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1CAN050202

May 23, 2002

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

SUBJECT: Arkansas Nuclear One, Unit 1  
Docket No. 50-313  
License Amendment Request  
Response to NRC Request to Modify ITS Bases 3.8.8, Inverters –  
Shutdown and Correct Administrative Errors

REFERENCES: 1. Letter Dated October 29, 2001 (1CNA100102), ITS Amendment 215  
2. Letter Dated March 13, 2002 (1CAN030201), Proposed Changes to  
Support Implementation of ANO-1 Improved Technical Specifications  
(ITS)

Dear Sir or Madam:

Pursuant to 10 CFR 50.90, Entergy Operations, Inc. (Entergy) hereby requests the following amendment for Arkansas Nuclear One, Unit 1 (ANO-1). In a telephone conversation with the NRC, a request was made by the NRC staff to modify the bases discussion in the ANO-1 Improved Technical Specifications (ITS) associated with ITS Bases 3.8.8, Inverters - Shutdown. The attached revision inserts three sentences from NUREG 1430, Revision 2, Standard Technical Specifications for B&W Plants, which were inadvertently omitted in the original submittal (Reference 2 above). This same section is reordered and modified slightly to incorporate human factors considerations. In addition, minor format or other administrative changes were made to a small number of other ITS or bases pages previously submitted (Reference 2 above) and are included in the attachment. The NRC requested submittal of the attached pages under cover letter only since the changes are administrative in nature and do not change the technical content of the specifications; therefore, no further discussion or justification is required at this time.

As in the original submittal (Reference 2 above), mark-ups of the current ANO-1 Technical Specification pages are not included in the attachment to this letter because the proposed changes, once approved, will be implemented in conjunction with the ANO-1 ITS implementation schedule. Therefore, the proposed changes will not be considered active until ITS is implemented and the current technical specifications are deleted.

The proposed changes do not affect the original no significant hazards considerations previously submitted (Reference 2 above).

A001

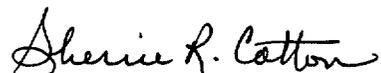
The proposed changes do not include any new commitments.

Entergy requests approval of the proposed amendment by June 1, 2002. This approval date is necessary because one or more of the changes are required to be implemented in conjunction with the ANO-1 conversion to ITS, currently scheduled to occur on July 8, 2002. Once approved, the amendment shall be implemented in conjunction with the ANO-1 conversion to ITS. Although this request is neither exigent nor emergency, your prompt review is requested.

If you have any questions or require additional information, please contact David Bice at 479-858-5338.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 23, 2002.

Sincerely,



Sherrie R. Cotton  
Director, Nuclear Safety Assurance

SRC/dbb

Attachment:

1. Proposed Technical Specification Bases Pages (mark-up)

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. William Reckley MS O-7 D1  
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**

**1CAN050202**

**Proposed Technical Specification and Bases Changes (mark-up)**

ACTIONS (continued)

CONDITION	REQUIRED ACTION	COMPLETION TIME
D. One or more DC electrical power distribution subsystem(s) inoperable.	D.1 Restore DC electrical power distribution subsystem(s) to OPERABLE status.	8 hours <u>AND</u> 16 hours from discovery of failure to meet LCO
E. Required Action and associated Completion Time not met.	E.1 Be in MODE 3. <u>AND</u> E.2 Be in MODE 5.	12 hours  36 hours
F. Two or more electrical power distribution subsystems inoperable that result in a loss of function.	F.1 Enter LCO 3.0.3.	Immediately

SURVEILLANCE REQUIREMENTS

SURVEILLANCE	FREQUENCY
SR 3.8.9.1 Verify correct breaker alignments to required AC, DC, and 120 VAC bus electrical power distribution subsystems.	7 days

**SURVEILLANCE REQUIREMENTS**

SURVEILLANCE		FREQUENCY
SR 3.7.7.1	<p>-----NOTE----- Isolation of SWS flow to individual components does not render the SWS inoperable. -----</p> <p>Verify each SWS manual, power operated, and automatic valve in the flow path servicing safety related equipment, that is not locked, sealed, or otherwise secured in position, is in the correct position.</p>	31 days
SR 3.7.7.2	Verify each SWS automatic valve in the flow path that is not locked, sealed, or otherwise secured in position, actuates to the correct position on an actual or simulated actuation signal.	18 months
SR 3.7.7.3	Verify each required SWS pump starts automatically on an actual or simulated signal.	18 months

## 5.0 ADMINISTRATIVE CONTROLS

### 5.2 Organization

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#### 5.2.1 Onsite and Offsite Organizations

Onsite and offsite organizations shall be established for unit operation and corporate management, respectively. The onsite and offsite organizations shall include the positions for activities affecting safety of the nuclear power unit.

