



Northwestern Division Missouri River Basin Water Management Division

# Missouri River Main Stem Reservoirs 2000-2001 Annual Operating Plan





DEPARTMENT OF THE ARMY NORTHWESTERN DIVISION, CORPS OF ENGINEERS 12565 WEST CENTER ROAD OMAHA, NEBRASKA 68144-3869

This Annual Operating Plan (AOP) for the Missouri River System was prepared by the Corps of Engineers' Missouri River Basin Water Management Division, Northwestern Division. The plan outlines the operating objectives of the Missouri River main stem reservoirs for the coming year (December 2000 through July 2001). In addition, two sets of 5-year extensions to the AOP, through March 2007, are presented to serve as guides for longer range planning.

Previous AOP's have included a System description and discussion of the typical operation to meet authorized purposes and a historic summary of the previous year's operation. Although not included in this AOP, they are available as separate reports upon request. To receive a copy of either the "System Description and Operation" or the "Summary of Actual 1999-00 Operations," contact the Water Management Division at 12565 West Center Road, Omaha, Nebraska 68144-3869, phone (402) 697-2676. Both reports are also available at the "Reports and Publications" link on our web site at: www.nwd.usace.army.mil/rcc.

The development of this year's Draft AOP was coordinated with the Missouri River Natural Resources Committee (MRNRC) and the general public. The MRNRC recommendations for the 2000-2001 AOP are shown as Exhibits 1 and 2.

The Draft AOP also received review at three fall public meetings held at Bismarck, North Dakota, on October 17, 2000, at Fort Peck, Montana, on October 18, 2000, and at Kansas City, Missouri, on October 19, 2000. The primary purpose of these meetings was to present the Draft AOP and receive comments from all concerned. Private citizens and representatives of public and industry interest groups and Missouri River basin states attended the meetings.

The final plan presented in this report is approved as the framework within which the Missouri River Region will schedule detailed daily, weekly, and monthly regulation of the individual main stem reservoirs for the period December 2000 through 2001. The final plan differs slightly from the draft plan presented at the October public meetings. First, the AOP studies were updated to reflect current basin conditions as of December 1, 2000. The final plan also differs from the draft in that lower winter System releases are used when System storage is below normal as an additional water conservation measure and to offset excess releases made for threatened and endangered species operation during the previous summer. Although a winter release rate of 12,000 cubic feet per second was used in the studies, releases will be adjusted as needed to assure adequate downstream water supply. This change was the result of suggestions from various interests made during the public comment period. A number of clarifications and word changes were also made to the draft to improve readability. The press release announcing the adopted plan for next year is shown on Exhibit 3.

une Sins

Duane R. Sims Lieutenant Colonel, Military Police Assistant Division Engineer

# **MISSOURI RIVER MAIN STEM RESERVOIRS**

# Annual Operating Plan 2000-2001

List o	of Tables		ii
List o	of Plates		ii
List o	of Exhibits	5	iii
List c	of Abbrevi	ations	iv
Defir	nition of T	erms	v
I.	FOREV	VORD	1
II.	PURPO	SE AND SCOPE	2
III.	FUTUR	E WATER SUPPLY – AUGUST 2000 – DECEMBER 2001	3
IV.	ANNU	AL OPERATING PLAN FOR 2000-2001	4
	A.	General	4
	B.	Operating Plans for the Balance of the 2000 Navigation Season.	7
	C.	Operating Plan for the Winter of 2000-2001	8
	D.	Operations During the 2001 Navigation Season	10
V.	SUMM	ARY OF RESULTS EXPECTED IN 2000-2001	15
	Α.	Flood Control	15
	B.	Water Supply and Water Ouality Control	
	C.	Irrigation	
	D.	Navigation	
	E.	Power	
	F.	Recreation. Fish and Wildlife	
	G.	System Storage	
	H I	Summary of Water Use by Functions	19
VI.	TENTA	TIVE PROJECTION OF OPERATIONS THROUGH	
	MARC	H 2007	
	A.	Median Runoff	
	B.	Lower Ouartile Runoff – Navigation Season Shortened at	
	-	52 MAF on July 1	
		5	

21
21
22

#### **TABLES**

Ι	Natural and Gross Water Supply at Sioux City	4
II	Gavins Point Releases Needed to Meet Navigation Requirements	6
III	Navigation Service Support for the 2001 Season	11
IV	Reservoir Unbalancing Schedule	13
V	MRNRC Recommended Reservoir Elevation Guidelines for Unbalancing	13
VI	Peaking Capability and Sales	17
VII	Energy Generation and Sales	17
VIII	Anticipated December 31, 2001 Storage in Main Stem System	18
IX	Missouri River Main Stem Water Use for Calendar Years 1999, 2000, and	
	2001 Above Sioux City, Iowa	20
Х	March 1 Reservoir Unbalancing, AOP Extensions	21

#### **PLATES**

- 1 Missouri River Basin Map
- 2 Summary of Engineering Data Missouri River Main Stem Reservoirs
- 3 System Storage
- 4 Gavins Point Releases
- 5 Fort Peck Elevations and Releases
- 6 Garrison Elevations and Releases
- 7 Oahe Elevations and Releases
- 8 Fort Randall Elevations and Releases
- 9 Reservoir Release and Unregulated Flow
- 10 System Gross Capability and Average Monthly Generation
- 11 Tentative Five Year Extensions of 2000-2001 AOP System Storage, Gavins Point Regulated Flows, and Peaking Capability (To be provided in Final AOP)
- 12 Tentative Five Year Extensions of 2000-2001 AOP Reservoir Elevations

### **EXHIBITS**

Exhibit 1 - MRNRC 2000-2001 AOP Recommendations, September 1, 2000

Exhibit 2 – MRNRC 2000-2001 AOP Recommendations Follow-up, September 21, 2000 Exhibit 3 – News Release Announcing 2001 AOP, January 12, 2001

# **ABBREVIATIONS**

AOP	-	annual operating plan
ac.ft.	-	acre-feet
AF	-	acre-feet
В	-	Billion
cfs	-	cubic feet per second
Corps	-	Corps of Engineers
CY	-	calendar year (January 1 to December 31)
elev	-	elevation
ft	-	feet
FY	-	fiscal year (October 1 to September 30)
GIS	-	Geographic Information System
GWh	-	gigawatt hour
KAF	-	1,000 acre-feet
Kcfs	-	1,000 cubic feet per second
kW	-	kilowatt
kWh	-	kilowatt hour
М	-	million
MAF	-	million acre-feet
MRBA	-	Missouri River Basin Association
MRNRC	-	Missouri River Natural Resources Committee
msl	-	mean sea level
MW	-	megawatt
MWh	-	megawatt hour
PI	-	Preliminary Injunction
plover	-	piping plover
рр	-	powerplant
P-S MBP	-	Pick-Sloan Missouri Basin Program
RCC	-	Reservoir Control Center
RM	-	river mile
tern	-	interior least tern
TRO	-	Temporary Restraining Order
tw	-	tailwater
USGS	-	United States Geological Survey
yr	-	year

#### **DEFINITION OF TERMS**

<u>Acre-foot (AF, ac-ft) is the quantity of water required to cover 1 acre to a depth of 1</u> foot and is equivalent to 43,560 cubic feet or 325,850 gallons.

<u>Cubic foot per second</u> (cfs) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute. The volume of water represented by a flow of 1 cubic foot per second for 24 hours is equivalent to 86,400 cubic feet, approximately 1.983 acre-feet, or 646,272 gallons.

<u>Discharge</u> is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

<u>Drainage area</u> of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the river above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

<u>Drainage basin</u> is a part of the surface of the earth that is occupied by drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded water.

<u>Gaging station</u> is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

<u>Runoff in inches</u> shows the depth to which the drainage area would be covered if allquota the runoff for a given time period were uniformly distributed on it.

<u>Streamflow</u> is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

#### **MISSOURI RIVER MAIN STEM RESERVOIRS**

#### Annual Operating Plan 2000 - 2001

#### I. FOREWORD

This Annual Operating Plan (AOP) presents pertinent information and tentative plans for operating the Missouri River Main Stem Reservoir System (System) for the remainder of 2000 through December 2001 under widely varying water supply conditions. It provides a framework for the development of detailed monthly, weekly, and daily regulation schedules for the System's six individual dams during the upcoming year to serve the Congressionally authorized project purposes. Regulation is directed by the Missouri River Basin Water Management Division (formerly the Reservoir Control Center), Northwestern Division, U.S. Army Corps of Engineers (Corps). A map of the Missouri River basin is shown on *Plate 1* and the summary of engineering data for the six main stem reservoirs is shown on *Plate 2*.

This plan may require adjustments when substantial departures from expected runoff occur. Results of a 5-year extension to the AOP studies (March 2002 to March 2007) are presented to serve as a guide for Western Area Power Administration's power marketing activities and those other interests that require information on reservoir conditions for long term planning.

The AOP studies described in the following paragraphs and shown at the end of this document have been updated from the Draft AOP studies to reflect actual conditions through late November and forecasted December 1, 2000 initial conditions. These updated studies serve as the basis for 2001 forecasts and for extensions through March 1, 2007.

Previous AOP's have used August 1 of the current year as the initial condition, but much lower runoff forecasts, low System storage, and two lawsuits pertaining to System operation rendered the Draft AOP regulation forecasts obsolete.

The first lawsuit, State of Kansas v. United States, filed in the United States District Court for the District of Kansas in Topeka, Kansas on September 25, 2000 resulted in a Temporary Restraining Order (TRO) and Preliminary Injunction (PI) that prevented the use of water stored in the Kansas River tributary dams for support of navigation on the lower Missouri River. Prior to the TRO, the Missouri River Basin Water Management Division had requested the Kansas City District to use water stored in Tuttle Creek, Milford, and Perry reservoirs to meet a 2,000 cubic feet per second (cfs) target on the Kansas River at Desoto, Kansas. This was 1,000 cfs above the minimum summertime water quality target. As a result of the TRO, the target flow on the Kansas River was reduced to 1,000 cfs, and additional releases were made from the main stem System to maintain the navigation flow targets. On a motion of the Plaintiff, the case has been dismissed and the PI vacated.

The second lawsuit, Standing Rock Sioux Tribe, et al v. U.S. Army Corps of Engineers, et al, pertained to the Lake Oahe elevation. The U.S. District Court in Aberdeen, South Dakota issued a Temporary Restraining Order (TRO) effective at 1800 hours on November 6, 2000 to maintain Lake Oahe at an elevation of 1597 feet above mean sea level (msl) with a variance not to exceed 6 inches downward to minimize impacts to exposed cultural and historical sites important to the Standing Rock Tribe. As a result, Oahe and Big Bend releases were immediately reduced and Garrison releases were increased to comply with the order. The effect on the main stem System was that releases from Oahe were drastically reduced and much higher flows were initiated from Garrison. The TRO was voluntarily modified and extended while settlement opportunities were pursued. A Joint Motion to Stay the Proceedings until January 22, 2001 was granted (later amended to January 23) by order dated November 28, 2000. That order provides that "Lake Oahe shall not be reduced below 1597 msl with not more than an eighteen (18) inch total variance downward."

This AOP includes only the plan for future operation. Previous AOP's have included a System description and discussion of the typical operation to meet authorized purposes and a historic summary of the previous year's operation. Although not included in this AOP, they are available as separate reports upon request. To receive a copy of either the updated version of the "System Description and Operation" dated January 2000, or the "Summary of Actual 1999-2000 Operations," contact the Missouri River Basin Water Management Division at 12565 West Center Road, Omaha, Nebraska 68144-3869, phone (402) 697-2676. Both reports will be available at the "Reports and Publications" link on our web site at: www.nwd-mr.usace.army.mil/rcc in early 2001.

#### **II. PURPOSE AND SCOPE**

Beginning in 1953, projected System operation for the year ahead was developed annually as a basis for advance coordination with the various interested Federal, state, and local agencies and private citizens. Also beginning in 1953, a coordinating committee was organized to make recommendations on each upcoming year's System operation. The Coordinating Committee on Missouri River Main Stem Reservoir Operations held meetings semiannually until 1981 and provided recommendations to the Corps. In 1982 the committee was dissolved because it did not conform to the provisions of the Federal Advisory Committee Act. Since 1982, to continue providing a forum for public participation, one or more open public meetings are held semiannually in the spring and fall. The fall public meeting is conducted to take public input on a draft of the Annual Operating Plan, which is typically published in early October each year. The spring meetings are conducted to update the public on the current hydrologic conditions and projected System operation for the remainder of the year.

The spring public meetings were held in Jefferson City, Missouri, on April 12, 2000 and in South Sioux City, Nebraska, on April 13, 2000. The attendees were given an update regarding the outlook for 2000 runoff and projected operation for the remainder of 2000. Three fall public meetings on the Draft AOP were held on October 17, 2000 at Bismarck, North Dakota, October 18, 2000 at Fort Peck, Montana, and on October 19, 2000 at Kansas City, Missouri.

Pre-draft AOP coordination was conducted with the Missouri River Natural Resources Committee (MRNRC). Its recommendations for the 2000-2001 AOP are shown as Exhibits 1 and 2.

#### III. FUTURE WATER SUPPLY - AUGUST 2000 - DECEMBER 2001

The AOP forecast studies described in this document underwent a major revision between the draft and the final AOP. The Draft 2000-2001 AOP studies used August 1, 2000 as the initial condition and the appropriate water supplies to the reservoirs for the period August 2000 to December 2001 were estimated. The period August through February is normally one of relatively low and stable inflows and can be forecast with reasonable reliability. Therefore, a Basic Forecast (most likely for current runoff conditions) of monthly inflows to the river reaches above the six reservoirs and the river reach from Gavins Point to Sioux City was prepared for the period August 2000 to February 2001.

However, due to changed basin and reservoir conditions, and the previously described lawsuits pertaining to the use of Kansas River basin reservoirs for navigation support and the Lake Oahe pool elevation, forecast studies for the final AOP used a forecasted December 1, 2000 starting condition and the Basic Forecast was revised for the period December through February.

Forecasts of the Lower Quartile and Lower Decile using 80 percent and Upper Quartile and Upper Decile using 120 percent of the Basic Forecast are also used to give a range of monthly inflows leading up to March 1, 2001, the beginning of next year's runoff season. Inflows to the System after March 1, 2001, are dependent upon many hydrologic factors which are impossible to forecast at the time the AOP is prepared. Therefore, in lieu of utilizing forecasted inflows were based on analyses of the past water supply records extending from 1898 through 1997. Runoff conditions selected for use in the AOP were the Upper Decile with a runoff of 34.5 million acrefeet (MAF) having 1 chance in 10 of being exceeded, the Upper Quartile with a runoff of 30.6 MAF having 1 chance in 2 of being exceeded. The lower range of System inflows used for the analyses in the AOP, the Lower Quartile with a runoff of 19.5 MAF having 1 chance in 4 of occurrence of less runoff and the Lower Decile with a runoff of 15.5 MAF having 1 chance in 10 of occurrence of less runoff, completes the range of inflows into the System.

The range between the AOP forecasts for Lower Decile (15.5 MAF with a 90 percent exceedence) and the Upper Decile (34.5 MAF with a 10 percent exceedence) simulates 80 percent of the historic runoffs. There is still a 20 percent chance that a runoff condition may occur that has not been simulated; i.e., 10 percent chance a runoff event could be lower than the 15.5 MAF (Lower Decile) and a 10 percent chance a runoff event could be greater than the 34.5 MAF (Upper Decile).

The estimated natural flow  $\underline{1}/$  at Sioux City, the corresponding post-1949 water use effects, and the net flow  $\underline{2}/$  available above Sioux City are shown in *Table I*, where several water supply conditions are quantified for the periods December 2000, Calendar Year (CY) 2000, and CY 2001. The natural water supply for CY 2000 (actual January 2000 to November 2000 runoff plus Basic Forecast for December 2000) is estimated to total about 16.6 MAF.

#### TABLE I

### NATURAL AND GROSS WATER SUPPLY AT SIOUX CITY

	<u>Natural 1</u> /	Post-1949 Depletions	<u>Net 2</u> /
	C	Volumes in 1,000 Acre-Feet)	
December 2000 (Basic Forecast)			
Basic	700	+100	800
120% Basic	800	+200	1,000
80% Basic	600	+100	700
Calendar Year 2000 (January-November	Actual; Dece	ember Basic Forecast)	
Basic	16,600	-1,700	14,900
120% Basic	16,700	-1,800	14,900
80% Basic	16,500	-1,400	15,100
Calendar Year 2001 (Extended Forecast -	- Statistical A	nalysis of Past Records)	
Upper Decile	34,500	-2,400	32,100
Upper Quartile	30,600	-2,400	28,200
Median	24,600	-2,600	22,000
Lower Quartile	19,500	-2,600	16,900
Lower Decile	15,500	-2,200	13,300

1/ The word "natural" is used to designate flows adjusted to the 1949 level of basin development, except that regulation and evaporation effects of the Fort Peck Reservoir have also been eliminated during its period of operation prior to 1949. 2/ The word "net" represents the total streamflow after deduction of the post-1949 irrigation, upstream storage, and other use effects.

#### IV. ANNUAL OPERATING PLAN FOR 2000-2001

A. <u>General</u>. The anticipated operation described in this AOP is designed to meet the operational objectives documented in the current Missouri River Master Water Control Manual (Master Manual). Consideration has been given to all of the authorized project purposes including the needs of endangered species. It incorporates the lessons learned during the 6 consecutive years of drought of the late-1980's through 1992 as well as the high runoff period that followed. Runoff during the period 1993 to 1999 was greater than upper quartile level during 5 of those 7 years, including the record 49.0 MAF of runoff in 1997.

This 2000-2001 AOP, developed for all five runoff scenarios, follows the March 15 and July 1 water-in-storage (storage) checks contained in the current Master Manual used to determine navigation flow service level and navigation season length. The September 1 storage check that previously was used to determine winter multipurpose System releases was not used in the AOP studies. Rather, when forecasted System storage was below 57.1 MAF on March 1, winter releases were set at 12,000 cfs as an additional water conservation measure and to offset excess releases made for threatened and endangered species operation during the previous summer. Although a winter release rate of 12,000 cfs was used in the studies, releases will be adjusted as needed to assure adequate downstream water supply, including powerplants. An additional Lower Decile study that shortens the navigation season by 2 weeks is included. Adjusted regulations for fish spawning and endangered species nesting habitat have been adopted for the three scenarios of Median, Lower Quartile, and Lower Decile runoffs with no peaking cycle at Gavins Point Dam as was implemented to conserve water during the recent drought years. Intrasystem releases are adjusted to best serve the multiple-purpose functions of the projects with special emphasis placed on regulation for fisheries starting in early April and for endangered species beginning in early May and continuing through August.

A reanalysis of the average monthly Gavins Point releases needed to meet navigation service requirements was completed in 1999. The study used the Daily Long Range Study (DLRS) model for the period 1950 to 1996. As part of this study, the relationship between annual runoff upstream of Sioux City and the average Gavins Point release required for the navigation season was analyzed. The study concluded that generally more water was needed downstream to support navigation during years with below normal upper basin runoff than during years with higher upper basin runoff. Therefore, regulation studies since 1999 use two levels of System release requirements: one for Median, Upper Quartile, and Upper Decile runoff scenarios, and another for Lower Quartile and Lower Decile scenarios.

The updated release requirements for full service navigation used in the development of the 2000-2001 AOP are given in *Table II*. Releases required for minimum service navigation support are 6,000 cfs less than the numbers provided in *Table II*. A final report detailing the procedures used in this study is available on our web site.

In summary, the Upper Decile runoff scenario follows the Master Manual with much above normal runoff prompting release increases early in the year to evacuate floodwater from the reservoirs. Releases for Upper Decile and Upper Quartile runoff for 2001 are considerably lower than was shown in recent Annual Operating Plans since March 1 System storage based on the 120 Percent Forecast is expected to be 6.1 MAF less than the desired 57.1 MAF. The Median, Lower Quartile, and Lower Decile runoffs follow the March 15 and July 1 System storage checks contained in the Master Manual. Since System storage is less than 52 MAF on July 1, 2001 for Lower Decile runoff, an additional study shortens the navigation season by 2 weeks. The Median and above runoff forecasts also include releases that provide a steady to rising lake level in the upper three large reservoirs during the spring fish spawn period. Similar regulations have resulted in a higher fish reproduction success. Gavins Point releases will not be cycled to conserve water under any of the five studied runoff levels but may be necessary for flood control operations during the endangered species nesting period or should significant drought conditions return.

### TABLE II GAVINS POINT RELEASES NEEDED TO MEET NAVIGATION REQUIREMENTS 1950 - 1996 (Discharges in 1,000 cfs)

Runoff									
<u>Scenario</u>	<u>Apr</u>	May	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	Oct	Nov	<u>Average</u>
Median, Upper Quartil Upper Decile	e, 26.7	28.0	27.9	31.6	33.2	32.6	32.0	31.1	30.4
Lower Quartile, Lower Decile	29.8	31.3	31.2	34.3	34.0	33.5	33.1	31.2	32.3

The lowest runoff scenario presented is Lower Decile. Runoff less than Lower Decile is possible, as was experienced in 1988 (12.4 MAF). One of the operational objectives of the current Master Manual is to provide for water supply requirements in the open Missouri River reaches between the reservoirs and below the System. Recent experience has shown that these water supply requirements are greater than was anticipated during the development of the guidelines documented in the current Master Manual. Also, operation to limit impacts to threatened and endangered species has resulted in higher releases during low runoff periods. Therefore, in order to meet the operational objectives of the current Master Manual, we would need to adjust the water conservation guidelines published in the Master Manual. These water conservation guidelines apply during drought periods and present criteria for season length, service level, minimum navigation season length, and nonnavigation season minimum releases. In order to meet the operational objectives of the current Master Manual, adjustments to drought water conservation guidelines would need to occur when total System storage is at or below 52 MAF on July 1. It is important to note that there are many possible combinations of potential adjustments that would result in attainment of the current Master Manual operational objectives.

This year's Lower Decile studies show a decline of total System storage below the 52 MAF level by July 1, 2001. Should significant drought conditions persist, (i.e., 52 MAF - July 1 level or less) the Missouri River Basin Association (MRBA), the MRNRC, and other interested parties would be consulted for adjustment recommendations that would best meet the operational objectives of the current Master Manual. We would facilitate discussion by providing studies that outline the effects of the various adjustment options to the aforementioned groups. If a general agreement on reasonable adjustments cannot be attained, we will determine which adjustments best meet the current Master Manual operational objectives.

Background information available for preparation of the 2000-2001 AOP includes 13 years of operation at Fort Peck Reservoir (1940) by itself plus 47 years of System experience as Fort Randall (1953), Garrison (1955), Gavins Point (1955), Oahe (1962), and Big Bend (1964)

have been brought progressively into operation. In addition to the long period of actual regulation experience, many background operational studies for the completed System are available for guidance.

Actual System operation from January through November 2000 and the operating plans for each project for the remainder of 2000 with the Basic Forecast and for CY 2001 using the five alternate levels of estimated runoff described on page 2 are presented on *Plates 3 through 8*, inclusive. An exception is the omission of Big Bend, since storage at that project is relatively constant and average monthly releases are essentially the same as those at Oahe. These plates also show, on a condensed scale, actual operations during the period 1953 through 1999.

**Plate 9** illustrates for Fort Peck, Garrison, Oahe, and Gavins Point Dams the actual reservoir releases (Regulated Flow) as well as the Missouri River flows (Unregulated Flow) that would have resulted if the reservoirs were not in place during the period January 1999 through July 2000. *Plate 10* presents past and forecasted gross monthly, average power generation, and gross peaking capability for the System.

**B.** <u>Operation for the Balance of the 2000 Navigation Season</u>. Gavins Point releases continued at 31,500 cubic feet per second (cfs) range until the endangered and threatened species left in late August. Releases were then adjusted as needed to provide 1,500 cfs less than full service support to navigation flows as computed by the July 1 System storage check. System storage was 57.0 MAF on July 1, 2000, substantially less than the 59.0 MAF minimum storage required to provide full service flows the remainder of the navigation season. A full 8-month navigation season was provided in 2000, but unlike the past 5 years, the navigation season was not extended since there was no excess storage to evacuate from the System.</u>

The decline in System storage over the past year began with lack of significant runoff from a plains snowpack and continued with dismal runoff from the much below normal mountain snowpack (82 percent of normal) in combination with below normal rainfall. The total runoff for 2000 is expected to be below Lower Quartile, but there has been a great deal of variability in the way the runoff has occurred. January and February were 99 and 106 percent of normal, respectively. March dropped to 63 percent, and April was 59 percent of normal. The reduction during March and April was due to the lack of a significant plains snow cover, most of which melted during February and did not produce any significant runoff. The months of May, June, and July were well below average at 65, 60, and 65 percent of normal, respectively. Low runoff continued in the August through November period. The December 1 runoff forecast of 16.6 MAF is just 66 percent of normal. The closing dates for ending the 2000 navigation season were November 22 at Sioux City, November 24 at Omaha, November 25 at Nebraska City, November 27 at Kansas City, and December 1 at the mouth of the Missouri River near St. Louis.

Energy generation by the System powerplants for the period August 1 to December 1 was 3.2 billion kilowatt hours (kWh), 0.6 billion kWh below normal.

Fort Peck releases ranged from 4,500 to 9,000 cfs, for the remainder of the 2000 navigation season. Fort Peck Lake declined 4.0 feet from elevation 2232.0 feet msl to 2228.0

feet msl by the end of the navigation season, 6.9 feet lower than the 1967-1999 long term average.

<u>Garrison</u> releases ranged from 13,000 to 27,000 cfs through the remainder of the 2000 navigation season. Releases as high as 27,000 cfs were scheduled November 9-17 to prevent the lowering of Lake Oahe. The level of Lake Sakakawea declined steadily by 6.9 feet from elevation 1837.4 feet msl to 1830.5 feet msl by the end of the navigation season, 8.1 feet below the long term average.

<u>Oahe</u> releases were reduced from 34,000 cfs in August to 8,000 cfs in November to achieve the scheduled Fort Randall drawdown to elevation 1335.0 feet msl prior to the end of the navigation season. A low 8,000 cfs release was scheduled November 7-9 to meet the requirements of the TRO that prohibited the lowering of Lake Oahe below elevation 1597.7 feet msl, plus or minus 6 inches. Releases were adjusted to serve the variable power loads. Lake Oahe fell 7.1 feet from August through early November, from elevation 1604.8 to elevation 1597.7 feet msl. The lake level was maintained near 1597.7 feet msl during the remainder of November as required by the TRO and, at the close of the navigation season, was at 1597.3 feet msl, 4.7 feet lower than the long term average.

<u>Big Bend</u> releases paralleled those from Oahe. Lake Sharpe generally fluctuated between 1420.0 and 1421.0 feet msl for weekly cycling during high power load periods. Actual elevations ranged from 1418.4 feet msl to 1421.0 feet msl during the period August through November. The lake was lowered to near elevation 1418.5 feet msl September 8-13 to facilitate protection of a cultural resources site along the shores of Lake Sharpe. Reservoir fluctuations of a foot are scheduled during the course of most weeks in order to follow peaking power demands.

<u>Fort Randall</u> releases generally paralleled those from Gavins Point. Lake Francis Case lowered 4.2 feet in September, from elevation 1355.7 feet msl to elevation 1351.5 feet msl. The fall drawdown of Lake Francis Case, originally planned to reach 1337.5 feet msl at the end of November, was accelerated to lower the pool to near 1335 feet msl by October 25. This allowed the Omaha District to attempt to locate remains at St. Phillips Cemetery in the White Swan area. Lake Francis Case was further lowered to elevation 1332.6 feet msl to supply navigation flows as Oahe releases were reduced in November to comply with the TRO. The drawdown will provide sufficient capacity to store a reasonable level of power releases from Oahe and Big Bend during the coming winter season.

<u>Gavins Point</u> releases ranged from 29,000 to 34,500 cfs during the remainder of the navigation season. Lewis and Clark Lake rose about 1 foot from elevation 1205.8 to near elevation 1207.0 feet msl during the remainder of the 2000 navigation season that ended December 1. The lake level will be maintained near 1207.0 feet msl through the winter.

C. <u>Operating Plan for the Winter of 2000-2001</u>. Winter releases from the System are normally based on the amount of water in storage on September 1 in accordance with guidelines

presented in the Master Manual. A System storage level of 58.0 MAF or above on September 1 indicates a full service release rate for the following winter. A System storage of 43.0 MAF indicates minimum service releases. Full and minimum service releases call for an average winter Fort Randall release of 15,000 and 5,000 cfs, respectively. Following the criteria in the current Master Manual, the Fort Randall 2000-2001 winter release rate would be near 12,500 cfs based on the September 1, 2000 System storage of 54.3 MAF. However, due to the low System storage, Gavins Point releases were set at 12,000 cfs as a water conservation measure and to offset the increased releases required for the endangered species nesting requirements. Sustained winter release rates above this amount are not anticipated since System storage is forecast to be 6.8 MAF below the desired 57.1 MAF on March 1, 2001. However, it may be necessary at times to increase System releases to provide adequate downstream flows if ice jams or blockages form which temporarily restrict flows. These events are expected to occur infrequently and be of short duration based on past experiences.

For the winter period from the close of the 2000 navigation season on December 1, 2000 until the opening of the 2001 navigation season on April 1, 2001 operations are expected to be as follows:

<u>Fort Peck</u> releases are expected to be near 10,000 cfs before the beginning of the winter period to prevent ice-jam flooding during the winter freeze-in period on the reach of the Missouri River from the dam to the Williston, North Dakota area. Releases will then be increased only slightly to 11,000 cfs for the remainder of the winter period to meet critical winter hydropower demands. Fort Peck Lake with the Basic Forecast is expected to fall steadily by 4.0 feet to elevation 2224.0 by March 1, the beginning of next year's runoff season. The lake would then rise to near elevation 2225.1 feet msl by March 31, which would be nearly 8.0 feet below normal.

<u>Garrison</u> winter releases are lower than the draft AOP forecasts as a result of the Temporary Restraining Order at Lake Oahe. Water stored in Lake Sakakawea that normally would have been transferred to Lake Oahe during the winter was moved to Lake Oahe in November to meet the requirements of the TRO. Releases will average only 17,500 cfs from December through February to balance the upper three reservoirs by March 1. Releases are normally scheduled near 20,000 cfs in December with reductions to 18,000 cfs during the freeze-in in the Bismarck area in an attempt to remain below a 13-foot stage at the Bismarck gage. Flood stage is 16 feet. Lake Sakakawea is expected to lower from near elevation 1830.9 feet msl to elevation 1829.3 feet msl by March 1, 8.2 feet below the base of the annual flood control storage zone. The Median forecast indicates the lake will rise to elevation 1830.0 by March 31, which would be 5.8 feet below normal.

<u>Oahe</u> releases for the winter season will provide backup for the Fort Randall and Gavins Point releases plus fill the recapture space available at Fort Randall consistent with anticipated winter power loads. Monthly average releases may vary substantially with fluctuations in power loads occasioned by weather conditions but, in general, are expected to average between 11,000 and 17,000 cfs. Daily releases will vary widely to best meet power loads. Peak hourly releases as well as daily energy generation will be constrained to prevent urban flooding in the Pierre and Fort Pierre areas if severe ice problems develop downstream of Oahe Dam. This potential reduction has been coordinated with the Western Area Power Administration.

The Lake Oahe level is expected to gradually rise from elevation 1597.3 feet msl at the end of the 2000 navigation season to elevation 1599.1 by March 1, with a further rise to elevation 1601.7 feet msl by the end of March, 5.0 feet below normal.

Lake Sharpe at Big Bend will be maintained in the normal 1420.0 to 1421.0 feet msl range during the winter.

<u>Fort Randall</u> releases will average 9,000 to 10,000 cfs. Lake Francis Case is expected to rise from a low of about 1335.0 feet msl at the end of the 2000 navigation season to near elevation 1350.0, the seasonal base of flood control, by March 1. However, if the plains snowpack flood potential downstream of Oahe is quite low at that time, measures will be taken to raise Lake Francis Case to near elevation 1353.0 by March 1. It is likely that a Lake Francis Case level above elevation 1353 feet msl, to as high as 1355.2, will be reached by the end of the winter period on March 31 if runoff conditions permit. The level of Lake Francis Case above the White River delta near Chamberlain, South Dakota will likely remain at a higher elevation than the lake below the delta from late October through December, due to the damming effect of this delta area.

<u>Gavins Point</u> releases were gradually reduced beginning the last week of November to near a winter level of 12,000 cfs. It is anticipated, although not modeled, that releases may have to be increased during periods of freeze-in to maintain water levels necessary for downstream water intakes. Lewis and Clark Lake will generally be near elevation 1207 feet msl until late February when it will be lowered to elevation 1206 feet msl for controlling spring floods, primarily from the Niobrara River and Ponca Creek along the Fort Randall to Gavins Point reach.

System storage for all five runoff conditions will be substantially below the base of the annual flood control zone by March 1, 2001, the beginning of next year's runoff season.

**D.** <u>Operations During the 2001 Navigation Season</u>. The Upper Decile, Upper Quartile, Median, and Lower Quartile runoff scenarios studied for this year's AOP follow the guidelines presented in the Master Manual for navigation service flow support and season length. Two Lower Decile studies are included, one with an 8-month navigation season as called for in the Master Manual and an additional study that has a 2-week shortening since the July 1 System storage is less than 52.0 MAF. Steady System releases or repetitive daily project patterns will be held from early May, at the beginning of the endangered species nesting season, to the end of the nesting in late August. All runoff scenarios except Lower Quartile and Lower Decile would provide rising pool levels in the spring fish spawn period.</u>

All five runoff scenarios studied for this year's AOP are based on gradually increasing System releases to provide navigation season flow rates at the mouth of the Missouri near St. Louis by April 1, 2001, the normal navigation season opening date. The corresponding dates at upstream locations are: Sioux City, Iowa, March 23; Omaha, Nebraska, March 25; Nebraska

City, Nebraska, March 26; and Kansas City, Missouri, March 28. The studies illustrated on Plates 3 through 8 and summarized in Table III are based on providing greater than full service flows and a full 8-month season extended by 10 days as a reservoir flood storage evacuation measure for the Upper Decile runoff scenario. Releases for Upper Quartile runoff are 1,600 cfs below full service in the spring, increasing to near full service during the summer and fall with an 8-month navigation season. The normal runoff scenario characterized by the Median study indicates 2,300 cfs less than full service flows for a full 8-month navigation season. Lower Quartile has a 3,000 cfs spring and 4,500 cfs summer and fall reduction below full service flows with an 8-month season. Both Lower Decile studies have releases 3,100 cfs below full service in the spring and 5,900 cfs below full service in the summer and fall.

NAVIGATION SERVICE SUPPORT FOR THE 2001 SEASON											
	Runoff	2001 Syster	n Storage	Flow Leve	l Above or	Length					
	Scenario	March 15	July 1	Below Fu	Ill Service	of Season					
	(MAF)	(MAF)	(MAF)	(in	cfs)	(Months)					
				<u>Spring</u>	Summer/Fall						
U.D.	34.5	52.4	60.0	+4,300	+3,500	8 + 10 days					
U.Q.	30.6	52.2	58.8	-1,600	-100	8					
Med	24.6	51.2	55.7	-2,300	-2,300	8					
L.Q.	19.5	50.3	52.6	-3,000	-4,500	8					
L.D.	15.5	50.2	50.7	-3,100	-5,900	8 or 7.5					

# **TABLE III**

Navigation flow support for the 2001 season will be determined by actual reservoir System storage on March 15 and July 1 following the Master Manual guidelines. Gavins Point releases may be quite variable during the 2001 navigation season but, for Median, Lower Quartile, and Lower Decile, are expected to range from 24,400 to 30,900 cfs. For Upper Quartile, releases range from 25,100 to 33,100 cfs; for the Upper Decile, Gavins Point releases would range from a minimum 31,000 cfs to a maximum 35,000 cfs. Release reductions necessary to minimize downstream flooding are not reflected in these monthly averages but will be instituted as conditions warrant.

Planned storages and releases for the System and individual reservoirs within the System are shown on *Plates 3 through 8*. Ample regulatory storage space exists in the System to control flood inflows under all conditions studied. Table III summarizes the navigation service support projected for the 2001 navigation season.

Two reservoir operations that have not been a part of previous Annual Operating Plans are included for 2001 in the Upper Decile, Upper Quartile, and Median forecasts. An endangered species flow modification "mini-test" will be conducted at Fort Peck beginning in early June to monitor effects of higher spring releases and warmer water released from the spillway. It will also allow for an evaluation of the integrity of the spillway structure given the potential for increased frequency of use. Streambank erosion and fishing impacts will also be monitored.

During the Fort Peck "mini-test," which will last about 4 weeks, flows will vary from 8,000 to 15,000 cfs as various combinations of spillway and powerplant releases are monitored. The maximum spillway release of 11,000 cfs will combine with a minimum powerplant release of 4,000 cfs for 6 days. This operation is reflected in the June releases shown for Fort Peck for Upper Decile, Upper Quartile, and Median runoff, but will be timed to avoid lowering the lake during the forage fish spawn. The "mini-test" will not be conducted if sufficient flows will not pass over the spillway crest (elevation 2225 feet msl). A minimum lake elevation of about 2229 feet msl is needed during the test to avoid unstable flows over the spillway. This elevation cannot be achieved in 2001 for Lower Quartile and Lower Decile flows. A more extensive test with a combined 20,000 to 30,000 cfs release from Fort Peck is scheduled to be conducted beginning in early June 2002 to determine if warm water releases will benefit the native river fishery. Peak outflows during the 2002 test would be maintained for 2 weeks within the 4-week test period. Any permanent change to the Fort Peck operation to enhance flows for endangered species will be considered as part of the Master Manual Review and Update.

The other reservoir operation involves unbalancing the three large upper reservoirs to benefit reservoir fishery and the endangered interior least tern and threatened piping plover. Table IV indicates the reservoirs will be balanced on March 1, 2001, but 1 year later, on March 1, 2002, Fort Peck will be high, Garrison low, and Oahe allowed to float (normal operation) should Median or greater runoff occur. This unbalancing is computed based on the percent of the carryover multiple purpose pool that remains in Fort Peck Lake, Lake Sakakawea, and Lake Oahe. In terms of elevations, Fort Peck would be 4.0 feet high, Garrison would be 3.0 feet low, and Oahe would be balanced on March 1, 2002, for Upper Decile and Upper Quartile. Since Median runoff does not refill the reservoirs in 2001, Fort Peck would be only 1.5 feet high and Garrison would be 1.0 foot low. This would permit the Fort Peck "spring rise" test of 20,000 to 30,000 cfs in the spring of 2002, as described in the previous paragraph. The unbalancing would alternate at each project; high one year, float (normal operation) the next year, and low the third year as shown on *Table IV*. Table V shows the lake elevations proposed by the MRNRC at which the unbalancing would be terminated. Table V indicates that no reservoir unbalancing should occur for any of the five runoff conditions in 2001 since Fort Peck Lake is below elevation 2227 feet msl on March 1, 2001. However, it is important to implement unbalancing to benefit endangered species should Median or greater runoff occur. No reservoir unbalancing is shown for the Lower Quartile and Lower Decile studies.

# TABLE IVRESERVOIR UNBALANCING SCHEDULE

	Fort	Peck	Garı	rison	Oahe		
Year	March 1	Rest of Year	March 1	Rest of Year	March 1	Rest of year	
2001	Balance	High	Balance	Low	Balance	Float	
2002	High	Float	Low	Hold peak	Raise & hold during spawn	Float	
2003	Raise & hold during spawn	Float	High	Float	Low	Hold peak	
2004	Low	Hold peak	Raise & hold during spawn	Float	High	Float	

# Notes:

**Float year:** Normal operation, then unbalance 1 foot during low pool years or 3 feet when System storage is near 57.1 MAF on March 1.

Low year: Begin low, then hold peak the remainder of the year.

High year: Begin high, raise and hold pool during spawn, then float.

# TABLE V MRNRC RECOMMENDED RESERVOIR ELEVATION GUIDELINES FOR UNBALANCING

	Fort Peck	Garrison	Oahe
Implement unbalancing if			
March 1 reservoir	2234	1837.5	1607.5
elevation is above this	feet msl	feet msl	feet msl
level.			
Implement unbalancing if			
March 1 reservoir			
elevation is in this range	2227-2234	1827-1837.5	1600-1607.5
and the pool is expected to	feet msl	feet msl	feet msl
raise more than 3 feet after			
March 1.			
	Avoid lake level decline	Schedule after spawn	Schedule after spawn
Scheduling Criteria	during spawn period	period of April 20 –	period of April 8 – May
	which ranges from April	May 20.	15.
	15 – May 30.		

## Summary of Reservoir Regulation Activities for Endangered Species and Fish Propagation Enhancement

As discussed in the section above, the 2000-2001 AOP includes provisions for unbalancing the Fort Peck, Garrison, and Oahe reservoirs for Median and greater runoff scenarios. The unbalancing is intended to benefit the reservoir fisheries in the long term by ensuring a periodic rise in reservoir elevation sufficient to provide good spawning conditions and inundating vegetation, thereby increasing young-of-the-year fish survival. Unbalancing is also intended to benefit interior least tern and piping plover production in the long term by maintaining and exposing sandbar and shoreline habitat.

<u>Fort Peck</u> will have a 2,500 cfs reduction in flows during the tern and plover nesting season for Upper Decile runoff and a 4,000 cfs reduction for Upper Quartile and Median runoff conditions. The resulting stage difference will provide excellent nesting habitat. For Lower Quartile and Lower Decile runoff scenarios, no difference in flows is anticipated during the nesting season, but the releases are low enough that good habitat should be available.

If flood flows enter the Missouri River below the project during the nesting season, hourly releases will be lowered to no less than 3,000 cfs in order to keep traditional riverine fish rearing areas continuously inundated while helping to lower river stages at downstream nesting sites. April releases should be adequate for trout spawning below the project. A rising pool in the April-to-May sport fish spawning season will be dependent upon the ever changing daily inflow pattern to the reservoir but appears possible with all AOP plans.

<u>Garrison</u> will have a reduction in flows during the tern and plover nesting season under all runoff scenarios. For Median and above runoff, the reductions will be approximately 2,000 cfs. For Lower Quartile and Lower Decile, the reductions will be in the 500-1,000 cfs range. Hourly peaking will be limited to no more than 30,000 cfs for 6 hours if the daily average release is lower than 28,000 cfs. This will limit peak stages below the project for nesting birds.

Except for the Upper Quartile and Upper Decile runoff conditions, Lake Sakakawea elevations will not reach levels considered necessary for optimum fish spawning during the month of May. In addition to the runoff conditions, the actual timing of the rise in lake elevation will be dependent upon the pattern of inflow at that time.

<u>Oahe</u> releases in the spring and summer will back up those from Gavins Point. If flows into the System are Median or greater, Oahe's elevation in the spring will likely be steady or rising. Under all AOP plans, the Oahe pool will fall during the summer.

<u>Fort Randall</u> will be operated to provide for a pool elevation near 1355 during the fish spawn period and the lake will not be drawn down below elevation 1337.5 feet msl in the fall for water intakes. Hourly releases from Fort Randall, during the 2001 nesting season will be limited to 37,000 cfs. Daily average flows may be increased every third day to preserve the capability of increasing releases later in the summer if conditions turn dry.

<u>Gavins Point</u> releases will be set in May when terns and plovers begin to initiate nesting. The release rate will be based on an assessment of flows needed to support navigation in July and August. The resulting steady release prevents inundation of nests and chicks due to navigation support flows. Flows during the nesting season will be near or below what they were this past nesting season for all runoff conditions. The excellent habitat conditions should result in very good tern and plover production. Cycling releases every third day is not planned during the 2001 nesting season except during downstream flood control operations.

The Gavins Point pool will be operated near 1206 feet msl in the spring and early summer with variations day to day due to rainfall runoff. Greater fluctuations occur in the river, increasing the risk of nest inundation in the upper end of the Gavins Point pool. Several factors contribute to the increased risk of nest inundation in the upper end of the Gavins Point pool. First, because there are greater numbers of endangered species nesting below the Gavins Point project which must be preserved, Gavins Point releases are restricted during the nesting season. Second, unexpected rainfall runoff between Fort Randall and Gavins Point can result in sudden pool rises because the Gavins Point project has a smaller storage capacity than the other System reservoirs. Third, the operation of Gavins Point for downstream flood control may necessitate sudden release reductions to prevent downstream bird losses. And finally, high releases required in wet years make nest inundation more likely. When combined, all these factors make it difficult and sometimes impossible to prevent inundation of nests in the upper end of Lewis and Clark Lake. The pool will be increased to elevation 1207.0 feet msl following the nesting season.

#### Summary of Habitat Activities

The Biological Opinion on the ongoing operations of the System was completed on November 30, 2000. A draft implementation plan, which includes actions to meet endangered species needs, is located on Missouri River Region web page.

#### V. SUMMARY OF RESULTS EXPECTED IN 2000-2001

With System operations in accordance with the 2000-2001 AOP outlined in the preceding pages, the following results can be expected.

**A.** <u>Flood Control</u>. All runoff scenarios studied will begin next year's runoff season on March 1, 2001 substantially below the desired 57.1 MAF base of annual flood control and multiple use zone. Therefore, the entire System flood control zone plus an additional 6.1 to 7.4 MAF of the carryover multiple use zone will be available to store runoff. The System will be available to significantly reduce peak discharges for all floods that may originate above the System.

Remaining storage in the carryover multiple use zone will be adequate to provide support for all of the other multiple purposes of the System, although recreation access may be difficult at some locations for the lower runoff scenarios. **B.** <u>Water Supply and Water Quality Control</u>. Although below normal winter releases are being provided for all five runoff scenarios, all water supply and water quality requirements on the Missouri River both below Gavins Point Dam and between main stem reservoirs should be met for all flow conditions studied. It is possible with the low winter releases that ice formation or ice jams may temporarily reduce river stages to levels below which some intakes can draw water. Therefore, during severe cold spells it may be necessary to increase Gavins Point releases as was required during the recent drought years to help alleviate water supply problems.

**C.** <u>Irrigation</u>. Scheduled releases from the System reservoirs will be ample to meet the volumes of flow required for irrigation diversions from the Missouri River. Some access problems may be experienced, however, if drought conditions persist. Tributary irrigation water usage is fully accounted for in the estimates of water supply.

**D.** <u>Navigation</u>. Service to navigation in 2001 would be scheduled above full service flow support for the Upper Decile runoff scenario. Navigation support for Upper Quartile runoff will be 1,600 cfs under full service in the spring and near full service the remainder of the season. The three studies of Median, Lower Quartile, and Lower Decile have reductions below full service as shown in *Table III*. Although these studies provide a comparison of typical flow support under varying runoff conditions that cover 80 percent of the historic runoff conditions, the actual rate of flow support for the 2001 navigation season will be based on actual System storage on March 15 and July 1, 2001.

In addition to greater than full service flow, the Upper Decile condition has an 8-month navigation season with a 10-day extension. Upper Quartile, Median and Lower Quartile runoffs have an 8-month navigation season. Should Lower Decile runoff occur with System storage forecast to be less than 52 MAF on July 1, 2001, meetings will be conducted with navigators, MRBA, the MRNRC, and other interested parties to determine if the navigation season will be shortened. The anticipated service level and season length for all runoff conditions studied are shown in *Table III*.

**E.** <u>Power</u>. *Tables VI* and *VII* give the estimated monthly System load requirements and hydropower supply of the Eastern Division, Pick-Sloan Missouri Basin Program (P-S MBP), from December 2000 through December 2001. Estimates of monthly peak demands and energy include customer requirements for firm, short-term firm, summer firm, peaking, and various other types of power sales, System losses, and the effects of diversity. Also included in the estimated requirements are deliveries of power to the Western Division, P-S MBP, to help meet its firm power commitments.

**F.** <u>Recreation, Fish and Wildlife</u>. The basic operations of the System will continue to provide recreation and fish and wildlife opportunities in the project areas and along the Missouri River as well as other benefits of a controlled river. Special operational adjustments incorporating specific objectives for these purposes will be accomplished whenever possible. Conditions should be favorable for the many visitors who enjoy the camping, boating, fishing, hunting, swimming, picnicking, and other recreational activities associated with the System reservoirs and for increasing usage of the regulated reaches of the Missouri River downstream of the reservoirs.

#### TABLE VI PEAKING CAPABILITY AND SALES (1,000 kW at plant)

	Estimated															
	Committed												Expe	ected To	otal	
	Sales*	Ex	pected	C of E C	apability	/	Expe	ected B	ureau C	apability	/**		Syste	m Capa	bility	
2000	_		<u>120%</u>	<u>Basic</u>	<u>80%</u>			<u>120%</u>	<u>Basic</u>	<u>80%</u>			<u>120%</u>	<u>Basic</u>	<u>80%</u>	
Aug Sep Oct Nov Dec	1819		2127	2125	2122			196	195	190			2323	2320	2312	
2001	_		2127	2120				100	100	100			2020	2020	2012	
Jan	2228		2151	2145	2141			191	194	187			2342	2339	2328	
Feb	1925		2159	2150	2144			187	194	185			2346	2344	2329	
		<u>U.D.</u>	<u>U.Q.</u>	Med.	<u>L.Q.</u>	<u>L.D.</u> ***	<u>U.D.</u>	<u>U.Q.</u>	Med.	<u>L.Q.</u>	<u>L.D.</u>	<u>U.D.</u>	<u>U.Q.</u>	Med	<u>L.Q.</u>	<u>L.D.</u>
Mar	1725	2228	2223	2206	2188	2185	188	188	194	185	185	2416	2411	2400	2373	2370
Apr	1494	2243	2239	2212	2186	2180	190	190	192	187	187	2433	2429	2404	2373	2367
May	1384	2260	2252	2219	2185	2174	189	189	195	193	193	2449	2441	2414	2378	2367
Jun	1706	2286	2280	2244	2204	2181	204	204	203	198	198	2490	2484	2447	2402	2379
Jul	2283	2305	2288	2245	2200	2171	204	204	204	198	197	2509	2492	2449	2398	2368
Aug	2124	2299	2279	2230	2183	2152	202	203	202	197	196	2501	2482	2432	2380	2348
Sep	1525	2293	2270	2219	2168	2136	203	202	202	198	196	2496	2472	2421	2366	2332
Oct	1452	2276	2251	2197	2144	2087	202	202	202	199	197	2478	2453	2399	2343	2284
Nov	1763	2235	2215	2160	2106	2082	200	201	201	198	196	2435	2416	2361	2304	2278
Dec	1943	2211	2199	2147	2090	2060	195	196	198	196	193	2406	2395	2345	2286	2253

\* Estimated sales, including system reserves. Power in addition to hydro production needed for these load requirements wil be obtained from other power systems by interchange or purchase. \*\* Total output of Canyon Ferry and 1/2 of the output of Yellowtail powerplant.

\*\*\* Lower decile values based on navigation season shortened at 40 MAF on July 1.

#### TABLE VII ENERGY GENERATION AND SALES (Million kWh at plant)

l (	Estimated												Exp	ected T	otal	
	Sales*	Ext	pected (	C of E G	eneratio	n	Expe	cted Bu	ireau G	eneratio	n **		Svste	m Gene	ration	
2000			<u>120%</u>	Basic	80%	<u> </u>		<u>120%</u>	Basic	<u>80%</u>	<u> </u>		<u>120%</u>	Basic	<u>80%</u>	
Aug Sep Oct Nov Dec	906		555	556	552			76	53	45			631	609	597	
2001 Jan Feb	- 903 847		559 442	556 442	552 439			74 65	53 47	45 40			633 507	609 489	597 479	
		<u>U.D.</u>	<u>U.Q.</u>	Med.	<u>L.Q.</u>	<u>L.D.</u> ***	<u>U.D.</u>	<u>U.Q.</u>	Med.	<u>L.Q.</u>	<u>L.D.</u>	<u>U.D.</u>	<u>U.Q.</u>	Med	<u>L.Q.</u>	<u>L.D.</u>
Mar Apr Jun Jul Aug Sep Oct	791 737 682 738 812 831 714 716 778	620 792 942 1029 1046 1075 947 810 798	589 680 852 950 1000 1011 833 702 647	552 667 816 897 941 934 789 649 602	582 737 840 828 907 897 754 628 571	588 706 814 785 860 854 716 586 532	73 70 104 133 151 100 93 93 90	73 70 104 133 130 92 88 88 88	67 60 85 96 88 78 75 75 78 79	44 36 41 43 51 51 49 56 58	44 36 41 43 50 50 48 55 52	693 862 1046 1162 1197 1175 1040 903 888	662 750 956 1083 1130 1103 921 790 736	619 727 901 993 1029 1012 864 727 681	626 773 881 871 958 948 803 684 629	632 742 855 828 910 904 764 641 584
Dec	<u>911</u>	798 <u>854</u>	647 <u>684</u>	602 <u>592</u>	571 <u>582</u>	532 <u>557</u>	90 <u>91</u>	89 <u>91</u>	79 <u>56</u>	58 <u>59</u>	52 53	888 <u>945</u>	736 <u>775</u>	<u>648</u>	629 641	584 <u>610</u>
СҮ ТОТ	9460	9914	8949	8437	8317	7989	1137	1097	862	573	557	11051	10046	9299	8890	8546

\* Estimated sales including system reserves and losses. Power in addition to hydro production needed for these load requirements will be obtained from other systems by interchange or purchase.

\*\* Total output Canyon Ferry and 1/2 output of Yellowtail powerplant.

\*\*\* Lower decile values based on navigation season shortened at 40 MAF on July 1.

Boat ramps that were lowered and low water ramps that were constructed during the drought of the late 1980's to early 1990's should be adequate to provide lake access next year even under the Lower Decile runoff scenario. However, boat ramps in a few areas where the ramps could not be extended may become unusable. This will affect the normal use patterns as visitors will have to seek out areas with usable boat ramps.

The effects of the planned System operation during 2000-2001 on fish and wildlife are included in the section entitled, "Summary of Reservoir Regulation Activities for Endangered Species and Fish Propagation Enhancement."

**G.** <u>System Storage</u>. If presently anticipated runoff estimates based upon normal precipitation materialize, System storage will total about 49.9 MAF by the close of CY 2000. This year-end storage would be 7.6 MAF less than the 57.5 MAF experienced on December 31, 1999, and 5.8 MAF less than the 1967 to 1999 average. Since the System first filled to normal operating levels in 1967, the lowest end-of-December storage was 40.9 MAF in 1990. The previous lowest storage prior to the recent 6 consecutive years of drought was 50.9 MAF in 1981. The end-of-year storages have ranged from a maximum of 60.9 MAF, which occurred in 1975, to the 1990 minimum of 40.9 MAF. Under the five runoff conditions of inflow analyzed for this AOP, the total System storage at the end of next year on December 31, 2001, would be approximately as shown on *Table VIII*.

		Above	Unfilled	Total
Water Supply	Total	Minimum	Carryover	Change
Condition	(12/31/01)	Pools 1/	Storage 2/	CY 2001
		(Volumes in	1,000 Acre-Feet)	
Upper Decile	57,600	39,500	0	7,400
Upper Quartile	56,800	38,700	300	6,600
Median	52,100	34,000	5,000	2,200
Lower Quartile	47,300	29,200	9,800	- 2,400
Lower Decile <u>3</u> /	44,800	26,700	12,300	-4,900
Lower Decile 4/	45,300	27,200	11,800	-4,400

# TABLE VIIIANTICIPATED DECEMBER 31, 2001 STORAGE IN MAIN STEM SYSTEM

- 1/ Net usable storage above 18.1 million-acre-foot System minimum pool level established for power, recreation, irrigation diversions, and other purposes.
- 2/ System base of flood control zone containing 57.1 million acre-feet.
- $\underline{3}$ / No shortening.
- $\underline{4}$  With 2-week shortening

**H.** <u>Summary of Water Use by Functions</u>. Anticipated water use in CY 2000, under the plan of operation with the Basic Forecast of water supply, is shown in *Table IX*. Actual water use data for CY 1999 are included for information and comparison.

Under the planned operations, estimated water use in CY 2001, which will be subject to reappraisal next year, also is shown in *Table IX* for the various levels of water supply.

#### VI. TENTATIVE PROJECTION OF OPERATIONS THROUGH MARCH 2007

The 5-year extension to the Annual Operating Plan (March 2002 to March 2007) has been prepared to serve as a guide for Western Area Power Administration's power marketing activities. As discussed in Section IV, Chapter A, adjustments to the drought water conservation guidelines are necessary to continue to meet the operational objectives of the current Master Manual during drought periods. This is due to increased release requirements for water supply and endangered species during low runoff periods. The specific details of these adjustments are not certain, absent the completion of review of possible options by the MRBA, the MRNRC, and any other interested parties. However, for planning purposes, we have included projections that utilize two different sets of drought water conservation guidelines in the 5-year extension studies.

The first set of projections presented uses drought water conservation guidelines that call for a 2-week shortening of the navigation season length if System storage falls to 52 MAF by July 1 of any year, and progressive shortening up to 4 weeks at 44 MAF on any July 1. These studies utilize the service level guidelines published in the current Master Manual which call for full service flows if System storage is 54.5 MAF or more on March 15, or 59 MAF or more on July 1 of any year. They also call for minimum service flows if System storage falls to 46 MAF by March 15, or 50.5 MAF by July 1 of any year.

The second set of results presented uses drought water conservation guidelines identical to those published in the current Master Manual. These guidelines call for a 1-week shortening of the navigation season if System storage falls to 40 MAF by any July 1, and would result in a progressive shortening up to 10 weeks at 25 MAF or less on any July 1. This set of guidelines calls for full service flows if System storage is 54.5 MAF or more on March 15, or 59 MAF or more on July 1 of any year. It also calls for minimum service flows if System storage falls to 46 MAF by March 15, or 50.5 MAF by July 1 of any year.

Only one set of Median results is presented since System storage would not fall below the drought water conservation trigger points under either set of guidelines during the study period. For all scenarios, from mid-May through July, Gavins Point releases are set to the anticipated August release required to meet downstream flow targets, to minimize inundation of interior least tern and piping plover nests.

#### TABLE IX MISSOURI RIVER MAIN STEM WATER USE FOR CALENDAR YEARS 1999, 2000, AND 2001 ABOVE SIOUX CITY, IOWA in Million Acre-Feet (MAF)

				Forecast for					
		CY 1999	CY 2000			Calendar Year 2001			
		Actual	Basic	Upper	Upper		Lower	Lower	Lower
			Forecast	Decile	Quartile	Median	Quartile	Decile(7)	Decile(8)
Upstream Depletions Irrigation, Tributary Reservoir	(1)								
Evaporation & Other Uses		1.8	1.9						
Tributary Reservoir Storage Change	e	- <u>0.1</u>	- 0.4						
Total Upstream Depletions		1.7	1.5	2.4	2.4	2.5	2.5	2.1	2.0
Main Stem Reservoir Evaporation	(2)	2.2	1.9	1.2	1.3	1.7	1.9	1.8	1.8
Sioux City Flows									
Navigation Season									
Unregulated Flood Inflows Between	een								
Gavins Point & Sioux City	(3)	0.0	0.0						
Navigation Service Requirement	15.0	16.0	17.6	16.5	14.9	14.3	13.6	13.0	
Supplementary Releases									
Endangered Species	(4)	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Flood Evacuation	(5)	6.4	0.0	1.9	0.3	0.0	0.0	0.0	0.0
Nonnavigation Season	(-)								
Flows		4.2	3.5	3.5	3.6	3.3	3.2	3.0	3.1
Flood Evacuation Releases	(6)	2.2	0.5	0.5	0.0	0.0	0.0	0.0	0.0
Main Stem System Storage Change		- <u>0.5</u>	- 7.6	7.4	6.5	2.2	- 2.4	-5.0	-4.4
Total		31.2	16.6	34.5	30.6	24.6	19.5	15.5	15.5
Project Releases									
Fort Peck		6.0	5.7	6.3	5.8	5.8	5.6	5.5	5.4
Garrison		17.7	14.9	17.4	15.7	14.2	13.7	13.0	12.7
Oahe		19.9	18.9	17.3	15.6	15.2	15.6	15.2	14.7
Big Bend		20.2	17.9	17.3	15.5	15.1	15.5	15.1	14.6
Fort Randall		21.6	17.8	18.6	16.6	15.8	15.8	15.2	14.8
Gavins Point		24.8	19.8	20.6	18.3	17.1	16.9	16.3	15.8

(1) Tributary uses, above the 1949 level of development including agricultural depletions and tributary storage effects.

