8	9600.5	10927.6	11839.5	10876.3	10356.8	9595.5	8714.8	10056.7	10666.4	9062.2	12000.0	10913.6
9	10271.7	11031.3	12192.7	10946.3	10273.6	9496.8	8651.1	9595.3	9758.5	8898.6	12000.0	9300.0
10	[illegible]	7209.6	11865.4	10969.6	10468.1	9691.8	7346.4	9929.0	9324.3	9516.0	13061.3	12773.6
11	9715.3	[illegible]	11397.2	10950.9	10349.5	9570.3	8713.1	9472.8	7050.4	7822.4	12000.0	9300.0
12	[illegible]	[illegible]	12025.4	11098.0	10421.9	9719.1	8943.6	10096.3	11554.4	9967.0	12000.0	12277.0
13	[illegible]	[illegible]	11771.3	10847.0	10305.6	9566.4	8664.4	8456.5	[illegible]	8274.5	[illegible]	[illegible]
14	[illegible]	[illegible]	11724.7	10838.4	10346.0	9483.3	8569.4	10126.2	10946.7	10605.5	17703.1	12720.0
15	[illegible]	[illegible]	11744.6	10791.8	10282.3	9560.9	8645.7	6000.0	12566.4	8628.0	12000.0	9300.0
16	[illegible]	10549.7	11634.6	10725.6	10218.4	9532.3	8640.9	9048.6	10435.3	9956.7	12000.0	9300.0
17	[illegible]	[illegible]	11825.4	10891.5	10369.8	9643.9	8845.7	7341.7	12146.8	9311.1	12000.0	9300.0
18	[illegible]	[illegible]	10286.5	10991.1	10475.2	9797.9	7585.7	9195.7	10633.6	10086.3	15664.9	16870.0
19	[illegible]	[illegible]	11784.7	10905.5	10377.4	9645.9	8724.2	9592.3	11301.0	9691.6	12000.0	9300.0
20	[illegible]	[illegible]	11759.3	10852.1	10336.5	9593.9	7402.6	6694.3	7100.3	6484.0	12000.0	9300.0
21	6572.5	7224.4	8202.7	7613.4	6619.9	6750.3	7289.7	6803.2	7969.3	7851.3	12000.0	9300.0
22	7175.0	7741.6	8512.5	7708.8	6666.3	6782.6	5961.7	7801.9	8811.4	6765.2	12000.0	9300.0
23	8030.7	10684.7	11918.1	11037.4	10500.3	9715.2	8763.8	11617.8	12051.2	8673.6	13511.8	12400.0
24	[illegible]	10539.7	11693.4	10777.4	10296.2	9553.8	8628.9	6012.4	10053.5	6484.0	12000.0	9300.0
25	[illegible]	[illegible]	8037.3	7420.9	9234.6	[illegible]	6714.4	9928.3	7115.0	6807.3	12000.0	9300.0
26	[illegible]	7203.1	8264.8	7631.2	6694.4	6815.0	6624.6	9162.4	11182.1	9686.9	12000.0	9300.0
27	[illegible]	10599.9	11676.3	10807.1	10300.0	9411.7	8767.8	8860.1	10151.1	6454.0	12000.0	9300.0
28	[illegible]	7531.9	8505.1	7720.6	8253.9	8338.6	7402.4	8190.2	11972.7	8907.0	12000.0	9300.0
29	[illegible]	10948.7	11956.0	10953.6	10405.9	9642.2	8690.3	8090.3	8528.8	6777.8	12000.0	9300.0
30	[illegible]	[illegible]	8247.4	7558.5	8481.2	8038.6	7172.4	7691.3	8555.9	9507.7	12000.0	9300.0
31	[illegible]	[illegible]	11819.1	10854.9	10315.9	9530.9	8728.6	8924.1	11626.9	11093.1	12000.0	9300.0
32	9586.5	[illegible]	11898.4	10861.6	10318.5	9565.6	8682.7	9878.2	7755.8	9306.0	22885.7	13171.1
AVE	[illegible]	9554.6	11003.2	10167.1	9750.0	9123.3	8178.6	8743.0	10081.9	8642.6	13131.7	10585.8

SUSITNA HEP
WATANA 2190 DC 1455
CASE C 120 : K2:

CASE C
WATANA / DEVIL CANYON
(FAILURE ACCEPTANCE)

DC 5 OCT 82

EL	STORAGE	EL	STORAGE
1900.0	2550000.0	925.0	0.0
1950.0	3330000.0	1000.0	7500.0
2000.0	4250000.0	1050.0	25000.0
2050.0	5340000.0	1150.0	85000.0
2100.0	6650000.0	1200.0	132000.0
2150.0	8139999.5	1250.0	195000.0
2200.0	10020000.0	1300.0	292000.0
2250.0	12210000.0	1350.0	456000.0
-1.0	-1000000.0	1400.0	707000.0
-1.0	-1000000.0	1450.0	1048000.0
-1.0	-1000000.0	1500.0	1484000.0
MAX. STORAGE =	9654000.0		1092000.0
MIN. STORAGE =	5733000.0		741000.0

MAXIMUM P.H.R = 19391.0 START WSEL=2185.0 TWEL=1455.0 PMAX=.10200E+07
MAXIMUM P.H.Q = 13763.2 START WSEL=1455.0 TWEL= 850.0 PMAX=.60000E+06

MONTHLY WATER LEVEL

2185.0	2170.0	2150.0	2130.0	2112.0	2095.0	2080.0	2092.0	2125.0	2160.0	2180.0	21
1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	14

MONTHLY FLOW DISTRIBUTION

1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	0.8	0.8
1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0

MONTHLY FLOW REQD

2000.0	1000.0	1000.0	1000.0	1000.0	1000.0	1000.0	6000.0	6000.0	6484.0	12000.0	93

YEARS OF SIMULATION = 32 TER = 0.0100

DEMAND FACTOR 0.460

MONTHLY POWER DEMAND

0.580511E+06	0.658012E+06	0.745200E+06	0.681113E+06	0.585727E+06	0.592434E+06
0.511207E+06	0.476133E+06	0.447120E+06	0.441904E+06	0.464260E+06	0.488106E+06

FLOW DEMAND FAILURE : YEAR 21 MONTH : 6

FLOW DEMAND FAILURE : YEAR 22 MONTH : 8

2857.2 0.0 3427.9 0.0 3427.9 5682.9 2255.0

MTH	UPPER RESERVOIR P.H.FLOW CFS	HEAD FT	POWER MW	ENERGY GWH	LOWER RESERVOIR P.H.FLOW CFS	HEAD FT	POWER MW	ENERGY GWH	TOTAL ENERGY (GWH) PROD	USED
OCT	9868.2	722.1	512.1	381.0	7261.1	590.2	309.4	230.2	611.2	611.2
NOV	9046.9	711.7	465.5	335.2	9378.0	605.0	408.8	294.4	629.6	629.5
DEC	10891.8	697.6	549.3	408.7	11136.1	605.0	485.5	361.2	769.9	769.2
JAN	10195.1	680.4	501.5	373.1	10532.4	604.4	458.7	341.3	714.4	713.7
FEB	9739.6	663.5	467.6	314.2	9948.1	603.6	433.5	291.3	605.5	605.0
MAR	8874.8	647.3	415.0	308.8	9019.3	603.5	393.1	292.5	601.3	600.8
APR	7574.3	631.7	345.4	248.7	7928.5	602.7	345.1	248.4	497.1	497.1
MAY	5876.1	629.6	266.7	198.4	7573.8	602.5	329.4	245.0	443.5	443.4
JUN	5338.8	652.6	251.1	180.8	8141.1	604.0	354.4	255.2	436.0	435.8
JUL	4747.9	685.6	235.2	175.0	7107.6	604.8	309.8	230.5	405.5	405.3
AUG	5930.0	711.5	305.2	227.1	11141.5	591.1	474.8	353.2	580.3	519.2
SEP	7752.0	724.5	405.3	291.8	9410.4	576.4	392.6	282.7	574.5	506.3
ANN	7986.3	679.8	393.3	286.9	9048.1	599.4	391.3	285.5	6868.7	6736.5

	ENERGY (GWH) OCT-APR	MAY-SEP	ANNUAL
AVERAGE	4426.5	2310.0	6736.5
FIRM (YEAR 22)	3333.0	2021.4	5354.4

	ENERGY (GWH) OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANNUAL
AVER	611.2	629.5	769.2	713.7	605.0	600.8	497.1	443.4	435.8	405.3	519.2	506.3	6736.5
FIRM YR 22	647.1	472.3	551.8	504.1	391.7	438.3	327.8	195.4	522.6	328.8	487.7	486.9	5354.4

