ARKANSAS POWER & LIGHT COMPANY
CAPITOL TOWER BUILDING/P. O. BOX 551/LITTLE ROCK, ARKANSAS 72203/(501) 377-3525

T. GENE CAMPBELL
Vice President - Nuclear

May 27, 1988

1CAN058807

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

Attn: Mr. Jose A. Calvo, Director
Project Directorate IV
Division of Reactor Projects
III, IV, V and Special Projects

SUBJECT: Arkansas Nuclear One - Unit 1
Docket No. 50-313
License No. DPR-51
NUREG-0737 Generic Letter 83-37
Technical Specification Change Request

Dear Mr. Calvo:

These proposed changes are in accordance with Generic Letter 83-37 Section II.F.2 (Inadequate Core Cooling Monitoring). These changes specifically address qualified core-exit thermocouple requirements and affect section 3.5, Table 3.5.1-1 and Table 4.1-1. Technical Specifications for the Reactor Vessel Level Monitoring (RVLM) System have not been addressed in this submittal. RVLM technical specifications were identified under the NRC Technical Specification Improvement Program as not appropriate. Currently this issue is being pursued through the B&W owner's group with NRC.

Core-Exit Thermocouple (CET) requirements were added to Section 3.5 Instrument Systems Section. The proposed changes to Table 3.5.1-1 reflect the ICC channel operability requirements and limiting conditions for operation. Changes to Table 4.1-1 reflect the surveillance requirements of the ICC Instruments.

The circumstances of this proposed Technical Specification amendment request are not exigent or emergency and are provided for the purpose of satisfying NUREG 0737 requirements as specified in Generic Letter 83-37. Currently the ANO-1 core contains four (4) qualified CET per quadrant. We are scheduled to install two (2) additional qualified CET per quadrant in the core during 1R8. We request this amendment not become effective until after 1R8 currently scheduled for the Fall of 1988.

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In accordance with 10CFR50.91(a)(1), AP&L has evaluated the proposed change using the criteria in 10CFR50.92(c) and has determined that this change involves no significant hazards considerations.

Also, in accordance with 10CFR50.91(b)(1) a copy of this amendment request has been sent to Ms. Greta Dicus, Director, Division of Radiation Control and Emergency Management, Arkansas Department of Health. A check in the amount of $150 is included as a application fee in accordance with 10CFR170.12(c).

Very truly yours,

T. Gene Campbell

TGC:mb

Attachments

cc: Ms. Greta Dicus, Director
Division of Radiation Control
and Emergency management
Arkansas Department of Health
4815 West Markham Street
Little Rock, Arkansas 72201

STATE OF ARKANSAS)
) SS
COUNTY OF PULASKI)

I, T. Gene Campbell, being duly sworn, subscribe to and say that I am Vice President for Arkansas Power & Light Company; that I have full authority to execute this oath; that I have read the document numbered 1CAN058807 and know the contents thereof; and that to the best of my knowledge, information and belief the statements in it are true.

T. Gene Campbell

T. Gene Campbell

SUBSCRIBED AND SWORN TO before me, a Notary Public in and for the County and State above named, this 27th day of May, 1988.

Sharon Kaye Hendrix

Notary Public

My Commission Expires:

9-19-89

Description of Amendment Request

These proposed changes are a result of NUREG 0737 requirements for inadequate core cooling concerns. Following the May 1979 accident at Three Mile Island Unit 2, many feature requirements were added to nuclear power plants to enhance the ability of the operator to manage accidents and transients. Qualified core exit thermocouples are one of the enhancements which serve to provide corroborative information to the operator during anticipated operating occurrences and accidents.

The proposed change adds to the Instrumentation Table 3.5.1-1 the requirements for the core-exit thermocouples. Table 3.5.1-1 provides the required number of minimum operable channels and required operator action pursuant to specification 3.5.1.1 and 3.5.1.2. A requirement of (2) operable core-exit thermocouples per core-quadrant has been specified to meet the LCO.

The other change involved is to add a surveillance requirement for the core-exit thermocouples to Table 4.1-1. The CETs have been assigned a monthly check and an 18 month calibration surveillance requirement.

No Significant Hazards Consideration Determination

The proposed changes to Section 3.5, Tables 3.5.1-1 and 4.1-1 do not involve a significant hazards consideration because operation of Arkansas Nuclear One Unit-1 in accordance with these changes would not:

(1) Involve a significant increase in the probability or consequences of an accident previously analyzed.

The core-exit thermocouples are neither credited nor required in the mitigation of any previously evaluated accident. In addition, they are not relied upon for reactor trips or initiation of any plant safety systems.

This instrumentation is provided as another means for the operator to monitor inadequate core cooling conditions in accordance with the requirements of NUREG 0737.

(2) Create the possibility of a new or different kind of accident from any previously analyzed.

The ICC instrumentation systems are utilized in the Emergency Procedures for corroboration of reactor coolant levels. The proposed changes are intended solely to enhance the ability of the operator to monitor accidents and transients by providing the operator with additional corroborative information.

(3) Involve a significant reduction in the margin of safety.

These specific proposed changes enhance accident and transient monitoring capability and therefore do not reduce the margin of safety.

The Commission has provided guidance concerning the application of the standards for determining whether a significant hazards consideration exists by providing certain examples of amendments that are considered not likely to involve significant hazards considerations. Example (ii) relates to a change that constitutes an additional limitation, restriction or control not presently included in the technical specifications. The proposed changes add additional accident monitoring instrumentation which is a requirement by the Nuclear Regulatory Commssions post-TMI-2 Action Plan.