

March 31, 2003

Mr. William R. Kanda  
Vice President - Nuclear  
FirstEnergy Nuclear Operating Company  
Perry Nuclear Power Plant  
P.O. Box 97, A200  
10 Center Road  
Perry, OH 44081

SUBJECT: PERRY NUCLEAR POWER PLANT - REQUEST FOR ADDITIONAL  
INFORMATION FOR THE REVIEW OF LICENSE AMENDMENT REQUEST TO  
MODIFY THE EXISTING MINIMUM CRITICAL POWER RATIO SAFETY LIMITS  
(TAC. NO. MB7517)

Dear Mr. Kanda:

By letter dated January 30, 2003, FirstEnergy Nuclear Operating Company, requested approval of a license amendment for the Perry Nuclear Power Plant (PNPP) to modify the existing minimum critical power ratio safety limit contained in the technical specification 2.1.1.2.

During the review, the Nuclear Regulatory Commission staff has identified that additional information is needed in order to complete the review. Specific questions are presented in the enclosed request for additional information (RAI).

The enclosed questions have already been discussed with your staff. In order to accommodate PNPP's refueling outage, please respond to this RAI by April 14, 2003. If you have any questions concerning our review, or additional time is needed to respond to the RAI, please contact me at (301) 415-3154.

Sincerely,

***/RA by Jon Hopkins for/***

Stephen P. Sands, Project Manager, Section 2  
Project Directorate III  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-440

Enclosure: Request for Additional Information

cc w/encl: See next page

Perry Nuclear Power Plant, Unit 1

cc:

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Daniel Z. Fisher  
Transportation Department  
Public Utilities Commission  
180 East Broad Street  
Columbus, OH 43215-3793

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**REQUEST FOR ADDITIONAL INFORMATION**

**PERRY NUCLEAR POWER PLANT (PNPP)**

**LICENSE AMENDMENT REQUEST TO MODIFY EXISTING MINIMUM CRITICAL POWER**

**RATIO (MCPR) SAFETY LIMITS CONTAINED IN TECHNICAL SPECIFICATIONS**

The Nuclear Regulatory Commission staff has reviewed the January 30, 2003, FirstEnergy Nuclear Operating Company submittal regarding changes to the PNPP technical specification change and has the following questions and comments concerning the submittal:

1. It was shown (in Table 1 of Attachment 6 of the January 30, 2003, submittal) that both Cycle 9 and Cycle 10 used same power distribution uncertainty and non-power distribution uncertainty for the safety limit for minimum critical power (SLMCPR) calculation. Please provide the basis for the proposed large reduction of the SLMCPR value in a summary table for both Cycle 9 and Cycle 10. Also, provide the impact on SLMCPR reduction relative to Cycle 9 value due to flatness of the core bundle-by-bundle MCPR distributions and flatness of the bundle pin-by-pin power/R-factor distributions.
2. Describe the detailed calculation process to model the core design through entire cycle to show any impact on the SLMCPR value for both two-loop operation and single-loop operation due to end-of-cycle penalty of top-peaked power shape.