PRESENT WORTH COST BASED ON REGRESSION ANALYSIS

R1 = -0.8156050 R2 = -0.1259790 R3 = 13274.9

PRESENT WORTH COST (

w/pc - La. Tunes

RESERVOIR 1

INFLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4719.9	2083.6	1168.9	815.1	641.7	569.1	680.1	8655.9	16432.1	19193.4	16913.6	7320.4
2	3299.1	1107.3	906.2	808.0	673.0	619.8	1302.2	11649.8	18517.9	19786.6	16478.0	17205.5
3	4592.9	2170.1	1501.0	1274.5	841.0	735.0	803.9	4216.5	25773.4	22110.9	17356.3	11571.0
4	6285.7	2756.8	1281.2	818.9	611.7	670.7	1382.0	15037.2	21469.8	17355.3	16681.6	11513.5
5	4218.9	1599.6	1183.8	1087.8	803.1	638.2	942.6	11696.8	19476.7	16983.6	20420.6	9165.5
6	3859.2	2051.1	1549.5	1388.3	1050.5	886.1	940.8	6718.1	24881.4	23787.9	23537.0	13447.8
7	4102.3	1588.1	1038.6	816.9	754.8	694.4	718.3	12953.3	27171.8	25831.3	19153.4	13194.4
8	4208.0	2276.6	1707.0	1373.0	1189.0	935.0	945.1	10176.2	25275.0	19948.9	17317.7	14841.1
9	6034.9	2935.9	2258.5	1480.6	1041.7	973.5	1265.4	9957.8	22097.8	19752.7	18843.4	5978.7
10	3668.0	1729.5	1115.1	1081.0	949.0	694.0	885.7	10140.6	18329.6	20493.1	23940.4	12466.9
11	5165.5	2213.5	1672.3	1400.4	1138.9	961.1	1069.9	13044.2	13233.4	19506.1	19323.1	16085.6
12	6049.3	2327.8	1973.2	1779.9	1304.8	1331.0	1965.0	13637.9	22784.1	19839.8	19480.2	10146.2
13	4637.6	2263.4	1760.4	1608.9	1257.4	1176.8	1457.4	11333.5	36017.1	23443.7	19887.1	12746.2
14	5560.1	2508.9	1708.9	1308.9	1184.7	883.6	776.6	15299.2	20663.4	28767.4	21011.4	10800.0
15	5187.1	1789.1	1194.7	852.0	781.6	575.2	609.2	3573.8	42841.9	20082.8	14048.2	7524.2
16	4759.4	2368.2	1070.3	863.0	772.7	807.3	1232.4	10966.0	21213.0	23235.9	17394.1	16225.6
17	5221.2	1565.3	1203.6	1060.4	984.7	984.7	1338.4	7094.1	25939.6	16153.5	17390.9	9214.1
18	3269.8	1202.2	1121.6	1102.2	1031.3	889.5	849.7	12555.5	24711.9	21987.3	26104.5	13672.9
19	4019.0	1934.3	1704.2	1617.6	1560.4	1560.4	1576.7	12826.7	25704.0	22082.8	14147.5	7163.6
20	3135.0	1354.9	753.9	619.2	607.5	686.0	1261.6	9313.7	13962.1	14843.5	7771.9	4260.0
21	2403.1	1020.9	709.3	636.2	602.1	624.1	986.4	9536.4	14399.0	18410.1	16263.8	7224.1
22	3768.0	2496.4	1687.4	1097.1	777.4	717.1	813.7	2857.2	27612.8	21126.4	27446.6	12188.9
23	4979.1	2587.0	1957.4	1670.9	1491.4	1366.0	1305.4	15973.1	27429.3	19820.3	17509.5	10955.7
24	4301.2	1977.9	1246.5	1031.5	1000.2	873.9	914.1	7287.0	23859.3	16351.1	18016.7	8099.7
25	3056.5	1354.7	931.6	786.4	689.9	627.3	871.9	12889.0	14780.6	15971.9	13523.7	9786.2
26	3088.8	1474.4	1276.7	1215.8	1110.3	1041.4	1211.2	11672.2	26689.2	23430.4	15126.6	13075.3
27	5679.1	1601.1	876.2	757.8	743.2	690.7	1059.8	8938.8	19994.0	17015.3	18393.5	5711.5
28	2973.5	1926.7	1687.5	1348.7	1202.9	1110.8	1203.4	8569.4	31352.8	19707.3	16807.3	10613.1
29	5793.9	2645.3	1979.7	1577.9	1267.7	1256.7	1408.4	11231.5	17277.2	18385.2	13412.1	7132.6
30	3773.9	1944.9	1312.6	1136.8	1055.4	1101.2	1317.9	12369.3	22904.8	24911.7	16670.7	9096.7
31	6150.0	3525.0	2032.0	1470.0	1233.0	1177.0	1404.0	10140.0	23400.0	25740.0	18000.0	11000.0
32	6458.0	3297.0	1385.0	1147.0	971.0	889.0	1103.0	10406.0	17017.0	27840.0	31435.0	12026.0
AVE	4513.1	2052.4	1404.8	1157.3	978.9	898.3	1112.6	10397.6	22912.9	20778.0	18431.4	10670.4

POWERHOUSE FLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5564.1	10435.0	12314.6	11438.4	10785.8	8708.4	7282.9	4470.2	4011.0	3799.5	4080.9	7546.7
2	11900.0	6948.4	7941.1	7345.6	6377.0	6511.7	6823.8	6344.3	4283.0	3925.0	3994.0	6939.1
3	9061.9	9850.5	12276.3	11401.4	11021.6	9708.1	7406.7	4992.5	3198.6	3628.9	5170.1	5760.3
4	9261.1	10916.8	12249.2	11408.5	11003.3	9827.2	7984.8	7029.0	6219.4	3931.4	3767.8	4192.5
5	11477.9	6740.6	11580.1	11103.4	10782.9	8777.5	7545.4	6287.2	3312.1	3779.9	3263.4	4123.9
6	10208.6	6683.3	12250.4	11376.7	10961.5	10315.6	7543.6	4550.3	5182.4	5128.7	7015.6	12466.0
7	7077.7	10811.9	12317.2	11455.6	10734.6	8833.7	7321.1	6881.3	6114.0	5829.8	8243.3	13194.4
8	7183.4	10907.1	12248.1	11394.9	10967.3	10193.6	8572.1	4982.2	6537.0	3771.0	5121.8	8991.7
9	8805.9	10830.7	12128.6	11312.9	10942.6	10208.1	9197.8	6059.5	5625.0	3854.8	4418.0	5853.2
10	11673.8	6809.6	7783.9	9626.1	10928.8	8833.3	7488.5	4878.2	3432.3	3442.5	5550.2	10149.9
11	8140.9	10947.2	12222.0	11360.3	10967.0	10203.4	8619.3	7501.6	4273.2	3790.8	3700	4009.2
12	10336.7	10068.4	12172.4	11373.7	11003.6	10125.2	9074.4	7178.1	5969.3	4106.5	6898.7	4894.6
13	9420.4	9619.6	12347.8	11410.3	10991.6	10209.5	8945.7	6097.0	5751.8	6625.6	13868.6	12746.2
14	8535.5	11048.4	12289.7	11405.4	10966.2	10239.9	8272.6	7186.8	6377.5	5757.0	8597.1	10800.0
15	8162.5	11012.9	12305.9	11442.9	10999.7	8714.5	7212.0	5142.5	5707.4	6499.0	6927.4	5163.5
16	10477.4	8758.0	12353.0	11497.6	10752.5	8946.6	7835.2	5742.0	4736.9	4587.1	5402.3	10487.7
17	8196.6	10789.1	12267.8	11399.3	10978.1	9625.9	7941.2	4566.1	5895.8	3674.0	3623.9	4935.2
18	11738.4	6814.9	7793.1	9300.0	11011.1	9028.8	7452.5	7144.1	6562.7	5028.6	8676.3	13672.9
19	6994.4	11011.0	12386.3	11388.2	10961.3	10170.4	9185.3	7298.8	6230.0	6134.6	4013.0	6880.4
20	11802.9	6860.6	7877.6	7372.6	10587.3	8825.3	7864.4	4823.7	4519.8	4478.7	5941.3	8467.0
21	12059.7	7203.9	8262.1	5585.0	602.1	624.1	986.4	9536.4	5121.2	3624.2	3942.3	5998.8
22	11737.5	6864.3	7956.7	7408.5	6451.8	6598.4	2351.2	2857.2	9508.5	3957.0	4186.6	6193.3
23	10120.7	9572.4	12222.4	11324.5	10880.4	10130.8	9160.8	6470.8	5825.4	6517.4	7122.4	8301.9
24	8631.3	9801.8	12329.9	11451.0	11014.3	9396.7	7516.9	5072.9	4338.0	4230.3	4381.1	8325.7
25	11844.4	6935.6	7938.1	7336.3	6370.2	8005.1	7474.7	7327.0	4024.9	3978.8	4185.4	6234.6
26	11900.1	6974.5	7942.4	7334.7	6337.0	6459.8	5607.7	5809.6	6308.3	6148.0	5613.0	7336.6
27	8654.5	10824.9	12333.9	11217.3	10723.0	8830.0	7662.6	4208.7	3625.2	4225.9	5226.4	8130.5
28	11801.3	6792.3	7775.9	7227.3	6272.0	8825.4	7806.2	4072.9	5981.5	6465.8	6985.7	5188.5
29	10178.6	10412.9	12205.4	11359.5	10940.1	10167.2	9199.9	6261.4	4439.9	4027.5	4074.8	7047.3
30	11758.0	6849.0	7903.9	7321.9	6356.0	6519.3	7233.4	7021.5	6458.3	6041.3	5072.9	4971.9
31	11642.2	8455.1	12272.0	11411.6	10992.6	10207.8	9084.8	5001.7	6626.9	5932.7	6652.7	7034.9
32	9433.4	10950.5	12289.0	11452.9	11003.6	10223.1	8723.2	5239.5	4642.9	5011.1	14043.2	12026.0
AVE	9868.2	9046.9	10891.8	10195.1	9739.6	8874.8	7574.3	5876.1	5338.8	4747.9	5930.0	7752.0

