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2CAN070204

July 18, 2002

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

SUBJECT: Arkansas Nuclear One, Unit 2  
Docket No. 50-368  
Supplement to Amendment Request to  
Revise Section 6.0, Administrative Controls

REFERENCES: 1. Letter dated June 26, 2002, Revision of Section 6.0,  
Administrative Controls For Consistency with ANO-1  
Improved Technical Specifications (2CAN060203)  
2. Letter dated January 31, 2002, Revision of Section 6.0,  
Administrative Controls For Consistency with ANO-1  
Improved Technical Specifications (2CAN010203)

Dear Sir or Madam:

By letters (reference 1 and 2) Entergy Operations, Inc. (Entergy) proposed a change to the Arkansas Nuclear One, Unit 2 (ANO-2) Technical Specifications (TSs) to reorganize the Administrative Controls Section of the ANO-2 TSs, which also included changes to several other TSs.

The purpose of this letter is to correct some electronic errors, as well as others that were identified upon a subsequent review, which occurred in the transmittal of the letter dated June 26, 2002 (reference 1). The corrected pages are included in Attachment 1 to this letter and should replace the existing pages or be inserted in the appropriate attachment of the letter.

In the cover letter of 2CAN060203 (reference 1), the date of the letter referenced as reference #1 incorrectly stated the date of the letter as being January 23, 2002. The actual date of the letter was January 31, 2002.

The following correction will be made and will be designated with a revision bar by the change:

In Attachment 1 to 2CAN060203 (reference 1), on page 52 of 56, portions of the information contained in paragraph 36.0 are missing. The following should have been included in the letter:

ACC 1

**"36.0 New 6.5.14, Technical Specification (TS) Bases Control Program**

A TS bases control program will be added to the ANO-2 TS. This program is necessary for proper implementation of the conversion and is consistent with the ANO-1 ITS and meets the intent of NUREG-1432. The program addition is an additional restriction on unit operation."

On page B 3/4 9-3 in Attachment 3 to 2CAN060203, Revised Markup of Technical Specification Bases Pages, the header "3/4 8 Electrical Power Systems, Bases" was inappropriately carried over to this page from the previous page. The header will be deleted. There were two pages associated with page B 3/4 9-3 included in 2CAN060203 due to the additional space taken by the inappropriate header. When the header is removed, the markup results in only one page. No revision bars will be included for this change.

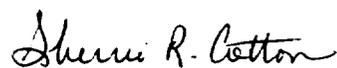
In Attachment 5 to 2CAN060203, Revised Clean Technical Specification Bases Pages, the clean bases page associated with the proposed changes to specification 3/4.9.11 were inadvertently omitted from the letter. The appropriate revision bars will be included on this page.

There are no technical changes proposed. The original no significant hazards considerations included in reference 1 is not affected by any information contained in this supplemental letter. There are no new commitments contained in this letter.

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 July 18, 2002.

Sincerely,



Sherrie R. Cotton  
Director Nuclear Safety Assurance

SRC/dm

Attachments:

1. Corrected Pages

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

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

**Attachment 1**

**To**

**2CAN070204**

**Corrected Pages**

- The proposed change does not replace the word “containment” with “reactor building.” The title Containment Leakage Rate Testing Program and reference to “containment” instead of “reactor building” is consistent with NUREG-1432. This does not present a change to the current wording contained in the ANO-2 TSs.
- The peak calculated containment internal pressure for the design basis loss of coolant accident for ANO-2 is 58 psig.
- The ANO-2 CTS requires that the maximum allowable containment leakage rate,  $L_a$ , shall be 0.1% of containment air weight per day at  $P_a$ . This is the current ANO-2 licensing basis and no change is proposed.
- Air lock acceptance criteria is included in the ANO-2 CTS. This is consistent with the currently approved ANO-2 TS and no change is proposed.

#### NUREG-1432 Comparison

Minor wording differences exist between the ANO-2 proposed TS and NUREG-1432. These differences, however, do not modify the intent of the words contained in NUREG-1432.

