

August 26, 2004

Mr. William A. Eaton, Vice President  
System Energy Resources, Inc.  
Entergy Operations, M-ECH-38  
1340 Echelon Parkway  
Jackson, MS 39213

SUBJECT: SUPPLEMENTAL REQUEST FOR ADDITIONAL INFORMATION (RAI)  
REGARDING THE ENVIRONMENTAL PORTION OF THE EARLY SITE  
PERMIT APPLICATION BY SYSTEM ENERGY RESOURCES, INC. (SERI) FOR  
THE GRAND GULF ESP SITE (TAC NO. MC1379)

Dear Mr. Eaton:

As a result of the staff's continuing review of the environmental portion of the application by SERI for an early site permit for the Grand Gulf site, the staff has identified areas where additional information is needed to complete its review. Specifically, the staff has identified the need for additional information regarding transportation of fuel and radioactive wastes to and from nuclear power facilities as required by 10 CFR 51.52(b). Enclosed are the staff's RAIs. As discussed with your staff, we request that you provide your responses to these RAIs by October 1, 2004, in order to support the early site permit review schedule. If you have any questions, please contact me at (301) 415-1108.

Sincerely,

**/RA/**

James H. Wilson, Senior Project Manager  
Environmental Section  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket No.: 52-009  
Enclosure: As stated  
cc w/enclosure: See next page

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Docket File RLEP r/f JHWilson TKenyon CGuerro AKugler AFernandez RAnand  
Adams Accession no: **ML042390512**

DOCUMENT NAME: C:\MyFiles\Copies\S-4RAI.wpd

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DATE	08/26/04	08/26/04	08/26/04	08/26/04	08/26/04

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**Supplemental Request for Additional Information Regarding  
The System Energy Resources, Inc. Early Site Permit Application  
For the Grand Gulf ESP Site**

Section number refers to the applicant's environmental report (ER) for the early site permit (ESP).

**Section 3.8    Transportation of Radioactive Materials**

E3.8-14

The environmental impacts of the transportation of fuel and radioactive wastes to and from nuclear power facilities were resolved generically for light water reactors in 10 CFR 51.52(a) provided that the specific conditions in the rule are met; if not, *a full description and detailed analysis* is required from the applicant for initial licensing in accordance with 10 CFR 51.52(b) (emphasis added). Once licensed, the NRC may consider requests to operate at conditions above those in the facility's licensing basis; for example, higher burnups, enrichments, or thermal power levels above 33,000 MWd/MTU, 4 percent, and 3800 MW(t), respectively. The rule has not been changed for the initial licensing of nuclear power facilities, and departures from the conditions itemized in the rule that were found to be acceptable for licensed facilities cannot serve as the basis for initial licensing. Unless the applicant uses a plant parameter envelope for considering transportation impacts, each reactor must be considered separately.

Provide a transportation risk assessment for all proposed reactor spent fuel shipments using an accepted methodology such as RADTRAN V. Provide justification that the best available information has been used to generate the RADTRAN input values and that those values are appropriate. Provide a comparison of the results of that assessment with the spent fuel shipment risk estimates contained in NUREG-0170, *Final Environmental Statement on the Transportation of Radioactive Material by Air and Other Modes*.

Grand Gulf Early Site Permit -  
Environmental Review

cc:

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Grand Gulf Early Site Permit -  
Environmental Review

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