SPILLS (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEAD (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	729.3	721.8	705.6	685.8	666.1	648.5	632.5	629.9	647.6	675.7	702.2	713.1
2	705.7	693.1	680.8	667.2	655.6	644.0	631.3	631.2	651.8	681.7	707.8	726.7
3	731.2	721.2	705.9	687.0	667.8	649.3	632.5	624.1	646.6	687.6	715.3	730.3
4	732.5	723.4	707.5	688.0	668.4	649.5	632.5	634.4	658.6	686.4	710.3	727.1
5	726.9	716.7	703.7	685.0	666.0	648.5	632.5	631.3	653.9	683.1	710.6	729.1
6	727.9	718.8	706.0	687.2	668.5	649.8	632.5	627.5	650.2	683.0	719.5	734.2
7	732.5	722.5	705.5	685.5	666.0	648.5	632.5	632.1	660.0	698.7	725.8	735.0
8	732.5	723.0	707.1	688.6	670.0	651.8	633.7	631.1	655.9	689.8	715.2	730.2
9	732.7	723.9	709.2	691.7	673.5	655.3	637.2	632.8	653.9	685.7	713.1	725.3
10	718.7	707.9	697.9	683.5	666.0	648.5	632.5	631.2	652.3	683.8	715.8	733.1
11	732.5	722.9	706.9	688.4	669.9	651.6	633.6	631.5	647.2	672.1	701.5	725.0
12	731.2	721.3	706.4	688.6	670.5	652.9	636.0	635.5	659.5	690.6	715.9	730.7
13	731.0	721.0	706.1	687.6	669.3	651.3	633.5	631.1	667.0	710.8	729.9	735.0
14	732.5	723.1	707.2	688.6	670.0	651.6	633.5	634.5	657.9	693.0	724.6	735.0
15	732.5	722.5	705.7	685.9	666.2	648.5	632.5	623.2	658.8	707.8	725.2	733.1
16	730.2	720.2	705.5	685.5	666.0	648.5	632.5	631.1	653.8	687.9	715.6	730.3
17	732.5	722.5	705.7	686.2	667.0	649.0	632.5	628.0	651.4	684.1	708.0	723.0
18	719.4	707.7	697.3	683.2	666.0	648.5	632.5	631.4	655.8	689.8	720.4	735.0
19	732.5	722.6	706.3	687.7	669.7	652.6	635.3	633.1	658.8	692.8	716.0	724.8
20	717.7	706.0	695.0	681.7	666.0	648.5	632.5	630.3	645.4	665.5	677.7	675.5
21	661.8	645.7	630.5	615.8	610.0	610.0	610.0	610.0	620.5	646.9	675.0	688.5
22	681.7	669.5	659.0	646.1	633.3	620.4	611.7	610.0	630.1	667.4	704.9	730.1
23	730.7	720.7	706.4	688.4	670.5	653.3	635.6	637.5	669.2	701.7	722.0	732.8
24	731.4	721.4	705.7	686.1	666.8	648.9	632.5	627.6	650.2	682.2	705.8	717.2
25	709.6	697.5	685.8	672.3	660.6	647.7	632.5	631.5	649.0	671.9	692.6	704.2
26	699.4	686.4	674.5	661.7	650.9	639.9	628.6	630.5	657.7	693.8	717.7	730.3
27	732.5	722.5	705.4	685.4	666.0	648.5	632.5	630.6	652.6	681.8	705.7	714.8
28	705.4	693.6	683.1	671.2	660.7	648.1	632.5	630.3	660.8	697.8	717.9	730.6
29	731.3	721.3	706.4	688.3	670.1	652.3	634.5	631.5	650.3	677.6	700.0	708.2
30	701.5	690.0	678.7	666.0	655.0	644.3	631.7	631.3	654.0	688.2	715.8	728.9
31	727.6	719.0	706.4	688.1	669.7	651.7	633.7	631.0	653.9	690.1	719.0	731.8
32	732.5	723.8	708.4	689.3	670.4	651.8	633.7	631.1	649.7	684.0	720.4	735.0
AVE	722.1	711.7	697.6	680.4	663.5	647.3	631.7	629.6	652.6	685.6	711.5	724.5

WATER SURFACE AT START OF MONTH (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2185.0	2183.6	2170.0	2151.3	2130.3	2112.0	2095.0	2080.0	2089.8	2115.3	2146.1	2168.3
2	2167.9	2153.5	2142.8	2128.8	2115.7	2105.4	2092.5	2080.0	2092.5	2121.1	2152.3	2173.3
3	2190.0	2182.5	2170.0	2151.9	2132.0	2113.7	2095.0	2080.0	2078.2	2125.1	2160.1	2180.6
4	2190.0	2185.0	2171.7	2153.3	2132.8	2114.0	2095.0	2080.0	2098.8	2128.4	2154.4	2176.1
5	2188.0	2175.8	2167.5	2150.0	2130.0	2112.0	2095.0	2080.0	2092.7	2125.0	2151.2	2180.0
6	2188.2	2177.5	2170.0	2152.0	2132.5	2114.6	2095.0	2080.0	2085.1	2125.4	2160.6	2188.4
7	2190.0	2185.0	2170.0	2151.0	2130.0	2112.0	2095.0	2080.0	2094.3	2135.8	2171.7	2190.0
8	2190.0	2185.0	2171.0	2153.3	2133.9	2116.2	2097.3	2080.0	2092.2	2129.6	2160.0	2180.5
9	2190.0	2185.3	2172.5	2155.9	2137.4	2119.5	2101.1	2083.3	2092.4	2125.4	2156.0	2180.2
10	2180.4	2167.0	2158.7	2147.1	2130.0	2112.0	2095.0	2080.0	2092.4	2122.3	2155.3	2186.2
11	2190.0	2185.0	2170.8	2153.1	2133.8	2116.0	2097.2	2080.0	2093.0	2111.4	2142.8	2170.2
12	2189.8	2182.6	2170.0	2152.9	2134.2	2116.7	2099.0	2082.9	2098.1	2130.8	2160.3	2181.5
13	2190.0	2182.0	2170.0	2152.2	2133.1	2115.5	2097.0	2080.0	2092.3	2151.6	2179.9	2190.0
14	2190.0	2185.9	2171.1	2153.3	2133.8	2116.2	2097.0	2080.0	2099.0	2126.8	2169.1	2190.0
15	2190.0	2185.0	2170.0	2151.3	2130.4	2112.0	2095.0	2080.0	2076.3	2151.4	2174.2	2186.2
16	2190.0	2180.4	2170.0	2151.0	2130.0	2112.0	2095.0	2080.0	2092.3	2125.3	2160.5	2180.7
17	2190.0	2185.0	2170.0	2151.4	2131.0	2113.0	2095.0	2080.0	2085.9	2126.8	2151.4	2174.6
18	2181.5	2167.3	2158.2	2146.4	2130.0	2112.0	2095.0	2080.0	2092.7	2128.9	2160.7	2190.0
19	2190.0	2185.0	2170.2	2152.3	2133.2	2116.3	2098.9	2081.6	2094.6	2133.0	2162.5	2179.5
20	2180.0	2165.4	2156.5	2143.5	2130.0	2112.0	2095.0	2080.0	2090.5	2110.2	2130.9	2134.6
21	2126.4	2107.1	2094.3	2076.6	2065.0	2065.0	2065.0	2065.0	2065.0	2086.1	2117.7	2142.3
22	2144.7	2128.7	2120.3	2107.8	2094.3	2082.3	2068.5	2065.0	2065.0	2105.2	2139.5	2180.2
23	2190.0	2181.4	2170.0	2152.8	2134.0	2117.1	2099.5	2081.6	2103.3	2145.1	2168.2	2185.7
24	2190.0	2182.7	2170.0	2151.4	2130.8	2112.8	2095.0	2080.0	2085.2	2125.1	2149.3	2172.4
25	2172.0	2157.2	2147.8	2133.8	2120.7	2110.5	2095.0	2080.0	2093.1	2114.9	2138.8	2156.3
26	2162.1	2146.7	2136.1	2122.8	2110.6	2101.2	2088.6	2078.7	2092.4	2132.9	2164.7	2180.7
27	2190.0	2185.0	2170.0	2150.7	2130.0	2112.0	2095.0	2080.0	2091.1	2124.1	2149.6	2171.8
28	2167.9	2153.0	2144.2	2132.0	2120.3	2111.2	2095.0	2080.0	2090.6	2141.0	2164.7	2181.2
29	2190.0	2182.6	2170.0	2152.8	2133.8	2116.4	2098.3	2080.6	2092.3	2118.3	2146.9	2163.1
30	2163.2	2149.8	2140.3	2127.1	2114.8	2105.2	2093.4	2080.0	2092.6	2125.4	2161.0	2180.5
31	2187.2	2178.0	2170.0	2152.8	2133.5	2115.9	2097.4	2080.0	2092.1	2125.7	2164.5	2183.6
32	2190.0	2185.0	2172.6	2154.2	2134.4	2116.4	2097.3	2080.0	2092.1	2117.2	2160.8	2190.0
AVE	2181.7	2172.5	2160.8	2144.3	2126.4	2110.6	2094.0	2079.3	2089.9	2125.3	2155.8	2177.1

