

## **Appendix A**

### **Contributors to the Environmental Impact Statement**



## Appendix A

### Contributors to the Environmental Impact Statement

The overall responsibility for the preparation of this environmental impact statement was assigned to the Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission. The statement was prepared by members of the Office of Nuclear Reactor Regulation with assistance from other NRC organizations and the Pacific Northwest National Laboratory.

Name	Affiliation	Function or Expertise
<b>U.S. Nuclear Regulatory Commission</b>		
James H. Wilson	Nuclear Reactor Regulation	Senior Project Manager
Andrew J. Kugler	Nuclear Reactor Regulation	Branch Chief
Barry Zalzman	Nuclear Reactor Regulation	Technical Monitor
Thomas J. Kenyon	Nuclear Reactor Regulation	Project Management
Cristina Guerrero	Nuclear Reactor Regulation	General Scientist
Jason Fleming	Nuclear Reactor Regulation	General Scientist
Robert Palla	Nuclear Reactor Regulation	Severe Accidents
James Park	Nuclear Materials Safety and Safeguards	Fuel Cycle Impacts
Charles Hinson	Nuclear Reactor Regulation	Health Physics
Steven Klementowicz	Nuclear Reactor Regulation	Radiological Impacts
Jay Lee	Nuclear Reactor Regulation	Design Basis and Severe Accidents
Michael T. Masnik	Nuclear Reactor Regulation	Aquatic and Terrestrial Ecology
Richard L. Emch	Nuclear Reactor Regulation	Radiological Impacts
Mark Notich	Nuclear Reactor Regulation	Historic and Cultural Resources and Non-Radiological Impacts
Amy Snyder	Nuclear Material Safety and Safeguards	Transportation
R. Brad Harvey	Nuclear Reactor Regulation	Peer Review
Charles Hinson	Nuclear Reactor Regulation	Peer Review
Goutam Bagchi	Nuclear Reactor Regulation	Peer Review
John Cook	Nuclear Material Safety and Safeguards	Peer Review
Andrew Balto	Nuclear Materials Safety and Safeguards	Peer Review
<b>Pacific Northwest National Laboratory<sup>(a)</sup></b>		
Charles A. Brandt		Task Leader
Tara O. Eschbach		Deputy Task Leader
David M. Anderson		Land Use, Related Federal Projects
James M. Becker		Terrestrial Ecology
Amoret L. Bunn		Aquatic Ecology
Philip M. Daling		Transportation

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<b>Name</b>	<b>Affiliation</b>	<b>Function or Expertise</b>
Paul L. Hendrickson		Alternatives
Eva Eckert Hickey		Health Effects, Uranium Fuel Cycle, Decommissioning
Rebekah H. Krieg		General Scientist
N. Maha Mahasenan		Transportation
James V. (Van) Ramsdell, Jr.		Air Quality, Design Basis and Severe Accidents
Stuart B. Saslow		Water Use, Hydrology, System Design Alternatives
Michael J. Scott		Socioeconomics, Environmental Justice
Darby C. Stapp		Cultural Resources
Amanda Stegen		General Scientist
Dennis L. Streng		Severe Accidents
Lance W. Vail		Water Use, Hydrology, System Design Alternatives, Geology
(a) Pacific Northwest National Laboratory is operated by Battelle for the U.S. Department of Energy.		

## **Appendix B**

### **Organizations Contacted**



## Appendix B

### Organizations Contacted

During the course of the staff's independent review of potential environmental impacts from siting one or more new nuclear units at Grand Gulf Early Site Permit site, the following Federal, State, Tribal, and local agencies and organizations were contacted:

Advisory Council on Historic Preservation, Washington, D.C.

Alcorn State University, Alcorn State, Mississippi  
Center for Rural Life and Economic Development  
Extension Program

*Cape Cod Times* (newspaper), Hyannis, Massachusetts

Central New York Regional Planning and Development Board, Oswego, New York

Claiborne County, Port Gibson, Mississippi  
Administrator  
Board of Supervisors - President  
Chancery Clerk  
E 911 Coordinator  
Hospital  
Sheriff's Department - Sheriff  
Tax Assessor/Collector

Clinton Main Street (economic development organization), Clinton, Louisiana

Cornell Cooperative Extension of Oswego County, New York

Department of Health and Human Services - Office of Public Health, Clinton, Louisiana

Fayette, Louisiana  
City Council  
Mayor

East Feliciana Parish, Clinton, Louisiana  
West Feliciana Parish, Saint Francisville, Louisiana  
Assessor  
Sheriff's Department

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Grand Gulf Military Park, Civil War Battlefield and Museum, Claiborne County, Mississippi

Jefferson County, Fayette, Louisiana

Board of Supervisors

Administrator

Purchasing Clerk

Receiving Clerk

Civil Defense

Chancery Clerk

Circuit Clerk

Department of Human Services

E911 Coordinator

Economic Development District

Sheriff

Supervisor

Louisiana Department of Wildlife and Fisheries, Baton Rouge, Louisiana

Louisiana Division of Archaeology, Baton Rouge, Louisiana

Louisiana State University Agricultural Center Research and Extension, Tensas Parish,  
Saint Joseph, Louisiana

Massachusetts Division of Fisheries and Wildlife, Westborough, Massachusetts

Mississippi Department of Archives and History, Jackson, Mississippi

Mississippi Department of Environmental Quality, Jackson, Mississippi

Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, Mississippi

Mississippi Development Authority, Port Gibson, Mississippi

Mississippi Southern Bank - President, Port Gibson, Mississippi

Mississippi State University Extension Services, Fayette, Mississippi

National Association for the Advancement of Colored People - Claiborne County Chapter, Port  
Gibson, Mississippi



National Marine Fisheries Service

Northeast Regional Office, Gloucester, Massachusetts

Southeast Regional Office, Saint Petersburg, Florida

New York Division of Fish, Wildlife and Marine Resources, Albany, New York

NSTAR Electric, Plymouth, Massachusetts

OCO Inc. (Oswego County Opportunity), Fulton, New York

*Old County Memorial* (newspaper), Plymouth, Massachusetts

Operation Oswego County (economic development organization), Oswego, New York

Oswego County, Oswego, New York

Department of Planning and Community Development

Legislative Chairman

Legislature Clerk

Sheriff

Oswego Health (integrated health system that includes Oswego Hospital, The Manor at Seneca Hill, Springside at Seneca Hill, the Fulton Health Services Center and other health and residential living facilities), Oswego, New York

Peppercorns, Inc. - Owner (developer), Oswego, New York

Pilgrim Watch (Massachusetts Citizens for Safe Energy), Plymouth, Massachusetts

Pine Hills LLC (real estate development), Plymouth, Massachusetts

Plymouth, Massachusetts

Director of Planning

Manager

Plymouth Area Chamber of Commerce, Plymouth, Massachusetts

Plymouth Center Steering Committee/WATD Radio Station, Plymouth, Massachusetts

Plymouth Regional Economic Development Foundation, Inc., Plymouth, Massachusetts

Port Gibson, Mississippi - Mayor

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Port Gibson Chamber of Commerce - President and Executive Director, Port Gibson, Mississippi

Port Gibson-Claiborne County Civil Defense - Director, Port Gibson, Mississippi

River Region Health System, Vicksburg, Mississippi

Saint Francisville, Louisiana  
Chief of Police  
Community Development Foundation  
Town Alderman

State University of New York, Oswego, New York

Tribal Nations  
Choctaw Nation of Oklahoma, Durant, Oklahoma  
Mississippi Band of Choctaw Indians, Choctaw, Mississippi  
Tunica Biloxi Indian Tribe of Louisiana, Marksville, Louisiana

U.S. Army Corps of Engineers, Vicksburg District, Vicksburg, Mississippi

U.S. Fish and Wildlife Service  
Louisiana Ecological Services Office, Baton Rouge, Louisiana  
New England Ecological Services Office, Concord, New Hampshire  
New York Ecological Services Office, Cortland, New York

Vicksburg, Mississippi  
Planning Director  
Vicksburg Warren School District

Vicksburg Chamber of Commerce - President, Vicksburg, Mississippi

Vicksburg Warren County Economic Development Foundation, Vicksburg, Mississippi

Warren County, Vicksburg, Mississippi  
Board of Supervisors  
Emergency Management Agency  
Port Commission - President  
Sheriff  
Tax Collectors Office

## **Appendix C**

### **Chronology of NRC Staff Environmental Review Correspondence Related to System Energy Resources, Inc.'s Application for an Early Site Permit (ESP) at the Grand Gulf ESP Site**



## Appendix C

### **Chronology of NRC Staff Environmental Review Correspondence Related to System Energy Resources, Inc.'s Application for an Early Site Permit (ESP) at the Grand Gulf ESP Site**

This appendix contains a chronological listing of correspondence between the U.S. Nuclear Regulatory Commission (NRC) and System Energy Resources, Inc. (SERI), and other correspondence related to the NRC staff's environmental review, under Title 10 of the Code of Federal Regulations (CFR) Part 51, of SERI's application for an early site permit (ESP) at the Grand Gulf ESP site near Port Gibson, Mississippi. All documents, with the exception of those containing proprietary information, have been placed in the Commission's Public Document Room, at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, and are available electronically from the Public Electronic Reading Room found on the Internet at the following web address: [www.nrc.gov/reading-rm.html](http://www.nrc.gov/reading-rm.html). From this site, the public can gain access to the NRC's Agencywide Documents Access and Management System (ADAMS), which provides text and image files of NRC's public documents in the Publicly Available Records component of ADAMS. The ADAMS accession numbers or Federal Register citation for each document are included below.

- September 30, 2003 Letter from NRC to Ms. Nancy Butler, Harriette Person Memorial Library, regarding maintenance of documents at the public library related to application by SERI for an ESP at the Grand Gulf site. (Accession No. ML032731680)
- October 16, 2003 Letter from Entergy to NRC, Early Site Permit Application. (Accession No. ML032960373)
- October 22, 2003 Letter from Entergy to NRC, Early Site Permit Application - Reformat and Correction. (Accession No. ML032960315 - package)
- November 7, 2003 Letter from NRC to W.A. Eaton, SERI, regarding Notice of Receipt and Availability of Application for an ESP for the Grand Gulf ESP Site. (Accession No. ML033020020 - package)
- November 24, 2003 Letter from NRC to W.A. Eaton, SERI, regarding Acceptance of the SERI. Application for an ESP for the Grand Gulf Site. (Accession No. ML033180657 - package)

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- December 23, 2003 Letter from NRC to SERI forwarding Notice of Intent to Prepare an Environmental Impact Statement and Conduct Scoping Related to Early Site Permit for Grand Gulf. (Accession No. ML033630515)
- December 31, 2003 *Federal Register* Notice of Intent to Prepare an Environmental Impact Statement and Conduct Scoping Process. (68 FR 75656)
- January 6, 2004 Letter from NRC to the National Oceanic and Atmospheric Administration, Fisheries Southeast Regional Office, requesting a list of endangered, threatened, and candidate or proposed species and critical habitat that are known to occur or could potentially occur in Claiborne County, Mississippi and West Feliciana Parish, Louisiana. (Accession No. ML040081014)
- January 6, 2004 Letter from NRC to the Advisory Council on Historic Preservation, regarding analyses of the potential impact to historic and cultural resources to be included in the environmental impact statement related to the application by SERI for an early site permit for the Grand Gulf site. (Accession No. ML040081042)
- January 6, 2004 Letter from NRC to New York Ecological Services Office of the U.S. Fish and Wildlife Service, requesting a list of endangered, threatened, and candidate or proposed species and critical habitat that are known to occur or could potentially occur in Oswego County, New York. (Accession No. ML040081119)
- January 6, 2004 Letter from NRC to National Oceanic and Atmospheric Administration Fisheries Northeast Regional Office, requesting a list of endangered, threatened, and candidate or proposed species and critical habitat that are known to occur or could potentially occur in Oswego County, New York and Plymouth County, Massachusetts. (Accession No. ML040081088)
- January 6, 2004 Letter from NRC to New England Ecological Services Office of the U.S. Fish and Wildlife Service, requesting a list of endangered, threatened, and candidate or proposed species and critical habitat that are known to occur or could potentially occur in Plymouth County, Massachusetts. (Accession No. ML040081108)
- January 7, 2004 *Federal Register* Notice of Hearing and Opportunity to Petition for Leave to Intervene - Early Site Permit for the Grand Gulf Site, Docket No. 52-009. (Accession No. ML033430298)

January 7, 2004 Notice of public meeting to discuss the environmental scoping process for the Grand Gulf early site permit review. (Accession No. ML040090364)

January 8, 2004 Letter from NRC to the Mississippi Ecological Services Office of the U.S. Fish and Wildlife Service, requesting a list of endangered, threatened, and candidate or proposed species and critical habitat that are known to occur or could potentially occur in Claiborne, County, Mississippi. (Accession No. ML040090099)

January 8, 2004 Letter from NRC to the Louisiana Ecological Services Office of the U.S. Fish and Wildlife Service, requesting a list of endangered, threatened, and candidate or proposed species and critical habitat that are known to occur or could potentially occur in West Feliciana Parish, Louisiana. (Accession No. ML040090141)

January 8, 2004 Letter from NRC to the Choctaw Nation of Oklahoma inviting participation in the environmental scoping process for the Grand Gulf ESP review. (Accession No. ML040090309)

January 8, 2004 Letter from NRC to the Tunika Biloxi Indian Tribe of Louisiana inviting participation in the environmental scoping process for the Grand Gulf ESP review. (Accession No. ML040090330)

January 8, 2004 Letter from NRC to the Mississippi Band of Choctaw Indians inviting participation in the environmental scoping process for the Grand Gulf ESP review. (Accession No. ML040090292)

January 8, 2004 Letter from NRC to the Mississippi Department of Archives and History regarding inclusion of analyses of the potential impact to historic properties in the environmental impact statement for an ESP at the Grand Gulf site. (Accession No. ML040090125)

January 13, 2004 Letter from NRC to multiple addressees concerning environmental scoping meeting to be held in the Town Hall in Port Gibson, Mississippi on January 21, 2004. (Accession No. ML033530010)

January 21, 2004 Letter from Mississippi Field Office, U.S. Fish and Wildlife Service, responding to NRC letter dated January 8, 2004 and providing list of threatened and endangered species that could be found near the Grand Gulf site. (Accession No. ML040260250)

