



Entergy

Entergy Operations, Inc.  
1448 S.R. 333  
Russellville, AR 72801  
Tel 501 858-5000

May 26, 1998

OCAN059809

U. S. Nuclear Regulatory Commission  
Document Control Desk  
Mail Station OP1-17  
Washington, DC 20555

Subject: Arkansas Nuclear One - Units 1 and 2  
Docket Nos. 50-313 and 50-368  
License Nos. DPR-51 and NPF-6  
Errors or Changes in the Emergency Core Cooling  
System Evaluation; Annual Report for 1997

Gentlemen:

10CFR50.46(a)(3)(ii) requires licensees to report each change to or error discovered in an acceptable evaluation model or in the application of such model for the emergency core cooling system (ECCS) that affects the peak cladding temperature (PCT) at least annually. Included in the submittal is the estimated effect these changes or errors have on the limiting ECCS analysis. The purpose of this submittal is to provide the required information for Arkansas Nuclear One (ANO).

For ANO-1, there were no significant errors (PCT increase of greater than 50 degrees F) reported in 1997 that resulted in a change in the calculated PCT, and no changes have been made to the Babcock and Wilcox (B&W) evaluation model.

For ANO-2, there were no significant errors reported in 1997 that resulted in a change in the calculated PCT; however, there were errors discovered in and changes made to the ABB CE evaluation model. These are discussed in the attached CENPD-279, Supplement 9 (includes only section 1 of Appendix E which is specifically applicable to ANO-2). When initially identified, the energy redistribution factor (ERF) issue was conservatively estimated to cause an increase of 40 degrees F in the PCT. To address this issue, Entergy Operations took compensatory actions to reduce the linear heat rate (LHR) limit for cycle 13 from 13.5 kW/ft to 13.3 kW/ft. This reduction in the LHR limit more than compensated for the 40 degree F PCT change without consideration of the cycle-specific pin-to-box analysis which was performed for cycle 13. This reduction in the LHR limit was later determined not to be necessary.

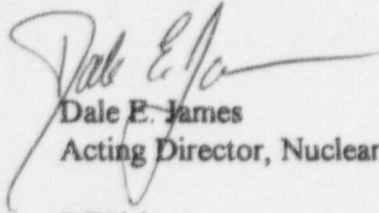
9806030037 980526  
PDR ADOCK 05000313  
P PDR

000075

1/1  
A001

Should you have any questions, please contact me.

Very truly yours,



Dale E. James  
Acting Director, Nuclear Safety

DEJ/nbm  
Attachment

cc: Mr. Ellis W. Merschoff  
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

Mr. William D. Reckley  
NRR Project Manager Region IV/ANO-1 & 2  
U. S. Nuclear Regulatory Commission  
NRR Mail Stop 13-H-3  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852