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Robert A. Fenech
Vice President, Sequoyah Nuclear Plant

April 19, 1993

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

TENNESSEE VALLEY AUTHORITY - SEQUOYAH NUCLEAR PLANT UNIT 1 - DOCKET
NO. 50-327 - FACILITY OPERATING LICENSE DPR-77 - LICENSEE EVENT REPORT
(LER) 50-327/93006

The enclosed LER provides details concerning inadequate technical
specification surveillance performance for four fire protection valves.

This event is being reported in accordance with 10 CFR 50.73(a)(2)(i) as
an operation prohibited by technical specifications.

Sincerely,

Robert A. Fenech

Enclosure
cc: See page 2

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U.S. Nuclear Regulatory Commission

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cc (Enclosure):

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LICENSEE EVENT REPORT (LER)

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| FACILITY NAME (1) Sequoyah Nuclear Plant, Unit 1 | | | | | | | | | | DOCKET NUMBER (2) PAGE (3) 050003 12 17 1101 01 5 | | | | | | | | | | | | | | |
| TITLE (4) Inadequate Technical Specification Surveillance Performance for Four Fire Protection Valves | | | | | | | | | | | | | | | | | | | | | | | | |
| EVENT DAY (5) | | | | | LER NUMBER (6) | | | | | REPORT DATE (7) | | | | | OTHER FACILITIES INVOLVED (8) | | | | | | | | | |
| | | | | | SEQUENTIAL REVISION | | | | | FACILITY NAMES | | | | | DOCKET NUMBER(S) | | | | | | | | | |
| MONTH DAY YEAR YEAR | | | | | NUMBER NUMBER | | | | | MONTH DAY YEAR | | | | | 050003 | | | | | | | | | |
| 0 3 1 8 9 3 9 3 | | | | | 0 0 6 0 0 0 4 1 9 9 3 | | | | | 050003 | | | | | | | | | | | | | | |
| OPERATING MODE | | | | | THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5: | | | | | | | | | | | | | | | | | | | |
| (9) 5 | | | | | (Check one or more of the following)(11) | | | | | | | | | | | | | | | | | | | |
| POWER | | | | | 20.402(b) | | | | | 20.405(c) | | | | | 50.73(a)(2)(iv) | | | | | 73.71(b) | | | | |
| LEVEL | | | | | 20.405(a)(1)(i) | | | | | 50.36(c)(1) | | | | | 50.73(a)(2)(v) | | | | | 73.71(c) | | | | |
| (10) 0 0 0 | | | | | 20.405(a)(1)(ii) | | | | | 50.36(c)(2) | | | | | 50.73(a)(2)(vii) | | | | | OTHER (Specify in | | | | |
| | | | | | 20.405(a)(1)(iii) | | | | | XX 50.73(a)(2)(i) | | | | | 50.73(a)(2)(viii)(A) | | | | | Abstract below and in | | | | |
| | | | | | 20.405(a)(1)(iv) | | | | | 50.73(a)(2)(ii) | | | | | 50.73(a)(2)(viii)(B) | | | | | Text, NRC Form 366A) | | | | |
| | | | | | 20.405(a)(1)(v) | | | | | 50.73(a)(2)(iii) | | | | | 50.73(a)(2)(x) | | | | | | | | | |
| LICENSEE CONTACT FOR THIS LER (12) | | | | | | | | | | | | | | | | | | | | | | | | |
| NAME | | | | | | | | | | TELEPHONE NUMBER | | | | | | | | | | | | | | |
| K. E. Meade, Compliance Licensing | | | | | | | | | | 6 1 5 8 4 3 - 7 7 6 6 | | | | | | | | | | | | | | |
| COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13) | | | | | | | | | | | | | | | | | | | | | | | | |
| CAUSE SYSTEM COMPONENT MANUFACTURER | | | | | REPORTABLE TO NRC | | | | | CAUSE SYSTEM COMPONENT MANUFACTURER | | | | | REPORTABLE TO NRC | | | | | | | | | |
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| SUPPLEMENTAL REPORT EXPECTED (14) | | | | | | | | | | EXPECTED MONTH DAY YEAR | | | | | | | | | | | | | | |
| | | | | | | | | | | SUBMISSION | | | | | | | | | | | | | | |
| YES (If yes, complete EXPECTED SUBMISSION DATE) X NO | | | | | | | | | | DATE (15) | | | | | | | | | | | | | | |
| ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16) | | | | | | | | | | | | | | | | | | | | | | | | |

On March 18, 1993, it was determined that two containment isolation valves in the fire protection system were not verified to isolate upon receipt of a Phase A containment isolation signal as required by Technical Specification (TS) 4.6.3.2.a. It was also determined that two other fire protection system valves that isolate upon receipt of a Phase A signal were not verified to have been reopened within the timeframe specified by TS 3.7.11.2. Investigation determined that the surveillance instruction that fulfills TS 4.6.3.2.a was revised in its entirety, to incorporate a new procedure format, just before the last performance of the surveillance. This revision failed to include the fire protection containment isolation valves in the table that verifies isolation of all valves that receive a Phase A containment isolation signal and also failed to provide a step to ensure that two other fire protection valves that receive a Phase A signal were reopened within one hour as required by TSs. The condition was determined to be caused by inadequate preparation and review of the subject procedure. The individual involved was appropriately disciplined regarding performance and management expectations.

