U.S. Hydropower Resource Assessment
for
Louisiana

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MASTER

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ABSTRACT

The Department of Energy is developing an estimate of the hydropower development potential in this country. The Hydropower Evaluation Software (HES) is a computer model that was developed by the Idaho National Engineering Laboratory for this purpose. The HES measures the potential 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 dBASE menu-driven software application 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 details the resource assessment results for the state of Louisiana.

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U.S. Hydropower Resource Assessment for Louisiana

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 potential hydropower resources were not well defined. As a result, the Department of Energy established an interagency Hydropower Resource Assessment Team to ascertain the 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 hydropower potential in Louisiana (as well as several other states). This report presents the results of the hydropower resource assessment for the state of Louisiana. Pumped storage hydropower potential is not included.

The HES was developed as a tool to measure hydropower potential by regional power marketing administrations and state energy agencies, because they were the most likely to have and need accurate hydropower information. The HES was not intended to provide precise development factors for individual sites, but to provide regional or state capacity 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 hydropower potential totals. The information for the resource assessment was compiled from the Federal Energy Regulatory Commission's Hydropower Resource 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,

the Status Report (Francfort, Moore, Rinehart, 1993) for an overview of all resource assessment activities to date.

Model Development

Hydropower Evaluation Software, both a probability-factor computer model and a data base, is a dBASE, menu-driven software application 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. Suitability factors depend on environmental attributes of a 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) absence of environmental concern can have little or no effect on the likelihood of site development (for a suitability factor of 0.9). A combination of attributes results in a lower suitability factor because multiple environmental considerations 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 potential hydropower sites in the United States for use as a planning tool to determine the viable national hydropower potential. Potential hydropower is not limited to the development of new sites; it also includes the development of additional hydropower at sites that currently have hydropower but are not developed to their full potential. This hydropower potential is a source of nonpolluting, renewable energy available to meet the growing power needs of the United States. The HES should make

this goal attainable and help assure a set of uniform criteria for national assessment.

Dam Status

The effects of environmental attributes vary by dam status. The dam status classifications follow the Federal Energy Regulatory Commission (FERC) standard, which is

- W = Developed hydropower site with power. The total hydropower capacity has not been fully developed. Only the undeveloped capacity is discussed in this report.
- W/O = Developed site without power generation. The site has some type of developed impoundment or diversion structure but no hydropower generating capacity.
- 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 22 sites have been identified and assessed for their hydropower potential. Information as to the potential megawatts of capacity for 1 of the sites was not available; however, this site has been identified as having hydropower potential and is included in the group of 22. The Hydropower Evaluation Software results for site capacities range from 250 kilowatts to 48.6 megawatts. Most of the sites have potential capacities of under 10 megawatts (Figure 1).

The unadjusted hydropower potential for Louisiana was identified as being 226 megawatts. The Hydropower Evaluation Software results lower this estimate 11% to 201 megawatts. The greatest reduction in undeveloped potential occurs at sites with no physical structures present. These undeveloped sites have a Hydropower Evaluation Software estimated capacity of 133 megawatts, a 11% reduction in capacity (Figure 2). The number of sites does not change, only the identified capacity is reassessed (Figure 3).

Figure 1. Number of sites with various capacity potentials. The unknown category is for sites that have hydropower potential but the size of the potential is undefined.

Figure 2. The Hydropower Evaluation Software identified potential hydropower capacity and the unadjusted potential capacity.

Figure 3. The number of sites with potential hydropower capacity and the total megawatts of potential capacity.

The 22 identified sites are located within 4 major river basins and several minor river basins. The number of sites per river basin ranges from 1 in the Pascagoula-Pearl River Basin to 10 sites in the Lower Red River Basin (Figure 4). The Lower Red River Basin has the most undeveloped potential hydropower capacity of the Louisiana river basins (Figure 5).