(2) Net Evaporation is shown for 2001.

(3) Incremental inflows to reach which exceed those usable in support of navigation at the target level, even if Gavins Point releases were held to as low as 6,000 cfs.

(4) Increased releases required to maintain navigation release flexibility during the endangered species nesting season.

(5) Includes flood control releases for flood control storage evacuation and releases used to extend the navigation season beyond the normal December 1 closing date at the mouth of the Missouri River.

(6) Releases for flood control storage evacuation in excess of a 15,000 cfs Fort Randall release.

(7) Navigation season shortened at 40 MAF on July 1.

(8) Navigation season shortened at 52 MAF on July 1.

**A.** <u>Median Runoff</u>. System storage would begin in March 2002 at 52.5 MAF and would rise to 57.1 MAF by March 2007. The September 1 storage check provided for in the current Master Manual, which sets the Fort Randall winter release, is not followed, resulting in annual increases in System storage of up to 1 MAF. The additional conservation measure of providing

minimum winter releases unless the System storage is forecast to return to normal is utilized. Therefore, water conservation during the winter period is followed. Winter releases are 12,000 cfs except 2006-2007 when System storage has refilled. Fort Peck Lake, Lake Sakakawea, and Lake Oahe were unbalanced each March 1 as shown on *Table X*. This follows the pattern of "high," "float," "low" described in *Table IV*. The amount of unbalancing was increased each year as System storage refilled to 57.1 MAF on March 1, 2007. Fort Peck releases were set at 18,800 cfs in June 2002, reflecting a 25,000 cfs "spring rise" for 2 weeks, most of which would be discharged through the spillway. This release is also shown 3 years later in June 2005. An 8-month navigation season and full service flows are provided through 2006.

Year	Fort Peck	Garrison	Oahe	
2003	0.0 feet	+ 1 0 feet	<b>-</b> 1 0 feet	
2003	- 2.2	0.0	+ 1.5	
2005	+ 1.8	- 2.0	+.7	
2006	0.0	+ 3.0	- 3.1	
2007	- 4.7	0.0	+3.0	

TABLE XMARCH 1 RESERVOIR UNBALANCING, AOP EXTENSIONS

**B.** Lower Quartile Runoff – Navigation Season Shortened at 52 MAF on July 1. System storage begins the period at 47.2 MAF and rises to 49.1 MAF by March 2007 due primarily to reduced winter releases. A 12,000 cfs winter release is shown for the entire study period. Navigation service levels are reduced from 3,600 cfs to 5,500 cfs below full service. Navigation season length is 7.5 months in 2002 and 2003, and 8 months from 2004 through 2006 as System storage recovers. Since the upper three reservoirs do not refill under Lower Quartile and Lower Decile runoff, their percent of remaining carryover multiple use storage is balanced each March 1.

C. <u>Lower Quartile Runoff – Navigation Season Shortened at 40 MAF on July 1.</u> System storage rises slightly, from 47.2 MAF in March 2002 to 48.8 MAF in March 2007, and navigation service levels are reduced from 3,800 cfs to 5,500 cfs with no season shortening. A 12,000 cfs winter release is shown for the entire study period.

**D.** <u>Lower Decile Runoff - Navigation Season Shortened at 52 MAF on July 1</u>. System storage begins the period at 45.0 MAF and falls to 37.6 MAF by March 2007. The navigation season is shortened 3 weeks in 2002 and 4 weeks from 2003 through 2006. Service level is at minimum service throughout the study period (2002-2006). A 12,000 cfs winter release is shown for the entire study period.

**E.** <u>Lower Decile Runoff - Navigation Season Shortened at 40 MAF on July 1</u>. System storage begins the period at 44.5 MAF and falls to 33.8 MAF by March 2007. An 8-month navigation season is provided through 2004, with a 2-week shortening to 7.5 months in 2005 and 2006. Service level is minimum service 2002 through 2006. A 12,000 cfs winter release is shown for the entire study period.

**Plate 11** presents System storage, Gavins Point regulated flow, and System peaking capability for Median, Lower Quartile, and Lower Decile for both sets of guidelines, for the period 2002 through March 2007. Peak power, or peaking capability, is the amount of power available when all powerplants are operating at maximum.

**Plate 12** presents reservoir elevations for Fort Peck, Garrison, Oahe, and Fort Randall for Median, Lower Quartile, and Lower Decile for both sets of guidelines, for the period 2002 through March 2007.

A Summary of Engineering Data for the Main Stem Reservoir System is shown on Plate 2.



	Summary of Engineering Data Missouri River Main Stem Reservoirs							
Item No.	Subject	Fort Peck Lake	Garrison Dam - Lake Sakakawea	Oahe Dam - Lake Oahe				
1	Location of Dam	Near Glasgow, Montana	Near Garrison, ND	Near Pierre, SD				
2	River Mile - 1960 Mileage	Mile 1771.5	Mile 1389.9	Mile 1072.3				
3	Total & incremental drainage	57,500	181,400 (2) 123,900	243,490 (1) 62,090				
4	Approximate length of full reservoir (in valley miles)	134, ending near Zortman, MT	178, ending near Trenton, ND	231, ending near Bismarck, ND				
5	Shoreline in miles (3)	1520 (elevation 2234)	1340 (elevation 1837.5)	2250 (elevation 1607.5)				
6	Average total & incremental	10,200	25,600 15,400	28,900 3,300				
_	inflow in cfs	107 000 (1 1070)	2 40 000 (4 11 1050)	440.000 (4. 11.1050)				
/	Max. discharge of record	137,000 (June 1953)	348,000 (April 1952)	440,000 (April 1952)				
8	Construction started - calendar yr.	1933	1946	1948				
9	In operation (4) calendar yr.	1940	1955	1962				
	Dam and Embankment							
10	Top of dam, elevation in feet msl	2280.5 21.026 (avaluding anilly av)	1875 11.200 (including anilluser)	1660 0.200 (avaluding grillway)				
11	Damming height in feet (5)	21,026 (excluding spillway)	11,500 (including spillway)	200 (excluding spillway)				
12	Maximum height in feet (5)	250.5	210	245				
14	Max. base width, total & w/o	3500, 2700	3400, 2050	3500, 1500				
	berms in feet							
15	Abutment formations ( under dam & embankment)	Bearpaw shale and glacial fill	Fort Union clay shale	Pierre shale				
16	Type of fill	Hydraulic & rolled earth fill	Rolled earth filled	Rolled earth fill & shale berms				
19	Fill quantity, cubic yards	1 200 000	00,000,000	55,000,000 & 37,000,000 1.045,000				
18	Date of closure	24 June 1937	15 April 1953	3 August 1958				
	Spillway Data							
20	Location	Right bank - remote	Left bank - adjacent	Right bank - remote				
21	Crest elevation in feet msl	2225	1825	1596.5				
22	Width (including piers) in feet	820 gated	1336 gated	456 gated				
23	No., size and type of gates	16 - 40' x 25' vertical lift gates	28 - 40' x 29' Tainter	$8 - 50^{\circ} \times 23.5^{\circ}$ 1 ainter 304.000 et elev 1644.4				
24	Discharge capacity at maximum	230.000 at cicv 2255.5	660.000	80.000				
	operating pool in cfs							
	Reservoir Data (6)							
26	Max. operating pool elev. & area	2250 msl 246,000 acres	1854 msl 380,000 acres	1620 msl 374,000 acres				
27	Max. normal op. pool elev. & area	2246 msl 240,000 acres	1850 msi 364,000 acres	161 / msi 360,000 acres				
28	Min operating pool elev & area	2160 msl 90 000 acres	1775 msl 128 000 acres	1540 msl 117 000 acres				
	Storage allocation & capacity							
30	Exclusive flood control	2250-2246 975,000 a.f.	1854-1850 1,489,000 a.f.	1620-1617 1,102,000 a.f.				
31	Flood control & multiple use	2246-2234 2,717,000 a.f.	1850-1837.5 4,222,000 a.f.	1617-1607.5 3,201,000 a.f.				
32	Carryover multiple use	2234-2160 10,785,000 a.f.	1837.5-1775 13,130,000 a.f.	160/.5-1540 13,461,000 a.t.				
34	Gross	2250-2030 4,211,000 a.f.	1854-1673 4,980,000 a.f.	1620-1415 23 137 000 a f				
35	Reservoir filling initiated	November 1937	December 1953	August 1958				
36	Initially reached min. operating pool	27 May 1942	7 August 1955	3 April 1962				
37	Estimated annual sediment inflow	18,100 a.f. 1030 yrs.	25,900 a.f. 920 yrs.	19,800 a.f. 1170 yrs.				
20	Outlet Works Data	Disht hault	Diaht Dauls	Diakt Dauly				
30	Number and size of conduits	2 - 24' 8" diameter (nos 3 & 4)	1 - 26' dia and $2 - 22'$ dia	6 - 19 75' dia unstream 18 25'				
				dia. downstream				
40	Length of conduits in feet (8)	No. 3 - 6,615, No. 4 - 7,240	1529	3496 to 3659				
41	No., size, and type of service gates	1 - 28' dia. cylindrical gate	1 - 18' x 24.5' Tainter gate per	1 - 13' x 22' per conduit, vertical				
		6 ports, 7.6 x 8.5 high (net opening) in each control shaft	conduit for fine regulation	11ft, 4 cable suspension and 2 hydraulic suspension (fine				
		opening, in each control shart		regulation)				
42	Entrance invert elevation (msl)	2095	1672	1425				
43	Avg. discharge capacity per conduit	Elev. 2250	Elev. 1854	Elev. 1620				
44	& total Present tailwater elevation (# msl)	22,500 cfs - 45,000 cfs	30,400 cfs - 98,000 cfs	18,500 cfs - 111,000 cfs				
44	Power Facilities and Data	2032-2030 5,000 - 55,000 CIS	10/0-1080 15,000-00,000 cls	1423-1428 20,000-55,000 CIS				
45	Avg. gross head available in feet (14)	194	161	174				
46	Number and size of conduits	No. 1-24'8" dia., No. 2-22'4" dia.	5 - 29' dia., 25' penstocks	7 - 24' dia., imbedded penstocks				
47	Length of conduits in feet (8)	No. 1 - 5,653, No. 2 - 6,355	1829	From 3,280 to 4,005				
48	Surge tanks	PH#1: 3-40' dia., PH#2: 2-65' dia.	65' dia 2 per penstock	70' dia., 2 per penstock				
49	ino., type and speed of turbines	5 Francis, r п#1-2: 128.5 rpm, 1-164 rpm PH#2-20 128.6 rpm	5 Francis, 90 ipm	/ Francis, 100 ipm				
50	Discharge cap. at rated head in cfs	PH#1, units 1&3 170', 2-140'	150' 41,000 cfs	185' 54,000 cfs				
		8,800 cfs, PH#2-4&5 170'-7,200 cfs	,					
51	Generator nameplate rating in kW	1&3: 43,500; 2: 18,250; 4&5: 40,000	3 - 109,250, 2 - 95,000	112,290				
52	Plant capacity in kW	185,250	517,750	786,030				
53	Dependable capacity in kW (9) Avg appual aparty million $kW/k$ (12)	181,000	388,000	534,000 2,008				
54	Initial generation, first and last unit	July 1943 - June 1961	January 1956 - October 1960	April 1962 - June 1963				
56	Estimated cost September 1996			F				
	completed project (13)	\$158,428,000	\$158,428,000 \$299,938,000 \$346,521,					

Summary of Engineering Data Missouri River Main Stem Reservoirs							
Big Bend Dam - Lake Sharpe	Fort Randall Dam - Lake Francis Case	Gavins Point Dam - Lewis & Clark Lake	Total	Item No.	Remarks		
21 miles upstream Chamberlain, SD	Near Lake Andes, SD	Near Yankton, SD		1	(1) Includes 4,280 square		
Mile 987.4	Mile 880.0	Mile 811.1		2	miles of non-contributing		
249,330 (1) 5,840	263,480 (1) 14,150	279,480 (1) 16,000		3	(2) Includes 1.350 square		
80, ending near Pierre, SD	107, ending at Big Bend Dam	25, ending near Niobrara, NE	755 miles	4	miles of non-contributing		
200 (elevation 1420) 28,900	540 (elevation 1350) 30,000 1,100	90 (elevation 1204.5) 32,000 2,000	5,940 miles	5 6	<ul><li>(3) With pool at base of flood control.</li></ul>		
440,000 (April 1952)	447,000 (April 1952)	480,000 (April 1952)		7	<ul> <li>(4) Storage first available for regulation of flows.</li> <li>(5) Damming height is height</li> </ul>		
1959 1964	1946 1953	1952 1955		8 9	from low water to maximum operating pool. Maximum		
1440	1205	1024		10	height is from average		
1440 10.570 (including spillway)	10.700 (including spillway)	1234 8.700 (including spillway)	71.596	10	(6) Based on latest available		
78	140	45	863 feet	12	storage data.		
95	165	74		13	(7) River regulation is attained		
1200, 700	4300, 1250	850, 450		14	by flows over low-crested		
Pierre shale & Niobrara chalk	Niobrara chalk	Niobrara chalk & Carlile shale		15	turbines.		
Rolled earth, shale, chalk fill	Rolled earth fill & chalk berms	Rolled earth & chalk fill		16	(8) Length from upstream face of outlet or to spiral case.		
17,000,000	28,000,000 & 22,000,000	7,000,000	358,128,000 cu. yds	17	(9) Based on 8th year (1961)		
540,000 24 July 1062	961,000 20 July 1052	308,000 21 July 1055	5,554,000 cu. yds.	18	of drought drawdown		
24 July 1963	20 July 1952	31 July 1933		19	(10) Affected by level of Lake		
Left bank - adjacent	Left bank - adjacent	Right bank - adjacent		20	Francis case. Applicable to		
1385	1346	1180		21	pool at elevation 1350.		
376  gated	1000 gated	664 gated		22	(11) Spillway crest.		
390.000 at elev 1433.6	620.000 at elev 1379.3	584.000 at elev 1221.4		23 24	(12) 1967-1999 Average (13) Source: Annual Report on		
270,000	508,000	345,000		25	Civil Works Activities of the		
					Report Fiscal Year 1996.		
1423 msl 61,000 acres	1375 msl 102,000 acres	1210 msl 31,000 acres	1,194,000 acres	26	(14) Based on Study 8-83-1985		
1422 msi 00,000 acres	1350 msl 77.000 acres	1208 list 28,000 acres	989.000 acres	28			
1415 msl 51,000 acres	1320 msl 38,000 acres	1204.5 msl 24,000 acres	450,000 acres	29			
1423-1422 60,000 a.f.	1375-1365 985,000 a.f.	1210-1208 59,000 a.f.	4,670,000 a.f.	30			
1422-1420 117,000 a.f.	1365-1350 1,309,000 a.f.	1208-1204.5 90,000 a.f.	11,656,000 a.f.	31			
1420-1345 1.682.000 a.f.	1320-1320 1,607,000 a.f. 1320-1240 1.517,000 a.f.	1204.5-1160 321.000 a.f.	38,983,000 a.f.	32			
1423-1345 1,859,000 a.f.	1375-1240 5,418,000 a.f.	1210-1160 470,000 a.f.	73,393,000 a.f.	34			
November 1963	January 1953	August 1955		35			
25 March 1964 4 300 a f 430 yrs	24 November 1953 18 300 a f 250 yrs	22 December 1955 2 600 a f 180 yrs	92 500 a f	36 37			
1,500 u.i. 150 yis.	10,500 u.i. 250 yis.	2,000 u.i. 100 yis.	92,500 u.i.	30			
None (7)	4 - 22' diameter	None (7)		38 39			
	1013			40			
	2 - 11' x 23' per conduit, vertical lift, cable suspension			41			
	,						
1385 (11)	1229	1180 (11)		42			
	Elev 1375 32 000 of 128 000 of			43			
1351-1355(10) 25,000-100,000 cfs	1228-1239 5,000-60,000 cfs	1155-1163 15,000-60,000 cfs		44			
70	117	48	764 feet	45			
None: direct intake	8 - 28' dia., 22' penstocks	None: direct intake		46			
NY.	1,074	NT.	55,083	47			
None 8 Fixed blade, 81.8 rpm	8 Francis, 85.7 rpm	3 Kaplan, 75 rpm	36 units	48 49			
67' 103,000 cfs	112' 44,500 cfs	48' 36,000 cfs		50			
3 - 67,276, 5 - 58,500	40,000	44,100		51			
494,320	320,000	132,300	2,435,650 kw	52			
497,000 1.055	293,000 1 861	74,000 756	1,967,000 kw 10 215 million kWb	53 54	Corps of Engineers, U.S. Army		
October 1964 - July 1966	March 1954 - January 1956	September 1956 - January 1957	July 1943 - July 1966	55	Northwestern Division		
¢107 400 000	¢100.077.000	640 (17 000	@1.1/1.0/0.000	56	Missouri River Region		
\$107,498,000	\$199,000,000	\$49,017,000	\$1,101,008,000		wiay 2000		



System Storage










# <u>**Reservoir Release and Unregulated Flow</u>**</u>







<u>Oahe</u>



Plate 9

lul











1434 316th Lane • Missouri Valley, Iowa 51555 • 712-642-4121 • Fax 712-642-2460

September 1, 2000

Colonel Michael Meuleners Northwestern Division, Corps of Engineers 12565 W. Center Road Omaha, NE 68144-3869

Dear Colonel Meuleners:

I am pleased to submit the following recommendations of the Missouri River Natural Resources Committee (MRNRC) for operation of the Missouri River system during 2000/2001. These recommendations were developed with input from our Fish, Wildlife, and Tern and Plover Technical Sections and adopted by our official MRNRC state delegates.

For the past several years the MRNRC has provided comprehensive recommendations regarding seasonal dam releases, reservoir elevations, and operations for interior least terns and piping plovers. The recommendations regarding Fort Peck and Gavins Point Dam releases, minimum flows below the dams, minimum lake elevations in Lake Sakakawea and Lake Oahe, stable discharges below Oahe Dam and Fort Randall Dam, and spiking of water releases and operations for interior least terns and piping plovers cited in our August 26, 1999 letter remain valid and are incorporated herein by reference.

We appreciate the efforts made this year to maintain Lake Sakakawea elevations during rainbow smelt spawning and to maintain more stable discharges from Oahe Dam during walleye spawning. Biologists have already detected substantial numbers of young-of-the-year (YOY) smelt in Lake Sakakawea while low numbers were found in Lake Oahe. The remainder of this letter will concentrate on specific recommendations for the 2000/2001 AOP which pertain to test flows from Fort Peck Dam and unbalancing of storage in Fort Peck Lake, Lake Sakakawea, and Lake Oahe.

It is our understanding that beginning in mid-May 2001, test flows ("the mini-test") will be released through the Fort Peck Dam spillway to test the structural integrity and performance of the spillway. Various combinations of flow from the spillway and powerhouse will be tested up to a maximum combined release of 15,000 cubic-feet-per-second. These combinations will be tested over a 3-4 day period followed by several days of monitoring prior to another test. The testing is to be completed in 25 days. In 2002, larger test flows will be released and accompanied by an unbalancing of storage in Fort Peck Lake, Lake Sakakawea, and Lake Oahe.

The MRNRC supports these preliminary tests as we view them as initial steps in adaptive management of the river. Spring releases from the dams and unbalancing of reservoir storage should be decided annually, and be dependent on storage conditions in the reservoirs and projected basin runoff. In anticipation of the 2002 full Fort Peck test and reservoir unbalancing, MRNRC members are developing elevation triggers and runoff guidelines for Fort Peck Lake, Lake Sakakawea, and Lake Oahe to guide future release and unbalancing efforts. We intend to discuss these guidelines with your staff and the U.S. Fish and Wildlife Service during our annual meeting in September.

Our specific recommendations for 2001 are:

# Exhibit 1

MRNRC State Agency Membership: Montana Department of Fish, Wildlife, and Parks • North Dakota Game and Fish Department • South Dakota Department of Game, Fish, and Parks

- Owing to the current low storage in Fort Peck Lake, Lake Sakakawea, and Lake Oahe, storage should be balanced;
- Minimum storage in all lakes should be maintained as close as possible to the conservation pool (base of the annual flood control pool);
- Lake Oahe elevations should not fall between April 8 and May 15 for smelt and walleye spawning; levels in Lake Sakakawea should not fall between April 20 and May 20. Smelt spawn in the top six inches to one foot of the water column on reservoir shorelines. Lake Oahe levels dropped approximately one foot this year immediately after the smelt spawned. Stable reservoir levels are necessary during and immediately following spawning to prevent dessication and loss of eggs. Because of its current low smelt numbers, Lake Oahe is the priority for the coming spring and the following spring if this recommendation cannot be implemented in both lakes.
- It is our understanding that the Fort Peck mini-test will not be implemented unless reservoir elevations exceed 2225 and runoff is expected to be above lower quartile. Stable to rising lake levels should be maintained during the test to preserve reservoir fish spawning and nursery habitat. The tests should be delayed until early June. This will make it more likely that inflows would match or exceed the test outflows even during a low runoff year, thus preserving lake levels. Also, in May, reservoir surface temperatures are not likely to be high enough to produce the desired downstream temperature increases from spillway releases.
- Preliminary reports are that interior least terns and piping plovers had a successful nesting year owing to the continued availability of habitat created by the high flows in 1997 and the lower flows that occurred throughout the nesting season. However, vegetation is beginning to significantly encroach on nesting bars, especially in the river reach between Fort Randall Dam and Lewis and Clark Lake. Flow management measures should be instituted next year if water is available to scour and push up new bars.

I trust these recommendations will be helpful to your staff in developing the Annual Operating Plan for next year. If you have any questions concerning these recommendations, please contact me at 402-471-5555 or Tom Gengerke, incoming MRNRC Chair at 712-336-1714.

Sincere

Gene Zuerlein MRNRC Chair Nebraska Game and Parks Commission

MRNRC Delegates MRNRC Ex-Officio Members and Cooperating Agencies MRNRC Technical Section Chairs MRBA Executive Director FWS Missouri River Coordinator (Olson)



1434 316th Lane • Missouri Valley, Iowa 51555 • 712-642-4121 • Fax 712-642-2460

September 21, 2000

Colonel Michael Meuleners Northwestern Division, Corps of Engineers 12565 W. Center Road Omaha, NE 68144-3869

Dear Colonel Meuleners:

This is a follow-up to our Annual Operating Plan recommendations of September 1, 2000. After the presentation by your staff on September 13 at our annual meeting and follow-up discussion, we have a better understanding of the plans proposed for the Fort Peck test flows and unbalancing of reservoir storage in 2001 and 2002.

The Missouri River Natural Resources Committee has supported the <u>concept of unbalancing</u> for many years, but only <u>under the right circumstances</u>. This past year has been one of below normal runoff in the Upper Basin. Your staff predicts runoff to be approximately 17.1 million acre-feet which is below Lower Quartile (i.e. occurred in 15 years during the 100-year period from 1898 to 1997). The elevations predicted for Fort Peck Lake, Lake Sakakawea, and Lake Oahe under the basic forecast for next March 1 are below normal for that time of year and infrequently occur under current operations. Since 1968 when the reservoir system was completed, these elevations have been exceeded in roughly 4 out of 5 years. **Therefore, we are concerned that the plans proposed for unbalancing in the next several years may further lower already low reservoirs if a prolonged drought ensues**. For this reason, we believe that the conditions for implementing unbalancing need to be specified to minimize unintended impacts to reservoir fisheries in the event the drought persists.

We agreed at the meeting to provide <u>reservoir elevation guidelines</u> for Fort Peck Lake, Lake Sakakawea, and Lake Oahe for implementing unbalancing. The elevation guidelines are as follows:

1) Fort Peck Lake: If the March 1 elevation is greater than the base of the annual flood control pool (2234 ft. msl), <u>implement unbalancing</u>. If the March 1 elevation is between 2227 and 2234 feet msl, <u>implement unbalancing if</u> runoff is projected to raise the reservoir elevation more than three (3) feet after March 1. Unbalancing should not cause lake levels to decline during the important spawning period for forage fish which ranges from April 15-May 30.

2) Lake Sakakawea: If the March 1 elevation is greater than the base of the annual flood control pool (1837.5 feet msl), <u>implement unbalancing</u>. If the March 1 elevation is between 1827 feet msl and 1837.5 feet msl, <u>implement unbalancing if</u> runoff is projected to raise the reservoir elevation more than three (3) feet after March 1. Unbalancing should not be implemented until after the critical rainbow smelt and walleye spawning period of April 20-May 20.

3) Lake Oahe: If the March 1 elevation is greater than the base of the annual flood control pool (1607.5 feet msl), <u>implement unbalancing</u>. If the March 1 elevation is between 1600 feet msl and 1607.5 feet msl, <u>implement unbalancing if</u> runoff is projected to raise the reservoir elevation more than three (3) feet after March 1. Unbalancing should not be implemented until after the critical rainbow smelt and walleye

## Exhibit 2

spawning period of April 8-May 15.

Under the criteria listed above, it would have been possible to implement unbalancing in the reservoirs in the majority of years since 1968. Our analysis of actual end-of-month storage data for the reservoirs indicate that unbalancing would have occurred in 24 of 32 years in Oahe, 24 of 32 years in Sakakawea, and 26 years out of 32 in Fort Peck.

Even with these conditions, it will still be possible to implement the Fort Peck test flows over the next several years without unbalancing Lake Sakakawea. If the drought persists, Sakakawea elevations will continue to decline thereby exposing shoreline habitat and allowing regrowth of vegetation already exposed this year.

I hope these guidelines are helpful to your staff in developing the Annual Operating Plan for next year and the plans for the Fort Peck test flows. If you have any questions concerning these recommendations, please contact me at 402-471-5555 or Tom Gengerke, incoming MRNRC Chair at 712-336-1714.

Gene Zuerlein Immediate Past MRNRC Chair Nebraska Game and Parks Commission

MRNRC Delegates MRNRC Ex-Officio Members and Cooperating Agencies MRNRC Technical Section Chairs MRBA Executive Director FWS Missouri River Coordinator (Olson)



# **News Release**

**US Army Corps of Engineers** Northwestern Division Public Affairs Office 12565 West Center Road Omaha, Nebraska 68144-3869

Contact: Paul Johnston (402) 697-2552

Phone: (402) 697-2552 Fax: (402) 697-2554 Date: Jan. 12, 2001

# FOR IMMEDIATE RELEASE

OMAHA -- The U.S. Army Corps of Engineers announced today its Annual Operating Plan for the Missouri River main stem dams and reservoirs for next year.

"With much of the basin suffering from moderate drought, the plan for the upcoming year will be one of conservation," said Lt. Col. Duane Sims, Northwestern Division Assistant Division Engineer. "The final plan differs slightly from the draft presented at the October public meetings. First, the AOP studies were updated to reflect current basin conditions, and second, lower winter releases are planned as an additional conservation measure while the system storage is below normal," he said.

Three public meetings were conducted on the draft plan Oct. 17-19 at Bismarck, N.D., Fort Peck, Mont., and Kansas City, Mo. As a result of suggestions received from various interests, a winter release rate of 12,000 cubic feet per second (cfs) was used in the final AOP studies.

"Releases this winter should be high enough to provide adequate service to downstream intakes," said Colonel Sims. "However, we will continue to provide modest short-term increases in Gavins Point releases to help alleviate water supply intake problems along the river during ice formation periods." Releases to support navigation will be in accordance with the operational objectives described in the current Master Water Control Manual. "Flow support for the 2001 navigation season will begin on schedule but at reduced levels, unless the basin experiences a significant turnaround in runoff conditions."

A number of clarifications and word changes were made to the draft to improve readability. Corps officials will distribute the final report later this month. Public meetings will be conducted in April 2001 to update the spring runoff outlook and review the operational plans for the remainder of the year. Specific dates and locations will be announced prior to the meetings.

--30--

Daily reservoir and river information is available from the water management section of the Northwestern Division homepage at www.nwd.usace.army.mil.

### TIME OF STUDY 11:02:01

30NO	VOO INI-SUM	31DEC	2000 31JAN	28FEB
FORT PECK- NAT INFLOW DEPLETION	- 970 -208	290 -83	315 -78	365 -47
EVAPORATION MOD INFLOW RELEASE	45 1133 1890	45 328 603	393 676	412 611
STOR CHANGE	-757 13775	-275 13500	-283 13217	-199 13018
ELEV FTMSL DISCH KCFS	2228.0 6.3	2226.6 9.8	2225.1 11.0	2224.0 11.0
AVE POWER MW PEAK POW MW ENERGY GWH	302.4	130 203 97.0	145 201 108.2	145 200 97.2
GARRISON- NAT INFLOW DEPLETION CHAN STOR	- 850 - 47 - 48	230 -46 -36	260 -12 -12	360 11 0
EVAPORATION REG INFLOW	50 2689 2124	50 793	936	960 972
STOR CHANGE	-435 16170	-283 15887	-140 15747	-12 15735
ELEV FTMSL DISCH KCFS	1830.9 20.8	1829.9 17.5	1829.4 17.5	1829.3 17.5
AVE POWER MW		209	208	207
ENERGY GWH	449.0	155.2	154.5	139.3
OAHE NAT INFLOW DEPLETION CHAN STOR	100 60 15	13 15	10 18	90 29
EVAPORATION REG INFLOW	48 3130 2638	48 1029 1051	1068	1033
STOR CHANGE	492 15875	-21 15854	95 15948	419 16367
ELEV FTMSL DISCH KCFS	1597.3 24.4	1597.2 17.1	1597.6 15.8	1599.1 11.1
AVE POWER MW PEAK POW MW ENERGY GWH	390.0	208 652 155.0	193 653 143.8	136 661 91.3
BIG BEND EVAPORATION	- 11	11		
REG INFLOW RELEASE	2627 2644	1039 1056	973 973	614 614
ELEV FTMSL DISCH KCFS	1420.3	1420.0	1420.0	1420.0
POWER AVE POWER MW		85	77	53
ENERGY GWH	156.4	538 63.5	537	35.7
FORT RANDALI NAT INFLOW DEPLETION	80 9	10 3	20 3	50 3
REG INFLOW	2705 1753	10 1054 603	990 639	661 511
STOR CHANGE	952 2171	451 2622	351 2973	150 3123
ELEV FTMSL DISCH KCFS	1335.1 26.2	1342.9 9.8	1348.0 10.4	1350.0 9.2
AVE POWER MW PEAK POW MW		72 301	81 324	74 331
ENERGY GWH	164.0	53.8	60.4	49.8
NAT INFLOW DEPLETION	345 11	120 10	100	125
EVAPORATION REG INFLOW	4 2115	4 739	737	638
RELEASE STOR CHANGE	2141 -26	739	737	664 -26 358
ELEV FTMSL DISCH KCFS	1207.0 28.8	1207.0 12.0	1207.0 12.0	1206.0 12.0
AVE POWER MW PEAK POW MW ENERGY GWH	92.1	43 77 31.9	43 77 31.8	42 76 28.4
GAVINS POIN	T - SIOU	JX CITY-		95
DEPLETION REGULATED FLO	160 35 AT SIC	40 11 DUX CITY	35 12 (	12
KAF KCFS	2266	768 12.5	760 12.4	737 13.3
TOTAL NAT INFLOW	2505	690	740	1075
DEPLETION CHAN STOR EVAPORATION	-140 -2 169	-92 10 169	-56 -13	8 2
STORAGE SYSTEM POWER	50074	49928	49951	50283
AVE POWER MW PEAK POW MW ENERGY GWH	1553 0	748 2125 556 4	747 2145 555 0	657 2150 441 6
DAILY GWH	1000.9	17.9	17.9	15.8
	INI-SUM	31DEC	31JAN	28FEB

-

VALUES IN 1000 AF EXCEPT AS INDICATED

99001 9901 4 PAGE 1

STUDY NO 1

### TIME OF STUDY 08:59:41

,

30NO	VOO INI-SUM	31DEC	2000 31JAN	28FEB
FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FIMSL DISCH_KCFS	1164 -238 34 1368 1902 -534 13775 2228.0 6.3	348 -81 34 395 615 -220 13555 2226.9 10.0	378 -99 477 676 -199 13356 2225.8 11.0	438 -58 496 611 -115 13241 2225.2 11.0
POWER AVE POWER MW PEAK POW MW ENERGY GWH	305.1	133 203 99.0	146 202 108.4	145 201 97.6
GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER	- 1020 -243 -48 38 3079 3272 -193 16170 1830.9 20.8	276 -118 -38 933 1107 -174 15996 1830.3 18.0	312 -83 -10 1061 1138 -76 15920 1830.0 18.5	432 -42 0 1085 1027 57 15977 1830.2 18.5
PEAK POWER MW PEAK POW MW ENERGY GWH	471.4	215 356 159.8	355 163.7	356 147.9
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STOR CHANGE ELEV FIMSL DISCH KCFS	120 60 10 36 3305 2552 754 15875 1597.3 24.4	13 12 36 1070 1019 51 15926 1597.5 16.6	12 18 -2 1129 951 178 16104 1598.1 15.5	108 29 1106 582 525 16629 1600.0 10.5
AVE POWER MW PEAK POW MW ENERGY GWH	378.1	202 653 150.4	189 656 140.8	129 666 86.9
BIG BEND- EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW	9 2543 2560 1699 1420.3 24.1	9 1010 1027 1682 1420.0 16.7 83 538	951 951 1682 1420.0 15.5 75 537	582 582 1682 1420.0 10.5 50 529
ENERGY GWH FORT RANDAL NAT INFLOW	151.5 L 96	61.8 12	55.9 24	33.8 60
DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER	9 7 2640 1688 952 2171 1335.1 26.2	3 7 1029 578 451 2622 1342.9 9.4	3 972 621 351 2973 1348.0 10.1	3 639 489 150 3123 1350.0 8.8
AVE POWER MW PEAK POW MW ENERGY GWH	157.9	69 301 51.6	79 324 58.7	71 331 47.6
GAVINS POIN NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	414 11 33 2120 2146 -26 384 1207.0 28.8	144 10 31 3740 740 384 1207.0 12.0	120 1 -1 739 739 384 1207.0 12.0	150 2 641 667 -26 358 1206.0 12.0
POWER AVE POWER MW PEAK POW MW ENERGY GWH	92.3	43 77 31.9	43 77 31.9	42 76 28.5
GAVINS POIN NAT INFLOW DEPLETION REGULATED FLO KAF KCFS	T - SIO 192 35 W AT SIO 2303	UX CITY 48 11 DUX CIT 777 12.6	42 12 Y 769 12.5	102 12 757 13.6
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWER AVE POWER MW PEAK POW MW	3006 -366 -5 127 50074	828 -162 6 127 50165 745 2127	888 -148 -14 50419 752 _2151	1290 -56 2 51010 658 2159
ENERGY GWH DAILY GWH	1556.3 INI-SUM	554.5 17.9 31DEC	559.4 18.0 31JAN	442.3 15.8 28FEB

VALUES IN 1000 AF EXCEPT AS INDICATED

99001 9901 9901 PAGE

STUDY NO 2

1

TIME OF STUDY 09:38:40

,

30NC	VOO INI-SUM	31DEC	2000 31JAN	28FEB	
FORT PECK- NAT INFLOW	- 776	232	252	292	
EVAPORATION MOD INFLOW	56 809	56 222	288	299	
RELEASE STOR CHANGE	1724 -915	553 -332	615 -327	555 -256	
STORAGE ELEV FTMSL	13775 2228.0	13443 2226.3	13116 2224.5	12860 2223.2	
DISCH KCFS POWER	6.3	9.0	10.0	10.0	
PEAK POWER MW	275 F	202	201	199	
GARRISON-	-	03.1	30.5	00.2	
NAT INFLOW DEPLETION	680 -85	184 -42	208 -31	288 -12	
CHAN STOR EVAPORATION	-38 63	-28 63	-10		
REG INFLOW RELEASE	3065	1045 257	844 1076	944	
STOR CHANGE STORAGE	16170	15813	15581	15492 1828 5	
DISCH KCFS POWER	20.8	17.0	17.5	17.0	
AVE POWER MW PEAK POW MW		203 354	207 351	200 351	
ENERGY GWH	439.5	150.7	154.0	134.7	
OAHE NAT INFLOW	80 60	13	8 18	72	
CHAN STOR	17 61	17 61	-2	2	
REG INFLOW RELEASE	3042 2731	989 1083	1064 996	989 653	
STOR CHANGE STORAGE	310 15875	-94 15781	68 15849	337 16185	
ELEV FTMSL DISCH KCFS	1597.3 24.4	1596.9 17.6	1597.2 16.2	1598.4 11.8	
AVE POWER MW		214	197 652	144 658	
ENERGY GWH	403.1	159.6	146.8	96.7	
BIG BEND- EVAPORATION	- 14	14		650	
REG INFLOW RELEASE	2/1/ 2734	1068	996 996	653 653	
ELEV FTMSL	1420.3	1420.0	1420.0	1420.0	
POWER AVE POWER MW		88	79	56	
PEAK POW MW ENERGY GWH	161.6	538 65.2	537 58.5	529 37.9	
FORT RANDAL	L 64	8	16	40	
DEPLETION EVAPORATION	9 12	3 12	3	3	
REG INFLOW RELEASE	2777 1824	1078 627	1009 658	690 539	
STOR CHANGE STORAGE	953 2171	451 2622	351 2973	151 3124	
DISCH KCFS	26.2	1342.9	1348.0	9.7	
AVE POWER MM	1	75 301	84 324	78 331	
ENERGY GWH	170.6	55.9	62.1	52.5	
GAVINS POIN NAT INFLOW	276	96 10	80 1	100	
CHAN STOR EVAPORATION	31 5	30 5	-1	2	
REG INFLOW RELEASE	2115 2141	738 738	736 736	641 667	
STOR CHANGE	-26 384	384	384	-26 358	
DISCH KCFS	28.8	1207.0	1207.0	1206.0	
AVE POWER MW	1	43 77	43 77	42 76	
ENERGY GWH	92.1	31.8	31.8	28.5	
GAVINS POIN NAT INFLOW	11 - SIOU 128	JX CITY 32 11	 28 12	68 12	
REGULATED FLC	W AT SI	OUX CIT 759	( 752	723	
KCFS		12.3	12.2	13.0	
TOTAL NAT INFLOW	2004	552	592	860	
CHAN STOR	-59 10 212	19 212	-13	4	
STORAGE SYSTEM POWER	50074	49726	49585	49702	
AVE POWER MW PEAK POW MW	1540 -	742	741 2141	653 2144	
ENERGY GWH DAILY GWH	1542.4	552.3 17.8	17.8	438.5	
	INI-SUM	31DEC	31JAN	28FEB	

VALUES IN 1000 AF EXCEPT AS INDICATED

99001 9901 9901 PAGE 1 STUDY NO 3

STUDY NO

1

							VALUES	5 IN 100	O AF E	CEPT AS	INDICA	ATED				31001	NO	4
	28FI	EB01 INI-SUM	15MAR	2001 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FOF NAT DEPLE EVAPO MOD RELE/ STOR STOR/ ELEV DISCH	RT PECK- INFLOW ETION DRATION INFLOW ASE CHANGE AGE FTMSL	9600 407 328 8865 6246 2619 13241 2225.2 11.0	319 -12 332 208 123 13364 2225.9 7.0	149 -6 155 97 57 13422 2226.2 7.0	192 -7 199 134 65 13487 2226.5 7.5	797 48 749 446 303 13789 2228.1 7.5	1604 279 1325 492 833 14622 2232.2 8.0	2491 635 1856 708 1148 15770 2237.6 11.9	1219 135 21 1063 584 478 16249 2239.7 9.5	456 -82 69 469 584 -115 16134 2239.2 9.5	379 -108 86 401 417 -16 16118 2239.1 7.0	531 -53 76 508 336 172 16290 2239.9 5.5	210 -18 18 210 143 67 16357 2240.2 4.8	98 -8 9 98 67 31 16389 2240.3 4.8	112 -10 10 159 -47 16342 2240.1 10.0	346 -116 40 422 615 -193 16149 2239.3 10.0	297 -155 452 646 -194 15956 2238.4 10.5	400 -115 515 611 -96 15860 2238.0 11.0
AVE F PEAK ENER(	ER POWER MM POW MW GY GWH	/ 1034.0	93 202 33.4	93 202 15.6	100 203 21.5	100 204 71.9	107 207 80.0	162 211 116.6	131 213 97.4	131 212 97.6	97 212 69.7	76 213 56.3	67 213 24.0	67 213 11.2	138 213 26.6	138 212 102.8	145 212 107.7	151 211 101.7
GA NAT DEPLE CHAN EVAPC REG RELEA	ARRISON- INFLOW ETION STOR DRATION INFLOW ASE	 14199 849 0 347 19249 17982	515 -32 41 797 655	240 -15 353 305	309 -19 -5 457 393	1376 -6 0 1828 1428	1934 96 -5 2325 1998	3530 957 -39 3242 1874	2647 441 24 23 2791 1875	841 43 75 1308 1845	574 -114 25 92 1037 1428	652 7 15 79 917 1173	260 -92 7 19 482 508	121 -43 9 222 237	139 -49 -52 10 285 286	278 -132 0 41 984 1230	348 -117 -5 1106 1414	434 -77 -5 1117 1333
STOR STOR ELEV DISC	CHANGE AGE FTMSL H KCFS	1266 15977 1830.2 18.5	142 16120 1830.7 22.0	47 16167 1830.9 22.0	64 16231 1831.1 22.0	400 16631 1832.5 24.0	326 16958 1833.6 32.5	1367 18325 1838.2 31.5	915 19240 1841.1 30.5	-537 18703 1839.4 30.0	-391 18312 1838.2 24.0	-256 18056 1837.3 19.1	-26 18030 1837.2 17.1	-15 18015 1837.2 17.1	-1 18014 1837.2 18.0	-246 17768 1836.4 20.0	-309 17460 1835.3 23.0	-216 17244 1834.6 24.0
AVE F PEAK ENER	POWER MW POW MW GY GWH	2629.0	262 357 94.2	262 358 44.1	263 358 56.7	288 362 207.1	364 366 270.7	370 379 266.7	370 389 275.4	367 383 272.9	301 379 216.4	238 376 177.2	213 376 76.6	213 376 35.7	224 376 43.0	248 374 184.5	283 371 210.6	294 369 197.3
NAT DEPLE CHAN EVAPO	-OAHE INFLOW ETION STOR DRATION	3850 542 -26 371	559 21 -15	261 10 0	335 13 0	474 44 -8	347 60 -34	881 114 4	297 129 4 25	123 84 2 79	163 21 23 98	102 -6 19 85	109 2 8 20	51 1 9	58 1 -4 11	22 10 -8 43	10 15 -12	59 24 -4
REG RELEA STOR STOR ELEV DISCH	INFLOW ASE CHANGE AGE FTMSL H KCFS	20894 18690 2204 16629 1600.0 10.5	1177 353 824 17452 1602.9 11.9	556 266 290 17743 1603.9 19.1	715 381 334 18076 1605.0 21.4	1850 1308 542 18618 1606.8 22.0	2251 1582 670 19288 1608.9 25.7	2645 1774 872 20160 1611.6 29.8	2022 1798 224 20384 1612.3 29.2	1807 1937 -130 20254 1611.9 31.5	1494 1776 -282 19973 1611.0 29.8	1215 1376 -162 19811 1610.5 22.4	603 664 -61 19750 1610.4 22.3	278 307 -30 19721 1610.3 22.1	329 507 -179 19542 1609.7 32.0	1191 1771 -581 18961 1607.9 28.8	1397 1621 -224 18738 1607.2 26.4	1364 1269 95 18833 1607.5 22.8
AVE PEAK ENER	POWER MW POW MW GY GWH	2935.6	148 681 53.4	241 686 40.5	271 692 58.4	281 701 202.1	332 713 246.7	388 727 279.7	384 730 286.0	414 728 308.1	391 724 281.8	293 721 218.2	292 720 105.0	289 720 48.6	416 717 79.8	373 707 277.4	339 703 252.4	294 705 197.5
B EVAPC REG RELEA STORA ELEV DISCH	IG BEND- DRATION INFLOW ASE AGE FTMSL H KCFS FR	71 18620 18620 1682 1420.0 10.5	353 353 1682 1420.0 11.9	266 266 1682 1420.0 19.1	381 381 1682 1420.0 21.4	1308 1308 1682 1420.0 22.0	1582 1582 1682 1420.0 25.7	1774 1774 1682 1420.0 29.8	5 1794 1794 1682 1420.0 29.2	15 1922 1922 1682 1420.0 31.3	19 1757 1757 1682 1420.0 29.5	16 1360 1360 1682 1420.0 22.1	4 660 1682 1420.0 22.2	2 306 306 1682 1420.0 22.0	2 505 505 1682 1420.0 31.8	9 1763 1763 1682 1420.0 28.7	1621 1621 1682 1420.0 26.4	1269 1269 1682 1420.0 22.8
AVE PEAK ENER	POWER MU POW MW GY GWH	/ 1072.8	56 517 20.3	90 509 15.1	100 509 21.6	103 509 74.1	120 509 89.6	137 496 98.8	136 505 101.1	146 509 108.8	140 517 100.8	108 538 80.5	111 538 39.9	110 538 18.5	159 538 30.4	141 538 104.8	128 538 95.1	109 529 73.6
FOR NAT DEPLI EVAPO REG STOR STOR	T RANDAI INFLOW ETION DRATION INFLOW ASE CHANGE AGE FTMSL	L 1501 80 82 19958 19957 1 3123 1350.0	190 1 542 250 292 3415 1353.6	89 1 354 220 134 3549 1355.2	114 1 494 494 3549 1355.2	298 4 1602 1602 0 3549 1355.2	159 9 1732 1732 0 3549 1355.2	224 12 1986 1831 155 3704 1357.0	111 18 1881 1985 -104 3600 1355.2	72 15 1960 2011 -51 3549 1355.2	92 7 24 1819 1963 -144 3405 1353.5	60 1 19 1400 2002 -602 2803 1345.6	5 1 660 989 -329 2474 1340.6	2 0 2 306 461 -155 2319 1337.9	3 1 2 505 527 -22 2297 1337.5	23 3 1775 1409 366 2663 1343.5	10 3 1628 1371 257 2920 1347.2	49 3 1315 1111 204 3124 1350.0
POWI AVE I PEAK ENER(	ER POWER MN POW MW GY GWH	v 1955.5	69 346 25.0	13.0 133 352 22.3	232 352 50.1	226 352 162.4	236 352 175.4	259 359 186.5	272 355 202.5	274 352 203.7	273 345 196.9	259 312 193.0	250 289 90.1	241 278 40.5	238 276 45.7	170 304 126.2	172 320 128.3	159 332 107.0
GAV NAT DEPLI CHAN EVAPO REG RELE	INS POIN INFLOW ETION STOR DRATION INFLOW ASE	NT 2252 114 -22 25 22047 22047	107 0 1 358 358	50 0 -14 256 256	64 0 -23 536 536	246 5 1 1844 1844	319 19 -2 2029 2029	281 24 -5 2083 2083	211 39 -3 2152 2152 2152	170 10 -1 5 2165 2152	135 -5 -1 7 2096 2083	157 2 1 2152 2152 2152	60 5 -1 1041 1041	28 2 0 1 486 486	32 3 0 1 555 555	95 10 19 3 1510 1510	106 1 1 1477 1477	191 4 1306 1332
STOR STOR/ ELEV DISCI	CHANGE AGE FTMSL H KCFS	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 18.4	358 1206.0 30.0	358 1206.0 31.0	358 1206.0 33.0	358 1206.0 35.0	358 1206.0 35.0	13 371 1206.5 35.0	13 384 1207.0 35.0	384 1207.0 35.0	384 1207.0 35.0	384 1207.0 35.0	384 1207.0 35.0	384 1207.0 24.6	384 1207.0 24.0	-26 358 1206.0 24.0
AVE I PEAK ENER	POWER MA POW MW GY GWH	N 864.9	42 114 15.2	64 114 10.7	101 114 21.8	103 114 74.3	108 114 80.1	112 114 80.5	112 114 83.2	112 115 83.5	113 115 81.6	114 115 84.6	114 115 41.0	114 115 19.1	114 115 21.8	78 77 57.8	78 77 57.8	77 76 51.9
GAV NAT DEPLI REGUL	INS POI INFLOW ETION ATED FLO	NT - SIOU 3100 237 DW AT SIC 24910	JX CITY- 195 6 DUX CIT 547	 91 3 Y 344	117 3 649	1006 19 2831	553 34 2548	318 29 2372	246 36 2362	184 32 2304	127 21 2189	66 9 2209	26 5 1062	12 2 496	14 3	30 11 1529	12 12 1477	105 12 1425
K	CFS	24910	18.4	24.8	36.4	47.6	41.4	39.9	38.4	37.5	36.8	35.9	35.7	35.7	35.7	24.9	24.0	25.7
NAT DEPLI CHAN EVAPO STOR	INFLOW ETION STOR ORATION AGE FM POWE	34502 2229 -49 1224 51010	1885 -16 27 52391	879 -7 -14 52920	1131 -10 -28 53383	4197 114 -7 54628	4916 497 -41 56457	7725 1771 -40 59999	4731 798 25 82 61513	1846 102 1 261 60693	1470 -178 47 326 59874	1568 -40 35 281 59026	670 -97 13 66 58678	312 -45 0 31 58509	357 -52 -56 35 58261	794 -214 12 143 57608	783 -241 -16 57139	1238 -153 -5 57100
AVE PEAK ENER DAIL	POWER M POW MW GY GWH Y GWH	√ 10491.7	671 2217 241.4 16.1	883 2221 148.3 21.2	1066 2228 230.2 25.6	1100 2243 791.8 26.4	1267 2260 942.4 30.4	1429 2286 1028.8 34.3	1405 2305 1045.6 33.7	1444 2299 1074.6 34.7	1315 2293 947.1 31.6	1088 2276 809.7 26.1	1046 2252 376.5 25.1	1034 2240 173.7 24.8	1289 2235 247.4 30.9	1147 2211 853.5 27.5	1145 2221 851.9 27.5	1085 2221 729.0 26.0
		INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

28FEB01 2001 INI-SUM 15MAR 22MAR 31MAR 30APR

STUDY NO

1

5

28FEB

VALUES	S TN 10		CEPT A		ATED				STUDY	NO	
THE CE	5 111 101	50 / (I E)		5 111010/				200	02		
31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	
1487	2309	1130	423	351	492	195	91	104	321	276	
279	635	138	-82	-108	-75	-28	-13	-15	-131	-161	
		21	67	85	75	34	16	18	40		
1208	1674	971	438	374	492	189	88	101	412	437	
461	696	492	492	327	264	128	60	143	584	615	
747	978	479	-54	47	228	61	29	-42	-172	-178	
14491	15468	15947	15893	15940	16168	16229	16258	16216	16044	15866	
2231.6	2236.2	2238.4	2238.1	2238.4	2239.4	2239.6	2239.8	2239.6	2238.8	2238.0	1
7.5	11.7	8.0	8.0	5.5	4.3	4.3	4.3	9.0	9.5	10.0	
101	159	110	110	76	59	59	59	124	131	129	
207	210	212	211	212	212	212	213	212	212	211	
74.9	114.3	81.8	82.0	54.6	44.1	21.4	10.0	23.9	97.6	102.4	

FORT PECK- NAT INFLOW DEPLETION	 8901 358	296 -12	138 -6	178 -7	739 48	1487 279	2309 635	1130 138	423 -82	351 -108	492 -75	195 -28	91 -13	104 -15	321 -131	276 -161	371 -104
EVAPORATION MOD INFLOW RELEASE STOR CHANGE	357 8186 5641 2545	308 193 115	144 90 54	185 125 60	691 417 274	1208 461 747	1674 696 978	21 971 492 479	67 438 492 -54	85 374 327 47	75 492 264 228	34 189 128 61	16 88 60 29	18 101 143	40 412 584 172	437 615	475 555
STORAGE ELEV FTMSL DISCH KCFS	13241 2225.2 11.0	13356 2225.8 6.5	13409 2226.1 6.5	13469 2226.4 7.0	13744 2227.8 7.0	14491 2231.6 7.5	15468 2236.2 11.7	15947 2238.4 8.0	15893 2238.1 8.0	15940 2238.4 5.5	16168 2239.4 4.3	16229 2239.6 4.3	16258 2239.8 4.3	16216 2239.6 9.0	16044 2238.8 9.5	15866 2238.0 10.0	15786 2237.7 10.0
POWER AVE POWER MU PEAK POW MW ENERGY GWH	932.0	86 202 31.0	86 202 14.5	93 203 20.1	93 204 67.1	101 207 74.9	159 210 114.3	110 212 81.8	110 211 82.0	76 212 54.6	59 212 44.1	59 212 21.4	59 213 10.0	124 212 23.9	131 212 97.6	138 211 102.4	137 211 92.4
GARRISON- NAT INFLOW DEPLETION	12901 847	482 - 30	225 -14	289 -18	1250 -2	1723 147	3207 906	2405 434	764 44	522 -111	593 12	236 -96	110 -45	126 -51	260 -134	316 -118	394 -78
CHAN STOR EVAPORATION REG INFLOW RELEASE	10 379 17326 16138	46 751 625	329 292	-5 426 393	1669 1369	-5 2032 1599	-42 2955 1666	37 23 2476 1691	74 1138 1660	25 91 894 1060	12 79 777 954	0 36 424 445	17 198 208	-47 19 254 317	-5 41 932 1230	-5 1044 1353	1027 1277
STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	1188 15977 1830.2 18.5	126 16103 1830.7 21.0	37 16140 1830.8 21.0	34 16174 1830.9 22.0	300 16474 1832.0 23.0	433 16907 1833.5 26.0	1289 18196 1837.8 28.0	786 18981 1840.3 27.5	-522 18459 1838.6 27.0	-167 18293 1838.1 17.8	-177 18116 1837.5 15.5	-21 18095 1837.4 14.9	-10 18085 1837.4 14.9	-63 18022 1837.2 20.0	-297 17724 1836.2 20.0	-309 17416 1835.2 22.0	-250 17166 1834.4 23.0
POWER AVE POWER MW PEAK POW MW ENERGY GWH	/ 2390.1	250 357 90.0	250 357 42.1	262 358 56.7	275 361 198.1	311 365 231.8	337 378 242.7	340 385 252.8	336 380 249.8	223 379 160.8	194 377 144.5	187 377 67.2	187 377 31.4	249 376 47.8	248 373 184.4	271 370 201.4	281 368 188.9
OAHE NAT INFLOW DEPLETION CHAN STOR	3200 542 -20	460 21 -11	214 10	276 13 -4	394 44 -4	285 60 -12	749 114 -8	246 129 2	103 84 2	135 21 36	85 -6 9	91 2 2	42 1	48 1 -20	18 10 0	5 15 -8	49 24 -4
EVAPORATION REG INFLOW RELEASE	384 18392 16270	1053 533	496 126	652 328	1715 1054	1812 1455	2293 1581	24 1786 1840	75 1606 1904	93 1118 1675	80 975 1204	36 500 582	17 232 270	19 325 251	41 1197 1290	1335 1157	1298 1021
STORAGE ELEV FTMSL DISCH KCFS	16629 1600.0 10.5	17148 1601.9 17.9	17518 1603.1 9.1	17842 1604.2 18.4	18502 1606.4 17.7	18859 1607.6 23.7	19571 1609.8 26.6	19517 1609.7 29.9	19219 1608.7 31.0	18662 1606.9 28.1	18434 1606.2 19.6	18352 1605.9 19.6	18314 1605.8 19.4	18389 1606.1 15.8	18296 1605.8 21.0	18473 1606.3 18.8	18751 1607.2 18.4
POWER AVE POWER MW PEAK POW MW ENERGY GWH	/ 2529.1	223 675 80.3	114 682 19.2	232 688 50.1	226 699 162.5	304 705 226.1	344 717 247.5	389 716 289.3	401 711 298.4	362 702 261.0	251 698 186.8	250 697 90.1	248 696 41.7	202 697 38.8	268 696 199.3	241 699 179.1	236 704 158.7
BIG BEND- EVAPORATION REG_INFLOW	 78 16193	533	126	328	1054	1455	1581	5 1835	15 1889	19 1656	16 1187	7 575	3 266	4 247	9 1281	1157	1021
RELEASE STORAGE ELEV FTMSL DISCH KCFS	16193 1682 1420.0 10.5	533 1682 1420.0 17.9	126 1682 1420.0 9.1	328 1682 1420.0 18.4	1054 1682 1420.0 17.7	1455 1682 1420.0 23.7	1681 1682 1420.0 26.6	1835 1682 1420.0 29.8	1689 1682 1420.0 30.7	1656 1682 1420.0 27.8	1187 1682 1420.0 19.3	5/5 1682 1420.0 19.3	1682 1420.0 19.2	247 1682 1420.0 15.6	1281 1682 1420.0 20.8	1157 1682 1420.0 18.8	1021 1682 1420.0 18.4
POWER AVE POWER MW PEAK POW MW ENERGY GWH	934.0	84 510 30.3	42 509 7.1	86 509 18.6	83 509 59.7	111 509 82.4	124 509 89.5	140 509 103.9	144 509 107.0	132 517 95.0	95 538 70.4	97 538 34.9	96 538 16.2	78 538 15.1	103 538 76.4	92 538 68.2	88 529 59.3
FORT RANDAL NAT INFLOW	-L 1200	142	66 1	85 1	239 4	150	195 12	89 18	65 15	64 7	38 1	3	1	1	18	5	39
EVAPORATION REG INFLOW RELEASE	88 17225 17224	674 265	191 174	412 412	1289 1289	1596 1596	1764 1764	6 1900 1900	19 1920 1920	24 1690 1834	19 1206 1836	7 569 879	3 264 410	3 245 267	8 1288 922	1159 922	1057 833
STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	1 3123 1350.0 8.8	409 3532 1355.0 8.9	17 3549 1355.2 12.6	3549 1355.2 23.1	3549 1355.2 21.7	3549 1355.2 26.0	3549 1355.2 29.6	3549 1355.2 30.9	3549 1355.2 31.2	-144 3405 1353.5 30.8	-630 2775 1345.2 29.9	-310 2465 1340.4 29.5	-146 2319 1337.9 29.6	-22 2297 1337.5 16.8	366 2663 1343.5 15.0	237 2900 1347.0 15.0	224 3124 1350.0 15.0
POWER AVE POWER MU PEAK POW MW ENERGY GWH	v 1695.0	74 351 26.6	106 352 17.8	194 352 41.9	182 352 131.0	218 352 161.9	248 352 178.5	258 352 192.2	261 352 194.2	256 345 184.2	238 310 176.9	222 289 80.0	215 278 36.2	122 276 23.4	112 304 83.1	116 319 86.7	120 332 80.5
GAVINS POIN NAT INFLOW DEPLETION	NT 1899 114	93 0	44 0	56 0	207	257 19	237 24	178 39	144 10	114 -5	132 2	51 5	24	27	86 10	89 1	161
EVAPORATION REG INFLOW RELEASE	-13 28 18968 18968	359 359	211 211	-20 448 448	1493 1493	-8 1826 1826	-7 1970 1970	2035 2035	2048 2035	1 7 1947 1934	6 1961 1961	1 3 922 922	1 430 430	24 1 313 313	3 3 999 999	1010 1010	994 1020
STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 15.2	358 1206.0 25.1	358 1206.0 25.1	358 1206.0 29.7	358 1206.0 33.1	358 1206.0 33.1	13 371 1206.5 33.1	13 384 1207.0 32.5	384 1207.0 31.9	384 1207.0 31.0	384 1207.0 31.0	384 1207.0 19.8	384 1207.0 16.2	384 1207.0 16.4	-26 358 1206.0 18.4
POWER AVE POWER MI PEAK POW MW ENERGY GWH	√ 773.0	42 114 15.2	53 114 8.9	86 114 18.6	86 114 61.9	100 114 74.5	108 114 77.6	108 114 80.2	108 115 80.6	108 115 77.7	107 115 79.7	105 115 37.8	105 115 17.6	70 115 13.4	58 77 42.8	58 77 43.3	64 76 43.2
GAVINS POIN NAT INFLOW	NT - SIO 2500 237	UX CITY 181 6	 85 3	109 3	811 19	406 34	252 29	199 36	148 32	97 21	53	21	10 2	11	24 11	10 12	84 12
REGULATED FLO KAF KCFS	DW AT SI 21231	OUX CIT 534 18.0	Y 293 21.1	554 31.0	2285 38.4	2198 35.8	2193 36.8	2198 35.8	2151 35.0	2010 33.8	2005 32.6	938 31.5	438 31.5	322 20.3	1012 16.5	1008 16.4	1092 19.7
TOTAL NAT INFLOW DEPLETION	30601 2178	1654 -14	772 -6	992 -8	3640 118	4308 548	6949 1720	4247 794	1647 103	1283 -175	1393 -57	595 -112	278 -52	317 -59	727 -231	701 -248	1098 -143
EVAPORATION STORAGE SYSTEM POWE	-22 1314 51010 R	35 52179	-7 52657	-29 53074	-1 54309	-25 55845	-57 58824	36 80 60035	1 255 59174	61 318 58365	23 275 57558	3 123 57207	0 57 57042	-43 65 56989	-2 141 56793	-13 56721	-4 56866
AVE POWER MA PEAK POW MW ENERGY GWH	9253.3	759 2210 273.3	653 2217 109.6	953 2223 205.9	945 2239 680.4	1145 2252 851.6	1320 2280 950.3	1344 2288 1000.2	1360 2279 1011.9	1157 2270 833.3	944 2251 702.4	921 2228 331.4	911 2216 153.0	845 2215 162.3	919 2199 683.7	915 2214 681.1	927 2218 622.9
DATEL UWN		10.2	13.7	211400	20400	21.0	20 111	21.11	21400	27.0	22.7	15100	21.3	20.3	22.1	22.0	22.2

