



Entergy Operations, Inc.  
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Craig Anderson  
Vice President  
Operations ANO

2CAN060306

June 30, 2003

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

SUBJECT: License Amendment Request  
To Revise the Spent Fuel Pool Loading Pattern  
Arkansas Nuclear One, Unit 2  
Docket No. 50-368  
License No. NPF-6

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Entergy Operations, Inc. (Entergy) hereby requests an amendment for Arkansas Nuclear One, Unit 2 (ANO-2). The proposed amendment will: 1) eliminate credit for the Boraflex neutron absorbing material used for reactivity control in Region 1 of the Spent Fuel Pool (SFP); 2) credit a combination of soluble boron and several defined fuel loading patterns within the storage racks to maintain SFP reactivity within the effective neutron multiplication factor ( $k_{\text{eff}}$ ) limits of 10 CFR 50.68; 3) increase the minimum boron concentration in the SFP to 2000 parts per million; and 4) reduce the fresh fuel assembly initial enrichment to less than or equal to  $4.55 \pm 0.05$  weight percent (wt%) uranium-235 (U-235).

The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c) and it has been determined that this change involves no significant hazards considerations. The bases for these determinations are included in the attached submittal.

The proposed change includes a new commitment which is summarized in Attachment 4.

Entergy requests approval of the proposed amendment by September 3, 2003 in order to support a full core offload during the ANO-2 fall 2003 refueling outage. Once approved, the amendment shall be implemented within 30 days. Although this request is neither exigent nor emergency, your prompt review is requested.

ACD

If you have any questions or require additional information, please contact Dana Millar at 601-368-5445.

I declare under penalty of perjury that the foregoing is true and correct. Executed on June 30, 2003.

Sincerely,



CGA/dm

**Attachments:**

1. Analysis of Proposed Technical Specification Change
2. Proposed Technical Specification Changes (mark-up)
3. Changes to Technical Specification Bases Pages – For Information Only
4. List of Regulatory Commitments
5. Holtec License Amendment Report

cc: Mr. Thomas P. Gwynn  
Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 400  
Arlington, TX 76011-8064

NRC Senior Resident Inspector  
Arkansas Nuclear One  
P. O. Box 310  
London, AR 72847

U. S. Nuclear Regulatory Commission  
Attn: Mr. Thomas W. Alexion MS O-7D1  
Washington, DC 20555-0001

Mr. Bernard R. Bevill  
Director Division of Radiation  
Control and Emergency Management  
Arkansas Department of Health  
4815 West Markham Street  
Little Rock, AR 72205