ENERGY FROM RESERVOIR 1 (GWH)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	217.5	390.8	465.9	420.5	347.9	302.8	239.0	151.0	134.8	137.6	153.6	279.2	3240.5
2	450.2	249.9	289.8	262.8	202.4	224.8	223.5	214.7	144.8	143.4	151.6	261.6	2819.5
3	355.2	368.6	464.6	419.9	356.4	337.9	243.1	167.0	107.3	133.8	198.3	218.2	3370.4
4	363.7	409.7	464.6	420.8	356.1	342.2	262.0	239.1	212.5	144.7	143.5	158.1	3517.0
5	447.3	250.6	436.9	407.8	347.7	305.2	247.6	212.8	112.4	138.4	124.3	156.0	3187.0
6	398.4	249.2	463.7	419.1	354.8	359.3	247.5	153.1	174.8	189.2	270.6	474.8	3754.7
7	277.9	405.3	465.9	421.0	346.2	307.1	240.2	233.2	209.4	218.4	320.8	503.1	3948.5
8	282.1	409.1	464.3	420.6	355.8	356.2	281.8	168.6	222.4	139.4	196.4	340.7	3637.5
9	345.9	406.8	461.1	419.5	356.9	358.6	304.1	205.6	190.8	141.7	168.9	220.3	3580.1
10	449.8	250.1	291.2	352.7	352.4	307.1	245.7	165.1	116.2	126.2	213.0	386.1	3255.6
11	319.7	410.6	463.2	419.3	355.7	356.4	283.3	254.0	143.5	136.6	139.1	150.8	3432.2
12	405.2	376.8	461.0	419.8	357.3	354.4	299.4	244.5	204.2	152.0	264.8	185.6	3725.0
13	369.2	359.8	467.4	420.6	356.2	356.5	294.0	206.3	199.0	252.5	542.7	486.0	4310.3
14	335.2	414.5	466.0	421.0	355.8	357.7	271.9	244.5	217.7	213.9	333.9	411.8	4043.8
15	320.5	412.8	465.5	420.8	354.8	303.0	236.7	171.8	195.1	246.6	269.3	196.4	3593.3
16	410.1	327.2	467.2	422.5	346.8	311.0	257.1	194.3	160.7	169.2	207.2	397.4	3670.8
17	321.9	404.4	464.1	419.4	354.6	334.9	260.6	153.7	199.2	134.7	137.5	185.1	3370.2
18	452.7	250.2	291.3	340.6	355.1	313.9	244.6	241.8	223.3	186.0	335.1	521.4	3755.9
19	274.7	412.8	469.0	419.9	355.5	355.8	302.7	247.7	212.9	227.8	154.0	258.7	3691.6
20	454.1	251.3	293.5	269.5	341.4	306.8	258.1	163.0	151.3	159.8	215.9	296.7	3161.4
21	427.9	241.3	279.3	184.4	17.8	20.4	31.2	311.9	164.9	125.7	142.7	214.3	2161.6
22	429.0	238.4	281.1	256.6	197.9	219.5	74.6	93.4	310.8	141.6	158.2	234.6	2635.7
23	396.4	357.9	462.8	417.9	353.3	354.8	302.1	221.1	202.3	245.2	275.7	315.6	3905.1
24	338.4	366.8	466.5	421.2	355.6	326.9	246.7	170.7	146.3	154.7	165.8	309.8	3469.4
25	450.6	251.0	291.9	264.4	203.8	278.0	245.3	248.1	135.5	143.3	155.4	227.8	2894.9
26	446.2	248.4	287.2	260.2	199.7	221.6	182.9	196.4	215.2	228.7	216.0	278.0	2980.4
27	339.9	405.8	466.4	412.2	345.8	307.0	251.4	142.3	122.7	154.5	197.7	301.5	3447.2
28	446.3	244.4	284.8	260.0	200.7	306.6	256.2	137.6	205.1	241.9	268.9	196.7	3049.1
29	399.1	389.7	462.2	419.2	355.0	355.6	302.8	212.0	149.8	146.3	152.9	258.9	3603.4
30	442.2	245.2	287.6	261.4	201.6	225.2	237.1	237.6	219.1	222.9	194.7	188.0	2962.6
31	454.1	315.4	464.7	421.0	356.5	356.6	298.7	169.2	224.8	219.5	256.4	267.1	3804.0
32	370.4	411.2	466.7	423.3	357.2	357.2	286.8	177.3	156.5	183.8	542.4	458.6	4191.3
AVE	381.0	335.2	408.7	373.1	314.2	308.8	248.7	198.4	180.8	175.0	227.1	291.8	3442.8