STUDY NO

1

6

TIME OF STOD	11:02:0	01				VALUES	S IN 100	O AF E	CEPT AS	INDICA	ATED				STUDY	NU	ь
28F	EB01 INI-SUM	15MAR	2001 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT PECK NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	 7400 316 440 6644 5692 952 13018 2224.0 11.0	264 0 264 179 85 13103 2224.5 6.0	123 0 123 69 54 13157 2224.8 5.0	158 0 158 89 69 13226 2225.1 5.0	628 81 547 387 160 13386 2226.0 6.5	1210 230 980 430 550 13936 2228.8 7.0	1851 580 1271 696 575 14510 2231.7 11.7	829 148 26 655 492 163 14673 2232.5 8.0	324 -85 84 325 -167 14506 2231.7 8.0	319 -136 105 350 345 5 14511 2231.7 5.8	398 -60 92 366 267 99 14610 2232.2 4.3	188 -32 42 177 149 28 14638 2232.3 5.0	88 -15 20 83 111 -28 14610 2232.2 8.0	100 -17 22 94 143 -48 14561 2231.9 9.0	310 -121 48 383 615 -232 14329 2230.8 10.0	261 -155 416 646 -230 14100 2229.6 10.5	349 -104 453 583 -130 13970 2229.0 10.5
POWER AVE POWER M PEAK POW MW ENERGY GWH	₩ 924.8	79 201 28.5	66 201 11.1	66 201 14.3	86 202 62.0	93 204 69.4	157 207 113.0	108 207 80.5	108 207 80.5	78 207 56.4	59 207 43.8	68 207 24.4	108 207 18.2	122 207 23.3	135 206 100.3	141 205 104.9	141 205 94.4
GARRISON NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER	 11001 971 5 484 15243 14759 484 15735 1829.3 17.5	469 26 51 673 595 78 15813 1829.6 20.0	219 12 10 286 236 50 15863 1829.8 17.0	282 16 355 303 52 15915 1830.0 17.0	853 -18 -15 1242 1131 112 16027 1830.4 19.0	1423 196 -5 1652 1445 207 16234 1831.1 23.5	2958 799 -48 2807 1488 1320 17554 1835.7 25.0	2066 478 37 30 2087 1445 642 18196 1837.8 23.5	581 37 94 1414 -472 17724 1836.2 23.0	497 -115 22 117 862 997 -136 17588 1835.8 16.8	454 9 14 101 625 887 -262 17327 1834.9 14.4	192 -95 -7 45 383 429 -46 17280 1834.7 14.4	89 -44 -30 21 193 243 -50 17231 1834.6 17.5	102 -50 -10 24 261 286 -24 17206 1834.5 18.0	253 -119 -10 52 925 1230 -305 16901 1833.4 20.0	237 -99 -5 977 1353 -376 16525 1832.1 22.0	326 -62 971 1277 -306 16219 1831.1 23.0
AVE POWER M PEAK POW MW ENERGY GWH	W 2167.5	237 354 85.2	202 354 33.9	202 355 43.7	226 356 162.7	280 358 208.2	303 372 217.8	291 378 216.3	285 373 212.1	207 372 149.2	178 369 132.3	177 369 63.8	214 368 36.0	220 368 42.3	244 365 181.2	266 361 197.7	275 358 185.1
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	2300 542 -24 458 16035 15225 810 16367 1599.1 11.1	317 21 -11 879 436 444 16811 1600.7 14.6	148 10 13 387 246 141 16951 1601.2 17.7	190 13 481 327 153 17105 1601.7 18.3	364 44 -8 1442 1197 245 17350 1602.6 20.1	236 60 -19 1602 1462 141 17490 1603.0 23.8	689 114 -6 2056 1529 527 18018 1604.8 25.7	162 129 6 29 1455 1816 -361 17657 1603.6 29.5	33 84 2 90 1275 1829 -553 17103 1601.7 29.7	118 21 26 111 1010 1619 -609 16494 1599.6 27.2	14 -6 10 95 822 1120 -298 16196 1598.5 18.2	5 2 0 42 390 529 -139 16057 1598.0 17.8	2 -13 20 211 244 -32 16025 1597.9 17.6	3 1 -2 22 263 203 59 16084 1598.1 12.8	-20 10 -9 1142 1051 91 16176 1598.4 17.1	15 -9 1329 972 357 16533 1599.7 15.8	40 24 -4 1289 645 644 17177 1602.0 11.6
POWER AVE POWER M PEAK POW MW ENERGY GWH	W 2294.6	181 669 65.3	220 672 37.0	229 674 49.4	252 679 181.3	298 681 221.9	324 691 233.4	373 684 277.4	372 674 276.8	337 663 242.6	224 658 166.8	218 655 78.5	215 655 36.1	157 656 30.2	210 657 155.9	195 664 144.9	145 676 97.2
BIG BEND EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER	 103 15122 15122 1682 1420.0 11.1	436 436 1682 1420.0 14.6	246 246 1682 1420.0 17.7	327 327 1682 1420.0 18.3	1197 1197 1682 1420.0 20.1	1462 1462 1682 1420.0 23.8	1529 1529 1682 1420.0 25.7	6 1810 1682 1420.0 29.4	20 1809 1809 1682 1420.0 29.4	25 1595 1595 1682 1420.0 26.8	22 1098 1098 1682 1420.0 17.9	10 520 520 1682 1420.0 17.5	5 239 239 1682 1420.0 17.2	5 198 198 1682 1420.0 12.5	11 1040 1040 1682 1420.0 16.9	972 972 1682 1420.0 15.8	645 645 1682 1420.0 11.6
AVE POWER M PEAK POW MW ENERGY GWH	W 871.3	69 517 25.0	83 509 13.9	86 509 18.5	94 509 67.8	111 509 82.8	120 509 86.6	138 509 102.5	138 509 102.4	127 517 91.4	88 538 65.2	88 538 31.6	87 538 14.6	63 538 12.1	84 538 62.2	77 537 57.1	56 529 37.5
FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	LL 900 80 118 15825 15824 1 3123 1350.0 9.2	122 1 557 265 292 3415 1353.6 8.9	57 1 302 168 134 3549 1355.2 12.1	73 1 400 400 3549 1355.2 22.4	115 4 1308 1308 3549 1355.2 22.0	140 9 1593 1593 3549 1355.2 25.9	185 12 1702 1702 3549 1355.2 28.6	74 18 8 1858 1858 0 3549 1355.2 30.2	57 15 25 1826 1826 0 3549 1355.2 29.7	42 7 31 1598 1742 -144 3405 1353.5 29.3	2 1 25 1074 1711 -637 2768 1345.1 27.8	2 1 511 815 -304 2464 1340.4 27.4	1 0 4 236 381 -145 2319 1337.9 27.4	1 4 194 216 -22 2297 1337.5 13.6	10 3 1036 670 366 2663 1343.5 10.9	3 969 658 311 2974 1348.0 10.7	19 3 661 511 150 3124 1350.0 9.2
POWER AVE POWER M PEAK POW MW ENERGY GWH	W 1563.5	73 346 26.4	102 352 17.1	188 352 40.6	185 352 133.0	217 352 161.5	239 352 172.4	253 352 188.0	248 352 184.8	243 345 175.1	222 310 165.1	206 289 74.2	200 278 33.6	99 276 19.0	81 303 60.6	84 324 62.3	74 331 49.8
GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STORAGE	NT 1450 114 -1 37 17122 17122 358	92 0 1 358 358 358	43 0 -6 206 206 358	55 0 -20 436 436 358	148 5 1 1452 1452 358	174 19 -8 1740 1740 358	166 24 -5 1839 1839 358	86 39 -3 2 1900 1900 358	103 10 1913 1900 13 371	77 -5 1 9 1816 1803 13 384	122 2 3 1826 1826 384	50 5 1 857 857 384	23 2 0 2 400 400 384	27 3 26 264 264 264 384	77 10 5 4 738 738 384	79 1 0 736 736 384	127 3 641 667 -26 358
ELEV FTMSL DISCH KCFS POWER AVE POWER M	1206.0 12.0 W	1206.0 12.0 42	1206.0 14.8 52	1206.0 24.4 84	1206.0 24.4 84	1206.0 28.3 96	1206.0 30.9 103	1206.0 30.9	1206.5 30.9 103	1207.0 30.3	1207.0 29.7 102	1207.0 28.8 100	1207.0 28.8 100	1207.0 16.7 59	1207.0 12.0 43	1207.0 12.0 43	1206.0 12.0 42
GAVINS POI	707.6 NT - SIO	114 15.2 UX CITY	8.7  79	114	60.3	71.7	74.1	76.6 129	76.9	74.1	75.9	35.9	115 16.8	11.3	31.8	31.8	28.5
DEPLETION REGULATED FL KAF KCFS	237 OW AT SI 18435	0UX CIT 522 17.5	y 282 20.3	534 29.9	19 1632 27.4	34 2016 32.8	29 2034 34.2	36 1993 32.4	32 1964 31.9	21 1842 31.0	9 1859 30.2	5 868 29.2	, 405 29.2	3 270 17.0	11 748 12.2	12 729 11.9	12 737 13.3
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWF	24601 2260 -20 1640 50283 R	1435 55 41 51182	669 26 17 51560	860 33 -20 51834	2307 135 -23 52352	3493 548 -31 53249	6073 1558 -59 55671	3346 848 40 101 56115	1194 93 319 54935	1113 -207 49 398 54065	1032 -45 27 343 52967	452 -114 -6 153 52506	211 -53 -44 71 52250	241 -61 14 80 52215	651 -206 -14 175 52135	582 -223 -13 52197	943 -127 -2 52529
AVE POWER M PEAK POW MW ENERGY GWH DAILY GWH	W 8529.4	682 2200 245.6 16.4	725 2202 121.8 17.4	855 2206 184.6 20.5	926 2212 667.1 22.2	1096 2219 815.5 26.3	1246 2244 897.3 29.9	1265 2245 941.2 30.4	1255 2230 933.5 30.1	1096 2219 788.9 26.3	872 2197 649.0 20.9	857 2173 308.4 20.6	924 2161 155.2 22.2	720 2160 138.2 17.3	796 2147 592.0 19.1	805 2168 598.6 19.3	733 2175 492.5 17.6

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 310CT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB

STUDY NO

1

TIME OF	STUDY	07:07:4	4				VALUES	5 IN 100	O AF E	CEPT AS	INDICA	TED				STUDY	NO	7
	28 F	EB01 INI-SUM	15MAR	2001 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT NAT IN DEPLET EVAPOR MOD IN RELEAS STOR C STORAG ELEV F DISCH	PECK- FLOW ION ATION FLOW E HANGE E TMSL KCFS	- 6000 493 503 5004 5728 -724 12860 2223.2 10.0	242 15 227 179 49 12909 2223.4 6.0	113 7 106 69 37 12946 2223.6 5.0	145 9 136 89 47 12993 2223.9 5.0	525 86 439 387 52 13045 2224.2 6.5	925 227 698 461 237 13282 2225.4 7.5	1454 311 1143 506 637 13919 2228.7 8.5	633 206 31 523 -127 13792 2228.1 8.5	263 16 97 523 -373 13419 2226.1 8.5	252 -36 121 167 347 -180 13240 2225.2 5.8	324 -49 105 268 311 -43 13197 2225.0 5.1	167 -21 47 141 179 -38 13159 2224.8 6.0	78 -10 22 66 111 -45 13114 2224.5 8.0	89 -11 25 75 143 -68 13046 2224.2 9.0	295 -88 54 329 615 -286 12760 2222.6 10.0	212 -103 315 676 -361 12399 2220.6 11.0	283 -65 348 611 -263 12136 2219.2 11.0
AVE PO PEAK P ENERGY	WER MW OW MW GWH	912.2	79 199 28.4	66 200 11.0	66 200 14.2	86 200 61.6	99 202 73.6	113 204 81.4	114 204 84.5	113 202 84.1	77 201 55.6	67 201 49.7	79 201 28.6	105 201 17.7	118 200 22.7	131 199 97.4	143 197 106.3	142 195 95.2
GAR NAT IN DEPLET CHAN S EVAPOR REG IN RELEAS STOR C STORAG ELEV F DISCH POWER	RISON- FLOW TOR ATION FLOW E HANGE E TMSL KCFS	- 9400 1053 -10 584 13481 14345 -864 15492 1828.5 17.0	443 16 41 647 565 81 15574 1828.8 19.0	207 8 10 279 208 71 15644 1829.0 15.0	266 10 345 268 77 15722 1829.3 15.0	712 54 -15 1029 1190 -161 15561 1828.7 20.0	1197 150 -10 1498 1353 145 15706 1829.2 22.0	2521 584 -10 2433 1369 1064 16770 1833.0 23.0	1765 383 0 1869 1383 485 17255 1834.7 22.5	496 52 113 854 1353 -499 16756 1832.9 22.0	417 -85 27 141 735 934 -199 16557 1832.3 15.7	400 52 8 122 544 863 -319 16238 1831.1 14.0	164 -58 -10 55 335 418 -83 16155 1830.8 14.0	76 -27 -20 26 168 264 -96 16060 1830.5 19.0	87 -31 -10 29 221 317 -96 15964 1830.2 20.0	222 -37 -10 63 801 1230 -429 15535 1828.6 20.0	165 -20 -10 851 1353 -502 15033 1826.8 22.0	262 1 0 872 1277 -405 14628 1825.3 23.0
AVE PO PEAK P ENERGY	WER MW OW MW GWH	2064.1	224 351 80.5	177 352 29.8	178 353 38.4	236 351 169.9	259 353 192.8	275 364 197.7	273 369 203.4	267 364 198.9	190 362 136.8	169 358 125.9	168 357 60.6	227 356 38.1	238 356 45.7	237 351 176.0	257 346 191.2	266 341 178.4
O NAT IN DEPLET CHAN S EVAPOR REG IN RELEAS STOR C STORAG ELEV F DISCH	AHE IFLOW TOR ATION IFLOW E HANGE E TMSL KCFS	1449 542 -28 523 14701 15621 -920 16185 1598.4 11.8	154 21 -9 689 470 219 16404 1599.2 15.8	72 10 17 295 -8 16396 1599.2 21.3	92 13 0 347 422 -75 16322 1598.9 23.6	229 44 -22 1353 1415 -62 16260 1598.7 23.8	130 60 -9 1414 1620 -206 16054 1598.0 26.4	577 114 -4 1827 1519 308 16361 1599.1 25.5	102 129 2 34 1325 1787 -462 15900 1597.4 29.1	24 84 2 103 1192 1787 -596 15304 1595.1 29.1	65 21 28 126 880 1596 -716 14588 1592.3 26.8	9 -6 8 108 778 1084 -306 14282 1591.1 17.6	2 0 48 368 475 -107 14175 1590.7 16.0	1 -23 22 217 220 -2 14173 1590.7 15.8	1 -5 26 286 196 90 14262 1591.0 12.4	-35 10 56 1129 1067 61 14324 1591.3 17.4	-6 15 -9 1322 950 372 14696 1592.8 15.5	36 24 -5 1285 716 569 15265 1595.0 12.9
AVE PO PEAK P ENERGY	WER MW YOW MW GWH	2281.4	195 661 70.0	262 661 44.0	291 660 62.8	292 659 210.2	322 655 239.7	313 661 225.1	355 652 264.0	351 641 261.2	320 628 230.2	208 622 155.1	188 619 67.6	186 619 31.3	146 621 28.0	205 622 152.2	183 630 136.3	154 641 103.8
BIG EVAPOR REG IN RELEAS STORAG ELEV F DISCH POWER AVE PO PEAK P	BEND- RATION IFLOW E E TMSL KCFS WER MW POW MW	- 129 15492 15492 1682 1420.0 11.8	470 470 1682 1420.0 15.8 75 517	295 295 1682 1420.0 21.3 100 510	422 422 1682 1420.0 23.6 111 509	1415 1415 1682 1420.0 23.8 111 509	1620 1620 1682 1420.0 26.4 123 509	1519 1519 1682 1420.0 25.5 120 509	8 1779 1779 1682 1420.0 28.9 135 509	24 1763 1763 1682 1420.0 28.7 134 509	31 1565 1565 1682 1420.0 26.3 125 517	27 1057 1057 1682 1420.0 17.2 84 538	12 463 463 1682 1420.0 15.5 78 538	6 214 214 1682 1420.0 15.4 78 538	7 190 1682 1420.0 12.0 60 538	14 1053 1053 1682 1420.0 17.1 85 538	950 950 1682 1420.0 15.5 75 538	716 716 1682 1420.0 12.9 62 529
ENERGY	' GWH RANDAL	892.1 L	27.0	16.7	23.9	80.2	91.8	86.1	100.8	99.8	89.8	62.8	28.2	13.0	11.6	63.0	56.0	41.6
NAT IN DEPLET EVAPOR REG IN RELEAS STOR C STORAG ELEV F DISCH	IFLOW ION RATION IFLOW E CHANGE E TMSL KCFS	500 80 147 15766 15766 0 3124 1350.0 9.7	68 1 265 272 3396 1353.4 8.9	32 1 326 191 136 3532 1355.0 13.7	41 1 462 445 17 3549 1355.2 24.9	64 4 1475 1475 3549 1355.2 24.8	51 9 1662 1662 3549 1355.2 27.0	130 12 1637 1637 3549 1355.2 27.5	26 18 10 1777 1777 0 3549 1355.2 28.9	49 15 32 1765 1765 0 3549 1355.2 28.7	23 7 39 1542 1686 -144 3405 1353.5 28.3	1 31 1026 1663 -637 2768 1345.1 27.0	1 12 450 754 -304 2464 1340.4 25.3	0 5 208 353 -145 2319 1337.9 25.5	1 5 184 206 -22 2297 1337.5 13.0	5 3 1042 676 366 2663 1343.5 11.0	-5 3 942 670 272 2935 1347.5 10.9	15 3 728 539 189 3124 1350.0 9.7
AVE PO PEAK P ENERGY	WER MW POW MW GWH	1558.7	73 345 26.4	115 351 19.3	209 352 45.1	208 352 149.7	226 352 168.5	230 352 165.9	242 352 180.0	240 352 178.7	236 345 169.6	216 310 160.5	191 288 68.8	186 277 31.2	94 276 18.1	82 303 61.1	85 321 63.3	78 331 52.4
GAVIN NAT IN DEPLET CHAN S EVAPOR REG IN RELEAS STOR C	IS POIN IFLOW TION STOR ATION IFLOW SE CHANGE	T 1251 114 -1 47 16855 16855	91 0 2 358 358	43 0 -9 224 224	55 0 -21 479 479	124 5 0 1595 1595	138 19 -4 1777 1777	143 24 -1 1755 1755	81 39 -3 3 1814 1814	80 10 9 1827 1814 13	58 -5 1 11 1739 1726 13	105 2 10 1759 1759	47 5 3 794 794	22 2 0 2 371 371	25 3 23 250 250	70 10 4 5 735 735	68 1 0 737 737	101 2 642 668 -26
STORAG ELEV F DISCH	E TMSL KCFS	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 16.2	358 1206.0 26.8	358 1206.0 26.8	358 1206.0 28.9	358 1206.0 29.5	358 1206.0 29.5	371 1206.5 29.5	384 1207.0 29.0	384 1207.0 28.6	384 1207.0 26.7	384 1207.0 26.7	384 1207.0 15.7	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
AVE PC PEAK F ENERGY	WER MW POW MW (GWH	701.4	42 114 15.2	56 114 9.4	92 114 19.8	92 114 65.9	98 114 73.1	100 114 71.8	100 114 74.1	100 115 74.5	100 115 71.9	99 115 73.9	93 115 33.5	93 115 15.6	56 115 10.7	43 77 31.7	43 77 31.8	43 76 28.6
GAVIN NAT IN DEPLET REGULAT KAF KCF	NS POIN NFLOW FION FED FLO	T - SIOU 900 237 W AT SIC 17518	UX CITY 115 6 0UX CIT 468 15.7	 54 3 Y 275 19.8	69 3 544 30.5	90 19 1666 28.0	174 34 1917 31.2	125 29 1851 31.1	75 36 1853 30.1	56 32 1838 29.9	35 21 1740 29.2	24 9 1774 28.8	13 5 802 27.0	6 2 374 27.0	7 3 254 16.0	13 11 737 12.0	-3 12 722 11.7	48 12 704 12.7
TC NAT IN DEPLET CHAN S EVAPOF STORAG SYSTEM	DTAL NFLOW FION STOR RATION GE 4 POWER	19500 2519 -39 1933 49702	1114 59 34 50323	520 28 18 50558	668 35 -21 50625	1744 212 -37 50455	2615 499 -23 50630	4950 1074 -16 52639	2682 811 0 121 52536	968 209 3 378 51082	850 -77 56 469 49856	863 9 18 403 48551	390 -66 -6 179 48019	182 -31 -44 83 47731	208 -35 94 47635	570 -91 -6 205 47348	431 -92 -19 47129	745 -25 -2 47192
AVE PO PEAK F ENERGY	OWER MW POW MW (GWH GWH	8409.9	687 2189 247.5	776 2189 130.3 18.6	945 2188 204.2 22.7	1024 2186 737.4 24.6	1128 2185 839.5 27.1	1150 2204 827.9 27.6	1219 2200 906.7 29.2	1206 2183 897.3 28.9	1047 2168 753.9 25.1	844 2144 627.9 20.3	798 2120 287.2 19.1	875 2107 146.9 21.0	713 2106 136.9 17.1	782 2090 581.5 18.8	786 2108 584.8 18.9	744 2113 499.9 17.9
	•	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

2000-2001 AOP LOWER DECILE RUNOFF

NAVIGATION SEASON SHORTENED AT 52 MAF ON JULY 1 VALUES IN 1000 AF EXCEPT AS INDICATED STUDY NO

TIME OF STUDY 13:26:06

INI-SUM 15MAR

22MAR

31MAR

30APR

31MAY

30JUN

31JUL

31AUG

30SEP

310CT

15NOV

22NOV

30NOV

31DEC

31JAN

28FEB

EB01 2001 INI-SUM 15MAR 22MAR 28FEB01 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV -31DEC 31JAN 28FFB --FORT PECK--NAT INFLOW DEPLETION -11 24 71 143 72 141 30 268 -77 102 -78 53 15 9 86 227 -9 21 62 -20 46 -46 488 -5 94 -64 117 -79 EVAPORATION 179 41 12901 387 42 13019 179 -46 707 -423 11822 639 MOD INFLOW RELEASE STOR CHANGE STORAGE 5562 -1356 12860 89 43 12977 209 13354 -224 13130 262 33 12731 -49 12636 33 126 -104 -72 12564 -318 11504 STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW 2223.2 2223.4 2223.6 6.0 5.0 2223.8 2224.0 2224.7 2225.8 2224.6 2222 8 2222.3 2222.5 2222.2 2221.9 6.0 8.0 2221.5 2219.8 2217.4 215.6 5.0 8.0 78.7 14.2 61.6 97.9 ENERGY GWH 876.6 28.4 11.0 68.6 76.1 78.2 46.4 41.5 28.2 17.5 22.5 96.2 109.5 -GARRISON--NAT INFLOW DEPLETION CHAN STOR EVAPORATION -16 564 -61 -18 53 329 -28 -21 25 -32 -10 28 223 -16 -5 -39 -10 41 Ř -103 -26 -10 136 -10 1436 1230 721 952 REG INFLOW 756 REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW ENERGY GWH -1632 15492 782 16128 -478 15857 -36 15253 -67 15186 -79 15107 -538 14569 -414 14155 -295 13860 -92 15400 -10 15390 -26 15364 15429 -82 15347 16335 -314 15544 1827.7 1828.1 19.0 1828.2 1827.1 19.0 1828.5 1828.1 15.0 1827.9 20.5 1829.8 19.5 1828.7 14.8 1827.6 12.3 1827.3 1823.5 21.0 1822.3 1828.0 1830.7 20.5 1831.5 20.0 1825.0 17 0 20.0 350 135.5 357 174.4 348 107.8 348 52.0 349 29.7 359 178.0 354 351 126.5 332 159.7 80.4 178.8 33.4 178.5 173.0 172.1 1860 3 38.1 -OAHE 10 17 44 NAT INFLOW 114 84 -2 -48 -5 2 - 3 -12 24 -20 -6 12 CHAN STOR EVAPORATION REG INFLOW -19 504 13115 -9 Õ -4 -23 -10 -5 -5 1153 1719 826 1377 -551 675 791 312 510 -197 263 141 189 1112 1040 1718 -678 474 259 431 -57 1434 -347 994 RELEASE 484 -1709 16186 1598.4 11.7 -8 16437 1599.3 22.8 STOR CHANGE -318 -129 -566 -116 13674 14477 STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER 1599.4 15.9 1599.1 24.1 1597.9 24.1 596.7 26.0 594.0 28.0 591.4 27.9 1587.8 17.1 1588.7 8.9 1591.1 12.6 588.6 12.9 1588.2 1591.9 17.9 96.2 24.4 589.1 23.1 89.2 16.2 POWER AVE POWER MW PEAK POW MW ENERGY GWH 655 212.6 626 142.0 70.5 47.1 64.1 235.3 212.4 249.7 246.3 195.0 111.5 71.5 13.9 19.8 140.5 110.1 2142.3 --BIG BEND-EVAPORATION REG INFLOW RELEASE 14695 14695 1711 1711 1682 1694 1694 764 764 498 498 983 983 93 93 1682 474 1682 316 1682 1434 1682 1450 1682 1346 775 1682 1682 1682 STORAGE ELEV FTMSL DISCH KCFS 1420.0 1420.0 11.7 15.9 420.0 1420.0 1420.0 1420.0 1420.0 1420.0 27.8 1420.0 27.5 420.0 1420.0 1420.0 16.7 1420.0 1420.0 1420.0 1420.0 1420.0 26.0 22.6 16.0 POWER AVE POWER MW PEAK POW MW ENERGY GWH 27.1 17.9 30.3 5.7 57.7 24.4 81.2 90.6 82.1 95.9 77.4 46.7 8.2 59.3 46.5 848.0 96.9 -- FORT RANDALL --NAT INFLOW DEPLETION 1 1 1 4 9 -10 -52 -3 -1 3 - 1 -6 3 5 127 127 13 968 695 273 2570 80 141 14770 10 32 10 5 39 1291 1606 -315 3234 678 1578 EVAPORATION 539 464 1558 676 1696 1683 520 - 37 88 REG INFLOW 1473 REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS 14770 527 14769 268 1 260 3123 3383 1350.0 1353.2 9.7 9.0 149 3532 1355.0 13.8 -900 2334 1338.2 25.7 2297 1337.5 6.3 1337.5 8.0 2660 n õ 1355.2 27.4 1337.5 17.5 1342.1 1343.5 11.0 1355.2 25.0 1355.2 24.8 1355.2 26.4 1355.2 26.2 1355.2 351.4 1350.0 9.7 POWER AVE POWER MW PEAK POW MW 352 149.5 352 164.8 352 158.0 352 171.9 352 170.6 278 146.5 351 19.4 337 160.3 276 45.7 276 11.2 7.8 62.4 51.5 62.4 344 26.7 45.2 1453.7 ENERGY GWH --GAVINS POINT NAT INFLOW DEPLETION CHAN STOR EVAPORATION 0 -9 39 -3 3 10 10 -21 0 -5 1 15 21 - 3 1 -3 -1 47 -6 5 571 223 477 1589 1734 1672 1728 1672 143 740 741 REG INFLOW RELEASE 13 STOR CHANGE -26 STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS 206.0 28.2 1206.0 28.1 1206.0 28.1 207.0 1207.0 27.2 207.0 9.0 1207.0 9.0 207.0 1206.0 1206.0 12.0 12.0 1206.0 16.1 1206.0 26.7 1206.0 26.7 207.0 1206.0 28.1 POWER AVE POWER MW PEAK POW MW ENERGY GWH 77 31.9 77 32.0 76 28.4 ۹. 9.4 65.7 71.5 68.9 71.2 71.6 68.8 70.5 24.4 5.4 15.1 19.7 660.6 --GAVINS POINT - SIOUX CITY-NAT INFLOW 550 36 DEPLETION 237 6 REGULATED FLOW AT SIOUX CITY 3 34 29 36 9 5 11 12 3 19 32 -5 12 2 3 KAF KCFS 27.7 13.0 17.1 27.7 30.0 29.4 28.3 27.9 27.5 27.3 19.4 9.2 9.1 12.0 11.8 12.2 -TOTAL -31 16 -32 -21 80 45750 -123 54 NAT INFLOW DEPLETION CHAN STOR EVAPORATION 974 -10 661 -17 2 -74 -41 1871 34 -19 -36 -23 92 45722 -83 -21 199 -68 -21 -28 ē -20 50073 46094 45777 STORAGE STORAGE SYSTEM POWER AVE POWER MW PEAK POW MW ENERGY GWH 2187 134.5 19.2 2185 205.7 22.9 2174 809.5 26.1 2171 846.4 27.3 2152 835.5 27.0 2082 110.4 13.8 2187 2180 2084 772.0 25.7 674.3 22.5 524.5 16.9 83.8 12.0 538.9 17.4 248.2 16.5 7841.5 252.1 16.8 706.0 23.5 562.5 537.2 19.2 DAILY GWH

.

DATE OF STUDY	11/28/2	2000				2000-2	2001 AOF	LOWER	DECILE	RUNOFF			99001	9901 9	901 PA	GE	1
TIME OF STUDY	10:42:1	19				NAVIGA VALUES	ATION SE 5 IN 100	ASON SH	ORTENED	AT 40 INDICA	MAF ON	JULY 1			STUDY	NO	9
28FE	BO1 INI-SUM	15MAR	2001 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL	- 5100 406 485 4209 5709 -1500 12860 2223.2	234 15 220 179 41 12901 2223.4	109 7 102 69 33 12934 2223.6	140 9 132 89 43 12977 2223.8	515 86 429 387 42 13019 2224.0	783 227 556 461 95 13114 2224.5	996 311 685 506 179 13293 2225.5	439 141 268 523 -255 13039 2224.1	253 -5 93 165 523 -358 12681 2222.2	242 -64 116 190 291 -101 12580 2221.6	320 -77 101 296 261 35 12614 2221.8	159 -20 46 133 179 -46 12569 2221.6	74 -9 21 62 111 -49 12519 2221.3	85 -11 24 71 143 -72 12447 2220.9	271 -78 52 297 615 -318 12129 2219.1	205 -79 284 707 -423 11706 2216.7	275 -46 321 666 -345 11361 2214.7
DISCH KCFS POWER AVE POWER MW PEAK POW MW ENERGY GWH	10.0 897.8	6.0 79 199 28.4	5.0 66 200 11.0	5.0 66 200 14.2	6.5 86 200 61.6	7.5 99 201 73.5	8.5 112 202 80.8	8.5 112 200 83.4	8.5 111 198 82.8	4.9 64 198 46.0	4.2 55 198 41.2	6.0 78 198 28.2	8.0 104 197 17.5	9.0 117 197 22.4	10.0 129 195 96.0	11.5 147 192 109.2	12.0 151 189 101.8
GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	- 7299 783 -22 560 11643 13451 -1808 15492 1828.5 17.0	270 16 41 473 565 -92 15400 1828.1 19.0	126 8 10 198 208 -10 15390 1828.1 15.0	162 10 241 268 -26 15364 1828.0 15.0	700 54 -16 1017 952 65 15429 1828.2 16.0	903 150 -10 1204 1261 -57 15372 1828.0 20.5	2020 484 -10 2031 1279 752 16124 1830.7 21.5	1277 298 0 35 1467 1291 176 16300 1831.4 21.0	361 22 109 752 1291 -539 15761 1829.4 21.0	277 -103 37 136 573 929 -356 15405 1828.2 15.6	390 40 7 117 501 796 -295 15109 1827.1 12.9	161 -61 52 329 385 -56 15054 1826.9 12.9	75 -28 -21 24 169 236 -67 14987 1826.6 17.0	86 -32 -10 28 223 301 -79 14908 1826.3 19.0	108 -39 -10 59 692 1230 -538 14371 1824.3 20.0	160 -26 -16 877 1291 -414 13957 1822.7 21.0	223 -10 -5 894 1166 -272 13685 1821.6 21.0
AVE POWER MW PEAK POW MW ENERGY GWH	1901.6	223 350 80.4	176 349 29.7	176 349 38.1	188 350 135.5	240 349 178.8	254 357 182.9	251 359 186.7	250 353 185.9	184 350 132.8	152 346 113.1	151 346 54.5	198 345 33.3	221 344 42.3	230 338 171.3	239 334 177.5	236 330 158.9
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS DOWED	1049 542 -19 504 13435 15324 -1889 16186 1598.4 11.7	197 21 -9 733 474 259 16445 1599.4 15.9	92 10 17 308 316 -8 16437 1599.3 22.8	118 13 0 373 431 -57 16380 1599.1 24.1	183 44 -4 1087 1434 -347 16033 1597.9 24.1	100 60 -20 1281 1599 -318 15714 1596.7 26.0	215 114 -4 1376 1450 -74 15640 1596.4 24.4	82 129 2 1214 1719 -505 15136 1594.5 28.0	21 84 99 1129 1718 -589 14547 1592.2 27.9	64 21 122 875 1549 -674 13873 1589.5 26.0	5 -6 13 104 716 1052 -336 13537 1588.1 17.1	-5 2 46 332 438 -106 13431 1587.6 14.7	-2 1 -20 22 192 202 -11 13421 1587.6 14.6	-3 1 -10 25 264 188 76 13496 1587.9 11.9	-48 10 -5 54 1113 985 128 13624 1588.4 16.0	-12 15 -5 1259 775 484 14108 1590.4 12.6	41 24 1183 994 190 14298 1591.2 17.9
AVE POWER MW PEAK POW MW ENERGY GWH	2212.4	196 662 70.5	280 662 47.1	297 661 64.1	295 655 212.6	316 649 235.3	295 648 212.5	336 638 250.2	332 627 247.1	305 613 219.8	199 606 148.0	170 604 61.3	168 604 28.3	137 605 26.3	186 608 138.2	147 618 109.6	210 622 141.4
BIG BEND- EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS DOWED	- 15195 15195 15195 1682 1420.0 11.7	474 474 1682 1420.0 15.9	316 316 1682 1420.0 22.8	431 431 1682 1420.0 24.1	1434 1434 1682 1420.0 24.1	1599 1599 1682 1420.0 26.0	1450 1450 1682 1420.0 24.4	8 1711 1711 1682 1420.0 27.8	24 1694 1694 1682 1420.0 27.5	31 1518 1518 1682 1420.0 25.5	27 1025 1025 1682 1420.0 16.7	12 426 426 1682 1420.0 14.3	6 197 197 1682 1420.0 14.2	7 182 182 1682 1420.0 11.4	14 971 971 1682 1420.0 15.8	775 775 1682 1420.0 12.6	994 994 1682 1420.0 17.9
AVE POWER MW PEAK POW MW ENERGY GWH	875.9	75 518 27.1	107 510 17.9	113 509 24.4	113 509 81.2	122 509 90.6	114 509 82.1	130 509 96.9	129 509 95.9	121 517 87.1	82 538 60.9	72 538 25.9	71 538 12.0	58 538 11.1	79 538 58.6	63 538 46.5	86 529 57.7
FORT RANDAL NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	L 300 80 147 15268 15267 1 3123 1350.0 9.7	55 1 527 268 260 3383 1353.2 9.0	26 1 341 192 149 3532 1355.0 13.8	33 1 463 446 17 3549 1355.2 25.0	43 4 1473 1473 0 3549 1355.2 24.8	35 9 1625 1625 3549 1355.2 26.4	120 12 1558 1558 0 3549 1355.2 26.2	13 18 10 1696 1696 3549 1355.2 27.6	36 15 32 1683 1683 0 3549 1355.2 27.4	-10 7 39 1462 1606 -144 3405 1353.5 27.0	-52 1 31 941 1578 -637 2768 1345.1 25.7	-3 1 12 410 714 -304 2464 1340.4 24.0	-1 0 5 190 335 -145 2319 1337.9 24.1	-1 1 5 174 196 -22 2297 1337.5 12.4	3 13 956 683 273 2570 1342.1 11.1	-6 3 676 90 2660 1343.5 11.0	12 3 1003 539 464 3124 1350.0 9.7
AVE POWER MW PEAK POW MW ENERGY GWH	1507.3	74 344 26.7	116 351 19.4	209 352 45.2	208 352 149.5	221 352 164.8	219 352 158.0	231 352 171.9	229 352 170.6	225 345 161.6	205 310 152.4	181 288 65.2	176 277 29.6	90 276 17.3	82 297 61.3	84 303 62.4	77 332 51.5
GAVINS POIN NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	T 1200 114 -1 47 16306 16306 358 1206.0 12.0	87 0 1 357 357 358 1206.0 12.0	41 0 -9 223 223 358 1206.0 16.1	52 0 -21 477 477 358 1206.0 26.7	120 5 0 1589 1589 358 1206.0 26.7	131 19 -3 1734 1734 1734 358 1206.0 28.2	138 24 0 1672 1672 358 1206.0 28.1	76 39 -3 3 1728 1728 358 1206.0 28.1	76 10 9 1741 1728 13 371 1206.5 28.1	55 -5 1 11 1655 1642 13 384 1207.0 27.6	104 2 10 1672 1672 384 1207.0 27.2	45 5 753 753 384 1207.0 25.3	21 2 0 2 351 351 1207.0 25.3	24 3 22 237 237 384 1207.0 15.0	67 10 2 5 737 737 384 1207.0 12.0	65 1 0 741 741 1207.0 12.0	98 2 639 665 -26 358 1206.0 12.0
POWER AVE POWER MW PEAK POW MW ENERGY GWH	681.3	42 114 15.1	56 114 9.4	91 114 19.7	91 114 65.7	96 114 71.5	96 114 68.9	96 114 71.2	96 115 71.6	96 115 68.8	95 115 70.5	88 115 31.8	88 115 14.8	53 115 10.2	43 77 31.8	43 77 32.0	42 76 28.4
GAVINS POIN NAT INFLOW DEPLETION REGULATED FLO KAF KCFS	T - SIO 550 237 W AT SIO 16619	UX CITY 36 6 0UX CIT 387 13.0	 17 3 Y 237 17.1	22 3 495 27.7	77 19 1647 27.7	144 34 1844 30.0	106 29 1749 29.4	47 36 1739 28.3	22 32 1718 27.9	15 21 1636 27.5	14 9 1677 27.3	10 5 757 25.5	4 2 353 25.5	5 3 240 15.1	10 11 736 12.0	-5 12 724 11.8	26 12 679 12.2
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWER	15498 2162 -41 1871 49702	880 59 34 50170	411 28 18 50334	528 35 -21 50310	1638 212 -19 50070	2096 499 -33 49789	3595 974 -14 50647	1934 661 0 117 50063	769 158 0 366 48591	643 -123 63 455 47328	781 -31 22 390 46095	367 -68 -15 173 45583	171 -32 -41 80 45312	195 -36 2 91 45215	408 -83 -13 198 44760	407 -74 -20 44497	675 -17 -3 44507
AVE POWER MW PEAK POW MW ENERGY GWH DAILY GWH	8076.3	689 2187 248.2 16.5	801 2187 134.5 19.2	952 2185 205.7 22.9	981 2180 706.0 23.5	1095 2174 814.4 26.3	1091 2182 785.2 26.2	1156 2173 860.2 27.7	1148 2154 853.9 27.5	995 2138 716.1 23.9	788 2113 586.0 18.9	741 2089 266.9 17.8	806 2077 135.5 19.4	675 2075 129.7 16.2	749 2053 557.1 18.0	722 2061 537.2 17.3	803 2078 539.7 19.3
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

ΤI	ME OF STUDY	11:02:0	01				VALUES	TN 100	0 AF F							STUDY	NO	10
	28FE	BO2 INI-SUM	15MAR	2002 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	)3 31DEC	31JAN	28FEB
N/ DI E'	-FORT PECK- AT INFLOW EPLETION VAPORATION	7400 353 448	264 -13	123 -6	158 -8	628 46	1210 329	1851 575	829 170 27	324 -89 85	319 -141 107	398 -70 94	188 -38 43	88 -18 20	100 -20 23	310 -130 49	261 -143	349 -93
N N N N N N N N N N N N N N N N N N N	DD INFLOW ELEASE TOR CHANGE TORAGE LEV FTMSL ISCH KCFS DOWED	6465 135 13970 2229.0 10.5	277 179 98 14068 2229.5 6.0	129 69 14128 2229.8 5.0	166 89 77 14204 2230.2 5.0	582 417 165 14370 2231.0 7.0	492 389 14759 2232.9 8.0	1276 1119 157 14916 2233.6 18.8	553 79 14995 2234.0 9.0	328 553 -226 14769 2232.9 9.0	353 344 9 14778 2233.0 5.8	374 277 97 14874 2233.4 4.5	182 134 48 14923 2233.6 4.5	85 63 22 14945 2233.8 4.5	97 159 -61 14884 2233.5 10.0	391 615 -224 14660 2232.4 10.0	404 707 -303 14357 2230.9 11.5	442 694 -252 14104 2229.7 12.5
A PI EI	VE POWER MW EAK POW MW NERGY GWH	1023.7	80 205 29.0	67 205 11.3	67 205 14.5	94 206 67.9	108 207 80.4	207 208 149.4	122 208 91.0	122 208 90.9	79 208 56.6	61 208 45.6	61 208 22.1	61 208 10.3	136 208 26.1	135 207 100.8	155 206 115.3	168 205 112.7
N/ DI CI	GARRISON- AT INFLOW EPLETION HAN STOR	 11001 901 -22	469 -8 46	219 -4 10	282 -5	853 -15 -20	1423 215 -10	2958 780 -109	2066 495 97	581 13	497 -124 32	454 11 13	192 -92	89 -43	102 -49 -54	253 -112 0	237 -98 -15	326 -64 -10
	EG INFLOW ELEASE TOR CHANGE TORAGE LEV FTMSL ISCH KCFS	16029 14933 1096 16219 1831.1 23.0	702 506 196 16415 1831.8 17.0	302 236 66 16481 1832.0 17.0	376 303 72 16554 1832.2 17.0	1264 1190 74 16628 1832.5 20.0	1690 1414 276 16903 1833.5 23.0	3188 1488 1700 18603 1839.1 25.0	2190 1506 683 19287 1841.2 24.5	1022 1476 -454 18833 1839.8 24.0	873 964 -91 18742 1839.5 16.2	625 878 -252 18489 1838.7 14.3	369 425 -56 18434 1838.5 14.3	172 198 -26 18408 1838.5 14.3	230 317 -88 18320 1838.2 20.0	925 1230 -305 18016 1837.2 20.0	1027 1414 -387 17629 1835.9 23.0	1074 1388 -314 17314 1834.9 25.0
A PI Ef	VE POWER MW EAK POW MW NERGY GWH	1 2237.3	204 360 73.5	205 361 34.4	205 362 44.3	241 362 173.6	278 365 206.8	308 382 221.8	309 390 230.1	303 384 225.7	205 383 147.4	180 381 134.0	180 380 64.6	179 380 30.1	250 379 48.1	249 376 185.5	284 372 211.5	306 369 205.9
	OAHE AT INFLOW EPLETION HAN STOR	2300 557 _9	317 22 25	148 10	190 13	364 45 -12	236 61 -12	689 117 -8	162 134 2	33 87 2	118 22 32	14 -7 8	5 2	2 1 0	3 1 -25	-20 11 0	15 -13	40 24 -9
	EG INFLOW ELEASE TOR CHANGE TORAGE LEV FTMSL ISCH KCFS	16203 15956 248 17177 1602.0 11.6	826 552 274 17451 1602.9 18.5	374 144 230 17681 1603.7 10.3	480 357 123 17804 1604.1 20.0	1497 1292 205 18009 1604.8 21.7	1577 1554 23 18032 1604.9 25.3	2051 1612 439 18471 1606.3 27.1	1507 1902 -396 18076 1605.0 30.9	1332 1915 -583 17493 1603.0 31.1	980 1703 -723 16770 1600.5 28.6	811 1206 -395 16375 1599.1 19.6	385 571 -186 16190 1598.5 19.2	180 263 -83 16106 1598.1 19.0	272 217 54 16160 1598.3 13.7	1150 1051 99 16259 1598.7 17.1	1386 972 414 16673 1600.2 15.8	1396 645 751 17424 1602.8 11.6
A PI EI	POWER VE POWER MW EAK POW MW NERGY GWH	/ 2421.7	233 681 83.7	131 685 21.9	253 687 54.6	275 691 198.1	320 691 238.4	345 699 248.2	393 692 292.7	392 681 291.9	356 668 256.6	242 661 180.3	236 658 84.9	233 656 39.1	168 657 32.3	210 659 156.1	195 667 145.2	145 680 97.6
	BIG BEND- VAPORATION EG INFLOW ELEASE TORAGE LEV FTMSL ISCH KCFS DOVED	 103 15852 15852 1682 1682 1420.0 11.6	552 552 1682 1420.0 18.5	144 144 1682 1420.0 10.3	357 357 1682 1420.0 20.0	1292 1292 1682 1420.0 21.7	1554 1554 1682 1420.0 25.3	1612 1612 1682 1420.0 27.1	6 1896 1896 1682 1420.0 30.8	20 1895 1895 1682 1420.0 30.8	25 1678 1678 1682 1420.0 28.2	22 1184 1184 1682 1420.0 19.3	10 561 561 1682 1420.0 18.9	5 259 1682 1420.0 18.6	5 212 212 1682 1420.0 13.4	11 1040 1040 1682 1420.0 16.9	972 972 1682 1420.0 15.8	645 645 1682 1420.0 11.6
A PI E	VE POWER MW EAK POW MW NERGY GWH	912.9	87 510 31.3	48 509 8.1	94 509 20.2	102 509 73.2	118 509 88.0	127 509 91.3	144 509 107.4	144 509 107.3	134 517 96.2	94 538 70.3	95 538 34.1	94 538 15.7	68 538 13.0	84 538 62.2	77 537 57.1	56 529 37.5
I N/ DI	FORT RANDAL AT INFLOW EPLETION	L 900 80	122 1	57 1	73 1	115 4	140 9	185 12	74 18 8	57 15 25	42 7 31	2 1 25	2 1	1 0 4	1	10 3	3	19 3
RI	EG INFLOW ELEASE TOR CHANGE	16555 16555 0	673 265 408	200 183 17	430 430	1403 1403	1685 1685	1785 1785	1944 1944 0	1912 1912 0	1681 1825 -144	1161 1798 -637	552 856 -304	255 400 -145	209 230 -22	1036 670 366	969 658 311	661 511 150
S E D	TORAGE LEV FTMSL ISCH KCFS	3124 1350.0 9.2	3532 1355.0 8.9	3549 1355.2 13.2	3549 1355.2 24.1	3549 1355.2 23.6	3549 1355.2 27.4	3549 1355.2 30.0	3549 1355.2 31.6	3549 1355.2 31.1	3405 1353.5 30.7	2768 1345.1 29.2	2464 1340.4 28.8	2319 1337.9 28.8	2297 1337.5 14.5	2663 1343.5 10.9	2974 1348.0 10.7	3124 1350.0 9.2
A' Pi El	POWER VE POWER MW EAK POW MW NERGY GWH	1635.4	74 351 26.6	111 352 18.7	202 352 43.6	198 352 142.5	229 352 170.7	251 352 180.6	264 352 196.6	260 352 193.3	255 345 183.4	233 310 173.2	217 289 77.9	210 278 35.2	105 276 20.2	81 303 60.6	84 324 62.3	74 331 49.8
 N/ DI CI	GAVINS POIN AT INFLOW EPLETION HAN STOR	1450 1450 114 -1 37	92 0 1	43 0 -8	55 0 -21	148 5 1	174 19 -7	166 24 -5	86 39 -3 2	103 10 1 7	77 -5 1 9	122 2 3 8	50 5 1	23 2 0	27 3 27	77 10 7	79 1 0	127 3
RI	EG INFLOW ELEASE TOR CHANGE	17853 17853	358 358	218 218	464 464	1547 1547	1832 1832	1922 1922	1986 1986	1999 1986 13	1899 1886 13	1912 1912	899 899	419 419	279 279	740 740	736 736	641 667 -26
S E D	TORAGE LEV FTMSL ISCH KCFS POWER	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 15.7	358 1206.0 26.0	358 1206.0 26.0	358 1206.0 29.8	358 1206.0 32.3	358 1206.0 32.3	371 1206.5 32.3	384 1207.0 31.7	384 1207.0 31.1	384 1207.0 30.2	384 1207.0 30.2	384 1207.0 17.6	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
A' Pi Ei	VE POWER MU EAK POW MW NERGY GWH	730.2	42 114 15.2	55 114 9.2	89 114 19.2	89 114 64.0	100 114 74.7	106 114 76.4	106 114 78.9	107 115 79.3	106 115 76.4	105 115 78.3	103 115 37.1	103 115 17.3	62 115 11.9	43 77 31.9	43 77 31.8	42 76 28.5
N. D	GAVINS POIN AT INFLOW EPLETION	1550 1550 239		79 3	102 3	199 19	310 34	224 29	129 36	96 33	60 21	42 9	16 5	7 2	9 3	21 11	5 12	82 13
RE	KAF KCFS	19164	522 17.5	294 21.2	563 31.5	1727 29.0	2108 34.3	2117 35.6	2079 33.8	2049 33.3	1925 32.4	1945 31.6	910 30.6	424 30.6	285 18.0	750 12.2	729 11.9	736 13.2
N. Di Ci	TOTAL AT INFLOW EPLETION HAN STOR	24601 2244 - 32	1435 8 72	669 4 2	860 5 -21	2307 104 -32	3493 667 -30	6073 1537 -122	3346 892 95	1194 69 3	1113 -220 65	1032 -54 24	452 -117 1	211 -54 0	241 -62 -52	651 -207 7	582 -210 -28	943 -117 -16
E S S	VAPORATION TORAGE YSTEM POWER	1683 52529	53506	53879	54151	54595	55283	57580	104 57946	328 56697	409 55761	352 54573	157 54076	72 53844	82 53727	179 53663	53698	54007
A' Pi Ei Di	VE POWER MW EAK POW MW NERGY GWH AILY GWH	8961.2	720 2222 259.3 17.3	617 2226 103.7 14.8	910 2229 196.5 21.8	999 2234 719.2 24.0	1155 2239 859.0 27.7	1344 2263 967.7 32.3	1339 2266 996.6 32.1	1329 2248 988.4 31.9	1134 2236 816.6 27.2	916 2212 681.8 22.0	891 2188 320.8 21.4	880 2175 147.8 21.1	789 2173 151.6 18.9	803 2160 597.1 19.3	838 2182 623.2 20.1	792 2191 531.9 19.0
		INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

### 2000-2001 AOP EXTENSIONS, MEDIAN RUNOFF

STUDY NO 11

TIME OF STUDY	11:02:0	01				VALUES	IN 100	0 AF E)	CEPT AS	INDICA	TED				STUDY	NO	11
28FE	BO3 INI-SUM	15MAR	2003 22MAR	3 31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	29FEB
FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	7400 366 449 6585 6765 -181 14104 2229.7 12.5	264 -13 277 179 99 14203 2230.2 6.0	123 -6 129 69 60 14263 2230.5 5.0	158 -8 166 89 77 14340 2230.8 5.0	628 50 578 476 102 14442 2231.3 8.0	1210 324 886 553 333 14775 2232.9 9.0	1851 582 1269 655 614 15389 2235.8 11.0	829 176 28 625 646 -20 15369 2235.7 10.5	324 -84 87 321 615 -294 15075 2234.4 10.0	319 -141 108 352 567 -215 14860 2233.4 9.5	398 -71 94 375 413 -38 14822 2233.2 6.7	188 -37 42 182 238 -56 14765 2232.9 8.0	88 -17 20 85 125 -40 14725 2232.7 9.0	100 -19 22 97 159 -62 14664 2232.4 10.0	310 -128 48 390 615 -225 14438 2231.3 10.0	261 -140 401 676 -275 14163 2230.0 11.0	349 -102 451 690 -239 13924 2228.8 12.0
POWER AVE POWER MW PEAK POW MW ENERGY GWH	1107.6	81 205 29.0	67 206 11.3	67 206 14.6	108 206 77.6	122 208 90.5	150 210 107.7	143 210 106.7	136 209 101.4	129 208 93.2	91 208 67.9	108 207 39.1	122 207 20.5	135 207 26.0	135 206 100.4	148 205 110.0	161 204 111.7
-GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER	- 11001 919 5 522 16330 16285 45 17314 1834.9 25.0	469 -7 65 720 506 215 17529 1835.6 17.0	219 -3 10 302 236 66 17595 1835.8 17.0	282 -4 375 303 72 17666 1836.0 17.0	853 -9 -30 1308 1190 118 17784 1836.4 20.0	1423 204 -10 1762 1537 225 18010 1837.2 25.0	2958 795 -20 2798 1607 1191 19201 1840.9 27.0	2066 516 52 2168 1629 539 19740 1842.6 26.5	581 18 5 102 1081 1599 -517 19222 1841.0 26.0	497 -126 5 126 1068 1245 -177 19045 1840.5 20.9	454 6 27 109 780 1103 -323 18722 1839.5 17.9	192 -95 -13 49 463 534 -71 18651 1839.2 17.9	89 -44 -10 23 226 278 -52 18600 1839.1 20.0	102 -50 -10 26 275 317 -42 18558 1838.9 20.0	253 -112 0 56 924 1230 -306 18252 1838.0 20.0	237 -98 -10 1001 1476 -474 17778 1836.4 24.0	326 -71 -10 1077 1496 -418 17360 1835.0 26.0
AVE POWER MW PEAK POW MW ENERGY GWH	2459.5	209 371 75.3	210 372 35.2	210 373 45.4	247 374 177.9	309 376 230.0	335 388 241.1	335 398 249.1	330 387 245.2	265 385 190.6	227 383 168.7	226 382 81.4	252 382 42.3	251 381 48.3	251 378 186.4	298 374 221.5	318 370 221.2
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MM PFAF POW MM	2300 570 -4 17532 16436 1096 17424 1602.8 11.6	317 22 33 834 552 282 17706 1603.8 18.5 234 685	148 10 374 150 223 17930 1604.5 10.8 137 689	190 13 480 370 110 18040 1604.9 20.7 263 691	364 45 -12 1497 1334 163 18203 18203 18203 22.4 285 694	236 62 -20 1691 1603 88 18291 1605.7 26.1 332 696	689 120 -8 2168 1666 502 18793 1607.4 28.0 358 704	162 138 2 30 1625 1958 -333 18460 1606.3 31.8 407 699	33 90 2 94 1450 1970 -520 17940 1604.6 32.0 407 689	118 23 21 115 1246 1756 -511 17430 1602.8 29.5 371 680	14 -7 12 99 1037 1261 -224 17206 1602.1 20.5 257 676	5 2 45 493 598 -105 17100 1601.7 20.1 251 674	2 1 250 276 -26 17074 1601.6 19.9 248 674	3 0 24 296 259 37 17111 1601.7 16.3 204 675	-20 11 52 1147 1043 104 17215 1602.1 17.0 212 676	15 -17 1444 972 472 17687 1603.7 15.8 199 685	40 25 -8 1502 669 833 18521 1606.5 11.6 148 700
ENERGY GWH	2518.4	84.1	23.0	56.8	205.2	246.9	257.7	303.0	302.5	267.4	191.3	90.4	41.7	39.1	157.9	148.0	103.2
EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW	103 16333 16333 1682 1420.0 11.6	552 552 1682 1420.0 18.5 87 510	150 150 1682 1420.0 10.8 51 509	370 370 1682 1420.0 20.7 97 509	1334 1334 1682 1420.0 22.4 105 509	1603 1603 1682 1420.0 26.1 122 509	1666 1666 1682 1420.0 28.0 131 509	6 1952 1952 1682 1420.0 31.7 149 509	20 1950 1950 1682 1420.0 31.7 148 509	25 1731 1731 1682 1420.0 29.1 138 517	22 1240 1240 1682 1420.0 20.2 99 538	10 588 588 1682 1420.0 19.8 99 538	5 271 271 1682 1420.0 19.5 98 538	5 254 254 1682 1420.0 16.0 81 538	11 1031 1031 1682 1420.0 16.8 83 538	972 972 1682 1420.0 15.8 77 537	669 669 1682 1420.0 11.6 56 529
FORT RANDAL NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MM	940.5 L 900 80 118 17035 17035 0 3124 1350.0 9.2	31.3 122 1 673 265 408 3532 1355.0 8.9 74	57 1 206 189 17 3549 1355.2 13.6 115	21.0 73 1 443 443 3549 1355.2 24.8 208	115 4 1445 1445 3549 1355.2 24.3 204	90.8 140 9 1734 1734 3549 1355.2 28.2 28.2 236	94.3 185 12 1839 1839 3549 1355.2 30.9 258	74 18 2000 2000 3549 1355.2 32.5 272	57 15 25 1967 1967 0 3549 1355.2 32.0 267	42 7 31 1735 1879 -144 3405 1353.5 31.6 262	2 1 25 1216 1853 -637 2768 1345.1 30.1 240	2 1 10 579 883 -304 2464 1340.4 29.7 223	16.5 1 0 4 268 413 -145 2319 1337.9 29.7 216	15.5 1 250 272 -22 2297 1337.5 17.1 124	10 3 10 1028 662 366 2663 1343.5 10.8 80	57.1 3 969 658 311 2974 1348.0 10.7 84	38.9 19 3 685 535 150 3124 1350.0 9.3 75
PEAK POW MW ENERGY GWH	1681.9	351 26.6	352 19.4	352 44.9	352 146.7	352 175.7	352 186.0	352 202.1	352 198.8	345 188.7	310 178.5	289 80.3	278 36.3	276 23.8	303 59.8	324 62.3	331 52.1
NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE	1450 114 -1 37 18333 18333	92 0 1 358 358	43 0 -9 224 224	55 0 -21 477 477	148 5 1 1589 1589	174 19 -8 1882 1882	166 24 -5 1976 1976	86 39 -3 2041 2041	103 10 7 2054 2041 13	77 -5 1 1953 1953 1940 13	122 2 3 1968 1968	50 5 1 925 925	23 2 0 2 432 432	27 3 24 317 317	77 10 12 4 737 737	79 1 0 736 736	127 3 665 691 -26
STORAGE ELEV FTMSL DISCH KCFS POWER	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 16.1	358 1206.0 26.7	358 1206.0 26.7	358 1206.0 30.6	358 1206.0 33.2	358 1206.0 33.2	371 1206.5 33.2	384 1207.0 32.6	384 1207.0 32.0	384 1207.0 31.1	384 1207.0 31.1	384 1207.0 20.0	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
PEAK POWER HM PEAK POW MW ENERGY GWH	744.8	114 15.2	114 9.4	114 19.7	114 65.7	114 76.1	114 77.8	114 80.4	115 80.7	115 77.9	115 79.8	115 37.9	115 17.7	115 13.5	43 77 31.8	43 77 31.8	42 76 29.5
GAVINS POIN NAT INFLOW DEPLETION REGULATED FLC KAF KCFS	17 - SIOU 1550 241 W AT SIC 19642	UX CITY- 169 6 0UX CITY 522 17.5	 79 3 ( 300 21.6	102 3 575 32.2	199 20 1768 29.7	310 34 2158 35.1	224 29 2171 36.5	129 36 2134 34.7	96 33 2104 34.2	60 22 1978 33.2	42 9 2001 32.5	16 5 936 31.5	7 2 437 31.5	9 3 323 20.4	21 11 747 12.1	5 12 729 11.9	82 13 760 13.2
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWER	24601 2290 0 1708 54007	1435 8 99 55011	669 4 1 55377	860 5 -21 55636	2307 115 -41 56019	3493 652 -38 56665	6073 1562 -33 58972	3346 923 4 106 59158	1194 82 .8 334 57840	1113 -220 26 415 56806	1032 -60 43 357 55584	452 -119 -12 159 55047	211 -55 -19 73 54784	241 -63 14 84 54695	651 -205 12 182 54635	582 -207 -27 54668	943 -132 -16 54968
AVE POWER MW PEAK POW MW ENERGY GWH DAILY GWH	9452.7	726 2238 261.5 17.4	636 2242 106.9 15.3	937 2245 202.4 22.5	1040 2249 748.6 25.0	1223 2254 909.9 29.4	1340 2277 964.6 32.2	1414 2282 1051.7 33.9	1397 2261 1039.2 33.5	1274 2251 917.0 30.6	1021 2229 759.8 24.5	1013 2206 364.8 24.3	1041 2194 174.9 25.0	865 2192 166.2 20.8	804 2180 598.0 19.3	848 2202 630.6 20.3	800 2210 556.6 19.2
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310СТ	15NOV	22NOV	30NOV	31DEC	31JAN	29FEE

