U.S. Hydropower Resource Assessment for Alabama

Prepared by:
Alison M. Conner
James E. Francfort

Project Manager:
Ben N. Rinehart

MASTER

Published February 1998

~~DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED~~ *ph*

**Idaho National Engineering and Environmental Laboratory
Renewable Energy Products Department
Lockheed Martin Idaho Technologies Company
Idaho Falls, Idaho 83415**

Prepared for the
U.S. Department of Energy
Assistant Secretary for Energy Efficiency and Renewable Energy
Under DOE Idaho Operations Office
Contract DE-AC07-94ID13223

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible electronic image products. Images are produced from the best available original document.

ABSTRACT

The U.S. Department of Energy is developing an estimate of the undeveloped hydropower potential in the United States. The Hydropower Evaluation Software (HES) is a computer model that was developed by the Idaho National Engineering Laboratory^a for this purpose. HES measures the undeveloped hydropower resources available in the United States, using uniform criteria for measurement. The software was developed and tested using hydropower information and data provided by the Southwestern Power Administration. It is a menu-driven program that allows the personal computer user to assign environmental attributes to potential hydropower sites, calculate development suitability factors for each site based on the environmental attributes present, and generate reports based on these suitability factors. This report describes the resource assessment results for the State of Alabama.

a. In January 1997, the name of the Idaho National Engineering Laboratory (INEL) was changed to the Idaho National Engineering and Environmental Laboratory (INEEL). INEEL will be used throughout the text of the document, except where the use of INEL is historically important.

ACKNOWLEDGMENTS

The authors thank Peggy A. M. Brookshier and John V. Flynn of the U.S. Department of Energy for their active participation and timely comments.

CONTENTS

ABSTRACT	iii
ACKNOWLEDGMENTS	v
INTRODUCTION	1
Model Development	1
Model Goal.....	1
Dam Status	2
ASSESSMENT RESULTS	2
Summary Results.....	2
Detailed Results.....	5
OBTAINING INDIVIDUAL STATE INFORMATION	5
ADDITIONAL HYDROPOWER EVALUATION SOFTWARE INFORMATION	6
REFERENCES	7
Appendix A—Summary Report	
Appendix B—River Basins Report	
Appendix C—Alabama Sites List	
Appendix D—Individual Resource Database List	

FIGURES

1. Number of sites, by capacity groups, with HES-modeled undeveloped hydropower potential.....	3
2. The nonmodeled and HES-modeled undeveloped hydropower potential.....	3
3. The number of sites with undeveloped hydropower potential and the total megawatts of HES-modeled undeveloped hydropower potential.....	4

4.	Number of sites with undeveloped hydropower potential in the Alabama river basins	4
5.	Megawatts of HES-modeled undeveloped hydropower potential in the Alabama river basins.....	5

TABLES

1.	Undeveloped hydropower potential summary for Alabama.....	2
----	---	---

U.S. Hydropower Resource Assessment for Alabama

INTRODUCTION

In June 1989, the U.S. Department of Energy initiated the development of a National Energy Strategy to identify the energy resources available to support the expanding demand for energy in the United States. Public hearings conducted as part of the strategy development process indicated that undeveloped hydropower resources were not well defined. As a result, the Department of Energy established an inter-agency Hydropower Resource Assessment Team to ascertain the undeveloped hydropower potential. In connection with these efforts by the Department of Energy, the Idaho National Engineering Laboratory designed the Hydropower Evaluation Software (HES), which has been used to perform a resource assessment of the undeveloped conventional hydropower potential in over 40 states. This report presents the results of the hydropower resource assessment for the State of Alabama. Undeveloped pumped storage hydropower potential is not included.

The HES was developed as a tool to measure undeveloped hydropower potential regionally or by state. The software is not intended to provide precise development factors for individual sites, but to provide regional or state totals. Because the software was developed as a generic measurement tool encompassing national issues, regional and state totals must be considered judiciously; various local issues may skew undeveloped hydropower potential totals. The information for the resource assessment was compiled from the Federal Energy Regulatory Commission's Hydroelectric Power Resources Assessment database and several other sources. Refer to DOE/ID-10338, the *User's Manual* (Francfort, Matthews, Rinehart 1991) for the specifics of the software and to DOE/ID-10430.1, the *Status Report* (Conner, Francfort, Rinehart 1996) for an overview of all resource assessment activities to date.

Model Development

Hydropower Evaluation Software, both a probability-factor computer model and a database, is a menu-driven program that is intended to be user-friendly. Computer screens and report-generation capabilities were developed to meet the needs of users nationwide. The software uses environmental attribute data to generate an overall project environmental suitability factor (PESF) between 0.1 and 0.9, where 0.9 indicates the highest likelihood of development and 0.1 indicates the lowest likelihood of development. The suitability factors depend on the unique environmental attributes of each potential site. They reflect the considerations that (a) environmental concerns can make a potential site unacceptable, prohibiting its development (for a suitability factor of 0.1), or (b) if there are no environmental concerns, there is no negative effect on the likelihood of site development (for a suitability factor of 0.9). A combination of attributes can result in a lower suitability factor because multiple environmental considerations would reduce the likelihood that a site may be developed to its physical potential.

Model Goal

The goal of the HES is to assemble an accurate resource database of all sites with undeveloped hydropower potential in the United States for use as a planning tool to determine the viable national hydropower potential. Undeveloped hydropower potential is not limited to the development of new sites; it also includes the development of additional hydropower-generating capacity at sites that currently have hydropower, but are not developed to their full potential. This undeveloped hydropower potential is a source of nonpolluting, renewable energy available to meet the growing power needs of the United States. The HES should help make this goal obtainable and ensure a set of uniform criteria for national assessment.

Dam Status

The effects of environmental attributes vary by dam status. The dam status classifications used are as follows:

W = Developed hydropower site with current power generation, but the total hydropower potential has not been fully developed. Only the undeveloped hydropower potential is discussed in this report.

W/O = Developed site without current power generation. The site has some type of developed impoundment or diversion structure, but no developed hydropower generating capability.

U = Undeveloped site. The site does not have power generation capability nor a developed impoundment or diversion structure.