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- January 26, 2004 Letter from David A. Stilwell, U.S. Fish and Wildlife Service, New York Field Office, to P.T. Kuo, NRC, responding to NRC letter dated January 6, 2004, requesting a list of threatened and endangered species in the vicinity of the FitzPatrick Nuclear Power Plant, in the Town of Scriba, Oswego County, New York. (Accession No. ML040370323)
- January 28, 2004 Letter from Northeast Region, National Oceanic and Atmospheric Administration Fisheries Service, responding to NRC letter dated January 6, 2004, and providing list of threatened and endangered species under National Oceanic and Atmospheric Administration Fisheries jurisdiction in the vicinity of the Grand Gulf site. (Accession No. ML040350504)
- January 29, 2004 Letter from NRC to Mayor of Port Gibson, Mississippi, in appreciation of the facility used to host the Grand Gulf ESP environmental scoping meeting on January 21, 2004. (Accession No. ML040330342)
- February 5, 2004 Letter from Russell C. Watson, U.S. Fish and Wildlife Service, Louisiana Field Office, to P.T. Kuo, NRC, responding to NRC letter dated January 8, 2004, requesting a list of threatened and endangered species in West Feliciana Parish, Louisiana. (Accession No. ML040500681)
- February 9, 2004 Letter from Michael J. Amaral, U.S. Fish and Wildlife Service, New England Field Office, to P.T. Kuo, NRC, regarding the application for an ESP for the Grand Gulf ESP site. (Accession No. ML040650620)
- February 18, 2004 Summary of public environmental scoping meeting held on January 21, 2004, in Port Gibson, Mississippi, related to application by SERI for an ESP for the Grand Gulf site. (Accession No. ML040510279, ML040510288 - package)
- April 14, 2004 Letter from Mr. Curtis B. James, U.S. Fish and Wildlife Service, Mississippi Field Office, to Dr. Michael T. Masnik, NRC, transmitting information on Federally listed threatened and endangered species as it pertains to the preparation of the environmental impact statement for the ESP for the Grand Gulf site. (Accession No. ML041310449)
- May 5, 2004 Summary of site audit to support the environmental review of ESP application for the Grand Gulf site. (Accession No. ML041270478)



May 11, 2004	Issuance of Environmental Scoping Summary Report associated with the staff's review of the application by SERI for an ESP for the Grand Gulf site. (Accession No. ML041330230)	
May 19, 2004	Letter from NRC to SERI requesting additional information related to the staff's environmental review of the Grand Gulf ESP application. (Accession No. ML041420530)	
May 19, 2004	Follow up to Early Site Permit Application Environmental Audit - Response No. 1. (Accession No. ML041890361)	
May 19, 2004	Follow up to Early Site Permit Application Environmental Audit - Response No. 2. (Accession No. ML041470464)	
July 1, 2004	Letter from SERI transmitting its response to NRC's staff request for additional information (Letter No. 1). (Accession No. ML050380151)	
July 2, 2004	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the staff's environmental review of the Grand Gulf ESP application, Partial Response No. 1. (Accession No. ML050380156)	
July 15, 2004	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information dated May 19, 2004, related to the staff's environmental review of the Grand Gulf ESP application. (Accession No. ML041610345)	
July 19, 2004	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the staff's environmental review of the Grand Gulf ESP, Partial Response No. 2. (Accession No. ML050380151)	
July 22, 2004	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the staff's environmental review of the Grand Gulf ESP application, Partial Response No. 3. (Accession No. ML050380170)	

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August 10, 2004	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the staff's environmental review of the Grand Gulf ESP application, Partial Response No. 4. (Accession No. ML050380162)
August 16, 2004	Follow up to Early Site Permit Application Environmental Audit - Partial Response 5. (Accession No. ML042400267 - package)
August 16, 2004	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the staff's environmental review of the Grand Gulf ESP application, Letter 2, Partial Response No. 1. (Accession No. ML050380166)
August 26, 2004	Letter from NRC to W.A. Eaton, SERI, regarding supplemental request for additional information related to the staff's environmental review of the Grand Gulf ESP application. (Accession No. ML042390512)
September 30, 2004	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the staff's environmental review of the Grand Gulf ESP application. (Accession No. ML042810132)
October 28, 2004	Letter from NRC to W.A. Eaton, SERI, regarding second supplemental request for additional information related to the staff's environmental review of the Grand Gulf ESP application. (Accession No. ML043020633)
December 10, 2004	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the staff's environmental review of the Grand Gulf ESP application, Letter No. 5. (Accession No. ML050380174)
January 14, 2005	Letter from PNNL to NRC forwarding information gathered and referenced in the Grand Gulf ESP environmental impact statement. (Accession No. ML050350147)
February 3, 2005	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the staff's environmental review of the Grand Gulf ESP application. (Accession No. ML050380489)
February 7, 2005	E-mail from PNNL to NRC regarding correspondence with U.S. Fish and Wildlife Service for the Grand Gulf ESP application on Louisiana and Mississippi Black Bear. (Accession No. ML050410367)

February 14, 2005	Letter from SERI to NRC transmitting responses to NRC staff's request for additional information regarding the environmental review of the Grand Gulf ESP application. (Accession No. ML050470305)
February 18, 2005	E-mail from PNNL to NRC regarding correspondence with Entergy for the Grand Gulf ESP application on threatened and endangered species at Pilgrim Nuclear Station. (Accession No. ML050550333)
February 23, 2005	E-mail from PNNL to NRC transmitting files containing logs of personal communication made in the process of updating Grand Gulf ESP EIS Chapters 2, 4, and 5 with Federally threatened and endangered species information. (Accession No. ML050600222)
April 21, 2005	Letter from NRC to U.S. Environmental Protection Agency transmitting Draft Environmental Impact Statement for an Early Site Permit (ESP) at the Grand Gulf ESP Site, NUREG-1817. (Accession No. ML051110104)
April 21, 2005	Letter from NRC to SERI forwarding Notice of Availability of the Draft Environmental Impact Statement (DEIS) for an Early Site Permit (ESP) at the Grand Gulf ESP Site. (Accession No. ML051110284)
April 21, 2005	<i>Federal Register</i> Notice of Availability of the Draft Environmental Impact Statement for an Early Site Permit (ESP) at the Grand Gulf ESP Site and Associated Public Meeting. (70 FR 22155)
May 5, 2005	NRC Press Release No. 05-076, "NRC Seeks Public Input on Grand Gulf Early Site Permit Environmental Impacts; Meeting to be Held June 28." (Accession No. ML051250331)
June 3, 2005	NRC meeting notice announcing public meeting in Port Gibson, Mississippi on June 28, 2005, to discuss the Draft Environmental Impact Statement for the Grand Gulf Early Site Permit Application. (Accession No. ML051560010)
June 24, 2005	Letter from SERI to NRC stating concerns over potential delay in the NRC review of the Grand Gulf Early Site Permit Application. (Accession No. ML051950260)
July 14, 2005	Letter from SERI to NRC in regards to Draft Environmental Impact Statement (DEIS) for an Early Site Permit (ESP) at the Grand Gulf ESP Site. (Accession No. ML052000275)

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July 14, 2005	Letter from U.S. Environmental Protection Agency (EPA) to NRC providing comments on EPA's review of NUREG-1817 Draft Environmental Impact Statement Early Site Permit (ESP) at the Grand Gulf ESP Site. (Accession No. ML052090157)
August 11, 2005	Summary of Public Meeting to Receive Comments on Draft NUREG-1817, Draft Environmental Impact Statement for the Grand Gulf Early Site Permit Application. (Accession No. ML0582280160)
August 16, 2005	NRC Press Release No. 05-111, "NRC Revises Schedule for Reviewing Existing Early Site Permit Applications." (Accession No. ML052280400)
September 3, 2005	Letter from SERI to NRC transmitting response to request for comments on USGS Deaggregation Approach. (Accession No. ML052510432)
September 3, 2005	Letter from SERI to NRC transmitting response to request for additional information regarding the Grand Gulf Early Site Permit. (Accession No. ML052510434)
October 3, 2005	Letter from SERI to NRC, transmitting the Early Site Permit Application, Revision 2. (Accession No. ML052780449)
November 4, 2005	Letter from SERI to NRC transmitting response to request for additional information regarding Grand Gulf Early Site Permit Application. (Accession No. ML060190548)
January 23, 2006	Letter from SERI to NRC transmitting response to request for additional information regarding the Grand Gulf Early Site Permit Draft Environmental Impact Statement. (TAC MC 1379)
March 2, 2006	Letter from SERI to NRC committing to including cultural resource-specific directions in its Excavation and Backfill Work Procedures for construction activities. (Accession No. ML060650273)

## **Appendix D**

### **Scoping Meeting Comments and Responses**



## Appendix D

### Scoping Meeting Comments and Responses

On December 31, 2003, the U.S. Nuclear Regulatory Commission (NRC) published a Notice of Intent in the *Federal Register* (68 FR 75656) to notify the public of the staff's intent to prepare an environmental impact statement (EIS) to support the early site permit (ESP) application of System Energy Resources, Inc. for the proposed Grand Gulf ESP site. This EIS is being prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality guidelines, and Title 10 of the Code of Federal Regulations (CFR) Parts 51 and 52. As outlined by NEPA, the NRC initiated the scoping process with the issuance of the *Federal Register* notice. The NRC also invited the applicant; Federal, Tribal, State, and local government agencies; local organizations; and individuals to participate in the scoping process by providing oral comments at a scheduled public meeting and/or submitting written suggestions and comments no later than February 12, 2004.

The scoping process included a public meeting, which was held at the Port Gibson City Hall in Port Gibson, Mississippi, on January 21, 2004. The NRC announced the meeting in local newspapers (*The Clarion-Ledger* and the *Port Gibson Reveille*), issued press releases, and distributed flyers locally. Approximately 68 members of the public attended the meeting. This session began with NRC staff members providing a brief overview of the ESP process and the NEPA process. Following the NRC's prepared statements, the meeting was opened for public comments. Eighteen (18) attendees provided either oral comments or written statements that were recorded and transcribed by a certified court reporter. The transcript of the meeting can be found as an attachment to the meeting summary, which was issued on February 18, 2004. Additional comments received after the meeting are also available. The meeting summary is available for public inspection by local residents at the Harriette Person Memorial Library. The meeting summary is also available in the NRC Public Document Room or electronically from the Publicly Available Records (PARS) component of NRC's document system, the Agencywide Document Access and Management System (ADAMS) under accession number ML040510288. ADAMS is accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room). Note that the URL is case-sensitive.

The scoping process provides an opportunity for public participants to identify issues to be addressed in the EIS and highlight public concerns and issues. The Notice of Intent identified the following objectives of the scoping process:

- Define the proposed action which is to be the subject of the EIS
- Determine the scope of the EIS and identify significant issues to be analyzed in depth

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- Identify and eliminate from detailed study those issues that are peripheral or that are not significant
- Identify any environmental assessments and other EISs that are being prepared or will be prepared that are related to but not part of the scope of the EIS being considered
- Identify other environmental review and consultation requirements related to the proposed action
- Indicate the relationship between the timing of the preparation of the environmental analyses and the Commission's tentative planning and decision making schedule
- Identify any cooperating agencies and, as appropriate, allocate assignments for preparation and schedules for completing the EIS to the NRC and any cooperating agencies
- Describe how the EIS will be prepared and include any contractor assistance to be used.

At the conclusion of the scoping period, the NRC staff and its contractor reviewed the transcripts and all written material received and identified individual comments. Forty-seven (47) e-mails containing comments were also received during the scoping period. All comments and suggestions received orally during the scoping meeting or in writing were considered. Each set of comments from a given commenter was given a unique alpha identifier (commenter ID letter), allowing each set of comments from a commenter to be traced back to the transcript, letter, or e-mail in which the comments were submitted.

Preparation of the EIS will take into account all the relevant issues raised during the scoping process. The EIS will be made available for public comment. The comment period for the EIS will offer the next opportunity for the applicant; interested Federal, Tribal, State, and local government agencies; local organizations; and members of the public to provide input to the NRC's environmental review process. The comments received on the draft EIS will be considered in the preparation of the final EIS. The final EIS, along with the staff's Safety Evaluation Report, will provide much of the basis for the NRC's decision on whether to grant System Energy Resources, Inc. an ESP.

Each comment applicable to this environmental review is summarized in this appendix. This information, which was extracted from the *Grand Gulf Scoping Summary Report*, is provided for convenience of those interested in the scoping comments applicable to this environmental review. The comments that are outside the scope of the environmental review for the proposed Grand Gulf ESP site are not included here. More detail regarding the disposition of general or inapplicable comments can be found in the summary report. The ADAMS accession number



for the summary report is ML040510288. This accession number is provided to facilitate access to the document through the Public Electronic Reading Room (ADAMS) at <http://www.nrc.gov/reading-rm.html>.

Table D-1 identifies individuals who provided comments and the Commenter ID number associated with each person's set(s) of comments. The individuals are listed in the order in which they spoke at the public meeting and in alphabetical order for the comments received by letter or e-mail.