RESERVOIR 2

INFLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6602.4	10756.1	12488.2	11574.6	10879.8	8809.3	7405.0	6305.0	6047.5	5989.5	5987.9	8177.1
2	12252.9	7072.3	8065.7	7443.3	6471.5	6589.0	7026.2	7913.0	5743.6	5714.3	6046.0	9532.7
3	9690.7	10219.4	12532.8	11610.6	11123.8	9801.3	7481.3	5765.5	7439.4	6379.7	7461.0	7630.4
4	10493.0	11392.6	12518.4	11589.2	11137.2	9923.2	8134.6	9750.1	9980.3	5760.1	6293.2	6607.4
5	12368.3	7062.3	11783.4	11239.8	10909.5	8868.7	7733.4	9876.4	7023.5	5950.5	6914.4	6537.5
6	11179.8	7139.0	12568.9	11637.5	11186.2	10453.1	7710.2	6222.3	8382.9	7553.6	8438.2	13007.4
7	7623.3	11012.4	12485.2	11560.4	10872.9	8991.6	7470.1	9907.0	10079.3	9210.5	11699.7	16495.8
8	8210.7	11404.3	12527.7	11605.1	11167.2	10364.0	8736.0	7279.6	9677.4	5931.7	7193.3	12179.6
9	10205.5	11485.2	12775.0	11624.3	11113.1	10320.3	9369.8	7950.9	7940.7	5865.2	6794.4	6863.3
10	12408.6	7079.9	8039.7	9862.0	11158.9	9017.2	7722.7	8638.5	6640.4	6339.8	10204.2	13012.6
11	9036.1	11356.4	12561.2	11646.1	11168.3	10355.1	8767.2	9260.3	5749.6	6024.0	6443.2	6853.5
12	11458.3	10500.5	12635.8	11805.8	11292.4	10433.1	9514.8	9570.9	10254.5	7147.3	8582.9	6967.0
13	10242.2	9900.3	12566.1	11597.4	11147.6	10353.0	9101.7	6904.7	10414.4	8172.5	16223.3	14767.2
14	9283.1	11235.5	12476.8	11592.5	11168.9	10314.7	8306.9	9585.2	9808.2	9378.0	10306.2	11777.2
15	8973.7	11309.2	12498.3	11568.9	11118.3	8803.1	7299.3	5610.6	10681.9	8342.2	8465.0	6479.3
16	11462.0	9034.9	12443.5	11559.9	10308.6	9006.2	7917.2	7043.1	7634.2	7546.9	7797.5	12496.3
17	9471.9	11131.6	12542.6	11617.6	11180.8	9828.6	8221.9	6206.0	10402.5	6056.7	6477.6	6565.4
18	12312.6	7070.6	8036.4	9555.7	11248.1	9228.4	7656.5	9024.1	9647.2	8122.5	12864.8	15728.2
19	7560.7	11280.2	12611.8	11621.8	11179.6	10388.7	9399.6	9454.5	9988.1	8922.8	5956.0	7942.7
20	12244.6	7037.5	7960.0	7440.0	10661.6	8908.9	8024.1	5939.9	5508.4	5286.4	6653.0	9002.5
21	12523.1	7328.7	8362.8	5705.7	708.7	721.8	1046.6	10721.6	7841.1	6356.3	6331.3	7218.2
22	12714.7	7449.7	8344.1	7630.2	6618.0	6748.1	2523.7	3427.9	12926.7	5772.2	7055.9	7640.4
23	10678.6	9897.7	12577.6	11689.7	11225.4	10424.6	9420.9	10274.5	10325.9	8413.6	8267.0	9230.4
24	8968.7	9978.7	12470.4	11559.3	11142.7	9477.8	7589.5	5682.3	6871.3	5451.0	5842.5	8952.0
25	12279.3	7043.8	8003.9	7392.6	6426.2	8067.3	7551.9	9442.6	6011.0	5796.9	5918.7	7818.5
26	12318.1	7119.5	8152.2	7527.7	6568.9	6690.3	5853.2	8173.9	9921.7	8905.6	7518.0	9416.0
27	9978.7	11076.8	12465.6	11356.3	10856.0	8964.5	7864.0	6575.2	6444.8	5463.2	6130.6	8882.3
28	12380.2	7257.3	8235.9	7536.0	6538.8	9075.6	8112.6	6715.4	10235.4	8499.0	8549.6	6491.5
29	11321.0	10978.4	12597.1	11649.5	11197.4	10391.1	9388.6	6723.3	5579.5	5721.3	5989.2	7995.1
30	12486.4	7228.4	8140.7	7489.2	6504.2	6582.8	7318.3	7986.2	7605.9	8592.4	7508.9	6047.6
31	12392.2	8885.1	12519.0	11590.6	11142.6	10351.8	9255.8	6238.7	9481.9	9194.7	8848.7	8376.9
32	10221.4	11352.5	12458.0	11592.9	11121.6	10331.1	8858.2	6509.5	5366.9	8407.1	17878.2	12762.0
AVE	10667.0	9377.4	11138.9	10389.8	9907.7	9018.3	7743.2	7708.7	8364.3	7070.9	8207.5	9357.9

POWERHOUSE FLOW (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6602.4	10756.1	12481.7	11574.6	10887.0	8809.3	7405.0	6305.0	6047.5	5989.5	10940.6	8949.8
2	6552.5	7072.3	8065.7	7443.3	6471.5	6589.0	7026.2	7913.0	5743.6	5714.3	10860.0	7859.1
3	6489.8	10226.1	12526.3	11610.6	11123.8	9807.8	7481.3	5765.5	7439.4	6373.2	10727.2	8261.1
4	6623.0	11385.9	12518.4	11589.2	11137.2	9929.7	8134.6	9743.6	9980.3	5760.1	10597.0	7958.4
5	6757.0	7069.0	11783.4	11239.8	10909.5	8868.7	7733.4	9876.4	7023.5	5950.5	9971.6	7959.1
6	6746.9	7139.0	12562.4	11637.5	11186.2	10459.6	7710.2	6222.3	8382.9	7547.1	11209.6	10143.6
7	7629.8	11012.4	12478.7	11566.9	10872.9	8991.6	7470.1	9900.5	10079.3	9210.5	11699.7	13763.2
8	8217.2	11397.6	12527.7	11605.1	11167.2	10364.0	8742.8	7279.6	9670.7	5931.7	10849.2	8401.8
9	10205.5	11485.2	12775.0	11624.3	11113.1	10320.3	9369.8	7957.4	7940.7	5865.2	10679.8	8738.8
10	6708.1	7079.9	8039.7	9862.0	11158.9	9017.2	7722.7	8638.5	6640.4	6339.8	10197.7	13012.6
11	9042.6	11349.7	12561.2	11646.1	11168.3	10355.1	8774.0	9253.8	5756.3	6024.0	10476.1	7719.9
12	6580.5	10507.2	12629.3	11805.8	11292.4	10433.1	9514.8	9570.9	10254.5	7147.3	11064.4	8148.6
13	6617.2	9907.0	12559.6	11597.4	11147.6	10353.0	9108.4	6904.7	10407.7	8172.5	13763.2	13763.2
14	9289.6	11228.8	12476.8	11592.5	11168.9	10314.7	8313.6	9578.7	9808.2	9378.0	11050.5	11008.1
15	8980.2	11309.2	12491.8	11568.9	11125.5	8803.1	7299.3	5739.9	10541.6	8342.2	11145.8	8569.0
16	6758.8	9041.7	12437.0	11566.4	10808.6	9006.2	7917.2	7043.1	7634.2	7540.4	10669.3	9528.7
17	9478.4	11131.6	12536.1	11617.6	11180.8	9835.1	8221.9	6206.0	10395.8	6056.7	10414.6	8394.3
18	6612.1	7070.6	8036.4	9555.7	11248.1	9228.4	7656.5	9024.1	9640.5	8122.5	12864.8	13763.2
19	7567.2	11273.5	12611.8	11621.8	11179.6	10388.7	9399.6	9454.5	9988.1	8922.8	10920.5	8709.9
20	6544.2	7037.5	7960.0	7440.0	10661.6	8908.9	8024.1	5939.9	5508.4	6035.2	11604.6	9002.5
21	6822.7	7328.7	8362.8	10250.7	1988.0	721.8	1046.6	6293.1	6526.7	6356.3	10672.8	3622.5
22	7014.2	7449.7	8344.1	7630.2	6618.0	6748.1	8414.2	3427.9	7036.2	5772.2	10405.9	8496.0
23	6494.0	9904.5	12571.1	11689.7	11225.4	10424.6	9420.9	10274.5	10325.9	8413.6	11364.1	3784.2
24	6303.4	9985.4	12463.9	11559.3	11142.7	9484.3	7589.5	5682.3	6871.3	5805.8	11188.1	8952.0
25	6578.8	7043.8	8003.9	7392.6	6426.2	8067.3	7551.9	9436.1	6017.8	5796.9	11037.0	8420.1
26	6617.7	7119.5	8152.2	7527.7	6568.9	6690.3	5853.2	8173.9	9915.0	8905.6	10941.6	8144.7
27	7791.9	11076.8	12459.1	11362.8	10856.0	8964.5	7864.0	6575.2	6444.8	5796.6	11497.7	8882.3
28	6679.8	7257.3	8235.9	7536.0	6538.8	9075.6	8112.6	6715.4	10228.7	8499.0	11131.2	8576.1
29	6722.0	10985.1	12590.6	11649.5	11197.4	10391.1	9388.6	6729.8	5579.5	5721.3	10936.5	8773.4
30	6785.9	7228.4	8140.7	7489.2	6504.2	6582.8	7318.3	7986.2	7605.9	8585.9	10646.7	8702.4
31	6685.2	8891.8	12512.5	11590.6	11142.6	10351.8	9262.5	6238.7	9481.9	9188.2	11236.0	8362.0
32	7855.0	11345.7	12458.0	11592.9	11121.6	10331.1	8864.9	6509.5	5598.0	8176.9	13763.2	12762.0
AVE	7261.1	9378.0	11136.1	10532.4	9948.1	9019.3	7928.5	7573.8	8141.1	7107.6	11141.5	9410.4

SPILLS (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2732.6
8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2460.1	1004.0
15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1965.0
20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4115.0	0.0
AVE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	205.5	178.2