STUDY NO 12

TIME OF STUDY	/ 11:02:0	01				VALUES	TN 100		CEDT AS		1750				STUDY	NO	12
29FE	EBO4 INI-SUM	15MAR	2004 22MAR	4 31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE	7400 366 467 6567 5447 1120	264 -13 277 179 99	123 -6 129 69	158 -8 166 89 77	628 50 578 357 221	1210 324 886 400 486	1851 582 1269 476 793	829 176 28 625 492 133	324 -84 89 319 492 -173	319 -141 112 348 260 88	398 -71 98 371 209 161	188 -37 45 179 238 -59	88 -17 21 84 125 -41	100 -19 24 96 159 -63	310 -128 51 387 615 -228	261 -140 401 676 -275	349 -102 451 611 -160
ELEV FTMSL DISCH KCFS POWER AVE POWER MW	2228.8 12.0	14023 2229.3 6.0 80	14082 2229.6 5.0	14159 2229.9 5.0 67	14380 2231.0 6.0 81	14867 2233.4 6.5 88	15660 2237.1 8.0 109	15793 2237.7 8.0 110	15620 2236.9 8.0 110	15/08 2237.3 4.4 60	15870 2238.0 3.4 47	15811 2237.8 8.0 110	15770 2237.6 9.0 124	15707 2237.3 10.0 137	15479 2236.3 10.0 137	15203 2235.0 11.0 150	15044 2234.2 11.0 150
ENERGY GWH	899.7	205 29.0	11.3	14.5	58.2	65.5	78.6	211 81.8	210 81.8	211 43.3	211 34.9	211 39.6	211 20.8	211 26.4	2 <b>1</b> 0 101.9	209 111.7	208 100.6
NAT INFLOW DEPLETION CHAN STOR EVAPORATION	11001 940 10 512	469 -6 60	219 -3 10	282 -4	853 -7 -10	1423 204 -5	2958 805 -15	2066 532 32	581 24 100	497 -129 36 124	454 1 9 106	192 -99 -45 48	89 -46 -10 22	102 -53 -10 25	253 -115 0	237 -99 -10	326 -65 0
REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	15006 15268 -262 17360 1835.0 26.0	714 506 209 17568 1835.7 17.0	301 236 65 17634 1835.9 17.0	375 303 71 17705 1836.2 17.0	1207 1190 17 17722 1836.2 20.0	1614 1445 169 17890 1836.8 23.5	2614 1517 1097 18987 1840.3 25.5	1994 1537 457 19444 1841.7 25.0	949 1506 -558 18887 1840.0 24.5	798 1065 -267 18620 1839.1 17.9	565 943 -378 18242 1837.9 15.3	435 456 -21 18221 1837.9 15.3	228 213 15 18236 1837.9 15.3	278 317 -39 18197 1837.8 20.0	928 1230 -301 17896 1836.8 20.0	1002 1414 -412 17484 1835.4 23.0	1002 1388 -387 17098 1834.1 25.0
POWER AVE POWER MM PEAK POW MW ENERGY GWH	2301.4	209 372 75.3	210 372 35.3	210 373 45.4	247 373 177.9	290 375 216.0	319 385 229.4	316 395 235.2	310 384 230.5	226 382 162.7	193 378 143.4	192 378 69.1	192 378 32.2	250 378 47.9	249 375 185.1	283 371 210.9	305 367 205.1
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION	2300 585 3 492	317 22 36	148 10	190 13	364 46 -12	236 64 -14	689 123 -8	162 143 2 32	33 93 2 97	118 23 26 119	14 -8 10 101	5 2 45	2 1 21	3 1 -20 24	-20 11 0 52	_16 -13	40 25 -8
REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	16495 16412 83 18521 1606.5 11.6	836 552 284 18805 1607.4 18.5	373 150 223 19028 1608.1 10.8	480 370 110 19138 1608.5 20.7	1496 1334 163 19301 1609.0 22.4	1603 1603 0 19301 1609.0 26.1	2076 1666 410 19711 1610.2 28.0	1527 1958 -431 19280 1608.9 31.8	1351 1970 -619 18661 1606.9 32.0	1067 1756 -689 17971 1604.7 29.5	874 1261 -387 17584 1603.4 20.5	415 598 -183 17401 1602.7 20.1	194 276 -82 17319 1602.4 19.9	276 259 17 17336 1602.5 16.3	1147 1043 104 17439 1602.9 17.0	1386 972 414 17853 1604.3 15.8	1395 645 750 18604 1606.8 11.6
AVE POWER MW PEAK POW MW ENERGY GWH	2546.5	238 704 85.8	140 708 23.5	268 710 57.9	290 713 209.2	338 713 251.5	364 720 262.0	413 712 307.4	412 702 306.7	376 690 270.5	259 683 193.0	253 680 91.0	249 678 41.9	205 679 39.3	213 680 158.5	200 688 148.5	148 701 99.7
BIG BEND- EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS	103 16309 16309 1682 1420.0 11.6	552 552 1682 1420.0 18.5	150 150 1682 1420.0 10.8	370 370 1682 1420.0 20.7	1334 1334 1682 1420.0 22.4	1603 1603 1682 1420.0 26.1	1666 1666 1682 1420.0 28.0	6 1952 1952 1682 1420.0 31.7	20 1950 1950 1682 1420.0 31.7	25 1731 1731 1682 1420.0 29.1	22 1240 1240 1682 1420.0 20.2	10 588 588 1682 1420.0 19.8	5 271 271 1682 1420.0 19.5	5 254 254 1682 1420.0 16.0	11 1031 1031 1682 1420.0 16.8	972 972 1682 1420.0 15.8	645 645 1682 1420.0 11.6
AVE POWER MM PEAK POW MW ENERGY GWH	/ 939.1	87 510 31.3	51 509 8.5	97 509 21.0	105 509 75.5	122 509 90.8	131 509 94.3	149 509 110.5	148 509 110.4	138 517 99.3	99 538 73.5	99 538 35.7	98 538 16.5	81 538 15.5	83 538 61.7	77 537 57.1	56 529 37.5
FORT RANDAL NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL	L 900 80 118 17011 17011 0 3124 1350.0	122 1 673 265 408 3532 1355.0	57 1 206 189 17 3549 1355.2	73 1 443 443 3549 1355.2	115 4 1445 1445 3549 1355.2	140 9 1734 1734 3549 1355.2	185 12 1839 1839 3549 1355.2	74 18 2000 2000 0 3549 1355.2	57 15 25 1967 1967 0 3549 1355.2	42 7 31 1735 1879 -144 3405 1353.5	2 1 25 1216 1853 -637 2768 1345.1	2 1 579 883 -304 2464 1340.4	1 0 268 413 -145 2319 1337.9	1 4 250 272 -22 2297 1337.5	10 3 10 1028 662 366 2663 1343.5	3 969 658 311 2974 1348.0	19 3 661 511 150 3124 1350.0
DISCH KCFS POWER AVE POWER MW PEAK POW MW ENERGY GWH	9.3 / 1679.6	8.9 74 351 26.6	13.6 115 352 19.4	24.8 208 352 44.9	24.3 204 352 146.7	28.2 236 352 175.7	30.9 258 352 186.0	32.5 272 352 202.1	32.0 267 352 198.8	31.6 262 345 188.7	30.1 240 310 178.5	29.7 223 289 80.3	29.7 216 278 36.3	17.1 124 276 23.8	10.8 80 303 59.8	10.7 84 324 62.3	9.2 74 331 49.8
GAVINS POIN NAT INFLOW DEPLETION CHAN STOR EVAPORATION	1450 114 -1 37	92 0 1	43 0 -9	55 0 -21	148 5 1	174 19 -8	166 24 -5	86 39 -3 2	103 10 1 7	77 -5 1 9	122 2 3 8	50 5 1 4	23 2 0 2	27 3 24 2	77 10 12 4	79 1 0	127 3
REG INFLOW RELEASE STOR CHANGE	18309 18309	358 358	224 224	477 477	1589 1589	1882 1882	1976 1976	2041 2041	2054 2041 13	1953 1940 13	1968 1968	925 925	432 432	317 317	737 737	736 736	641 667 -26
ELEV FTMSL DISCH KCFS POWER	358 1206.0 12.0	358 1206.0 12.0	1206.0 16.1	358 1206.0 26.7	358 1206.0 26.7	358 1206.0 30.6	358 1206.0 33.2	358 1206.0 33.2	3/1 1206.5 33.2	384 1207.0 32.6	384 1207.0 32.0	384 1207.0 31.1	384 1207.0 31.1	384 1207.0 20.0	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
AVE POWER MW PEAK POW MW ENERGY GWH	743.8	42 114 15.2	56 114 9.4	91 114 19.7	91 114 65.7	102 114 76.1	108 114 77.8	108 114 80.4	109 115 80.7	108 115 77.9	107 115 79.8	105 115 37.9	105 115 17.7	70 115 13.5	43 77 31.8	43 77 31.8	42 76 28.5
GAVINS POIN NAT INFLOW DEPLETION	T - SIOU 1550 247	JX CITY- 169 6	79 , 3	102 4	199 20	310 34	224 30	129 36	96 34	60 22	42 9	16 6	7 3	9 3	21 12	5 13	82 13
KAF KCFS	19612	522 17.5	300 21.6	575 32.2	1768 29.7	2158 35.1	2170 36.5	2134 34.7	2103 34.2	1978 33.2	2001 32.5	936 31.5	437 31.5	323 20.4	746 12.1	728 11.8	736 13.2
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION	24601 2332 13 1729	1435 10 97	669 5 1	860 6 -21	2307 118 -21	3493 654 -26	6073 1576 -28	3346 944 -1 108	1194 92 3 338	1113 -223 63 420	1032 -66 23 361	452 -123 -45 160	211 -57 -10 74	241 -65 -6 85	651 -207 12 184	582 -206 -22	943 -126 -5
STORAGE SYSTEM POWER AVE POWER MW PEAK POW MW ENERGY GWH	54968	55968 731 2257 263.2	6333 639 2261 107.3	942 2264 203.5	1018 2267 733.1	57647 1177 2271 875.4	1289 2291 928.1	1367 2293 1017.4	1356 2272 1008.9	5//70 1170 2260 842.2	945 2235 703.1	982 2211 353.6	985 2198 165.4	55603 867 2196 166.4	55543 805 2184 598.9	55581 836 2205 622.3	55909 776 2213 521.2
DAILY GWH		1/.5	15.3 22MAR	22.6 31MAR	24.4 304PP	28.2 31MAY	30.9 30.1UN	32.8 31.101	31AUG	28.1 305FP	22.7 3100T	23.6 15NOV	23.6 22NOV	20.8 30NOV	33DEC	20.1 31.14N	18.6 28FFF

STUDY	NO	13

TIME OF STUD	11:02:0	01				VALUES	5 TN 100		(CEPT 45						STUDY	NO	13
28F1	EBO5 INI-SUM	15MAR	2005 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT PECK NAT INFLOW DEPLETION EVAPORATION MOD INFLOW	 7400 387 468 6545	264 -13 277	123 -6 129	158 -8 166	628 50 578	1210 325 885	1851 590 1261	829 190 28 611	324 -75 90 309	319 -142 112 349	398 -75 98 375	188 -39 44 182	88 -18 21 85	100 -21 24 97	310 -133 51 392	261 -144 405	349 -94 443
RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	6690 -145 15044 2234.2 11.0	179 99 15142 2234.7 6.0	69 60 15202 2235.0 5.0	89 77 15279 2235.3 5.0	417 161 15441 2236.1 7.0	492 393 15834 2237.9 8.0	1119 142 15976 2238.5 18.8	553 57 16033 2238.8 9.0	553 -244 15789 2237.7 9.0	410 -61 15728 2237.4 6.9	330 45 15773 2237.6 5.4	238 -56 15717 2237.3 8.0	125 -40 15677 2237.2 9.0	159 -61 15616 2236.9 10.0	615 -223 15393 2235.9 10.0	676 -271 15122 2234.6 11.0	666 -223 14898 2233.5 12.0
POWER AVE POWER MN PEAK POW MW ENERGY GWH	√ 1075.4	82 209 29.5	68 209 11.5	68 209 14.8	96 210 68.9	110 211 81.7	211 211 152.0	124 212 92.3	124 211 92.2	95 211 68.2	74 211 54.9	110 211 39.6	124 211 20.8	137 210 26.3	137 210 101.8	150 209 111.6	163 208 109.5
GARRISON NAT INFLOW DEPLETION CHAN STOR	11001 952 -11	469 -7 50	219 -3 10	282 -4	853 -8 -20	1423 204 -10	2958 815 -107	2066 548 95	581 29	497 -132 20	454 -3 15	192 -103 -26	89 - 48 - 10	102 -55 -10	253 -116 0	237 -100 -10	326 -66 -10
EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCES	546 16182 14349 1833 17098 1834.1 25.0	705 506 199 17297 1834.8 17.0	302 236 66 17362 1835.0 17.0	375 303 71 17434 1835.3 17.0	1258 1071 186 17620 1835.9 18.0	1701 1322 379 17999 1837.1 21.5	3154 1398 1756 19755 1842.6 23.5	33 2133 1414 719 20474 1844.8 23.0	105 1000 1383 -383 20091 1843.6 22.5	131 928 982 -55 20037 1843.5 16.5	114 687 -183 19854 1842.9	52 455 421 34 19888 1843.0 14.2	24 228 264 -35 19852 1842.9	27 278 317 -39 19813 1842.8 20 0	59 925 1230 -305 19508 1841.9 20 0	1004 1353 -349 19159 1840.8	1049 1277 -229 18930 1840.1
POWER AVE POWER MU PEAK POW MW ENERGY GWH	¥ 2196.9	208 369 74.9	209 370 35.1	209 370 45.1	222 372 159.7	266 376 197.8	296 398 213.4	295 400 219.5	289 399 215.3	212 399 152.9	182 399 135.3	182 399 65.4	243 399 40.9	256 399 49.1	255 397 189.8	279 386 207.4	291 385 195.4
OAHE NAT INFLOW DEPLETION CHAN STOR	2300 597 7	317 22 32	148 10	190 13	364 46 -4	236 65 -14	689 126 -8	162 147 2	33 96 2	118 24 24	14 -8 10	5 2 0	2 1 -21	3 1 -4	-20 11 0	16 -9	40 25 -4
EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	15581 16412 -831 18604 1606.8 11.6	832 434 398 19002 1608.0 14.6	373 251 122 19124 1608.4 18.1	480 387 93 19217 1608.7 21.7	1385 1334 52 19269 1608.9 22.4	1479 1603 -124 19145 1608.5 26.1	1954 1666 288 19433 1609.4 28.0	1400 1958 -558 18875 1607.6 31.8	95 1227 1970 -743 18132 1605.2 32.0	985 1756 -771 17361 1602.6 29.5	98 804 1261 -458 16903 1601.0 20.5	44 381 598 -217 16686 1600.2 20.1	20 224 276 -52 16634 1600.1 19.9	23 292 259 33 16667 1600.2 16.3	51 1148 1043 105 16773 1600.5 17.0	1328 972 356 17129 1601.8 15.8	1288 645 643 17772 1604.0 11.6
POWER AVE POWER MA PEAK POW MW ENERGY GWH	¥ 2528.7	188 708 67.7	234 710 39.3	281 711 60.7	291 712 209.2	337 710 251.1	363 715 261.1	411 706 305.7	409 693 304.2	372 679 267.7	256 671 190.6	249 667 89.8	246 666 41.3	202 666 38.8	210 668 156.5	197 675 146.6	146 687 98.3
BIG BEND EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS	103 16309 16309 1682 1420.0 11.6	434 434 1682 1420.0 14.6	251 251 1682 1420.0 18.1	387 387 1682 1420.0 21.7	1334 1334 1682 1420.0 22.4	1603 1603 1682 1420.0 26.1	1666 1666 1682 1420.0 28.0	6 1952 1952 1682 1420.0 31.7	20 1950 1950 1682 1420.0 31.7	25 1731 1731 1682 1420.0 29.1	22 1240 1240 1682 1420.0 20.2	10 588 588 1682 1420.0 19.8	5 271 271 1682 1420.0 19.5	5 254 254 1682 1420.0 16.0	11 1031 1682 1420.0 16.8	972 972 1682 1420.0 15.8	645 645 1682 1420.0 11.6
AVE POWER MA PEAK POW MW ENERGY GWH	√ 939.4	69 517 24.9	85 510 14.3	102 509 21.9	105 509 75.5	122 509 90.8	131 509 94.3	149 509 110.5	148 509 110.4	138 517 99.3	99 538 73.5	99 538 35.7	98 538 16.5	81 538 15.5	83 538 61.7	77 537 57.1	56 529 37.5
FORT RANDA NAT INFLOW DEPLETION EVAPORATION	LL 900 80 118	122 1	57 1	73 1	115 4	140 9	185 12	74 18 8	57 15 25	42 7 31	2 1 25	2 1 10	1 0 4	1 1 4	10 3 10	3	19 3
REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	17011 17011 0 3124 1350.0 9.2	555 265 290 3414 1353.6 8.9	308 189 118 3532 1355.0 13.6	460 443 17 3549 1355.2 24.8	1445 1445 0 3549 1355.2 24.3	1734 1734 3549 1355.2 28.2	1839 1839 3549 1355.2 30.9	2000 2000 3549 1355.2 32.5	1967 1967 0 3549 1355.2 32.0	1735 1879 -144 3405 1353.5 31.6	1216 1853 -637 2768 1345.1 30.1	579 883 -304 2464 1340.4 29.7	268 413 -145 2319 1337.9 29.7	250 272 -22 2297 1337.5 17.1	1028 662 366 2663 1343.5 10.8	969 658 311 2974 1348.0 10.7	661 511 150 3124 1350.0 9.2
POWER AVE POWER MI PEAK POW MW ENERGY GWH	√ 1679.3	73 346 26.4	114 351 19.2	208 352 44.9	204 352 146.7	236 352 175.7	258 352 186.0	272 352 202.1	267 352 198.8	262 345 188.7	240 310 178.5	223 289 80.3	216 278 36.3	124 276 23.8	80 303 59.8	84 324 62.3	74 331 49.8
GAVINS POI NAT INFLOW DEPLETION CHAN STOR FVAPORATION	NT 1450 114 -1 37	92 0 1	43 0 -9	55 0 -21	148 5 1	174 19 -8	166 24 -5	86 39 -3 2	103 10 1 7	77 -5 1 9	122 2 3 8	50 5 1 4	23 2 0 2	27 3 24 2	77 10 12 4	79 1 0	127 3
REG INFLOW RELEASE STOR CHANGE	18309 18309	358 358	224 224	477 477	1589 1589	1882 1882	1976 1976	2041 2041	2054 2041 13	1953 1940 13	1968 1968	925 925	432 432	317 317	737 737	736 736	641 667 -26
STORAGE ELEV FTMSL DISCH KCFS POWER	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 16.1	358 1206.0 26.7	358 1206.0 26.7	358 1206.0 30.6	358 1206.0 33.2	358 1206.0 33.2	3/1 1206.5 33.2	384 1207.0 32.6	384 1207.0 32.0	384 1207.0 31.1	384 1207.0 31.1	384 1207.0 20.0	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
AVE POWER M PEAK POW MW ENERGY GWH	N 743.8	42 114 15.2	56 114 9.4	91 114 19.7	91 114 65.7	102 114 76.1	108 114 77.8	108 114 80.4	109 115 80.7	108 115 77.9	107 115 79.8	105 115 37.9	105 115 17.7	70 115 13.5	43 77 31.8	43 77 31.8	42 76 28.5
GAVINS POIN NAT INFLOW DEPLETION	NT - SIOU 1550 248	JX CITY- 169 6	 79 3	102 4	199 20	310 34	224 30	129 37	96 34	60 22	42 9	16 6	7 3	9 3	21 12	5 13	82 13
KAF KCFS	19611	521 17.5	300 21.6	575 32.2	1768 29.7	2158 35.1	2170 36.5	2133 34.7	2103 34.2	1978 33.2	2001 32.5	936 31.5	437 31.5	323 20.4	746 12.1	728 11.8	736 13.2
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE	24601 2378 -5 1751 55909	1435 10 83 56895	669 5 1 57261	860 6 -21 57519	2307 117 -23 57919	3493 656 -31 58567	6073 1597 -120 60753	3346 979 94 109 60972	1194 109 3 341 59615	1113 -226 46 425 58597	1032 -74 27 365 57364	452 -129 -25 163 56821	211 -60 -31 75 56549	241 -69 10 86 56459	651 -213 12 187 56403	582 -211 -18	943 -119 -11
SYSTEM POWEL AVE POWER M PEAK POW MW ENERGY GWH DATLY GWH	9163.5	663 2262 238.6	767 2264 128.8 18 4	959 2266 207.1 23.0	1008 2270 725.7 24 2	1174 2272 873.1 28 2	1367 2300 984.5 32 8	1358 2292 1010.5 32.6	1346 2279 1001.7 32 3	1187 2267 854.5 28 5	958 2243 712.7 23 0	969 2218 348.7 23 2	1032 2206 173.5 24 P	870 2204 167.0	808 2193 601.5	829 2207 616.8	772 2215 519.0
LILLI GHIT	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

TIME OF STUDY	11:02:0	01				VALUES	TN 100			TNDTC	1760				STUDY	NO	14
28FEE ]	BO6 INI-SUM	15MAR	2006 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT PECK NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE	- 7400 399 456 6545 7409 -865 14898	264 -13 277 179 99 14997	123 -6 129 69 60 15057	158 -8 166 89 77 15134	628 50 578 536 42 15176	1210 326 884 615 269 15446	1851 595 1256 714 542 15988	829 197 28 604 738 -134 15853	324 -71 88 307 738 -431 15422	319 -142 110 351 631 -279 15143	398 -77 95 380 508 -128 15015	188 -40 43 185 246 -61 14954	88 -19 20 86 115 -28 14925	100 -21 23 99 159 -60 14865	310 -134 49 395 615 -220 14645	261 -144 405 738 -333 14312	349 -94 443 722 -279 14033
ELEV FIMSE DISCH KCFS POWER AVE POWER MW PEAK POW MW ENERGY GWH	1219.7	2234.0 6.0 82 208 29.4	2234.3 5.0 68 209 11.4	2234.6 5.0 68 209 14.7	2234.8 9.0 123 209 88.3	2236.1 10.0 136 210 101.5	2238.6 12.0 165 212 118.5	2238.0 12.0 165 211 122.8	2236.0 12.0 164 210 122.3	10.6 145 209 104.1	2234.1 8.3 112 208 83.6	2233.8 8.3 112 208 40.4	2233.7 8.3 112 208 18.8	2233.4 10.0 136 208 26.0	2232.3 10.0 135 207 100.7	2230.7 12.0 162 206 120.3	2229.3 13.0 174 205 116.8
GARRISON NAT INFLOW DEPLETION	- 11001 1181	469 -6	219 -3	282 -4	853 -7	1423 204	2958 825	2066 564	581 35	497 -135	454 28	192 -84	89 - 39	102 -45	253 -72	237 -55	326 -25
CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL	-10 552 16668 17490 -823 18930 1840.1	59 713 506 207 19138 1840.7	10 301 236 65 19203 1840.9	375 303 71 19274 1841.2	-39 1357 1250 107 19381 1841.5	-10 1824 1599 225 19606 1842.2	-19 2828 1666 1161 20768 1845.6	34 2206 1691 515 21282 1847.1	108 1176 1660 -484 20798 1845.7	13 134 1142 1457 -315 20483 1844.8	22 115 841 1505 -664 19819 1842.8	51 470 728 -258 19561 1842.0	24 219 305 -86 19475 1841.8	-17 27 262 317 -56 19419 1841.6	0 58 882 1230 -348 19071 1840.5	-20 1010 1537 -527 18544 1838.9	-10 1063 1500 -436 18107 1837.5
DISCH KCFS POWER AVE POWER MW PEAK POW MW ENERGY GWH	23.0	17.0 215 386 77.4	17.0 215 387 36.2	17.0 216 389 46.6	21.0 266 392 191.7	26.0 330 398 245.3	28.0 355 400 255.5	27.5 354 401 263.5	27.0 348 400 259.3	24.5 316 400 227.7	24.5 314 399 233.5	24.5 312 398 112.2	22.0 280 396 47.0	20.0 254 394 48.8	20.0 253 386 188.5	25.0 315 381 234.2	27.0 333 377 223.8
OAHE NAT INFLOW DEPLETION	2300 613	317 23	148 11	190 14	364 47	236 66	689 129	162 151	33 100	118 25	14 -8	5 2	2	3 1	-20 11	16	40 26
CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	-15 501 18661 16642 2019 17772 1604.0 11.6	824 474 350 18122 1605.2 15.9	373 212 161 18283 1605.7 15.3	480 386 93 18377 1606.0 21.6	-16 1550 1334 217 18593 1606.7 22.4	-20 1749 1603 146 18739 1607.2 26.1	-8 2218 1666 552 19291 1609.0 28.0	2 31 1673 1958 -285 19006 1608.1 31.8	2 96 1499 1970 -471 18535 1606.5 32.0	10 119 1440 1756 -316 18219 1605.5 29.5	104 1423 1261 162 18381 1606.0 20.5	47 684 598 87 18468 1606.3 20.1	10 22 295 276 19 18487 1606.4 19.9	8 25 302 259 43 18530 1606.5 16.3	0 55 1144 1130 13 18543 1606.6 18.4	-20 1501 1047 454 18997 1608.0 17.0	-8 1506 711 794 19791 1610.5 12.8
POWER AVE POWER MW PEAK POW MW ENERGY GWH	2583.9	202 693 72.9	195 695 32.8	276 697 59.7	287 701 206.6	334 703 248.8	361 713 259.9	411 708 305.7	411 700 305.6	376 694 270.8	262 697 194.8	257 699 92.6	255 699 42.8	209 700 40.2	236 700 175.4	219 708 163.3	167 721 112.2
BIG BEND EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS	103 16539 16539 1682 1420.0 11.6	474 474 1682 1420.0 15.9	212 212 1682 1420.0 15.3	386 386 1682 1420.0 21.6	1334 1334 1682 1420.0 22.4	1603 1603 1682 1420.0 26.1	1666 1666 1682 1420.0 28.0	6 1952 1952 1682 1420.0 31.7	20 1950 1950 1682 1420.0 31.7	25 1731 1731 1682 1420.0 29.1	22 1240 1240 1682 1420.0 20.2	10 588 588 1682 1420.0 19.8	5 271 1682 1420.0 19.5	5 254 254 1682 1420.0 16.0	11 1119 1119 1682 1420.0 18.2	1047 1047 1682 1420.0 17.0	711 711 1682 1420.0 12.8
POWER AVE POWER MW PEAK POW MW ENERGY GWH	952.8	75 515 27.1	72 510 12.0	101 509 21.9	105 509 75.6	122 509 90.8	131 509 94.3	149 509 110.5	148 509 110.4	138 517 99.3	99 538 73.5	99 538 35.7	98 538 16.5	81 538 15.5	90 538 66.9	83 537 61.5	61 529 41.3
FORT RANDALL NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWFR	L 900 80 118 17241 17241 0 3124 1350.0 9.2	122 1 595 263 332 3456 1354.1 8.9	57 1 269 192 76 3532 1355.0 13.9	73 1 459 442 17 3549 1355.2 24.8	115 4 1445 1445 3549 1355.2 24.3	140 9 1734 1734 3549 1355.2 28.2	185 12 1839 1839 0 3549 1355.2 30.9	74 18 2000 2000 0 3549 1355.2 32.5	57 15 25 1967 1967 0 3549 1355.2 32.0	42 7 31 1735 1879 -144 3405 1353.5 31.6	2 1 25 1216 1853 -637 2768 1345.1 30.1	2 10 579 883 -304 2464 1340.4 29.7	1 0 4 268 413 -145 2319 1337.9 29.7	1 4 250 272 -22 2297 1337.5 17.1	10 3 10 1115 749 366 2663 1343.5 12.2	3 1044 733 311 2974 1348.0 11.9	19 3 727 577 150 3124 1350.0 10.4
AVE POWER MW PEAK POW MW ENERGY GWH	1700.8	73 348 26.3	116 351 19.6	207 352 44.8	204 352 146.7	236 352 175.7	258 352 186.0	272 352 202.1	267 352 198.8	262 345 188.7	240 310 178.5	223 289 80.3	216 278 36.3	124 276 23.8	91 303 67.7	93 324 69.4	84 331 56.2
GAVINS POINT NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE	T 1450 114 -3 37 18537 18537	92 0 1 357 357	43 0 -10 226 226	55 0 -21 477 477	148 5 1 1589 1589	174 19 -8 1882 1882	166 24 -5 1976 1976	86 39 -3 2041 2041	103 10 7 2054 2041 13	77 -5 1 1953 1953 1940 13	122 2 3 1968 1968	50 5 1 925 925	23 2 0 2 432 432	27 3 24 21 317 317	77 10 9 4 822 822	79 1 0 812 812	127 3 707 733 -26
STORAGE ELEV FTMSL DISCH KCFS	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 16.3	358 1206.0 26.7	358 1206.0 26.7	358 1206.0 30.6	358 1206.0 33.2	358 1206.0 33.2	371 1206.5 33.2	384 1207.0 32.6	384 1207.0 32.0	384 1207.0 31.1	384 1207.0 31.1	384 1207.0 20.0	384 1207.0 13.4	384 1207.0 13.2	358 1206.0 13.2
AVE POWER MW PEAK POW MW ENERGY GWH	753.4	42 114 15.1	57 114 9.5	91 114 19.7	91 114 65.7	102 114 76.1	108 114 77.8	108 114 80.4	109 115 80.7	108 115 77.9	107 115 79.8	105 115 37.9	105 115 17.7	70 115 13.5	48 77 35.4	47 77 35.0	47 76 31.3
GAVINS POINT NAT INFLOW DEPLETION REGULATED FLOW KAF KCFS	T - SIOU 1550 251 W AT SIC 19836	UX CITY- 169 6 520 520 17.5	79 3 ( 302 21.8	102 4 574 32,2	199 21 1767 29.7	310 35 2157 35,1	224 30 2170 36,5	129 37 2133 34.7	96 , 34 2103 34,2	60 22 1978 33.2	42 10 2000 32.5	16 6 936 31.5	7 3 437 31.5	9 3 323 20,4	21 12 831 13.5	5 13 804 13,1	82 13 802 14,4
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE	24601 2638 -28 1767 56765	1435 11 84 57753	669 5 0 58115	860 6 -21 58373	2307 120 -54 58739	3493 659 -37 59379	6073 1615 -33 61635	3346 1006 -1 110 61731	1194 123 344 60357	1113 -228 24 429 59316	1032 -44 25 369 58049	452 -111 164 57512	211 -52 10 76 57271	241 -59 15 87 57177	651 -170 188 56988	582 -166 -39 56893	943 -77 -15 57096
SYSTEM POWER AVE POWER MW PEAK POW MW ENERGY GWH DAILY GWH	9901.6	690 2264 248.2 16.5	724 2266 121.6 17.4	960 2270 207.4 23.0	1076 2277 774.5 25.8	1261 2286 938.1 30.3	1378 2300 991.9 33.1	1458 2296 1084.9 35.0	1448 2286 1077.2 34.7	1345 2281 968.4 32.3	1134 2267 843.9 27.2	1109 2247 399.1 26.6	1066 2233 179.1 25.6	874 2230 167.8 21.0	853 2211 634.6 20.5	919 2232 683.5 22.0	865 2239 581.5 20.8

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 310CT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB

TIME OF STUDY 09:38:40

FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	- 6556 356 497 5703 5587 115 12136 2219.2 11.0	264 -8 272 134 139 12274 2219.9 4.5	123 -4 127 62 65 12339 2220.3 4.5	158 -5 163 80 83 12422 2220.7 4.5	574 69 505 417 88 12511 2221.2 7.0	1011 302 709 461 248 12758 2222.6 7.5	1589 484 1105 506 599 13358 2225.8 8.5	692 159 30 503 523 -20 13338 2225.7 8.5	287 -69 95 261 523 -262 13076 2224.3 8.5	275 -129 285 320 -35 13041 2224.1 5.4	354 -64 104 314 269 45 13086 2224.4 4.4	183 -32 47 167 130 37 13123 2224.6 4.4	85 -15 22 78 62 16 13139 2224.7 4.5	98 -17 25 89 143 -54 13085 2224.4 9-0	322 -109 54 377 615 -238 12847 2223.1	231 -124 355 676 -321 12526 2221.3	309 -83 392 666 -274 12251 2219.8 12.0
POWER AVE POWER MW PEAK POW MW ENERGY GWH	885.0	58 196 20.9	58 196 9.8	58 197 12.6	91 197 65.4	98 199 72.7	112 202 80.5	113 202 83.7	112 200 83.5	71 200 51.1	58 200 42.9	58 201 20.8	59 201 10.0	119 200 22.8	131 199 97.6	143 197 106.5	155 196 104.1
GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	- 10069 1136 -10 580 13930 13930 13790 140 14628 1825.3 23.0	475 28 68 476 173 14801 1825.9 16.0	221 13 222 49 14850 1826.1 16.0	285 17 286 63 14913 1826.3 16.0	763 50 -26 1104 1071 32 14945 1826.5 18.0	1282 187 -5 1551 1230 321 15266 1827.6 20.0	2701 744 -10 2452 1309 1143 16410 1831.7 22.0	1891 477 0 35 1901 1322 579 16989 1833.8 21.5	532 52 112 891 1291 -401 16588 1832.4 21.0	446 -94 32 140 752 952 -200 16388 1831.7 16.0	428 40 10 545 888 -342 16046 1830.5 14.4	175 -84 0 55 334 430 -96 15950 1830.1 14.4	82 -39 -1 25 156 207 -51 15899 1829.9 1829.9 14.9	93 -45 -46 29 206 301 -96 15803 1829.6 19.0	238 -89 -10 62 869 1230 -360 15443 1828.3 20.0	177 -74 -10 917 1353 -436 15007 1826.7 22.0	280 -47 -10 983 1222 -239 14768 1825.8 22.0
AVE POWER MW PEAK POW MW ENERGY GWH	1971.8	185 343 66.6	186 344 31.2	186 344 40.1	209 345 150.5	233 348 173.3	260 360 187.5	260 366 193.2	254 362 189.1	193 360 138.9	173 356 128.9	172 355 62.1	178 355 29.9	225 354 43.3	236 350 175.5	257 345 190.9	255 343 171.0
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STOR CHANGE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW	1761 557 4 516 14482 144338 144 15265 1595.0 12.9	187 22 32 673 443 230 15495 1595.9 14.9 180	87 10 299 268 31 15526 1596.0 19.3 233	112 13 385 377 8 15534 1596.0 21.1 255	278 45 -9 1295 1294 1 15535 1596.0 21.8 263	158 61 -9 1318 1517 -199 15336 1595.3 24.7 297	701 117 -9 1884 1407 477 15813 1597.1 23.6 286	124 134 2 33 1282 1706 -425 15388 1595.5 27.8 335	29 87 2 101 1135 1700 -565 14822 1593.3 27.7 331	79 22 23 124 908 1519 -611 14211 1590.8 25.5 302	11 -7 106 807 1008 -201 14011 1590.0 16.4 192	2 0 48 380 242 138 14149 1590.6 8.1	1 -2 23 182 18 164 14313 1591.2 1.3	1 -19 26 256 115 141 14453 1591.8 7.3 86	-42 11 57 1116 1073 43 14496 1592.0 17.4 206	-7 15 -9 1321 945 376 14873 1593.5 15.4 183	44 24 0 1242 706 536 15408 1595.5 12.7 153
PEAK POW MW ENERGY GWH BIG BEND-	2077.3	645 64.7	646 39.2	646 55.2	646 189.4	642 221.3	651 205.9	643 249.5	632 246.0	620 217.2	616 143.2	619 34.4	622 2.5	625 16.5	626 153.6	633 136.0	643 102.7
EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER	129 14210 14210 1682 1420.0 12.9	443 443 1682 1420.0 14.9	268 268 1682 1420.0 19.3	377 377 1682 1420.0 21.1	1294 1294 1682 1420.0 21.8	1517 1517 1682 1420.0 24.7	1407 1407 1682 1420.0 23.6	8 1699 1699 1682 1420.0 27.6	24 1676 1676 1682 1420.0 27.3	31 1489 1489 1682 1420.0 25.0	27 981 981 1682 1420.0 16.0	12 230 230 1682 1420.0 7.7	6 12 1682 1420.0 0.9	7 109 1682 1420.0 6.8	14 1058 1058 1682 1420.0 17.2	945 945 1682 1420.0 15.4	706 706 1682 1420.0 12.7
AVE POWER MW PEAK POW MW ENERGY GWH	816.4	70 517 25.4	90 510 15.2	99 509 21.4	102 509 73.3	115 509 85.9	111 509 79.7	129 509 96.2	128 509 94.9	119 517 85.4	78 538 58.3	39 538 14.1	4 538 0.7	35 538 6.7	85 538 63.0	74 536 55.4	61 526 40.8
FORT RANDAL NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	643 80 148 14624 14561 63 3124 1350.0 9.7	88 1 256 273 3397 1353.4 8.6	41 1 308 173 135 3532 1355.0 12.4	53 1 429 412 17 3549 1355.2 23.1	82 4 1372 1372 3549 1355.2 23.1	66 9 1574 1574 3549 1355.2 25.6	167 12 1562 1562 3549 1355.2 26.3	33 18 10 1704 1704 3549 1355.2 27.7	63 15 32 1692 1692 0 3549 1355.2 27.5	30 7 39 1472 1617 -144 3404 1353.5 27.2	2 1 951 1588 -638 2767 1345.1 25.8	1 12 217 521 -304 2462 1340.4 17.5	0 5 6 -80 2383 1339.0 6.2	1 6 102 124 -22 2361 1338.6 7.8	6 3 1048 683 366 2726 1344.5 11.1	-6 3 936 664 272 2998 1348.3 10.8	19 3 722 533 189 3187 1350.8 9.6
AVE POWER MW PEAK POW MW ENERGY GWH	1446.8	71 345 25.5	104 351 17.5	193 352 41.8	194 352 139.4	215 352 159.7	220 352 158.4	232 352 172.6	231 352 171.5	226 345 162.7	206 310 153.4	133 288 47.8	46 282 7.7	58 281 11.1	84 308 62.3	85 325 63.2	78 335 52.2
GAVINS POIN NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE	IT 1335 114 -1 47 15735 15735 358	98 0 2 356 356 358	46 0 -7 211 211 358	59 0 -20 450 450 358	132 5 0 1499 1499 358	147 19 -5 1697 1697 358	153 24 -1 1690 1690 358	87 39 -3 1746 1746 358	85 10 9 1759 1746 13 371	62 -5 11 1673 1660 13 384	112 2 3 10 1691 1691 384	50 5 16 577 577 384	23 21 126 126 384	27 3 -3 2 143 143 384	75 10 -6 5 736 736 384	73 1 1 737 737 384	107 2 642 668 -26 358
ELEV FTMSL DISCH KCFS POWER AVE POWER MW	1206.0 12.0	1206.0 12.0 42	1206.0 15.2 53	1206.0 25.2 86	1206.0 25.2 86	1206.0 27.6 94	1206.0 28.4 97	1206.0 28.4 97	1206.5 28.4 97	1207.0 27.9 97	1207.0 27.5 96	1207.0 19.4 68	1207.0 9.1 32	1207.0 9.0 32	1207.0 12.0 43	1207.0 12.0 43	1206.0 12.0 43
PEAK POW MW ENERGY GWH GAVINS POIN	657.7 IT - SIOU	114 15.1 JX CITY-	114 8.9	114 18.7	114 62.1	70.0	114 69.6	71.9	72.3	69.5	71.2	24.6	5.4	6.2	31.8	31.8	/6 28.6
NAT INFLOW DEPLETION REGULATED FLO KAF	1135 239 WATSIC 16631	145 6 DUX CITN 496	68 3 276	87 3 534	113 19 1593	219 34 1882	158 29 1819	95 36 1805	70 , 33 1783	44 21 1683	31 9 1713	16 5 588	7 2 131	9 3 149	16 11 741	-3 12 722	60 13 715
KCFS TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWFR	21499 2482 -7 1917 47192	16.7 1256 48 102 48007	19.9 586 22 -7 48287	29.9 753 29 -20 48458	26.8 1942 192 -35 48580	2883 612 -19 48949	5469 1410 -21 51169	29.4 2922 863 -1 119 51304	29.0 1066 128 372 50088	28.3 936 -178 55 464 49110	27.9 938 -19 20 400 47975	424 -103 16 178 47750	9.4 198 -48 18 83 47800	9.4 226 -55 -69 95 47769	12.1 615 -163 -21 206 47579	465 -167 -19 47470	12.9 819 -90 -8 47655
AVE POWER MW PEAK POW MW ENERGY GWH DAILY GWH	7855.1	606 2160 218.2 14.5	725 2161 121.8 17.4	878 2162 189.7 21.1	945 2163 680.2 22.7	1052 2164 782.9 25.3	1086 2188 781.6 26.1	1166 2186 867.1 28.0	1152 2170 857.3 27.7	1007 2158 724.8 24.2	804 2136 597.9 19.3	566 2117 203.8 13.6	335 2113 56.3 8.0	554 2113 106.5 13.3	785 2098 583.7 18.8	785 2113 584.0 18.8	743 2118 499.5 17.8
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

TIME OF STUDY 09:38:40

STORAGE

STORAGE

POWER

STORAGE

POWER

STORAGE

POWER

-- TOTAL

INI-SUM 15MAR 22MAR 31MAR

30APR 31MAY

2000-2001 AOP EXTENSIONS, LOWER QUARTILE RUNOFF 99001 9901 PAGE NAVIGATION SEASON SHORTENED AT 52 MAF ON JULY 1 VALUES IN 1000 AF EXCEPT AS INDICATED STUDY NO 28 FFB03 INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 310CT 15NOV 22NOV 30NOV 31DEC 31JAN 29FEB FORT PECK-NAT INFLOW DEPLETION EVAPORATION -10 -122 -91 30 501 584 -65 95 259 499 -130 119 -66 105 -31 -14 22 -17 25 -21 -13 -108 378 MOD INFLOW RELEASE -230 12398 -236 72 44 -321 62 13170 2224.8 4.2 12251 -84 13419 -17 13107 13223 STOR CHANGE -295 2222.5 13214 13223 2225.1 2225.1 ELEV FTMSL DISCH KCFS 2219.8 2220.7 12.0 4.5 2226.1 9.5 2224.5 221.9 11.0 220.6 2221.1 2221.6 4.5 2224.1 2226.6 2224.6 2224.9 2223 6 6.0 10.0 9.0 5.1 4.2 5.0 8.0 10.0 POWER AVE POWER MW PEAK POW MW ENERGY GWH 197 201 19.9 201 93.7 9.8 88.5 11.1 20.3 95.1 890.4 21.0 12.7 56.4 68.3 48 8 41.0 97.8 106.8 99.2 -GARRISON-722 -31 477 -94 -20 63 NAT INFLOW -41 -9 26 DEPLETION CHAN STOR EVAPORATION 57 114 10 123 -47 -31 29 -10 -97 39 -78 -10 -89 -57 587 -16 36 749 REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS DOUGD 194 90 15070 1323 -351 1353 980 -231 16681 1832.7 16.5 212 4980 116 15186 276 15554 1192 16746 1832.9 596 17342 1834.9 -50 16188 301 -93 16095 -364 15731 1829.3 -431 15300 -95 92 15278 1827.7 17.0 -348 16333 1831.5 14.4 180 14768 1833.5 828.7 827.8 1825.8 1826.6 1826.9 1827.3 1831.1 1831.0 1830.6 1826.5 23.0 22.0 16.0 14.0 14.0 20.0 23.0 22.5 22.0 14.4 15.0 19.0 20.0 POWER AVE POWER MW PEAK POW MW 370 143.9 176.7 192.3 186.2 ENERGY GWH 2012.3 66.9 27.4 35.4 143.3 174.6 197.3 203.6 199.5 129.4 62.3 30.2 43.6 NAT INFLOW DEPLETION CHAN STOR EVAPORATION 22 27 45 -13 -7 10 107 -43 11 -5 57 25 -5 13 138 -5 519 90 101 25 124 -13 -13 9 -9 -19 -3 23 33 REG INFLOW RELEASE STOR CHANGE 14492 184 15408 398 273 1736 -394 15502 115 141 724 614 250 250 17 1072 1432 517 15896 15714 1596.7 -224 15379 -32 15682 -79 15603 -611 14357 -232 14125 14254 .591.7 1.2 592.4 17.4 593.9 15.4 ELEV FTMSL DISCH KCFS 1595.5 1596.6 13.4 1596.6 21.4 1596.3 1595.4 1597.4 1595.9 1593.8 591.4 1590.5 16.9 1591.0 8.4 1592.2 596.2 12.6 18.0 22.1 25.0 24.1 28.2 28.1 26.0 AVE POWER MW PEAK POW MW ENERGY GWH 647 105.7 58.4 36.7 56.2 192.8 224.8 254.3 250.7 222.0 148.0 35.7 2.4 16.5 153.8 136.5 209.8 2104.3 -BIG BEND-EVAPORATION REG INFLOW RELEASE 1057 1057 14363 14363 1682 1728 1682 1703 1682 1517 1517 1682 398 250 1315 1682 1540 1682 1432 1682 1012 238  $11 \\ 11$ 724 ELEV FTMSL DISCH KCFS 1420.0 1420.0 12.7 13.4 420.0 420.0 420.0 420.0 420.0 420.0 20.0 420.0 1420.0 120.0 8.0 420.0 1420.0 1420.0 20.0 12.6 120.0 21.4 17.2 15.4 AVE POWER MW PEAK POW MW ENERGY GWH 509 97.9 87.2 22.8 14.2 21.7 74.5 96.5 87.0 60.1 14.6 0.7 6.7 63.0 55.5 41.9 825.2 81.1 -- FORT RANDAL NAT INFLOW 15 32 3 13 -7 3 1 9 12 1 5 5 148 10 12 EVAPORATION 176 115 REG INFLOW RELEASE 14794 1395 529 124 683 552 230 STOR CHANGE 3549 3549 3549 -144 3404 -638 2767 -304 2462 -80 -22 2360 2997 -1 3187 1353.5 27.7 ELEV FTMSL DISCH KCFS 1350.8 1353.6 9.6 8.6 355.0 12.7 1355.2 23.5 1355.2 23.4 355.2 26.0 355.2 1355.2 28.2 1355.2 28.0 1345.1 26.3 340.4 339.0 6.2 1338.6 44.5 . 3 50.8 9.6 10.8 AVE POWER MW PEAK POW MW ENERGY GWH 352 175.7 17.9 42.5 141.7 162.0 161.3 174.5 165.7 48.5 7.7 11.1 54.1 63.2 1470.0 25.6 156.3 62.2 -GAVINS POINT NAT INFLOW DEPLETION CHAN STOR 19 -5 3 -3 114 39 10 10 16 5 -5 3 -21 0 22 -1 -8 -3 -6 EVAPORATION REG INFLOW RELEASE 1790 1777 13 371 1206.5 28.9 127 15975 357 214 457 1523 1722 1720 1777 1690 1722 586 143 736 737 STOR CHANGE -26 STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS 1206.0 12.0 1206.0 15.4 1206.0 28.9 1207.0 28.0 1207.0 19.7 1207.0 9.0 1207.0 12.0 1206.0 25.6 1206.0 25.6 206.0 28.0 1206.0 28.9 1207.0 28.4 1207.0 12.0 1206.0 1207.0 1206.0 12.0 12.0 9.1 POWER AVE POWER MW PEAK POW MW ENERGY GWH 76 29.4 115 115 77 77 9.0 71.0 73.1 70.7 63.1 73.4 72.4 25.0 70.7 667.1 18.9 5.5 31.8 31.8 15.1 6.2 --GAVINS POINT - SIOUX CITY--NAT INFLOW 1160 149 DEPLETION 241 6 REGULATED FLOW AT SIOUX CITY KAF 16894 499 KCFS 16.8 34 36 33 9 2 3 13 11 -3 12 20.2 30.4 31.1 29.9 29.5 9.5 9.4 12.8 27.2 31.1 12.1 11.7 28.8 28.4 20.1 DEPLETION CHAN STOR -25 22 -57 -53 -167 -31 2374 1447 -107 -107 -29 -180 -50 107 1 -169 -21 -29 -46 375 179 -19 -2 EVAPORATION STORAGE SYSTEM POWER AVE POWER MW PEAK POW MW ENERGY GWH 209.8 14.0 115.1 16.4 187.4 20.8 671.8 22.4 787.9 25.4 815.3 27.2 898.3 29.0 607.2 19.6 205.9 13.7 57.6 8.2 104.2 13.0 586.1 18.9 516.4 17.8 585.3 ENERGY GWI DAILY GWH 738.0 7969.3 . ó

28.5

30JUN 31JUL 31AUG 30SEP 310CT 15NOV

18.9

31DEC

31JAN

22N0V

30NOV

29FEB

ŧ

2000-2001 AOP EXTENSIONS, LOWER QUARTILE RUNOFF 99001 9901 9901 PAGE 1 NAVIGATION SEASON SHORTENED AT 52 MAF ON JULY 1 STUDY NO 17 VALUES IN 1000 AF EXCEPT AS INDICATED 2005

29 F	EBO4 INI-SUM	15MAR	2004 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER	6720 379 501 5840 5777 63 12398 2220.6 11.0	271 -21 292 134 158 12556 2221.5 4.5	126 -10 136 62 74 12630 2221.9 4.5	163 -13 175 80 95 12725 2222.4 4.5	588 44 544 357 187 12912 2223.4 6.0	1036 303 733 553 180 13092 2224.4 9.0	1629 545 1084 595 489 13580 2227.0 10.0	709 174 31 504 584 -80 13501 2226.6 9.5	294 -61 96 259 553 -294 13207 2225.0 9.0	282 -130 120 292 340 -48 13158 2224.8 5.7	363 -68 105 326 286 41 13199 2225.0 4.6	188 -33 48 172 138 34 13233 2225.2 4.6	88 -15 22 80 64 13249 2225.2 4.6	100 -17 25 92 127 -35 13214 2225.1 8.0	330 -111 55 386 615 -229 12986 2223.8 10.0	237 -125 362 676 -314 12671 2222.1 11.0	317 -83 400 611 -211 12460 2221.0 11.0
AVE POWER MW PEAK POW MW ENERGY GWH	919.6	59 197 21.1	59 198 9.9	59 198 12.7	79 200 56.6	118 201 87.9	132 203 95.2	126 203 93.9	119 201 88.7	76 201 54.4	61 201 45.7	62 201 22.1	62 201 10.3	106 201 20.3	132 200 97.9	144 198 106.9	143 197 95.9
GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER	- 10262 939 0 590 14510 14432 78 14949 1826.5 23.0	484 1 685 446 238 15187 1827.4 15.0	226 0 288 194 93 15280 1827.7 14.0	290 1 370 250 120 15400 1828.1 14.0	777 3 -15 1116 1041 74 15475 1828.4 17.5	1306 178 -31 1650 1322 328 15803 1829.6 21.5	2752 707 -10 2630 1428 1202 17005 1833.8 24.0	1927 467 5 2013 1445 568 17573 1835.7 23.5	542 63 5 115 923 1414 -491 17081 1834.1 23.0	455 -100 33 142 786 1041 -256 16826 1833.2 17.5	437 31 123 579 903 -324 16502 1832.1 14.7	179 -93 55 354 437 -83 16419 1831.8 14.7	83 -43 26 165 278 -112 16307 1831.4 20.0	95 -49 -34 29 208 317 -109 16197 1831.0 20.0	243 -96 -20 63 870 1230 -360 15838 1829.7 20.0	180 -79 -10 925 1353 -428 15410 1828.2 22.0	286 -52 0 1333 -384 15026 1826.8 24.0
AVE POWER MW PEAK POW MW ENERGY GWH	2086.2	175 347 63.0	164 348 27.6	165 350 35.6	206 350 148.2	253 354 188.5	287 366 207.0	287 372 213.6	281 367 209.3	213 364 153.4	178 361 132.3	177 360 63.7	240 359 40.3	239 358 45.9	238 354 177.1	259 350 192.8	280 346 187.9
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	1860 585 -5 528 15174 15094 81 15593 1596.2 12.6	197 22 36 657 394 263 15856 1597.2 13.2	92 10 4 281 251 29 15885 1597.3 18.1	118 13 355 387 -32 15853 1597.2 21.7	294 46 -15 1274 1333 -59 15794 1597.0 22.4	167 64 -18 1407 1559 -152 15642 1596.4 25.4	740 123 -11 2034 1447 587 16229 1598.6 24.3	131 143 2 33 1402 1758 -356 15873 1597.3 28.6	31 93 2 103 1251 1749 -498 15375 1595.4 28.4	83 25 127 999 1570 -571 14804 1593.2 26.4	12 -8 13 109 827 1062 -235 14569 1592.3 17.3	2 49 386 465 -79 14490 1592.0 15.6	1 -25 23 229 215 14 14505 1592.0 15.5	1 0 290 194 96 14601 1592.4 12.2	-45 11 0 57 1117 1065 51 14653 1592.6 17.3	-7 16 -9 1320 946 374 15027 1594.1 15.4	46 25 -9 1345 699 646 15673 1596.5 12.6
POWER AVE POWER MW PEAK POW MW ENERGY GWH	2202.4	161 652 58.0	220 652 37.0	264 652 57.0	272 651 196.1	307 648 228.7	296 659 213.2	349 652 259.3	344 643 255.7	316 632 227.3	205 627 152.7	185 626 66.7	183 626 30.8	145 628 27.9	206 629 153.1	184 636 136.7	152 648 102.1
BIG BEND- EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW	- 129 14965 14965 1682 1420.0 12.6	394 394 1682 1420.0 13.2 63 517	251 251 1682 1420.0 18.1 85 510	387 387 1682 1420.0 21.7 101 509	1333 1333 1682 1420.0 22.4 105 509	1559 1559 1682 1420.0 25.4 119 509	1447 1447 1682 1420.0 24.3 114 509	8 1750 1750 1682 1420.0 28.5 133 509	24 1724 1724 1682 1420.0 28.0 131 509	31 1540 1540 1682 1420.0 25.9 123 517	27 1035 1035 1682 1420.0 16.8 83 538	12 453 453 1682 1420.0 15.2 77 538	6 209 209 1682 1420.0 15.1 76 538	7 188 188 1682 1420.0 11.8 60 538	14 1051 1051 1682 1420.0 17.1 85 538	946 946 1682 1420.0 15.4 75 538	699 699 1682 1420.0 12.6 60 529
FORT RANDAL MAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW ENERGY GWH	L 690 147 15428 15491 -63 3186 1350.8 9.6 1531.8	94 1 487 256 231 3417 1353.6 8.6 71 346 25.6	44 1 294 179 115 3532 1355.0 12.9 108 351 18.2	56 1 442 425 17 3549 1355.2 23.8 200 352 43.1	88 4 1417 1417 13549 1355.2 23.8 200 352 143.9	70 9 1620 1620 3549 1355.2 26.3 221 352 164.3	179 12 1614 1614 3549 1355.2 27.1 227 352 163.6	36 18 10 1758 1758 1758 28.6 239 352 178.0	68 15 32 1746 1746 1746 1355.2 28.4 238 352 176.8	32 7 39 1525 1669 -144 3405 1353.5 28.1 233 345 167.9	2 1 31 1005 1642 -637 2768 1345.1 26.7 213 310 158.5	1 12 440 744 -304 2464 1340.4 25.0 189 288 67.9	0 5 204 349 -145 2319 1337.9 25.1 183 277 30.8	11.3 1 5 182 204 -22 2297 1337.5 12.9 93 276 17.9	7 3 13 1042 676 2663 1343.5 11.0 82 303 61.1	-7 3 936 664 272 2935 1347.4 10.8 84 321 62.7	21 3 717 528 189 3124 1350.0 9.5 76 331 51.3
GAVINS POIN NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER MM	T 1359 114 -1 47 16689 16689 16689 358 1206.0 12.0	100 0 2 358 358 1206.0 12.0 42	47 0 -8 218 218 358 1206.0 15.7 55	60 0 -21 464 464 1206.0 26.0 89	135 5 0 1547 1547 358 1206.0 26.0 89	150 19 -5 1746 1746 1746 1206.0 28.4 97	155 24 -1 1743 1743 358 1206.0 29.3 99	88 39 -3 3 1802 1802 358 1206.0 29.3 99	87 10 9 1815 1802 13 371 1206.5 29.3 100	63 -5 11 1727 1714 13 384 1207.0 28.8 99	114 2 3 10 1746 1746 1207.0 28.4 99	51 5 788 788 788 1207.0 26.5 92	24 2 368 368 384 1207.0 26.5 92	27 3 23 249 249 249 384 1207.0 15.7 56	76 10 3 5741 741 384 1207.0 12.0 43	74 1 0 737 737 384 1207.0 12.0 43	109 2 639 665 -26 358 1206.0 12.0 42
PEAK POW MW ENERGY GWH	695.5	114 15.2	114 9.2	114 19.2	114 64.0	114 71.9	114 71.4	114 73.8	115 74.1	115 71.5	115 73.4	115 33.3	115 15.5	115 10.7	77 32.0	77 31.8	76 28.4
NAT INFLOW DEPLETION REGULATED FLC KAF KCFS	- 5100 1211 247 W AT SIG 17653	155 6 0UX CIT 507 17.0	72 3 Y 287 20.7	93 4 554 31.0	121 20 1648 27.7	234 34 1946 31.7	168 30 1881 31.6	101 36 1867 30.4	75 34 1843 30.0	47 22 1739 29.2	33 9 1770 28.8	17 6 800 26.9	8 3 373 26.9	9 3 255 16.1	17 12 746 12.1	-3 13 721 11.7	64 13 716 12.9
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWER AVE POWER MM	22102 2344 -6 1942 48165	1301 9 105 49056 571	607 4 -4 49367 691	780 6 -21 49568	2003 122 -31 49770 950	2963 607 -54 50126 1115	5623 1441 -23 52403 1156	2992 877 4 121 52536 1233	1097 154 8 378 51265 1213	962 -183 58 471 50259 1059	961 -33 26 405 49104 839	434 -112 3 181 48673 781	203 -52 -25 84 48446 837	231 -60 -11 95 48375 699	628 -171 -17 207 48205 785	474 -171 -19 48109 788	843 -94 -7 48323 753
PEAK POW MW ENERGY GWH DAILY GWH	8297.5	2173 205.6 13.7	2174 116.1 16.6	2175 189.5 21.1	2176 684.3 22.8	2177 829.7 26.8	2203 832.4 27.7	2202 917.7 29.6	2187 902.3 29.1	2175 762.8 25.4	2152 624.2 20.1	2129 281.3 18.8	2117 140.6 20.1	2116 134.2 16.8	2101 584.0 18.8	2120 586.6 18.9	2127 506.2 18.1
	INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