Detailed Results

The appendices contain, in the form of Hydropower Evaluation Software generated reports, detailed information of the potential hydropower capacity in Louisiana. The appendices contain the following information:

Appendix A The hydropower capacity summary for Louisiana categorizes sites by dam status. The number of sites, unadjusted capacity, and Hydropower Evaluation Software adjusted capacity are provided based on the dam status.

Appendix B The hydropower resource assessment by river basin includes the FERC project number, project

name, stream name, dam status, unadjusted capacity, and Hydropower Evaluation Software adjusted capacity for each of the individual sites. Subtotals are provided for each river basin.

Appendix C This is a listing of the project numbers, plant name, stream name, if a site is Federally owned, unadjusted capacity, and Hydropower Evaluation Software adjusted capacity. The sites are grouped by dam status.

Appendix D This section contains a resource database listing for each of the 22 sites in Louisiana. Information includes plant, stream, state, county, river basin and owner names; project number; name plate and Hydropower Evaluation Software adjusted capacity ratings; the unit and plant types, dam status; latitude; longitude; and the environmental factors that the Hydropower Evaluation Software uses to determine the project environmental suitability factor.

Figure 4. Number of sites with potential hydropower capacity in the Louisiana river basins.

Figure 5. Potential hydropower capacity in the Louisiana river basins.

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 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.

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) a NTIS deposit account; or (d) by asking to be billed (add \$7.50 per order, United States, Canada, and Mexico, only).

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

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

\$15.00 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 class 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 Hydropower Evaluation Software 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
Idaho National Engineering Laboratory
P.O. Box 1625
Idaho Falls, ID 83415-3830
(208) 526-1002

Jim Francfort
Idaho National Engineering Laboratory
P.O. Box 1625
Idaho Falls, ID 83415-3875
(208) 526-6787

Information concerning the state of Louisiana involvement with the resource assessment or about the identified sites may be obtained by contacting:

David Grouchy
State of Louisiana
Department of Transportation and Development
Room 437
1201 Capitol Access Road
Baton Rouge, LA 70802
(504) 379-1477

REFERENCES

- 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.
- Francfort, J. E., K. M. Moore, and B. N. Rinehart, 1993, *Uniform Criteria for U.S. Hydropower Resource Assessment, Hydropower Evaluation Software Status Report*, DOE/ID-10430, Idaho National Engineering Laboratory, Idaho Falls, Idaho.

Appendix A

Hydropower Capacity Summary

DATE: 12/21/93

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>
LA	With Power	0	0	0
	W/O Power	14	77895	67245.50
	Undeveloped	8	148135	133321.50
	STATE TOTAL	22	226030	200567
TOTALS	With Power	0	0	0
	W/O Power	14	77895	67245.50
	Undeveloped	8	148135	133321.50
GRAND TOTAL		22	226030	200567

Appendix B

Hydropower Resource Assessment by River Basin

HYDROPOWER RESOURCE ASSESSMENT BY RIVER BASIN

FERC Number	Plant Name/ Stream	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
** River Basin LOWER RED RIVER BASIN					
02908A	RED L&D 3 RED R	U	54000.00	0.90	48600.00
09604X	RED L&D 4 RED R	U	30000.00	0.90	27000.00
10459A	RED L&D 5 RED R	U	22000.00	0.90	19800.00
LA006	RED L&D 6 RED R	U	14000.00	0.90	12600.00
07042X	RED L&D 2 RED R	WO	25500.00	0.90	22950.00
07043X	RED L&D 1 RED R	WO	18000.00	0.90	16200.00
07179X	WALLACE LAKE DAM WALLACE BAYOU, RED R	WO	400.00	0.90	360.00
08201X	CADDO LAKE CYPRESS BAYOU , RED R	WO	1500.00	0.90	1350.00
LA005	BISTINEAU LOGGY BAYOU	WO	9370.00	0.90	8433.00
LA008	ALLEN-CHIVERY BAYOU BOURBEU	WO	6225.00	0.90	5602.50
** Subtotal **			180995.00		162895.50
** River Basin MINOR RIVER BASINS					
08358X	DARLINGTON AMITE R	U	6000.00	0.90	5400.00
LA001	HOO SHOO TOO AMITE R	U	12470.00	0.90	11223.00
LA002	DENHAM SPRINGS AMITE R	U	840.00	0.90	756.00
LA005	FELIXVILLE AMITE R	U	8825.00	0.90	7942.50
02854A	OLD RIVER - VIDALIA L OLD R,MISSISSIPPI R	WO	0.00	0.90	0.00