HEAD (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	583.4	558.4
2	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	584.0	570.3
3	591.3	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.0	574.2
4	588.2	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	586.3	561.7
5	580.4	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.9	572.6
6	585.7	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	593.3	593.3
7	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
8	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	589.3	589.3
9	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	588.2	563.2
10	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
11	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	587.5	566.2
12	583.8	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	594.6	578.9
13	589.4	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
14	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	602.4	602.4
15	605.0	605.0	605.0	605.0	605.0	605.0	605.0	604.5	604.6	605.0	593.7	573.2
16	584.5	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	592.8	592.8
17	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	588.0	563.0
18	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0
19	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	583.4	558.3
20	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	602.3	577.3	555.0
21	580.0	605.0	605.0	585.2	560.2	555.0	555.0	575.0	600.0	605.0	586.1	561.1
22	580.0	605.0	605.0	605.0	605.0	605.0	580.0	555.0	580.0	605.0	590.6	572.4
23	586.9	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.8	580.5
24	593.7	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	603.7	578.7	555.0
25	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	582.6	557.6
26	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	590.3	581.1
27	595.8	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	603.8	578.8	555.0
28	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	594.1	574.1
29	585.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	583.4	558.4
30	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	591.6	566.6
31	580.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	595.0	585.0
32	595.0	605.0	605.0	605.0	605.0	605.0	605.0	605.0	604.2	604.2	605.0	605.0
AVE	590.2	605.0	605.0	604.4	603.6	603.5	602.7	602.5	604.0	604.8	591.1	576.4

WATER SURFACE AT START OF MONTH (FT)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1411.7
2	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1413.0
3	1427.6	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1427.0
4	1421.5	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1417.6
5	1405.8	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1428.8
6	1416.4	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1431.5
7	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
8	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1423.5
9	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1421.4
10	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
11	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1420.0
12	1412.5	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1434.1
13	1423.8	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
14	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1449.7
15	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1454.1	1455.0	1455.0	1432.3
16	1414.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1430.6
17	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1420.9
18	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0
19	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1411.7
20	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1449.6	1405.0
21	1405.0	1455.0	1455.0	1455.0	1415.4	1405.0	1405.0	1405.0	1444.9	1455.0	1455.0	1417.2
22	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1405.0	1405.0	1455.0	1455.0	1428.2
23	1418.7	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1428.5
24	1432.4	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1452.5	1405.0
25	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1410.2
26	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1425.6
27	1436.7	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1452.6	1405.0
28	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1433.2
29	1415.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1411.8
30	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1428.2
31	1405.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1434.9
32	1435.1	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1455.0	1453.4	1455.0	1455.0
AVE	1425.3	1455.0	1455.0	1455.0	1453.8	1453.5	1453.5	1451.9	1453.1	1455.0	1454.7	1427.5

ENERGY FROM RESERVOIR 2 (GWH)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	214.1	337.6	404.9	375.4	319.0	285.7	232.4	204.5	189.8	194.3	342.2	259.3	3359.2
2	203.7	222.0	261.6	241.4	189.6	213.7	220.5	256.7	180.3	185.3	340.0	232.5	2747.4
3	205.7	321.0	406.3	376.6	325.9	318.1	234.8	187.0	233.5	206.7	339.9	246.1	3401.7
4	208.9	357.4	406.1	375.9	326.3	322.1	255.3	316.0	313.3	186.8	333.1	231.9	3633.1
5	210.3	221.9	382.2	364.6	319.6	287.7	242.7	320.3	220.5	193.0	316.4	236.4	3315.5
6	211.9	224.1	407.5	377.5	327.7	339.3	242.0	201.8	263.1	244.8	356.5	312.2	3508.3
7	247.5	345.7	404.8	375.2	318.5	291.6	234.5	321.1	316.4	298.8	379.5	432.0	3965.5
8	266.5	357.8	406.4	376.4	327.2	336.2	274.4	236.1	303.6	192.4	342.7	256.9	3676.5
9	331.0	360.5	414.4	377.1	325.6	334.8	294.1	258.1	249.2	190.2	336.8	255.3	3727.1
10	208.6	222.2	260.8	319.9	326.9	292.5	242.4	280.2	208.4	205.6	330.8	408.5	3306.7
11	293.3	356.3	407.4	377.8	327.2	335.9	275.4	300.2	180.7	195.4	330.0	226.8	3606.2
12	205.9	329.8	409.6	382.9	330.8	338.4	298.7	310.4	321.9	231.8	352.7	244.7	3757.9
13	209.1	311.0	407.4	376.2	326.6	335.8	285.9	223.9	326.7	265.1	446.4	432.0	3946.1
14	301.3	352.5	404.7	376.0	327.2	334.6	261.0	310.7	307.9	304.2	356.9	344.0	3980.9
15	291.3	355.0	405.2	375.3	325.9	285.5	229.1	186.0	330.6	270.6	354.7	254.8	3664.1
16	211.8	283.8	403.4	375.2	316.6	292.1	248.5	228.4	239.6	244.6	339.1	293.1	3476.2
17	307.4	349.4	406.6	376.8	327.6	319.0	258.1	201.3	326.3	196.5	328.3	245.2	3642.5
18	205.6	221.9	260.7	309.9	329.5	299.3	240.3	292.7	302.6	263.5	417.3	432.0	3575.4
19	245.4	353.9	409.1	377.0	327.5	337.0	295.1	306.7	313.5	289.4	341.5	252.3	3848.4
20	203.5	220.9	258.2	241.3	312.3	289.0	251.9	192.7	172.9	194.9	359.2	259.2	2955.8
21	212.1	230.0	271.2	321.6	53.9	21.5	30.1	194.0	203.2	206.2	335.4	251.0	2330.2
22	218.1	233.8	270.6	247.5	193.9	218.9	253.2	102.0	211.7	187.2	329.5	252.3	2718.7
23	204.3	310.9	407.7	379.2	328.9	338.1	295.7	333.3	324.1	272.9	360.5	264.5	3920.3
24	200.6	313.4	404.3	374.9	326.5	307.6	238.2	184.3	215.7	187.9	347.1	257.8	3358.4
25	204.6	221.1	259.6	239.8	188.3	261.7	237.0	306.1	188.9	188.0	344.7	243.6	2883.3
26	205.8	223.5	264.4	244.2	192.4	217.0	183.7	265.1	311.2	288.9	346.3	245.6	2988.0
27	248.9	347.7	404.1	368.6	318.0	290.8	246.8	213.3	202.3	187.6	356.8	255.8	3440.6
28	207.7	227.8	267.1	244.4	191.6	294.4	254.6	217.8	321.1	275.7	354.5	255.4	3112.1
29	210.8	344.8	408.4	377.9	328.1	337.1	294.7	218.3	175.1	185.6	342.0	254.2	3476.9
30	211.0	226.9	264.0	242.9	190.5	213.5	229.7	259.0	238.7	278.5	337.7	255.8	2948.3
31	207.9	279.1	405.8	376.0	326.5	335.8	290.7	202.3	297.6	298.0	358.4	253.8	3631.9
32	250.6	356.1	404.1	376.0	325.8	335.1	278.3	211.1	175.5	264.9	446.4	400.6	3824.6
AVE	230.2	294.4	361.2	341.3	291.3	292.5	248.4	245.0	255.2	230.5	353.2	282.7	3425.9