NUREG-1432 specification 5.5.16 [OPTION B] does not include the testing requirements related to the containment purge supply and exhaust isolation valves. Relocation of this requirement from CTS 4.6.3.1.4 does not change the intent of the NUREG section. It consolidates the testing requirements in one location.

NUREG-1432 specifies Type A leakage rate acceptance criteria of  $\leq 0.75 L_a$ . The ANO-1 ITS modified this acceptance criteria as described above. The ANO-2 proposed TS is consistent with the ANO-1 ITS and thus differs from NUREG-1432. This is justified above.

NUREG-1432 states, “Nothing in these Technical Specifications shall be construed to modify the testing Frequencies required by 10 CFR 50, Appendix J.” The ANO-2 CTS states, “The provisions of Specification 4.0.2 do not apply to the test frequencies specified in the Containment Leakage Rate Testing Program.” The CTS words, which are consistent with the wording in the ANO-1 ITS, reflect the intent of NUREG-1432. No change is proposed to the CTS words.

#### **36.0 New 6.5.14, Technical Specification (TS) Bases Control Program**

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## REFUELING OPERATIONS

### BASES

#### 3/4.9.9 and 3/4.9.10 WATER LEVEL-REACTOR VESSEL AND SPENT FUEL POOL WATER LEVEL

The restrictions on minimum water level ensure that sufficient water depth is available to remove 99% of the assumed 12% iodine activity released from the rupture of an irradiated fuel assembly. The minimum water depth is consistent with the assumptions of the accident analysis.

#### 3/4.9.11 FUEL HANDLING AREA VENTILATION SYSTEM

The limitations on the fuel handling area ventilation system ensure that all radioactive materials released from an irradiated fuel assembly will be filtered through the HEPA filters and charcoal adsorbers prior to discharge to the atmosphere. The operation of this system and the resulting iodine removal capacity are consistent with the assumptions of the accident analyses.

~~Acceptable removal efficiency is shown by methyl iodide penetration of less than 5.0% when tests are performed in accordance with ASTM D3803-1989, "Standard Test Method for Nuclear-Grade Activated Carbon," at a temperature of 30°C and a relative humidity of 95%. The penetration acceptance criterion is determined by the following equation:~~

~~Allowable Penetration =  $\frac{[100\% - \text{methyl iodide efficiency for charcoal credited in accident analysis}]}{\text{safety factor of 2}}$~~

~~Applying a safety factor of 2 is acceptable because ASTM D3803-1989 is a more accurate and demanding test than older tests.~~

#### 3/4.9.12 FUEL STORAGE

Region 1 and Region 2 of the spent fuel storage racks are designed to assure fuel assemblies of less than or equal to 5.0 w/o U-235 enrichment that are within the limits of Figure 3.9.2 will be maintained in a subcritical array with  $K_{\text{eff}} \leq 0.95$  in unborated water. These conditions have been verified by criticality analyses.

The requirement for 1600 ppm boron concentration is to assure the fuel assemblies will be maintained in a subcritical array with  $K_{\text{eff}} \leq 0.95$  in the event of a postulated accident. Analysis has shown that, during a postulated accident with the fuel stored within the limits of this specification, that a  $K_{\text{eff}}$  of  $\leq 0.95$  will be maintained when the boron concentration is at or above 1000 ppm.

Normally, fuel stored in a cross-hatch storage configuration must have all four diagonal spaces or at least two adjacent faces remain vacant to meet the criticality safety analysis mentioned above. However, the spent fuel pool walls may be credited as a neutron leakage path. Therefore, vacant spaces face adjacent to the walls of the Region I cross-hatch configured assemblies may be used to store fuel assemblies that are outside of the area of the graph enclosed by Curve A on Figure 3.9.2, excluding the most southeast and southwest corner spaces of Region 1 which must remain empty.

## REFUELING OPERATIONS

### BASES

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