ASSESSMENT RESULTS

Summary Results

A total of 33 sites (Table 1) have been identified and assessed for their undeveloped hydropower potential. The HES results for

individual site capacities range from 50 kilowatts (kW) to 87 megawatts (MW). The majority (67%) of the sites in Alabama are small hydropower sites, less than 10 MW (Figure 1).

The nonmodeled undeveloped hydropower potential total for Alabama was identified as 498 MW. The HES results lowers this estimate about 27% to 363 MW. The greatest reduction in undeveloped hydropower potential, by MW, occurs at sites that have some type of developed impoundment or diversion structure, but no hydropower generating capability (W/O category). These sites have a HES-modeled undeveloped hydropower potential of about 216 MW, a 65-MW reduction in the estimated undeveloped hydropower potential (Figure 2). Figure 3 correlates the number of sites that have undeveloped hydropower potential with the total megawatts of HES-modeled undeveloped hydropower potential.

The 33 identified sites are located within five major river basins. The number of sites per major river basin ranges from 1 in the Apalachicola and Escambia-Choctawhatchee River basins to 19 in the Alabama Coosa River basin (Figure 4). Ninety percent of the undeveloped hydropower potential in the State of Alabama is contained within the Alabama Coosa and Tombigbee River basins (Figure 5).

Table 1. Undeveloped hydropower potential summary for Alabama. The table contains the nonmodeled undeveloped nameplate potential and the HES-modeled undeveloped potential totals.

	Number of projects	Nameplate potential (MW)	HES-modeled potential (MW)
With Power	4	70.5	35.3
W/O Power	21	280.8	215.9
Undeveloped	8	146.2	111.6
State Total	33	497.5	362.8

Figure 1. Number of sites, by capacity groups, with HES-modeled undeveloped hydropower potential.

Figure 2. The nonmodeled and HES-modeled undeveloped hydropower potential.

Figure 3. The number of sites with undeveloped hydropower potential and the total megawatts of HES-modeled undeveloped hydropower potential.

Figure 4. Number of sites with undeveloped hydropower potential in the Alabama river basins.

Figure 5. Megawatts of HES-modeled undeveloped hydropower potential in the Alabama river basins.

Detailed Results

The appendices contain, in the form of HES-generated reports, detailed information about the undeveloped hydropower potential in Alabama. The appendices contain the following information:

Appendix A summarizes the undeveloped hydropower potential by dam status groups. The number of sites, nonmodeled undeveloped hydropower potential, and HES-modeled undeveloped hydropower potential is provided based on the dam status.

Appendix B provides the hydropower resource assessment by river basin, which includes the project number, project name, stream name, dam status, nonmodeled undeveloped hydropower potential, and the HES-modeled undeveloped hydropower potential for each site. Subtotals are provided for each river basin.

Appendix C lists the project numbers, plant name, stream name, if a site is Federally owned, nonmodeled undeveloped hydropower potential,

and HES-modeled undeveloped hydropower potential. The sites are grouped by dam status.

Appendix D contains a resource database list for the 33 sites in Alabama. Information includes plant name, stream, state, county, river basin and owner names, project number, nameplate and HES-modeled undeveloped hydropower potential, the unit and plant types, dam status, latitude, longitude, and the environmental factors that the HES uses to determine the PESF.

OBTAINING INDIVIDUAL STATE INFORMATION

Additional copies of the hydropower resource assessment results for individual states are available and can be obtained by writing or calling the authors or the National Technical Information Service (NTIS).

Telephone Orders—(703) 487-4650. NTIS sales desk and customer services are available between 8:30 a.m. and 5:00 p.m., Eastern Standard Time.

Fax—(703) 321-8547. Customers may fax their orders to NTIS. These orders may be charged to a NTIS deposit account, American Express, VISA, or MasterCard.

Mail Orders—Mail orders should be sent to National Technical Information Service, Document Sales, 5285 Port Royal Road, Springfield, VA 22161. Call the sales desk for prices before placing an order.

E-mail—Customers may e-mail their requests to info@ntis.fedworld.gov.

Method of Payment—Customers may pay for reports (and other NTIS products and services) by (a) credit card (American Express, Visa or MasterCard); (b) check or money order on a United States bank payable to NTIS; (c) NTIS deposit account; or, (d) by asking to be billed (add \$7.50 per order), United States, Canada, and Mexico, only.

Handling Fee—A \$4.00 handling fee per total order applies to orders from the United States, Canada, and Mexico. Handling charges do not apply to rush order service or pick-up orders.

Postage and Shipping—Orders are shipped first class mail, or equivalent, to addresses in the United States, Canada, and Mexico.

Order Turnaround Time—Orders for technical reports generally are shipped within 3 to 5 days of receipt. For faster service, NTIS offers rush order service.

Rush Order Service—Call 1-800-533-NTIS. In Virginia, Canada, and Mexico call (703) 487-4700. For NTIS rush order service add \$15

per item. This guarantees that an order will be processed through NTIS within 24 hours of its receipt. These orders receive immediate, individual attention. The items ordered are delivered by first call mail. Call NTIS for information on rush order service for computer products.

For Help in Tracing an Order—Call (703) 487-4650 and request the customer service option.

ADDITIONAL HYDROPOWER EVALUATION SOFTWARE INFORMATION

Additional information concerning the HES can be obtained by contacting Ben Rinehart or Jim Francfort at the addresses provided below. Copies of the software and the User's Manual may also be obtained from these individuals.

Ben Rinehart, Project Manager
Idaho National Engineering and Environmental
Laboratory
P.O. Box 1625, MS 3830
Idaho Falls, ID 83415-3830
(208) 526-1002

Jim Francfort
Idaho National Engineering and Environmental
Laboratory
P.O. Box 1625, MS 3830
Idaho Falls, ID 83415-3830
(208) 526-6787

REFERENCES

Conner, A. M., J. E. Francfort, and B. N. Rinehart, 1996, *Uniform Criteria for U.S. Hydropower Resource Assessment, Hydropower Evaluation Software Status Report-II*, DOE/ID 10430.1, Idaho National Engineering Laboratory, Idaho Falls, Idaho.