TOTAL ENERGY PRODUCED (GWH)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	431.7	728.4	870.7	796.0	666.9	588.5	471.4	355.5	324.6	331.9	495.8	538.5	6599.7
2	653.9	471.9	551.4	504.2	392.0	438.5	444.0	471.3	325.1	328.8	491.6	494.1	5566.9
3	561.0	689.6	870.9	796.5	682.3	656.1	477.9	354.0	340.8	340.5	538.2	464.4	6772.1
4	572.5	767.1	870.7	796.7	682.4	664.3	517.4	555.1	525.8	331.5	476.6	390.1	7150.2
5	657.6	472.5	819.1	772.3	667.3	592.8	490.3	533.1	332.8	331.4	440.7	392.4	6502.5
6	610.2	473.3	871.1	796.6	682.6	698.6	489.6	354.9	438.0	434.0	627.1	787.0	7263.0
7	525.4	750.9	870.6	796.2	664.7	598.8	474.7	554.3	525.8	517.1	700.3	935.2	7914.0
8	548.6	766.9	870.7	797.1	683.0	692.4	556.2	404.7	526.0	331.9	539.1	597.5	7314.0
9	676.9	767.3	875.5	796.5	682.4	693.4	598.2	463.7	440.1	331.9	505.7	475.6	7307.3
10	658.4	472.3	552.0	672.6	679.4	599.6	488.1	445.2	324.6	331.8	543.7	794.5	6562.3
11	613.0	766.8	870.6	797.0	683.0	692.3	558.7	554.1	324.2	332.0	469.1	377.6	7038.4
12	611.1	706.6	870.6	802.8	688.1	692.8	598.1	555.0	526.1	383.9	617.4	430.3	7482.9
13	578.3	670.8	874.8	796.8	682.8	692.3	579.9	430.2	525.7	517.6	989.1	918.1	8256.4
14	636.5	766.9	870.7	797.0	683.0	692.3	532.9	555.2	525.6	518.1	690.8	755.9	8024.7
15	611.8	767.8	870.7	796.0	680.8	588.5	465.8	357.8	525.7	517.2	624.0	451.2	7257.4
16	622.0	611.1	870.6	797.7	663.4	603.2	505.6	422.7	400.3	413.7	546.3	690.4	7147.0
17	629.3	753.8	870.7	796.2	682.1	653.9	518.7	355.0	525.6	331.2	465.8	430.3	7012.7
18	658.3	472.2	552.0	650.6	684.6	613.2	484.9	534.5	525.9	449.4	752.4	953.4	7331.3
19	520.1	766.7	878.1	796.9	683.0	692.8	597.8	554.4	526.5	517.3	495.6	511.0	7540.0
20	657.6	472.2	551.7	510.8	653.8	595.8	509.9	355.6	324.2	354.7	575.0	555.9	6117.3
21	640.0	471.4	550.5	506.0	71.7	41.9	61.4	505.8	368.0	331.8	478.0	465.3	4491.8
22	647.1	472.3	551.8	504.1	391.7	438.3	327.8	195.4	522.6	328.8	487.7	486.9	5354.4
23	600.8	668.8	870.6	797.1	682.1	692.9	597.8	554.4	526.4	518.1	636.2	580.2	7725.4
24	539.1	680.3	870.7	796.1	682.1	634.5	484.9	355.0	362.0	342.6	512.9	567.5	6827.8
25	655.1	472.1	551.5	504.2	392.0	539.6	482.3	554.1	324.4	331.3	500.1	471.4	5778.2
26	652.0	471.8	551.6	504.3	392.2	438.6	366.6	461.5	526.5	517.5	562.2	523.5	5968.4
27	588.8	753.4	870.5	780.7	663.8	597.7	498.3	355.5	325.0	342.1	554.5	557.3	6887.8
28	654.0	472.2	551.9	504.5	392.2	601.0	510.8	355.4	526.1	517.6	623.4	452.1	6161.2
29	609.9	734.5	870.6	797.0	683.0	692.6	597.5	430.3	324.9	331.9	495.0	513.1	7080.3
30	653.2	472.1	551.6	504.3	392.1	438.7	466.8	496.7	457.9	501.4	532.3	443.8	5910.9
31	662.0	594.5	870.6	796.9	682.9	692.4	589.4	371.6	522.4	517.5	614.8	520.9	7436.0
32	621.0	767.3	870.8	799.3	683.0	692.4	565.0	388.4	332.0	448.6	988.8	859.2	8015.8
AVE	611.2	629.6	769.9	714.4	605.5	601.3	497.1	443.5	436.0	405.5	580.3	574.5	6868.7

TOTAL USABLE ENERGY (GWH)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ANN
1	431.7	728.4	870.5	796.0	666.9	588.5	471.4	355.5	324.6	331.9	495.8	538.5	6599.5
2	653.9	471.9	551.4	504.2	392.0	438.3	444.0	471.3	325.1	328.8	491.6	494.1	5566.9
3	561.0	689.6	870.5	796.1	682.1	656.1	477.9	354.0	340.8	340.5	538.2	464.4	6771.0
4	572.5	766.8	870.5	796.1	682.1	664.3	517.4	554.3	525.6	331.5	476.6	390.1	7147.7
5	657.6	472.5	819.1	772.3	667.3	592.8	490.3	533.1	332.8	331.4	440.7	392.4	6502.5
6	610.2	473.3	870.5	796.1	682.1	691.9	489.6	354.9	438.0	434.0	543.1	568.8	6952.4
7	525.4	750.9	870.5	796.1	664.7	598.8	474.7	554.3	525.6	517.1	543.1	568.8	7390.0
8	548.6	766.8	870.5	796.1	682.1	691.9	556.2	404.7	525.6	331.9	539.1	568.8	7282.3
9	676.9	766.8	870.5	796.1	682.1	691.9	597.6	463.7	440.1	331.9	505.7	475.6	7298.8
10	658.4	472.3	552.0	672.6	679.4	599.6	488.1	445.2	324.6	331.8	543.1	568.8	6335.9
11	613.0	766.8	870.5	796.1	682.1	691.9	558.7	554.1	324.2	332.0	469.1	377.6	7036.0
12	611.1	706.6	870.5	796.1	682.1	691.9	597.6	554.3	525.6	383.9	543.1	430.3	7393.1
13	578.3	670.8	870.5	796.1	682.1	691.9	579.9	430.2	525.6	517.1	543.1	568.8	7454.4
14	636.5	766.8	870.5	796.1	682.1	691.9	532.9	554.3	525.6	517.1	543.1	568.8	7685.6
15	611.8	766.8	870.5	796.0	680.8	588.5	465.8	357.8	525.6	517.1	543.1	451.2	7175.0
16	622.0	611.1	870.5	796.1	663.4	603.2	505.6	422.7	400.3	413.7	543.1	568.8	7020.4
17	629.3	753.8	870.5	796.1	682.1	653.9	518.7	355.0	525.6	331.2	465.8	430.3	7012.3
18	658.3	472.2	552.0	650.6	682.1	613.2	484.9	534.5	525.6	449.4	543.1	568.8	6734.6
19	520.1	766.7	870.5	796.1	682.1	691.9	597.6	554.3	525.6	517.1	495.6	511.0	7528.5
20	657.6	472.2	551.7	510.8	653.8	595.8	509.9	355.6	324.2	354.7	543.1	555.9	6085.4
21	640.0	471.4	550.5	506.0	71.7	41.9	61.4	505.8	368.0	331.8	478.0	465.3	4491.8
22	647.1	472.3	551.8	504.1	391.7	438.3	327.8	195.4	522.6	328.8	487.7	486.9	5354.4
23	600.8	668.8	870.5	796.1	682.1	691.9	597.6	554.3	525.6	517.1	543.1	568.8	7616.6
24	539.1	680.3	870.5	796.1	682.1	634.5	484.9	355.0	362.0	342.6	512.9	567.5	6827.4
25	655.1	472.1	551.5	504.2	392.0	539.6	482.3	554.1	324.4	331.3	500.1	471.4	5778.2
26	652.0	471.8	551.6	504.3	392.2	438.6	366.6	461.5	525.6	517.1	543.1	523.5	5948.0
27	588.8	753.4	870.5	780.7	663.8	597.7	498.3	355.5	325.0	342.1	543.1	557.3	6876.3
28	654.0	472.2	551.9	504.5	392.2	601.0	510.8	355.4	525.6	517.1	543.1	452.1	6079.9
29	609.9	734.5	870.5	796.1	682.1	691.9	597.5	430.3	324.9	331.9	495.0	513.1	7077.6
30	653.2	472.1	551.6	504.3	392.1	438.7	466.8	496.7	457.9	501.4	532.3	443.8	5910.9
31	662.0	594.5	870.5	796.1	682.1	691.9	589.4	371.6	522.4	517.1	543.1	520.9	7361.6
32	621.0	766.8	870.5	796.1	682.1	691.9	565.0	388.4	332.0	448.6	543.1	568.8	7274.3
AVE	611.2	629.5	769.2	713.7	605.0	600.8	497.1	443.4	435.8	405.3	519.2	506.3	6736.5

FORECAST DEMAND ENERGY (GWH)

OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	
677.0	766.8	870.5	796.1	682.1	691.9	597.6	554.3	525.6	517.1	543.1	568.8	7790.9