**Table D-1.** Individuals Providing Comments During Scoping Comment Period

<b>Commenter ID</b>	<b>Commenter</b>	<b>Affiliation (if stated)</b>	<b>Comment Source and ADAMS Accession #</b>
A	George A. Williams	Entergy	Public Meeting Transcript (ML040360176)
B	Curtis James	U.S. Fish and Wildlife Service	Public Meeting Transcript (ML040360176)
C	Landon Huey	Concerned Citizen	Public Meeting Transcript (ML040360176)
D	Paul Gunter	Nuclear Information Resource Service	Public Meeting Transcript (ML040360176)
E	A. C. Garner	Claiborne County Chapter, National Association for the Advancement of Colored People	Public Meeting Transcript (ML040360176)
F	Soloman Wilson	Concerned Citizen	Public Meeting Transcript (ML040360176)
G	Rose Johnson	Mississippi Chapter Sierra Club	Public Meeting Transcript (ML040360176)
H	Evan Doss, Jr.	Concerned Citizen	Public Meeting Transcript (ML040360176)
I	Nathalie Walker	Advocates for Environmental Human Rights	Public Meeting Transcript (ML040360176)
J	Alexander Martin	Concerned Citizen	Public Meeting Transcript (ML040360176)
K	Becky Gillette	Mississippi Chapter Sierra Club	Public Meeting Transcript (ML040360176)

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**Table D-1.** (contd)

<b>Commenter ID</b>	<b>Commenter</b>	<b>Affiliation (if stated)</b>	<b>Comment Source and ADAMS Accession #</b>
L	Martha Ferris	Concerned Citizen	Public Meeting Transcript (ML040360176)
M	J. Scott Peterson	Nuclear Energy Institute	Public Meeting Transcript (ML040360176)
N	Phil Segrest	Concerned Citizen	Public Meeting Transcript (ML040360176)
O	Monique Harden	Advocates for Environmental Human Rights	Public Meeting Transcript (ML040360176)
P	Jerry Landrum	Concerned Citizen	Public Meeting Transcript (ML040360176)
Q	Ruth Pullen	Concerned Citizen	Public Meeting Transcript (ML040360176)
R	David Ritter	Public Citizen/Critical Mass	Public Meeting Transcript (ML040360176)
S	Claiborne County Chapter, NAACP	Concerned Citizen	Attachment to Transcript (ML040360176)
T	J. Scott Peterson	Nuclear Energy Institute	Attachment to Transcript (ML040360176)
U	Cheryl Catranbone	Concerned Citizen	E-Mail (ML040540768)
V	Barbara Powell	Concerned Citizen	E-Mail (ML040540776)
W	Edward A. Mainland	Concerned Citizen	E-Mail (ML040540774)
X	Ned Ford	Concerned Citizen	E-Mail (ML040540772)
Y	Gilbert Woolley	Concerned Citizen	E-Mail (ML040540766)
Z	Reilly Morse	Concerned Citizen	E-Mail (ML040540765)
AA	Lorraine Kitman	Concerned Citizen	E-Mail (ML040540755)
AB	Jane W. Lusk	Concerned Citizen	E-Mail (ML040540857)
AC	Tony Bland	Concerned Citizen	E-Mail (ML040540758)
AD	Cynthia Sarthou	Gulf Restoration Network	E-Mail (ML040540753)
AE	Mark M. Gonzalez	Concerned Citizen	E-Mail (ML040540787)

Table D-1. (contd)

<b>Commenter ID</b>	<b>Commenter</b>	<b>Affiliation (if stated)</b>	<b>Comment Source and ADAMS Accession #</b>
AF	Julianna Padgett	Concerned Citizen	E-Mail (ML040540783)
AG	Micah Walker Parkin	Alliance for Affordable Energy	E-Mail (ML040540795)
AH	Wendy King	Concerned Citizen	E-Mail (ML040540793)
AI	Leonard Levine	Concerned Citizen	E-Mail (ML040540791)
AJ	Paula Vassey	Concerned Citizen	E-Mail (ML040540797)
AK	Videojan	Concerned Citizen	E-Mail (ML040540799)
AL	Paul Gunter	Nuclear Information and Resource Service	E-Mail (ML040540801)
AM	Ruth Pullen	Concerned Citizen	E-Mail (ML040540802)
AN	Chris Holly	Concerned Citizen	E-Mail (ML040540812)
AO	Tom Pullen	Concerned Citizen	E-Mail (ML040540805)
AP	Tiffany Elyce Crane	Concerned Citizen	E-Mail (ML040540821)
AQ	Charlie Brenner	Concerned Citizen	E-Mail (ML040540826)
AR	Susan Hall	Concerned Citizen	E-Mail (ML040540827)
AS	Marianne Hill	Concerned Citizen	E-Mail (ML040540829)
AT	Ginnette Lolli	Concerned Citizen	E-Mail (ML040540831)
AU	Betty Daugherty	Concerned Citizen	E-Mail (ML040540834)
AV	Tom Mann	Concerned Citizen	E-Mail (ML040540836)
AW	Alex Major	Concerned Citizen	E-Mail (ML040540839)
AX	K. Brad Ott	Concerned Citizen	E-Mail (ML040540843)
AZ	J. Scott Peterson	Nuclear Energy Institute	E-Mail (ML040540761)
BA	Solomon S. Wilson	Claiborne County Hospital	E-Mail (ML040780554)
BB	Patricia Neveleff	Concerned Citizen	E-Mail (ML040540780)
BC	Davis Mounger	Concerned Citizen	E-Mail (ML040540782)
BD	Martha Ferris	Concerned Citizen	E-Mail (ML040540786)

**Table D-1.** (contd)

<b>Commenter ID</b>	<b>Commenter</b>	<b>Affiliation (if stated)</b>	<b>Comment Source and ADAMS Accession #</b>
BE	William Ferris	Concerned Citizen	E-Mail (ML040540792)
BF	Takasha Lewis	Concerned Citizen	E-Mail (ML040540798)
BG	Michael Berk	Mississippi State University	E-Mail (ML040540751)
BH	Bob Kochtitzky	Mississippi 2020 Network	E-Mail (ML040540752)
BI	Sallie E. Davis	Concerned Citizen	E-Mail (ML040540760)
BJ	Becky Gillette	Mississippi Chapter Sierra Club	E-Mail (ML040540764)
BK	Judy Treichel	Concerned Citizen	E-Mail (ML040540769)
BL	Arthur D. Unger	Concerned Citizen	E-Mail (ML040540773)
BM	Christine Blair	Concerned Citizen	E-Mail (ML040540799)
BN	Lavaree Jones	Concerned Citizen	E-Mail (ML040540845)
BO	Christine Murphey	Concerned Citizen	E-Mail (ML040540853)
BP	Katherine B. Senter	Concerned Citizen	E-Mail (ML040540861)

The comments that are considered in the evaluation of the environmental impact in this EIS are summarized in the following pages. To review all the comments received during scoping, refer to the meeting summary (Accession No. ML040510288). For those comments that do not just provide general information, the responses provide the appropriate section in the EIS where the subject has been addressed. Parenthetical numbers after each comment refer to the commenter's ID letter and the comment number. Comments can be tracked to the commenter and the source document through the ID letter and comment number listed in Table D-1.

Comments are grouped by the following categories:

- D.1 Comments Concerning Air Quality
- D.2 Comments Concerning Surface Water Use and Quality
- D.3 Comments Concerning Aquatic Ecology
- D.4 Comments Concerning Threatened or Endangered Species
- D.5 Comments Concerning Socioeconomics
- D.6 Comments Concerning Environmental Justice
- D.7 Comments Concerning Radiological Impacts
- D.8 Comments Concerning Uranium Fuel Cycle and Waste Management
- D.9 Comments Concerning Decommissioning
- D.10 Comments Concerning Cumulative Impacts

D.11 Comments Concerning Alternative Energy Sources and Conservation

D.12 Comments Concerning Operational Safety.

## D.1 Air Quality

**Comment:** Nuclear power is clean, and it is emission-free. You can easily get a lot of large generation with one unit. (A-4)

**Comment:** Today, nuclear energy provides electricity to power one out of every five U.S. homes and businesses. It is the only large-scale, emission-free electricity source that can be readily expanded. Nuclear power plants do not produce sulfur dioxide, nitrogen oxides or the major greenhouse gas, carbon dioxide. I can see every day that we will need more electricity – and we will also need clean air. With nuclear energy, we can have both. Entergy's Grand Gulf Station generates about one-fifth of this state's power. In 2002, operation of Grand Gulf avoided the emission of nearly 50,000 tons of sulfur dioxide and more than 20,000 tons of nitrogen oxide to the state's atmosphere, compared to what would have been emitted by fossil electric generating plants. (T-4)

**Comment:** Today, nuclear energy provides electricity to power one out of every five U.S. homes and businesses. It is the only large-scale, emission-free electricity source that can be readily expanded. Nuclear power plants do not produce sulfur dioxide, nitrogen oxides or the major greenhouse gas, carbon dioxide. (AZ-4)

**Response:** *The impacts on air quality resulting from construction and operation of proposed units at Grand Gulf are discussed in Chapters 4 and 5 of the environmental impact statement.*

## D.2 Surface Water Use and Quality

**Comment:** The impacts on the Mississippi River arising from any increased intake of cooling water for the operation of any new proposed nuclear power units should be included. Now, Grand Gulf right now operates on a cooling tower, and that does provide some reduced impact on the Mississippi as it were – and like most other units draw directly from the water source, and they discharge directly into the water source. But we don't know for a fact that this new design won't in fact use a once-through cooling system, which might be taking in as much as 2-1/2 billion gallons of water a day out of the Mississippi River. And because we are not being provided with a specific design, we don't really know what the water intake is. So in fact again all the potential impacts on the Mississippi River arising from that need to be incorporated into this environmental impact statement. Also, all the impacts associated with the possibility of flooding of the Mississippi River on the safe operation of this proposed facility, as well as the existing facility, but clearly we have seen indications that the flooding and the river itself can

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change. So clearly an environmental impact statement needs to take into account and closely study how changes in the Mississippi River might affect future operation. (D-5)

**Response:** *The impact from any cooling system using the parameters identified in the plant parameter envelope (PPE) have been reviewed in accordance with the environmental standard review plan (NUREG-1555) and discussed in the EIS in Sections 4.3 and 5.3. At this time, the applicant has indicated that a closed cooling system employing a cooling tower will be used and not a once-through cooling system. Therefore, the early site permit will not consider once-through cooling. If the applicant were subsequently to decide that they were interested in once-through designs it would require a new application. The particular cooling system ultimately chosen by the applicant will have to fall within the PPE submitted by the applicant. The impact associated with the possibility of flooding of the Mississippi River on the safe operation of the existing facility is outside the scope of this EIS. The impact associated with the possibility of flooding of the Mississippi River on the safe operation of this proposed facility was reviewed as part of the Site Safety Analysis Report per 10 CFR 52.17 and the NRC's Office of Nuclear Reactor Regulation Review Standard RS-002 Section 2.4, and is presented in the Safety Evaluation Report Section 2.4. This comment is outside the scope of this EIS.*

**Comment:** The EIS for the Grand Gulf nuclear power station is therefore required to address all of the following. All impacts on the Mississippi River arising from any increased intake of reactor cooling water for the operation of any proposed new nuclear power units. (AL-1)

**Response:** *Impact on the Mississippi River arising from any increased intake of reactor cooling water for the operation of any proposed new nuclear power units was reviewed in accordance with the environmental standard review plan (NUREG-1555, Section 5.2) and discussed in the EIS in Sections 4.3 and 5.3.*

**Comment:** The EIS for the Grand Gulf nuclear power station is therefore required to address all of the following. All impacts on the Mississippi River arising from the increase in the routine discharge of chemicals, heavy metals, cleaning solvents, biocides and radioactive isotopes into the Mississippi River arising from the operation of additional nuclear power units. (AL-4) (D-8)

**Response:** *Impact on the Mississippi River arising from the increase in the routine discharge of chemicals, heavy metals, cleaning solvents, and biocides into the Mississippi River arising from the operation of additional nuclear power units was reviewed in accordance with the environmental standard review plan (NUREG-1555, Section 5.2) and discussed in the EIS in Sections 4.3 and 5.3. Impact on the Mississippi River arising from the radioactive isotopes released into the Mississippi River from the operation of additional nuclear power units was reviewed in accordance with the environmental standard review plan (NUREG-1555) and discussed in the EIS in Sections 4.3 and 5.3.*

### D.3 Aquatic Ecology

**Comment:** Well, wetlands, and I don't even know if wetlands, since it is on this site, would even be involved, but that would be a concern to the Fish and Wildlife Service. (B-1)

**Comment:** All impacts on the aquatic environment of the Mississippi River arising out of any increase in thermal discharge into the river from cooling water need to be addressed from these additional units. (D-6)

**Comment:** All impacts on the Mississippi River arising from the increased impingement and entrainment, or the sucking in and pinning of fish or fish spawn, or other aquatic life and nutrients arising out of increased reactor cooling water intake. (D-7)

**Comment:** When I was a child, I would go to that creek and I would kick over rocks, and I would walk it, and I would fish out of it. So when I got back, I went to the creek again. And I went down and I picked up a rock. Now, years ago when I picked up a nice-sized rock, I would find nice little crawly things under it. Sometimes just little crawling things under it. But when I came back this time, I picked up a rock, and I looked, and there was nothing there. And then I thought that nuclear power plant. (F-1)

**Comment:** I would like to emphasize the need to truly look at all those things, and then as you do the impact study, to make sure that we are informed in a very meaningful way on whether or not when I catch a fish over there in Louisiana that has a funny look on it, and got a little growth on it, I think nuclear power plant, and I need to know that it is not. (F-3)

**Comment:** All impacts on the aquatic environment of Mississippi River arising from any increase in thermal discharge of reactor cooling water as result of the operation of additional nuclear power units. (AL-2)

**Comment:** All impacts on Mississippi River arising from the increased impingement and entrainment of fish, fish spawn, other aquatic life and nutrients arising from the increased reactor cooling water intake for any proposed additional nuclear power units. (AL-3)

**Comment:** All impacts on the Mississippi River arising from any increased intake of reactor cooling water for the operation of any proposed new nuclear power units. (AL-20)

**Response:** *The impacts on aquatic ecology resulting from construction and operation of proposed units at Grand Gulf are discussed in Chapters 4 and 5 of the EIS.*

#### D.4 Threatened or Endangered Species

**Comment:** Federally-listed species, and those would include the endangered Interior least tern, the endangered pallid sturgeon found in the lower Mississippi River. The threatened Bayou darter, and I am not saying – I am saying that these would be species that we would be concerned with and inform the NRC. The threatened bald eagle, and the Federally-listed threatened Louisiana black bears. Particularly secondary impacts to threatened and endangered species. (B-2)

**Response:** *The U.S. Nuclear Regulatory Commission (NRC) consulted with the U.S. Fish and Wildlife Service (FWS) to request a list of Federal threatened, endangered, proposed, and candidate species that are known to occur, or that potentially could occur, on the Grand Gulf site or in the vicinity (and on or in the vicinity of the alternate sites) and that could thus be impacted by activities that are the subject of the EIS for the Grand Gulf early site permit. The NRC also requested from FWS a statement of concerns regarding such species. NRC evaluated impacts, both direct and indirect, to such species in consideration of the concerns expressed by the FWS. NRC presented these results in Chapters 4 and 5 of the EIS.*

#### D.5 Socioeconomics

**Comment:** Shame on you, [Entergy], trying to hold the Claiborne County residents hostage because of job shortages. (G-6)