	101-500			JINAK	JUNER	JINA	30300	31305	SIAUG	JUSEP	31001	15000	22NUV	30000	31DEC	31JAN	28FEB
FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STORAGE ELEV FIMSL DISCH KCFS POWER	6751 388 503 5860 5800 60 12460 2221.0 11.0	272 -21 294 134 160 12620 2221.8 4.5	127 -10 137 62 75 12695 2222.3 4.5	163 -13 176 80 96 12791 2222.8 4.5	591 44 547 357 190 12981 2223.8 6.0	1041 304 737 553 184 13164 2224.8 9.0	1636 549 1087 595 492 13656 2227.4 10.0	712 181 30 584 -84 13572 2226.9 9.5	295 -57 96 256 553 -298 13275 2225.4 9.0	284 -131 120 295 337 -42 13233 2225.2 5.7	365 -70 105 330 283 47 13279 2225.4 4.6	188 -34 48 174 137 37 13316 2225.6 4.6	88 -16 22 81 17 13334 2225.7 4.6	100 -18 25 93 127 -34 13299 2225.5 8.0	332 -112 55 389 615 -226 13073 2224.3 10.0	238 -125 363 707 -344 12729 2222.4 11.5	318 -84 402 611 -209 12520 2221.3 11.0
AVE POWER MU PEAK POW MW ENERGY GWH	924.6	59 198 21.1	59 198 9.9	59 199 12.7	79 200 56.7	118 201 88.1	132 203 95.4	126 203 94.0	119 202 88.8	75 201 54.0	61 202 45.3	61 202 22.0	61 202 10.3	106 202 20.3	132 200 98.1	150 198 111.9	143 197 96.1
GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER	10290 899 0 591 14600 14542 58 15026 1826.8 24.0	485 1 68 686 446 15266 1827.6 1827.6 15.0	226 0 288 194 15360 1828.0 14.0	291 1 371 250 121 15481 1828.4 14.0	779 3 -15 1118 1012 106 15587 1828.8 17.0	1310 178 -31 1654 1322 332 15919 1830.0 21.5	2760 717 -10 2628 1428 1200 17119 1834.2 24.0	1932 483 5 2002 1445 557 17676 1836.1 23.5	543 63 5 115 923 1476 -552 17124 1834.2 24.0	456 -103 34 143 787 1071 -284 16839 1833.2 18.0	438 26 11 123 582 935 -353 16487 1832.0 15.2	179 -102 0 55 362 452 -90 16397 1831.7 15.2	84 -48 26 169 278 -108 16288 1831.3 20.0	95 -54 -35 29 213 317 -105 16184 1830.9 20.0	243 -110 -20 63 884 1230 -346 15838 1829.7 20.0	181 -92 -15 965 1353 -388 15450 1828.3 22.0	287 -64 5 967 1333 -366 15084 1827.0 24.0
AVE POWER MU PEAK POW MW ENERGY GWH	2105.0	348 63.2	349 27.6	350 35.6	352 144.3	254 355 189.0	288 367 207.5	288 373 214.1	294 367 218.6	219 364 157.8	361 137.0	360 66.0	359 40.3	239 358 45.9	238 354 177.1	259 350 192.9	280 346 188.1
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS DOWFD	1877 597 -1 528 15293 15236 57 15673 1596.5 12.6	199 22 40 663 436 227 15901 1597.4 14.6	93 10 4 281 272 9 15910 1597.4 19.6	119 13 356 388 -32 15878 1597.3 21.7	297 46 -13 1249 1338 -89 15789 1577.0 22.5	168 65 -20 1405 1564 -159 15630 1596.4 25.4	747 126 -11 2038 1456 582 16212 1598.5 24.5	132 147 2 33 1399 1770 -371 15840 1597.2 28.8	31 96 -2 103 1305 1761 -456 15384 1595.4 28.6	84 24 27 1031 1582 -551 14833 1593.3 26.6	12 -8 13 109 859 1074 -215 14618 1592.5 17.5	2 49 402 471 -69 14549 1592.2 15.8	1 -22 23 232 218 14 14563 1592.3 15.7	1 0 26 290 195 95 14658 1592.6 12.3	-45 11 0 57 1117 1065 51 14709 1592.8 17.3	-7 16 -9 1321 946 374 15083 1594.3 15.4	47 25 -9 1346 699 647 15731 1596.8 12.6
AVE POWER MU PEAK POW MW ENERGY GWH	v 2223.8	178 652 64.2	239 653 40.1	265 652 57.2	273 650 196.9	308 648 229.4	298 658 214.5	351 651 261.0	346 643 257.5	318 632 229.1	208 628 154.6	188 627 67.6	186 627 31.3	146 629 28.1	206 630 153.3	184 637 136.8	152 649 102.2
BIG BEND EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER	 129 15107 15107 1682 1420.0 12.6	436 436 1682 1420.0 14.6	272 272 1682 1420.0 19.6	388 388 1682 1420.0 21.7	1338 1338 1682 1420.0 22.5	1564 1564 1682 1420.0 25.4	1456 1456 1682 1420.0 24.5	8 1762 1762 1682 1420.0 28.7	24 1737 1737 1682 1420.0 28.2	31 1551 1551 1682 1420.0 26.1	27 1047 1047 1682 1420.0 17.0	12 459 459 1682 1420.0 15.4	6 212 212 1682 1420.0 15.3	7 189 189 1682 1420.0 11.9	14 1051 1051 1682 1420.0 17.1	946 946 1682 1420.0 15.4	699 699 1682 1420.0 12.6
AVE POWER MU PEAK POW MW ENERGY GWH	870.2	517 25.0	510 515.4	509 22.0	509 75.8	509 88.6	509 82.5	509 99.8	509 98.3	517 89.0	538 62.2	538 27.9	538 12.9	538 11.6	538 62.9	538 55.7	529 40.6
FORT RANDAU NAT INFLOW DEPLETION	LL 696 80	95 1	44 1	57 1	89 4	71 9	181 12	36 18 10	68 15 32	32 7 39	2 1 31	1 12	05	15	7 3 13	-7 3	21 3 717
EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M BEAK POW M	147 15576 15576 0 3124 1350.0 9.5	529 256 273 3397 1353.4 8.6 71	316 180 135 3532 1355.0 13.0 13.0	444 427 17 3549 1355.2 23.9 201 352	1423 1423 3549 1355.2 23.9 201 352	1626 1626 3549 1355.2 26.4 222 352	1625 1625 3549 1355.2 27.3 229 352	1770 1770 3549 1355.2 28.8 241 352	1758 1758 0 3549 1355.2 28.6 239 352	1537 1681 -144 3405 1353.5 28.3 235 345	1017 1654 -637 2768 1345.1 26.9 215 310	750 -304 2464 1340.4 25.2 190 288	352 -145 2319 1337.9 25.3 185 277	183 205 -22 2297 1337.5 12.9 94 276	1042 676 366 2663 1343.5 11.0 82 303	664 272 2935 1347.4 10.8 84	528 189 3124 1350.0 9.5 76 331
EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POIN	147 15576 15576 0 3124 1350.0 9.5 4 1539.9 NT	529 256 273 3397 1353.4 8.6 71 345 25.5	316 180 135 3532 1355.0 13.0 109 351 18.3	444 427 17 3549 1355.2 23.9 201 352 43.3	1423 1423 3549 1355.2 23.9 201 352 144.5	1626 1626 3549 1355.2 26.4 222 352 164.9	1625 1625 3549 1355.2 27.3 229 352 164.7	1770 1770 0 3549 1355.2 28.8 241 352 179.3	1758 1758 0 3549 1355.2 28.6 239 352 178.0	1537 1681 -144 3405 1353.5 28.3 235 345 169.1	1654 -637 2768 1345.1 26.9 215 310 159.6	750 -304 2464 1340.4 25.2 190 288 68.4	257 -145 2319 1337.9 25.3 185 277 31.0	183 205 -22 2297 1337.5 12.9 94 276 18.1	1042 676 366 2663 1343.5 11.0 82 303 61.1	664 272 2935 1347.4 10.8 84 321 62.7	528 189 3124 1350.0 9.5 76 331 51.3
EVAPORATION REG INFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POII NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE DISCH KCFS	14/ 15576 15576 0 3124 1360.0 9.5 4 1539.9 NT 1362 114 -1 47 16777 16777 16777 358 1206.0 12.0	529 256 273 3397 1353.4 8.6 71 345 25.5 100 0 2 358 358 358 1206.0 12.0	316 1800 1355 3532 13550 13.50 13.00 13.00 109 351 18.3 47 0 -8 219 219 358 1206.00 15.7	444 427 17 3549 1355.2 23.9 201 352 43.3 60 0 -21 466 466 358 1206.0 26.1	1423 1423 3549 1355.2 23.9 201 352 144.5 1355 0 1553 1553 358 1206.0 26.1	1626 1626 3549 1355.2 26.4 222 352 164.9 150 19 -5 1752 1752 1752 358 1206.0 28.5	1625 1625 3549 13552 27.3 229 352 164.7 156 24 -2 1755 1755 358 1206.0 29.5	1770 1770 0 3549 13552 28.8 241 352 179.3 88 39 -3 3 1814 1814 1814 1814 358 1206.0 29.5	1758 1758 03549 13552 28.6 239 352 178.0 87 10 0 9 1827 1827 1827 1817 1206.5 29.5	1537 1681 -144 353.05 28.3 235 345 169.1 11 1739 1726 384 1207.0 29.0	10154 -637 2768 1345.1 26.9 215 310 159.6 114 2 3 10 1759 1759 1759 1759 384 1207.0 28.6	750 -304 2464 1340.4 25.2 190 288 68.4 51 5 33 5 794 794 384 1207.0 26.7	252 -145 2319 1337.9 25.3 185 277 31.0 24 2 0 2 371 371 384 1207.0 26.7	183 205 -22 227 1337.5 12.9 94 276 18.1 27 32 32 251 251 384 1207.0 15.8	1042 676 366 2663 1343.5 11.0 82 303 61.1 766 10 4 5 741 741 741 384 1207.0 12.0	664 272 2935 1347.4 10.8 84 321 62.7 75 1 0 738 738 738 738 1207.0 12.0	528 189 3124 1350.0 9.5 76 331 51.3 110 2 640 666 666 -26 358 1206.0 12.0
EVAPORATION REG INFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER MA PEAK POW MW ENERGY GWH GAVINS POII NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STOR CHANGE ST	14/ 15576 15576 0 3124 1350.0 9.5 V 1539.9 VT 1362 114 -1 14 -1 16777 16777 16777 358 1206.0 12.0 V 698.4	529 256 273 3397 1353.4 25.5 100 0 2 2 358 358 358 1206.0 12.0 42 114 15.2	316 1800 13532 1355.0 13.0 109 351 18.3 47 0 .8 219 219 358 1206.0 15.7 55 114 9.2	444 427 17 3549 1355.2 23.9 201 352 43.3 60 0 -21 466 466 358 1206.0 26.1 89 114 19.3	1423 1423 1423 3549 1355.2 23.9 201 352 144.5 135 5 0 1553 1553 358 1206.0 26.1 89 114 64.2	1626 1626 3549 1355.2 26.4 222 352 164.9 150 19 -5 1752 1752 1752 358 1206.0 28.5 97 114 72.2	1625 1625 3549 1355.2 27.3 229 352 164.7 156 24 -2 1755 1755 1755 358 1206.0 29.5 100 114 71.8	1770 1770 0 35549 1355.2 28.8 241 352 179.3 88 39 -3 3 1814 1814 1814 1814 29.5 100 29.5 100 114 74.1	1758 1758 0 35549 1355.2 28.6 239 352 178.0 87 10 0 9 1827 1814 13 371 1206.5 29.5 100 115 74.5	1537 1681 -144 3405 1353.5 28.3 235 345 169.1 11 1739 1726 13 384 1207.0 29.0 100 115 71.9	1017 1654 -637 2768 1345.1 26.9 2155 3100 159.6 114 23 100 1759 384 1207.0 28.6 99 1155 73.9	-304 2464 1340.4 25.2 1900 288 68.4 51 5 384 1207.0 26.7 93 115 33.5	352 -145 2319 1337.9 25.3 185 277 31.0 24 20 0 2 371 371 371 384 1207.0 26.7 93 115 5.6	183 205 -227 2277 1337.5 12.9 94 276 18.1 27 23 23 251 251 384 1207.0 15.8 56 115 10.8	1042 676 366 2663 1343.5 11.0 82 303 61.1 76 10 4 5 741 741 741 741 741 741 384 1207.0 12.0 43 777 32.0	664 272 2935 1347.4 10.8 84 321 62.7 75 1 0 738 738 738 384 1207.0 12.0 43 777 31.9	528 189 3124 1350.0 9.5 76 331 51.3 110 2 640 666 -26 358 1206.0 12.0 42 76 28.5
EVAPORATION REG INFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER MA PEAK POW MW ENERGY GWH GAVINS POII NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER MA PEAK POW MW ENERGY GWH GAVINS POII NAT INFLOW DEPLETION REGULATED FLU KAF KCFS	14/ 15576 15576 0 3124 1550.0 9.5 4 1539.9 NT 1362 114 -1 47 16777 16777 16777 358 1206.0 12.0 4 698.4 NT - 1203 248 0W AT SI( 17752	529 253 3397 1353.4 25.5 100 0 25.5 100 25.5 100 22 358 358 358 1206.0 12.0 12.0 12.0 12.0 12.0 12.0 12.7 157 157 157 17.1	316 1800 135 3532 1355.0 13.0 109 351 18.3 47 0 -8 219 219 358 1206.0 15.7 55 114 9.2 -7 73 3 (289 20.8	444 427 17 3549 1355.2 23.9 201 3522 43.3 60 0 -21 466 466 466 466 1206.0 26.1 189 114 19.3 94 4 556 31.2	1423 1423 1423 3549 1355.2 23.9 201 352 144.5 135 0 1553 1553 1553 1553 1553 1553 1206.0 26.1 89 114 64.2 122 20 1655 27.8	1626 1626 3549 1355.2 26.4 222 352 164.9 150 1-5 1752 1752 1752 1752 1752 1752 2358 1206.0 28.5 97 114 72.2 236 34 1954 31.8	1625 1625 3599 1355.2 27.3 229 352 164.7 156 24 -2 1755 1755 358 1206.0 29.5 100 114 71.8 170 30 1895 31.9	1770 1770 3549 1355.2 28.8 241 352 179.3 88 39 -3 3 1814 1814 1814 1814 29.5 100 114 74.1 102 37 1879 30.6	1758 1758 0 35549 13552 28.6 239 352 178.0 87 10 0 9 1827 1814 1206.5 29.5 100 115 74.5 100 115 74.5 34 1855 30.2	1537 1681 -144 3405 1353.5 28.3 235 345 169.1 11 1739 1726 384 1207.0 29.0 100 115 71.9 47 22 1751 29.4	10154 -637 2768 1345.1 26.9 215 3100 159.6 1144 12070 28.6 99 1155 73.9 333 9 1783 29.0	750 -304 2464 1340.4 25.2 1900 288 68.4 51 5 35 794 794 384 1207.0 26.7 93 115 33.5 17 6 806 27.1	352 -145 2319 1337.9 25.3 185 277 31.0 24 20 20 371 371 371 384 1207.0 26.7 93 115 15.6 8 3 376 27.1	183 205 -22 2297 1337.5 12.9 94 276 18.1 23 23 251 251 251 251 251 12.9 94 276 18.1 10.8 56 115 10.8 9 3 257 16.2	1042 676 366 2663 1343.5 11.0 82 303 61.1 76 100 4 5 741 741 1207.0 12.0 43 77 32.0 18 12 12 12.1	564 2935 1347.4 10.8 84 321 62.7 75 1 0 738 738 738 738 738 738 738 738 738 738	528 1899 3124 1350.0 9.5 76 331 51.3 110 2 640 666 -26 358 1206.0 12.0 42 76 28.5 13 718 12.9
EVAPORATION REG INFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER A AVE POWER M PEAK POW MW ENERGY GWH GAVINS POII NAT INFLOW DEPLETION CHAN STOR ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POII NAT INFLOW DEPLETION REULASE STORAGE STORAGE CHANSTOR ENTRLOW ENTRLOW ENTRLOW DEPLETION REGULATED FLU KAF KCFS TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWE	14/ 15576 03124 1350.0 9.5 W 1539.9 NT 1362 114 -1 14 -1 177 16777 16777 16777 358 1206.0 12.0 W 698.4 NT - SIO( 1223 248 0W AT SI( 17752 22199 2326 -1 1945 48323 R W	229 223 3397 1353.4 8.6 71 345 25.5 100 2 358 358 1206.0 12.0 42 114 15.2 UX CITY 157 60UX CITY 508 17.1 1308 9 109 49223 595	316 180 135 3532 1355.0 13.0 109 351 18.3 47 0 -8 219 219 358 1206.0 15.7 55 114 9.2  73 3 (289 20.8 610 -4 49537 718	444 427 17 3549 1355.2 23.9 201 352 43.3 60 0 -21 466 466 466 466 26.1 89 114 19.3 94 4 556 51.2 785 51.2 785 6 -21 49738 880	1423 1423 1423 3549 1355.2 23.9 201 352 144.5 135 0 1553 1553 1553 1553 36.0 26.1 89 114 64.2 122 2013 114 64.2 122 27.8 2013 1655 27.8 2013 122 201 26,1 26,1 26,1 26,1 26,1 26,1 26,1 26,	1626 1626 3549 1355.2 26.4 222 352 164.9 150 19 -5 1752 1752 1752 1752 1752 1752 2368 1206.0 28.5 97 114 72.2 236 34 1954 31.8 2976 600 2976 50302 1119	1625 1625 359 1355.2 27.3 229 352 164.7 156 29.5 1755 1755 358 1206.0 29.5 100 114 71.8 170 30 1895 31.9 5650 1458 -23 52576 1162	1770 1770 3549 1355.2 28.8 241 355.2 179.3 1814 1814 1814 3568 1206.0 29.5 100 114 74.1 102 37 1879 30.6 3002 905 1879 1879 30.6	1758 1758 0 3549 1355.2 28.6 239 352 178.0 9 1827 178.0 9 1827 1814 133 371 1206.5 29.5 100 115 74.5 34 1855 30.2 1099 161 335 29.5 1099 161 3379 51385 2212	1537 1681 -144 3405 1353.5 28.3 235 3455 169.1 63 -5 11 11 1739 1726 13 384 1207.0 29.0 100 115 71.9 71.9 71.9 47 22 1751 29.4 966 -186 61 472 50376 1071	1017 1017	750 -304 2464 1340.4 25.2 1900 288 68.4 51 5 33 5 794 384 1207.0 26.7 93 115 33.5 33.5 17 6 806 27.1 435 -123 31 181 48791 793	352 -145 2319 1337.9 25.3 185 277 31.0 24 2 0 2 27 31.0 24 2 0 2 27 31.0 26.7 331 384 1207.0 26.7 93 1155 15.6 8 3 3 776 27.1 203 -7.2 203 -7.2 203 -7.2 203 -7.2 203 -7.2 203 -7.2 203 203 203 203 203 203 203 203 203 20	183 205 -22 2297 1337.5 12.9 94 276 18.1 27 32 251 251 384 1207.0 15.8 56 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5	1042 676 366 2663 303 31343.5 11.0 82 303 61.1 76 10 4 5 741 741 384 1207.00 12.0 43 741 384 1207.00 12.0 12.0 43 747 12.1 631 -186 631 -186 631 -186 8349 785	664 272 2935 1347.4 10.8 84 321 62.7 75 1 0 738 384 1207.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	528 189 3124 1350.0 9.5 76 331 51.3 110 2 640 666 -26 358 1206.0 12.0 42 76 28.5 13 718 12.9 848 -107 -2 48499 754
EVAPORATION REG INFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER MA PEAK POW MW ENERGY GWH GAVINS POI INAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STOR CHANGE CHAN STOR CHAN STOR CHAN STOR EVAPORATION STORAGE SYSTEM POWER MA PEAK POW MW ENERGY GWH DAILLY GWH	14/ 15576 15576 0 3124 1559.9 WT 1362 114 -1 47 16777 358 1206.0 12.0 W 698.4 NT - SIQI 17752 22199 2326 -1 19455 48323 R W 8361.9	529 253 3397 1353.4 25.5 100 0 25.5 100 0 2 358 358 1206.0 12.0 42 114 15.2 UX CITY. 157 0UX CITY. 157 000X CITY. 109 49223 509 2175 214.1 14.3	316 1800 135 135520 135520 135520 135520 135520 135520 109 3513 47 0 -8 2199 2199 3588 1206.0 15.7 289 20.8 6100 4 49537 7188 2176 120.6 17.2	444 427 17 3549 1355.2 23.9 201 352 43.3 60 0 -21 466 3588 1206.0 26.1 89 114 19.3 94 4 556 31.2 785 6 6 21.1 49738 880 2176 21.1	1423 1423 1423 3549 1355.2 23.9 201 352 144.5 1355 1553 1553 1553 1553 1553 1553 15	1626 1626 3549 1355.2 26.4 222 352 164.9 150 19 -5 1752 1752 1752 1758 1206.0 28.5 97 114 72.2 236 1752 1752 1752 1752 1752 1752 1752 1752	1625 1625 3549 1355-2 27.3 229 352 164.7 156 244 -2 1755 358 1206.0 29.5 100 114 71.8 170 30 1895 31.9 56500 1458 -23 52576 1162 2204 836.3 27.9	1770 1770 3549 13552 28.8 241 352 179.3 88 39 -3 3 1814 1814 1814 1814 1814 1814 1814 1	1758 1758 03549 13552 28.6 239 352 178.0 9 352 178.0 9 1827 1814 1206.5 29.5 100 115 74.5 100 115 73.5 100 115 73.5 100 115 73.5 100 105 123 100 105 123 100 105 123 100 105 123 100 105 123 100 105 123 100 100 100 100 100 100 100 100 100 10	1537 1681 -144 3405 1353.5 28.3 235 3455 169.1 63 -5 1 11 1739 1726 29.0 100 1155 71.9 47 22 1751 29.4 9666 612 64 612 50376 1071 27.76 25.7	1017 1017	750 -304 2464 1340.4 25.2 190 288 68.4 51 5 3 5 794 794 288 68.4 1207.0 26.7 93 3155 33.5 17 6 806 27.1 435 -123 3 181 48791 2130 285.4 19.0	352 -145 2319 1337.9 25.3 185 277 31.0 24 20 0 22 371 371 384 1207.0 26.7 93 3115 15.6 8 3 376 27.1 203 -57 -22 48569 842 21.19 20.2	183 205 -22 2297 1337.5 12.9 94 276 18.1 27 3 23 251 251 251 251 10.8 56 115 10.8 9 3 257 16.2 232 -65 -11 95 48503 702 2117 134.7 16.8	1042 676 366 2663 1343.5 11.0 82 303 61.1 76 10 4 5 741 741 384 1207.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	564 2935 1347.4 10.8 84 321 62.7 75 1 0 738 738 384 1207.0 12.0 12.0 43 738 738 384 1207.0 12.0 43 738 738 738 738 738 738 738 73	528 1899 3124 1350.0 9.5 76 331 51.3 110 2 640 666 -26 358 1206.0 12.0 42 76 28.5 13 718 12.9 848 -107 -2 48499 51.3 75 8.1

C	ATE OF	STUDY	11/28/2	2000				2000-2	2001 AOF	P EXTENS	SIONS, L	OWER QU	JARTILE	RUNOFF	99001	990 <b>1</b> 9	901 P/	GE	1
1	IME OF	STUDY	09:38:4	10				NAVIGA VALUES	TION SE	ASON SH	HORTENED	) AT 52 5 INDICA	MAF ON	JULY 1			STUDY	NO	19
		28 FI	EBO6 INI-SUM	15MAR	2006 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
	FORT NAT INF DEPLETI	PECK- LOW ON	7022	283 -21	132 -10	170 -13	615 43	1083 305	1702 553	741 188	307 -52	295 -131	379 -72	196 - 34	91 -16	104 -18	345 -112	248 -126	331 -84
	MOD INF RELEASE	LOW	6115 5947	304 134	142 62	183 80	572 357	778 584	1149 625	522 615	262 584	305 334	345 281	181 136	23 85 63	26 97 127	402 615	374 738	415 611
	STOR CH	ANGE	168 12520	171 12691	80 12770	102 12873	215 .13088	194 13281	524 13806	-93 13713	-322 13391	-30 13361	64 13425	46 13471	21 13492	-30 13462	-213 13248	-364 12885	-196 12689
	DISCH K	CFS	11.0	4.5	4.5	4.5	6.0	9.5	10.5	10.0	2226.0 9.5	2225.8 5.6	2226.2 4.6	2226.4 4.6	2226.5 4.6	2226.4 8.0	2225.2	2223.3 12.0	2222.2
	AVE POW PEAK PO ENERGY	ER MW W MW GWH	950.6	59 198 21.2	59 199 9.9	59 199 12.8	79 200 56.8	125 202 93.2	139 204 100.4	133 204 99.2	126 202 93.9	75 202 53.7	61 202 45.1	61 203 21.9	61 203 10.2	106 203 20.4	132 201 98.5	158 199 117.2	144 198 96.5
	GARR NAT INF DEPLETI	ISON LOW ON	10598 1125	500 -5	233 -2	300 -3	803 -9	1349 204	2842 752	1990 525	559 57	470 -121	451 22	185 -83	86 -39	98 -44	251 -64	186 -45	295 -21
	EVAPORA REG INF	TION	598 14822	706	298	383	1154	1693	2705	37 2048	116 975	144 820	125 595	56 347	26 162	-35 30 205	-20 64 846	-20 948	937
	RELEASE STOR CH	ANGE	14606 215	446 260	194 104	250 133	1012 142	1353 340	1458 1247	1476 573	1445 -470	1071 -251	947 - 352	458 -111	264 -102	317 -112	1230 -384	1353 -404	1333 -396
	ELEV FT	MSL CES	15084 1827.0 24.0	15344 1827.9 15.0	1828.3 14.0	1828.8	15/23 1829.3	1830.5	1834.8	1/883	17412 1835.2 23.5	1834.3	1833.1	1832.7	16596	16484	16100 1830.6 20.0	15695 1829.2	15300 1827.8 24 0
	POWER AVE POW	ER MW		176	165	165	201	261	295	295	289	221	188	187	230	241	240	261	281
	ENERGY	w mw GWH	2124.8	63.3	27.7	35.7	144.7	194.0	212.5	219.5	215.2	368 158.9	364 139.8	363 67.3	362 38.6	46.2	357 178.2	353 194.0	348 189.1
	NAT INF DEPLETI		2048 613	217 23	101 11	130 14	324 47	183 66	815 129	144 151	34 100	92 25	13 -8	2	1	1	-49 11	-8 16	51 26
	EVAPORA REG INF	TION	535 15506	681	4 290	367	1275	-22 1448	2133	34 1437	105 1276	129 1034	110 869	50 407	-17 23 223	-5 26 285	58 1112	-9 1320	-9 1349
	RELEASE STOR CH	ANGE	15283 222	557 124	148 141	365 2	1329 -53	1570 -122	1454 679	1787 -350	1776	1600 -566	1095 -226	481 -74	223 1	197 89	1058 54	947 373	697 652
	ELEV FT	MSL CFS	15751 1596.8 12.6	1597.2 18.7	15996 1597.7 10.7	15998	15945	1597.1	1599.6 24.4	1598.3 29.1	1596.5	1594.3	14859 1593.4 17.8	14785 1593.1 16.2	14/86 1593.1 16.0	148/4 1593.5 12.4	14928 1593.7 17.2	15300 1595.1 15.4	15953 1597.6 12.5
	POWER AVE POW	ER MW		228	130	249	272	311	299	356	351	323	213	193	191	148	206	185	152
	ENERGY	w mw GWH	2240.9	82.0	21.9	53.9	196.1	231.1	215.3	265.0	261.1	232.9	158.6	631 69.5	32.1	633 28.5	634 153.0	641 137.6	653 102.4
	BIG EVAPORA	BEND	- 129		140	265	1220	1570	1454	1770	24	31	27	12	6	7	14	0.47	c 0 7
	RELEASE	LOW	15155 15155 1682	557 1682	148 148 1682	365 365 1682	1329 1329 1682	1570 1570 1682	1454 1454 1682	1779 1682	1751 1751 1682	1569 1569 1682	1068	469 469 1682	217 217 1682	190 190 1682	1044 1044 1682	947 947 1682	697 697 1682
	ELEV FT DISCH K	MSL CFS	1420.0 12.6	1420.0 18.7	1420.0 10.7	1420.0 20.4	1420.0 22.3	1420.0 25.5	1420.0 24.4	1420.0 28.9	1420.0 28.5	1420.0 26.4	1420.0 17.4	1420.0 15.8	1420.0 15.6	1420.0 12.0	1420.0 17.0	1420.0 15.4	1420.0 12.5
	AVE POW PEAK PO	ER MW		88 510	50 509	96 509	105 509	120 509	114 509	135 509	133 509	125 517	85 538	79 538	79 538	61 538	84 538	75 538	60 529
	ENERGY	GWH	872.7	31.6	8.4	20.7	75.3	88.9	82.4	100.7	99.2	90.0	63.5	28.5	13.2	11.6	62.5	55.8	40.5
	NAT INF DEPLETI	LOW	779 80	106 1	49 1	64 1	100 4	79 9	203 12	41 18	76 15	36 7	2 1	1	0	1	8 3	-8 3	23 3
	EVAPORA REG INF	TION LOW	147 15707 15707	661	197	427	1425	1640	1645	10 1792 1792	32 1781 1781	39 1559 1703	31 1039 1676	12 456 760	5 211 356	5 185 207	13 1036 670	936	717
	STOR CH	ANGE	0 3124	408 3532	17 3549	3549	3549	0 3549	3549	3549	0 3549	-144 3405	-637 2768	-304 2464	-145 2319	-22 2297	366 2663	272 2935	189 3124
	ELEV FT DISCH K	MSL CFS	1350.0 9.5	1355.0 8.5	1355.2 13.0	1355.2 23.9	1355.2 23.9	1355.2 26.7	1355.2 27.6	1355.2 29.1	1355.2 29.0	1353.5 28.6	1345.1 27.3	1340.4 25.5	1337.9 25.7	1337.5 13.0	1343.5 10.9	1347.4 10.8	1350.0 9.5
	AVE POW PEAK PO	ER MW W MW		71 351	109 352	201 352	201 352	223 352	232 352	244 352	242 352	238 345	217 310	193 288	187 277	95 276	81 303	84 321	76 331
_	ENERGY	GWH POIN	1553.1 T	25.4	18.4	43.4	144.7	166.3	166.7	181.4	• 180.3	171.3	161.7	69.3	31.5	18.2	60.6	62.7	51.3
	NAT INF	LOW	1401 114	103 0	48 0	62 0 21	139 5	155 19	160 24	91 39 3	89 10	65 -5	117 2 3	53 5	25 2	28 3 24	78 10	77 1	113
	EVAPORA REG INF	TION	47 16946	358	219	468	1559	1771	1779	3 1839	9 1852	11 1762	10 1783	5 806	2 376	2 254	5 737	740	643
	RELEASE STOR CH	ANGE	16946	358	219	468	1559	1771	1779	1839	1839 13 371	1749 13 384	1783	806 384	376	254	737	740	669 -26
	ELEV FT DISCH K	MSL CFS	1206.0 12.0	1206.0 12.0	1206.0 15.8	1206.0 26.2	1206.0 26.2	1206.0 28.8	1206.0 29.9	1206.0 29.9	1206.5 29.9	1207.0 29.4	1207.0 29.0	1207.0 27.1	1207.0 27.1	1207.0 16.0	1207.0 12.0	1207.0 12.0	1206.0 12.0
	AVE POW PEAK PC ENERGY	'ER MW W MW GWH	703.8	42 114 15.2	55 114 9.2	90 114 19.4	90 114 64.5	98 114 72.9	101 114 72.4	101 114 74.8	101 115 75.2	101 115 72.6	100 115 74.6	94 115 34.0	94 115 15.9	57 115 10.9	43 77 31.8	43 77 31.9	43 76 28.6
-	GAVINS NAT INF DEPLETI	POIN LOW ON	T – SIOU 1356 251	JX CITY- 174 6	- 81 3	104 4	135 21	262 35	188 30	113 37	84 34	52 22	37 10	19 6	9 3	10 3	20 12	-4 13	72 13
F	REGULATE KAF	D FLO	AT SIC 18051	DUX CITY	298	568	1673	1998	1937	1915	1889	1779	1810	820	383	261	745	723	728
	TOT	AL		17.7	21.4	51.0	20.1	52.5	32.0	51.1	30.7	29.9	29.4	27.0	27.0	10.4	12.1	11.0	
	NAT INF	LOW	23204 2583	1383	645 2	829 2	2116 111	3111 638	5910 1500	3120 958	1149 164	1010 -203	999 -45	452 -104	211 -48	241 -55	653 -140	491 -138	885 -63
	EVAPORA STORAGE	TION	-1 1963 48499	49462	-4 49803	-21 50041	-29 50344	-63 50756	-23 53206	4 122 53335	383 52057	476 51078	409 49928	3 182 49484	-1/ 84 49259	96 49182	209 49005	-29 48881	4 49105
	SYSTEM	POWER		663	569	860	947	1138	1180	1264	1243	1082	865	807	842	707	786	805	756
	ENERGY DAILY G	GWH WH	8445.8	238.5 15.9	95.5 13.6	185.7 20.6	682.1 22.7	846.4 27.3	849.7 28.3	940.7 30.3	924.9 29.8	779.3 26.0	643.2 20.7	290.5 19.4	141.4 20.2	135.8 17.0	584.5 18.9	599.3 19.3	508.4 18.2

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 310CT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB

TIME OF STUDY 07:07:45

STORAGE ELEV FTMSL DISCH KCFS

NAT INFLOW

CHAN STOR EVAPORATION

REG INFLOW RELEASE

ENERGY GWH

NAT INFLOW

REG INFLOW

ELEV FTMSL DISCH KCFS

STORAGE

POWER

STORAGE

POWER

ELEV FTMSL DISCH KCFS

NAT INFLOW

EVAPORATION

REG INFLOW RELEASE

ELEV FTMSL DISCH KCFS

NAT INFLOW DEPLETION CHAN STOR

EVAPORATION

REG INFLOW RELEASE

STOR CHANG STORAGE ELEV FTMSL DISCH KCFS

ENERGY GWH

-TOTAL NAT INFLOW DEPLETION CHAN STOR

AVE POWER MW PEAK POW MW ENERGY GWH

DAILY GWH

121.8 17.4

INI-SUM 15MAR 22MAR 31MAR

218.2 14.5

8073.0

189.7

21.1

30APR 31MAY

688.4 22.9

796.3 25.7

794.8 26.5

STORAGE

POWER

STOR CHANGE

STORAGE

POWER

RELEASE STOR CHANGE

-0AHE ---

DEPLETION

POWER

28.1

871.6

881.2 28.4

30JUN 31JUL 31AUG 30SEP

735.1 24.5

264.6 17.6

122.2 17.5

22NOV

131.6 16.4

30NOV

580.2 18.7

31DEC

505.6

18.1

28FEB

582.2

18.8

31JAN

310CT 15NOV

589.4 19.0

TIME OF STUDY 07:07:45

	28 F	EB03 INI-SUM	15MAR	2003 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	29FEB
F NAT DEF EVA MOD REL STO STO ELE DIS	FORT PECK- TINFLOW PLETION APORATION DINFLOW EASE DR CHANGE DRAGE EV FTMSL SCH KCFS WFR	6613 365 493 5755 5713 43 12121 2219.1 12.0	267 -21 288 134 154 12275 2219.9 4.5	124 -10 134 62 72 12347 2220.3 4.5	160 -13 173 80 92 12439 2220.8 4.5	579 44 535 417 118 12558 2221.5 7.0	1019 302 717 492 225 12783 2222.7 8.0	1603 540 1063 595 468 13251 2225.3 10.0	698 167 30 501 584 -83 13167 2224.8 9.5	289 -65 94 260 523 -263 12905 2223.4 8.5	278 -130 118 290 318 -28 12877 2223.2 5.3	357 -66 103 320 267 53 12929 2223.5 4.3	185 -31 47 169 129 39 12969 2223.7 4.3	86 -14 22 79 60 18 12987 2223.8 4.3	98 -17 25 90 127 -37 12950 2223.6 8.0	325 -108 54 379 615 -236 12714 2222.4 10.0	233 -122 355 676 -321 12393 2220.6 11.0	312 -91 403 633 -230 12163 2219.3 11.0
AVE PEA ENE	POWER MW AK POW MW ERGY GWH	902.9	58 196 20.9	58 196 9.8	58 197 12.6	91 198 65.5	104 199 77.6	131 201 94.5	125 201 93.2	112 199 83.1	70 199 50.6	57 200 42.5	57 200 20.6	57 200 9.6	105 200 20.2	131 198 97.3	143 197 106.2	142 195 98.7
NAT DEF CHA REQ REL STC STC ELE	GARRISON- INFLOW DETION NN STOR APORATION GINFLOW LEASE DR CHANGE DRAGE V FTMSL SCH KCFS	 10134 1004 10 582 14271 14215 56 14609 1825.2 23.0	478 2 78 688 476 212 14821 1826.0 16.0	223 1 284 194 90 14911 1826.3 14.0	287 1 366 250 116 15027 1826.8 14.0	768 6 -26 1153 1012 141 15168 1827.3 17.0	1290 204 -10 1568 1291 276 15444 1828.3 21.0	2718 722 -21 2570 1398 1172 16616 1832.5 23.5	1903 477 5 1980 1414 565 17181 1834.4 23.0	535 57 10 113 898 1383 -486 16696 1832.7 22.5	449 -97 32 141 756 994 -239 16457 1831.9 16.7	431 36 10 122 550 899 -349 16108 1830.7 14.6	176 -89 0 55 339 435 -96 16012 1830.3 14.6	82 -41 0 25 158 203 -45 15968 1830.2 14.6	94 -47 -37 202 301 -100 15868 1829.8 19.0	240 -94 -21 866 1230 -364 15504 1828.5 20.0	178 -78 -10 922 1353 -431 15073 1826.9 22.0	282 -57 972 1381 -409 14664 1825.4 24.0
AVE PEA ENE	DWER E POWER MW AK POW MW ERGY GWH	1 2037.6	185 343 66.6	163 344 27.3	163 346 35.2	198 347 142.8	246 350 182.7	279 362 201.0	279 368 207.4	273 363 203.1	202 361 145.3	176 357 130.7	175 356 62.9	175 356 29.3	226 354 43.3	236 351 175.7	257 346 191.2	277 342 192.9
NAT DEF CHA EVA REL STC ELE DIS	OAHE INFLOW PLETION AN STOR APORATION A INFLOW LEASE DR CHANGE DRAGE EV FTMSL SCH KCFS	1794 570 -5 518 14916 14858 58 15245 1594.9 12.7	190 22 32 676 441 235 15480 1595.8 14.8	89 10 9 282 267 15 15495 1595.9 19.2	114 13 351 375 -25 15471 1595.8 21.0	283 45 -13 1236 1291 -55 15415 1595.6 21.7	161 62 -18 1372 1515 -143 15273 15273 1595.0 24.6	714 120 -11 1981 1414 567 15839 1597.2 23.8	127 138 2 33 1373 -345 15494 1595.9 27.9	30 90 2 101 1224 1270 -485 15009 1594.0 27.8	80 23 26 125 953 1531 -578 14431 1591.7 25.7	11 -7 10 107 820 1021 -201 14230 1590.9 16.6	2 0 48 385 -59 14171 1590.7 14.9	1 0 22 180 205 -26 14145 1590.6 14.8	1 -21 254 189 65 14210 1590.8 11.9	-43 11 -5 56 1115 1065 50 14260 1591.0 17.3	-7 15 -9 1321 946 375 14635 1592.5 1592.5	45 25 -9 1391 724 667 15302 1595.1 12.6
AVE PEA ENE	E POWER MU AK POW MW ERGY GWH	2151.2	179 645 64.4	232 645 39.0	254 645 54.9	262 644 188.6	296 641 220.6	287 651 206.9	338 645 251.5	334 636 248.2	305 625 219.8	196 621 145.7	176 619 63.3	174 619 29.2	141 620 27.0	204 621 151.7	182 629 135.5	151 641 105.0
EVA REG REL STO ELE DIS AVE	BIG BEND- APORATION EASE DRAGE EV FTMSL SCH KCFS DWER E POWER MW	129 14729 14729 1682 1420.0 12.7	441 441 1682 1420.0 14.8 70	267 267 1682 1420.0 19.2 90	375 375 1682 1420.0 21.0 98	1291 1291 1682 1420.0 21.7 102	1515 1515 1682 1420.0 24.6 115	1414 1414 1682 1420.0 23.8 111	8 1710 1710 1682 1420.0 27.8 130	24 1685 1685 1682 1420.0 27.4 128	31 1500 1500 1682 1420.0 25.2 119	27 994 994 1682 1420.0 16.2 79	12 432 432 1682 1420.0 14.5 73	6 200 200 1682 1420.0 14.4 73	7 183 183 1682 1420.0 11.5 58	14 1051 1051 1682 1420.0 17.1 85	946 946 1682 1420.0 15.4 75	724 724 1682 1420.0 12.6 60
PEA ENE	AK POW MW ERGY GWH	848.5	517 25.3	$510 \\ 15.1$	509 21.3	509 73.2	509 85.8	509 80.1	509 96.8	509 95.4	517 86.0	538 59.1	538 26.3	538 12.2	538 11.2	538 62.9	538 55.7	529 42.1
NAT DEVA REG STC STC DIS PC AVE ENE	TINFLOW PLETION APORATION G INFLOW EASE DR CHANGE DRAGE EV FTMSL SCH KCFS WER E POWER MV AK POW MW ERGY GWH	659 80 147 15161 15161 15161 3124 1350.0 9.6 1499.3	90 1 529 256 273 3397 1353.4 8.6 71 345 25.5	42 1 308 173 3532 1355.0 12.4 104 351 17.5	54 1 428 411 17 3549 1355.2 23.0 193 352 41.7	84 4 1371 3549 1355.2 23.0 194 352 139.3	67 9 1573 1573 3549 1355.2 25.6 214 352 159.6	171 12 1573 1573 3549 1355.2 26.4 222 352 159.5	34 18 10 1716 0 3549 1355.2 27.9 234 352 173.9	65 15 32 1704 0 3549 1355.2 27.7 232 352 172.6	31 7 39 1485 1629 -144 3405 1353.5 27.4 228 345 163.9	2 1 31 964 1601 -637 2768 1345.1 26.0 208 310 154.6	1 12 419 723 -304 2464 1340.4 24.3 183 288 66.0	0 5 194 339 -145 2319 1337.9 24.4 178 277 30.0	1 5 177 199 -22 2297 1337.5 12.6 91 276 17.5	7 3 1042 676 366 2663 1343.5 11.0 82 303 61.1	-7 3 936 664 272 2935 1347.4 10.8 84 321 62.7	20 3 741 552 189 3124 1350.0 9.6 77 331 53.7
GA NAT DEF CHA EVA REC STC STC STC ELE DIS PC AVE PCA ENE	AVINS POIN F INFLOW PLETION AN STOR APORATION G INFLOW EASE DR CHANGE DRAGE EV FIMSL SCH KCFS DWER E POWER MW AK POW MW ENGY GWH	17 1342 114 -1 47 16342 16342 358 1206.0 12.0 4 682.9	98 0 2 357 357 358 1206.0 12.0 42 114 15.1	46 0 -7 211 211 358 1206.0 15.2 53 114 8.9	59 0 -20 450 450 358 1206.0 25.2 86 114 18.7	133 5 0 1499 1499 358 1206.0 25.2 86 114 62.1	148 19 -5 1697 1697 358 1206.0 27.6 94 114 70.0	154 24 -2 1702 1702 358 1206.0 28.6 97 114 70.1	87 39 -3 1759 1759 358 1206.0 28.6 97 114 72.4	86 10 9 1772 1759 13 371 1206.5 28.6 98 115 72.8	62 -5 1 11 1685 1672 13 384 1207.0 28.1 97 115 70.0	112 2 3 10 1703 1703 384 1207.0 27.7 96 115 71.7	51 5 768 768 768 1207.0 25.8 90 115 32.4	24 2 358 358 358 1207.0 25.8 90 115 15.1	27 3 22 243 243 243 384 1207.0 15.3 54 115 54 10.5	75 10 3 5 739 739 384 1207.0 12.0 43 77 31.9	73 1 0 736 736 384 1207.0 12.0 43 77 31.8	108 2 662 688 -26 358 1206.0 12.0 42 76 29.4
GA NA1 DEF	AVINS POIN T INFLOW PLETION	NT - SIO 1160 241	UX CITY- 149 6	 69 3	89 3	116 20	224 34	161 29	97 36	72 33	45 22	31 9	16 5	7	9	17	-3 12	61 13
REGU	JLATED FLO KAF KCFS	DW AT SIG 17261	OUX CIT 499 16.8	278 20.0	536 30.0	1595 26.8	1887 30.7	1834 30.8	1820 29.6	1798 29.2	1695 28.5	1725 28.1	779 26.2	- 363 26.2	249 15.7	745 12.1	721 11.7	736 12.8
NAT DEF CHA STC SYS AVE PEA ENE	TOTAL TINFLOW PLETION AN STOR APORATION DRAGE STEM POWER E POWER MA AK POW MW ERGY GWH	21702 2374 4 1916 47138 8122.3	1271 10 112 48012 605 2160 217.8	593 5 2 48325 701 2161 117.7	762 6 -20 48525 854 2162 184.4	1963 124 -39 48729 933 2163 671.5	2909 630 -33 49088 1070 2165 796.3	5521 1447 -34 51295 1128 2190 812.1	2946 875 4 119 51432 1203 2189 895.2	1077 140 13 373 50211 1176 2174 875.3	945 -180 59 465 49235 1022 2162 735.6	944 -25 22 400 48102 812 2140 604.2	427 -107 3 178 47682 754 2117 271.6	199 -50 0 83 47485 747 2105 125.5	228 -57 -36 94 47391 675 2103 129.7	621 -167 -22 204 47207 780 2089 580.6	467 -169 -19 47102 784 2107 583.1	828 -107 -7 47294 750 2114 521.7
UAI	LIGWH	INI-SUM	14.5 15MAR	10.8 22MAR	20.5 31MAR	22.4 30APR	25.7 31MAY	27.1 30JUN	28.9 31JUL	20.2 31AUG	24.5 30SEP	310CT	15NOV	17.9 22NOV	30NOV	18./ 31DEC	18.8 31JAN	29FEB

FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER	- 6720 379 495 5846 5713 133 12163 2219.3 11.0	271 -21 292 134 158 12322 2220.2 4.5	126 -10 136 62 74 12396 2220.6 4.5	163 -13 175 80 95 12491 2221.1 4.5	588 44 544 357 12678 2222.2 6.0	1036 303 733 553 180 12857 2223.1 9.0	1629 545 1084 595 489 13346 2225.8 10.0	709 174 30 505 584 -79 13267 2225.3 9.5	294 -61 95 260 553 -293 12974 2223.8 9.0	282 -130 118 294 314 -20 12954 2223.7 5.3	363 -68 104 327 263 64 13018 2224.0 4.3	188 -33 47 173 127 45 13063 2224.3 4.3	88 -15 22 81 59 21 13084 2224.4 4.3	100 -17 25 92 127 -35 13049 2224.2 8.0	330 -111 54 387 615 -228 12821 2222.9 10.0	237 -125 362 676 -314 12507 2221.2 11.0	317 -83 400 611 -211 12296 2220.1 11.0
AVE POWER MW PEAK POW MW ENERGY GWH	905.1	58 196 21.0	58 197 9.8	59 197 12.6	/8 198 56.3	118 199 87.4	132 202 94.7	126 201 93.5	119 200 88.2	69 200 50.0	56 200 42.0	57 200 20.4	57 200 9.5	105 200 20.2	131 199 97.5	143 197 106.5	142 196 95.6
GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	- 10262 939 0 586 14449 14291 159 14664 1825.4 24.0	484 1 685 446 239 14903 1826.3 15.0	226 0 288 194 93 14996 1826.6 14.0	290 1 370 250 120 15116 1827.1 14.0	777 3 -16 1115 1012 104 15220 1827.5 17.0	1306 178 -31 1650 1291 359 15579 1828.8 21.0	2752 707 -10 2630 1398 1231 16811 1833.1 23.5	1927 467 5 2013 1414 599 17410 1835.2 23.0	542 63 5 114 924 1383 -460 16950 1833.6 22.5	455 -100 38 142 765 1071 -306 16644 1832.6 18.0	437 31 10 123 557 889 -332 16311 1831.4 14.5	179 -93 0 55 343 430 -87 16224 1831.1 14.5	83 -43 26 160 278 -117 16107 1830.7 20.0	95 -49 -38 204 317 -113 15994 1830.3 20.0	243 -96 -20 63 871 1230 -359 15635 1829.0 20.0	180 -79 -10 925 1353 -428 15207 1827.4 22.0	286 -52 0 1333 -384 14823 1826.0 24.0
AVE POWER MW PEAK POW MW ENERGY GWH	2056.1	174 344 62.6	163 345 27.4	163 346 35.3	199 348 143.0	246 351 183.1	280 364 201.7	280 370 208.3	274 366 204.2	218 362 157.2	175 359 129.9	174 358 62.5	239 357 40.1	238 356 45.7	237 352 176.2	258 347 191.8	278 343 186.9
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER	1860 585 -1 521 15044 14882 162 15302 15302 15302 12.6	197 22 41 662 437 226 15528 15568 15560 14.7	92 10 4 281 265 15 15543 1596.1 19.1	118 13 355 374 -19 15525 1596.0 20.9	294 46 -13 1246 1291 -45 15479 1595.8 21.7	167 64 -18 1376 1522 -146 15333 1595.3 24.8	740 123 -11 2004 1417 587 15920 1597.5 23.8	131 143 2 33 1372 1727 1555 15564 1596.1 28.1	31 93 2 102 1222 1718 -496 15068 1594.2 27.9	83 23 20 125 1026 1541 -514 14554 1592.2 25.9	12 -8 16 108 818 1031 -213 14341 1591.4 16.8	2 0 48 380 -70 14271 1591.1 1591.1	1 -26 23 228 208 20 14292 1591.2 1591.2	1 26 291 191 100 14392 1591.6 12.0	-45 11 0 56 1117 1065 52 14444 1591.8 17.3	-7 16 -9 1320 946 374 14818 1593.3 15.4	46 25 -9 1345 699 646 15464 1595.8 12.6
AVE POWER MW PEAK POW MW ENERGY GWH	2159.1	177 646 63.8	231 646 38.8	253 646 54.7	262 645 188.8	298 642 221.9	288 653 207.6	340 646 253.2	336 637 249.7	308 627 221.7	198 623 147.6	178 621 64.2	177 622 29.7	142 624 27.3	205 625 152.4	183 632 136.0	151 644 101.6
BIG BEND- EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER	- 14753 14753 14753 1682 1420.0 12.6	437 437 1682 1420.0 14.7	265 265 1682 1420.0 19.1	374 374 1682 1420.0 20.9	1291 1291 1682 1420.0 21.7	1522 1522 1682 1420.0 24.8	1417 1417 1682 1420.0 23.8	8 1719 1719 1682 1420.0 28.0	24 1694 1694 1682 1420.0 27.5	31 1510 1510 1682 1420.0 25.4	27 1004 1004 1682 1420.0 16.3	12 438 438 1682 1420.0 14.7	6 202 202 1682 1420.0 14.6	7 184 184 1682 1420.0 11.6	14 1051 1051 1682 1420.0 17.1	946 946 1682 1420.0 15.4	699 699 1682 1420.0 12.6
AVE POWER MW PEAK POW MW ENERGY GWH	849.9	69 517 25.0	90 510 15.0	98 509 21.2	102 509 73.2	116 509 86.2	112 509 80.3	131 509 97.4	129 509 95.9	120 517 86.6	80 538 59.7	74 538 26.7	73 538 12.3	59 538 11.3	85 538 62.9	75 538 55.7	60 529 40.6
FORT RANDAL NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS DOWFD	L 690 147 15217 15217 0 3124 1350.0 9.6	94 1 529 256 273 3397 1353.4 8.6	44 1 308 173 135 3532 1355.0 12.5	56 1 429 412 17 3549 1355.2 23.1	88 4 1375 1375 3549 1355.2 23.1	70 9 1583 1583 3549 1355.2 25.8	179 12 1584 1584 0 3549 1355.2 26.6	36 18 10 1727 1727 0 3549 1355.2 28.1	68 15 32 1715 1715 0 3549 1355.2 27.9	32 7 39 1495 1640 -144 3405 1353.5 27.6	2 31 974 1611 -637 2768 1345.1 26.2	1 12 425 729 -304 2464 1340.4 24.5	0 5 197 342 -145 2319 1337.9 24.6	1 5 178 201 -22 2297 1337.5 12.6	7 3 1042 676 2663 1343.5 11.0	-7 3 936 664 272 2935 1347.4 10.8	21 3 528 189 3124 1350.0 9.5
AVE POWER MW PEAK POW MW ENERGY GWH	1504.7	71 345 25.5	105 351 17.6	194 352 41.8	194 352 139.7	216 352 160.6	223 352 160.6	235 352 175.0	234 352 173.8	229 345 165.0	209 310 155.5	185 288 66.5	180 277 30.2	92 276 17.6	82 303 61.1	84 321 62.7	76 331 51.3
GAVINS POIN NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE	T 1359 114 -1 47 16414 16414	100 0 2 358 358	47 0 -7 212 212	60 0 -20 452 452	135 5 0 1505 1505	150 19 -5 1709 1709	155 24 -2 1714 1714	88 39 -3 3 1771 1771	87 10 9 1784 1771 13	63 -5 1 11 1697 1684 13	114 2 3 10 1716 1716	51 5 5 774 774	24 2 0 2 361 361	27 3 22 245 245 245	76 10 3 5 740 740	74 1 0 737 737	109 2 639 665 -26
STORAGE ELEV FTMSL DISCH KCFS POWER	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 15.3	358 1206.0 25.3	358 1206.0 25.3	358 1206.0 27.8	358 1206.0 28.8	358 1206.0 28.8	371 1206.5 28.8	384 1207.0 28.3	384 1207.0 27.9	384 1207.0 26.0	384 1207.0 26.0	384 1207.0 15.5	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
AVE POWER MW PEAK POW MW ENERGY GWH	685.6	42 114 15.2	53 114 8.9	87 114 18.7	87 114 62.4	95 114 70.5	98 114 70.5	98 114 72.9	98 115 73.2	98 115 70.4	97 115 72.2	91 115 32.7	91 115 15.2	55 115 10.5	43 77 31.9	43 77 31.8	42 76 28.4
GAVINS POIN NAT INFLOW DEPLETION REGULATED FLC KAF KCFS	T - SIO 1211 247 W AT SI 17378	UX CITY- 155 6 0UX CIT 507 17.0	72 3 7 282 20,3	93 4 541 30,3	121 20 1606 27.0	234 34 1909 31,1	168 30 1852 31,1	101 36 1836 29,9	75 34 1812 29,5	47 22 1709 28,7	33 9 1740 28.3	17 6 785 26,4	8 3 366 26,4	9 3 251 15.8	17 12 745 12,1	-3 13 721 11.7	64 13 716 12.9
TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE	22102 2344 -1 1925 47294	1301 9 110	607 4 -3 48507	780 6 -20 48721	2003 122 -29	2963 607 -54 49359	5623 1441 -23	2992 877 4 119 51830	1097 154 375 50594	962 -183 59 467	961 -33 29 402 48503	434 -112 3 179 48088	203 -52 -26 83 47868	231 -60 -15 95 47798	628 -171 -17 206 47628	474 -171 -19	843 -94 -7 47747
SYSTEM POWER AVE POWER MM PEAK POW MW ENERGY GWH DAILY GWH	8160.5	592 2162 213.1 14.2	700 2163 117.6 16.8	854 2164 184.4 20.5	921 2166 663.4 22.1	1089 2168 809.9 26.1	1133 2194 815.5 27.2	1210 2193 900.2 29.0	1189 2178 885.0 28.5	1043 2167 750.8 25.0	816 2145 606.8 19.6	758 2122 273.0 18.2	816 2110 137.1 19.6	691 2109 132.6 16.6	782 2094 582.1 18.8	786 2113 584.6 18.9	751 2120 504.4 18.0
				//									,				_00

TIME OF STUDY 07:07:45 28 FEB05

--FORT PECK--NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STOR CHANGE STORAGE ELEV FTMSL S DISCH KCFS POWER AVE POWER MW ENERGY GWH