Francfort, J. E., S. D. Matthews, and B. N. Rinehart, 1991, *Hydropower Evaluation Software User's Manual*, DOE/ID-10338, Idaho National Engineering Laboratory, Idaho Falls, Idaho.

Appendix A
Summary Report

DATE: 01/12/98

H Y D R O P O W E R C A P A C I T Y S U M M A R Y

<u>State</u>	<u>Category</u>	<u>Number of Projects</u>	<u>Name Plate Capacity (KW)</u>	<u>HES Adjusted Capacity (KW)</u>
AL	With Power	4	70450	35285
	W/O Power	21	280814	215922.60
	Undeveloped	8	146200	111580
	STATE TOTAL	33	497464	362787.60
TOTALS	With Power	4	70450	35285
	W/O Power	21	280814	215922.60
	Undeveloped	8	146200	111580
GRAND TOTAL		33	497464	362787.60

Appendix B
River Basins Report

Page No. 1
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY RIVER BASIN

FERC Number	Plant Name/ Stream	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
** River Basin ALABAMA COOSA RIVER BASIN					
AL005	MITCHELL COOSA R	U	96500.00	0.90	86850.00
AL006	YELLOWLEAF YELLOWLEAF CR	U	4000.00	0.90	3600.00
AL007	BIG WILLS BIG WILLS CR	U	3000.00	0.90	2700.00
AL008	TERRAPIN CREEK TERRAPIN CR, COOSA R	U	2600.00	0.90	2340.00
AL009	LITTLE RIVER LITTLE R	U	14500.00	0.10	1450.00
AL010	MILLS CREEK MILLS CR, CHATTOOGA R	U	4600.00	0.90	4140.00
02407A	THURLOW TALLAPOOSA R	W	5500.00	0.50	2750.00
02407B	YATES TALLAPOOSA R	W	4800.00	0.50	2400.00
00349	MARTIN DAM TALLAPOOSA R	W	60000.00	0.50	30000.00
08233	TALLAPOOSA RIVER TALLAPOOSA R	W	150.00	0.90	135.00
10564	CLAIBORNE L&D ALABAMA R	WO	15200.00	0.75	11400.00
AL001	MILLERS FERRY L&D ALABAMA R	WO	64300.00	0.90	57870.00
AL002	OAK MOUNTAIN NEW LAKE CAHABA R	WO	67.00	0.90	60.30
AL003	OAK MOUNTAIN LAKE 1 CAHABA R	WO	92.00	0.90	82.80
AL004	OAK MOUNTAIN LAKE 2 CAHABA R	WO	55.00	0.90	49.50
08753	WALLAHATCHEE TALLAPOOSA R	WO	24000.00	0.50	12000.00

Page No. 2
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY RIVER BASIN

FERC Number	Plant Name/ Stream	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
08775	DESOTO W FK LITTLE R	WO	700.00	0.50	350.00
AL011	UPPER ESCATAWPA ESCATAWPA R	WO	13000.00	0.90	11700.00
10460	LITTLE TALLAPOOSA RIVER L TALLAPOOSA R	WO	300.00	0.90	270.00
** Subtotal **			313364.00		230147.60
** River Basin APALACHICOLA RIVER BASIN					
07115	GEORGE W ANDREWS L&D CHATAHOOCHEE R	WO	35400.00	0.75	26550.00
** Subtotal **			35400.00		26550.00
** River Basin ESCAMBIA-CHOCTAWHATCHEE RB					
10691	ELBA PEA R	WO	2500.00	0.90	2250.00
** Subtotal **			2500.00		2250.00
** River Basin TENNESSEE RIVER BASIN					
AL012	CEDAR CREEK CEDAR CR, BEAR CR	WO	4030.00	0.75	3022.50
AL013	BEAR CREEK BEAR CR	WO	2070.00	0.75	1552.50
** Subtotal **			6100.00		4575.00
** River Basin TOMBIGBEE RIVER BASIN					
08466	WARRIOR L&D BLACK WARRIOR R	U	6000.00	0.50	3000.00
10407	OLIVER L&D REPL BLACK WARRIOR	U	15000.00	0.50	7500.00
08862	COFFEEVILLE L&D TOMBIGBEE R	WO	24000.00	0.75	18000.00
02912	DEMOPOLIS L&D TOMBIGBEE R	WO	37500.00	0.75	28125.00

Page No. 3
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY RIVER BASIN

FERC Number	Plant Name/ Stream	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
10368A	LAKE TUSCALOOSA NORTH R, BLACK WARRIOR R	WO	3000.00	0.90	2700.00
09876	VILLAGE CREEK VILLAGE CR, LOCUST FK	WO	1100.00	0.90	990.00
08812	GAINESVILLE L&D TOMBIGBEE R	WO	24000.00	0.75	18000.00
08435	ALICEVILLE L&D TOMBIGBEE R	WO	20000.00	0.75	15000.00
10368B	NORTH RIVER NORTH R	WO	3000.00	0.90	2700.00
11154	LOCUST FORK LOCUST FK, BLACK WARRIOR R	WO	6500.00	0.50	3250.00
** Subtotal **			140100.00		99265.00
*** Total ***			497464.00		362787.60

Appendix C
Alabama Sites List

Page No. 1
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY FERC NUMBER

Plant Name/ Stream	ST	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
** FERC Number 08466 WARRIOR L&D BLACK WARRIOR R	AL	U	6000.00	0.50	3000.00
** Subtotal **			6000.00		3000.00
** FERC Number 10407 OLIVER L&D REPL BLACK WARRIOR	AL	U	15000.00	0.50	7500.00
** Subtotal **			15000.00		7500.00
** FERC Number AL005 MITCHELL COOSA R	AL	U	96500.00	0.90	86850.00
** Subtotal **			96500.00		86850.00
** FERC Number AL006 YELLOWLEAF YELLOWLEAF CR	AL	U	4000.00	0.90	3600.00
** Subtotal **			4000.00		3600.00
** FERC Number AL007 BIG WILLS BIG WILLS CR	AL	U	3000.00	0.90	2700.00
** Subtotal **			3000.00		2700.00
** FERC Number AL008 TERRAPIN CREEK TERRAPIN CR, COOSA R	AL	U	2600.00	0.90	2340.00
** Subtotal **			2600.00		2340.00
** FERC Number AL009 LITTLE RIVER LITTLE R	AL	U	14500.00	0.10	1450.00