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| Sequoyah Nuclear Plant, Unit 1 | | | | SEQUENTIAL | | REVISION | | | | | | | | | |
| | | YEAR | | NUMBER | | NUMBER | | | | | | | | | |
| | 05000312171913--006--0002005 | | | | | | | | | | | | | | |

TEXT (If more space is required, use additional NRC Form 366A's) (17)

I. PLANT CONDITIONS

Unit 1 was in cold shutdown, Mode 5.

II. DESCRIPTION OF EVENT

A. Event

On March 18, 1993, it was determined that two containment isolation valves (EIS Code BD) in the fire protection system (EIS Code KP) had not been verified to isolate upon receipt of a Phase A containment isolation signal as required by Technical Specification (TS) 4.6.3.2.a. It was also determined that two other fire protection system valves that isolate upon receipt of a Phase A signal were not verified to have been reopened within the time frame specified by TS 3.7.11.2.

Investigation determined that the surveillance instruction that fulfills TS 4.6.3.2.a was revised in its entirety, to incorporate a new procedure format, just before the last performance of the surveillance in October 1991. This revision failed to include the fire protection containment isolation valves in the table that verifies isolation of all valves that receive a Phase A containment isolation signal. The revision also failed to provide a step to ensure that two other fire protection valves, which receive a Phase A signal, were reopened within one hour as required by TSs. These valves provide fire protection to the reactor building annulus (EIS Code NH). Thus, these conditions are being reported in accordance with 10 CFR 50.73.a.2.i as conditions prohibited by TSs.

B. Inoperable Structures, Components, or Systems That Contributed to the Event

None.

C. Dates and Approximate Times of Major Occurrences

October 3, 1991 The surveillance instruction that fulfills the requirements of TS 4.6.3.2.a was revised. This revision failed to include appropriate testing verification requirements for four fire protection valves.

October 7, 1991 The subject SI was performed without properly verifying that two containment isolation valves closed on a Phase A containment isolation signal and that two other fire protection valves were reopened within the required time frame.

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March 18, 1993

During the review of a revision of the subject SI, the independent qualified reviewer discovered that the valves were not verified in the correct position by the procedure.

D. Other Systems or Secondary Functions Affected

None.

E. Method of Discovery

The independent qualified reviewer discovered this condition during the review of a revision to the subject procedure.

F. Operator Action

None.

G. Safety System Response

Not applicable - no safety system response was required.

III. CAUSE OF EVENT

Immediate Cause

The immediate cause of this condition was the failure to include the subject valves in the procedure.

Root Cause

The condition was caused by inadequate preparation and review of the subject procedure. The personnel involved were adequately trained to perform the required task; however, during the revision of this procedure to a new format, the subject valves were inadvertently omitted from the procedure.

IV. ANALYSIS OF EVENT

The two containment isolation valves provide fire protection to the reactor coolant pumps' ring header and standpipe, as well as the lower containment air filters. These valves are required to close on a Phase A containment isolation signal. The valves were not documented to be closed following receipt of a Phase A signal. However, the methodology used to verify that all the Phase A valves isolate upon receipt of a Phase A signal is to check main control room status panels. These panels indicate valve position status by red (open) or green (closed) lights. The

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individual who performed this SI recalls that all valves on the Phase A portion of the status panels indicated a green light upon receipt of a Phase A signal. Additionally, these valves are required to be reopened within one hour after closure to comply with TS 3.7.11.2. The procedure included a step, which was performed, to independently verify that these valves were reopened within that time frame. Subsequent testing verified that the subject valves will close on a Phase A containment isolation signal. Further, a redundant leak-rate tested check valve is located upstream of the subject valves such that if the valves did not close, the check valve would serve the containment isolation function. This would prevent the backflow of fluids or gases from escaping the containment vessel.

The other two fire protection valves provide fire protection to the reactor building annulus. These valves were not documented to be reopened within one hour after receipt of a Phase A containment isolation signal. However, the individuals who performed the SI indicated that separate telephone lines were set up to ensure that quick communication was established to field personnel at the valves. This was to ensure that the valves were reopened within the required time frame. Additionally, these valves are required to be entered into the fire protection fire impairment log if the valves are open greater than one hour. No log entry was made. The subsequent performance of the valve position verification procedure verified that the subject valves were open.

Based on the above information, it is believed that the subject valves functioned properly, were positioned correctly, and that the noncompliance is limited to inadequate documentation. Accordingly, there were no adverse consequences as a result of this event.

V. CORRECTIVE ACTION

A. Immediate Action

The subject SI was corrected upon discovery of the condition.

B. Action to Prevent Recurrence

Two of the three individuals involved with this condition are no longer employed by TVA. The other individual was appropriately disciplined regarding performance and management expectations.

A sample of SIs, including SIs prepared or reviewed by the individuals involved, will be reviewed for technical adequacy.

Also, actions are being taken to enhance the training of independent qualified reviewers. These actions will include communicating management's expectations regarding responsibility of the IQR in the procedure revision process.

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VI. ADDITIONAL INFORMATION

A. Failed Components

None.

B. Previous Similar Events

A review of previous similar reportable events identified four LERs that were similar to this condition. Only events that involved the present SQN procedure revision process that was instituted in the Fall of 1987 were reviewed. LERs 50-327/88041, 89032, 90023, and 90025 had either an inadequate procedure preparation or an inadequate review of a procedure. The corrective actions for these LERs were focused on the specific events and would not have been able to prevent this condition.

VII. COMMITMENT

A sample of SIs, including SIs prepared or reviewed by the individuals involved, will be reviewed for technical adequacy before restart of the respective units.