- a. Lines of authority, responsibility, and communication shall be defined and established throughout highest management levels, intermediate levels, and all operating organization positions. These relationships shall be documented and updated, as appropriate, in organization charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements, including the unit specific titles of those personnel fulfilling the responsibilities of the positions delineated in these Technical Specifications, shall be documented in the Safety Analysis Report (SAR);
- b. The ANO-1 Plant Manager Operations shall be responsible for overall safe operation of the unit and shall have control over those onsite activities necessary for safe operation and maintenance of the unit;
- c. A specified corporate executive shall have corporate responsibility for overall unit nuclear safety and shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support to the unit to ensure nuclear safety. The specified corporate executive shall be identified in the SAR; and
- d. The individuals who train the operating staff, carry out health physics, or perform quality assurance functions may report to the appropriate onsite manager; however, these individuals shall have sufficient organizational freedom to ensure their independence from operating pressures.

#### 5.2.2 Unit Staff

- a. A non-licensed operator shall be on site when fuel is in the reactor and ~~an~~ two additional non-licensed operators shall be on site when the reactor is in MODES 1, 2, 3, or 4.
- b. The minimum shift crew composition for licensed operators shall meet the minimum staffing requirements of 10 CFR 50.54(m)(2)(i) for one unit, one control room.

## ACTIONS

LCO 3.0.3 is not applicable while in MODE 5 or 6. However, since irradiated fuel assembly movement can occur in MODE 1, 2, 3, or 4, the ACTIONS have been modified by a Note stating that LCO 3.0.3 is not applicable. If moving irradiated fuel assemblies while in MODE 5 or 6, LCO would not specify an action. If moving irradiated fuel assemblies while in MODE 1, 2, 3, or 4, the fuel movement is independent of reactor operations. Entering LCO 3.0.3, while in MODE 1, 2, 3, or 4 would require the unit to be shutdown unnecessarily.

### A.1, A.42.1, A.42.2, A.42.3, A.42.4, and A.42.5

Although redundant required features may require redundant inverters to be OPERABLE, one OPERABLE inverter may be capable of supporting sufficient required features to allow continuation of CORE ALTERATIONS, fuel movement, and operations with a potential for positive reactivity additions that could result in loss of required SDM (MODE 5) or boron concentration (MODE 6). ~~With the required inverter inoperable, there may be insufficient capability to mitigate the consequences of a fuel handling accident. Therefore, conservative actions must be taken (i.e., to suspend CORE ALTERATIONS, movement of irradiated fuel assemblies, and operations involving positive reactivity additions that could result in loss of required SDM (MODE 5) or boron concentration (MODE 6)).~~ By the allowance of the option to declare required features inoperable with the associated inverter(s) inoperable, appropriate restrictions will be implemented in accordance with the affected required features LCOs' Required Actions. In many instances, this option may involve undesired administrative efforts. Therefore, the allowance for sufficiently conservative actions is made (i.e., to suspend CORE ALTERATIONS, movement of irradiated fuel assemblies, and operations involving positive reactivity additions).- Suspending positive reactivity additions that could result in failure to meet the minimum SDM or boron concentration limit is required to assure continued safe operation. Introduction of coolant inventory must be from sources that have a boron concentration greater than that which would be required in the RCS for minimum SDM or refueling boron concentration. This may result in an overall reduction in RCS boron concentration, but provides acceptable margin to maintaining subcritical operation. Introduction of temperature changes including temperature increases when operating with a positive MTC must also be evaluated to ensure they do not result in a loss of required SDM.

Suspension of these activities shall not preclude completion of actions to establish a safe conservative condition. These actions minimize the probability of the occurrence of a fuel handling accident. It is further required to immediately initiate action to restore the required inverter and to continue this action until restoration is accomplished in order to provide the necessary inverter power to the unit safety systems.

Notwithstanding performance of the above conservative Required Actions, a required low temperature overpressure protection (LTOP) system feature may be inoperable. In this case, Required Actions A.42.1 through A.42.4 do not adequately address the concerns relating to LTOP. Pursuant to LCO 3.0.6, the LTOP ACTIONS would not be entered. Therefore, Required Action A.42.5 is provided to direct entry into the appropriate LTOP Conditions and Required Actions, which results in taking the appropriate LTOP actions.

ACTIONS (continued)

The Completion Time of immediately is consistent with the required times for actions requiring prompt attention. The restoration of the required inverter should be completed as quickly as possible in order to minimize the time the unit safety systems may be without power or powered from the alternate AC source.

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SURVEILLANCE REQUIREMENTS

SR 3.8.8.1

This Surveillance verifies that the inverters are functioning properly with all required circuit breakers closed and 120 VAC vital buses energized from the inverter. The verification of proper voltage output ensures that the required power is readily available for the instrumentation connected to the 120 VAC vital buses. The 7 day Frequency takes into account the redundant capability of the inverters and other indications available in the control room that alert the operator to inverter malfunctions.

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REFERENCES

1. 10 CFR 50.36.
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