Page No. 2
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY FERC NUMBER

Plant Name/ Stream	ST	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
** Subtotal **			14500.00		1450.00
** FERC Number AL010 MILLS CREEK MILLS CR, CHATTOOGA R	AL	U	4600.00	0.90	4140.00
** Subtotal **			4600.00		4140.00
** FERC Number 00349 MARTIN DAM TALLAPOOSA R	AL	W	60000.00	0.50	30000.00
** Subtotal **			60000.00		30000.00
** FERC Number 02407A THURLOW TALLAPOOSA R	AL	W	5500.00	0.50	2750.00
** Subtotal **			5500.00		2750.00
** FERC Number 02407B YATES TALLAPOOSA R	AL	W	4800.00	0.50	2400.00
** Subtotal **			4800.00		2400.00
** FERC Number 08233 TALLAPOOSA RIVER TALLAPOOSA R	AL	W	150.00	0.90	135.00
** Subtotal **			150.00		135.00
** FERC Number 02912 DEMOPOLIS L&D TOMBIGBEE R	AL	WO	37500.00	0.75	28125.00
** Subtotal **			37500.00		28125.00

Page No. 3
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY FERC NUMBER

Plant Name/ Stream	ST	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
** FERC Number 07115 GEORGE W ANDREWS L&D CHATTAHOOCHEE R	AL	WO	35400.00	0.75	26550.00
** Subtotal **			35400.00		26550.00
** FERC Number 08435 ALICEVILLE L&D TOMBIGBEE R	AL	WO	20000.00	0.75	15000.00
** Subtotal **			20000.00		15000.00
** FERC Number 08753 WALLAHATCHEE TALLAPOOSA R	AL	WO	24000.00	0.50	12000.00
** Subtotal **			24000.00		12000.00
** FERC Number 08775 DESOTO W FK LITTLE R	AL	WO	700.00	0.50	350.00
** Subtotal **			700.00		350.00
** FERC Number 08812 GAINESVILLE L&D TOMBIGBEE R	AL	WO	24000.00	0.75	18000.00
** Subtotal **			24000.00		18000.00
** FERC Number 08862 COFFEEVILLE L&D TOMBIGBEE R	AL	WO	24000.00	0.75	18000.00
** Subtotal **			24000.00		18000.00
** FERC Number 09876 VILLAGE CREEK VILLAGE CR, LOCUST FK	AL	WO	1100.00	0.90	990.00

Page No. 4
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY FERC NUMBER

Plant Name/ Stream	ST	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
** Subtotal **			1100.00		990.00
** FERC Number 10368A LAKE TUSCALOOSA NORTH R, BLACK WARRIOR R	AL	WO	3000.00	0.90	2700.00
** Subtotal **			3000.00		2700.00
** FERC Number 10368B NORTH RIVER NORTH R	AL	WO	3000.00	0.90	2700.00
** Subtotal **			3000.00		2700.00
** FERC Number 10460 LITTLE TALLAPOOSA RIVER L TALLAPOOSA R	AL	WO	300.00	0.90	270.00
** Subtotal **			300.00		270.00
** FERC Number 10564 CLAIBORNE L&D ALABAMA R	AL	WO	15200.00	0.75	11400.00
** Subtotal **			15200.00		11400.00
** FERC Number 10691 ELBA PEA R	AL	WO	2500.00	0.90	2250.00
** Subtotal **			2500.00		2250.00
** FERC Number 11154 LOCUST FORK LOCUST FK, BLACK WARRIOR R	AL	WO	6500.00	0.50	3250.00
** Subtotal **			6500.00		3250.00

Page No. 5
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY FERC NUMBER

Plant Name/ Stream	ST	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
** FERC Number AL001 MILLERS FERRY L&D ALABAMA R	AL	WO	64300.00	0.90	57870.00
** Subtotal **			64300.00		57870.00
** FERC Number AL002 OAK MOUNTAIN NEW LAKE CAHABA R	AL	WO	67.00	0.90	60.30
** Subtotal **			67.00		60.30
** FERC Number AL003 OAK MOUNTAIN LAKE 1 CAHABA R	AL	WO	92.00	0.90	82.80
** Subtotal **			92.00		82.80
** FERC Number AL004 OAK MOUNTAIN LAKE 2 CAHABA R	AL	WO	55.00	0.90	49.50
** Subtotal **			55.00		49.50
** FERC Number AL011 UPPER ESCATAWPA ESCATAWPA R	AL	WO	13000.00	0.90	11700.00
** Subtotal **			13000.00		11700.00
** FERC Number AL012 CEDAR CREEK CEDAR CR,BEAR CR	AL	WO	4030.00	0.75	3022.50
** Subtotal **			4030.00		3022.50
** FERC Number AL013 BEAR CREEK BEAR CR	AL	WO	2070.00	0.75	1552.50

Page No. 6
01/12/98

HYDROPOWER RESOURCE ASSESSMENT BY FERC NUMBER

Plant Name/ Stream	Dam ST Stat	Name Plate Rating (KW) PESF	PESF * KW
** Subtotal **		2070.00	1552.50
*** Total ***		497464.00	362787.60

Appendix D

Individual Resource Database List

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 1

FERC Number	Plant Name	Stream	State Name
00349	MARTIN DAM	TALLAPOOSA R	AL

County Name	River Basin
ELMORE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
P	ALABAMA POWER CO

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
60000.00	0.50	30000.00	98800.00	49400

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3241.00 8555.00
C	STG	MO	W		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value	Y	0.75
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value	Y	0.75	Federal Land Code 103		0.90
Fish Presence Value	Y	0.75	Federal Land Code 104	Y	0.75
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value	Y	0.75	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value	Y	0.75	Federal Land Code 108		0.90
Scenic Value	Y	0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 2

FERC Number	Plant Name	Stream	State Name
02407A	THURLOW	TALLAPOOSA R	AL

County Name	River Basin
ELMORE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
P	ALABAMA POWER CO,ET AL