**Comment:** But back to the tax issue. The money was divvied up by the Legislature to the other counties, and their rationale was that the people from the other counties were paying an electric bill that came from Grand Gulf, and therefore they ought to benefit some back from it. Well, I think that we ought to take that same thing and I think we ought to challenge our political leaders in the county here, and in the city, to go back to the Legislature and say our people go to the gaming facilities in Vicksburg, and we want our share of that money. (N-2)

**Comment:** We have talked about the poverty level, and the poverty level here is because we don't have enough industry, and that's why I say can anybody really say that we have not all benefitted from what Grand Gulf has brought to this county. I would hate to think where we are now or where we would be now if we had not had the benefits from Grand Gulf. So we need to address education and how our money is being spent, more than how much more money we need, although I do agree that we need more. (N-8)

**Response:** *The basis of these comments is not clear. Existing socioeconomic conditions, including tax payments, are covered in Chapter 2 of the EIS and the potential impact of new plants in Chapters 4 and 5.*



**Comment:** Due to a lack of adequate distribution of local tax revenue from the plant, local government and emergency services are prevented from being fully prepared to protect the public health and safety and provide an adequate emergency plan. (S-12)

**Comment:** One major concern is inadequate emergency planning and infrastructure in Claiborne County and beyond. Due to the Mississippi Legislature's decision to take away \$200 million in tax revenues generated from Grand Gulf and give them to other counties in the state, Claiborne County's emergency planning infrastructure is woefully underfunded to deal with the present nuclear plant – let alone a new plant. There is not adequate money available to fund the Sheriff's Department, Civil Defense or the Fire Department. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24 hours per day. The radiological emergency plan relies heavily on teachers to shelter and evacuate school children without obtaining adequately informed consent or any statutory authority. There are significant impediments to emergency planning to safeguard area residents in case of an accident or act of terrorism at the facility. (U-7)

**Comment:** One major concern is inadequate emergency planning and infrastructure in Claiborne County and beyond. Due to the Mississippi Legislature's decision to take away \$200 million in tax revenues generated from Grand Gulf and give them to other counties in the state, Claiborne County's emergency planning infrastructure is woefully underfunded to deal with the present nuclear plant-let alone a new plant. There is not adequate money available to fund the Sheriff's Department, Civil Defense or the Fire Department. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24 hours per day. The radiological emergency plan relies heavily on teachers to shelter and evacuate school children without obtaining adequately informed consent or any statutory authority. (X-12) (AE-8) (BE-8) (BF-8) (BH-8) (BJ-9)

**Comment:** Another important concern is inadequate emergency planning and infrastructure in Claiborne County and beyond. Claiborne County's emergency planning infrastructure is woefully underfunded to deal with the present nuclear plant – let alone a new plant, because the Mississippi Legislature took away \$200 million in tax revenues generated from Grand Gulf and give it to other counties in the state. There is not adequate money available to fund the Sheriff's Department, Civil Defense or the Fire Department. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24 hours per day. The radiological emergency plan relies heavily on teachers to shelter and evacuate school children without obtaining adequately informed consent or any statutory authority. (Z-6)

**Comment:** Not unlike other nuclear power plant sites, a major concern is inadequate emergency planning and infrastructure. Specifically though, due to the Mississippi Legislature's decision to take away \$200 million in tax revenues generated from Grand Gulf from Claiborne County and give them to other counties in the state, Claiborne County's emergency planning infrastructure is woefully underfunded to deal with the present nuclear plant – let alone a new

## Appendix D

plant. There is not adequate money available to fund the Sheriff's Department, Civil Defense or the Fire Department. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24 hours per day. The radiological emergency plan relies heavily on teachers to shelter and evacuate school children without obtaining adequately informed consent or any statutory authority. Obviously, there are significant impediments to emergency planning to safeguard area residents in case of an accident or act of terrorism at the facility. (AA-7)

**Comment:** Moreover, Claiborne County's emergency planning infrastructure is woefully underfunded and could not adequately deal with any incident at the present nuclear plant – let alone a new plant. Sadly, existing emergency planning and infrastructure in Claiborne County and beyond are simply inadequate to address a potential incident. (AD-8)

**Comment:** There has been little emergency planning to safeguard area residents and there does not appear to be resources for emergency planning for a new plant, in case of an accident or act of terrorism at the facility. (AF-10)

**Comment:** Another major concern is inadequate emergency planning and infrastructure in Claiborne County and beyond. Money that should be available for this planning, has been distributed to other counties in Mississippi. This has left Claiborne County's emergency planning infrastructure extremely underfunded to deal with the present nuclear plant and unable to add a new plant. If we look at all the related services, it can be seen that there is not adequate money available to fund the Sheriff's Department, Civil Defense or the Fire Department. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24 hours per day. Unfortunately, the emergency plan relies heavily on teachers to shelter and evacuate school children, even though the teachers may not have obtained consent from parents and guardians. This heavy burden should not be born just by the teachers. There needs to be a coordinated system of emergency services. (AF-11)

**Comment:** Another major concern is information we have received regarding inadequate emergency planning and infrastructure in Claiborne County. The Mississippi Legislature's decision to take away \$200 million in tax revenues generated from Grand Gulf and give them to other counties in the state has crippled Claiborne County's emergency planning infrastructure leaving it underfunded and unprepared to deal with the present nuclear plant, much less a new plant. It has been brought to our attention that there is not adequate money available to fund the Sheriff's Department, Civil Defense or the Fire Department, there is only one fire station in the rural county, the hospital in Port Gibson is not open 24 hours per day, and the radiological emergency plan relies heavily on teachers to shelter and evacuate school children without obtaining adequately informed consent or any statutory authority. This is far from the ideal scenario should the worst occur. (AG-7)

**Comment:** One of my major concerns about your permitting this nuclear power plant is inadequate emergency planning and infrastructure in Claiborne County and beyond. Due to the

Mississippi Legislature's decision to take away \$200 million in tax revenues generated from Grand Gulf and give them to other counties in the state, Claiborne County's emergency planning infrastructure is woefully underfunded to deal with the present nuclear plant, let alone a new plant. There is not adequate money available to fund the Sheriff's Department, Civil Defense or the Fire Department. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24 hours per day. The radiological emergency plan relies heavily on teachers to shelter and evacuate school children without obtaining adequately informed consent or any statutory authority. (AH-8)

**Comment:** One primary concern is inadequate emergency planning and infrastructure in Claiborne County and beyond. Due to the Mississippi Legislature's decision to take away \$200 million in tax revenues generated from Grand Gulf and give them to other counties in the state, Claiborne County's emergency planning infrastructure is woefully underfunded to deal with the present nuclear plant – let alone a new plant. There is not enough money to fund the Sheriff's Department, Civil Defense or the Fire Department. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24/7. The radiological emergency plan relies heavily on teachers to shelter and evacuate school children without obtaining adequately informed consent or any statutory authority. (AI-8)

**Comment:** I am also concerned about the inadequate emergency planning and infrastructure in Claiborne County and beyond. Claiborne County's emergency planning infrastructure is too under-funded to deal with the present nuclear plant – let alone a new plant. There is not adequate money available to fund the Sheriff's Department, Civil Defense or the Fire Department. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24 hours per day. (AM-8) (AQ-8) (AS-11) (AW-9) (BN-10)

**Comment:** I am also concerned about the inadequate emergency planning and infrastructure in Claiborne County and beyond. Claiborne County's emergency planning infrastructure is too under-funded to deal with the present nuclear plant – let alone a new plant. (AO-7)

**Comment:** Another major concern is that of inadequate emergency planning and infrastructure in Claiborne County and beyond. Claiborne County's emergency planning infrastructure is woefully under funded and currently, the county cannot even support the present nuclear plant, let alone a new facility. There is only one fire station in the rural county, and the hospital in Port Gibson is not open 24 hours per day. The radiological emergency plan relies heavily on teachers to shelter and evacuate school children without obtaining adequately informed consent or any statutory authority. There are significant impediments to emergency planning, thus providing no safeguard to area residents in case of an accident or act of terrorism. (AP-8)

**Comment:** I am also concerned for security reasons since the infra structure in Claiborne County is under funded and not developed. (AU-4)

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**Comment:** New Orleans has no evacuation plan for hurricanes. What's the point? There's no way out! If the area can't handle mother nature, how are we suddenly going to become savvy in emergency planning and infrastructure compensation in case of a nuclear power plant breakdown? Claiborne County in Mississippi, the site of the plant, lost \$200 million in tax revenues generated from Grand Gulf due to a state legislative redistribution. The County is underfunded to deal with the present nuclear plant-let alone a new plant. There is only one fire station in the county! Not only is the proposal life-threatening to the community, it is socially irresponsible as well. (BO-6)

**Response:** *The economic consequences of implementing the emergency preparedness plan from proposed construction and operation of the Grand Gulf units are addressed in Chapters 4 and 5 of the EIS.*

**Comment:** All impacts on public health and safety arising out of a severe accident, including the impacts of the accident itself, sheltering, evacuation, radiation exposure, treatment, and reoccupation, or relocation of populations, entire communities, and as we have seen in the accident that happened at the [Chernobyl] Power Station. (D-11)

**Comment:** Claiborne County was receiving all of the tax monies that came to this county. Well, sometime during that particular period, it was decided that the monies needed to be redistributed, okay? And what happened was that Claiborne County ended up receiving just a small portion, and the rest of it was distributed to other counties. (E-2)

**Comment:** With respect to the tax revenues generated by the facility, and you have heard a little bit about that already tonight, and I understand that could be a huge issue. And if you are getting huge tax benefits and you want to take the attendant risks, I am not here to judge you. But that is not the situation that you are in. Claiborne County receives a very small portion of the tax revenues generated by the facility. That was not true at first, but soon after the facility began operating, it all changed. So that there are now 48 counties that share the tax revenues generated by the facility. The facility is not in 48 counties, It is in this county, and since that change happened, we are basically talking about somewhere in the neighborhood of \$200 million that should have come to this county. (I-3)

**Comment:** One cost that you have to look at is the Gulf of Mexico. If there is an accident at this plant, and it goes down the Mississippi River, you will destroy the seafood industry that now creates hundreds of millions of dollars in revenue and food for people to eat. (K-4)

**Comment:** There are tax benefits here even though the tax money, a large portion of it, was taken away from the county, and I think that Mr. Doss, who was a tax collector here and assessor for a number of years, could attest to this. (N-7)

**Comment:** And I guess the main thing that I wanted to talk about that some people have kind of referred to, but I would like to go into a little more detail, is the issue of the contamination of the Mississippi River in the case of catastrophic accident or a high release of nuclear waste. I think Becky addressed the issue of the fisheries, but if this river was contaminated many of the communities the length of the river from here down depends on the river for water, and there is an industrial corridor from Baton Rouge to New Orleans that depends on the river water for all their industrial usage. New Orleans itself depends on the river for drinking water, and there is also the issue of wetlands, which have been used for water purification and hurricane mitigation. There is the fisheries, and also the current could potentially carry this waste from Florida to Texas. So you are talking about just incomprehensible damage if this whole area was contaminated, and I think that is something that really needs to be considered. (Q-2)

**Comment:** Benefits to this area briefly with 11 percent unemployment for Claiborne County, and I guess within the last decade or so there has been a loss of population to the county, this is not typically interpreted as something as signs of a prosperous area when you are losing population, and you have unemployment rates like that. (R-10)

**Comment:** The deeper one digs into the past and present practices of the nuclear industry, the less supportable it becomes. I understand this plant is to be sited in a community with little economic resources, and there will probably be promised of riches to be had in the form of property tax relief, or new schools and hospitals, or the other similar bribes that have been offered to similar communities in the past. Well, in Ohio, we cannot point to a single person who has died from radioactive exposure from the nuclear plants here. However, as much of the State has experienced the loss of billions of dollars in the form of disproportionate rate increases for a modest amount of power, it is inevitable that thousands of lives have been lost and will be lost because of the degradation of public services, personal and corporate wealth and the other impacts of draining a few percentage points of the entire local economy have accrued. (X-9)

**Comment:** All potential socio-economic impacts from the elevated national security requirements and countermeasures to protect a larger target of terrorism with the expansion of the nuclear power station site including the indefinite and possibly permanent closure of Mississippi River to public access for commercial, sporting, recreation and other means of economic livelihood. (AL-21)

**Response:** *Distribution of tax monies for the existing plants is described in Chapter 2 of the EIS. The impact on government finances of construction and operation of the proposed plants will be described in Chapters 4 and 5.*

## Appendix D

**Comment:** The distribution of tax revenues, and who bears the risks, and who reaps the benefits; and existence and/or adequacy of the emergency evacuation plans; and environmental justice issues, and this is huge, and class and race issues and they must be addressed. (R-2)

**Response:** *U.S. Nuclear Regulatory Commission staff analyzed both socioeconomic and environmental impact from an environmental justice perspective in Chapters 4 and 5 of the EIS.*

**Comment:** Terrorist sabotage or accidents could poison the Mississippi River, New Orleans, and the Gulf of Mexico. Damage could affect seafood industries that bring in millions of dollars of benefits to the state economy. (W-5)

**Comment:** All socio-economic impacts arising out of a severe nuclear accident at an expanded Grand Gulf site on the including commerce on the Mississippi River and the Gulf of Mexico fishing industry. (AL-8)

**Comment:** It is also near an area of the River that would allow easy access for terrorists, particularly from a boat or barge. An accident or act of sabotage at this facility and its stored nuclear waste could contaminate the Mississippi River and the Gulf of Mexico. This would be disastrous to the communities downstream that depend on the River for drinking water. Also, the extensive industrial corridor between Baton Rouge and New Orleans depends on the River water for processing. These industries would have to be shut down. Contamination of vital wetlands that provide 'nurseries' for larval and other developmental stages of fish, for shrimp, oysters, etc., could devastate the seafood industry. Certainly the tourist industries in Florida, Mississippi, Louisiana, and Texas would be affected. We are talking potentially billions of dollars and innumerable lives lost or changed because of an accident at this plant. (AM-9)