γ	11/28/2	2000				2000-2	2001 AO	P EXTEN	SIONS, I	LOWER Q	JARTILE	RUNOFF	99001	9901	9901 P	AGE	1
γ	07:07:4	45				NAVIG	ATION S	EASON SI		DAT 40	MAF ON	JULY 1			STUDY	NO	23
F E	BO5 NI-SUM	15MAR	200 22MAR	5 31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	20 30NOV	06 31DEC	31.JAN	28FFB
(															01020	0107.01	201 20
1	6751 388 499	272 -21	127 -10	163 -13	591 44	1041 304	1636 549	712 181 30	295 -57	284 -131 119	365 70	188 -34	88 -16	100 -18	332 -112	238 -125	318 -84
	5864 5752	294 134	137 62	176 80	547 357	737 553	1087 595	501 584	257 553	296 330	331 277	174 134	81 63	93 127	389 615	363 676	402 611
	112 12296 2220.1	160 12456 2220.9	75 12531 2221.3	96 12626 2221.9	190 12816 2222.9	184 13000 2223.9	492 13492 2226.5	-84 13408 2226.1	-297 13112 2224,5	-34 13078 2224,3	54 13131 2224.6	40 13171 2224.8	19 13190 2224,9	-34 13156 2224.7	-225 12930 2223-5	-313 12617 2221.8	-209 12408 2220 7
	11.0	4.5	4.5	4.5	6.0	9.0	10.0	9.5	9.0	5.5	4.5	4.5	4.5	8.0	10.0	11.0	11.0
W	914.0	58 197 21.0	59 197 9.8	59 198 12.7	78 199 56.5	118 200 87.7	132 203 95.0	126 202 93.7	119 201 88.5	73 200 52.7	60 201 44.3	60 201 21.4	60 201 10.0	106 201 20.3	131 200 97.7	143 198 106.8	143 197 95.8
		105	226	201	770	1210	2760	1022	E 4 3	156	420	170					
	899	485	226	291	3	178	717	483	63	-103	438	-102	-48	-54	-110	181 -92	287 -64

GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW	- 10290 899 0 589 14554 14418 136 14823 1826.0 24.0	485 1 68 686 446 15063 1826.9 15.0 175 346	226 0 288 194 94 15157 1827.2 14.0 164 347	291 1 250 121 15278 1827.7 14.0 164 348	779 3 -16 1118 1012 106 15384 1828.1 17.0 199 349	1310 178 -31 1654 1291 15747 1829.4 21.0 247 353	2760 717 -10 2628 1398 1229 16976 1833.7 23.5 281 366	1932 483 5 36 2002 1414 588 17564 1835.7 23.0 281 372	543 63 114 924 1445 -521 17043 1833.9 23.5 287 367	456 -103 35 142 782 1071 -290 16754 1832.9 18.0 219 364	438 26 11 123 576 934 -357 16396 1831.7 15.2 184 360	179 -102 05 360 452 16304 1831.4 15.2 183 359	84 -48 26 168 278 -110 16195 1831.0 20.0 239 358	95 -54 -36 29 212 317 -105 16089 1830.6 20.0 239 357	243 -110 -20 63 884 1230 -345 15744 1829.4 20.0 237 353	181 -92 -10 939 1353 -414 15330 1827.9 22.0 259 349	287 -64 0 962 1333 -371 14959 1826.5 24.0 279 345
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FIMSL DISCH KCFS POWER	1877 597 -1 524 15174 15035 139 15464 1595.8 12.6	199 22 40 663 436 228 15692 1596.6 14.6	27.5 93 10 4 281 268 13 15705 1596.7 19.3	35.5 119 13 356 381 -25 15680 1596.6 21.3	297 46 -13 1249 1314 -65 15615 1596.3 22.1	163.9 168 65 -18 1376 1540 -163 15452 1595.7 25.0	747 126 -11 2008 1432 576 16028 1597.9 24.1	132 147 2 33 1368 1746 -377 15651 1596.5 28.4	213.7 31 96 -2 102 1275 1737 -461 15189 1594.7 28.2 340	84 24 25 126 1030 1559 -529 14661 1592.6 26.2	136.6 12 -8 13 108 858 1049 -191 14470 1591.9 17.1	65.8 2 49 402 459 -57 14413 1591.7 15.4	40.2 1 -22 23 232 212 20 14432 1591.7 15.3	45.8 1 0 26 291 193 98 14530 1592.1 12.1	-45 11 0 57 1117 1065 52 14582 1592.3 17.3	192.4 -7 16 -9 1320 946 374 14956 1593.8 15.4	187.5 47 25 -9 1346 699 647 15603 1596.3 12.6
AVE POWER MW PEAK POW MW ENERGY GWH BIG BEND- EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL	2186.8 - 14906 14906 1682 1420.0	178 649 63.9 436 436 1682 1420.0	235 649 39.4 268 268 1682 1420.0	259 648 55.9 381 381 1682 1420.0	268 647 192.7 1314 1314 1682 1420.0	302 644 225.0 1540 1540 1682 1420.0	292 655 210.3 1432 1432 1682 1420.0	345 648 256.4 1738 1738 1682 1420.0	340 639 252.9 24 1712 1712 1682 1420.0	312 629 224.8 31 1528 1528 1682 1420.0	202 625 150.6 27 1022 1022 1682 1420.0	183 624 65.7 12 447 447 1682 1420.0	181 625 30.4 6 206 206 1682 1420.0	144 627 27.6 7 186 186 1682 1420.0	205 628 152.9 14 1051 1051 1682 1420.0	183 635 136.4 946 946 1682 1420.0	152 647 101.9 699 699 1682 1420.0
DISCH KCFS POWER AVE POWER MW PEAK POW MW ENERGY GWH FORT RANDAL	12.6 858.6 L	14.6 69 517 25.0	19.3 91 510 15.2	21.3 100 509 21.6	22.1 103 509 74.4	25.0 117 509 87.2	24.1 113 509 81.1	28.3 132 509 98.4	27.8 130 509 97.0	25.7 122 517 87.6	16.6 82 538 60.8	15.0 76 538 27.2	14.9 75 538 12.6	11.7 59 538 11.4	17.1 85 538 62.9	15.4 75 538 55.7	12.6 60 529 40.6
NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS DOWED	696 80 147 15375 15375 0 3124 1350.0 9.5	95 1 529 256 273 3397 1353.4 8.6	44 1 177 135 3532 1355.0 12.7	57 1 420 17 3549 1355.2 23.5	89 4 1399 1399 3549 1355.2 23.5	71 9 1602 1602 3549 1355.2 26.0	181 12 1601 1601 3549 1355.2 26.9	36 18 10 1746 1746 1746 1355.2 28.4	68 15 32 1733 1733 0 3549 1355.2 28.2	32 7 39 1513 1657 -144 3405 1353.5 27.9	2 1 31 992 1629 -637 2768 1345.1 26.5	1 434 738 -304 2464 1340.4 24.8	0 5 201 -145 2319 1337.9 24.9	1 5 203 -22 2297 1337.5 12.8	7 3 1042 676 366 2663 1343.5 11.0	-7 3 936 664 272 2935 1347.4 10.8	21 3 717 528 189 3124 1350.0 9.5
AVE POWER MW PEAK POW MW ENERGY GWH	1520.2	71 345 25.5	107 351 17.9	197 352 42.6	197 352 142.1	218 352 162.4	225 352 162.3	238 352 176.8	236 352 175.6	232 345 166.8	211 310 157.3	187 288 67.3	182 277 30.6	93 276 17.8	82 303 61.1	84 321 62.7	76 331 51.3
GAVINS POIN NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE	T 1362 114 -1 47 16575 16575 358	100 0 2 358 358 358	47 0 -8 215 215 358	60 0 -21 459 459 358	135 5 0 1529 1529 358	150 19 -5 1728 1728 358	156 24 -2 1732 1732 358	88 39 -3 3 1789 1789 358	87 10 9 1802 1789 13 371	63 -5 11 1715 1702 13 384	114 2 3 10 1734 1734 384	51 5 782 782 782 384	24 2 365 365 384	27 3 23 248 248 248 384	76 10 3 5 740 740 384	75 1 0 738 738 384	110 2 640 666 -26 358
ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW ENERGY GWH	1206.0 12.0 691.5	1206.0 12.0 42 114 15.2	1206.0 15.5 54 114 9.1	1206.0 25.7 88 114 19.0	1206.0 25.7 88 114 63.3	1206.0 28.1 96 114 71.2	1206.0 29.1 99 114 71.1	1206.0 29.1 99 114 73.4	1206.5 29.1 99 115 73.8	1207.0 28.6 99 115 71.2	1207.0 28.2 98 115 72.9	1207.0 26.3 92 115 33.0	1207.0 26.3 92 115 15.4	1207.0 15.6 55 115 10.6	1207.0 12.0 43 77 31.9	1207.0 12.0 43 77 31.9	1206.0 12.0 42 76 28.5
GAVINS POIN NAT INFLOW DEPLETION REGULATED FLO KAF	T - SIOU 1223 248 W AT SIC 17550	UX CITY- 157 6 0UX CITY 508	73 3 _286	94 4 549	122 20 1631	236 34 1930	170 30 1872	102 37 1854	75 34 1830	47 22 1727	33 9 1758	17 6 794	8 3 371	9 3 254	18 12 746	-3 13 722	65 13 718
KCFS TOTAL		17.1	20.6	30.8	27.4	31.4	31.5	30.2	29.8	29.0	28.6	26.7	26.7	16.0	12.1	11.7	12.9

--TOTAL--NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWER AVE POWER MW PEAK POW MW ENERGY GWH DAILY GWH -186 60 469 49963 -57 -23 83 48202 -65 -13 95 48138 -186 -17 207 47984 2326 609 -54 1458 -23 905 4 161 -40 26 -123 3 -184 -19 -107 -7 -21 110 -3 -1 47747 48831 2171 672.7 22.4 2182 901.4 29.1 2099 583.2 18.8 2117 585.9 18.9 2125 505.7 18.1 213.4 14.2 119.0 17.0 187.2 20.8 817.5 26.4 822.3 27.4 907.8 29.3 760.5 25.3 622.4 20.1 280.5 18.7 139.2 19.9 133.6 16.7 8252.1

30NOV 31DEC 31JAN 28FEB

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV

POWER

CHAN STOR

POWER

POWER

STORAGE SYSTEM

ENERGY GWH

DAILY GWH

AVE POWER MM PEAK POW MW

238.1 15.9

8385.9

94.7 13.5

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY

184.2 20.5

677.0

22.6

840.9 27.1

935.4 30.2

844.5 28.2

919.8 29.7

30JUN 31JUL 31AUG 30SEP 31OCT

72.3 25.7

630.1 20.3

284.1 18.9

15NOV

139.9

20.0

22NOV

TIME OF STUDY 07:07:45

2000-2001 AOP EXTENSIONS, LOWER QUARTILE RUNOFF 99001 9901 9901 PAGE NAVIGATION SEASON SHORTENED AT 40 MAF ON JULY 1 VALUES IN 1000 AF EXCEPT AS INDICATED STUDY NO 28 FEB06 EB06 2006 INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 310CT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB --FORT PECK-NAT INFLOW DEPLETION -10 -13 -34 48 -16 -84 31 522 615 -52 96 -131 120 -72 106 -18 26 97 -21 -112 55 -126 EVAPORATION MOD INFLOW RELEASE 6118 320 269 -15 76 13265 13341 2225.3 2225.7 5.4 4 615 738 51 24 12579 2221.6 4.5 -321 13279 2225.4 STOR CHANGE 13694 -30 13386 -213 13173 -364 -196 STORAGE ELEV FTMSL DISCH KCFS 2220.7 2226.0 2222.1 2222.6 2223.8 2224.8 2226.1 2226.0 2227.6 2227.1 10.0 2224.8 2222.9 12.0 2221.8 11.0 11.0 4.5 6.0 9.5 10.5 9.5 4.4 10.0 AVE POWER MW PEAK POW MW ENERGY GWH 198 9.9 201 92.9 203 201 202 43.2 202 20.9 21.1 56.7 12.7 100.2 20.4 98.3 117.0 96.3 93.7 943.3 99.0 51.4 9.8 --GARRISON NAT INFLOW DEPLETION -45 -20 -83 -83 56 57 116 975 -121 41 144 10 124 -44 -37 30 -64 -20 64 -36 -10 -5 -2 - 3 -9 5 -39 -21 10 ō -15 EVAPORATION REG INFLOW RELEASE 437 -95 317 114 1230 1333 0/9 1247 17185 573 17758 -470 17288 -262 17026 -318 -104 104 15323 1827.9 14.0 STOR CHANGE 15598 15938 STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS -384 -404 -396 1826.5 1827.5 1831.7 20.0 1827.4 24.0 1836.3 24.0 1832.8 14.7 832.4 14.7 B30.3 20.0 1828.3 1828.9 1830.1 1834.4 1834.8 1833.9 1832.1 19.0 24.0 15.0 14.0 17.0 22.0 24.5 23.5 18.0 22.0 POWER AVE POWER MW PEAK POW MW 348 177.8 27.6 214.7 132.9 64.0 38.5 46.2 193.6 ENERGY GWH 2109.7 63.1 35.6 144.3 193.4 212.0 218.9 158.4 188.7 -OAHE---OAHE-25 25 128 -8 15 110 -49 11 0 26 -9 -8 16 -9 DEPLETION CHAN STOR EVAPORATION -1 533 40 4 -22 -11 0 -1 -5 -20 23 34 105 286 1763 -487 15591 475 -90 1083 220 REG INFLOW 15441 681 15183 557 258 124 15603 15727 1596.3 1596.7 12.6 18.7 146 143 15871 1597.3 10.5 6 15876 -110 15725 -554 15037 -337 372 STOR CHANGE 16415 -255 14782 -42 15835 STORAGE ELEV FTMSL DISCH KCFS .593.1 17.6 97.3 20.2 1597.1 1596.7 1599.3 1598.0 1596.2 1594.1 26.7 92.8 16.0 592.8 15.8 1593.1 12.3 593.3 17.2 594.8 15.4 1597.2 22.1 25.3 24.2 28.9 28.7 POWER AVE POWER MW PEAK POW MW 21.6 53.2 193.9 228.8 213.1 262.8 156.6 68.5 31.6 28.2 152.7 137.3 ENERGY GWH 2222.2 81.8 259.0 230.9 102.2 -BIG BEND-1557 1557 463 463 1044 1044 EVAPORATION REG INFLOW RELEASE STORAGE 15054 557 1682 1767 1739 1056 214 947 1682 1682 1682 1682 20.0 17.0 20.0 1420.0 15.4 ELEV FTMSL DISCH KCFS 1420.0 1 12.6 420.0 420.0 10.5 1420.0 420.0 420.0 420.0 1420.0 28.7 420.0 1420.0 1420.0 20.0 120.0 1420.0 15.6 11.9 15.4 12.5 AVE POWER MW PEAK POW MW 529 40.5 31.6 8.3 20.4 74.6 88.2 81.7 100.0 98.5 89.3 62.8 28.2 13.1 ENERGY GWH 866.9 11.6 55.8 62.5 -FORT RANDALL NAT INFLOW DEPLETION 1 9 15 32 1 3 -8 3 147 5 5 10 12 EVAPORATION 253 408 754 -304 354 -145 670 366 424 1691 1663 206 REG INFLOW RELEASE STOR CHANGE STORAGE 272 -22 2297 337.5 13.0 3124 3549 3549 3549 3549 3549 -144 3405 -637 2768 50.0 ELEV FTMSL 355.2 23.7 1355.2 27.4 1350.0 1355.0 9.5 8.5 1355.2 12.8 1355.2 23.7 355.2 26.5 1355.2 28.9 1355.2 28.8 1353.5 1345.1 27.1 40.4 25.3 337.9 43.5 .4 DISCH KCFS POWER AVE POWER MW PEAK POW MW 28.4 25.5 10.9 10.8 9.5 310 160.5 277 31.2 331 51.3 303 25.4 18.2 43.0 143.5 165.1 180.2 170.1 18.1 62.7 ENERGY GWH 165.5 1543.2 179.1 68.8 60.6 --GAVINS POINT-0 -8 NAT INFLOW DEPLETION 0 -21 19 -5 24 -5 1 39 10 10 4 23 2 0 3 0 CHAN STOR EVAPORATION  $-1 \\ 47$ -2 -3 252 252 Ř REG INFLOW RELEASE 16846 358 218 464 1547 1759 1767 1826 1826 1738 1771 800 373 737 740 669 STOR CHANGE -26 358 371 1207.0 28.8 1207.0 26.9 1207.0 1207.0 ELEV FTMSL DISCH KCFS 1206.0 12.0 1206.0 12.0 206.0 1206.0 26.0 1206.0 26.0 1206.0 28.6 1206.0 29.7 206.0 29.7 206.5 29.7 1207.0 1207.0 1207.0 1206.0 29.2 26.9 15.9 12.0 12.0 12.0 AVE POWER MW PEAK POW MW ENERGY GWH 114 9.2 114 74.5 115 74.8 115 74.2 77 76 77 19.2 64.0 72.4 72.1 33.7 72.2 15.7 700.5 15.2 10.8 31.8 31.9 28.6 --GAVINS POINT - SIOUX CALL NAT INFLOW 1356 174 DEPLETION 251 6 REGULATED FLOW AT SIOUX CITY KAF 17951 525 17.7 3 4 37 34 22 10 3 13 6 3 12 -4 13 21.3 31.6 27.9 32.4 30.5 29.7 29.2 27.4 27.4 12.1 32.3 30.9 11.8 13.1 16.3 -- TOTAL --NAT INFLOW DEPLETION 2583 2 -4 111 -29 -45 28 -55 -18 164 -140 -16 -63 -104 -203 -48 -138 -63 -21 CHAN STOR EVAPORATION -23 -29 - 1 49227 9F 48748 POWER 

18.1

507.6

28FEB

135.2

16.9

30NOV

583.6

18.8

31DEC

598.4 19.3

31JAN
DATE OF STU

(	DATE OF	STUDY	/ 11/28/2	2000				2000-2	2001 AOF	P EXTENS	SIONS, L	OWER DE	ECILE RU	JNOFF	99001	9901 9	9901 PA	AGE	1
	TIME OF	STUDY	/ 13:26:0	06				NAVIGA VALUES	TION SE	EASON SH	ORTENED	) AT 52 S INDICA	MAF ON	JULY 1			STUDY	NO	25
		28FE	EBO2 INI-SUM	15MAR	2002 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
	FORT NAT INF DEPLETI	PECK- FLOW LON	5435 444	250 -4	116 -2	150 -2	549 77	834 311	1061 543	468 141	270 -57	258 -123	341 -52	169 -32	79 -15	90 -17	289 -107	218 -126	293 -91
	MOD INF RELEASE	E E E E E E E E E E E E E E E E E E E	461 4530 5464	254 119	118 56	152 71	472 298	523 430	518 506	28 299 523	88 239 523	111 270 362	96 297 286	44 157 149	20 73 97	23 84 143	50 346 615	344 676	384 611
	STOR CH STORAGE ELEV F1	HANGE E FMSL	-934 11504 2215.6	135 11639 2216.3	63 11702 2216.7	81 11782 2217.2	174 11957 2218.1	93 12049 2218.7	12 12061 2218.7	-224 11838 2217.5	-284 11554 2215.8	-92 11462 2215.3	10 11472 2215.4	9 11481 2215.4	-24 11457 2215.3	-59 11398 2214.9	-269 11129 2213.4	-332 10797 2211.4	-227 10570 2210.0
	DISCH N POWER	<cfs √FR M∿</cfs 	11.5 /	4.0 51	4.0 51	4.0 51	5.0 64	7.0 90	8.5 109	8.5 109	8.5 108	6.1 77	4.7 59	5.0	7.0	9.0	10.0	11.0	11.0
	PEAK PO ENERGY	GWH	835.8	191 18.3	192 8.6	192 11.0	193 46.1	194 66.8	194 78.6	193 80.9	190 80.4	190 55.5	190 43.9	190 22.8	190 14.9	189 21.8	187 93.3	184 101.7	183 91.1
	GARF NAT INF DEPLETI	RISON- FLOW [ON [OP	8026 1281	297 22 79	138 10	178 13	770 38 ~11	993 135 -21	2221 714	1404 464	397 77	305 -81 25	429 50	177 -58 -4	83 -27 -21	94 -31	119 -33	176 -16	245
	EVAPORA REG INF	LOW	535 11680 12810	473	184 167	236	1019	1267	1997	33 1430 1230	104 739 1230	129 645	112 569 776	50 329	23 162	27 220	57 699	858	854
	STOR CH	IANGE	-1130	27 13887	17 13904	22 13925	126 14052	14151	807 14958	200 15158	-491	-239 14427	-208 14220	-117 14103	-74 14029	-81 13948	-530 13417	-403 13015	-285 12730
	DISCH N POWER	CFS	21.0	1822.4	1822.5	1822.6	1823.1	19.0	20.0	20.0	20.0	1824.5	1823.7	1823.3	1823.0	1822.7	20.0	1818.9 20.5	1817.8 20.5
	AVE POV PEAK PO ENERGY	VER MW DW MW GWH	1761.1	170 333 61.1	136 333 22.9	136 333 29.4	335 122.6	216 336 160.6	230 345 165.4	233 347 173.1	232 342 172.4	1/1 339 123.2	145 337 107.8	171 335 61.6	193 334 32.5	215 333 41.3	225 327 167.0	227 323 169.0	225 319 151.2
	NAT INF DEPLETI CHAN SI	ELOW CON	1184 557 2	223 22 28	104 10 14	134 13	206 45 -14	113 61 -19	242 117 -5	92 134	24 87	72 22 25	6 -7 11	-6 2 -12	-3 1 -10	-3 1 -10	-54 11 -5	-13 15 -2	47 24
	EVAPORA REG INF RELEASE	TION LOW	466 12973 14131	675 462	274 283	335 368	1040 1250	1202 1500	1310 1417	30 1158 1708	91 1076 1702	111 848 1372	96 705 795	43 384 267	20 202 116	23 264 138	51 1109 991	1230 770	1162 991
	STOR CH STORAGE	HANGE E FMSL	-1158 14477 1591.9	213 14690 1592.8	-9 14681 1592.7	-34 14647 1592.6	-210 14437 1591.8	-298 14139 1590.5	-107 14032 1590.1	-550 13482 1587.8	-626 12856 1585.2	-524 12332 1582.8	-90 12242 1582,4	117 12359 1583.0	86 12445 1583.4	126 12571 1583.9	117 12688 1584.4	460 13148 1586,4	171 13319 1587.2
	DISCH N POWER AVE POV	<cfs √ER M∿</cfs 	17.9 √	15.5 184	20.4 242	20.6 245	21.0 249	24.4 287	23.8 279	27.8 322	27.7 316	23.1 260	12.9 145	9.0 101	8.4 95	8.7 98	16.1 183	12.5 143	17.8 205
	PEAK PC ENERGY	GWH	1974.8	630 66.4	629 40.7	629 52.9	625 179.1	619 213.4	617 200.7	605 239.7	591 235.4	579 187.4	577 108.0	579 36.4	581 15.9	584 18.9	587 135.8	598 106.4	601 137.8
	EVAPORA REG INF	BEND- ATION FLOW	 129 14003	462	283	368	1250	1500	1417	8 1700	24 1677	31 1341	27 768	12 255	6 111	7 131	14 977	770	991
	RELEASE STORAGE	E FMSL	14003 1682 1420.0	462 1682 1420.0	283 1682 1420.0	368 1682 1420.0	1250 1682 1420.0	1500 1682 1420.0	1417 1682 1420.0	1700 1682 1420.0	1677 1682 1420.0	1341 1682 1420.0	768 1682 1420.0	255 1682 1420.0	111 1682 1420.0	131 1682 1420.0	977 1682 1420.0	770 1682 1420.0	991 1682 1420.0
	DISCH I POWER		17.9	15.5	20.4	20.6	21.0	24.4	23.8	27.6	27.3	22.5	12.5	8.6	8.0	8.3	15.9	12.5	17.8
	PEAK PO	GWH	807.9	518 26.5	510 16.1	509 20.9	509 70.8	509 84.9	509 80.3	509 96.3	509 95.0	523 77.1	538 47.0	538 15.6	538 6.8	538 8.1	538 58.9	538 46.2	529 57.5
	NAT INF	RANDAL FLOW LON	L 366 80	67 1	31 1	40 1	52 4	42 9	146 12	16 18	44 15	-12	-62	-3	-1	-2 1	3	-7 3	15 3
	EVAPORA REG INA RELEASE	LOW E	$141 \\ 14143 \\ 14143$	528 268	314 165	408 391	1298 1298	1533 1533	1551 1551	1688 1688	32 1675 1675	39 1284 1599	672 1569	241 282	5 104 104	5 124 124	13 962 689	760 670	1003 539
	STOR CH STORAGE	HANGE E TMSL	0 3124 1350.0	260 3383 1353.2	149 3532 1355.0	17 3549 1355.2	0 3549 1355.2	3549 1355.2	0 3549 1355.2	0 3549 1355.2	0 3549 1355.2	-315 3234 1351.4	-897 2337 1338.2	41- 2297 1337.5	0 2297 1337.5	0 2296 1337.5	273 2569 1342.1	90 2659 1343.5	464 3123 1350.0
	DISCH H POWER	≺CFS √ER MV	9.7 v	9.0 74	11.9 100	21.9 184	21.8 183	24.9 209	26.1 219	27.5 230	27.2 228	26.9 222	25.5 196	9.5 69	.7.5 55	7.8 57	11.2 83	10.9 83	9.7 77
	PEAK PO ENERGY	OW MW GWH	1394.2	344 26.7	351 16.7	352 39.7	352 132.0	352 155.5	352 157.3	352 171.1	352 169.7	337 159.6	278 145.7	276 24.9	276 9.2	276 10.9	297 61.8	303 61.8	332 51.5
	NAT INF DEPLETI CHAN ST	S POIR FLOW ION TOR	1229 114 -1	89 0 1	42 0 -6	53 0 -19	123 5 0	134 19 -6	141 24 -2	78 39 -3	78 10 0	56 -5 1	107 2 3	46 5 30	21 2 4	25 3 -1	69 10 -6	67 1 1	100 2
	EVAPORA REG INF	ATION FLOW	47 15211 15211	359 359	201 201	425 425	1416 1416	1642 1642	1666 1666	3 1722 1722	9 1735 1722	11 1649 1636	10 1666 1666	5 348 348	2 125 125	2 143 143	5 736 736	737 737	641 667
	STOR CH		358	358	358	358	358	358	358	358	13 371 1206 5	13 384 1207 0	384	384	384	384	384	384	-26 358 1206 0
	DISCH H POWER		12.0	12.1	14.5	23.8	23.8	26.7	28.0	28.0	28.0	27.5	27.1	11.7	9.0	9.0	12.0	12.0	12.0
	PEAK PO ENERGY	OW MW GWH	636.5	114 15.2	114 8.5	114 17.7	114 58.8	114 67.8	114 68.7	114 71.0	115 71.3	115 68.6	115 70.2	115 15.0	115 5.4	115 6.2	77 31.8	77 31.8	76 28.5
	NAT IN	FLOW	664 239	44 6	21	26 3	93 19	173 34	128 29	57 36	26 33	18 21	17 9	12 5	5 2	6 3	12 11	-6 12	32 13
	REGULATI KAF KCF:	ED FLO S	DW AT SI 15636	397 397 13.3	7 219 15.8	448 25.1	1490 25.0	1781 29.0	1765 29.7	1743 28.3	1715 27.9	1633 27.4	1674 27.2	355 11.9	128 9.2	146 9.2	737 12.0	719 11.7	686 12.4
	TO NAT IN	TAL FLOW	16904	969	452	581	1793	2289	3939	2115	839	697	838	395	184	211	435	435	732
	CHAN S	TOR	2/15 1 1777	109	8	-19	-24	-46	-23	-3 111	348	-159 51 431	24 368	-// 15 164	-36 -27 77	-41 -32 87	-22	-11	-49 2
	STORAGI SYSTEM AVE POL	POWER	45005 R √	45639 595	45858 675	45944	46035	45928 1007	46640 1043	46067	44678 1108	43521 932	42337	42305 _490	42293	42279	41870 738	41685 695	41/82
	PEAK PO ENERGY DAILY (	OW MW GWH GWH	7410.3	2130 214.2 14.3	2130 113.4 16.2	2129 171.6 19.1	2128 609.4 20.3	2124 749.1 24.2	2131 751.0 25.0	2120 832.0 26.8	2099 824.4 26.6	2083 671.3 22.4	2034 522.6 16.9	2033 176.3 11.8	2034 84.6 12.1	2036 107.2 13.4	2013 548.7 17.7	2022 516.9 16.7	2040 517.5 18.5

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB

DATE OF STU

DATE C	OF STUDY	11/28/2	2000				2000-2	2001 AO	P EXTENS	SIONS, 1	OWER DE	ÉCILE RU	JNOFF	99001	9901 9	901 PA	\GE	1
TIME C	F STUD	13:26:0	07				NAVIG/ VALUES	ATION SE 5 IN 100	EASON SH DO AF EX	HORTENED	) AT 52 5 INDICA	MAF ON ATED	JULY 1			STUDY	NO	26
	28FE	BO3 INI-SUM	15MAR	2003 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	29FEB
FOF NAT I DEPLE	T PECK- NFLOW TION	 5615 365	258 -6	120 - 3	155 -3	567 67	862 299	1097 488	483 148 27	279 -54	266 -124	352 -54	175 - 32	81 -15	93 -17	298 -106	226 -124	303 -100
MOD I RELEA	NFLOW	4806 5357	264 119	123 56	158 71	500 298	563 430	609 506	308 523	248 523	284 313	313 263	42 164 149	20 76 97	22 87 143	48 356 615	350 676	403 575
STOR	GE FTMSL	-550 10570 2210.0	145 10715 2210.9	10782 2211.3	10869 2211.8	202 11071 2213.0	133 11204 2213.8	103 11307 2214.4	-215 11093 2213.2	-274 10818 2211.5	-30 10789 2211.3	50 10838 2211.6	15 10854 2211.7	-21 10833 2211.6	-55 10778 2211.3	-259 10518 2209.7	-326 10192 2207.7	-172 10020 2206.6
DISCH POWE	I KCFS R POWFR MM	11.0	4.0	4.0	4.0	5.0	7.0	8.5 107	8.5	8.5 106	5.3	4.3	5.0	7.0	9.0	10.0	11.0	10.0
PEAK ENERG	POW MW Y GWH	803.0	184 17.8	184 8.3	185 10.8	187 45.0	188 65.3	188 76.8	187 79.3	185 78.7	184 47.1	185 39.6	185 22.4	185 14.6	184 21.4	182 91.7	179 99.9	178 84.3
GA NAT I DEPLE CHAN	RRISON- NFLOW TION STOR	8444 1044	312 28 76	146 13	187 17	810 24 -11	1045 211 -21	2337 694 -16	1477 450	418 52	320 -114 34	451 15 11	187 -77 -8	87 -36 -21	99 -41 -21	125 -82	185 -64	258 -46
EVAPO REG I	NFLOW	516 12251 12931	479	188	242	1073	1243	2133	32 1518 1230	100 789 1230	125 657	108	49 355	23 176	26 236	55 756	915	890
STOR	CHANGE	-680 12730	33 12763	22 12784	28 12812	180 12992	75 13067	943 14010	288 14298	-441 13857	-279 13577	-201 13377	-33 13344	-60 13284	-66 13218	-474 12744	-377 12368	-318 12050
ELEV DISCH POWE	FIMSE I KCFS R	20.5	1817.9	1818.0	1818.1 12.0	1818.9	1819.2	20.0	1824.0 20.0	1822.3 20.0	1821.2 15.7	1820.4 13.1	1820.3 13.1	1820.0 17.0	1819.8 19.0	1817.8 20.0	1816.3 21.0	1814.9 21.0
AVE F PEAK ENERG	POWER MW POW MW SY GWH	1736.3	165 320 59.3	132 320 22.2	132 320 28.5	165 322 119.1	210 323 156.0	224 334 161.0	227 338 169.1	227 332 168.8	177 329 127.7	146 327 108.9	146 327 52.5	189 326 31.8	211 325 40.5	220 319 163.8	228 315 169.8	226 311 157.2
NAT I DEPLE CHAN	OAHE NFLOW TION STOR	1263 570 -3	238 22 27	111 10 14	143 13	220 45 -14	120 62 -19	259 120 -5	99 138	25 90	77 23 22	6 -7 14	-6 2	-3 1 -21	-3 1 -10	-58 11 -5	-14 15 -5	50 25
EVAPC REG I RELEA	RATION NFLOW	438 13184 13882	689 452	282 280	344 367	1053 1255	1207 1492	1324 1400	28 1163 1705	85 1079 1697	104 909 1372	90 740 597	41 340 227	19 193 122	22 265 137	49 1107 991	1257 771	1233 1015
STOR STORA		-698 13319 1587 2	237 13555 1588 2	2 13557 1588 2	-24 13534 1588 1	-202 13332 1587 2	-285 13046 1586 0	-76 12970 1585 7	-542 12428	-617 11811 1580 5	-464 11347	143 11490 1578 9	112 11603	70 11673	128 11801	116 11917	486 12402	218 12621
DISCH		17.8	15.2	20.2	20.6	21.1	24.3	23.5	27.7	27.6	23.1	9.7	7.6	8.8	8.7	16.1	12.5	17.6
PEAK ENERG	POWER MW POW MW SY GWH	1892.8	607 63.3	233 607 39.2	238 606 51.4	602 175.2	278 595 206.8	268 594 193.3	581 233.0	307 566 228.3	253 555 182.2	558 79.2	561 30.3	563 16.4	96 566 18.4	1/9 569 133.0	140 580 104.4	199 586 138.5
BI EVAPC REG I	G BEND- RATION	- 129 13753	452	280	367	1255	1492	1400	8 1697	24 1672	31 1341	27 570	12 215	6 117	7 131	14 977	771	1015
RELEA STORA	SE GE ETMSI	13753 1682 1420 0	452 1682 1420 0	280 1682 1420 0	367 1682 1420 0	1255 1682 1420 0	1492 1682 1420 0	1400 1682 1420 0	1697 1682 1420 0	1672 1682 1420 0	1341 1682 1420 0	570 1682 1420 0	215 1682 1420 0	117 1682 1420 0	131 1682 1420 0	977 1682	771 1682	1015 1682
DISCH	KCFS	17.8	15.2	20.2	20.6	21.1	24.3	23.5	27.6	27.2	22.5	9.3	7.2	8.4	8.2	15.9	12.5	17.6
AVE F PEAK ENERG	POWER MW POW MW GY GWH	792.8	/2 518 25.9	95 510 15.9	96 509 20.8	509 71.1	509 84.5	509 79.3	509 96.1	509 94.7	523 77.1	4/ 538 34.9	538 13.2	43 538 7.2	42 538 8.0	/9 538 58.9	538 46.3	85 529 58.9
FORT NAT I DEPLE	RANDAL	.L 404 80	74 1	35 1	44 1	58 4	47 9	161 12	18 18	48 15	-13 7	-69 1	-4 1	-2 0	-2 1	3	-8 3	16 3
EVAPC REG I RELEA	RATION NFLOW	140 13930 13930	525 265	314 165	411 394	1309 1309	1530 1530	1549 1549	10 1687 1687	32 1674 1674	39 1283 1598	27 466 1403	10 201 201	5 110 110	5 123 123	13 962 689	760 670	1028
STOR STORA		0 3123 1350 0	260 3384 1353 2	148 3532 1355 0	17 3549 1355 2	3549	3549	0 3549 1355 2	0 3549 1355 2	0 3549 1355 2	-315 3234	-937 2297 1337 5	0 2297 1337 5	0 2297 1337 5	0 2297 1337 5	273 2570	90 2660	464 3124
DISCH		9.7	8.9	11.9	22.1	22.0	24.9	26.0	27.4	27.2	26.9	22.8	6.7	7.9	7.7	11.2	10.9	9.8
AVE F PEAK ENERG	POWER MW POW MW BY GWH	1374.6	344 26.4	351 16.8	352 40.0	352 133.1	352 355.3	352 357.1	352 371.0	352 352 169.6	337 159.5	275 130.1	276 17.7	276 9.7	276 10.8	83 297 61.8	83 303 61.8	332 53.9
GAVI NAT I DEPLE	NS POIN NFLOW	IT 1242 114	90 0	42 0	54 0	124 5	136 19	143 24	79 39	79 10	57 -5	108 2	47 5	22 2	25 3	69 10	67 1	101
CHAN EVAPO REG 1	STOR RATION	-1 47 15011	2 357	-6 202	-19 429	0 1428	-6 1642	-2 1666	-3 3 1722	0 9 1735	1 11 1649	8 10 1506	30 5 268	-2 2 125	0 2 143	-6 5 736	1	2 667
RELEA	CHANGE	15011	357	202	429	1428	1642	1666	1722	1722	1636 13	1506	268	125	143	736	737	693 -26
ELEV DISCH		1206.0 12.0	1206.0 12.0	1206.0 14.5	1206.0 24.0	1206.0 24.0	1206.0 26.7	1206.0 28.0	1206.0 28.0	1206.5 28.0	1207.0 27.5	1207.0 24.5	1207.0 9.0	1207.0 9.0	1207.0 9.0	1207.0 12.0	1207.0 12.0	1206.0 12.0
AVE F PEAK ENERG	POWER MW POW MW BY GWH	628.2	42 114 15.1	51 114 8.5	82 114 17.8	82 114 59.3	91 114 67.8	95 114 68.7	95 114 71.0	96 115 71.3	95 115 68.6	86 115 63.8	32 115 11.6	32 115 5.4	32 115 6.2	43 77 31.8	43 77 31.8	43 76 29.6
GAVI NAT I DEPLE	NS POIN NFLOW TION	T - SIOU 730 241	JX CITY- 48 6	 23 3	29 3	102 20	191 34	141 29	63 36	29 33	20 22	18 9	13 5	6 2	7 3	13 11	-7 12	35 13
REGULA KA KC	NTED FLO NF SFS	W AT SIC 15500	OUX CITN 399 13.4	7 222 16.0	454 25.4	1510 25.4	1799 29.3	1778 29.9	1749 28.4	1718 27.9	1634 27.5	1515 24.6	275 9.3	128 9.2	147 9.3	738 12.0	718 11.7	715 12.4
1 NAT 1	OTAL	17698	1020	476	612	1881	2401	4138	2219	878	727	866	411	192	219	447	449	763
DEPLE		2414 1	50 104	23 9	30 -19	165 -25	634 -46	1367 -23	829 -3	146 0 325	-191 57	-34 26	-96 23	-45	-51 -31	-153 -22	-157 -15	-105 13
STORA	GE M POWER	41782	42457	42696	42804	42985	42907	43876	43408	42088	41013	40068	40163	40152	40159	39815	39687	39854
AVE F PEAK ENERC	POWER MW POW MW BY GWH	1 7227.8	577 2086 207.8	660 2087 110.9	784 2087 169.3	837 2086 602.7	989 2081 735.7	1023 2091 736.2	1101 2080 819.5	1091 2059 811.6	920 2043 662.1	614 1998 456.5	410 2001 147.7	506 2002 85.0	549 2004 105.3	727 1982 541.0	691 1993 514.0	751 2011 522.5
DAIL	GWH		13.9	12.9	19.9	20.1	23.1	24.5	20.4	20.2	22.1	14./	9.8	12.1	13.2	1/.5	10.0	18.0