HYDROPOWER RESOURCE ASSESSMENT BY RIVER BASIN

FERC Number	Plant Name/ Stream	Dam Stat	Name Plate Rating (KW)	PESF	PESF * KW
** Subtotal **			28135.00		25321.50
** River Basin NECHES-SABINE RIVER BASINS					
06933X	LAKE ANACOCO SABINE R	WO	1200.00	0.50	600.00
06934X	LAKE VERNON SABINE R	WO	500.00	0.50	250.00
** Subtotal **			1700.00		850.00
** River Basin OUACHITA-BLACK RIVER BASIN					
06279X	LAKE D'ARBONNE BAYOU D'ARBONNE	WO	1800.00	0.50	900.00
06682X	COLUMBIA L&D OUACHITA R	WO	6000.00	0.90	5400.00
06947X	CLAIBORNE BAYOU D'ARBONNE	WO	600.00	0.50	300.00
LA007	JONESVILLE BLACK R	WO	6000.00	0.75	4500.00
** Subtotal **			14400.00		11100.00
** River Basin PASCAGOULA-PEARL RIVER BAS					
06865X	BOGUE CHITTO BOGUE CHITTO CR, PEARL R	WO	800.00	0.50	400.00
** Subtotal **			800.00		400.00
*** Total ***			226030.00		200567.00

Appendix C

Louisiana (LA) Sites

HYDROPOWER RESOURCE ASSESSMENT BY STATE

FERC Number	Plant Name/ Stream	Fed. Proj	Name Plate Rating (KW)	PESF	KW * PESF
** State Name LA					
** Dam Status: WO					
LA007	JONESVILLE BLACK R	Yes	6000.00	0.75	4500.00
06865X	BOGUE CHITTO BOGUE CHITTO CR, PEARL R		800.00	0.50	400.00
07042X	RED L&D 2 RED R		25500.00	0.90	22950.00
07043X	RED L&D 1 RED R		18000.00	0.90	16200.00
LA005	BISTINEAU LOGGY BAYOU		9370.00	0.90	8433.00
LA008	ALLEN-CHIVERY BAYOU BOURBEU		6225.00	0.90	5602.50
02854A	OLD RIVER - VIDALIA L OLD R, MISSISSIPPI R		0.00	0.90	0.00
06279X	LAKE D'ARBONNE BAYOU D'ARBONNE		1800.00	0.50	900.00
06682X	COLUMBIA L&D OUACHITA R		6000.00	0.90	5400.00
06933X	LAKE ANACOCO SABINE R		1200.00	0.50	600.00
06934X	LAKE VERNON SABINE R		500.00	0.50	250.00
06947X	CLAIBORNE BAYOU D'ARBONNE		600.00	0.50	300.00
07179X	WALLACE LAKE DAM WALLACE BAYOU, RED R		400.00	0.90	360.00
08201X	CADDO LAKE CYPRESS BAYOU , RED R		1500.00	0.90	1350.00
* Subsubtotal *			77895.00		67245.50

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HYDROPOWER RESOURCE ASSESSMENT BY STATE

FERC Number	Plant Name/ Stream	Fed. Proj	Name Plate Rating (KW) PESF	KW * PESF
** Subtotal **			77895.00	67245.50
*** Total ***			77895.00	67245.50