**Comment:** An accident or act of sabotage at this facility and its stored nuclear waste could contaminate the Mississippi River and the Gulf of Mexico. This would be disastrous to the communities downstream that depend on the River for drinking water. Also, the extensive industrial corridor between Baton Rouge and New Orleans depends on the River water for processing. These industries would have to be shut down and shipping on the MS River curtailed. Contamination of vital wetlands that provide 'nurseries' for larval and other developmental stages of fish, shrimp, oysters, etc., could devastate the seafood industry. Additionally, the tourist industries in Florida, Mississippi, Louisiana, and Texas would be affected. We are talking potentially billions of dollars and innumerable lives lost or changed because of an accident at this plant. (AO-8)

**Comment:** An increased threat to human health is not the only serious risk that this facility will pose, it can also be devastating economically. If the environment becomes contaminated, we can lose the very foundation upon which we depend for sustenance. Most areas along the river

are agricultural, supplying the nation with food crops for human consumption and animal feed. Those crops not directly consumed by people will eventually be consumed through the foodweb. Other industries such as gaming (hunting and fishing) and seafood harvest could be destroyed. Economic collapse would be inevitable and billions of dollars lost. (AP-5)

**Comment:** An increased threat to human health is not the only serious risk that this facility will pose, it can also be devastating economically. If the environment becomes contaminated, we can lose the very foundation upon which we depend for sustenance. Most areas along the river are agricultural, supplying the nation with food crops for human consumption and animal feed. Those crops not directly consumed by people will eventually be consumed through the foodweb. Other industries such as gaming (hunting and fishing) and seafood harvest could be destroyed. Economic collapse would be inevitable and billions of dollars lost. (AP-9)

**Comment:** It is also near an area of the River that would allow easy access for terrorists, particularly from a boat or barge. An accident or act of sabotage at this facility and its stored nuclear waste could contaminate the Mississippi River and the Gulf of Mexico. This would be disastrous to the communities downstream that depend on the River for drinking water. Also, the extensive industrial corridor between Baton Rouge and New Orleans depends on the River water for processing. These industries would have to be shut down. Contamination of vital wetlands that provide 'nurseries' for larval and other developmental stages of fish, for shrimp, oysters, etc., could devastate the seafood industry. Certainly the tourist industries in Florida, Mississippi, Louisiana, and Texas would be affected. We are talking potentially billions of dollars and innumerable lives lost or changed because of an accident at this plant. (AQ-10)

**Comment:** It is also near an area of the River that would allow easy access for terrorists, particularly from a boat or barge. An accident or act of sabotage at this facility and its stored nuclear waste could contaminate the Mississippi River and the Gulf of Mexico. This would be disastrous to the communities downstream that depend on the River for drinking water. Also, the extensive industrial corridor between Baton Rouge and New Orleans depends on the River water for processing. These industries would have to be shut down. Contamination of vital wetlands that provide 'nurseries' for larval and other developmental stages of fish, for shrimp, oysters, etc., could devastate the seafood industry. Certainly the tourist industries in Florida, Mississippi, Louisiana, and Texas would be affected. We are talking potentially billions of dollars and innumerable lives lost or changed because of an accident at this plant. (AW-10)

**Comment:** Before NRC considers granting this preliminary permit, it should answer a number of questions: How would a release of radiation affect the seafood industry and agriculture in the area? (BI-6)

**Response:** *The economic impact of postulated accidents was evaluated, and the results are presented in Chapter 5 of the EIS.*

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**Comment:** There are very few Port Gibson residents that have jobs at that facility. It is a small percentage, and it is a small portion. (I-2)

**Response:** *The geographic distribution of current Grand Gulf employment is covered in Chapter 2 of the EIS and the impact of new plants on the employment in the area in Chapters 4 and 5.*

**Comment:** You hear a lot about the jobs, and that is an issue that can't be avoided by anyone that wants to take the issue seriously whether a new plant makes sense or not. But I did appreciate the comments from Rose Johnson that it is a false choice or a bad choice when a community needs to choose between their health and future generation's health, and being able to have some kind of job to put the food on the table and a roof over one's head. (R-12)

**Comment:** It is hard to persuade other needed businesses to come to small towns, much less to come and locate next to a nuclear reactor facility, that is knowingly storing onsite, cancer causing toxic nuclear waste. In effect the permitting board is sentencing a community to die or become ill. (AJ-7)

**Comment:** As a historically poor state Mississippi has [lagged] behind in industrial and commercial [development]. Some might believe that we are behind the curve, I would argue that this has given us the opportunity to see how industrial and commercial [development] has affected the areas this type [development] have been implemented. At this time, Mississippi is trying to catch up and bring in new development and jobs. As a long time resident of this state I believe it is time we start looking at the consequences of such decisions, learn from what has happened and use that information to put ourselves ahead of the game. I do not believe that this plant will put us ahead of the game and make us more attractive to future [business] and [development]. (AT-3)

**Response:** *These comments on future business development opportunities facing the local community are not within the scope of the EIS. They have not been considered further in the staff's environmental review.*

**Comment:** How can we even consider adding another nuclear reactor when Entergy has failed to deliver on its 25 or so year old promise of job creation in this area. What happened, and why is there now double-digit unemployment in this area, which is one of among the highest in the state of Mississippi. And in addition to the unemployment, you have to add to that is the situation that you have a situation where the young people who work here move away. Why? Because they don't have the kinds of job opportunities that they would be interested in pursuing and they work elsewhere. (O-6)



**Comment:** Grand Gulf has been less than responsible to the surrounding community, specifically Claiborne County, in hiring, training, and promoting its citizens in that the majority of Grand Gulf's permanent workforce do not live in Claiborne County. (S-6)

**Response:** *These comments on actions not taken and not required of the applicant by any regulatory body are not within the scope of the EIS. They are not considered further in the staff's environmental review.*

## D.6 Environmental Justice

**Comment:** The comment about the racism and where nuclear power plants are located. With 103 reactors that are in the country, a large percentage, and I would say greater than 90 percent, are located in non-minority areas. And I know that a lot of people are thinking that this is a race issue, we just need to make sure that we get the information correct, and I would say that if at all that I felt that the issue of potentially building another unit at Grand Gulf was potentially racial in nature that I would not be standing here tonight, and that is one thing that I can tell you for sure. (A-11)

**Comment:** And finally all of the above need to be considered as environmental justice issues given that the risks and the hazards associated with Grand Gulf site expansion disproportionately impact the people of Claiborne County, given that the county is 84 percent African-American, with 34 percent living under the poverty line, with a per capita income of \$11,000 annually, and that is from the Census data from 2000. (D-12)

**Comment:** Once again in Mississippi, low income African-Americans are being placed at the greatest risk of harm so a greedy corporation can make big profits. To place another nuclear reactor in Claiborne County doesn't make any sense when there is already concerns about the present plant. This is a crime and blatant example of environmental racism. Claiborne County is 84 percent African-American, with 34 percent living below the poverty line. (G-2)

**Comment:** And chief among these enormously important issues that have got to be considered in the NEPA process is certainly environmental justice. With this project once again we are talking about an African-Community that is basically going to receive all of the burdens of this proposed project, and very few of the benefits. And that is environmental racism. (I-1)

**Comment:** And as the Nuclear Regulatory Commission held in the Louisiana Energy Services case just a few years ago, which I did litigate, environmental justice is used such as these have to be considered as part of the NEPA process. (I-7)

**Comment:** I want to echo the sentiments of the local people who talked about environmental racism. That is a genuine issue that must be considered when this application is being

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reviewed, and why Claiborne County, Mississippi, and why Grand Gulf Nuclear Station. As our African-American population continues to thrive, and our Caucasian population diminishes, 20 years from now what will the population be. As we study demographics across the Nation, we already know that we can project what the population in this community will be, and we just reiterate those comments regarding environmental racism. And I call upon the governing body of this county tonight to be ever mindful of the tax inequity that exists, and I don't know if this is an NRC problem, or a state of Mississippi problem, or what. But there is a tremendous tax inequity that currently exists with regard to the distribution of tax dollars. And this should not be about money, and I hope that we don't sit down and say that if all of the tax dollars could come here, then we should be for the approval of this permit. But certainly the reverse is that why should we assume the risk and distribute those funds, those resources, across the state of Mississippi to people who are less at risk than we are. Let's keep that in mind, and I direct those comments specifically to the residents of Claiborne County, and ask that we constantly call upon our elected officials to do everything possible to see that the NRC and this application process is taken seriously, and to see that those tax dollars are returned to Claiborne County if there is going to be a second site here. (J-1)

**Comment:** I wanted to begin my comments by focusing on the Louisiana Energy Services case. It was in this case that two African-American communities in Louisiana, the communities of Forest Grove and Cedar Springs, were successful in stopping the licensing of a uranium enrichment facility on environmental justice grounds, and the decision maker was the Nuclear Regulatory Commission. In that case the Nuclear Regulatory Commission was compelled to set up a very important national environmental justice precedent, and in that decision I quote the Nuclear Regulatory Commission held, and I quote, that this great impact analysis is our principal tool for advancing environmental justice under the National Environmental Policy Act. The NRC's goal is to identify and adequately weigh and mitigate the effects on low income and minority communities that become apparent only by considering factors peculiar to those communities. (O-1)

**Comment:** The risk to public health, safety, and security associated with building more atomic power plants at the Grand Gulf site is disproportionately placed on the people of Claiborne County and the surrounding communities. (S-10)

**Comment:** Entergy wants to dump yet another dangerous facility on the mostly African American residents who live in Claiborne County, which is 82 percent African American. This is a clear case of environmental racism. (U-3) (X-13) (AE-3) (AH-3) (AI-3) (BD-7) (BE-3) (BF-4) (BH-3)

**Comment:** Claiborne County, where this dangerous facility will be dumped, is 82 percent African American, which unfortunately evokes the issue of environmental racism. (W-3)

**Comment:** A third important concern is environmental racism. Entergy wants to dump yet another dangerous facility on the mostly African American residents who live in Claiborne County, which is 82 percent African American. The adverse impacts from this project will disproportionately impact a racial minority group with weak political and economic means to advocate on its behalf. This is a clear case of environmental racism. Please deny this request for an early site permit for expansion of Grand Gulf Nuclear. (Z-3)

**Comment:** Entergy wants another nuclear facility in the backyards of the mostly African American residents who live in Claiborne County, which is 82 percent African American. This is a clear case of environmental racism. (AA-3)

**Comment:** In addition, and specific to the Port Gibson facility, I object to yet another “undesirable” facility being located in a predominately African-American community. (AC-4)

**Comment:** Additionally, this proposal raises significant environmental justice issues. Claiborne County is 82 percent African American. The placement of this facility within Claiborne County would, therefore, have a disproportionate effect on African American communities. (AD-5)

**Comment:** 82 percent of Claiborne County is African American, making the proposal to put another dangerous facility in this community a clear case of environmental racism. (AF-4)

**Comment:** The community surrounding the facility is 82 percent African American, which makes this proposal ring of environmental racism. (AG-3)

**Comment:** The nuclear facility is located in a small town, mostly minority, low income, residential community, called Port Gibson, Mississippi. (AJ-2)

**Comment:** There is and will be a disproportionately high and adverse impact on low income or minority populations. (AJ-12)

**Comment:** The time is past for the people and the Nuclear Regulatory Commission to allow (permit) facilities that generate vast amounts of toxic air pollution, soil contamination, water pollution and toxic radioactive wastes that has to be stored onsite or disposed of in some other community that doesn't want it. This could be considered another Environmental Justice issue! President Bill Clinton's Executive Order 12898 in its ruling “To the greatest extent practicable and permitted by law... each federal agency shall make [achieving] Environmental Justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health, or environmental effects of its programs, policies, and activities on minority populations and low income populations in the United States.” The last time I checked Port Gibson, Mississippi is still in the United States, therefore why would the commission even consider permitting this facility in a low income minority community? Companies, industries and

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others should be ashamed of themselves and not be allowed to bribe or coerce the citizens desperate for jobs into acceptance of (with the offer of good paying jobs, positive economic impact or other incentives) or exchange for industries that spew toxic pollution on the people! (AJ-16)

**Comment:** All of the above need to be considered as environmental justices issues given that the risks and hazards associated with the Grand Gulf site expansion disproportionately impact the people of Claiborne County given that the county is 84 percent African American with 34 percent living under the poverty line at a per capita income of \$11,000 annually. (AL-13)

**Comment:** I have heard much discussion of environmental racism and also believe this is a relevant issue. Claiborne county is largely minority in population – I don't believe this plant would be considered in a wealthier, more affluent area. (AM-4) (AQ-4) (AW-5)

**Comment:** I have heard much discussion of environmental racism and also believe this is a relevant issue. (AS-8)

**Comment:** IT'S ABOUT JUSTICE. Entergy wants to dump yet another dangerous facility on the mostly African American residents who live in Port Gibson. This is a clear case of environmental racism. Why do Entergy and other polluting companies promise only dangerous and dirty jobs to African Americans and other people of color? (BG-8)

**Comment:** Before NRC considers granting this preliminary permit, it should answer a number of questions: Will this facility affect communities of color more than other communities? (BI-7)

**Comment:** This may be a siting decision now, but the considerations range far beyond geological stability and availability of plentiful cooling water. This is a decision to saddle an economically depressed county with greater risk in order to produce electricity by one of the most expensive and environmentally unsound methods that exists today. (BI-9)

**Comment:** Entergy wants to dump yet another dangerous facility on the mostly African American residents who live in Claiborne County, which is 82 percent African American. This is a clear case of environmental racism that ignores significant impediments to emergency planning to safeguard area residents in case of an accident or act of terrorism at the facility. We believe it is no accident that low-income African Americans in Mississippi are being placed at the greatest risk of harm so a large corporation can make big profits. Entergy would not be trying to build the first new nuclear plant in decades in the U.S. in predominantly white Madison or Ridgeland, Miss. Just like you don't have hog factories, creosote waste sites and chemical plants located next to these affluent, white communities. This is another example of environmental racism in a state where African Americans are already bearing the brunt of the pollution burden. African American women in Mississippi have the worst health of any

population group in the U.S. Adding additional sources of dangerous pollution is simply unacceptable. It is a blatant case of environmental racism to expect this community to accept the risk from building another nuclear power plant considering concerns about health impacts from the present plant and the threat of terrorist attacks. This would simply make the terrorist target bigger. (BJ-3)

**Comment:** Here in California, we site hazardous waste facilities in poor Hispanic areas. I guess in Mississippi one uses poor black areas. I am told Claiborne County, is 82 percent African American; do many of low income minority persons live near the proposed Power Plant? (BL-3)

