

October 16, 2003

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

**SUBJECT:** Early Site Permit Application

**REFERENCE:** NRC Project No. 720

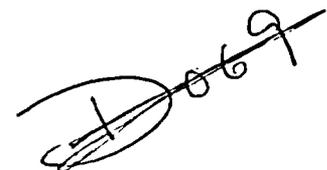
**CNRO-2003-00054**

System Energy Resources, Inc. (SERI), a subsidiary of Entergy Corporation, hereby submits an application for an early site permit (ESP) pursuant to U.S. Nuclear Regulatory Commission (NRC) regulations in Title 10 of the Code of Federal Regulations, Part 52, Section 52.15 (10 CFR 52.15). Through this application, SERI is requesting an ESP with a twenty-year duration in accordance with 10 CFR 52.27(a).

The site selected for evaluation in the SERI ESP application is property co-located with the existing Grand Gulf Nuclear Station near Port Gibson, Mississippi. Entergy Corporation has not yet selected a specific reactor design for any future plant that may be built at this proposed site. Therefore, technical information from various certified and proposed designs has been used to develop and envelope a facility characterization necessary to evaluate the suitability of the site for any future construction and operation of a nuclear power plant.

One complete set of application documents is provided in electronic file format on the enclosed CD-ROM. Submission of the application in electronic format is in accordance with the general exception to 10 CFR 50.4(c) provided by Regulatory Issue Summary 2001-005, "Guidance on Submitting Documents to the NRC by Electronic Information Exchange or on CD-ROM" (January 25, 2001). The enclosed CD-ROM contains files grouped as follows:

- Cover and Table of Contents
- Administrative Information - provides general information regarding the application;
- Site Safety Analysis Report - provides the safety analysis report (SAR) required by 10 CFR 52.17 (a)(1);
- Environmental Report - provides the environmental report required by 10 CFR 52.17(a)(2);



- Emergency Planning Information - contains the information on emergency planning required by 10 CFR 52.17(b);
- Programs and Plans – provides information on quality processes used for application preparation;
- Electronic Copy of this Transmittal Letter CNRO-2003-00054.

This application contains no restricted data or other defense information that requires separation from the unclassified information in accordance with 10 CFR 50.33(j) and pursuant to 10 CFR 52.17(a)(1).

The application has been prepared by Entergy Nuclear Potomac Company (ENPC), a subsidiary of Entergy Corporation, on behalf of SERI. ENPC will continue to be the authorized agent of SERI during the review and approval process. The licensing contact for this application is:

George A. Zinke  
Entergy Nuclear Potomac Company  
P.O. Box 31995  
Jackson, Mississippi 39286-1995  
OR  
1340 Echelon Parkway  
Jackson, MS 39213-8202  
gzinke@entergy.com  
601-368-5381

All invoices should be addressed as follows:

Entergy Nuclear Potomac Company  
Attn: Mr. Michael D. Bourgeois  
P.O. Box 31995  
Jackson, Mississippi 39286-1995  
OR  
1340 Echelon Parkway  
Jackson, MS 39213-8202  
mbourge@entergy.com  
601-368-5676

Should you have any questions, please contact Mr. Zinke at (601) 368-5381 or Mr. Bourgeois at (601) 368-5676. Written correspondence to SERI regarding this application should be sent to me at the address shown below.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 16, 2003.

Sincerely,

A handwritten signature in cursive script that reads "William A. Eaton".

William A. Eaton  
Vice President  
System Energy Resources Inc.  
1340 Echelon Parkway  
Jackson, MS 39213-8202

Enclosure: One CD-ROM

cc: Mr. T. L. Hoeg, Senior Resident Inspector, USNRC/RIV, Grand Gulf Nuclear Station  
Mr. S. S. Koenick, USNRC/NRR/DRIP/RNRP  
Mr. B. S. Mallett, Administrator, USNRC/RIV