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
5500.00	0.50	2750.00	14400.00	7200

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3233.00 8550.00
C	ROR	MO	W		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value	Y	0.75
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value	Y	0.75	Federal Land Code 103		0.90
Fish Presence Value	Y	0.75	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value	Y	0.75	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value	Y	0.75	Federal Land Code 108		0.90
Scenic Value	Y	0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 3

FERC Number	Plant Name	Stream	State Name
02407B	YATES	TALLAPOOSA R	AL

County Name	River Basin
ELMORE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
P	ALABAMA POWER CO

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
4800.00	0.50	2400.00	16000.00	8000

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3234.00	Longitude	8554.00
C	STG	MO	W				

Factor	Exist	Prob	Factor	Exist	Prob
--------	-------	------	--------	-------	------

Wild/Scenic Protection		0.90	Wildlife Value	Y	0.75
Wild/Scenic Tributary or			Threatened/Endangered Fish		0.90
Upstream/Downstream			Threatened/Endangered Wildlife		0.90
Wild/Scenic Location		0.90	Federal Land Code 103		0.90
Cultural Value	Y	0.75	Federal Land Code 104	Y	0.75
Fish Presence Value	Y	0.75	Federal Land Code 105		0.90
Geologic Value		0.90	Federal Land Code 106		0.90
Historic Value	Y	0.75	Federal Land Code 107		0.90
Other Value		0.90	Federal Land Code 108		0.90
Recreation Value	Y	0.75	Federal Land Code 198		0.90
Scenic Value	Y	0.90			

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 4

FERC Number	Plant Name	Stream	State Name
02912	DEMOPOLIS L&D	TOMBIGBEE R	AL

County Name	River Basin
SUMTER	TOMBIGBEE RIVER BASIN

Class	Owner Name
C	ALABAMA ELECTRIC COOP INC

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
37500.00	0.75	28125.00	153000.00	114750

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3231.00 8753.00
C	ROR	XX	WO		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108	Y	0.75
Scenic Value		0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 5

FERC Number	Plant Name	Stream	State Name
07115	GEORGE W ANDREWS L&D	CHATTAHOOCHEE R	AL

County Name	River Basin
HOUSTON	APALACHICOLA RIVER BASIN

Class	Owner Name
M	MUN ELEC AUTH GA,ET AL

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
35400.00	0.75	26550.00	82100.00	61575

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3115.00 8507.00
C	STG	MO	WO		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108	Y	0.75
Scenic Value		0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 6

FERC Number	Plant Name	Stream	State Name
08233	TALLAPOOSA RIVER	TALLAPOOSA R	AL

County Name	River Basin
CLEBURNE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
R	PYLE,D S & MCCONNELL,R H

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
150.00	0.90	135.00	1128.00	1015.20

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3333.00
C	ROR	LE	W	Longitude	8535.00

Factor	Exist Prob	Factor	Exist Prob
Wild/Scenic Protection	0.90	Wildlife Value	0.90
Wild/Scenic Tributary or Upstream/Downstream		Threatened/Endangered Fish	0.90
Wild/Scenic Location	0.90	Threatened/Endangered Wildlife	0.90
Cultural Value	0.90	Federal Land Code 103	0.90
Fish Presence Value	0.90	Federal Land Code 104	0.90
Geologic Value	0.90	Federal Land Code 105	0.90
Historic Value	0.90	Federal Land Code 106	0.90
Other Value	0.90	Federal Land Code 107	0.90
Recreation Value	0.90	Federal Land Code 108	0.90
Scenic Value	0.90	Federal Land Code 198	0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 7

FERC Number	Plant Name	Stream	State Name
08435	ALICEVILLE L&D	TOMBIGBEE R	AL

County Name	River Basin
PICKENS	TOMBIGBEE RIVER BASIN

Class	Owner Name
R	INDEPENDENCE ELEC CORP

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
20000.00	0.75	15000.00	63500.00	47625

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3312.00 8817.00
C	ROR	XX	WO		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection	0.90		Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location	0.90		Threatened/Endangered Wildlife		0.90
Cultural Value	0.90		Federal Land Code 103		0.90
Fish Presence Value	0.90		Federal Land Code 104		0.90
Geologic Value	0.90		Federal Land Code 105		0.90
Historic Value	0.90		Federal Land Code 106		0.90
Other Value	0.90		Federal Land Code 107		0.90
Recreation Value	0.90		Federal Land Code 108	Y	0.75
Scenic Value	0.90		Federal Land Code 198		0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 8

FERC Number	Plant Name	Stream	State Name
08466	WARRIOR L&D	BLACK WARRIOR R	AL

County Name	River Basin
GREENE	TOMBIGBEE RIVER BASIN

Class	Owner Name
R	INDEPENDENCE ELEC CORP

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
6000.00	0.50	3000.00	27900.00	13950

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3247.00
C	ROR	XX	U	Longitude	8750.00

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection	0.90		Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location	0.90		Threatened/Endangered Wildlife		0.90
Cultural Value	0.90		Federal Land Code 103		0.90
Fish Presence Value	0.90		Federal Land Code 104		0.90
Geologic Value	0.90		Federal Land Code 105		0.90
Historic Value	0.90		Federal Land Code 106		0.90
Other Value	0.90		Federal Land Code 107		0.90
Recreation Value	0.90		Federal Land Code 108	Y	0.50
Scenic Value	0.90		Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 9

FERC Number	Plant Name	Stream	State Name
08753	WALLAHATCHEE	TALLAPOOSA R	AL

County Name	River Basin
ELMORE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
R	INDEPENDENCE ELEC CORP

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
24000.00	0.50	12000.00	76000.00	38000

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3227.00 8553.00
C	ROR	XX	WO		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value	Y	0.75
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value	Y	0.75	Federal Land Code 103		0.90
Fish Presence Value	Y	0.75	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value	Y	0.75	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value	Y	0.75	Federal Land Code 108	Y	0.75
Scenic Value	Y	0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 10

FERC Number	Plant Name	Stream	State Name
08775	DESOTO	W FK LITTLE R	AL

County Name	River Basin
DEKALB	ALABAMA COOSA RIVER BASIN

Class	Owner Name
R	DESOTO HYDRO ASSOC

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
700.00	0.50	350.00	2000.00	1000