**Comment:** I have heard much discussion of environmental racism and also believe this is a relevant issue. Claiborne county is largely minority in population – I don't believe that this plant would be considered in a more affluent area. (BN-4)

**Comment:** 82 percent of it population is African American. This is a clear case of environmental racism. (BO-3)

**Comment:** Justifying permit because of the economic benefits they provide is disgusting. Projects should not be allowed to destroy the public health safety, and welfare of any community, especially a low income, minority community that does not have the political clout, financial clout or resources to fight these terrifying nuclear reactor projects! By not having the resources available to fight this situation, this could be an Environmental Justice issue in itself! I sincerely believe this to be an Environmental Justice problem and hope that some health organization or environmental group will be notified of this project and join together to fight against this project and be prepared to file lawsuits challenging this permit request. Why do these types of projects never request to be located in densely populated upper class (white-Caucasian) communities, such as Madison, Clinton, or North Jackson? (AJ-14)

**Response:** *Environmental justice analysis in a U.S. Nuclear Regulatory Commission (NRC) EIS deals with disproportionate environmental impact on low income and minority communities, including socioeconomic impact. NRC staff analyzed socioeconomic impacts from an environmental justice perspective in Chapters 4 and 5 of the EIS.*

**Comment:** Before NRC considers granting this preliminary permit, it should answer a number of questions: Would the benefits from any jobs related to the construction and operation of a second nuclear facility be fairly distributed. That is, will this project mean good jobs with good benefits to the African American residents of Claiborne County? (BI-8)

**Response:** *Whether current or future Claiborne County residents will be hired for construction and operations jobs would depend on a number of factors, including job requirements, occupational skills of the local workforce, and availability of training programs. The geographic*

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*distribution of current Grand Gulf employment is covered in Chapter 2 of the EIS and the impact of any new plant(s) on the employment in the area in Chapters 4 and 5. Issues with the equity of hiring practices and equal employment opportunity are the responsibility of the U.S. Equal Employment Opportunity Commission and are not considered further in the staff's environmental review.*

**Comment:** I attended an environmental justice workshop that was put on by the government, ATSDR, and other agencies, in Weblin, Mississippi. At that meeting, there were chiefs of some Indian nations that came to speak about the contamination of their sacred lands by uranium mining. They talked about how difficult it was to tell their people to not eat the fish out of the stream. Do not eat the deer. They are contaminated. Well, these are their sacred lands, and these are the lands that have supported them for many generations, and now they can't use them anymore. (K-2)

**Response:** *The impacts of the uranium fuel cycle including the onsite storage and eventual disposal of the spent fuel is considered in Chapter 6 of the environmental impact statement. Guidance on the approach is provided in the U.S. Nuclear Regulatory Commission environmental standard review plan (NUREG-1555, Section 5.7).*

**Comment:** It doesn't have to be that way, and we showed them in Louisiana that we can stop licensing of dangerous and hazardous facilities in our African-American communities, and we will show them again. (O-8)

**Response:** *This comment provides only general information in opposition to the Grand Gulf early site permit and is not considered further in the staff's environmental review.*

### D.7 Radiological Impacts

**Comment:** Impacts on plant and animal life, and the fish in the Mississippi, and everything that is revolving in that biosphere surrounding Grand Gulf and that biosphere generally and we humans that live in it. (R-4)

**Comment:** We need to build on our [resources] and enhance our state. One of our largest resources in the state of Mississippi is our natural environment. The river, the forests, the land. By building a power plant we risk destroying and or [polluting] these resources. It is time for the state of Mississippi to start protecting and preserving its natural resources before it is too late. I believe that by allowing Grand Gulf Nuclear to expand its facilities, we are expanding our potential to harm our natural resources and citizens. (AT-4)

**Response:** *The impact on the Mississippi River arising from the release of radioactive materials into the Mississippi River from the operation of additional nuclear power units will be reviewed in accordance with the environmental standard review plan (NUREG-1555) and discussed in the EIS in Sections 4.3 and 5.3.*

**Comment:** The Claiborne County residents want what any other community desires; their god-given right to breath clean air, and drink clean water. (G-7)

**Response:** *The comment provides only a general statement and is not considered further in the staff's environmental review.*

**Comment:** All impacts on public health and environment arising out of the increase in routine or accidental releases of radioactive gas, and particulate to the air and to our water as it settles on to our land and our agricultural soil as the result of the operation of additional units. Clearly, this analysis should be taken in the most vulnerable of our population, not the most robust, and so we need to be looking at the impact of increased bioconcentration of radioactive isotopes. So while they say that the impact is small, and the releases are minute, we need to realize that there are isotopes that are being routinely released by this plant, like cesium-135, that has a half-life of over 2 million years. So every day that plant operates, and that one isotope, and dozens of isotopes gets out in the environment, it is going to persist in the environment for – well, an effective half-life. And if you want to really get rid of all the hazardous life, you multiply that half-life figure by 10, and that will give you some idea of how long that isotope can be accumulating in the environment, and biomagnifying up through the food chain, and getting through mother's milk, or through the uterus, or in any other number of ways and accumulate. And so all this environmental impact statement needs to be looking at is all and new published data that looks at the epidemiological impact of the routine and accidental emissions. (D-10)

**Response:** *The early site permit process is designed to determine if the site is suitable for one or more nuclear power reactors. The EIS assessment will contain an analysis and evaluation of components of the facility relating to the potential radiological consequences. Chapters 4 and 5 of the EIS will address health impacts related to construction and operations.*

**Comment:** From an environmentalist standpoint for us to build a second site in close proximity of the first unit, and we are talking about over a period of years; whereas, beginning from day one some 20 years ago when Entergy first built the site, they have refused to put one penny into a study to even conduct studies in terms of any help related that perhaps may have come from that site. I don't see us getting into without some kind of commitment based upon some studies here for the local residents, and here with an increase in cancer, or the increase in other various kinds of disease that could have been related to the site, and without any of that, I don't see us proceeding with a second Grant Gulf unit here. (H-1)

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**Comment:** And at the reactor site and the area surrounding it, people are concerned about cancer, and the growing rates of cancer, and what we know that it is a scientific fact that nuclear radiation causes cancer, period. And Entergy's nuclear reactor, the proposed one that we are now talking about, would definitely increase radiation levels as part of its routine operation. (O-4)

**Comment:** There is a lack of an adequate epidemiological study of the health effects of radiation releases on the residents of Claiborne County from the routine operation of Grand Gulf atomic power plant and any new reactors. (S-7)

**Comment:** Concerns about elevated cancer rates and the failure of state health authorities to conduct epidemiological studies of the surrounding population. (BD-6)

**Response:** *The EIS will contain an analysis and evaluation of components of the facility relating to the potential radiological consequences. Chapters 4 and 5 of the EIS will address the health impacts; however, epidemiological studies are outside the scope of the EIS.*

**Comment:** So I am saying that this is not just a local issue. It is a global issue. [Chernobyl] gave off radiation 2000 miles away, and so anything that happens here could contaminate a good portion of the world. (K-3)

**Comment:** As nuclear power proliferates, the availability of highly radioactive building materials which can be used deliberately or accidentally to injure individuals and groups of people increases. Do we all have to buy our own personal Geiger counters so that a handful of corporate executives can enjoy the satisfaction of propping up a failed industry? (X-8)

**Comment:** The electricity generated at this facility would be sold to other states, why should my state be polluted and Mississippians be exposed to harmful toxic radioactive waste so others can have electricity? The Nuclear Regulatory Commission should permit nuclear reactor facilities to be located where the people receive the benefits and the toxic exposures. (AJ-10)

**Comment:** The nuclear power industry has historically evaded environmental regulations and shown disregard for the public health, safety, and welfare of nearby or far residents. Please remember towns like Anniston Alabama and PCB pollution, millions of dollars do not replace or pay for good health! (AJ-17)

**Response:** *These comments refer to health impacts. The EIS impact analysis will contain an analysis and evaluation of components of the facility relating to the potential radiological consequences. Chapters 4 and 5 of the EIS will address health impacts.*



**Comment:** When I passed by the nuclear power plant, I seen the steam coming up, and I noticed the storage there, and I wondered if I was going to get zapped going by here today or not. In my community here, I am talking to people sometimes, and they have an ailment, and a lot of them went to a lawyer, and you know, I didn't have all these things happening, you know, and I wonder if it is that nuclear power plant. (F-2)

**Comment:** But the fact is that it is not safe. Radioactive release remains very toxic to all life for thousands, to millions, of years. (G-5)

**Comment:** Residents of Port Gibson are exposed to radiation from the existing facility, and obviously now more exposure is proposed, because we are talking about another facility, another facility that has in fact the capacity for 2 or 3 reactors, and that is possible. Nobody can deny that scientists have documented that radiation exposure increases the risk of cancer and all kinds of serious health problems; birth defects, still births, and the science is there, absolutely. (I-5)

**Comment:** You would not have to wait for a catastrophe to happen at the reactor to have radiation emissions. These reactors are not as was said earlier emission free, and as part of their daily routine operations, they are leaking and emitting radioactivity into our air, land, and water. (O-5)

**Comment:** I hear this at every NRC meeting that I go to practically, even if it is not about reactors, because I deal a lot with low level nuclear waste, and not the stuff that will kill you in like 5 minutes if you were next to it, and it wouldn't be in the water, but the stuff that would give you cancer within 10 years or 30 years, and so forth. And that is about radiation and how it is a fact of daily life. We have heard a lot about how the NRC has deemed that the routine releases from plants are safe and pose no substantial health risks to humans. We are told that we live with radiation all around us every day, and that radiation is just another fact of life, but an important distinction to make here is that between radiation exposures that people can't reasonably avoid, unless a person becomes a very desired lifestyle, and wants to avoid the sun completely, and never fly in an airplane to visit relatives on the other side of the world, it is true that there is a lot of radiation out there in nature that is difficult to avoid. But ionizing radiation that comes from a nuclear reactor is an entirely different matter, and that has to do with activities of mankind and how we deal with technology. So it creates a whole other issue that needs to be addressed and if you have exposure to radioisotopes that are in your drinking water, and in the soil, and in the air, that is a whole other matter than a little bit of radiation that may be in a banana. So I just think that it is time to put that to rest, and the whole idea that it is a radioactive world and so let's just throw some more into it. It is time for – you know, that is kind of absurd. (R-5)

**Comment:** All impacts on the public health and environment arising out of the increase in routine and accidental radioactive emissions to the air and to the water as the result of the

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operation of additional nuclear power units. The analysis should consider work by Dr. John Gofman, showing that low-level radiation, at levels considered to be safe for medical use, is a significant contributor to deaths from heart disease and cancer. See Radiation from Medical Procedures in the Pathogenesis of Cancer and Ischemic Heart Disease (Committee for Nuclear Responsibility: 1999). (AL-6)

**Comment:** IT'S ABOUT HEALTH. The daily operation of nuclear reactors release radioactivity into our air, water, and soil that can damage human health. It is scientifically established that being exposed to radiation increases your risk of cancer and other severe health problems. Health studies have linked nuclear reactors to increased cancers, leukemia, reproductive damage, still births, and birth defects. (BG-3)

**Comment:** IT'S ABOUT A CLEAN ENVIRONMENT. Entergy admits that it wants to build a nuclear reactor that would have the capacity equal to two very large reactors. If licensed, this reactor would generate harmful, radioactive waste, daily pollute the air, water, and soil with radiation, and threaten the lives of people with the potential for a nuclear catastrophe. (BG-4)

**Response:** *The purpose of radiation regulatory limits are to protect workers and the public from the harmful health effects of radiation on humans. The limits, including effluent release limits, are based on the recommendations of standards-setting organizations. Radiation standards reflect extensive ongoing study by national and international organizations (International Commission on Radiological Protection [ICRP], National Council on Radiation Protection and Measurements, and National Academy of Sciences) and are conservative to ensure that the public and workers at nuclear power plants are protected. The NRC radiation exposure standards are presented in 10 CFR Part 20, "Standards for Protection Against Radiation," and are based on the recommendations in ICRP 26 and 30. In addition, the U.S. Environmental Protection Agency has established a whole body dose limit of 25 millirem per year (see 40 CFR Part 190). Finally, Appendix I in 10 CFR Part 50 provides dose design objectives for exposure of the public to radioactive effluents from nuclear reactors. Numerous scientifically designed, peer-reviewed studies of personnel exposed to occupational levels of radiation (versus life-threatening accident doses or medical therapeutic levels) have shown minimal effect to human health, and any effect was from exposures well above the exposure levels of the typical member of the public from normal operation of a nuclear power plant. Regarding health effects to populations around nuclear power plants, NRC relies on the studies performed by the National Cancer Institute (NCI). NCI conducted a study in 1990, "Cancer in Populations Living Near Nuclear Facilities," to look at cancer mortality rates around 52 nuclear power plants, nine U.S. Department of Energy (DOE) facilities, and one former commercial fuel reprocessing facility. The NCI study concluded from the evidence available that there is no suggestion that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers in populations living nearby. Additionally, the American Cancer Society had concluded that although reports about cancer case clusters in such communities have raised public concern, studies show that clusters do not occur more often near nuclear plants than*

*they do by chance elsewhere in the population. The issue of radioactive effluents and their impacts on human health are evaluated in Chapters 4 and 5 of the EIS.*

## **D.8 Uranium Fuel Cycle and Waste Management**

**Comment:** In addition, there is substantial doubt about the ability to develop a large amount of nuclear power without a complete reconstruction of the U.S. Department of Energy nuclear fuel refining process, an expense which should not be borne by the taxpayer in a deregulating electric market, and which cannot be borne by the utility industry if new nuclear plants are to pass the laugh test. (X-5)

**Response:** *The comment is noted. Restructuring of the U.S. Department of Energy is outside the scope of this environmental review. The impact of the uranium fuel cycle, including the onsite storage and eventual disposal of the spent fuel, is considered in Chapter 6 of the environmental impact statement. Related U.S. Nuclear Regulatory Commission (NRC) staff review guidance is provided in the NRC environmental standard review plan (NUREG-1555, Section 5.7).*