HYDROPOWER RESOURCE ASSESSMENT BY STATE

FERC Number	Plant Name/ Stream	Fed. Proj	Name Plate Rating (KW)	PESF	KW * PESF
** State Name LA					
** Dam Status: U					
LA001	HOO SHOO TOO AMITE R		12470.00	0.90	11223.00
LA002	DENHAM SPRINGS AMITE R		840.00	0.90	756.00
LA005	FELIXVILLE AMITE R		8825.00	0.90	7942.50
LA006	RED L&D 6 RED R		14000.00	0.90	12600.00
02908A	RED L&D 3 RED R		54000.00	0.90	48600.00
08358X	DARLINGTON AMITE R		6000.00	0.90	5400.00
09604X	RED L&D 4 RED R		30000.00	0.90	27000.00
10459A	RED L&D 5 RED R		22000.00	0.90	19800.00
* Subsubtotal *			148135.00		133321.50
** Subtotal **			148135.00		133321.50
*** Total ***			148135.00		133321.50

DATE: 12/21/93

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>
LA	With Power	0	0	0
	W/O Power	14	77895	67245.50
	Undeveloped	8	148135	133321.50
	STATE TOTAL	22	226030	200567
TOTALS	With Power	0	0	0
	W/O Power	14	77895	67245.50
	Undeveloped	8	148135	133321.50
GRAND TOTAL		22	226030	200567

Appendix D
Resource Database Listing

RESOURCE DATABASE LISTING

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FERC Number	Plant Name	Stream	State Name
02854A	OLD RIVER - VIDALIA	L OLD R, MISSISSIPPI R	LA

County Name	River Basin
CONCORDIA	MINOR RIVER BASINS

Class	Owner Name
R	VIDALIA, TOWN OF ET AL

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
0.00	0.90	0.00	0.00	0

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3105.00 9137.00
Z	ROR	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		0.90
Scenic Value		0.90	Federal Land Code 198	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

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FERC Number	Plant Name	Stream	State Name
02908A	RED L&D 3	RED R	LA

County Name	River Basin
RAPIDES	LOWER RED RIVER BASIN

Class	Owner Name			
M	NEW ROADS, TOWN OF			
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
54000.00	0.90	48600.00	231000.00	207900

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3151.00 9306.00
C	ROR	MO	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	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

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FERC Number	Plant Name	Stream	State Name
06279X	LAKE D'ARBONNE	BAYOU D'ARBONNE	LA

County Name	River Basin
UNION	OUACHITA-BLACK RIVER BASIN

Class	Owner Name
R	F&T SERVICES CORP

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
1800.00	0.50	900.00	6623.00	3311.50

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3242.00 9218.00
C	STG	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		0.90	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

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FERC Number	Plant Name	Stream	State Name
06682X	COLUMBIA L&D	OUACHITA R	LA

County Name	River Basin
CALDWELL	OUACHITA-BLACK RIVER BASIN

Class		Owner Name		
R		F&T SERVICES CORP		
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
6000.00	0.90	5400.00	21360.00	19224

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3210.00
C	ROR	XX	WO	Longitude	9207.00

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	Y	0.90

RESOURCE DATABASE LISTING

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FERC Number	Plant Name	Stream	State Name
06865X	BOGUE CHITTO	BOGUE CHITTO CR, PEARL R	LA

County Name	River Basin
ST TAMMANY	PASCAGOULA-PEARL RIVER BAS

Class	Owner Name
M	SUN, VILLAGE OF

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
800.00	0.50	400.00	2500.00	1250

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3037.00 8952.00
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	N	0.90	Federal Land Code 103		0.90
Fish Presence Value	Y	0.75	Federal Land Code 104		0.90
Geologic Value	N	0.90	Federal Land Code 105		0.90
Historic Value	N	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	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

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FERC Number	Plant Name	Stream	State Name
06933X	LAKE ANACOCO	SABINE R	LA

County Name	River Basin
VERNON	NECHES-SABINE RIVER BASINS

Class	Owner Name
R	F&T SERVICES CORP

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
1200.00	0.50	600.00	10500.00	5250

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3106.00 9323.00
C	STG	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		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	Y	0.90