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3433.00
C	ROR	XX	WO	Longitude	8536.00

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection	Y	0.50	Wildlife Value	Y	0.75
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value	Y	0.75	Federal Land Code 103		0.90
Fish Presence Value	Y	0.75	Federal Land Code 104		0.90
Geologic Value	Y	0.90	Federal Land Code 105		0.90
Historic Value	Y	0.75	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value	Y	0.75	Federal Land Code 108		0.90
Scenic Value	Y	0.90	Federal Land Code 198		0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 11

FERC Number	Plant Name	Stream	State Name
08812	GAINESVILLE L&D	TOMBIGBEE R	AL
County Name	River Basin		
GREENE	TOMBIGBEE RIVER BASIN		
Class	Owner Name		
R	INDEPENDENCE ELEC CORP		
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)
24000.00	0.75	18000.00	82700.00
			PESF Annual Energy Rating (MWh)
			62025
Unit Type	Plant Type	Project Status	Dam Status
C	ROR	XX	WO
Latitude	3250.00	Longitude	8810.00
Factor	Exist Prob	Factor	Exist Prob
Wild/Scenic Protection	0.90	Wildlife Value	0.90
Wild/Scenic Tributary or Upstream/Downstream		Threatened/Endangered Fish	0.90
Wild/Scenic Location	0.90	Threatened/Endangered Wildlife	0.90
Cultural Value	0.90	Federal Land Code 103	0.90
Fish Presence Value	0.90	Federal Land Code 104	0.90
Geologic Value	0.90	Federal Land Code 105	0.90
Historic Value	0.90	Federal Land Code 106	0.90
Other Value	0.90	Federal Land Code 107	0.90
Recreation Value	0.90	Federal Land Code 108	Y 0.75
Scenic Value	0.90	Federal Land Code 198	0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 12

FERC Number	Plant Name	Stream	State Name
08862	COFFEEVILLE L&D	TOMBIGBEE R	AL

County Name	River Basin
CLARKE	TOMBIGBEE RIVER BASIN

Class	Owner Name
R	COFFEEVILLE HYDRO PARTNERS

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
24000.00	0.75	18000.00	93700.00	70275

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3145.00
C	ROR	XX	WO	Longitude	8808.00

Factor	Exist Prob	Factor	Exist Prob
Wild/Scenic Protection	0.90	Wildlife Value	0.90
Wild/Scenic Tributary or Upstream/Downstream		Threatened/Endangered Fish	0.90
Wild/Scenic Location	0.90	Threatened/Endangered Wildlife	0.90
Cultural Value	0.90	Federal Land Code 103	0.90
Fish Presence Value	0.90	Federal Land Code 104	0.90
Geologic Value	0.90	Federal Land Code 105	0.90
Historic Value	0.90	Federal Land Code 106	0.90
Other Value	0.90	Federal Land Code 107	0.90
Recreation Value	0.90	Federal Land Code 108	Y 0.75
Scenic Value	0.90	Federal Land Code 198	0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 13

FERC Number	Plant Name	Stream	State Name
09876	VILLAGE CREEK	VILLAGE CR, LOCUST FK	AL

County Name	River Basin
JEFFERSON	TOMBIGBEE RIVER BASIN

Class	Owner Name
R	CLEARWATER HYDRO ASSOC

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
1100.00	0.90	990.00	4730.00	4257

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3334.00 8659.00
C	ROR	XX	WO		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 14

FERC Number	Plant Name	Stream	State Name
10368A	LAKE TUSCALOOSA	NORTH R, BLACK WARRIOR R	AL

County Name	River Basin
TUSCALOOSA	TOMBIGBEE RIVER BASIN

Class	Owner Name
R	TUSCALOOSA HYDRO ASSOC

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
3000.00	0.90	2700.00	13800.00	12420

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3316.00
C	ROR	XX	WO	Longitude	8731.00

Factor	Exist Prob	Factor	Exist Prob
Wild/Scenic Protection	0.90	Wildlife Value	0.90
Wild/Scenic Tributary or Upstream/Downstream		Threatened/Endangered Fish	0.90
Wild/Scenic Location	0.90	Threatened/Endangered Wildlife	0.90
Cultural Value	0.90	Federal Land Code 103	0.90
Fish Presence Value	0.90	Federal Land Code 104	0.90
Geologic Value	0.90	Federal Land Code 105	0.90
Historic Value	0.90	Federal Land Code 106	0.90
Other Value	0.90	Federal Land Code 107	0.90
Recreation Value	0.90	Federal Land Code 108	0.90
Scenic Value	0.90	Federal Land Code 198	0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 15

FERC Number	Plant Name	Stream	State Name
10368B	NORTH RIVER	NORTH R	AL

County Name	River Basin
TUSCALOOSA	TOMBIGBEE RIVER BASIN

Class	Owner Name
R	TUSCALOOSA HYDRO ASSOC

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
3000.00	0.90	2700.00	13800.00	12420

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3300.00
C	ROR	XX	WO	Longitude	8700.00

Factor	Exist Prob	Factor	Exist Prob
Wild/Scenic Protection	0.90	Wildlife Value	0.90
Wild/Scenic Tributary or Upstream/Downstream		Threatened/Endangered Fish	0.90
Wild/Scenic Location	0.90	Threatened/Endangered Wildlife	0.90
Cultural Value	0.90	Federal Land Code 103	0.90
Fish Presence Value	0.90	Federal Land Code 104	0.90
Geologic Value	0.90	Federal Land Code 105	0.90
Historic Value	0.90	Federal Land Code 106	0.90
Other Value	0.90	Federal Land Code 107	0.90
Recreation Value	0.90	Federal Land Code 108	0.90
Scenic Value	0.90	Federal Land Code 198	0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 16

FERC Number	Plant Name	Stream	State Name
10407	OLIVER L&D REPL	BLACK WARRIOR	AL

County Name	River Basin
TUSCALOOSA	TOMBIGBEE RIVER BASIN

Class	Owner Name
R	INDEPENDENCE ELEC COREP

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
15000.00	0.50	7500.00	60000.00	30000