**Comment:** I guess there was one question about spent fuel capacity. The spent fuel capacity at Grand Gulf is capable of storing fuel in the spent fuel up until 2007. Now, what happens after that, and this technology has already been used at several of our sites, and across the company, utilities have moved towards dry cask storage. That is a technology that has been used for the low radiation fuel bundles, bundles that have been out of the reactor for a significant period of time, such that the dose is relatively low. And these bundles can be safely stored in a dry cache storage facility on the site. It is still on the site location, and many utilities use that already. But with that technology, we can store fuel for as long as it takes to have an alternate main storage for fuel elsewhere, such as Yucca Mountain. (A-8)

**Comment:** I first would like to say that one of our major concerns here is that we have been talking about nuclear waste, and I know that is a big issue. If I recall, there were 3500 assemblies, and 800 pounds per assembly. That is over a thousand tons there at Grand Gulf sitting in that pool with an uncertain future. And now we are talking about increasing the amount of nuclear waste that could be generated there. And it will be where it is if there is no other place for it to go, and you should be considering that, and certainly the environmental impact statement that we are talking about here is to address that. We also want to know about all impacts arising from the additional accumulation of high level radioactive waste generated and indefinitely stored on the Grand Gulf nuclear site as I originally discussed. (D-2)

**Comment:** Nuclear power produces extremely hazardous waste from the cradle to the grave. There is dangerous radiation waste from mining uranium, from processing it into fuel, and then from waste material left over after it is used to make power. (G-3)

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**Comment:** One point that I wanted to make on used fuel management. There has been a lot of discussion about can I stand in a room with spent fuel, and is it dangerous. What was not said about used fuel. I have been in a room with used fuel several times. I have taken tours of reporters and policy makers into a used fuel storage room. The fuel is under 30 feet of water, which is a shielding agent for the radiation, and so you can go in this room with the appropriate radiation monitors on, and you can stand in there and look at the pool. You don't want to stand in there a long time, but you are perfectly safe to go into this facility and look at the fuel. The same thing with the dry storage containers that Mr. Williams referenced. These containers are safe, and they are approved by the NRC as safe. You can walk up to one and stand there, and you will not get any health impacts by standing next to one of these containers. About 28 companies already have gone from using pool fuel storage to these dry storage containers. They are made of concrete and steel, and as one speaker said, you take the oldest fuel out of your fuel pools, and put it in these containers, and you store these on-site with security added to that facility. (M-9)

**Comment:** The waste issue would be dealt with in this current EIS based on the life of the plant, the life of the nuclear facility, which I am not sure now, but it used to be 20 years, and maybe it is 40 years now. And I don't believe that at that point that there will be a facility to store this waste, and concrete and metal dry casks do not last tens of thousands of years. So I think there is a lot of considerations that need to be dealt with. (Q-3)

**Comment:** And the best solution found for the waste being just throwing it in a hole in the ground is disturbing. Let's see. The myth that nuclear is a clean air energy, and there is a lot to say here, but the proponent of nuclear energy would like us to believe that uranium fuel rods simply and magically appear in a nuclear reactor's core. This is not the case, and the process is neither simple nor magic. From the front end to the back end of the uranium fuel cycle, there is a considerable reliance on fossil fuels. Uranium mining and uranium milling, processing, and fuel fabrication, all require fossil fuel use in order to deliver fuel rods to the reactor. And, of course, this does not even begin to cover the unfathomable amounts of energy to create a Yucca Mountain, and/or to ship the nation's high level waste from the reactors across the country to the site, or in this case to the sites if we need more than one. (R-6)

**Comment:** The Grand Gulf site is already accumulating highly radioactive waste without an approved and scientifically valid long-term nuclear waste management site and more atomic power plants would make the radioactive waste problem for Claiborne County worse. (S-1)

**Comment:** No one knows what to do with the spent nuclear fuel that we have right now. Why generate any more? (AB-3)

**Comment:** The radioactive waste issue. I am not satisfied with the current means of disposal of nuclear waste. I have heard of no method of disposal of such waste that I consider acceptable. (AC-3)

**Comment:** Entergy has publicly admitted that by the year 2007 it will no longer have the capacity to store on-site the radioactive waste generated by the current Grand Gulf reactor. Additionally, it is well known that Yucca Mountain when fully operational will not possess sufficient capacity to receive existing waste. Thus, allowing expansion of the proposed expansion will only exacerbate current problems associated with storage and/or disposal of radioactive waste generated at the Port Gibson facility. (AD-2)

**Comment:** I have been told that the Grand Gulf Nuclear Reactor facility at Port Gibson has publicly stated as of the year 2007, it would no longer have storage capacity onsite for the toxic radioactive waste it is already generating. Where will the old waste and the expected new waste go in the future? To quote the Utah Governor Mike Leavitt who is adamantly opposed to the dumping of toxic waste, "It's pretty clear that utilities are willing to spend billions to move spent fuel out of their backyard into ours"... (AJ-11)

**Comment:** All impacts arising from the additional accumulation of high-level nuclear waste generated and indefinitely stored on-site at the Grand Gulf nuclear power station as the result of the operation of additional nuclear power reactors. This discussion is required, given that the Waste Confidence Rule applies only to waste generated by "existing facility licenses." 55 Fed. Reg. 38,474 (September 18, 1990). (AL-5)

**Comment:** In the past, contractors have not met specifications in building plants, unexpected accidents have occurred, and there is still no safe way of disposing of nuclear waste – I expect the plans are for it to stay by the MS River until opposition to the waste being shipped across the country ends. (AS-4)

**Comment:** Most of my concern is over the continued inability of the nuclear industry to safely dispose of its waste. The bottom line is that there is no safe, long-term, economically viable way to manage this "output." The much-touted "input-output" claims of the industry, which is that the public gets more benefits to cost than from other fuel sources, is not true, when all the real expenses are added in. This means construction, maintenance, use of water and other "inputs," as well as the byproducts (waste) and the collection, storage, transfer, etc. Of course, radiation is a problem that lasts for thousands of years, and is a cumulative effect that no number-crunching can tally. (BC-4)

**Comment:** While a plant like Grand Gulf may be staffed by competent people and enjoy a commendable safety record, the ugly fact of nuclear waste (48 tons produced annually at the plant) cannot go ignored. A plant official at the recent NRC environmental scoping meeting in Port Gibson stated that on site nuclear waste storage would reach capacity by 2007! To propose construction of new reactors creating even more deadly waste that will still be around thousands of years from now is not just folly, it is the height of arrogance. (BD-3)

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**Comment:** Through a company called “System Energy Resources, Inc.,” the Entergy Corp. is seeking a permit that would allow it to build one or more large nuclear reactors next to Entergy’s Grand Gulf nuclear reactor in Port Gibson, MS. Entergy publicly admits that by the year 2007 it will no longer have the capacity to store on-site the radioactive waste generated by the current Grand Gulf reactor. Entergy’s plans for new nuclear reactors will create more dangerous radioactive waste, and further threaten the health and lives of people who live, work, and attend school in Port Gibson. Here are some important facts. (BG-2)

**Response:** *The impact of the uranium fuel cycle, including the onsite storage and eventual disposal of the spent fuel, is considered in Chapter 6 of the EIS. Related U.S. Nuclear Regulatory Commission (NRC) staff review guidance is provided in the NRC environmental standard review plan (NUREG-1555, Section 5.7).*

**Comment:** I cried, because I was so sad that there is a possibility that we are going to be adding another nuclear plant. It’s like let’s double the amount of poison that we are going to give to our children as their inheritance. Yucca Mountain, that’s a dream. That is something that is not going to happen. If it does happen, it will be a disaster. (C-1)

**Comment:** There is another burden. All of the tons of toxic radioactive waste that have been produced at Grand Gulf are sitting right here on the site. A lot of people don’t know that everywhere the county that if you have a nuclear reactor, you have got all of the tons, and tons, and tons of waste that they have produced right there on site, and that is not going to change. It is not going to change. The proposed Yucca Mountain repository for all this nuclear waste that has been talked about for years, and years, and years, and years, is not going to be available for years, and years, and years, if at all. There are well respected scientists who have been weighing in on Yucca Mountain saying that in essence, in layman’s terms, what, are you nuts? You can’t put nuclear waste there. And let’s just assume for a minute that Yucca Mountain ever becomes a reality, what you all need to know in this community is that Yucca Mountain would already be full when the current Grand Gulf facility reactor reaches the end of its operating life. So this pipe dream out there about Yucca Mountain, which I think is a total pipe dream, and if you don’t want to believe the pipe dream, fine. But even if it is not a pipe dream, it is not going to be available for the waste from what you have here now, and any additional waste that you get in the future. (I-4)

**Comment:** And one is that I just absolutely believe that no more nuclear waste should be generated, and if that is not supposed to be dealt with at this point in the process, then it shouldn’t be, because I don’t think when you generate these deadly wastes that are going to be around for tens of thousands of years, that is an issue that should be dealt with before anything else is considered. I mean, we have billions of dollars in superfund sites now that have not

been cleaned up, and in decades have yet to be cleaned up, and we are depending on the government for that, and they aren't funding it, and I think that this is the same kind of situation. If you can't deal with it, and if you can't store it, and if you can't get rid of it, then you shouldn't produce it. (Q-1)

**Comment:** I am writing to remind you of the experience in Massachusetts when one of our two nuclear plants was closed down some years ago. It has become, to all intents and purposes, a nuclear waste dump. Despite decades of effort by the federal government there is still no approved site to store spent radio active fuel rods and reactor parts, which will be radio active for hundreds of years. You know that the state of New Mexico is still fighting a partially completed underground storage facility and the state may well succeed. The fact is that even the most pro-nuclear power proponents want a nuclear waste facility in their neighborhood. Surely, the licensing of new nuclear facilities should be held back until there is available a secure site for spent fuel rods. (Y-1)

**Comment:** Also, since there is nowhere in the country to dispose of, or better yet, recycle these highly toxic, long-lived wastes, I believe that no permits should be granted for future nuclear power plants. (AM-6)

**Comment:** Also, since there is nowhere in the country to dispose of, or better yet, recycle highly toxic, long-lived nuclear wastes, I believe that no permits should be granted for future nuclear power plants. (AO-5)

**Comment:** Also, since there is nowhere in the country to dispose of, or better yet, recycle these highly toxic, long-lived wastes, I believe that no permits should be granted for future nuclear power plants. (AQ-6)

**Comment:** We have not come up with solutions to dispose of the waste safely. (AU-2)

**Comment:** Also, since there is nowhere in the country to dispose of, or better yet, recycle these highly toxic, long-lived wastes, I believe that no permits should be granted for future nuclear power plants. (AW-7)

**Comment:** Beyond concerns I have about nuclear power plants operations, I am opposed to the construction of new nuclear facilities until the government [satisfactorily] deals with the nuclear waste these facilities already create. (AX-2)

**Comment:** It is madness to expect future generations for thousands of years to live with the extremely long-lived and hazardous waste that results from nuclear power production. Once

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fossil fuels run out in a hundred years or so, there could be wide ranging economic disruption that would make it extremely difficult to continue to safeguard nuclear waste. It is a sin against future generations to leave this legacy of poison as the most lasting hallmark of our generation. (BJ-5)

**Comment:** As a person in Nevada who is deeply concerned about the Yucca Mountain project and the fairness of the NRC licensing process in regard to that project, I am worried about the Commission's consideration of permits for new reactors. The license application has not yet been written for Yucca Mountain so NRC should certainly have no reason to believe that there will be a disposal site for any waste produced by new reactors. Indeed, even if Yucca Mountain were to be licensed, it's legal limit would be reached before any waste from new generation was disposed. (BK-1)

**Comment:** The people of Nevada are worried that the process will be tilted to the benefit of the Department of Energy and the commercial nuclear industry when the NRC evaluates a license application and determines whether or not Yucca Mountain should be granted a license. Right now there are magnitudes of uncertainty about the ability of Yucca Mountain to isolate waste and no justification for approval of new waste production. (BK-2)

**Comment:** Also, since there is nowhere in the country to dispose of, or better yet, recycle these highly toxic, long-lived wastes, I believe that no permits should be granted for future nuclear power plants. (BN-7)

**Comment:** In addition to the inherent risks to the environment of nuclear power, including disposal of low and high-level radioactive waste, and in addition to the high cost of decommissioning nuclear facilities, I oppose this permit for the undue risk it poses to the communities in its shadow and to the residents of New Orleans in the even of a severe accident. (BI-2)

**Response:** *The environmental impacts of postulated accidents are evaluated and the results of the staff's analysis are presented in Chapter 5 of the EIS.*

### D.9 Decommissioning

**Comment:** Whether existing reactors or looking at new ones, but what about when the plants shut down and eventually that has got to happen at all of these, even if they do the 40 years, plus the additional 20 that nearly all of them are applying for. They have got to shut them down at some point, and it will only make sense for them to shut them down instead of continuing to make repairs. You have decommissioning, and the enormous costs of that, and there was a recent GAO report that indicated that a lot of nuclear plant owner/operators were not doing their best at maintaining the funds that they needed to have built up in order to do a proper



decommissioning, which of course has a lot to do with environmental issues. Once they leave, are they going to leave behind a clean site that people would feel comfortable getting close to, or having a park on, or you name it. Is it going to be a green site some day. (R-11)

**Response:** *The environmental impact from decommissioning a permanently shutdown commercial nuclear power reactor is discussed in Chapter 6 of the EIS. In addition, Supplement 1 to NUREG-0586, Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, which was published in 2002, may provide information on expected impacts from decommissioning.*

## D.10 Cumulative Impacts

**Comment:** A cumulative impacts analysis is a fundamental and critical part of NEPA, and it can't be trumped by any agency or commission. (I-9)

**Comment:** All impacts arising from the simultaneous operation of the existing and aging Grand Gulf nuclear power reactor in close proximity to any new proposed advanced reactor design, including the possibility of multiple, simultaneous accidents, whether related (e.g., by fire or natural disaster) or unrelated. (AL-9)

**Response:** *The cumulative impact associated with the construction and operation of the proposed nuclear power plants is evaluated in Chapter 7 of the EIS.*

**Comment:** The issue for the NRC is not to look at this proposed reactor in a vacuum. It has got to look at this reactor and connection with the existing reactor that is in Port Gibson here. (O-3)

**Response:** *The U.S. Nuclear Regulatory Commission's EIS Chapter 7 discusses the cumulative impacts associated with the construction and operation of any new nuclear power plants at a site with existing nuclear power plants.*