PRE-PROJECT FLOW AT GOLD CREEK (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6335.0	2583.0	1439.0	1027.0	788.0	726.0	870.0	11510.0	19600.0	22600.0	19880.0	8301.0
2	3848.0	1300.0	1100.0	960.0	820.0	740.0	1617.0	14090.0	20790.0	22570.0	19670.0	21240.0
3	5571.0	2744.0	1900.0	1600.0	1000.0	880.0	920.0	5419.0	32370.1	26390.0	20920.0	14480.0
4	8202.0	3497.0	1700.0	1100.0	820.0	820.0	1615.0	19270.0	27320.1	20200.0	20610.0	15270.0
5	5604.0	2100.0	1500.0	1300.0	1000.0	780.0	1235.0	17280.0	25250.0	20360.0	26100.0	12920.0
6	5370.0	2760.0	2045.0	1794.0	1400.0	1100.0	1200.0	9319.0	29860.0	27560.0	25750.0	14290.0
7	4951.0	1900.0	1300.0	980.0	970.0	940.0	950.0	17660.0	33340.0	31090.1	24530.0	18330.0
8	5806.0	3050.0	2142.0	1700.0	1500.0	1200.0	1200.0	13750.0	30160.0	23310.0	20540.0	19800.0
9	8212.0	3954.0	3264.0	1965.0	1307.0	1148.0	1533.0	12900.0	25700.0	22880.0	22540.0	7550.0
10	4811.0	2150.0	1513.0	1448.0	1307.0	980.0	1250.0	15990.0	23320.0	25000.0	31180.0	16920.0
11	6558.0	2850.0	2200.0	1845.0	1452.0	1197.0	1300.0	15780.0	15530.0	22980.0	23590.0	20510.0
12	7794.0	3000.0	2694.0	2452.0	1754.0	1810.0	2650.0	17360.0	29450.0	24570.0	22100.0	13370.0
13	5916.0	2700.0	2100.0	1900.0	1500.0	1400.0	1700.0	12590.0	43270.0	25850.0	23550.0	15890.0
14	6723.0	2800.0	2000.0	1600.0	1500.0	1000.0	830.0	19030.0	26000.0	34400.0	23670.0	12320.0
15	6449.0	2250.0	1494.0	1048.0	966.0	713.0	745.0	4307.0	50580.0	22950.0	16440.0	9571.0
16	6291.0	2799.0	1211.0	960.0	860.0	900.0	1360.0	12990.0	25720.0	27840.0	21120.0	19350.0
17	7205.0	2098.0	1631.0	1400.0	1300.0	1300.0	1775.0	9645.0	32950.0	19860.0	21830.0	11750.0
18	4163.0	1600.0	1500.0	1500.0	1400.0	1200.0	1167.0	15480.0	29510.0	26800.0	32620.0	16870.0
19	4900.0	2353.0	2055.0	1981.0	1900.0	1900.0	1910.0	16180.0	31550.0	26420.0	17170.0	8816.0
20	3822.0	1630.0	882.0	724.0	723.0	816.0	1510.0	11050.0	15500.0	16100.0	8879.0	5093.0
21	3124.0	1215.0	866.0	824.0	768.0	776.0	1080.0	11380.0	18630.0	22660.0	19980.0	9121.0
22	5288.0	3407.0	2290.0	1442.0	1036.0	950.0	1082.0	3745.0	32930.0	23950.0	31910.0	14440.0
23	5847.0	3093.0	2510.0	2239.0	2028.0	1823.0	1710.0	21890.0	34430.0	22770.0	19290.0	12400.0
24	4826.0	2253.0	1465.0	1200.0	1200.0	1000.0	1027.0	8235.0	27800.0	18250.0	20290.0	9074.0
25	3733.0	1523.0	1034.0	874.0	777.0	724.0	992.0	16180.0	17870.0	18800.0	16220.0	12250.0
26	3739.0	1700.0	1603.0	1516.0	1471.0	1400.0	1593.0	15350.0	32310.0	27720.0	18090.0	16310.0
27	7739.0	1993.0	1081.0	974.0	950.0	900.0	1373.0	12620.0	24380.0	18940.0	19800.0	6881.0
28	3874.0	2650.0	2403.0	1829.0	1618.0	1500.0	1680.0	12680.0	37970.0	22870.0	19240.0	12640.0
29	7571.0	3525.0	2589.0	2029.0	1668.0	1605.0	1702.0	11950.0	19050.0	21020.0	16390.0	8607.0
30	4907.0	2535.0	1681.0	1397.0	1286.0	1200.0	1450.0	13870.0	24690.0	28880.1	20460.0	10770.0
31	7311.0	4192.0	2416.0	1748.0	1466.0	1400.0	1670.0	12060.0	29080.0	32660.0	20960.0	13280.0
32	7725.0	3986.0	1773.1	1453.6	1235.6	1114.3	1367.5	13316.7	18143.0	32000.0	38538.0	13171.1
AVE	5756.7	2568.4	1793.2	1462.8	1242.8	1123.2	1377.0	13277.4	27657.9	24382.8	21995.5	13174.5

POST-PROJECT FLOWS AT GOLD CREEK (CFS)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7179.2	10934.4	12578.2	11650.3	10939.3	8865.3	7472.8	7324.3	7178.9	7206.1	12000.0	9300.0
2	6748.5	7141.1	8134.9	7497.6	6524.0	6631.9	7138.6	8784.5	6555.1	6708.4	12000.0	9300.0
3	6839.1	10431.1	12668.8	11726.9	11180.6	9859.6	7522.8	6195.0	9795.3	7901.5	12000.0	9300.0
4	7307.4	11650.3	12668.0	11689.6	11211.6	9983.0	8217.8	11255.3	12069.7	6776.1	12000.0	9300.0
5	7251.7	7247.7	11896.3	11315.6	10979.8	8919.3	7837.8	11870.4	9085.4	7156.4	12000.0	9300.0
6	7286.5	7392.2	12739.4	11782.4	11311.0	10536.0	7802.8	7151.2	10161.0	8894.3	12000.0	10444.4
7	7932.9	11123.8	12572.1	11625.2	10949.8	9079.3	7552.8	11581.5	12282.2	11088.6	13619.9	18330.0
8	8787.9	11673.8	12683.1	11721.9	11278.3	10458.6	8833.8	8556.0	11415.3	7132.1	12000.0	10172.8
9	10983.0	11848.8	13134.1	11797.3	11207.9	10382.6	9465.4	9008.2	9227.2	6982.1	12000.0	9300.0
10	7116.3	7230.1	8181.8	9993.1	11286.8	9119.3	7852.8	10727.6	8422.7	7949.4	12783.3	14603.0
11	9539.9	11577.0	12749.7	11804.9	11280.1	10439.3	8856.2	10230.9	6576.5	7264.7	12000.0	9300.0
12	7203.6	10747.3	12886.7	12045.8	11452.8	10604.2	9759.4	10900.2	12635.2	8836.7	12000.0	9300.0
13	7073.8	10062.9	12680.9	11701.4	11234.2	10432.7	9195.0	7353.5	12998.0	9031.9	17531.5	15890.0
14	9704.9	11332.8	12580.8	11696.5	11281.5	10356.3	8332.7	10911.1	11714.1	11389.6	12000.0	11550.9
15	9430.9	11473.8	12598.7	11638.9	11191.3	8852.3	7347.8	6000.0	13305.2	9366.2	12000.0	9300.0
16	7305.8	9195.6	12487.2	11601.1	10839.8	9039.3	7962.8	7766.0	9243.9	9184.7	12000.0	10644.5
17	10186.9	11321.8	12688.7	11738.9	11293.4	9947.7	8377.8	7117.0	12899.5	7380.5	12000.0	9300.0
18	6931.1	7212.7	8171.5	9697.8	11379.8	9339.3	7769.8	10068.6	11354.1	9841.3	15191.8	16870.0
19	7881.9	11423.0	12737.1	11751.6	11300.9	10510.0	9518.6	10652.1	12076.0	10471.8	12000.0	9300.0
20	6789.5	7135.7	8005.7	7477.4	10702.8	8955.3	8112.8	6560.0	6057.7	6484.0	12000.0	9300.0
21	7080.2	7398.0	8418.8	10317.8	2047.3	776.0	1080.0	6951.5	8037.8	7874.1	12000.0	9300.0
22	7557.0	7774.9	8559.3	7753.4	6710.4	6831.3	8510.0	3745.0	8935.2	6780.6	12000.0	9300.0
23	6804.0	10085.2	12768.5	11892.6	11417.0	10587.8	9565.4	12387.7	12826.1	9467.1	12000.0	9300.0
24	6490.8	10083.6	12541.9	11619.5	11214.1	9529.3	7629.8	6020.9	8278.7	6484.0	12000.0	9300.0
25	6820.4	7103.9	8040.5	7423.9	6457.3	8101.8	7594.8	10611.5	7121.1	6806.9	12000.0	9300.0
26	6849.9	7200.1	8268.7	7634.9	6697.7	6818.4	5989.5	9487.4	11922.4	10437.6	12000.0	9300.0
27	8527.6	11216.8	12532.2	11440.0	10929.8	9039.3	7975.8	7889.9	8011.2	6484.0	12000.0	9300.0
28	7001.4	7515.6	8491.4	7707.6	6687.1	9214.6	8282.8	8183.5	12592.0	9628.5	12000.0	9300.0
29	7356.7	11299.3	12808.2	11810.6	11340.4	10515.5	9493.5	6986.4	6212.7	6662.3	12000.0	9300.0
30	7190.6	7439.1	8272.3	7582.1	6586.6	6618.1	7365.5	8522.2	8243.5	10003.2	12000.0	9300.0
31	7096.2	9128.8	12649.5	11689.6	11225.6	10430.8	9357.5	6921.7	12306.9	11846.2	12000.0	9300.0
32	8334.0	11632.7	12677.1	11759.5	11268.2	10448.4	8994.4	8150.2	6000.0	8940.9	21146.2	13171.1
AVE	7705.9	9563.6	11277.3	10643.3	10044.0	9100.7	8024.1	8621.0	9860.6	8389.4	12633.5	10486.8

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