RESOURCE DATABASE LISTING

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FERC Number	Plant Name	Stream	State Name
06934X	LAKE VERNON	SABINE R	LA

County Name	River Basin
VERNON	NECHES-SABINE RIVER BASINS

Class	Owner Name
R	F&T SERVICES CORP

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
500.00	0.50	250.00	2190.00	1095

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3110.00 9321.00
C	STG	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		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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
06947X	CLAIBORNE	BAYOU D'ARBONNE	LA

County Name	River Basin
CLAIBORNE	OUACHITA-BLACK RIVER BASIN

Class		Owner Name		
R		F&T SERVICES CORP		
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
600.00	0.50	300.00	1700.00	850

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3254.00 9246.00
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		0.90	Federal Land Code 103		0.90
Fish Presence Value		0.90	Federal Land Code 104	Y	0.75
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

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FERC Number	Plant Name	Stream	State Name
07042X	RED L&D 2	RED R	LA

County Name	River Basin
RAPIDES	LOWER RED RIVER BASIN

Class	Owner Name
M	MINDEN, CITY OF ET AL

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
25500.00	0.90	22950.00	104089.00	93680.10

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3129.00 9241.00
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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
07043X	RED L&D 1	RED R	LA

County Name	River Basin
CATAHOULA	LOWER RED RIVER BASIN

Class	Owner Name			
M	MINDEN,CITY OF ET AL			
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
18000.00	0.90	16200.00	53972.00	48574.80

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3111.00
C	ROR	XX	WO	Longitude	9218.00

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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
07179X	WALLACE LAKE DAM	WALLACE BAYOU, RED R	LA

County Name	River Basin
CADDO	LOWER RED RIVER BASIN

Class	Owner Name
R	F&T SERVICES CORP

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
400.00	0.90	360.00	1200.00	1080

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3219.00 9340.00
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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
08201X	CADDO LAKE	CYPRESS BAYOU , RED R	LA

County Name	River Basin
CADDO	LOWER RED RIVER BASIN

Class	Owner Name
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R	F&T ENERGY CORP
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Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
1500.00	0.90	1350.00	5020.00	4518

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3242.00
C	ROR	XX	WO	Longitude	9355.00

Factor	Exist	Prob	Factor	Exist	Prob
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Wild/Scenic Protection	0.90	Wildlife Value	0.90
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	0.90	Federal Land Code 104	0.90
Fish Presence Value	0.90	Federal Land Code 105	0.90
Geologic Value	0.90	Federal Land Code 106	0.90
Historic Value	0.90	Federal Land Code 107	0.90
Other Value	0.90	Federal Land Code 108	0.90
Recreation Value	0.90	Federal Land Code 198	Y 0.90
Scenic Value	0.90		

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FERC Number	Plant Name	Stream	State Name
08358X	DARLINGTON	AMITE R	LA

County Name	River Basin
ST HELENA	MINOR RIVER BASINS

Class	Owner Name			
M	LA ST DEPT TRANS & DEV			
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
6000.00	0.90	5400.00	21500.00	19350

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3052.00	Longitude	9048.00
C	STG	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		0.90
Scenic Value		0.90	Federal Land Code 198	Y	0.90

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FERC Number	Plant Name	Stream	State Name
09604X	RED L&D 4	RED R	LA

County Name	River Basin
RED RIVER	LOWER RED RIVER BASIN

Class		Owner Name		
M		VIDALIA, TOWN OF		
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
30000.00	0.90	27000.00	154000.00	138600

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3213.00 9328.00
C	STG	XX	U		

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
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		0.90	Federal Land Code 104		0.90
Fish Presence Value		0.90	Federal Land Code 105		0.90
Geologic Value		0.90	Federal Land Code 106		0.90
Historic Value		0.90	Federal Land Code 107		0.90
Other Value		0.90	Federal Land Code 108		0.90
Recreation Value		0.90	Federal Land Code 198	Y	0.90
Scenic Value		0.90			