**Comment:** All impacts on public health and safety arising out of a severe accident, including the impacts of the accident itself, sheltering, evacuation, radiation exposure treatment and reoccupation or relocation of entire communities in the event of an accident at an expanded Grand Gulf site. (AL-7)

**Response:** *As part of the U.S. Nuclear Regulatory Commission's site safety review, the staff considered whether the site characteristics are suitable for the addition of one or more additional nuclear power reactors. The environmental impacts of postulated accidents were evaluated, and the results of this analysis is presented in Chapter 5 of the EIS.*

## D.11 Alternative Energy Sources and Conservation

**Comment:** A fourth concern is the need and the existence of feasible alternatives for power generation. The existing Grand Gulf facility involved significant cost overruns and there is a genuine question whether it has been a cost effective operation. Before expanding this facility further the NRC should require a compelling case of public need for [additional] energy generation in this service area. (Z-4)

**Comment:** According to Entergy, energy from the plant is not needed at this time. I believe the Site Permit should be denied because there are more viable alternatives to nuclear power and that the money spent on nuclear issues would better be spent developing these alternatives in the state. (AM-5)

**Comment:** According to Entergy, energy from the plant is not needed at this time. I believe the Site Permit should be denied because there are more viable alternatives to nuclear power and that the money spent on nuclear issues would better be spent developing these alternatives and in promoting energy conservation in the state. (AO-4)

**Response:** *In accordance with 10 CFR 52.18, the environmental impact statement prepared by the U.S. Nuclear Regulatory Commission (NRC) in conjunction with the early site permit application does not include a discussion of the need for power. NRC practice regarding need for power assessments is consistent with judicial precedent. As part of NRC's compliance with the National Environmental Policy Act, need for power is addressed in connection with the construction of a new nuclear power plant so NRC may weigh the likely benefits (for example, electrical power) against the environmental impact of constructing and operating a nuclear power reactor. In considering the need for power, the NRC does not supplant the states that have traditionally been responsible for assessing the need for power facilities and their economic feasibility and for regulating rates and services.*

**Comment:** Hydro is being torn down. That leaves nuclear as the only other emission-free source of electricity generation that we have to meet our growing economy. ...the only other option we have is an expansion of nuclear energy using advanced technologies. The smart way to approach that, and this is what Entergy is looking at, and this is what Virginia power, Dominion Energy is looking at in Virginia, and it is what Exelon in Illinois is looking at, is maximizing the value of sites that we have today. (M-3)

**Comment:** All of our electricity sources have environmental impacts. Every single one of them. The chemicals that they use in the solar industry are toxic, and arsenic is one of them. It never goes away. So they all have drawbacks, every single one of them. Nuclear and wind, when you look at the total lifecycle of these facilities, have the least environmental impact, and they are right there together. There have been studies done in Europe, and there have been

studies down in Japan, and when you look at the cradle-to-grave application of nuclear and wind, they are by far the lowest. We have those independent studies on our website if you would like to see them. It is [www.nei.org](http://www.nei.org). (M-7)

**Comment:** The impact of that is rising natural gas prices, both for industries that use natural gas as a feed stock – the chemical industry, the fertilizer industry – and our home heating bills for those of us who use natural gas for heating. So there is an impact, a secondary impact, to an over-reliance on any single fuel source. We are blessed in this country with diversity of fuel supply options for electricity, and we have to continue to use all of them. (M-8)

**Comment:** But if the Federal Government and the Department of Energy have finally gotten the idea of global warming and the concerns of that, then I think that is great. As to which is the most noxious (inaudible) effects, they brought in fossil fuels, or the nuclear energy, I am not sure. They are both pretty bad. (P-2)

**Comment:** What I would like to suggest, and which has not been brought out, was to put in a plug for energy conservation. They have these sprinkle replacement light bulbs that you can screw in and replace a 60-watt light bulb and it gives just as much light on about 13 watts, and it costs about two bucks a piece now, \$2 to \$3, and it pays for itself in about a month in just the energy saving there. But it is even more so in the summer time because I have to have air-conditioning to pump out all of that extra heat that is given off of it, and so that is just one of many. And the Federal Government sponsored this energy star program, and we need to have more of that, and it is a great program, and the new freezers and refrigerators are much thicker and you can save a lot of energy there. (P-3)

**Comment:** I don't think that the Mississippi Power Company has the arrangement yet to where they will buy electricity back from a small time producer, and that needs to be in place, because that way you use the grid as the battery to store the excess off of, and I really believe – and I think we could also alter our consumption in about half, and you are talking about a 42 percent increase, and I think just energy saving and doing things that don't really hurt your standard of living that much. (P-4)

**Comment:** Alternative energy, the gentleman that spoke before me I thought raised a lot of good points. But there are also a lot of studies that show that we could go now to viable alternative energy and produce, and satisfy all of our energy needs. And I agree that every energy source has its advantages and disadvantages, but I think those kinds of things should definitely be considered. (Q-4)

**Comment:** The other thing, also architectural standards, and there is lots of things that you could do with conservation that have not been dealt with. (Q-5)

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**Comment:** But we all have to be responsible in our energy use. I mean, which would you rather have, cut down a little bit on your energy usage, or have Grand Gulf, and you are talking about people that maybe – I don't know how far the grid here goes, but you are talking about people that have an insatiable appetite for energy that are not going to be affected if there is a discharge that is at Grand Gulf. It is the people in Claiborne County and the people down river that are going to be affected. (Q-6)

**Comment:** Energy efficiency. Regarding our own shared insatiable use of energy, and I wouldn't put all the brunt on Mr. Peterson's kids. I think that we all bear some responsibility here, and we should share that responsibility. (R-8)

**Comment:** The merits of wind energy, and I guess there is something on NEI's site about that, but additional benefits of wind, particularly compared to nuclear plants, include that windmills would make pretty awful terrorist targets. You are not going to scare or kill many people that way, or harm them with radioisotopes, or whatever other pollutants that we are talking about, toxins. Windmills don't create tons of nuclear waste every year, and they do not require a 10-mile radius evacuation zone and plan, of which I guess the one for Grand Gulf is of questionable use and value. (R-9)

**Comment:** Although proponents of nuclear power will claim that this technology will reduce global warming, a substantial amount of warming is already committed to by past emissions, and nuclear power is an unrealistic alternative to global warming because of the many cheaper alternatives. The most important alternative to fossil fuel emissions is energy efficiency, and while some parts of the nation have had strong efficiency programs in place and operating for several decades, Mississippi has had nothing of significance. Since efficiency is available in massive quantity and cheaper than the cost of operating a conventional power plant of any sort (the operating cost alone, not including the capital cost of a new plant), the need for the proposed nuclear plants is a fragile assumption. (X-4)

**Comment:** There are other ways of providing energy that are much safer and sustainable. (AB-2)

**Comment:** There are too many other ways to generate energy to go this dangerous route. The U.S. needs to invest in sustainable sources of energy production – nuclear power is not a safe or economically viable means. (AF-5)

**Comment:** The U.S. has given little consideration and investment of alternative sources for energy production. (AF-7)

**Comment:** There are many alternative sources of energy; such as solar power, wind power, incineration of recyclables, or renewable sources of energy (which could all use million dollar

grants). None of these produce toxic nuclear waste. These sources would also produce energy, jobs and economic benefit, but a lot less cost to the taxpayer. (AJ-15)

**Comment:** Whether effects on the environment would be reduced if Entergy alternatively implemented more applications of energy efficiency technologies and energy conservation rather than the development of additional nuclear power capacity at the Grand Gulf site. The Renewable Energy Policy Project has demonstrated that innovative and well-managed efficiency programs would reduce annual increases in electric growth by 61 percent, substantially reducing demand over a twenty-year period. (AL-14)

**Comment:** Whether effects on the environment would be reduced if Entergy alternatively implemented use of passive solar, photovoltaic, wind turbines and hybrid renewable energy systems rather than the development of additional nuclear power capacity at the Grand Gulf site. (AL-15)

**Comment:** Whether effects on the environment would be reduced if Entergy alternatively implemented greater use of natural gas energy rather than the development of additional nuclear power capacity at the Grand Gulf site. (AL-16)

**Comment:** Whether effects on the environment would be reduced if Entergy alternatively implemented broader applications of the above mentioned resources as distributed power systems rather than increased reliance on an increasingly vulnerable electrical grid system connecting any additional new power capacity at the Grand Gulf site. (AL-17)

**Comment:** According to Entergy, energy from the plant is not needed at this time. I believe the Site Permit should be denied because there are more viable alternatives to nuclear power and that the money spent on nuclear issues would better be spent developing these alternatives in the state. (AQ-5)

**Comment:** The Site Permit should be denied. Viable alternatives to nuclear power should be developed as alternatives in the state. (AR-3)

**Comment:** There are more viable alternatives to nuclear power and that the money would better be spent developing these alternatives in the state. (AS-3)

**Comment:** As a concerned citizen, I have to believe that there are more viable, environmentally friendly solutions for power production. (AT-2)

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**Comment:** According to Entergy, energy from the plant is not needed at this time. I believe the Site Permit should be denied because there are more viable alternatives to nuclear power and that the money spent on nuclear issues would better be spent developing these alternatives in the state. (AW-6)

**Comment:** Although Grand Gulf has not been as notorious as say, Watts Barr in Tennessee, the nuclear option as a power source is not proving to be sustainable. (BC-3)

**Comment:** At a time when renewable energy is within our grasp, this proposal is a major step backward. (BI-3)

**Comment:** Instead of granting this permit, the government should focus on major, well-funded efforts to encourage energy conservation and development of alternative, sustainable energy such as solar and wind. (BJ-4)

**Comment:** It would be better to spend our resources conserving energy. I write this from a house lighted almost entirely by [fluorescent] bulbs. The house is at 58 degrees F.; I am comfortable in a watch cap, imitation fleece slippers and a heavy "miracle fabric" house coat from Sears. I drive high mileage cars. Please let me know if you want more about all the heroic things I do to help you refuse to litter the earth with the wastes from another nuclear plant. America should set an example for France and other generators of nuclear wastes. (BL-4)

**Comment:** I believe the Site Permit should be denied because there are more viable alternatives to nuclear power and that the money spent on nuclear issues would better be spent developing these alternatives in the state. (BN-6)

**Comment:** Our energy policy should be aimed at developing safe renewable sources of energy. (BP-4)

**Response:** *The EIS was prepared in accordance with the requirements of 10 CFR 52.18 and 10 CFR 51, which will include analyses of conservation and alternative energy sources.*

**Comment:** Whether effects on the environment would be reduced if Entergy alternatively implemented some or all of the above-mentioned applications as security countermeasures to any act of terrorism that would seek to target an expanded nuclear power station site for the purpose of creating widespread radiological catastrophe. (AL-18)

**Response:** *The EIS was prepared in accordance with the requirements of 10 CFR 52.18 and 10 CFR 51, which included an analysis in Chapter 8 of alternative energy sources. For the current application, the NRC decision will be on whether to grant the early site permit – meaning, whether this site is deemed suitable for one or more new nuclear plants. As part of its evaluation of the application, NRC staff documented in a safety evaluation report whether the site characteristics are such that adequate security plans and measures can be developed (see 10 CFR 100.21). If SERI eventually applies for a construction permit or combined operating license for the Grand Gulf site, it would have to supply a safeguards contingency plan for NRC staff review in accordance with 10 CFR 50.34.*

## **D.12 Operational Safety**

**Comment:** Grand Gulf has a tremendous operating record. The plant has been here for almost 20 years, and Grand Gulf has a tremendous reputation in the industry, and that is because of operating the plant soundly, and if you were to talk to anyone that actually knows about plant operations, and they were to tell you what is one of the better plants in the industry, they would reference Grand Gulf. (A-6)

**Response:** *The comment is noted. The operating history of the currently operating unit was reviewed in terms of the environmental impact that may be related to the construction and operation of new nuclear facilities at the Grand Gulf early site permit site.*

**Comment:** SERI is asking the NRC to provide no significant impact, setting aside the Grand Gulf site. There has got to be incidents that have already happened, and I would like to incorporate by requesting that the NRC raise those issues in terms of the new comparison of the new site. And also make those documents available to the local citizens here as well. (H-2)

**Response:** *The early site permit process is designed to determine if the site is suitable for one or more nuclear power reactors. The operating history of the currently operating unit was reviewed in terms of the environmental impact that might be related to the construction and operation of new nuclear facilities at the Grand Gulf early site permit (ESP) site. Information regarding the environmental review process for the Grand Gulf ESP is publicly available through the Agencywide Documents Access and Management System (ADAMS) which is the U.S. Nuclear Regulatory Commission's electronic record keeping system that maintains the official records of the agency.*

**Comment:** Other human-induced accidents could yield similar results. Malfunctions of equipment and/or employee negligence causing accidents could be disastrous. (AP-3)

**Response:** *The environmental impact of postulated accidents was evaluated, and the results of this analysis are presented in Chapter 5 of the EIS.*

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**Comment:** And primarily that stripping down as I understand is to make the construction more affordable, and this is one of the ways that the industry and the Federal agency are thinking about making it more affordable. (D-4)

**Comment:** Another speaker raised the issue of advanced reactor designs, and I think called them stripped-down versions of today's designs. I would look at that in another way. We have got the best engineers in the country, really globally, and in some joint partnerships with other countries, looking at new reactor designs. They are smaller, the same way that our computer mainframes that used to fit in this room now fit in a box. You have got technological advances, and you have got the use of gravity rather than pumps. So that there is less mechanical failures, or at least the chance of mechanical failures, in these designs. So it is not stripped-down and it is the using of advanced technology that like everything else in our world is getting smaller, and smaller, and smaller. (M-6)

**Response:** *The U.S. Nuclear Regulatory Commission (NRC) decision will be whether to grant the early site permit – meaning, whether the site is deemed suitable for one or more nuclear plants. The applicant has prepared the environmental report to address the environmental impact of construction and operation of one or more nuclear units at the Grand Gulf ESP site. There are several new reactor designs that have been certified for licensing by the NRC, and other designs are in the certification process or are being considered by the applicant. The ER does not address any particular type of nuclear plant but uses the “plant parameter envelope” to describe the operation of the possible nuclear plant and the impact from the nuclear plant’s operation. At the construction and operating license stage, the actual design of the reactor(s) will be addressed.*