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December 6, 1999

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

Subject: Arkansas Nuclear One - Unit 2
Docket No. 50-368
License No. NPF-6
ANO-2 Simulator Performance Testing Report

Gentlemen:

The attached ANO-2 Simulator Performance Testing Report is being submitted in accordance with 10CFR55.45(b)(5)(ii) and (vi).

Discrepancies identified during simulator performance tests are corrected in accordance with the Simulator Modification Control guidelines included in Section 1 of the attachment to this letter.

At the time of the initial simulator performance test, three exceptions were taken to ANSI/ANS 3.5-1985. Exception 2 was deleted in our previous submittal dated December 6, 1995. The present status of the exceptions is stated in Section 2 of the attachment.

Plant modifications that were installed in the last four years and were determined to affect the simulator's appearance and fidelity have been incorporated in accordance with the Simulator Modification Control guidelines. As of this date, all plant modifications have been incorporated. A listing of plant modifications that have been incorporated into the ANO-2 plant reference simulator during this reporting period is provided in Section 3 of the attachment.

Simulator operability tests have been conducted on an annual basis and meet the requirements of ANSI/ANS 3.5-1985. All performance issues identified during the operability testing have been corrected. The testing was conducted in the following manner:

- Normal Operations Test (25% per year)
- Surveillance Tests (25% per year)
- Malfunction Tests (25% per year)

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- Real-Time Test (Annually)
- Steady State Operations (Annually)
- Transient Tests (Annually)

New malfunctions and plant modifications incorporated into the simulator during the past four years have been included in our simulator operability testing. With the exception of the in-depth replacement steam generator testing in 2000, the upcoming four year operability test follows the format utilized during the past four year period and has been included in Section 4 of the attachment. All malfunctions affected by the steam generator replacement have been identified, reviewed, and scheduled to be tested during the first year of the Operability Test. The affected malfunctions are identified within the Operability Test by a pound sign (#). Step 7.3 of the Malfunction section references this method of identification. The simulator's response to the replacement steam generators will be tested by two predictive software programs and to actual plant startup and operating data.

Section 5 includes a listing of malfunctions which have been added to enhance the simulator's capability and improve Operations training. The new malfunctions were tested and are now incorporated into the continuing training.

Should you require additional information, please contact me at 501-858-4601.

Very truly yours,

Jimmy D. Vandergrift
Director, Nuclear Safety

JDV/rhs
Attachment

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Simulator Modification Control

Training Guide