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 29FEB

5007 0504		101011		01.0.00		01.01		01002	51/100	50521	51001	15001	LENGT	501107	SIDLU	JIOAN	20120
NAT INFLOW DEPLETION	5748 378	264 -11	123 -5	158 -7	580 71	882 304	1123 495	495 155	285 -50	273 -124	361 -55	179 -34	83 -16	95 -18	305 -109	231	310
EVAPORATION MOD INFLOW	435 4935	275	128	165	509	578	628	26 314	83 252	104 293	91 325	41 171	19 80	22 91	47 367	358	402
RELEASE STOR CHANGE	5308 -372	119 156	56 73	71 94 10242	298 211	430 148	506 122	-209	523 -271	310 -17	260 65	126 45	97 -18	143 -52	615 -248	676 -318	555 -153
ELEV FTMSL DISCH KCFS	2206.6 10.0	2207.6	2208.1	2208.6	2209.9	2210.8	2211.6	2210.3	2208.6	2208.5	2208.9	2209.2	2209.1	2208.8	2207.2	2205.2	2204.3
POWER AVE POWER M	W	49	49	49	62	86	105	105	104	64	52	52	86	110	122	133	120
PEAK POW MW ENERGY GWH	785.0	179 17.5	180 8.2	$\begin{array}{c} 181 \\ 10.6 \end{array}$	182 44.3	184 64.3	185 75.8	183 78.2	181 77.6	181 46.0	181 38.7	182 18.7	$181 \\ 14.4$	181 21.1	179 90.5	176 98.6	175 80.4
GARRISON NAT INFLOW	8762	324	151	194	840	1084	2425	1533	433	332	468	194	90	103	130	192	268
DEPLETION CHAN STOR	980 0	5 65	2	3	9 -11	211 -22	704 -16	466	57	-117	10 10	-80	-37 -30	-43	-90 -11	-72 -11	-48 11
REG INFLOW	12586 13035	504 417	205 167	263 214	1118 893	1282 1261	2211 1220	1559 1261	801 1261	672	623 805	47 352 390	22 173 236	25 242 301	54 770 1230	929	882
STOR CHANGE STORAGE	-450 12050	87 12137	38 12175	49 12224	225 12449	21 12470	991 13461	298 13759	-460 13299	-280 13019	-182 12838	-37 12800	-63 12737	-60 12678	-460 12218	-362 11856	-256 11600
ELEV FTMSL DISCH KCFS	1814.9 21.0	1815.3 14.0	1815.5 12.0	1815.7 12.0	1816.6 15.0	1816.7 20.5	1820.7 20.5	1821.9 20.5	1820.1 20.5	1819.0 16.0	1818.2 13.1	1818.1 13.1	1817.8 17.0	1817.6 19.0	1815.7 20.0	1814.1 21.0	1813.0 20.5
AVE POWER M	W	151 312	130 312	130 313	163 316	222 316	225 328	230 331	229 326	178 323	145 321	144 320	186 319	208 319	217 313	225 309	217 305
ENERGY GWH	1723.4	54.3	21.8	28.1	117.1	165.4	162.4	170.8	170.5	127.8	107.6	51.9	31.3	39.9	161.3	167.2	146.1
NAT INFLOW DEPLETION	1323 585	249 22	116 10	149 13	231 46	126 64	271 123	103 143	26 93	81 23	7 -8	-7 2	-3 1	-3 1	-61 11	-15 16	52 25
CHAN STOR EVAPORATION	2 431	35	10		-15	-27		27	83	24 104	15 90	40	-21 19	-11 21	-5 47	-5	3
RELEASE	13345	6/9 447 232	282	350	1063	1295	1368	1193	1111 1693	930 445 485	745 1530 - 785	342 225	193 122 71	265 137	1105 991	1255	1168 989
STORAGE ELEV FTMSL	12621 1584.1	12852 1585.2	12860 1585.2	12850 1585.1	12675 1584.4	12480 1583.5	12461 1583.4	11950 1581.1	11369 1578.4	11854 1580.7	11068 1576.9	11185 1577.5	11256 1577.8	11384 1578.4	11498 1579.0	11981 1581.2	12160 1582.1
DISCH KCFS POWER	17.6 W	15.0	19.8	20.1	20.8	24.2	23.3	27.7	27.5	7.5	24.9	7.6	8.8	8.6	16.1	12.6	17.8
PEAK POW MW ENERGY GWH	1859.1	591 61.4	591 37.9	591 49.5	587 169.9	582 203.2	582 188.8	570 229.8	555 224.8	567 59.4	547 202.3	551 29.7	552 16.1	556 18.2	558 131.4	570 103.3	575 133.3
BIG BEND	120							0	24	21	27	12	c	7	1.4		
REG INFLOW RELEASE	13676 13676	447 447	275 275	360 360	1238 1238	1490 1490	1387 1387	1696 1696	1668 1668	414 414	1503 1503	213 213	117 117	131 131	977 977	772 772	989 989
STORAGE ELEV FTMSL	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0	1682 1420.0
MISCH KCES	17.6	15.0	19.8	20.1	20.8	24.2	23.3	27.6	27.1	7.0	24.4	1.2	8.4	8.2	15.9	12.6	17.8
POWER AVE POWER M	w 1/10	71	93	94	97	113	109	129	127	35	122	36	43	42	79	62	85
POWER AVE POWER M PEAK POW MW ENERGY GWH	W 792.6	71 518 25.6	93 510 15.6	94 509 20.4	97 509 70.1	113 509 84.4	109 509 78.6	129 509 96.0	127 509 94.5	35 538 25.4	122 538 91.1	36 538 13.1	43 538 7.2	42 538 8.0	79 538 58.9	62 538 46.3	85 529 57.4
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW	W 792.6 LL 433	71 518 25.6	93 510 15.6 37	94 509 20.4 48	97 509 70.1	113 509 84.4	109 509 78.6	129 509 96.0	127 509 94.5	35 538 25.4 -15	122 538 91.1	36 538 13.1	43 538 7.2	42 538 8.0	79 538 58.9	62 538 46.3	85 529 57.4
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION	W 792.6 LL 433 80 130	71 518 25.6 80 1	93 510 15.6 37 1	94 509 20.4 48 1	97 509 70.1 62 4	113 509 84.4 50 9	109 509 78.6 174 12	129 509 96.0 19 18 10	127 509 94.5 52 15 32	35 538 25.4 -15 7 33	122 538 91.1 -75 1 22	36 538 13.1 -4 1 10	43 538 7.2 -2 0 5	42 538 8.0 -2 1 5	79 538 58.9 3 13	62 538 46.3 -9 3	85 529 57.4 17 3
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE	W 792.6 LL 433 80 130 13886 13887	71 518 25.6 80 1 525 265	93 510 15.6 37 1 312 164	94 509 20.4 48 1 407 390	97 509 70.1 62 4 1296 1296	113 509 84.4 50 9 1531 1531	109 509 78.6 174 12 1549 1549	129 509 96.0 19 18 10 1687 1687	127 509 94.5 52 15 32 1674 1674	35 538 25.4 -15 7 33 345 1598	122 538 91.1 -75 1 22 1403 1403	36 538 13.1 -4 10 200 201	43 538 7.2 -2 0 5 110 110	42 538 8.0 -2 1 5 123 123	79 538 58.9 3 13 962 689	62 538 46.3 -9 3 760 670	85 529 57.4 17 3 1003 539
POWER AVE POWER PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE ELEVS FMSL	W 792.6 LL 433 80 130 13887 -1 3124 1350.0	71 518 25.6 80 1 525 265 265 260 3384 1353.2	93 510 15.6 37 1 312 164 148 3532 1355.0	94 509 20.4 48 1 407 390 17 3549 1355.2	97 509 70.1 62 4 1296 1296 3549 1355.2	113 509 84.4 50 9 1531 1531 1531 3549 1355.2	109 509 78.6 174 12 1549 1549 3549 1355.2	129 509 96.0 19 18 10 1687 1687 0 3549 1355.2	127 509 94.5 52 15 32 1674 1674 1674 0 3549 1355.2	35 538 25.4 -15 7 33 345 1598 -1252 2296 1337.5	122 538 91.1 -75 1 22 1403 1403 0 2296 1337.5	36 538 13.1 -4 10 200 201 0 2296 1337.5	43 538 7.2 -2 0 5 110 110 2296 1337.5	42 538 8.0 -2 123 123 123 0 2296 1337.5	79 538 58.9 3 13 962 689 273 2569 1342.1	62 538 46.3 -9 3 760 670 90 2659 1343.5	85 529 57.4 17 3 1003 539 464 3123 1350.0
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER	W 792.6 LL 130 13886 13887 -1 3124 1350.0 9.8	71 518 25.6 80 1 525 265 265 260 3384 1353.2 8.9	93 510 15.6 37 1 312 164 148 3532 1355.0 11.8	94 509 20.4 48 1 407 390 17 3549 1355.2 21.8	97 509 70.1 62 4 1296 1296 3549 1355.2 21.8	113 509 84.4 50 9 1531 1531 1531 3549 1355.2 24.9	109 509 78.6 174 12 1549 1549 1355.2 26.0	129 509 96.0 19 18 10 1687 1687 1687 1687 25.2 27.4	127 509 94.5 52 15 32 1674 1674 1674 1674 255.2 27.2	35 538 25.4 -15 7 33 345 1598 -1252 2296 1337.5 26.9	122 538 91.1 -75 1 22 1403 0 2296 1337.5 22.8	36 538 13.1 -4 1 00 200 0 2296 1337.5 6.7	43 538 7.2 -2 0 5 110 0 2296 1337.5 7.9	42 538 8.0 -2 123 123 0 2296 1337.5 7.7	79 538 58.9 3 13 962 689 273 2569 1342.1 11.2	62 538 46.3 -9 3 760 670 90 2659 1343.5 10.9	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEREGY GWH	W 792.6 LL 130 13886 13887 -1 3124 1350.0 9.8 W	71 518 25.6 80 1 525 265 260 3384 1353.2 8.9 73 344 264	93 510 15.6 37 1 312 164 164 3532 1355.0 11.8 99 351 166	94 509 20.4 48 1 407 390 1355.2 21.8 183 352 39 6	97 509 70.1 1296 1296 3549 1355.2 21.8 183 352 131.8	113 509 84.4 50 9 1531 1531 3549 1355.2 24.9 209 209 255 352	109 509 78.6 174 12 1549 1549 3549 1355.2 26.0 218 352 352	129 509 96.0 19 18 10 1687 1687 1687 1355.2 27.4 230 352 352	127 509 94.5 52 15 32 1674 1674 0 3549 1355.2 27.2 228 352 169 69	35 538 25.4 -15 7 33 345 1598 -1252 2296 1337.5 26.9 209 274 150	122 538 91.1 -75 1 22 1403 1403 0 2296 1337.5 22.8 164 276 276	36 538 13.1 -4 1 0 200 201 0 2296 1337.5 6.7 49 276 276	43 538 7.2 -2 0 5 110 110 2296 1337.5 7.9 58 276 9 7	42 538 8.0 -2 1 5 123 123 123 2296 1337.5 7.7 7.7 56 276 276	79 538 58.9 3 3 962 689 273 2569 1342.1 11.2 83 297 618	62 538 46.3 -9 3 760 670 90 2659 1343.5 10.9 83 303 61 8	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7 77 332 332 51 5
POWER AVE POWER AVE POWER PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER AVE POWER PEAK POW MW ENERGY GWH GAVINS POI	W 792.6 LL 130 13886 13887 -1 3124 1350.0 9.8 W 1353.3 NT	71 518 25.6 80 1 525 265 260 3384 1353.2 8.9 73 344 26.4	93 510 15.6 37 1 312 148 3532 13550 11.8 99 351 16.6	94 509 20.4 48 1 407 3549 1355.2 21.8 183 352 39.6	97 509 70.1 62 4 1296 1296 3599 1355.2 21.8 183 352 131.8	113 509 84.4 50 9 1531 1531 3549 1355.2 24.9 209 352 155.3	109 509 78.6 174 12 1549 1549 1355.2 26.0 218 352 157.1	129 509 96.0 19 1887 1687 1687 1355.2 27.4 230 352 171.0	127 509 94.5 32 1674 1674 1674 13552 27.2 27.2 228 352 169.6	35 538 25.4 -15 33 345 1598 -1252 2296 1337.5 26.9 209 274 150.3	122 538 91.1 -75 1403 1403 1337.5 22.8 164 276 122.2	36 538 13.1 -4 1 10 200 2296 1337.5 6.7 49 276 17.7	43 538 7.2 -2 5 110 110 2296 1337.5 7.9 58 276 9.7	42 538 8.0 -2 123 123 123 0 2296 1337.5 7.7 7.7 56 276 10.8	79 538 58.9 3 3 962 689 273 2569 1342.1 11.2 83 297 61.8	62 538 46.3 -9 3 760 670 90 2659 1343.5 10.9 83 303 61.8	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7 77 3322 51.5
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER AVE POWER MENERGY GWH GAVINS POI NAT INFLOW DEPLETION	W 792.6 LL 433 80 130 13886 13886 13887 -1 3124 1350.0 9.8 W 1353.3 NT 1246 114	71 518 25.6 80 1 525 265 265 260 3384 1353.2 8.9 9 73 344 26.4 91 0 2	93 510 15.6 37 1 164 148 3532 1355.0 11.8 99 351 16.6 42 0	94 509 20.4 48 1 407 390 1355.2 21.8 183 352 39.6 54 0	97 509 70.1 62 4 1296 1296 3549 1355.2 21.8 183 352 131.8 125 5	113 509 84.4 50 9 15531 1531 3549 13552 24.9 209 352 155.3 136 19	109 509 78.6 174 12 1549 13552 26.0 218 352 157.1 143 24	129 509 96.0 19 18 10 1687 13552 27.4 230 352 171.0 79 39	127 509 94.5 52 15 322 1674 1674 0 3549 13552 27.2 27.2 228 352 169.6 79 10	35 538 25.4 -15 7 33 345 1598 -1252 2296 1337.5 26.9 209 274 150.3 57 -5	122 538 91.1 -75 1 22 1403 1403 0 2296 1337.5 22.8 164 276 122.2 108 2	36 538 13.1 100 200 2296 1337.5 6.7 49 276 17.7 49	43 538 7.2 -2 0 5 110 10 2296 1337.5 7.9 58 276 9.7 22 2 2	42 538 8.0 -2 1 5 123 123 0 2296 1337.5 7.7 7.5 56 276 10.8 25 3 0	79 538 58.9 3 133 962 689 273 2569 1342.1 11.2 83 297 61.8 70 10 <i>c</i>	62 538 46.3 -9 3 760 670 90 2659 1343.5 10.9 83 303 61.8 61.8	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7 77 332 51.5 101
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFELOW DEPLETION REG INFLOW REG INFLOW REG INFLOW REG YENTSL DISCH KCFS POWER AVE POWER M PEAK POW GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW	W 792.6 LL 433 800 13886 13886 13886 13887 -1 3124 1350.0 9.8 W 1353.3 NT 1246 114 -1 47 477	71 518 25.6 80 1 525 265 260 3384 13532 8.9 73 344 26.4 91 0 2 358	93 510 15.6 37 1 164 148 3532 13550 11.8 99 351 16.6 42 0 6 -6 201	94 509 20.4 48 1 407 390 13552 21.8 183 352 39.6 54 0 -19 425	97 509 70.1 62 4 1296 1296 1255.2 21.8 183 352 131.8 125 5 0 0 1416	113 509 84.4 50 9 1531 1531 355.2 24.9 209 352 155.3 136 19 6 1642	109 509 78.6 174 12 1549 1549 3552 26.0 218 352 157.1 143 24 24 25 157.1	129 509 96.0 19 18 10 1687 1687 1687 27.4 230 352 171.0 79 352 171.0 79 3 3 1722	127 509 94.5 52 15 322 1674 1674 1674 213552 27.2 228 352 169.6 79 10 0 9 1735	35 538 25.4 -15 7 33 345 1598 -1252 2296 1337.5 26.9 209 274 150.3 57 -5 11 11 1649	122 538 91.1 -75 1 22 1403 1403 1403 12296 1337.5 22.8 164 276 122.2 108 28 10 1506	36 538 13.1 -4 1 0 200 201 0 2296 1337.5 6.7 49 276 17.7 47 5 30 5 268	43 538 7.2 0 5 110 12296 1337.5 7.9 58 276 9.7 22 2 -2 2 2 2 2 2 2 2 2 2	42 538 8.0 -2 1 5 123 123 0 2296 1337.7 7.7 56 276 10.8 25 3 0 2 143	79 538 58.9 3 13 962 689 273 2569 1342.1 11.2 83 297 61.8 700 100 -6 5 737	62 538 46.3 -9 3 760 670 90 2659 1343.5 10.9 83 303 61.8 61.8 1 1 738	85 529 57.4 17 3 1003 464 3123 1350.0 9.7 77 332 51.5 101 2 642
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE SIDE CHANGE	W 792.6 LL 433 80 130 13886 13887 13124 1350.0 9.8 W 1353.3 NT 1246 114 -1 47 14972 14972	71 518 25.6 80 1 1 525 265 265 265 265 3384 1353.2 8.9 3344 26.4 91 0 2 358 358	93 510 15.6 37 1 1 312 164 148 3532 1355.0 11.8 99 351 16.6 42 0 -6 201 201	94 509 20.4 48 1 407 3549 1355.2 21.8 183 352 39.6 54 0 -19 425 425	97 509 70.1 62 4 1296 1296 3549 1355.2 21.8 183 352 131.8 125 5 0 1416 1416	113 509 84.4 50 9 1531 1531 3549 1355.2 24.9 209 352 155.3 136 19 -6 1642 1642	109 509 78.6 174 12 1549 1559 1355.2 26.0 218 352 157.1 143 24 -2 1666 1666	129 509 96.0 19 18 10 1687 1687 1687 1687 27.4 230 3552 27.4 230 3552 171.0 79 39 39 31722 1722	127 509 94.5 52 15 32 1674 1674 0 3549 1355.2 27.2 228 352 169.6 79 10 0 9 1735 1725 1725	35 538 25.4 -15 7 33 345 1598 -1252 2296 1337.5 26.9 274 150.3 57 -5 1 111 1649 1649 1649 1649	122 538 91.1 -75 1 22 1403 1403 1403 2296 1337.5 22.8 164 276 122.2 108 2 8 100 1506 1506	36 538 13.1 -4 1 0 2296 1337.5 6.7 49 276 17.7 47 5 30 5 5 268 268	43 538 7.2 -2 0 5 110 0 2296 1337.5 7.9 7.9 58 276 9.7 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	42 538 8.0 -2 1 5 23 0 2296 1337.5 7.7 56 276 10.8 25 3 0 2 25 3 143 143	79 538 58.9 3 13 962 689 273 2569 1342.1 112.2 83 297 61.8 700 100 -6 5 737 737	62 538 46.3 -9 3 760 60 670 90 2659 1343.5 10.9 83 303 61.8 61 1 1 738 738	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7 77 332 51.5 101 2 642 642 642 642 642 642 642
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW REG INFLOW REGINFLOW PEAK POW MW PEAK POW MW PEAK POWEM PEAK POWEM PEAK POWEM PEAK POWEM PEAK POWEM PEAK POWEM CHANSTOR EVAPORATION REGINFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS	W 792.6 LL 433 80 130 13886 13887 -1 3124 1353.3 9.8 W 1353.3 NT 1246 114 -1 4972 14972 14972 14972 358 1206.0	71 518 25.6 80 1 525 265 260 3384 1353.2 8.9 73 344 26.4 91 0 2 58 358 358 358 358 1206.0	93 510 15.6 37 1 164 148 3532 13550 11.8 99 351 16.6 42 0 -6 201 201 358 1206.0 14 5	94 509 20.4 48 1 407 390 13552 21.8 183 352 21.8 183 352 39.6 54 0 -19 425 425 358 1206.0	97 509 70.1 62 4 1296 1296 1355.2 21.8 1355.2 131.8 1255 5 0 1416 1416 358 1206.0	113 509 84.4 50 9 1531 1531 3549 1355.2 24.9 209 352 155.3 136 19 -6 1642 1642 358 1206.0 26.7	109 509 78.6 174 12 1549 1549 1355.2 26.0 218 352 157.1 143 24 .24 1666 1666 1666 358 1206.0 28.0	129 509 96.0 19 18 100 1687 1355.2 27.4 230 352 171.0 79 39 -3 3 1722 1722 358 1206.0 28.0	127 509 94.5 52 15 322 1674 1674 0 3549 1355.2 27.2 228 352 169.6 79 10 0 9 9 1735 1722 13 371 1206.5 28.0	35 538 25.4 -15 7 33 345 1252 2296 1337.5 26.9 209 274 150.3 57 -5 11 1649 1636 13 384 41207.0	122 538 91.1 -75 1 22 1403 1403 0 2296 1337.5 22.8 164 276 122.2 108 2 8 10 1506 1506 1506 1506 24.5	36 538 13.1 10 200 2296 1337.5 6.7 49 276 17.7 47 5 30 5 268 8268 384 1207.0 9.0 9.0	43 538 7.2 0 5 110 110 2296 1337.5 7.9 58 276 9.7 22 2 2 2 2 2 2 125 125 125 384 1207.0 9 0 9 7	42 538 8.0 -2 1 5 123 2296 1337.7 7.7 56 276 10.8 25 3 0 2 143 143 143 384 1207.0 9 0 9	79 538 58.9 3 13 962 689 273 2569 1342.1 111.2 83 297 61.8 70 10 -6 5 737 737 384 1207.0	62 538 46.3 -9 3 760 670 90 2659 1343.5 10.9 83 303 61.8 1 1 738 738 384 1207.0 12 0	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7 77 332 51.5 101 2 642 668 -26 358 1206.0 12.0
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REGINFLOW RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW PEAK POW RELEASE STOR CHANGE STOR CHANGE STO	W 792.6 LL 433 80 130 13886 13887 - 13124 1350.0 9.8 W 1353.3 NT 1246 114 -1 4972 14972 14972 14972 14972 14972 14972 14972 14972 14972	71 518 25.6 80 1 525 265 265 265 265 260 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358 358 1206.0 12.0 12.0	93 510 15.6 37 1 144 148 3532 13550 11.8 99 351 16.6 201 201 201 201 201 201 201 201 201 201	94 509 20.4 48 1 407 3549 13552 21.8 183 352 39.6 183 352 39.6 19 425 425 1206.0 23.8 1206.0 23.8	97 509 70.1 1296 1296 1296 1355.2 21.8 135.2 131.8 125 0 1416 1416 1416 1416 1416 1206.0 23.8	113 509 84.4 50 9 1531 1531 1551 155.2 24.9 209 3522 155.3 136 1642 1642 1642 1642 1642 1642 1642 164	109 509 78.6 174 12 1549 13549 1355.2 26.0 218 3522 157.1 143 252 157.1 143 266 1666 1666 1666 1666 1666 1206.0 28.0	129 509 96.0 19 18 100 1687 1687 1657 27.4 230 352 171.0 79 39 -3 3 1722 1722 1722 1722 3588 12060 28.0	127 509 94.5 52 15 324 1674 1674 1674 1674 1674 1674 1674 228 352 169.6 79 10 0 9 1735 1722 133 371 1206.5 28.0	35 538 25.4 -15 7 33 345 -1252 2296 12296 12296 12296 12296 12296 12296 1252 26.9 209 274 150.3 57 -57 -1 111 1649 1636 1237.5 284 1207.5	122 538 91.1 -75 1 22 1403 1403 2296 1337.5 22.8 164 122.2 108 8 100 1506 1506 1506 1506 384 1207.0 24.5	36 538 13.1 -4 1 0 200 2296 1337.5 6.7 276 17.7 47 5 268 268 268 268 268 384 1207.0 9.0	43 538 7.2 0 5 110 100 2296 1337.5 7.9 58 276 9.7 9.7 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	42 538 8.0 -2 1 5 123 123 2296 1337.7 7.7 56 276 10.8 276 276 10.8 276 276 276 276 276 276 276 276 276 276	79 538 58.9 3 13 962 273 2569 1342.1 11.2 83 297 61.8 61.8 61.8 70 10 -5 737 737 384 1207.0 12.0 43	62 538 46.3 760 90 2659 1343.5 10.9 83 303 61.8 68 1 1 738 738 1207.0 12.0 43	85 529 57.4 17 33 1003 464 3123 1350.0 9.7 77 322 51.5 101 2 642 668 -26 68 -26 68 -26 5358 1206.0 12.0 43
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW REG INFLOW REGINFLOW PEAK POWER AVE POWER AVE POWER AVE POWER AVE POWER CHANS STOR CHANS STOR EVAPORATION REG INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER AVE POWER	W 792.6 LL 433 80 130 13886 13887 13886 13887 137 1353.3 NT 1246 114 14972 14972 14972 358 1206.0 12.0 W 626.6	71 518 25.6 80 1 1 525 265 260 3384 1353.2 8.9 73 344 26.4 91 0 2 3588 358 358 1206.0 12.0 42 114 15.1	93 510 15.6 37 1 164 148 3532 13550 11.8 99 351 16.6 42 0 -6 201 201 201 201 201 358 1206.0 14.5 50 114 8.5	94 509 20.4 48 1 407 390 13552 21.8 183 352 39.6 54 0 -19 425 425 358 1206.0 23.8 82 114 17.7	97 509 70.1 62 4 1296 1296 3549 21.8 135.2 131.8 125 5 0 1416 1416 358 1206.0 23.8 82 114 58.8	113 509 84.4 50 9 15531 1551 3549 13552 24.9 209 352 155.3 136 19 155.3 136 19 1642 1642 26.7 91 114 467.8	109 509 78.6 174 12 1549 1549 1355.2 26.0 218 352 157.1 143 24 -2 1666 1666 1666 1666 1666 1666 358 1206.0 28.0 95 114 68.7	129 509 96.0 19 18 100 1687 1355.2 27.4 230 352 171.0 79 39 31 722 1722 358 1206.0 28.0 95 1144 71.0	127 509 94.5 52 15 322 1674 1674 13552 27.2 228 352 169.6 79 10 0 9 1735 1722 13 371 1206.5 28.0 96 115 71.3	35 538 25.4 -15 7 33 345 1252 2296 1337.5 26.9 209 274 150.3 57 -5 11 11 1649 1636 13 384 1207.0 27.5 95 1155 68.6	122 538 91.1 -75 1 22 1403 1403 0 2296 1337.5 22.8 164 276 122.2 108 2 8 10 1506 1506 1506 384 1207.0 24.5 86 115 63.8	36 538 13.1 -4 10 2200 2296 1337.5 6.7 49 276 17.7 47 5 30 5 268 268 268 268 268 268 268 268 268 268	43 538 7.2 0 5 110 110 2296 13376 7.9 58 276 9.7 22 2 2 2 2 2 2 2 2 2 2 2 384 1207.0 9.0 32 35.4	42 538 8.0 -2 1 2296 1337.2 7.7 56 276 10.8 25 3 0 2 24 10.8 25 3 3 84 1207.0 9.0 32 115 6.2	79 538 58.9 3 13 2569 13421 11.2 83 297 61.8 70 10 61.8 70 10 61.8 70 10 10 10 297 61.8 737 737 737 737 7384 1207.0 12.0 43 777 31.8	62 538 46.3 -9 3 760 670 90 2655 10.9 83 303 61.8 61.8 738 738 384 1207.0 12.0 43 777 31.8	85 529 57.4 17 3 1003 539 464 3123 13500 9.7 77 332 51.5 101 2 642 668 -358 1206.0 12.0 43 76 28.6
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW REG INFLOW REGINENCON STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POWEM PEAK POWER PEAK POWER AVE POWER AVERGY GWH GAVINS POI NAT INFLOW	W 792.6 LL 433 800 13886 13886 13887 -1 3124 1350.0 9.8 W 1353.3 NT 1246 114 9.8 W 1353.3 NT 1246 114 9.7 2 358 1206.0 12.0 0 12.0 0 0 12.0 0 0 12.0 0 0 12.0 0 0 12.0 0 0 12.0 0 0 12.0 0 0 12.0 0 12.0 0 12.0 0 13 0 13886 134 114 14972 1785 126 1785 126 1785 1275 1275 1275 1275 1275 1275 1275 127	71 518 25.6 80 1 525 265 260 3384 1353.2 8.9 73 344 26.4 91 0 2 2 358 358 1206.0 12.0 12.0 0 42 114 15.1 JX CIT2 52	93 510 15.6 37 1 14 148 3532 13550 11.8 99 351 16.6 42 0 -6 201 201 201 201 201 201 201 201 14.5 50 114 8.5	94 509 20.4 48 1 407 390 13552 21.8 183 352 39.6 54 0 -19 425 425 1206.0 23.88 1206.0 23.88 82 114 17.7 31	97 509 70.1 62 4 1296 1296 1255.2 21.8 183 352 131.8 125 5 0 0 1416 1416 1416 1416 1416 1416 1416	113 509 84.4 50 9 1531 1531 3549 13552 24.9 209 352 155.3 136 1642 1642 1642 1642 1642 1642 1642 164	109 509 78.6 174 12 1549 3549 3552 26.0 218 352 157.1 143 24 -2 1666 1666 1666 1666 1666 1666.0 28.0 28.0 28.0 28.0 114 68.7	129 509 96.0 19 18 100 1687 1687 0 3549 1355.2 27.4 230 352 171.0 79 3 3 1722 1722 1722 1722 1722 1722 1722	127 509 94.5 52 15 322 1674 1674 1674 1674 2355 27.2 228 352 169.6 79 100 9 1735 1722 1722 1722 1722 288 352 169.6 115 71.3 31	35 538 25.4 -15 7 33 345 1252 2296 1337.5 26.9 209 274 150.3 57 -5 11 11 1649 1636 1207.0 27.5 115 68.6	122 538 91.1 -75 1 22 1403 1403 1403 1232.6 1232.6 1232.6 122.2 108 276 122.2 108 1506 1506 1506 1506 1506 1506 1506 1506	36 538 13.1 -4 1 0 200 201 0 2296 1337.5 6.7 49 276 17.7 47 5 268 268 268 268 268 268 268 268 1207.0 9.0 9.0 32 115 11.6	43 538 7.2 0 5 110 12296 1337.5 7.9 7.9 58 276 9.7 22 2 2 2 2 2 125 125 125 125 125 125 12	42 538 8.0 -2 1 5 123 2296 1337.5 7.7 56 276 10.8 25 3 0 2 143 143 143 1207.0 9.0 9.0 32 115 6.2 7	79 538 58.9 3 13 2569 13421 11.2 83 297 61.8 700 -61.8 700 -61.8 707 737 737 84 1207.0 12.00 12.00 43 77 31.8	62 538 46.3 760 90 2659 1343.5 10.9 83 303 61.8 61.8 68 1 1 738 738 1207.0 12.00 12.	85 529 57.4 17 3 1003 464 3123 1350.0 9.7 77 332 51.5 101 2 642 668 -26 668 -26 668 -26 668 -26 668 -28.6 358
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION REG INFLOW RELEASE STOR CHANGE STORAGE STORAGE STORAGE STORAGE HELEV FTMSL DISCH KCFS POWER AVE POWER AVE POWER A	W 792.6 LL 433 80 130 13886 13887 13886 13887 1353.3 NT 1246 114 14972 14972 14972 14972 14972 14972 14972 14972 14972 14972 14972 14972 14972 14972 0 12.0 W 626.6 NT - SIO 785 247 OW AT SIO	71 518 25.6 80 1 525 265 265 260 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358 1206.0 12.0 42 114 15.1 JX CITY- 52 6 52 6 52 52 6 52 6 52 52 6 52 52 6 52 52 6 52 52 6 52 52 6 52 52 6 52 52 6 52 6 52 52 6 52 6 52 6 52 6 52 6 52 6 52 6 52 6 52 6 52 6 5 6 6 7 3 3 4 4 2 6 5 5 6 6 7 3 3 4 2 6 5 5 6 6 7 3 3 4 2 6 5 6 5 6 6 7 3 5 8 5 5 5 5 5 5 5 5 5 5 5 5 5	93 510 15.6 37 14 164 148 3532 1355.0 115.6 99 351 16.6 42 0 -6 201 201 201 358 1206.0 14.5 50 1144 8.5	94 509 20.4 48 1 407 390 13552 21.8 183 352 21.8 183 352 39.6 54 0 -19 425 358 1206.0 23.8 82 114 17.7 31 4	97 509 70.1 62 4 1296 3549 13552 21.8 183 352 131.8 125 5 0 1416 1416 1416 1416 1416 358 1206.0 23.8 82 114 58.8 110 0	113 509 84.4 50 9 15531 1531 3549 13552 24.9 209 352 155.3 136 19 -6 1642 1642 1642 1642 1642 1642 1642 164	109 509 78.6 174 12 1549 1559 1355.2 26.0 218 352 157.1 143 24 -2 1666 1666 1666 1666 1666 1666 1666 1	129 509 96.0 19 18 100 1687 1687 1687 1687 27.4 230 352 27.4 230 352 27.4 230 352 171.0 79 39 -3 3 1722 1722 1722 1722 1722 1722 1722 1	127 509 94.5 52 15 322 1674 1674 0 3549 13552 27.2 27.2 228 352 169.6 79 10 0 9 1735 1722 28.0 9 1725 28.0 96 115 71.3 31 34	36 538 25.4 -15 7 33 345 -1252 2296 1337.5 26.9 209 204 150.3 150.3 57 -55 11 10 1639 1636 1337.5 26.9 209 21 137.5 57 -55 155 68.6 68.6 68.6	122 538 91.1 -75 1 22 1403 1403 1403 2296 1337.5 22.8 164 276 122.2 108 2 8 100 1506 1506 1506 1506 1506 1506 1506	36 538 13.1 -4 1 0 200 2296 1337.5 6.7 49 276 17.7 47 5 268 268 268 268 268 268 268 268 1207.0 9.0 32 115 11.6 11.6 11.6 11.6 11.6 11.6 11.6	43 538 7.2 -2 0 5 110 12296 1337.5 7.9 58 276 9.7 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	42 538 8.0 -2 1 5 123 2296 1337.5 276 10.8 276 10.8 25 276 10.8 25 276 10.8 25 276 10.8 25 276 10.8 25 27 10.8 25 21 10.8 25 20 10.8 20 21 10.9 20 21 10.9 20 20 10.8 20 10.8 20 20 20 20 20 20 20 20 20 20 20 20 20	79 538 58.9 273 273 273 273 275 61.8 70 10 -6 -5 737 737 737 737 1207.0 12.0 43 77 31.8 14 2720	62 538 46.3 7600 90 2659 1343.5 10.9 83 303 61.8 738 738 738 1207 12.0 43 77 31.8 -7 31.8	85 529 57.4 17 3123 1500 9.7 77 3322 51.5 101 2 642 662 -26 642 662 -26 -26 -26 -26 -26 -26 -26 -26 -2
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION REAL POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION REULATED FL KAF KCFS	W 792.6 LL 433 80 1300 13886 13887 -1 3124 0350.0 9.8 W 1353.3 NT 1246 114 14972 14972 14972 14972 14972 358 1206.0 12.0 W 626.6 NT - SIO( NT - SIO( NT - SIO( 785 247 .0W AT SI( 15510)	71 518 25.6 80 1 525 265 265 265 3384 1353.2 8.9 73 344 26.4 91 0 2 2 358 358 358 358 1206.0 12.0 12.0 12.0 12.0 12.0 12.0 2 200 2 200 2 200 2 200 2 200 2 200 2 200 2 200 2 200 2 200 2 200 2 200 200 2 200 100 200 2	93 510 15.6 37 1 14 148 3532 13550 11.8 99 351 16.6 42 0 -6 201 201 358 1206.0 14.5 50 114 8.5  24 3 (222 16.0	94 509 20.4 48 1 407 390 13552 21.8 183 352 39.6 54 0 -19 425 425 1206.0 23.58 1206.0 23.58 1206.0 23.58 1206.0 23.58 124 14 17.7 31 4 452 25.3	97 509 70.1 62 4 1296 1296 1296 1296 125.2 1.8 135.5 131.8 125 5 0 1416 1416 1416 1416 1416 23.8 1206.0 23.8 82 114 58.8 110 20 25.3	113 509 84.4 50 9 1551 1551 1551 155.3 1352 155.3 136 19 -6 1642 1642 1642 1642 1642 1642 1642 164	109 509 78.6 174 12 1549 3549 13552 26.0 218 352 157.1 143 24 -2 1666 1666 1666 1666 1666 1666 1666 1	129 509 96.0 19 18 100 1687 1687 1355.2 27.4 230 352 171.0 79 3-3 3 1722 1722 1722 1722 1722 358 1206.0 28.0 95 114 71.0 68 36 1754 28.5	127 509 94.5 52 15 322 27.2 27.2 228 352 169.6 79 10 0 9 1735 1722 3371 1206.5 28.0 96 115 71.3 31 34 1719 28.0	35 538 25.4 -15 7 33 345 1252 2296 1337.5 26.9 209 274 150.3 57 -5 11 11 1649 1636 384 1207.0 27.5	122 538 91.1 -75 1 22 1403 1403 0 2296 1337.5 22.8 164 276 122.2 108 2 8 10 1506 1506 1506 1506 1506 1506 1506 1	36 538 13.1 -4 10 200 2296 1337.5 6.7 49 276 17.7 47 5 30 5 268 268 268 268 268 384 1207.0 9.0 32 115 11.6 14 6 9.3	43 538 7.2 0 5 110 12296 1337.5 7.9 58 276 9.7 22 2 2 2 2 2 2 125 125 125 125 125 125	42 538 8.0 -2 1 5 2296 1337.7 7.7 56 276 10.8 25 3 0 2 143 143 143 143 143 143 143 143 143 166.2 7 3 115 6.2 7 3 115 6.2	79 538 58.9 3 13 2569 1342.1 11.2 83 297 61.8 700 10 -61.8 707 10 -61.8 737 737 384 1207.0 12.0 43 377 31.8 14 12 297 12.0	62 538 46.3 760 670 2659 1343.5 10.9 83 303 61.8 68 1 1 1 738 738 1207.0 12.00 12.00 12.00 12.00 12.01	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7 77 332 51.5 101 2 642 668 -25 668 1206.0 12.0 12.0 12.0 358 1358 28.6 38 13 1358 28.6 38 13 12.5
POWER AVE POWER AVE POWER PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS TOTAL NAT INFLOW	W 792.6 LL 433 80 130 13886 13887 13124 1350.0 9.8 W 1353.3 NT 1246 114 -1 4972 14972 14972 14972 14972 14972 14972 14972 14972 14972 14972 0 25 1206.0 12.0 W 626.6 NT - SIO 785 247 .0W AT SIO 15510 18297	71 518 25.6 80 1 525 265 265 260 3384 13532 8.9 73 344 26.4 91 0 2 358 358 12060 12.0 12.0 42 114 15.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	93 510 15.6 37 1 312 14 148 3532 13550 11.8 99 351 16.6 201 201 201 201 201 201 201 201 201 201	94 509 20.4 48 1 407 3549 13552 21.8 183 352 39.6 183 352 39.6 19 425 425 32.8 1206.0 23.8 82 114 17.7 31 4 452 25.3 636	97 509 70.1 62 4 1296 1296 1252 21.8 135.2 131.8 125 0 1416 1416 1416 1416 1416 1416 1416 23.8 1206 23.8 82 114 58.8 110 20 23.8 114 58.8 110 20 23.8 114 58.8 110 20 23.8 114 58.8 110 20 23.8 114 58.8 112 58.8 114 58.8 112 58.8 114 58.8 112 58.8 112 58.8 112 58.8 112 58.8 114 58.8 112 58.8 112 58.8 114 57.5 114 57.5 1114 57.5 1114 57.5 114 57.5 114 57.5 114 57.	113 509 84.4 50 9 1531 1531 1531 155.2 24.9 209 3522 155.3 136 1642 1642 1642 1642 3588 1206.7 91 114 67.8 205 34 1813 29.5 24,9	109 509 78.6 174 12 1549 1359 1355.2 26.0 218 3549 1355.2 26.0 218 157.1 143 25.2 157.1 143 26.0 28.0 28.0 95 114 68.7 151 30 1787 30.0 4287	129 509 96.0 19 18 100 1687 1687 1687 1687 1752 27.4 230 352 171.0 79 39 33 1722 1722 1722 3588 12060 28.0 95 114 71.0 68 68 36 1754 28.5 2297	127 509 94.5 32 1674 1674 1674 1674 1674 1674 1674 1674	36 538 25.4 -15 7 33 346 -1252 2296 13375 26.9 209 274 150.3 57 -55 11 111 1649 150.3 57 -55 11 68.6 225 125 27.5 26.9 209 274 150.3 26 125 27.5 26 125 27.5 27 27 209 274 150.3 26 125 27.5 27 209 274 150.3 26 125 27.5 26 125 27 27 209 274 150.3 26 125 27 27 209 27 27 209 27 27 27 27 27 27 27 27 27 27 27 27 27	122 538 91.1 -75 1 22 1403 1403 1403 122.2 108 22.8 164 122.2 108 28 100 1506 1506 1506 1506 1506 1506 1506	36 538 13.1 -4 1 00 200 2296 1337.5 6.7 47 5268 268 268 268 268 384 1207.0 9.0 32 115 11.6 14 6 276 9.3 422	43 538 7.2 0 538 7.2 110 100 2296 1337.5 7.9 58 276 9.7 9.7 22 22 22 22 125 125 125 125 125 125 125	42 538 8.0 -2 1 5 5 2296 1337.7 7.7 256 276 10.8 25 276 10.8 25 276 10.8 25 276 10.8 25 276 10.8 25 276 10.8 25 276 10.3 20 5 276 10.3 27.7 10.3 20 5 27.6 27.6 27.6 27.6 27.6 27.6 27.6 27.6	79 538 58.9 3 13 962 2569 1342.1 11.2 83 297 61.8 61.8 70 10 -5 737 737 384 1207.0 12.0 43 77 31.8 14 12 739 12.0 458	62 538 46.3 7600 2659 1343.5 10.9 83 303 61.8 68 10.9 83 303 61.8 738 12070 12.0 43 77 31.8 -7 13 718 11.7 460	85 529 57.4 17 33 1003 13500 9.7 77 322 51.5 101 2 642 668 -26 668 -26 668 -26 668 -28.6 358 12060 12.0 43 76 28.6 38 13 12.5 5 28.6
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW REG INFLOW REG INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STORAGE ELEV FIMSL DISCH KCFS POWER AVE POWER M RELEASE STORAGE ELEV FIMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION REGULATED FL KAF KCFS TOTAL	W 792.6 LL 433 80 130 13886 13887 -1 3124 1353.3 NT 1246 114 9.8 W 1353.3 NT 1246 114972 14972 14972 14972 14972 14972 14972 1206.0 12.0 W 626.6 NT - SIO(0) 785 247 000 AT SI( 15510 18297 2384 -12 2384 -12 1675	71 518 25.6 80 1 1 525 265 260 3384 1353.2 8.9 73 344 26.4 91 0 2 8 358 358 358 358 1206.0 12.0 42 114 15.1 15.1 15.1 15.1 15.1 15.1 13.5 1060 23 102	93 510 15.6 37 1 14 148 3532 13550 11.8 99 351 16.6 42 0 -6 201 201 358 1206.0 14.5 50 114.5 50 114.5 50 114.5 50 114.4 8.5 - 24 3 35 1206.0 11.6 4 222 16.0 494 411 4	94 509 20.4 48 1 407 390 13552 21.8 183 352 39.6 54 0 -19 425 425 358 1206.0 23.8 82 1144 17.7 31 4 452 25.3 636 14 -19	97 509 70.1 62 4 1296 3549 13552 21.8 183 352 131.8 125 5 0 1416 1416 358 1206.0 23.8 82 114 58.8 110 20 1506 25.3 1948 155 -26	113 509 84.4 50 9 15531 1531 3549 1355.2 24.9 209 352 155.3 136 19 - 6 1642 1642 26.7 114 67.8 205 34 1813 29.5 2483 641 -55	109 509 78.6 174 12 1549 1355.2 26.0 218 352 157.1 143 24 -2 1666 1666 358 1206.0 28.0 28.0 28.0 114 68.7 151 30 1787 30.0 4287 1388 -18	129 509 96.0 19 18 100 1687 1355.2 27.4 230 352 171.0 79 39 37 1722 358 1206.0 28.0 28.0 28.0 114 71.0 85 295 114 71.0 85 28.5 2297 857 -3 105	127 509 94.5 52 15 322 1674 1674 1355.2 27.2 228 352 169.6 79 10 0 9 1735 1722 18 371 1206.5 28.0 96 115 71.3 31 34 1719 28.0 906 159 0328	35 538 25.4 -15 7 33 345 1252 2296 1337.5 26.9 209 274 150.3 57 -5 11 1649 1636 27.5 115 68.6 21 22 27.5 115 68.6	122 538 91.1 -75 1 222 1403 1403 0 2296 12375 22.8 164 276 122.2 108 2 8 10 1506 1506 1506 1506 384 1207.0 24.5 8 63.8 20 9 1517 24.7 889 -41 31 346	36 538 13.1 -4 10 200 2296 1337.5 6.7 49 276 17.7 47 5 30 5 268 268 268 384 1207.0 9.0 9.0 2115 11.6 14 6 276 9.3 422 -101 32 155	43 538 7.2 0 5 110 110 2296 1337.5 7.9 58 276 9.7 22 2 2 2 2 2 125 125 125 125 125 125 12	42 538 8.00 -2 1 5 123 123 123 123 123 7.7 56 276 10.8 25 3 0 2 143 143 384 1207.0 9.0 32 115 6.2 7 3 147 9.3 225 5 -54 47 -5 -5 -5 -5 -5 -5 -5 -5 -5 -5	79 538 58.9 3 133 962 689 273 2569 1342.1 11.2 83 297 61.8 700 16 .6 5 737 737 384 1207.0 12.0 43 737 31.8 14 12 739 12.0 43 8 731 297 61.8 737 737 737 2384 1207.0 12.0 43 737 2384 1207.0 12.0 43 737 2384 1207.0 12.0 43 737 2384 1207.0 12.0 43 737 2384 1207.0 12.0 43 737 2384 1207.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	62 538 46.3 -9 3 760 670 90 2659 1343.5 10.9 83 303 61.8 68 1 1 1 738 738 384 1207.0 12.0 12.0 43 77 31.8 -7 13 718 11.7 460 -166 -16	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7 77 332 51.5 101 2 642 668 -26 358 1206.0 12.0 43 76 28.6 38 13 12.5 786 -99 16
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW REGINFLOW REGINFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR ELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION REGULATED FL KAF KCFS TOTAL NAT INFLOW DEPLETION REULATED FL KAF KCFS	W 792.6 LL 433 130 13886 13887 -1 3124 1350.0 9.8 W 1353.3 NT 1246 114 9.8 W 1353.3 NT 1246 114 9.7 238 1206.0 12.0 12.0 0 12.0 0 0 12.0 0 12.0 12.0	71 518 25.6 80 1 525 265 260 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358 1206.0 12.0 42 114 15.1 JX CITY 403 13.5 52 6 0 2 2 358 358 1206.0 12.0 40 23 13.5 102 405 24 0 23 102	93 510 15.6 37 1 144 148 3532 13550 11.8 99 351 16.6 42 0 -6 201 201 201 201 201 201 201 201 201 201	94 509 20.4 48 1 407 390 13552 21.8 183 352 39.6 54 0 -19 425 425 1206.0 23.88 12060.2 358 12060.2 23.8 1262.0 23.5 14 17.7 31 4 452 25.3 3 636 14 -19 9 41006	97 509 70.1 62 4 1296 1296 1296 1296 1296 1296 1296 1296	113 509 84.4 50 9 1531 1531 3549 1355 24.9 209 352 155.3 136 1205 26.7 91 114 67.8 205 34 1813 29.5 2483 641 -641 -641 -7541	109 509 78.6 174 12 1549 1549 3552 26.0 218 352 157.1 143 24 -2 1666 1666 1666 1666 1666 1666 1666 1	129 509 96.0 19 18 100 1687 1687 1687 1355.2 27.4 230 352 171.0 79 352 171.0 28.0 28.0 95 114 71.0 68 36 1754 28.5 2297 857 -33 105 2297	127 509 94.5 52 15 322 27.2 228 352 169.6 79 100 9 17355 1722 280 371 1206.5 28.0 96 115 71.3 31 34 1719 28.0 906 159 0 0 3284 40614	35 538 25.4 -15 7 33 345 -1252 2296 1337.5 26.9 209 274 150.3 57 -51 111 1649 1636 1207.5 95 115 68.6 21 22 1635 27.5 749 -194 405 3356	122 538 91.1 -75 1 2296 1337.5 22.8 164 276 122.2 108 26 1506 1506 1506 1506 1506 1506 1506 150	36 538 13.1 -4 1 0 2206 1337.5 6.7 49 276 17.7 47 5 268 268 268 268 268 268 268 268 1207.0 9.0 32 115 11.6 14 6 276 9.3 344 1207.0 9.3 2215 11.6 14 6 276 5 265 265 265 265 265 265 265 265 265	43 538 7.2 0 5 110 12296 1337.5 7.9 58 276 9.7 22 2 2 2 2 2 2 125 125 125 125 125 125	42 538 8.0 -2 1 5 123 2296 1337.7 56 276 10.8 25 3 0 2 143 143 143 143 143 1207.0 9.0 32 115 6.2 7 3 147 9.3 147 9.3 225 -54 -54 -54 -54 -54 -54 -54 -5	79 538 58.9 3 13 2569 13421 11.2 83 297 61.8 700 -61.8 700 -61.8 707 737 737 384 1207.0 12.0 43 77 31.8 14 12 739 12.0 438 43 77 31.8 14 12 20 438 77 31.8 14 12 20 438 77 31.8 14 12 20 438 77 31.8 14 12 20 20 20 20 20 20 20 20 20 20 20 20 20	62 538 46.3 760 90 2659 1343.5 10.9 83 303 61.8 68 1 1 738 738 738 1200 12.0 12.0 12.0 12.0 12.0 12.0 12.0	85 529 57.4 17 3123 13500 9.7 77 332 51.5 101 2 642 668 -566 358 1206.0 12.0 12.0 12.0 12.0 12.5 38 13 693 12.5 786 -99 12.5
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STORAGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION REGULATED FL KAF CFS TOTAL NAT INFLOW DEPLETION REGULATED FL KAF STORAGE SYSTEM POWER AVE POWER M PEAK POW MW ENERGY CLM	W 792.6 LL 433 80 13807 13886 13887 1353.3 NT 14972 1497	71 518 25.6 80 1 525 265 265 260 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358 358 358 358 358 1206.0 12.0 42 114 15.1 15.1 15.1 15.1 15.1 15.1 15.1	93 510 15.6 37 1 14 148 3532 1355.0 115.8 99 351 16.6 42 0 -6 201 201 201 358 1206.0 14.5 50 114.5 50 114.5 50 14.5 50 14.5 50 14.5 50 114.5 24 36 222 16.0 494 40855 647 205 647	94 509 20.4 48 1 407 3549 13552 21.8 183 352 39.6 54 0 -19 425 425 356 12060 23.8 82 114 17.7 31 4 452 25.3 636 636 636 636 -19 41006 767 2060	97 509 70.1 62 4 1296 1296 135.2 21.8 135.2 131.8 125 0 1416 1416 1416 1416 1416 1416 1416 1206 23.8 82 114 58.8 110 20 25.3 1948 1556 25.3 1948 1556 25.3	113 509 84.4 50 9 1531 1531 3549 1355.2 24.9 209 355.2 155.3 136 1642 1642 1642 1642 1642 1642 1642 164	109 509 78.6 174 12 1549 1355.2 26.0 218 3549 1355.2 26.0 218 157.1 143 24 -2 1666 1666 1666 1666 1666 1666 1666 1	129 509 96.0 19 18 100 1687 1687 1355.2 27.4 230 3549 1355.2 27.4 2352 171.0 79 39 33 1722 1722 1722 3580 28.0 95 114 71.0 886 1754 28.0 95 114 71.0 868 1754 28.0 95 114 71.0 868 1754 28.0 95 114 71.0 868 1754 28.0 95 114 71.0 868 105 205 9 816	127 509 94.5 32 1674 1674 1674 1674 1674 1674 1674 1674	36 538 25.4 -15 7 33 345 -1252 2296 1237.5 26.9 209 209 27.4 150.3 57 -55 11 10 11 1649 1636 1237.5 95 115 68.6 21 22 1635 27,5 95 115 68.6 21 22 1635 27,5 749 -194 46 3956 3956 3956 305 3956 31998 477	122 538 91.1 -75 1 2296 1337.5 22.8 164 122.2 108 296 1327.5 22.8 164 122.2 108 20 9 1506 1506 1506 1506 1506 1506 1506 1507 24.5 86 115 63.8 20 9 1517 24.7 889 -41 13 346 38661 841 1978 525	36 538 13.1 -4 1 00 200 2296 1337.5 6.7 49 276 17.7 47 5 268 268 268 268 268 384 1207.0 9.0 32 115 11.6 14 6 276 9.3 3 422 -101 12.5 5 385 34 12.5 11.6 12.5 12.5 35 5 35 5 35 5 35 5 35 5 35 5 35 5 3	43 538 7.2 0 5 110 2296 1337.5 7.9 58 276 9.7 22 -22 125 125 125 125 125 125 125 125 125 1	42 538 8.0 -2 1 5 123 2296 1337.7 7.7 56 276 10.8 25 3 0 2 143 143 143 384 1207.0 9.0 32 115 6.2 7 3 143 125 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2	79 538 58.9 3 3 3 269 273 2569 1342.1 11.2 83 29 261.8 70 10 -6 6 1.8 70 10 -6 737 737 31.8 1207 12.0 43 77 31.8 14 12 739 12.0 43 77 31.8 14 27 20 20 20 27 20 20 27 20 20 20 20 20 20 20 20 20 20 20 20 20	62 538 46.3 7600 90 2659 1343.5 10.9 83 303 61.8 68 1 1 1 738 738 303 61.8 738 12070 12.0 43 77 31.8 77 31.8 77 13 77 31.8 11.7 460 -166 38362 684 1973 500	85 529 57.4 17 3123 13500 9.7 77 3122 51.5 101 2 642 668 -26 642 668 -26 51.5 101 2 642 642 668 -26 28.6 358 120.0 12.0 43 76 28.6 388 13 693 12.5 786 -99 16 38570 740 1991 497
POWER AVE POWER M PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE STOR CHANGE STOR CHANGE CHANGE POWER PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION REGULATED FL KAF KCFS TOTAL NAT INFLOW DEPLETION REGULATED FL KAF CAN STOR EVAPORATION STORAGE EVAPORATION STORAGE STORAGE EVAPORATION STORAGE STORAGE STORAGE EVAPORATION STORAGE STORAGE STORAGE MATEN PEAK POW MW PEAK POW MW PACK POWER M PEAK POW MM CHAN STOR EVAPORATION STORAGE SYSTEM POWE	W 792.6 LL 433 80 130 13886 13887 -1 3124 1353.3 NT 1246 114 9.8 W 1353.3 NT 1246 114 9.8 W 1353.3 NT 1246 14972 14972 358 1206.0 12.0 W 626.6 NT - SIO( 12.0 W 626.6 NT - SIO( 12.0 V 1255100 125510000000000	71 518 25.6 80 1 525 265 265 265 266 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358 358 1206.0 12.0 40 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.	93 510 15.6 37 1 144 148 3532 13550 11.8 99 351 16.6 42 0 -6 201 201 358 1206.0 14.5 50 114 8.5 -24 3 (222 16.0 494 11 4 40855 647 2056 15.5	94 509 20.4 48 1 407 390 13552 21.8 183 352 39.6 54 0 -19 425 425 358 1206.0 23.8 124 14 17.7 31 4 452 25.3 636 636 14 -19 41006 266.8 18.4	97 509 70.1 62 4 1296 1296 1296 1296 1296 1296 1296 1296	113 509 84.4 50 9 1531 1531 3549 13552 24.9 209 352 155.3 136 19 -6 1642 1642 1642 1642 358 1206.0 26.7 91 114 67.8 205 34 1813 29.5 2483 641 -55 2483 641 -55 24241 995 23.9	109 509 78.6 174 12 1549 3549 13552 26.0 218 352 157.1 143 24 1666 1666 1666 1666 1666 1666 1666 1	129 509 96.0 19 18 100 1687 13572 27.4 230 352 171.0 79 39 33 1722 1722 1722 358 1206.0 28.0 95 114 71.0 95 114 71.0 88 68 36 1754 28.5 2297 857 -03 1098 28.5 41913 1098 26.3	127 509 94.5 52 15 322 1674 1674 3549 13552 27.2 228 352 169.6 79 10 0 9 1735 1722 18 371 1206.5 28.0 96 115 71.3 31 34 1719 28.0 906 159 0328 40614 1086 28.0 40614	35 538 25.4 -15 7 33 345 2296 1337.5 26.9 209 274 150.3 57 -5 115 11 1649 1636 27.4 150.3 384 1207.0 27.5 15 68.6 21 22 1635 27.5 749 -194 405 39563 663 1635 15.9	122 538 91.1 -75 1 222 1403 1403 2296 12375 22.8 164 276 122.2 108 2 8 10 1506 1506 1506 1506 1506 1506 1506 1	36 538 13.1 -4 10 200 2296 1337.5 6.7 49 276 17.7 47 5 30 268 268 268 268 268 268 268 268 268 268	43 538 7.2 0 5 110 110 2296 1337.5 7.9 58 276 9.7 22 2 -2 2 125 125 125 125 125 125 125 125 125	42 538 8.0 -2 1 5 123 123 123 123 123 7.7 56 276 10.8 25 3 0 2 143 143 143 384 1207.0 9.0 9.0 322 115 6.2 7 3 147 9.3 2256 7.4 387 9.1 387 9.3 387 91 543 387 91 543 387 91 543 104.2 104.2 104.2 104.2 105.2 10	79 538 58.9 3 13 2569 1342.1 11.2 83 297 61.8 700 10 -5 737 737 384 1207.0 12.0 43 37 31.8 14 12 739 12.0 43 37 31.8 14 12 739 12.0 43 377 31.8 14 12 739 12.0 43 377 31.8 14 12 739 12.0 38470 720 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	62 538 46.3 760 670 90 2659 1343.5 10.9 83 303 61.8 68 1 1 1 738 738 1207.0 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12	85 529 57.4 17 3 1003 539 464 3123 1350.0 9.7 77 332 51.5 101 2 642 668 -358 1206.0 12.0 12.0 43 76 28.6 388 13 693 12.5 786 -99 16 38570 740 197.3 17.8

TIME OF STUDY 13:26:07

N DE MR S S E D	-FORT PECK- AT INFLOW EPLETION VAPORATION DD INFLOW ELEASE TOR CHANGE TOR CHANGE LEV FTMSL ISCH KCFS	- 5919 388 429 5102 5259 -157 9647 2204.3 10.0	272 -11 283 119 164 9811 2205.3 4.0	127 -5 132 56 77 9888 2205.8 4.0	163 -7 170 71 98 9986 2206.4 4.0	598 70 528 298 230 10217 2207.9 5.0	909 305 604 430 174 10390 2208.9 7.0	1156 500 656 506 150 10540 2209.8 8.5	509 162 26 321 523 -202 10339 2208.6 8.5	294 -46 82 523 -264 10074 2207.0 8.5	281 -125 102 304 309 -5 10069 2206.9 5.2	371 -57 90 338 259 79 10147 2207.4 4.2	184 -34 41 177 126 52 10199 2207.8 4.2	86 -16 19 83 97 -15 10185 2207.7 7.0	98 -18 22 95 127 -32 10152 2207.5 8.0	314 -110 47 584 -207 9945 2206.2 9.5	238 -128 366 676 -310 9635 2204.2 11.0	319 -92 411 555 -144 9490 2203.3 10.0
A' Pi Ei	POWER VE POWER MW EAK POW MW NERGY GWH	771.8	48 176 17.3	48 177 8.1	48 178 10.5	61 180 43.8	86 181 63.7	104 182 75.1	104 181 77.5	103 179 77.0	63 178 45.5	51 179 38.2	52 180 18.5	85 179 14.3	97 179 18.7	115 177 85.5	132 175 98.1	119 174 80.0
	GARRISON- AT INFLOW EPLETION HAN STOR VAPORATION EG INFLOW ELEASE TOR CHANGE LEV FTMSL ISCH KCFS POWFD	9185 965 0 501 12979 13172 -193 11600 1813.0 20.5	340 2 66 523 387 136 11736 1813.6 13.0	158 1 213 167 46 11783 1813.8 12.0	204 1 274 214 60 11842 1814.1 12.0	881 3 -11 1165 893 272 12114 1815.2 15.0	1136 211 -22 1334 1261 73 12188 1815.5 20.5	2542 714 -16 2317 1250 1068 13255 1819.9 21.0	1607 482 0 31 1617 326 13581 1821.2 21.0	454 63 97 1291 -475 13106 1819.3 21.0	349 -120 35 121 693 952 -259 12847 1818.3 16.0	491 6 105 650 795 -145 12702 1817.7 12.9	203 -84 364 385 -20 12682 1817.6 12.9	95 -39 -30 22 179 236 -57 12624 1817.4 1817.4	108 -45 -11 25 244 301 -58 12567 1817.1 19.0	136 -98 -16 54 748 1230 -481 12085 1815.1 20.0	201 -79 -16 940 1353 -413 11672 1813.3 22.0	281 -54 11 1166 -265 11407 1812.2 21.0
A <sup>1</sup> PI EI	VE POWER MW EAK POW MW NERGY GWH	1730.3	138 307 49.8	128 308 21.5	128 308 27.7	161 312 115.9	220 313 163.8	229 326 165.1	234 329 174.0	233 324 173.7	177 321 127.2	142 319 105.9	142 319 51.1	186 318 31.2	207 317 39.8	216 311 160.7	234 306 174.2	221 303 148.7
	OAHE AT INFLOW EPLETION HAN STOR VAPORATION EG INFLOW EG INFLOW ELEASE TOR CHANGE TORAGE LEV FTMSL ISCH KCFS POWER VE POWER MW EAK POW MW	1408 597 -2 415 13566 13763 -198 12160 1582.1 17.8	265 22 38 667 440 228 12388 1583.1 14.8 166 580 59.7	123 10 5 285 272 13 12401 1583.2 19.6 220 580 36.9	159 13 360 355 5 12406 1583.2 19.9 223 580 48.3	245 46 -15 1232 -156 12250 1582.5 20.7 232 577 167.2	134 65 -28 1302 1484 -182 12068 1581.6 24.1 269 572 200.1	288 126 -3 1409 1369 40 12108 1581.8 23.0 256 573 184.4	110 147 27 1228 1702 -474 11634 1579.6 27.7 306 562 227.4	28 96 81 1142 1688 -545 11088 1577.0 27.5 299 548 222.2	86 24 98 942 1375 -433 10656 1574.8 23.1 248 537 178.7	7 -8 17 85 742 609 133 10789 1575.5 9.9 106 540 79.1	-7 2 39 338 227 111 10899 1576.1 7.6 82 543 29.7	-3 1 -22 18 192 122 70 10969 1576.4 8.8 95 545 16.0	-3 1 -11 266 137 128 11098 1577.1 8.6 94 548 18.0	-64 11 -5 46 1103 991 112 11210 1577.6 16.1 175 551 130.3	-16 16 -11 1310 773 537 11747 1580.2 12.6 138 565 102.7	56 25 5 1202 987 216 11962 1581.2 17.8 197 570 132.3
	BIG BEND- VAPORATION EG INFLOW ELEASE TORAGE LEV FTMSL ISCH KCFS POWER VE POWER MW EAK POW MW FPGY GWH	- 129 13634 13634 1682 1420.0 17.8	440 440 1682 1420.0 14.8 70 518 25 2	272 272 1682 1420.0 19.6 92 510	355 355 1682 1420.0 19.9 93 509 20.1	1232 1232 1682 1420.0 20.7 97 509 69.8	1484 1484 1682 1420.0 24.1 113 509 84.0	1369 1369 1682 1420.0 23.0 108 509 77.6	8 1694 1694 1682 1420.0 27.6 129 509 95.9	24 1663 1663 1682 1420.0 27.1 127 509 94.2	31 1344 1682 1420.0 22.6 107 523 77.3	27 582 582 1682 1420.0 9.5 48 538 35 7	12 215 215 1682 1420.0 7.2 37 538	6 117 1682 1420.0 8.4 43 538 7 2	7 131 131 1682 1420.0 8.2 42 538 8 0	14 977 977 1682 1420.0 15.9 79 538	773 773 1682 1420.0 12.6 62 538 46 4	987 987 1682 1420.0 17.8 85 529 57 3
	FORT RANDAL AT INFLOW EPLETION VAPORATION EG INFLOW ELEASE TOR CHANGE TORAGE LEV FTMSL ISCH KCFS POWER VE POWER MW EAK POW MW	L 476 80 13883 13883 13123 1350.0 9.7	88 1 526 265 261 3384 1353.2 8.9 73 344 26 4	41 1 312 164 148 3532 1355.0 11.8 99 351 166	53 1 406 389 17 3549 1355.2 21.8 183 352 39 6	68 4 1296 1296 0 3549 1355.2 21.8 183 352 21.8	55 9 1530 1530 0 3549 1355.2 24.9 209 352	191 12 1548 1548 3549 1355.2 26.0 218 352 257 0	21 18 10 1687 1687 1355.2 27.4 230 352 27.4	57 15 32 1674 1674 0 3549 1355.2 27.2 228 352 228 352	-16 7 39 1283 1598 -315 3234 1351.4 26.9 222 337 159 5	-82 1 27 465 1402 -937 2297 1337.5 22.8 175 275	-4 1 10 200 0 2297 1337.5 6.7 49 276 17 7	-2 0 5 109 110 0 2297 1337.5 7.9 57 276 97	-2 1 5 123 123 0 2297 1337.5 7.7 56 276 10 8	3 13 962 689 273 2570 1342.1 11.2 83 297 61	-10 3 760 90 2660 1343.5 10.9 83 303 61 8	19 3 1003 539 464 3124 1350.0 9.7 77 332 515
	GAVINS POIN AT INFLOW EPLETION HAN STOR VAPORATION EG INFLOW ELEASE TOR CHANGE TORAGE LEV FTMSL LEV FTMSL ISCH KCFS POWER	T 1252 114 -1 47 14973 14973 358 1206.0 12.0	91 0 2 358 358 1206.0 12.0	42 0 -6 201 201 358 1206.0 14.5	55 0 -19 425 425 358 1206.0 23.8	125 5 0 1416 1416 1416 1206.0 23.8	137 19 -6 1642 1642 358 1206.0 26.7	144 24 -2 1666 1666 358 1206.0 28.0	79 39 -3 1722 1722 358 1206.0 28.0	79 10 9 1735 1722 13 371 1206.5 28.0	57 -5 1 11 1649 1636 13 384 1207.0 27.5	109 2 8 10 1506 1506 384 1207.0 24.5	47 5 30 5 268 268 268 384 1207.0 9.0	22 2 125 125 384 1207.0 9.0	25 3 0 2 143 143 384 1207.0 9.0	70 10 -7 5 737 737 384 1207.0 12.0	68 1 738 738 384 1207.0 12.0	102 2 643 669 -26 358 1206.0 12.0
A' Pi Ei	VE POWER MW EAK POW MW NERGY GWH	626.7	42 114 15.2	50 114 8.5	82 114 17.7	82 114 58.8	91 114 67.8	95 114 68.7	95 114 71.0	96 115 71.3	95 115 68.6	86 115 63.8	32 115 11.6	32 115 5.4	32 115 6.2	43 77 31.8	43 77 31.8	43 76 28.6
N/ DI RE	GAVINS POIN AT INFLOW EPLETION GULATED FLO KAF KCFS	T - SIO 862 248 W AT SIG 15587	UX CITY- 57 6 0UX CITY 409 13.7	27 3 Y 225 16.2	34 4 456 25.5	121 20 1517 25.5	225 34 1833 29.8	166 30 1802 30.3	74 37 1759 28.6	34 34 1722 28.0	23 22 1637 27.5	22 9 1519 24.7	15 6 277 9.3	7 3 129 9.3	8 3 148 9.3	16 12 741 12.0	-8 13 717 11.7	41 13 697 12.5
NDCESS	TOTAL AT INFLOW EPLETION HAN STOR VAPORATION TORAGE YSTEM POWFP	19102 2392 -9 1660 38570	1112 20 106 39359	519 9 0 39643	667 12 -19 39823	2038 148 -26 40170	2596 643 -56 40235	4487 1406 -21 41493	2400 885 -3 104 41143	946 172 0 324 39871	780 -197 63 402 38871	918 -47 28 344 38001	438 -105 30 154 38143	204 -49 -54 72 38141	234 -56 -21 82 38179	472 -172 -28 179 37876	473 -174 -26 37780	818 -105 18 38024
A' PI EI D	VE POWER MW EAK POW MW NERGY GWH AILY GWH	7117.8	538 2040 193.6 12.9	637 2041 107.1 15.3	758 2042 163.8 18.2	816 2043 587.3 19.6	988 2041 734.8 23.7	1011 2057 727.9 24.3	1098 2047 816.8 26.3	1086 2026 808.0 26.1	912 2011 656.6 21.9	608 1966 452.6 14.6	394 1970 141.8 9.5	499 1971 83.8 12.0	528 1974 101.4 12.7	711 1952 529.1 17.1	692 1964 515.0 16.6	742 1983 498.4 17.8
		INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

DATE OF	STUDY	11/28/2	2000				2000-2	2001 AOF	P EXTENS	SIONS, L	OWER DE	ECILE RU	JNOFF	99001	9901 9	901 PA	GE	1
TIME OF	STUDY	13:26:0	07				NAVIGA VALUES	ATION SE 5 IN 100	EASON SH	HORTENED	AT 52	MAF ON ATED	JULY 1			STUDY	NO	29
	28FEI	306 [NI-SUM	15MAR	2006 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT NAT INF DEPLETI EVAPORA	PECK LOW ON TION	5961 400 425	274 -11	128 -5	164 -7	602 70	915 306	1164 504	513 169 26	296 -41 81	283 -125 102	374 -59 89	185 -35 41	86 -16 19	99 -19 22	317 -110 47	240 -128	321 -93
RELEASE STOR CH	ANGE	5136 5270 -135	285 119 166	133 56 77	71 100	532 298 234	430 179	506 154	523 -205	256 523 -267	306 293 13	344 246 98	179 119 60	84 97 -13	96 143 -47	380 615 -234	368 676 -308	414 555 -141
STORAGE ELEV FT	MSL	9490 2203.3 10.0	9656 2204.3 4.0	9734 2204.8 4.0	9833 2205.5 4.0	10068 2206.9 5.0	10247 2208.0 7.0	10401 2209.0 8.5	10196 2207.7 8.5	9929 2206.1	9943 2206.1 4 9	10040 2206.8 4 0	10100 2207.1 4 0	10087 2207.0 7.0	10040 2206.8	9805 2205.3	9497 2203.3	9356 2202.4
POWER AVE POW	ER MW		48	48	48	61	85	104	104	103	60	49	49	85	109	120	131	119
ENERGY	w ™w GWH ISON	770.0	175	8.1	10.4	43.6	63.4	74.8	77.2	76.6	43.0	36.2	179	1/9	20.9	176 89.6	174 97.6	172 79.6
NAT INF DEPLETI CHAN ST	LOW ON OR	9293 1053 1	344 -1 66	160 0	206 -1	891 -2 -11	1150 211 -22	2572 724 -16	1626 498 0	460 68	353 -123 38	496 1 10	205 -87	96 -41 -32	109 -46 -22	137 -70 -11	204 -50 -11	284 -28 11
EVAPORA REG INF RELEASE	TION LOW	498 13013 13177	530 387	216 167	278 214	1180 893	1348 1261	2337 1250	31 1620 1291	97 818 1291	120 688 952	104 647 790	47 364 382	22 179 222	25 252 301	53 758 1230	919 1353	878 1194
STOR CH.		-164 11407	143 11550	50 11600	64 11664	287 11951	87 12038	1088 13126	329 13455	-473 12981	-264 12717	-142	-18 12557	-43 12514	-50 12465	-472 11993	-433 11559	-316 11244
DISCH K POWER	CFS	21.0	13.0	12.0	12.0	15.0	20.5	21.0	21.0	21.0	16.0	12.8	12.8	16.0	19.0	20.0	22.0	21.5
PEAK PO ENERGY	ER MW W MW GWH	1724.0	138 305 49.5	305 21.4	306 27.6	310 115.3	311 163.1	228 324 164.4	233 328 173.4	233 322 173.1	1/6 319 126.7	141 317 104.7	140 317 50.5	174 317 29.3	206 316 39.6	215 310 160.3	233 305 173.7	225 301 151.5
NAT INF DEPLETI CHAN ST	HE LOW ON OR	1429 613 -2	269 23 41	125 11 5	161 14	249 47 -15	136 66 -28	293 129 -3	112 151	29 100	87 25 27	7 -8 17	-7 2	-3 1 -17	-4 1 -16	-65 11 -5	-16 16 -11	56 26 3
EVAPORA REG INF	TION LOW	409 13581	674	286	362	1079	1302	1411	26 1226 1702	80 1141	97 944 1375	84 738	38 335	18 183	21 260	45 1103	1310	1227
STOR CH.	ANGE	-168 11962	237 12199	16 12216	12224	-151 12073	-180 11893	46 11939	-476 11463	-545 10918	-431 10486	127 10613	108 10721	61 10782	123 10905	991 112 11017	537 11554	241 11795
ELEV FT DISCH K POWER	MSL CFS	1581.2 17.8	1582.2 14.7	1582.3 19.4	1582.4 19.8	1581.7 20.7	1580.8 24.1	1581.1 22.9	1578.8 27.7	1576.1 27.4	1574.0 23.1	1574.6 9.9	1575.2 7.6	1575.5 8.8	1576.1 8.6	1576.6 16.1	1579.2 12.6	1580.4 17.7
AVE POW PEAK PO ENERGY	ER MW W MW GWH	1821.6	164 576 59.0	218 576 36.5	221 576 47.8	231 573 166.1	268 568 199.0	254 569 183.0	304 557 226.3	297 544 220.8	247 532 177.7	106 536 78.9	82 538 29.5	95 540 15.9	93 543 17.9	174 546 129.5	137 560 102.1	196 566 131.5
BIG EVAPORA	BEND	. 129	407			1000	1400	1265	8	24	31	27	12	6	7	14		
REG INF RELEASE STORAGE	LOW	13620 13620 1682	437 437 1682	270 270 1682	353 353 1682	1230 1230 1682	1483 1483 1682	1365 1365 1682	1694 1694 1682	1661 1661 1682	1344 1344 1682	584 584 1682	215 215 1682	117 117 1682	131 131 1682	977 977 1682	773 773 1682	986 986 1682
ELEV FT	MSL CFS	1420.0 17.8	1420.0 14.7	1420.0 19.4	1420.0 19.8	1420.0 20.7	1420.0 24.1	1420.0 22.9	1420.0 27.6	1420.0 27.0	1420.0 22.6	1420.0 9.5	1420.0 7.2	1420.0 8.4	1420.0 8.2	1420.0 15.9	1420.0 12.6	1420.0 17.7
AVE POW PEAK PO ENERGY	ER MW W MW GWH	785.3	69 518 25.0	91 510 15.3	93 509 20.0	97 509 69.7	113 509 84.0	107 509 77.3	129 509 95.9	126 509 94.1	107 523 77.3	48 538 35.8	37 538 13.2	43 538 7.2	42 538 8.0	79 538 58.9	62 538 46.4	85 529 57.2
FORT R. NAT INF DEPLETI	ANDALI LOW ON	 489 80	90 1	42 1	54 1	70 4	56 9	195 12	21 18	59 15	-16 7	-84 1	-4 1	, -2 0	-2 1	3	-10 3	20 3
EVAPORA REG INF	TION LOW	140 13882 13883	525	311	406	1296	1530	1548 1548	10 1687 1687	32 1674 1674	39 1283 1598	27 465 1402	10 200 200	5 109 110	5 123 123	13 962 689	760	1003
STOR CH. STORAGE	ANGE	0 3124	261 3384	148 3532	17 3549	3549	3549	3549	0 3549	0 3549	-315 3234	-937 2297	2297	2297	2297	273 2570	90 2660	464 3124
DISCH K POWER	CFS	9.7	8.9	1355.0	21.8	21.8	24.9	26.0	27.4	27.2	26.9	22.8	6.7	7.9	7.7	1342.1	1343.5	9.7
AVE POW PEAK PO ENERGY	ER MW W MW GWH	1370.0	73 344 26.4	99 351 16.6	183 352 39.6	183 352 131.8	209 352 155.2	218 352 157.0	230 352 171.0	228 352 169.6	222 337 159.5	175 275 130.0	49 276 17.7	57 276 9.7	56 276 10.8	83 297 61.8	83 303 61.8	77 332 51.5
GAVINS NAT INF	POINT LOW	1252 <sup></sup>	91	42	55	125	137	144	79	79	57	109	47	22	25	70	68	102
DEPLETI CHAN ST EVAPORA	ON OR TION	114 -1 47	0 2	0 -6	0 -19	5 0	19 -6	24 -2	39 -3 3	10 0 9	-5 1 11	2 8 10	5 30 5	2 -2 2	3 0 2	10 -7 5	1 1	2
REG INF RELEASE	LOW	14973 14973	358 358	201 201	425 425	1416 1416	1642 1642	1666 1666	1722 1722	1735 1722	1649 1636	1506 1506	268 268	125 125	$14\overline{3} \\ 143$	737	738 738	643 669
STOR CH STORAGE ELEV FT DISCH K	MSL CFS	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 14.5	358 1206.0 23.8	358 1206.0 23.8	358 1206.0 26.7	358 1206.0 28.0	358 1206.0 28.0	371 1206.5 28.0	384 1207.0 27.5	384 1207.0 24.5	384 1207.0 9.0	384 1207.0 9.0	384 1207.0 9.0	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
POWER AVE POW PEAK PO' ENERGY	ER MW W MW GWH	626.7	42 114 15.2	50 114 8.5	82 114 17.7	82 114 58.8	91 114 67.8	95 114 68.7	95 114 71.0	96 115 71.3	95 115 68.6	86 115 63.8	32 115 11.6	32 115 5.4	32 115 6.2	43 77 31.8	43 77 31.8	43 76 28.6
GAVINS NAT INF	POINT LOW	r - SIOL 879	- YTI3 XL 58	27	35	123	230	169	76	35	24	22	15	7	8	16	-8	42
REGULATE	D FLOW	V AT SIC 15601	OUX CITY	225	456	1518	1837	1805	1761	1723	1638	1518	277	129	148	741	717	698
KCFS TOT	AL		13.8	16.2	25.6	25.5	29.9	30.3	28.6	28.0	27.5	24.7	9.3	9.3	9.3	12.0	11.7	12.6
NAT INF DEPLETI	LOW ON OR	19303 2511	1125 18 109	525 8 0	675 11 _19	2060 145 -26	2624 646 -56	4537 1423 _21	2427 912	958 186	788 -199 66	924 -53 28	441 -109 30	206 -51 -52	235 -58 -37	475 -144 -23	478 -145 -21	825 -79 16
EVAPORA	TION	1648 38024	38831	39122	39310	39681	39766	41054	103 40703	322 39431	399 38446	342 37591	153 37741	71 37746	82 37772	177 37450	37335	37557
SYSTEM AVE POW PEAK PO	POWER ER MW W MW		534 2031	634 2033	755 2034	813 2036	985 _2034	1007 2050	1095 2040	1083 2019	906 2004	604 1959	389 1963	486 1964	539 1967	715 1945	690 1956	744 1975
ENERGY DAILY G	GWH WH	7097.6	192.3 12.8	106.4 15.2	163.0 18.1	585.2 19.5	732.5 23.6	725.3 24.2	814.8 26.3	805.6 26.0	652.7 21.8	449.3 14.5	140.0 9.3	81.7 11.7	103.4 12.9	531.9 17.2	513.4 16.6	499.9 17.9

INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB

DATE OF	STUDY	11/28/2	2000				2000-2	2001 AO	P EXTEN	SIONS, I	_OWER DI	ECILE R	JNOFF	99001	9901	9901 P	AGE	1
TIME OF	STUDY	10:42:	19				NAVIG/ VALUES	ATION SE S IN 100	EASON SE	ORTENE	AT 40 S INDIC	MAF ON	JULY 1			STUDY	NO	30
	28FE	BO2 INI-SUM	15MAR	2002 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
FORT NAT IN DEPLET EVAPOR MOD IN	FLOW FLOW ION ATION FLOW	- 5435 444 454 4537	250 -4 254	116 -2	150 -2 152	549 77 472	834 311 523	1061 543 518	468 141 28 299	270 -57 87 240	258 -123 109 272	341 -52 95 298	169 -32 43	79 -15 20	90 -17 23	289 -107 49	218 -126	293 -91
RELEAS STOR C STORAG ELEV F DISCH POWER	E HANGE E TMSL KCFS	5671 -1133 11361 2214.7 12.0	119 135 11495 2215.5 4.0	56 63 11558 2215.9 4.0	71 81 11639 2216.3 4.0	298 174 11813 2217.3 5.0	430 93 11906 2217.9 7.0	536 -18 11888 2217.8 9.0	553 -254 11634 2216.3 9.0	553 -314 11320 2214.5 9.0	378 -106 11214 2213.9 6.4	299 -1 11213 2213.9 4.9	138 149 9 11223 2213.9 5.0	97 -23 11199 2213.8 7.0	143 -58 11141 2213.4 9.0	615 -268 10873 2211.8 10.0	707 -363 10510 2209.7 11.5	384 666 -282 10227 2207.9 12.0
AVE PO PEAK P ENERGY	WER MW OW MW GWH	861.5	51 190 18.2	51 190 8.5	51 191 11.0	64 192 45.9	89 193 66.6	115 193 82.8	115 191 85.2	114 189 84.6	80 188 57.6	61 188 45.5	63 188 22.6	88 188 14.8	113 187 21.6	125 185 92.7	142 182 105.4	146 180 98.4
GAR NAT IN DEPLET CHAN S	RISON FLOW ION TOR	8026 1281 0	297 22 85	138 10	178 13	770 38 -11	993 135 -21	2221 714 -21	1404 464	397 77	305 -81 28	429 50 16	177 -58 -1	83 -27 -21	94 -31 -21	119 -33 -11	176 -16 -16	245 2 -5
EVAPOR REG IN RELEAS STOR C STORAG ELEV F DISCH	ATION FLOW E HANGE E TMSL KCFS	526 11889 13269 -1380 13685 1821.6 21.0	478 446 32 13717 1821.7 15.0	184 167 17 13734 1821.8 12.0	236 214 22 13755 1821.9 12.0	1019 893 126 13882 1822.4 15.0	1267 1261 7 13888 1822.4 20.5	2021 1250 772 14660 1825.4 21.0	33 1461 1291 170 14830 1826.0 21.0	102 771 1291 -520 14310 1824.1 21.0	127 665 952 -287 14023 1822.9 16.0	110 584 792 -208 13815 1822.1 12.9	49 332 383 -51 13764 1821.9 12.9	23 162 264 -101 13663 1821.5 19.0	26 220 317 -97 13566 1821.2 20.0	56 700 1230 -530 13036 1819.0 20.0	883 1353 -470 12566 1817.1 22.0	904 1166 -262 12304 1816.0 21.0
AVE PO PEAK P ENERGY	WER MW OW MW GWH	1807.7	169 331 60.9	136 331 22.8	136 331 29.3	170 333 122.1	231 333 172.1	239 342 172.3	242 343 180.2	241 338 179.4	182 334 131.3	146 332 108.8	146 331 52.4	214 330 35.9	224 329 43.0	222 323 165.3	241 317 179.1	227 314 152.8
O NAT IN DEPLET CHAN S	AHE FLOW ION TOR	1184 557 -1	223 22 28	104 10 14	134 13	206 45 -14	113 61 -26	242 117 -2	92 134	24 87	72 22 25	6 -7 16	-6 2	-3 1 -31	-3 1 -5	-54 11 0	-13 15 -10	47 24 5
REG IN RELEAS STOR C STORAG ELEV F DISCH	FLOW E HANGE E TMSL KCFS	401 13434 14850 -1416 14298 1591.2 17.9	675 459 216 14514 1592.1 15.4	274 282 -8 14506 1592.0 20.3	335 368 -34 14472 1591.9 20.6	1040 1250 -210 14262 1591.0 21.0	1287 1500 -213 14049 1590.2 24.4	1372 1417 -45 14004 1590.0 23.8	1219 1708 -488 13515 1588.0 27.8	91 1137 1702 -565 12950 1585.6 27.7	915 1544 -629 12322 1582.8 25.9	95 726 1053 -327 11995 1581.3 17.1	42 334 434 -100 11895 1580.8 14.6	209 209 201 11903 1580.9 14.5	23 286 186 100 12003 1581.3 11.7	49 1115 985 130 12133 1582.0 16.0	1315 770 544 12678 1584.4 12.5	1194 991 204 12881 1585.3 17.8
AVE PO PEAK P ENERGY	WER MW OW MW GWH	2063.6	182 626 65.7	240 626 40.4	244 625 52.7	248 621 178.4	286 617 212.7	278 616 200.5	322 606 239.7	317 593 235.8	293 578 210.8	191 571 142.3	162 568 58.4	160 568 27.0	131 571 25.1	179 574 133.0	141 587 105.0	203 591 136.2
BIG EVAPOR REG IN RELEAS STORAG ELEV F DISCH	BEND ATION FLOW E E TMSL KCFS	129 14721 14721 1682 1420.0 17.9	459 459 1682 1420.0 15.4	282 282 1682 1420.0 20.3	368 368 1682 1420.0 20.6	1250 1250 1682 1420.0 21.0	1500 1500 1682 1420.0 24.4	1417 1417 1682 1420.0 23.8	8 1700 1700 1682 1420.0 27.6	24 1677 1677 1682 1420.0 27.3	31 1513 1513 1682 1420.0 25.4	27 1026 1026 1682 1420.0 16.7	12 422 422 1682 1420.0 14.2	6 195 1682 1420.0 14.0	7 180 1682 1420.0 11.3	14 971 971 1682 1420.0 15.8	770 770 1682 1420.0 12.5	991 991 1682 1420.0 17.8
AVE PO PEAK P ENERGY	WER MW OW MW GWH	849.1	73 518 26.3	95 510 16.0	97 509 20.9	98 509 70.8	114 509 84.9	112 509 80.3	129 509 96.3	128 509 95.0	121 517 86.8	82 538 61.0	71 538 25.7	71 538 11.9	57 538 11.0	79 538 58.6	62 538 46.2	86 529 57.5
FORT NAT IN DEPLET EVAPOR REG IN RELEAS STOR C	RANDALI FLOW ION ATION FLOW E HANGE	366 80 147 14861 14861 0 2124	67 1 524 265 260	31 1 313 164 148	40 1 408 391 17	52 4 1298 1298	42 9 1533 1533	146 12 1551 1551	16 18 10 1688 1688 0	44 15 32 1675 1675 0	-12 7 39 1455 1599 -144	-62 1 932 1569 -637	-3 12 406 710 -304	-1 0 188 333 -145	-2 1 5 172 194 -22	3 13 956 683 273	-7 3 760 670 90	15 3 1003 539 464
ELEV F DISCH POWER	TMSL KCFS	1350.0 9.7	1353.2 8.9	1355.0 11.8	1355.2 21.9	1355.2 21.8	1355.2 24.9	1355.2 26.1	1355.2 27.5	1355.2 27.2	1353.5 26.9	1345.1 25.5	2464 1340.4 23.9	2319 1337.9 24.0	1337.5 12.2	2570 1342.1 11.1	2660 1343.5 10.9	3124 1350.0 9.7
AVE PO PEAK P ENERGY	WÉR MW OW MW GWH	1466.8	73 344 26.4	99 351 16.7	184 352 39.7	183 352 132.0	209 352 155.5	219 352 157.3	230 352 171.1	228 352 169.7	224 345 161.0	204 310 151.5	180 288 64.8	175 277 29.4	89 276 17.1	82 297 61.3	83 303 61.8	77 332 51.5
GAVIN NAT IN DEPLET CHAN S	S POINT FLOW ION TOR ATION	1229 114 -1	89 0 2	42 0 -6	53 0 -19	123 5 0	134 19 -6	141 24 -2	78 39 -3	78 10 0	56 -5 1	107 2 3	46 5 3	21 2 0	25 3 22	69 10 2	67 1 0	100 2
REG IN RELEAS STOR C	FLOW E HANGE	15929 15929	356 356	200 200	425 425	1416 1416	1642 1642	1666 1666	1722 1722	1735 1722 13	1649 1636 13	1666 1666	750 750	350 350	236 236	738 738	737 737	641 667
STORAG ELEV F DISCH	É TMSL KCFS	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 14.4	358 1206.0 23.8	358 1206.0 23.8	358 1206.0 26.7	358 1206.0 28.0	358 1206.0 28.0	371 1206.5 28.0	384 1207.0 27.5	384 1207.0 27.1	384 1207.0 25.2	384 1207.0 25.2	384 1207.0 14.9	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
AVE PO PEAK P ENERGY	WER MW OW MW GWH	666.4	42 114 15.1	50 114 8.5	82 114 17.7	82 114 58.8	91 114 67.8	95 114 68.7	95 114 71.0	96 115 71.3	95 115 68.6	94 115 70.2	88 115 31.7	88 115 14.8	53 115 10.1	43 77 31.9	43 77 31.8	42 76 28.5
GAVIN NAT IN DEPLET	S POINT FLOW ION	F - SIOL 664 239	UX CITY- 44 6	21 3	26 3	93 19	173 34	128 29	57 36	26 33	18 21	17 9	12 5	5 2	6 3	12 11	-6 12	32 13
REGULAT KAF KCF	tu ⊦LOV S	4 AT SIC 16354	JUX CITY 394 13.2	218 15.7	448 25.1	1490 25.0	1781 29.0	1765 29.7	1743 28.3	1715 27.9	1633 27.4	1674 27.2	756 25.4	353 25.4	239 15.1	739 12.0	719 11.7	686 12.4
TO NAT IN DEPLET CHAN S	TAL FLOW ION TOR	16904 2715 -2	969 47 115	452 22 8	581 28 -19	1793 188 -24	2289 569 -53	3939 1439 -26	2115 832 -3	839 165 0	697 -159 53	838 3 34	395 -77 2	184 -36 -53	211 -41 -4	435 -105 -9	435 -111 -26	732 -49 2

--TOTAL--NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM POWER AVE POWER MW PEAK POW MW ENERGY GWH DAILY GWH -105 -9 187 40678 -2 1763 44507 163 41411 367 41857 -53 75 41150 -26 -19 -24 -53 -26 -3 -4 45568 44182 43029 41072 2123 112.8 16.1 2095 835.9 27.0 2053 579.3 18.7 2029 255.8 17.1 2016 127.9 16.0 1994 542.6 17.5 2004 529.3 17.1 2022 524.9 18.7 2017 133.7 19.1 7715.2 212.5 14.2 171.2 19.0 608.0 20.3 759.7 24.5 761.9 25.4 843.4 27.2 716.1 23.9 INI-SUM 15MAR 22MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 310CT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB DATE OF STUDY 11/28/2000

TIME OF STUDY 10:42:20

DEPLETION EVAPORATION

MOD INFLOW RELEASE

CHANGE

STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS

ENERGY GWH

NAT INFLOW

CHAN STOR EVAPORATION

REG INFLOW RELEASE STOR CHANGE

STORAGE ELEV FTMSL

DISCH KCFS POWER

REG INFLOW RELEASE

ELEV FTMSL DISCH KCFS

EVAPORATION REG INFLOW RELEASE

STORAGE ELEV FTMSL DISCH KCFS

NAT INFLOW

EVAPORATION

REG INFLOW RELEASE STOR CHANGE

ELEV FTMSL DISCH KCFS

CHAN STOR

EVAPORATION REG INFLOW RELEASE

STOR CHANGE STORAGE ELEV FTMSL DISCH\_KCFS

--TOTAL-NAT INFLOW DEPLETION

EVAPORATION STORAGE

206.1 13.7

INI-SUM 15MAR 22MAR

7596.8

109.6 15.7

167.1

18.6

595.0 19.8

31MAR 30APR 31MAY

747.8 24.1

747.9 24.9

695.2 23.2

30SEP

823.8

26.6

831.6

26.8

30JUN 31JUL 31AUG

576.3 18.6

310CT 15NOV

256.2 17.1

125.2 15.7

30NOV

31DEC

131.4

18.8

22N0V

518.2 16.7

31JAN 29FEB

534.2 18.4

CHAN STOR

STORAGE

POWER

POWER

STORAGE

POWER

STOR CHANGE

-- 0AHF --NAT INFLOW DEPLETION CHAN STOR EVAPORATION

CHANGE

DEPLETION

DATE OF STUDY 11/28/2000

TIME OF STUDY 10:42:20

STORAGE

STORAGE

POWER

STORAGE

POWER

ENERGY

DAILY GWH

GWH

7476.2

INI-SUM 15MAR 22MAR 31MAR

2000-2001 AOP EXTENSIONS, LOWER DECILE RUNOFF 99001 9901 9901 PAGE NAVIGATION SEASON SHORTENED AT 40 MAF ON JULY 1 VALUES IN 1000 AF EXCEPT AS INDICATED STUDY NO 22MAR 29FEB04 INT-SUM 15MAR 31MAR 30APR 31MAY 30JUN 31JUL 31AUG 30SEP 31OCT 15NOV 22NOV 30NOV 31DEC 31JAN 28FEB FORT PECK-NAT INFLOW DEPLETION -50 80 255 -5 -7 71 -55 87 329 -34 40 172 -16 -18 21 -109 -127 -92 26 314 417 -124 100 -11 EVAPORATION MOD INFLOW RELEASE 329 1/2 265 128 64 44 9656 9700 2204.3 2204.6 4.3 4.3 73 9633 94 9727 2204.8 211 9938 -349 9037 -264 8773 - 17 156 117 -18 9592 2203.9 5.3 -631 9404 2202.7 12.0 -298 9611 2204.0 10148 -239 9909 STOR CHANGE -51 9633 -246 STORAGE ELEV FTMSL DISCH KCFS 2203.7 4.0 2204.5 2206.1 5.0 2205.9 9.0 2204.2 202.6 10.0 200.3 11.5 198.5 2204.2 2206.9 7.5 2207.4 4.0 9.0 9.0 7.0 POWER AVE POWER MW PEAK POW MW ENERGY GWH 174 17.2 175 8.1 176 10.4 177 43.4 178 67.5 177 81.0 174 45.7 175 14.1 175 38.5 175 20.7 88.4 100.5 93.7 806.7 78.6 80.3 18.6 --GARRISON-NAT INFLOW DEPLETION CHAN STOR EVAPORATION -43 -22 24 -90 -11 51 773 1230 -117 40 117 11 101 -27 -37 -29 -80 с -72 -48 482 -11 -6 357 433 -76 11801 317 1222 REG INFLOW 1353 13651 -767 11304 1811.7 21.5 417 110 11414 1812.2 14.0 214 49 11501 1812.6 12.0 38 11452 1812.4 225 11726 1291 15 11741 931 12672 1817.5 -517 12393 -254 CHANGE 12910 -89 11711 1813.5 19.0 -398 -245 -262 11877 -74 -457 STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW 1809.4 1813.6 21.0 1814.2 14.6 813.9 14.6 1813.2 1813.6 1818.5 1816.4 1815 3 1811.2 20.0 1808.2 12.0 15.0 22.0 22.0 22.0 15.8 22.0 307 307 33.9 295 169.1 291 150.9 27.4 123.3 116.3 56.0 ENERGY GWH 1756.0 53.1 21.3 114.6 165.7 170.3 179.0 178.3 156.2 -0AHE-NAT INFLOW 10 10 46 -15 64 -31 123 -5 -61 11 0 143 93 25 0 -3 DEPLETION CHAN STOR EVAPORATION -4 399 33 96 -8 7 39 -6 -11 -25 288 1115 REG INFLOW RELEASE STOR CHANGE 1704 -417 1693 1065 434 14771 -785 11856 236 12092 1238 -176 11914 1490 -167 11747 260 -230 -9 12090 -487 10908 -609 -46 1571.8 17.3 573.0 26.0 1571.5 14.6 1572.2 11.7 575.6 12.6 1576.9 17.8 1572.8 16.0 ELEV FTMSL 1580.7 1581.8 17.6 15.0 581.8 1581.7 580.9 1580.2 580.5 1578.5 27.7 576.1 27.5 71.6 DISCH KCFS 19.8 20.1 20.8 23.3 POWER AVE POWER MW PEAK POW MW ENERGY GWH 573 37.1 573 48.5 527 198.9 521 135.5 519 55.1 520 25.4 523 23.7 541 99.6 548 129.0 60.1 199.1 185.2 225.9 221.5 166.5 1936.7 125.6 -BIG BEND-EVAPORATION REG INFLOW RELEASE 1515 1515 422 422 195 195 1682 420.0 971 971 1038 14642 447 275 360 1238 772 420.0 16.9 20.0 14.2 420.0 11.3 420.0 ELEV FTMSL DISCH KCFS 1420.0 1420.0 120.0 19.8 1420.0 1420.0 420.0 1420.0 420.0 420.0 20.0 120.0 1420.0 23.3 27.6 27.1 14.0 15.8 12.6 17.8 AVE POWER MW PEAK POW MW ENERGY GWH 509 84.4 529 57.4 538 46.3 538 25.6 15.6 20.4 70.1 78.6 96.0 94.5 86.9 61.7 11.9 58.6 844.6 25.7 11.0 -FORT RANDAL NAT INFLOW DEPLETION EVAPORATION -2 1 5 4 9 12 15 -15 -75 -9 3 10 147 31 956 683 REG INFLOW RELEASE STOR CHANGE 164 148 1598 -144 710 -304 333 -145 265 390 1296 1687 1674 1568 1531 194 464 -637 2768 -22 337.5 12.2 337.9 343.5 350.0 ELEV FTMSL DISCH KCFS POWER 355.0 11.8 355.2 1350.0 1353.2 9.8 8.9 55.2 21.8 355.2 21.8 355.2 24.9 355.2 26.0 355.2 27.4 26.9 345.1 25.5 23.9 342.1 11.1 24.0 10.9 9.7 AVE POWER MW PEAK POW MW ENERGY GWH 352 171.0 345 160.9 310 151.4 277 29.4 276 17.1 332 51.5 352 352 297 39.6 155.3 61.8 1465.6 16.6 131.8 157.1 169.6 64.8 26.4 61.3 -GAVINS POINT DEPLETION CHAN STOR 0 -6 39 - 3 24 22 236 236 - 19 0 -5 1 3 -1 -6 -2 ō EVAPORATION ã č REG INFLOW 358 201 425 1416 1642 1722 1722 750 738 668 739 STOR CHANGE 371 1206.5 -26 358 358 358 1206.0 1206.0 12.0 12.0 STORAGE ELEV FTMSL DISCH KCFS 1206.0 14.5 1206.0 23.8 1206.0 26.7 1206.0 28.0 1207.0 27.1 1207.0 25.2 1207.0 25.2 1207.0 14.9 1206.0 23.8 1206.0 28.0 1207.0 1207.0 12.0 1207.0 12.0 1206.0 28.0 27.5 AVE POWER MW PEAK POW MW ENERGY GWH 114 8.5 114 114 67.8 115 31.7 76 115 115 77 77 71.0 10.1 666.6 58.8 68.7 71.3 68.6 70.2 14.8 31.9 31.8 28.6 15.1 --GAVINS POINT - SIOUX CITY--NAT INFLOW 785 52 DEPLETION 247 6 REGULATED FLOW AT SIOUX CITY KAF 16472 403 KCFS 13.5 3 4 34 30 9 3 20 36 22 13 34 6 3 12 25.3 28.5 16.0 29.5 28.0 27.5 27.3 25.5 15.1 12.1 25.3 25.5 30.0 11.7 12.5 --TOTAL NAT INFLOW DEPLETION CHAN STOR -41 20 -54 -5 79 35775 857 159 -101 -64 -194 -47 129 5 -163 -166 -99 -4 -26 -24 -3 Ó ĩĝ -27 -3 EVAPORATION EVAPORATION STORAGE SYSTEM POWER AVE POWER MW PEAK POW MW 35474 2025 739.9 23.9 1967 573.6 18.5 197.5 13.2 107.2 15.3 164.0 18.2 585.2 19.5 738.5 24.6 129.6 18.5 123.2 15.4 511.0 18.3 823.9 684.3 251.9 509.2 16.4 815.5 

26.6

30APR 31MAY 30JUN 31JUL 31AUG

26.3

22.8

30SEP

16.8

22NOV

30NOV

310CT 15NOV

522.0 16.8

31DEC

31JAN

28FEB

DATE OF STUDY 11/28/2000

TIME

2000-2001 AOP EXTENSIONS, LOWER DECILE RUNOFF 99001 9901 9901 PAGE 1

T.	IME OF STUDY	10:42:2	0				NAVIGA VALUES	ATION SE 5 IN 100	EASON SE DO AF EX	CEPT AS	D AT 40 S INDIC/	MAF ON ATED	JULY 1			STUDY	NO	33
	28FE	B05 INI-SUM	15MAR	2005 22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	200 30NOV	31DEC	31JAN	28FEB
	FORT PECK- NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	- 5919 388 404 5127 5383 -256 8773 2198.5 12.0	272 -11 283 119 164 8937 2199.6 4.0	127 -5 132 56 77 9013 2200.1 4.0	163 -7 170 71 98 9112 2200.8 4.0	598 70 528 298 230 9342 2202.3 5.0	909 305 604 461 143 9485 2203.2 7.5	1156 500 656 536 120 9606 2204.0 9.0	509 162 25 322 553 -231 9374 2202.5 9.0	294 -46 77 263 553 -290 9084 2200.6 9.0	281 -125 96 310 289 21 9105 2200.7 4.9	371 -57 85 343 243 101 9205 2201.4 3.9	184 -34 39 179 117 62 9267 2201.8 3.9	86 -16 18 84 97 -13 9254 2201.7 7.0	98 -18 21 96 143 -47 9207 2201.4 9.0	314 -110 44 380 615 -235 8972 2199.9 10.0	238 -128 366 676 -310 8661 2197.8 11.0	319 -92 411 555 -144 8517 2196.8 10.0
ļ	POWER AVE POWER MW PEAK POW MW ENERGY GWH	765.2	47 169 16.8	47 169 7.9	47 170 10.2	59 172 42.6	89 174 66.2	107 175 77.2	107 173 79.6	106 170 78.9	57 170 41.2	47 171 34.7	47 172 16.8	83 172 13.9	106 171 20.4	117 169 87.1	127 166 94.8	115 164 77.1
	GARRISON- NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	- 9185 965 23 472 13153 13468 -315 10537 1808.2 22.0	340 2 90 547 387 160 10697 1809.0 13.0	158 1 213 167 46 10743 1809.2 12.0	204 1 274 214 60 10803 1809.5 12.0	881 3 -11 1164 893 272 11075 1810.7 15.0	1136 211 -28 1358 1291 67 11142 1811.0 21.0	2542 714 -17 2347 1309 1038 12180 1815.5 22.0	1607 482 29 1649 1353 296 12476 1816.7 22.0	454 63 92 852 1353 -501 11975 1814.6 22.0	349 -120 45 114 689 952 -263 11713 1813.5 16.0	491 6 10 99 803 -164 11548 1812.8 13.1	203 -84 0 44 359 -30 11519 1812.7 13.1	95 -39 -34 21 176 264 -87 11431 1812.3 19.0	108 -45 -22 23 250 317 -67 11364 1812.0 20.0	136 -98 -11 50 788 1230 -442 10922 1810.0 20.0	201 -79 -11 945 1353 -408 10515 1808.1 22.0	281 -54 11 902 1194 -292 10222 1806.7 21.5
A E	POWER AVE POWER MW PEAK POW MW ENERGY GWH	1708.2	133 294 48.0	124 294 20.8	124 295 26.8	156 299 112.0	218 299 162.3	233 313 167.4	237 316 176.6	237 310 176.1	171 307 123.0	139 305 103.3	138 304 49.8	200 303 33.6	210 302 40.3	208 297 154.8	225 291 167.5	217 287 145.9
	OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER MW PEAK POW MW	1408 597 2 383 13898 14221 -324 11071 1576.9 17.8	265 22 48 677 439 238 11309 1578.1 14.8 161 554	123 10 5 285 271 14 11323 1578.1 19.5 213 554	159 13 360 355 11327 1578.2 19.9 217 554	245 46 -16 1076 1232 -156 11171 1577.4 20.7 225 550	134 65 -32 1328 1484 -155 11016 1576.6 24.1 261 546	288 126 -5 1466 1369 96 11112 1577.1 23.0 249 549	110 147 25 1291 1702 -411 10702 1575.1 27.7 297 538	28 96 75 1209 1688 -479 10223 1572.6 27.4 290 525	86 24 33 92 955 1375 -420 9803 1570.3 23.1 241 513	7 -8 16 78 756 974 -218 9585 1569.1 15.8 164 507	-7 2 35 346 341 5 9590 1569.2 11.5 118 507	-3 1 -34 16 210 100 9700 1569.8 7.2 74 510	-3 1 -6 19 288 140 148 9848 1570.6 8.8 92 515	-64 11 0 42 1113 991 121 9970 1571.3 16.1 168 518	-16 16 -11 1310 773 536 10506 1574.1 12.6 133 533	56 25 3 1228 987 241 10747 1575.3 17.8 190 539
1	ENERGY GWH BIG BEND- EVAPORATION REG INFLOW	1832.1 - 129 14093	57.8 439	35.8	46.8	162.1	194.0	179.0	220.9 8 1694	216.0 24 1663	173.7 31 1344	122.0 27 947	42.6 12 329	12.5 6 94	17.7 7 134	125.1 14 977	98.8	127.4 987
f S E C	RELEASE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER	14093 1682 1420.0 17.8	439 1682 1420.0 14.8 70	271 1682 1420.0 19.5	355 1682 1420.0 19.9	1232 1682 1420.0 20.7	1484 1682 1420.0 24.1	1369 1682 1420.0 23.0	1694 1682 1420.0 27.6	1663 1682 1420.0 27.1	1344 1682 1420.0 22.6	947 1682 1420.0 15.4	329 1682 1420.0 11.0	94 1682 1420.0 6.8	134 1682 1420.0 8.4	977 1682 1420.0 15.9	773 1682 1420.0 12.6	987 1682 1420.0 17.8
j j	PEAK POWER MW PEAK POW MW ENERGY GWH	813.6	518 25.1	510 515.4	509 20.1	509 69.8	509 84.0	509 77.6	509 95.9	509 94.2	523 77.3	538 57.5	538 20.1	538 5.8	43 538 8.2	538 58.9	538 46.4	529 57.3
	-FORT RANDAL NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER	L 476 80 142 14346 14347 0 3124 1350.0 9.7	88 1 525 265 260 3384 1353.2 8.9	41 1 164 148 3532 1355.0 11.8	53 1 406 389 17 3549 1355.2 21.8	68 4 1296 1296 0 3549 1355.2 21.8	55 9 1530 1530 0 3549 1355.2 24.9	191 12 1548 1548 3549 1355.2 26.0	21 18 10 1687 1687 0 3549 1355.2 27.4	57 15 32 1674 0 3549 1355.2 27.2	-16 7 39 1283 1598 -315 3234 1351.4 26.9	-82 1 29 836 1567 -731 2503 1341.0 25.5	-4 11 313 519 -206 2297 1337.5 17.4	-2 0 5 87 0 2297 1337.5 6.3	-2 1 5 126 0 2296 1337.5 7.9	3 13 962 689 273 2569 1342.1 11.2	-10 3 760 670 90 2659 1343.5 10.9	19 3 1003 539 464 3123 1350.0 9.7
ļ	PEAK POWER MW PEAK POW MW ENERGY GWH	1414.1	344 26.4	351 16.6	352 39.6	352 131.8	352 155.2	352 157.0	352 171.0	352 169.6	337 159.5	291 147.4	276 46.1	276 7.7	276 11.1	297 61.8	303 61.8	332 51.5
       	AT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE	1252 114 -1 47 15437 15437	91 0 2 358 358	42 0 -6 201 201	55 0 -19 425 425	125 5 0 1416 1416	137 19 -6 1642 1642	144 24 -2 1666 1666	79 39 -3 3 1722 1722	79 10 9 1735 1722 13	57 -5 11 1649 1636 13	109 2 3 10 1666 1666	47 5 15 571 571	22 21 126 126	25 3 -3 143 143	70 10 -6 5 737 737	68 1 1 738 738	102 2 643 669 -26
	STORAGE ELEV FTMSL DISCH KCFS POWER	358 1206.0 12.0	358 1206.0 12.0	358 1206.0 14.5	358 1206.0 23.8	358 1206.0 23.8	358 1206.0 26.7	358 1206.0 28.0	358 1206.0 28.0	371 1206.5 28.0	384 1207.0 27.5	384 1207.0 27.1	384 1207.0 19.2	384 1207.0 9.0	384 1207.0 9.0	384 1207.0 12.0	384 1207.0 12.0	358 1206.0 12.0
1	AVE POWER MW PEAK POW MW ENERGY GWH	646.0	$42 \\ 114 \\ 15.2$	50 114 8.5	82 114 17.7	82 114 58.8	91 114 67.8	95 114 68.7	95 114 71.0	96 115 71.3	95 115 68.6	94 115 70.2	68 115 24.4	32 115 5.4	32 115 6.2	43 77 31.8	43 77 31.8	43 76 28.6
r R	-GAVINS POIN NAT INFLOW DEPLETION EGULATED FLO KAF KCFS	T - SIOU 862 248 W AT SIO 16051	X CITY- 57 6 00X CITY 409 13.7	27 3 225 16.2	34 4 456 25.5	121 20 1517 25.5	225 34 1833 29.8	166 30 1802 30.3	74 37 1759 28.6	34 34 1722 28.0	23 22 1637 27.5	22 9 1679 27.3	15 6 581 19.5	7 3 130 9.4	8 3 148 9.3	16 12 741 12.1	-8 13 717 11.7	41 13 697 12.5
	TOTAL NAT INFLOW DEPLETION CHAN STOR EVAPORATION STORAGE SYSTEM DOWED	19102 2392 24 1577 35544	1112 20 139 36367	519 9 0 36651	667 12 -19 36831	2038 148 -27 37177	2596 643 -65 37232	4487 1406 -24 38487	2400 885 -3 99 38141	946 172 0 309 36885	780 -197 79 383 35920	918 -47 29 327 34907	438 -105 15 145 34738	204 - 49 - 46 68 34748	234 -56 -31 77 34781	472 -172 -17 168 34499	473 -174 -22 34407	818 -105 16 34650
	STSTEM POWER AVE POWER MW PEAK POW MW ENERGY GWH DAILY GWH	7179.0	526 1992 189.3 12.6	625 1993 104.9 15.0	746 1995 161.1 17.9	801 1996 577.1 19.2	981 1994 729.7 23.5	1010 2011 726.9 24.2	1095 2002 815.0 26.3	1084 1981 806.1 26.0	893 1965 643.1 21.4	719 1927 535.0 17.3	555 1912 199.8 13.3	470 1914 78.9 11.3	541 1917 103.8 13.0	698 1895 519.6 16.8	673 1908 501.0 16.2	726 1927 487.8 17.4
		INI-SUM	15MAR	22MAR	31MAR	30APR	31MAY	30JUN	31JUL	31AUG	30SEP	310CT	15NOV	22NOV	30NOV	31DEC	31JAN	28FEB

FORT PECK NAT INFLOW DEPLETION EVAPORATION MOD INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWM	 5961 400 397 5164 5403 -239 8517 2196.8 10.0 W 760 9	274 -11 285 119 166 8683 2197.9 4.0 46 166	128 -5 133 56 77 8761 2198.4 4.0 47 167 7 8	164 -7 171 71 100 8860 2199.1 4.0 4.0 47 168	602 70 532 298 234 9095 2200.7 5.0 59 170 422	915 306 609 461 148 9242 2201.6 7.5 88 171 65 7	1164 504 660 536 124 9367 2202.5 9.0 106 173 76 5	513 169 24 320 553 -234 9133 2200.9 9.0 106 170 78 9	296 -41 261 553 -292 8841 2199.0 9.0 105 168 78 2	283 -125 95 313 298 15 8856 2199.1 5.0 58 168 421	374 -59 83 350 250 100 8956 2199.7 4.1 48 169 35 4	185 -35 38 182 121 61 9017 2200.2 4.1 48 169 17 2	86 -16 18 85 97 -12 9005 2200.1 7.0 82 169 13 8	99 -19 20 97 143 -46 8959 2199.8 9.0 105 169 2002	317 -110 43 384 615 -231 8728 2198.2 10.0 116 167 86 4	240 -128 368 676 -308 8419 2196.1 11.0 126 163 23 7	321 -93 414 555 -141 8278 2195.1 10.0 113 162 762
GARRISON NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER	9293 1053 0 465 13178 13469 -291 10222 1806.7 21.5	344 -1 68 531 387 144 10367 1807.4 13.0	160 0 216 167 50 10416 1807.7 12.0	206 -1 278 214 64 10480 1808.0 12.0	891 -2 -11 1179 893 287 10767 1809.3 15.0	1150 211 -28 1372 1291 81 10848 1809.7 21.0	2572 724 -17 2367 1309 1058 11905 1814.3 22.0	1626 498 29 1653 1353 300 12205 1815.6 22.0	460 68 91 855 1353 -498 11707 1813.5 22.0	353 -123 44 112 705 952 -247 11460 1812.4 16.0	496 1 10 97 658 804 -145 11315 1811.8 13.1	205 -87 44 369 389 -20 11295 1811.7 13.1	96 -41 -32 20 181 264 -83 11212 1811.3 19.0	109 -46 -22 23 317 -64 11148 1811.0 20.0	137 -70 -11 49 761 1230 -468 10680 1808.9 20.0	204 -50 -11 919 1353 -434 10246 1806.9 22.0	284 -28 11 879 1194 -315 9931 1805.3 21.5
AVE POWER M PEAK POW MW ENERGY GWH	√ 1692.5	132 289 47.4	122 290 20.5	122 291 26.5	154 294 110.7	216 296 160.5	230 309 165.9	235 313 175.2	235 307 174.6	169 304 122.0	138 302 102.6	138 301 49.5	199 300 33.4	208 300 40.0	206 293 153.6	223 287 165.8	215 283 144.3
OAHE NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PFAK POW M	1429 613 -1 374 13911 14209 -298 10747 1575.3 17.8	269 23 46 678 437 241 10988 1576.5 14.7 158 546	125 11 5 287 270 17 11005 1576.6 19.5 210 546	161 14 362 353 8 11013 1576.6 19.8 214 546	249 47 -16 1079 1230 -151 10862 1575.9 20.7 223 542	136 66 -32 1329 1483 -154 10708 1575.1 24.1 258 538	293 129 -5 1468 1365 10811 1575.6 22.9 246 541	112 151 24 1290 1702 -412 10399 1573.5 27.7 294 530	29 100 74 1208 1686 -478 9921 1571.0 27.4 287 517	87 25 33 90 958 1375 -417 9503 1568.7 23.1 239 505	7 -8 17 76 759 976 -217 9286 1567.5 15.9 163 499	-7 2 34 346 341 6 9292 1567.5 11.5 117 499	-3 1 -34 16 210 100 110 9402 1568.1 7.2 74	-4 1 -6 19 289 140 148 9550 1568.9 8.8 91	-65 11 0 41 1113 991 122 9672 1569.6 16.1 166	-16 16 -11 1309 773 536 10208 1572.5 12.6 131 525	56 26 3 1227 986 241 10449 1573.8 17.7 188
BIG BEND EVAPORATION REG INFLOW RELEASE STORAGE ELEVFTMSL DISCH KCFS POWER M	1812.1  14080 14080 14080 1682 1420.0 17.8	437 437 437 1682 1420.0 14.7	35.3 35.3 270 270 1682 1420.0 19.5 91	46.2 353 353 1682 1420.0 19.8 93	160.3 1230 1230 1682 1420.0 20.7 97	1483 1483 1483 1682 1420.0 24.1 113	1365 1365 1365 1682 1420.0 22.9	218.8 1694 1694 1682 1420.0 27.6 129	213.6 24 1661 1661 1682 1420.0 27.0 126	171.8 31 1344 1682 1420.0 22.6 107	27 949 949 1682 1420.0 15.4	42.1 12 329 329 1682 1420.0 11.0	12.4 6 94 1682 1420.0 6.8 34	17.5 7 134 134 1682 1420.0 8.4 43	123.7 14 977 977 1682 1420.0 15.9 79	97.7 97.7 1682 1420.0 12.6	986 986 1682 1420.0 17.7 85
		518	510	509	509	509	509	509	509	523	538	538	538	538	538	538	529
PEAK POW MW ENERGY GWH	812.9 LL	25.0	15.3	20.0	69.7	84.0	77.3	95.9	94.1	77.3	57.6	20.1	5.8	8.2	58,9	46.4	57.2
PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION REG INFLOW RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS	812.9 489 80 142 14347 14347 0 3123 1350.0 9.7	90 90 1 526 265 261 3384 1353.2 8.9	42 1 311 164 148 3532 1355.0 11.8	20.0 54 1 406 389 17 3549 1355.2 21.8	69.7 70 4 1296 1296 3549 1355.2 21.8	84.0 56 9 1530 1530 3549 1355.2 24.9	77.3 195 12 1548 1548 3549 1355.2 26.0	95.9 21 18 10 1687 1687 0 3549 1355.2 27.4	94.1 59 15 32 1674 1674 0 3549 1355.2 27.2	77.3 -16 7 39 1283 1598 -315 -3234 1351.4 26.9	57.6 -84 1 29 836 1567 -731 2503 1341.0 25.5	20.1 -4 11 313 519 -206 2297 1337.5 17.4	5.8 -2 0 5 87 87 0 2297 1337.5 6.3	8.2 -2 126 126 126 126 1296 1337.5 7.9	58.9 3 13 962 689 273 2569 1342.1 11.2	46.4 -10 3 760 670 90 2659 1343.5 10.9	57.2 20 3 1003 539 464 3123 1350.0 9.7
PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH	812.9 LL 489 80 142 14347 14347 0 3123 1350.0 9.7 W 1414.1	25.0 90 1 526 265 261 3384 1353.2 8.9 73 344 26.4	15.3 42 1 311 164 148 3532 1355.0 11.8 99 351 16.6	20.0 54 1 406 389 17 3549 1355.2 21.8 183 352 39.6	69.7 70 4 1296 1296 3549 1355.2 21.8 183 352 131.8	84.0 56 9 1530 1530 3549 1355.2 24.9 209 352 155.2	77.3 195 12 1548 1548 3549 1355.2 26.0 218 352 157.0	95.9 21 18 10 1687 0 3549 1355.2 27.4 230 352 171.0	94.1 59 15 32 1674 1674 0 3549 1355.2 27.2 228 352 169.6	77.3 -16 7 39 1283 1598 -315 3234 1351.4 26.9 222 337 159.5	57.6 -84 1 29 836 1567 -731 2503 1341.0 25.5 198 291 147.4	20.1 -4 11 313 519 -206 2297 1337.5 17.4 128 276 46.1	5.8 -2 0 5 87 87 0 2297 1337.5 6.3 46 276 7.7	8.2 -2 15 126 126 0 2296 1337.5 7.9 58 276 11.1	58.9 3 13 962 689 273 2569 1342.1 11.2 83 297 61.8	46.4 -10 3 760 670 90 2659 1343.5 10.9 83 303 61.8	57.2 20 3 1003 539 464 3123 1350.0 9.7 77 332 51.5
PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE STOR CHANGE STORAGE DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE	812.9 489 142 14347 14347 14347 1350.0 9.7 W 1414.1 NT 1252 114 -1 47 15437 15437	25.0 90 1 526 261 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358	15.3 42 1 164 3532 1355.0 11.8 959 351 16.6 42 0 -6 201 201 201	20.0 54 1 406 389 1355.2 21.8 183 35.6 21.8 39.6 55 0 -19 425 425	69.7 70 4 1296 3549 1355.2 21.8 183 352 131.8 125 0 1416 1416	84.0 56 9 1530 3549 1355.2 24.9 209 352 155.2 137 1642 1642 1642	77.3 195 12 1548 1548 3549 1355.2 26.0 218 352 157.0 144 24 -2 1666 1666 1666	95.9 21 18 10 1687 0 3549 1355.2 27.4 230 352 171.0 79 33 1722 1722 1722	94.1 59 15 32 1674 1674 1674 1674 1355.2 27.2 228 352 27.2 228 352 169.6 79 10 0 9 1735 1722 1133 371	77.3 -16 39 1283 1598 -3155 3234 1351.4 26.9 222 337 159.5 57 -5 11 1649 1636 384 384	57.6 -84 1 29 836 1567 -731 134100 25.5 198 291 147.4 109 2 3 10 1666 1666	20.1 -4 11 313 519 -206 2297 1337.5 17.4 128 276 46.1 47 5 571 571 571	5.8 -2 0 5 87 0 2297 1337.5 6.3 46 276 276 276 2 7.7 2 2 1126 126	8.2 -2 126 0 2296 1337.5 7.9 58 276 11.1 25 3 -3 2 143 143	58.9 3 13 962 689 273 2569 1342.1 11.2 83 297 61.8 70 10 -6 5 737 737 2384	46.4 -10 3 760 670 909 1343.5 10.9 83 303 61.8 68 1 1 738 738 738	57.2 20 3 539 464 3123 1350.0 9.7 77 3322 51.5 102 2 643 669 -26 643 669 -26
PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE STORAGE ELEV FIMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION RELEASE STOR CHANGE STOR CHANGE STORAGE ELEV FIMSL DISCH KCFS POWER AVE POWER M PEAK POW MW	812.9 489 80 142 14347 0 3123 1350.0 9.7 W 1414.1 NT 1252 114 -1 47 15437 1547 15	25.0 90 1 5266 265 261 3384 26.4 73 344 26.4 91 0 2 3588 3588 3588 1206.0 12.0 42 114	15.3 42 1 164 158 1355.0 11.8 9 351 16.6 42 0 -6 201 201 201 201 201 201 358 1206.0 14.5 50 114.5	20.0 54 1 406 389 17 3549 1355.2 21.8 352 39.6 55 0 -19 425 425 358 1206.0 23.8 82 114	69.7 4 1296 1296 3549 1355.2 21.8 1355 131.8 1255 0 1416 1416 358 1206.0 23.8 82 114	84.0 56 9 1530 1530 155.2 24.9 352 155.2 137 19 -6 1642 1642 1642 1642 1642 1642 1642 164	77.3 195 12 1548 1548 3549 1355.2 26.0 218 352 157.0 144 24 -2 1666 1666 358 1206.0 28.0 95 114	95.9 21 18 10 1687 1687 155.2 27.4 230 352 171.0 79 39 -33 1722 1722 358 1206.0 28.0 95 114	94.1 59 15 32 1674 1674 0 3549 1355.2 27.2 228 352 169.6 79 10 0 9 1735 1722 13 371 1206.5 28.0 9 96.5	77.3 -16 7 39 1283 1598 -315 3234 1351.4 26.9 222 337 159.5 57 -5 11 1649 1636 13 384 1207.0 27.5 95 115	57.6 -84 1 29 836 1567 -731 1341.0 25.5 198 291 147.4 109 2 3 10 1666 1666 384 1207.0 27.1 94 115	20.1 -4 11 313 519 -2066 2297 1337.5 17.4 128 276 46.1 47 55 155 571 384 1207.0 19.2 68 115	5.8 -2 5 87 0 2297 1337.5 6.3 46 276 276 7.7 22 21 2 126 126 126 126 126 384 1207.0 9.0 32 115	8.2 -2 1 5 126 126 1237.5 7.9 58 276 11.1 25 3 -3 2 143 143 384 1207.0 9.0 32 115 5 5 5 5 5 5 5 5 5 5 5 5 5	58.9 3 13 962 689 273 2569 1342.1 11.2 83 297 61.8 70 10 -6 5737 737 737 384 1207.0 12.0 43 77	46.4 -10 3 760 670 92659 1343.5 10.9 83 303 61.8 68 1 1 738 738 384 1207.0 12.0 43 77	57.2 20 3 1003 539 43123 1350.0 9.7 77 332 51.5 102 2 643 669 -26 358 1206.0 12.0 43 766
PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI RAT INFLOW RELEASE STOR CHANGE STOR CHANGE ST	812.9 489 80 14347 14347 14347 1350.0 9.7 W 1414.1 NT 1252 114 -1 15437 15437 15437 15437 15437 0 12.0 W 646.0 NT - SIOI 879	25.0 90 1 526 265 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358 358 1206.0 12.0 12.0 42 114 15.2 90 12.0 12.0 12.0 12.0 12.0 12.0 12.0 12.	15.3 42 1 164 3532 1355.0 11.8 99 351 16.6 42 0 -6 201 201 201 201 201 201 201 1206 1206	20.0 54 1 406 389 1355.2 21.8 185 39.6 55 0 -19 425 425 1206.0 23.8 82 114 17.7 35	69.7 70 4 1296 3549 1355.2 21.8 183 352 131.8 125 0 1416 1416 1416 1416 1416 1416 1205 0 23.0 82 114 58.8 82 114	84.0 56 9 1530 1530 3549 1355.2 24.9 209 352 155.2 137 19 -6 1642 1642 358 1206.0 26.7 91 114 67.8 230	77.3 195 12 1548 1548 3549 1355.2 26.0 218 352 157.0 144 24 -2 1666 1666 358 1206.0 25 114 68.7 169	95.9 21 18 10 1687 1687 1355.2 27.4 230 352 171.0 79 39 -3 31722 358 1206.0 28.0 95 114 71.0 76	94.1 59 15 32 1674 1674 0 3549 1355.2 27.2 228 352 169.6 79 10 0 9 1735 1722 13 371 1206.5 28.0 96 115 71.3 35	77.3 -16 7 39 1283 1598 -3155 3234 1351.4 26.9 222 337 159.5 57 -5 11 1649 1636 13 384 1207.0 27.0 27.5 15 68.6 24	57.6 -84 1 29 836 1567 -731 12503 13410 25.5 198 291 147.4 109 2 3 10 1666 1666 1666 1666 1666 1666 1666	20.1 -4 11 313 519 -206 2297 1337.4 128 276 46.1 47 5 571 571 384 1207.0 19.27 68 115 24.4 15	5.8 -2 0 5 87 0 2297 1337.5 6.3 46 276 7.7 2 2 126 126 126 126 126 126 126 126 126	8.2 -2 1 5 126 0 2296 1337.5 7.9 58 276 11.1 25 3 -3 2 143 143 384 1207.0 9.0 9.0 32 115 6.2 8	58.9 3 13 962 689 273 2569 1342.1 11.2 83 297 61.8 70 10 -6 5 737 737 384 1207.0 12.0 43 77 31.8 16	46.4 -10 3 760 670 900 2659 1343.5 10.9 83 303 61.8 68 1 1 738 738 384 1207.0 12.0 43 77 31.8 -8	57.2 20 3 1003 539 464 3123 1350.0 9.7 7 332 51.5 102 2 643 669 -26 358 1206.0 12.0 12.0 28.6
PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLEFION EVAPORATION RELEASE STOR CHANGE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION REG INFLOW RELEASE STOR CHANGE STOR	812.9 489 80 142 14347 0 3123 1350.0 9.7 W 1414.1 NT 1252 114 -1 47 15437 15457 15457 15457 15457	25.0 90 1 5266 261 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358 358 1206.0 12.0 42 114 15.2 0 2 2 358 358 358 358 358 1206 0 2 358 358 358 358 358 1206 12.0 12.0 14 1526 14 1526 12 14 1526 12 14 1526 12 14 1526 12 14 1537 14 1537 12 14 1537 12 14 1537 12 14 1537 12 14 1537 12 14 15 15 12 12 14 15 15 12 14 15 15 12 12 14 15 15 12 14 15 15 12 12 14 15 12 14 15 15 12 14 15 12 14 15 12 14 15 12 14 15 12 14 15 12 14 15 12 14 15 12 14 15 12 14 15 12 14 15 12 12 14 15 12 15 12 12 14 15 12 14 15 12 12 14 15 12 12 12 14 15 12 12 14 15 12 12 12 12 14 15 12 12 13 13 14 15 12 12 13 13 14 15 12 12 13 13 13 14 15 12 12 13 13 14 15 12 13 13 13 14 15 12 13 13 13 13 13 13 14 15 13 13 13 13 13 13 13 13 13 13	15.3 15.3 42 11 164 148 3532 1355.0 11.8 9 351 16.6 42 0 -6 201 201 358 1206.0 14.5 50 114 8.55 50 14.5 50 14.5 50 201 201 201 205 50 14.5 50 201 205 50 14.5 50 201 205 50 201 205 50 205 50 205 50 205 50 205 205	20.0 54 1 4066 389 17 3549 1355.2 21.8 1352 39.6 55 0 -19 425 358 1206.0 23.8 82 114 17.7 35 4 456 25.6 25.6 25.6 25.8 26.0 27.8 27.	69.7 70 4 1296 3549 1355.2 21.8 183 352 131.8 125 5 0 1416 155.2 13.8 125 13.8 1416 1416 1416 1416 1416 1416 1416 1416 1416 1416 145 145 155 155 155 155 155 155	84.0 56 9 1530 3549 1355.2 24.9 352 155.2 137 19 -6 1642 1642 1642 1642 1642 1648 1206.0 26.7 91 174 6 230 35.1 187 29.1 187 29.1 187 29.1 187 29.1 187 29.1 19.1	77.3 195 12 1548 1548 3549 1355.2 26.0 218 352 157.0 144 24 -2 1666 1666 1666 1666 1666 1666 1667 169 30 1805 30.1 1805	95.9 21 18 10 1687 0 3549 1355.2 27.4 230 352 171.0 79 39 -3 352 171.0 79 39 -3 352 1722 1722 1722 358 1206.0 28.0 95 114 71.0 76 77 1761 28.6	94.1 59 15 32 1674 1674 1355.2 27.2 22.8 352 169.6 79 10 0 9 1735 1725 1735 1735 1206.5 71.3 371 1206.5 71.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 34 17.3 35 35 34 35 37 17.3 35 35 28 35 28 35 28 35 28 35 28 35 28 35 28 35 28 35 28 35 37 18 37 18 37 18 37 18 37 18 37 18 37 18 37 18 37 18 37 18 37 18 37 18 37 18 37 18 37 18 35 28 0 96 17 35 37 18 37 18 37 18 35 28 35 35 34 35 34 35 34 28 35 35 34 35 34 28 35 35 34 35 34 35 35 34 38 38 38 38 38 38 38 38 38 38	77.3 -16 7 39 1283 1598 -315 3234 1351.4 26.2 337 159.5 57 -5 1 111 1649 165 165 165 165 165 165 165 165	57.6 -84 1 29 836 1567 -331 1341.0 2503 1341.0 2503 1341.0 2513 198 291 147.4 109 23 100 1666 1666 1666 1666 1666 1666 1666 1655 70.2 21 102 102 102 102 102 102 102	20.1 -4 11 313 519 -2066 2297 137.5 17.4 128 276 46.1 47 571 571 384 1207.0 19.2 68 1155 24.4 15 6 581 19.5 581 19.5 581	5.8 -2 5 87 0 2297 1337.5 6.3 46 276 276 276 27 21 2 126 384 1207.0 9.0 32 155 5.4 7 3 130 9.4 137 137 15 15 15 15 15 15 15 15 15 15	8.2 -2 15 1266 1267 1296 1337.5 7.9 58 276 11.1 255 3 -3 -3 -3 -3 -3 -3 -3 -3 -3	58.9 3 13 962 273 273 11.2 83 297 61.8 700 100 -6 5 737 737 384 1207.0 12.0 43 31.8 16 12 741 12.1	46.4 -10 3 760 670 92659 1343.5 10.9 83 303 61.8 68 1 1 738 384 1207.0 12.0 43 3717 31.8 -8 13 7177	57.2 20 3 1003 539 43123 1350.0 9.7 77 332 51.5 102 2 643 669 -26 358 1206.0 12.0 43 76 28.6 28.6 28.6 28.6 28.6 28.6 28.6 28.
PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE STOR CHANGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI NAT INFLOW DEPLETION CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE CHAN STOR POWER AVE POWER AVE TO A CHANGE STOR A CHANGE CHAN STOR EVAPORATION SYSTEM POW	812.9 LL 489 80 142 14347 14347 0 3123 1350.0 9.7 W 1414.1 NT 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 15437 16065 19303 2511 -1 1554 15457 15457 15457 15457 15457 15457 157	25.0 25.0 90 1 526 261 3384 1353.2 8.9 3344 26.4 91 0 2 358 358 358 1206.0 12.0 42 1144 15.2 UX CITY- 58 000X CITY 410 13.8 1125 38 125 35462	15.3 42 311 164 352 1355.0 11.8 99 351 16.6 42 0 -6 201 201 358 1206.0 114.5 50 114.5 50 114.5 50 114.5 50 114.5 50 114.5 50 35754	20.0 54 1 4066 3187 3549 1355.2 2183 352 39.6 55 0 -19 425 3588 1206.0 23.8 82 1144 17.7 358 4 456 25.6 675 11 -19 35942	69.7 70 4 1296 1296 3549 1355.2 21.8 183 352 131.8 125 5 0 1416 1416 358 1206.0 23.8 82 114 58.8 123 21.6 82 145 55 2060 145 -27 36312	84.0 56 9 1530 1530 3549 1355.2 24.9 352 155.2 137 19 -6 1642 358 1206.0 26.7 91 114 67.8 230 35 1837 29.9 2624 646 646 646 646 36387	77.3 195 12 1548 1548 3549 1355.2 26.0 218 352 157.0 144 24 21666 1666 358 1206.0 28.05 114 68.7 169 30 1805 30.3 4537 1423 -24 37672	95.9 21 18 10 1687 1687 1355.2 27.4 230 352 171.0 79 39 -3 1722 1722 358 1206.0 28.0 95 114 71.0 76 37 1761 28.6 2427 912 -3 37326	94.1 59 15 32 1674 1674 0 3549 1355.2 27.2 228 352 169.6 79 10 0 9 1735 1722 13 371 1206.5 28.0 915 71.3 354 1722 28.0 958 186 36071	77.3 -16 7 39 1283 1598 -3155 3234 1351.4 26.9 222 337 159.5 57 -5 11 16496 13 384 1207.0 27.5 5155 68.6 24 22 1638 27.5 788 -199 78 35120	57.6 -84 1 29 8366 1567 -7311 2503 1341.0 25.5 198 291 147.4 109 2 3 10 16666 384 1207.0 27.1 94 115 70.2 22 10 1678 27.3 924 -53 30 3222 34125	20.1 -4 11 313 519 -206 2297 1337.5 17.4 128 276 46.1 47 557 571 384 1207.0 19.8 115 24.4 156 581 19.5 441 -109 15 143 33966	5.8 -2 0 5 87 0 2297 1337.5 6.3 46 276 7.7 22 21 126 126 126 126 126 126	8.2 -2 1 5 126 0 2296 1337.5 7.9 58 276 11.1 255 3 -3 2 143 384 1207.0 9.0 32 115 6.2 8 3 148 9.3 235 -58 -31 166 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3	58.9 3 13 962 689 273 2569 1342.1 11.2 83 297 61.8 70 10 -6 5 737 737 384 1207.0 12.0 43 77 31.8 16 12 741 12.1 475 -144 -17 16 33715	46.4 -10 3 760 670 900 2659 1343.5 10.9 83 303 61.8 68 1 1 738 738 384 1207.0 12.0 43 777 31.8 -8 13 717 11.7 478 -145 -22 33599	57.2 20 3 1003 539 464 3123 1350.0 9.7 77 3322 51.5 102 2 643 669 -26 358 1206.0 12.0 43 76 28.6 42 13 698 12.6 825 -79 16 33821
PEAK POW MW ENERGY GWH FORT RANDA NAT INFLOW DEPLETION EVAPORATION RELEASE STOR CHANGE STOR CHANGE STORAGE ELEV FTMSL DISCH KCFS POWER AVE POWER M PEAK POW MW ENERGY GWH GAVINS POI CHAN STOR EVAPORATION REG INFLOW RELEASE STOR CHANGE STOR CHANGE STORAGE DISCH KCFS TOTAL NAT INFLOW DEPLETION REGULATED FL KAF KCFS TOTAL NAT INFLOW DEPLETION STORAGE SYSTEM POWER M PEAK POW RW ENERGY GWH DAILY GWH	812.9 LL 489 80 142 14347 14347 0 3123 1350.0 9.7 W 1414.1 NT 15437 15437 15437 15437 15437 15437 15437 16065 19303 2511 1554 34650 R W 7138.3	25.0 90 11 526 261 3384 1353.2 8.9 73 344 26.4 91 0 2 358 358 358 1206.0 12.0 42 114 15.2 UX CITY- 56 60UX CITY 410 13.8 1125 56 521 1977 187.6 12.5	15.3 42 311 164 3522 1355.0 11.8 99 351 16.6 42 0 -6 201 201 358 1206.0 14.5 50 114.8 50 14.5 50 16.2 525 8 0 35754 6.2 525 8 0 35754 6.2 525 8 0 35754 6.2 525 8 0 35754 6.2 525 8 0 10788 1078 1078 1078	20.0 20.0 54 1 4066 3187 3549 1355.2 21.8 352 39.6 55 0 -19 425 3588 1206.0 23.8 82 1144 17.7 358 4 456 25.6 675 11 -19 35942 740 159.9 17.8	69.7 70 4 1296 1297 1355.2 21.8 183 352 131.8 125 5 0 1416 1416 3588 1206.0 23.8 124 58.8 123 211 1518 25.5 2060 145 -27 36312 797 19.1	84.0 56 9 1530 1530 3549 1355.2 24.9 352 155.2 137 19 -6 1642 358 1206.0 26.7 91 114 67.8 230 35 1837 29.9 2624 646 -66 36387 975 1950 22.4	77.3 195 12 1548 1548 3549 1355.2 26.0 218 352 157.0 144 24 24 26 1666 1666 1206.0 28.0 114 68.7 169 30 1805 30.3 4537 1423 -24 37672 1093 1998 722.3 24.1	95.9 21 18 10 1687 1687 1355.2 27.4 230 352 171.0 79 39 -3 1722 358 1206.0 28.0 95 114 71.0 76 37 1761 28.6 2427 912 -3 37326 10980 810.8 26.2	94.1 59 15 32 1674 1674 1674 0 3549 1355.2 27.2 228 352 169.6 79 10 0 9 1735.2 1722 13 371 1206.5 28.0 1155 71.3 354 1722 28.0 958 186 36071 1077 1967 801.5 25.9	77.3 -16 7 39 1283 1598 -315 3234 1351.4 26.9 222 337 159.5 57 -5 11 1646 13 384 1207.0 27.5 115 68.6 24 22 1638 27.5 788 -199 378 35120 8900 1951 641.2 21.4	57.6 -84 1 29 8366 1567 -7311 2503 1341.0 25.5 198 291 147.4 109 2 3 10 16666 384 1207.0 27.1 914 1155 70.2 22 10 1678 27.3 924 -533 322 34125 718 1915 734.1 17.2	20.1 -4 11 313 519 -206 2297 1337.5 17.4 128 276 46.1 47 5 571 571 384 1207.0 19.5 24.4 15 6 581 19.5 441 -109 15 143 33966 554 19.5 441 -109 15 1441 888 199.4 13.3	5.8 -2 0 5 87 0 2297 1337.5 6.3 46 276 7.7 22 21 126 126 126 126 126 126	8.2 -2 1 5 126 0 2296 137.5 7.9 58 276 11.1 255 3 -3 2 143 384 1207.0 9.0 32 115 6.2 8 3 148 9.3 148 9.3 148 9.3 148 9.3 148 9.3 148 9.3 148 9.3 148 9.3 148 9.3 148 9.3 148 9.3 148 156 156 156 157 156 157 157 157 157 157 157 157 157	58.9 3 13 962 689 273 2569 1342.1 11.2 83 297 61.8 70 10 -6 5 737 737 384 1207.0 12.0 43 77 31.8 16 12 741 12.1 475 -144 -17 166 33715 694 156.2 16.7	46.4 -10 3 760 670 900 2659 1343.5 10.9 83 303 61.8 68 1 1 738 384 1207.0 12.0 43 777 31.8 -8 13 717 11.7 478 -145 -22 33599 668 1893 497.3 16.0	57.2 20 3 1003 539 464 3123 1350.0 9.7 77 332 51.5 102 2 643 669 -26 358 1206.0 12.0 43 76 28.6 42 13 698 12.6 825 -79 16 33821 720 101 720 73 77 77 77 77 77 77 77 77 77