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3312.00	Longitude	8736.00
C	ROR	XX	U				

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108	Y	0.50
Scenic Value		0.90	Federal Land Code 198		0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 17

FERC Number	Plant Name	Stream	State Name
10460	LITTLE TALLAPOOSA RIVER	L TALLAPOOSA R	AL

County Name	River Basin
RANDOLPH	ALABAMA COOSA RIVER BASIN

Class	Owner Name
R	PYLE, D S ET AL

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
300.00	0.90	270.00	1752.00	1576.80

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3327.00
C	ROR	XX	WO	Longitude	8634.00

Factor	Exist	Prob	Factor	Exist	Prob
--------	-------	------	--------	-------	------

Wild/Scenic Protection	0.90	Wildlife Value	0.90
Wild/Scenic Tributary or Upstream/Downstream		Threatened/Endangered Fish	0.90
Wild/Scenic Location	0.90	Threatened/Endangered Wildlife	0.90
Cultural Value	0.90	Federal Land Code 103	0.90
Fish Presence Value	0.90	Federal Land Code 104	0.90
Geologic Value	0.90	Federal Land Code 105	0.90
Historic Value	0.90	Federal Land Code 106	0.90
Other Value	0.90	Federal Land Code 107	0.90
Recreation Value	0.90	Federal Land Code 108	0.90
Scenic Value	0.90	Federal Land Code 198	0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 18

FERC Number	Plant Name	Stream	State Name
10564	CLAIBORNE L&D	ALABAMA R	AL

County Name	River Basin
MONROE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
R	EDWARDS ENERGY SYSTEMS INC

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
15200.00	0.75	11400.00	99500.00	74625

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3137.00
C	ROR	XX	WO	Longitude	8733.00

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108	Y	0.75
Scenic Value		0.90	Federal Land Code 198		0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 19

FERC Number	Plant Name	Stream	State Name
10691	ELBA	PEA R	AL

County Name	River Basin
COFFEE	ESCAMBIA-CHOCTAWHATCHEE RB

Class	Owner Name
R	ELBA HYDROELECTRIC PWR INC

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
2500.00	0.90	2250.00	11000.00	9900

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3122.00 8606.00
C	ROR	LE	WO		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 20

FERC Number	Plant Name	Stream	State Name
11154	LOCUST FORK	LOCUST FK, BLACK WARRIOR R	AL

County Name	River Basin
BLOUNT	TOMBIGBEE RIVER BASIN

Class	Owner Name
M	BIRMINGHAM, CITY OF

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
6500.00	0.50	3250.00	34000.00	17000

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3350.00
C	STG	XX	WO	Longitude	8645.00

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value	Y	0.75
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value	Y	0.75	Federal Land Code 103		0.90
Fish Presence Value	Y	0.75	Federal Land Code 104		0.90
Geologic Value	Y	0.90	Federal Land Code 105		0.90
Historic Value	Y	0.75	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value	Y	0.75	Federal Land Code 108		0.90
Scenic Value	Y	0.90	Federal Land Code 198		0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 21

FERC Number	Plant Name	Stream	State Name
AL001	MILLERS FERRY L&D	ALABAMA R	AL

County Name	River Basin
WILCOX	ALABAMA COOSA RIVER BASIN

Class	Owner Name
F	CORPS OF ENGINEERS

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
64300.00	0.90	57870.00	115000.00	103500

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3206.00
C	ROR		WO	Longitude	8724.00

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 22

FERC Number	Plant Name	Stream	State Name
AL002	OAK MOUNTAIN NEW LAKE	CAHABA R	AL

County Name	River Basin
SHELBY	ALABAMA COOSA RIVER BASIN

Class	Owner Name
M	LA DEPT OF C&NR

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
67.00	0.90	60.30	587.00	528.30

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3317.00	Longitude	8652.00
C	ROR		WO				

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection	0.90		Wildlife Value	0.90	
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish	0.90	
Wild/Scenic Location	0.90		Threatened/Endangered Wildlife	0.90	
Cultural Value	0.90		Federal Land Code 103	0.90	
Fish Presence Value	0.90		Federal Land Code 104	0.90	
Geologic Value	0.90		Federal Land Code 105	0.90	
Historic Value	0.90		Federal Land Code 106	0.90	
Other Value	0.90		Federal Land Code 107	0.90	
Recreation Value	0.90		Federal Land Code 108	0.90	
Scenic Value	0.90		Federal Land Code 198	0.90	

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 23

FERC Number	Plant Name	Stream	State Name
AL003	OAK MOUNTAIN LAKE 1	CAHABA R	AL

County Name	River Basin
SHELBY	ALABAMA COOSA RIVER BASIN

Class	Owner Name
M	ALABAMA DEPT OF C&NR

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
92.00	0.90	82.80	806.00	725.40

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3318.00 8650.00
C	ROR		WO		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 24

FERC Number	Plant Name	Stream	State Name
AL004	OAK MOUNTAIN LAKE 2	CAHABA R	AL

County Name	River Basin
SHELBY	ALABAMA COOSA RIVER BASIN

Class	Owner Name
M	ALABAMA DEPT OF C&NR

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
55.00	0.90	49.50	481.00	432.90

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3321.00	Longitude	8648.00
C	ROR		WO				

Factor	Exist Prob	Factor	Exist Prob
Wild/Scenic Protection	0.90	Wildlife Value	0.90
Wild/Scenic Tributary or Upstream/Downstream		Threatened/Endangered Fish	0.90
Wild/Scenic Location	0.90	Threatened/Endangered Wildlife	0.90
Cultural Value	0.90	Federal Land Code 103	0.90
Fish Presence Value	0.90	Federal Land Code 104	0.90
Geologic Value	0.90	Federal Land Code 105	0.90
Historic Value	0.90	Federal Land Code 106	0.90
Other Value	0.90	Federal Land Code 107	0.90
Recreation Value	0.90	Federal Land Code 108	0.90
Scenic Value	0.90	Federal Land Code 198	0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 25