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FERC Number	Plant Name	Stream	State Name
10459A	RED L&D 5	RED R	LA

County Name	River Basin
BOSSIER	LOWER RED RIVER BASIN

Class		Owner Name		
M		JONESBORO, TOWN OF		
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
22000.00	0.90	19800.00	111800.00	100620

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3232.00 9344.00
C	ROR	PO	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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
LA001	HOO SHOO TOO	AMITE R	LA

County Name	River Basin
EAST BATON ROUGE	MINOR RIVER BASINS

Class	Owner Name
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NHPS/COE

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
12470.00	0.90	11223.00	31000.00	27900

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3022.00
C	STG	ZZ	U	Longitude	9057.00

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
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		0.90	Federal Land Code 104		0.90
Fish Presence Value		0.90	Federal Land Code 105		0.90
Geologic Value		0.90	Federal Land Code 106		0.90
Historic Value		0.90	Federal Land Code 107		0.90
Other Value		0.90	Federal Land Code 108		0.90
Recreation Value		0.90	Federal Land Code 198	Y	0.90
Scenic Value		0.90			

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FERC Number	Plant Name	Stream	State Name
LA002	DENHAM SPRINGS	AMITE R	LA

County Name	River Basin
LIVINGSTON	MINOR RIVER BASINS

Class	Owner Name
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NHPS/COE

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
840.00	0.90	756.00	6300.00	5670

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3031.00 9058.00
C	STG	ZZ	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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
LA005	FELIXVILLE	AMITE R	LA

County Name	River Basin
EAST FELICIANA	MINOR RIVER BASINS

Class	Owner Name
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NHPS/COE

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
8825.00	0.90	7942.50	18000.00	16200

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3057.00 9051.00
C	STG	ZZ	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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
LA005	BISTINEAU	LOGGY BAYOU	LA

County Name	River Basin
BOSSIER	LOWER RED RIVER BASIN

Class	Owner Name
M	LOUISIANA, STATE OF

Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
9370.00	0.90	8433.00	20800.00	18720

Unit Type	Plant Type	Project Status	Dam Status	Latitude	3220.00
C	STG	ZZ	WO	Longitude	9326.00

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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
LA006	RED L&D 6	RED R	LA

County Name	River Basin
CADDO	LOWER RED RIVER BASIN

Class	Owner Name
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Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)
14000.00	0.90	12600.00	82000.00	73800

Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3234.00 9347.00
C		ZZ	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	Y	0.90

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FERC Number	Plant Name	Stream	State Name
LA007	JONESVILLE	BLACK R	LA

County Name	River Basin
CATAHOULA	OUACHITA-BLACK 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)
6000.00	0.75	4500.00	37800.00	28350
Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude
C	ROR	ZZ	WO	3129.00 9106.00

Factor	Exist	Prob	Factor	Exist	Prob
Wild/Scenic Protection		0.90	Wildlife Value		0.90
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	0.90		Federal Land Code 104	Y	0.75
Fish Presence Value	0.90		Federal Land Code 105		0.90
Geologic Value	0.90		Federal Land Code 106		0.90
Historic Value	0.90		Federal Land Code 107		0.90
Other Value	0.90		Federal Land Code 108		0.90
Recreation Value	0.90		Federal Land Code 198		0.90
Scenic Value	0.90				

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FERC Number	Plant Name	Stream	State Name		
LA008	ALLEN-CHIVERY	BAYOU BOURBEU	LA		
County Name	River Basin				
NATCHITOCES	LOWER RED RIVER BASIN				
Class	Owner Name				
M	LOUISIANA, STATE OF				
Name Plate Rating (KW)	PESF	PESF*KW	Annual Energy Rating (MWh)	PESF Annual Energy Rating (MWh)	
6225.00	0.90	5602.50	15250.00	13725	
Unit Type	Plant Type	Project Status	Dam Status	Latitude Longitude	3151.00 9258.00
C	STG	ZZ	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	Y	0.90

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