FERC Number	Plant Name	Stream	State Name
AL005	MITCHELL	COOSA R	AL

County Name	River Basin
CHILTON	ALABAMA COOSA RIVER BASIN

Class	Owner Name
P	ALABAMA POWER CO

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
96500.00	0.90	86850.00	176900.00	159210

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3247.00 8630.00
C	ROR		U		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 26

FERC Number	Plant Name	Stream	State Name
AL006	YELLOWLEAF	YELLOWLEAF CR	AL

County Name	River Basin
SHELBY	ALABAMA COOSA RIVER BASIN

Class	Owner Name
F	CORPS OF ENGINEERS

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
4000.00	0.90	3600.00	3500.00	3150

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3315.00
C	ROR		U	Longitude	8627.00

<u>Factor</u>	<u>Exist</u>	<u>Prob</u>	<u>Factor</u>	<u>Exist</u>	<u>Prob</u>
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 27

FERC Number	Plant Name	Stream	State Name
AL007	BIG WILLS	BIG WILLS CR	AL

County Name	River Basin
ETOWAH	ALABAMA COOSA RIVER BASIN

Class	Owner Name
F	CORPS OF ENGINEERS

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
3000.00	0.90	2700.00	8500.00	7650

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3409.00 8557.00
C	ROR		U		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 28

FERC Number	Plant Name	Stream	State Name
AL008	TERRAPIN CREEK	TERRAPIN CR, COOSA R	AL

County Name	River Basin
CHEROKEE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
-------	------------

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
2600.00	0.90	2340.00	9700.00	8730

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3410.00 8542.00
C	STG		U		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 29

FERC Number	Plant Name	Stream	State Name
AL009	LITTLE RIVER	LITTLE R	AL

County Name	River Basin
CHEROKEE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
-------	------------

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
14500.00	0.10	1450.00	46000.00	4600

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3426.00 8535.00
C	STG		U		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection	Y	0.10	Wildlife Value	Y	0.25
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value	Y	0.50	Federal Land Code 103		0.90
Fish Presence Value	Y	0.25	Federal Land Code 104		0.90
Geologic Value	Y	0.50	Federal Land Code 105		0.90
Historic Value	Y	0.50	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value	Y	0.25	Federal Land Code 108		0.90
Scenic Value	Y	0.50	Federal Land Code 198		0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 30

FERC Number	Plant Name	Stream	State Name
AL010	MILLS CREEK	MILLS CR, CHATTOOGA R	AL

County Name	River Basin
CHEROKEE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
-------	------------

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
4600.00	0.90	4140.00	12000.00	10800

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3417.00 8531.00
C	STG		U		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value		0.90	Federal Land Code 108		0.90
Scenic Value		0.90	Federal Land Code 198		0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 31

FERC Number	Plant Name	Stream	State Name
AL011	UPPER ESCATAWPA	ESCATAWPA R	AL

County Name	River Basin
MOBILE	ALABAMA COOSA RIVER BASIN

Class	Owner Name
-------	------------

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
13000.00	0.90	11700.00	24000.00	21600

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3054.00 8827.00
C	STG		WO		

Factor	Exist Prob	Factor	Exist Prob
--------	------------	--------	------------

Wild/Scenic Protection	0.90	Wildlife Value	0.90
Wild/Scenic Tributary or Upstream/Downstream		Threatened/Endangered Fish	0.90
Wild/Scenic Location	0.90	Threatened/Endangered Wildlife	0.90
Cultural Value	0.90	Federal Land Code 103	0.90
Fish Presence Value	0.90	Federal Land Code 104	0.90
Geologic Value	0.90	Federal Land Code 105	0.90
Historic Value	0.90	Federal Land Code 106	0.90
Other Value	0.90	Federal Land Code 107	0.90
Recreation Value	0.90	Federal Land Code 108	0.90
Scenic Value	0.90	Federal Land Code 198	0.90

R E S O U R C E D A T A B A S E L I S T I N G

DATE: 01/12/98

PAGE NO: 32

FERC Number	Plant Name	Stream	State Name
AL012	CEDAR CREEK	CEDAR CR, BEAR CR	AL

County Name	River Basin
FRANKLIN	TENNESSEE RIVER BASIN

Class	Owner Name
F	TENNESSEE VALLEY AUTH

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
4030.00	0.75	3022.50	11800.00	8850

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3433.00 Longitude 8758.00
C	STG		WO		

<u>Factor</u>		<u>Exist</u>	<u>Prob</u>	<u>Factor</u>		<u>Exist</u>	<u>Prob</u>
Wild/Scenic Protection		0.90		Wildlife Value			0.90
Wild/Scenic Tributary or Upstream/Downstream				Threatened/Endangered Fish			0.90
Wild/Scenic Location		0.90		Threatened/Endangered Wildlife			0.90
Cultural Value		0.90		Federal Land Code 103			0.90
Fish Presence Value		0.90		Federal Land Code 104			0.90
Geologic Value		0.90		Federal Land Code 105			0.90
Historic Value		0.90		Federal Land Code 106			0.90
Other Value		0.90		Federal Land Code 107			0.90
Recreation Value	Y	0.75		Federal Land Code 108			0.90
Scenic Value	Y	0.90		Federal Land Code 198			0.90

RESOURCE DATABASE LISTING

DATE: 01/12/98

PAGE NO: 33

FERC Number	Plant Name	Stream	State Name
AL013	BEAR CREEK	BEAR CR	AL

County Name	River Basin
FRANKLIN	TENNESSEE RIVER BASIN

Class	Owner Name
F	TENNESSEE VALLEY AUTH

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
2070.00	0.75	1552.50	5800.00	4350

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3424.00 8759.00
C	STG		WO		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
Wild/Scenic Tributary or Upstream/Downstream			Threatened/Endangered Fish		0.90
Wild/Scenic Location		0.90	Threatened/Endangered Wildlife		0.90
Cultural Value		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104		0.90
Geologic Value		0.90	Federal Land Code 105		0.90
Historic Value		0.90	Federal Land Code 106		0.90
Other Value		0.90	Federal Land Code 107		0.90
Recreation Value	Y	0.75	Federal Land Code 108		0.90
Scenic Value	Y	0.90	Federal Land Code 198		0.90