

September 21, 1988

Docket Nos. 50-327/328

Mr. S. A. White
Senior Vice President, Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

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Dear Mr. White:

SUBJECT: ADDITION OF RCS PRESSURE ISOLATION VALVES - SEQUOYAH NUCLEAR PLANT,
UNITS 1 AND 2 (TAC 61779, 61780, R00153, R00154) (TS 87-35)

The Commission has issued the enclosed Amendment No. 83 to Facility Operating License No. DPR-77 and Amendment No. 74 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are in response to your application dated June 10, 1987.

These amendments revise Table 3.4-1, Reactor Coolant System Pressure Isolation Valves, of the Sequoyah, Units 1 and 2 Technical Specifications (TS). The changes are to add the two upper head injection charging header valves to Table 3.4-1. These valves are different from most of the valves in Table 3.4-1 in that the staff has accepted that these two valves do not have to be leak tested following manual or automatic actuation or flow through the valve.

In your application, you also withdrew TS change 68 which was submitted by letter dated May 10, 1986.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's Bi-Weekly Federal Register Notice.

Sincerely,

Original signed by

Suzanne Black, Assistant Director
for Projects

TVA Projects Division
Office of Special Projects

Enclosures:

1. Amendment No. 83 to License No. DPR-77
2. Amendment No. 74 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures:
See next page

*See note
9/18/88
addressed
9/20/88 JND*

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OFC	:OSP:TVA/LA	:OSR:TVA/SPM	:OGC	:TVA:AD/P	:	:	:
NAME	:MSimms:as	:JDonohew:as	:SM	:SBlack	:	:	:
DATE	:9/19/88	:9/19/88	:9/15/88	:9/21/88	:	:	:

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September 2 1988

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*See note
9/18/88
addressed
9/20/88 JND*

OFC	:OSP:TVA/LA	:OSP:TVA/PM	:OGC	:TVA:AD/P	:	:	:
NAME	:MSimms:as	:JDonohew:as	:JM	:SBlack	:	:	:
DATE	:9/19/88	:9/19/88	:9/15/88	:9/21/88	:	:	:

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Mr. S. A. White

-2- Sequoyah Nuclear Plant

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-327

SEQUOYAH NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 83
License No. DPR-77

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated June 10, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

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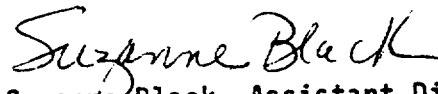
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-77 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 83, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Suzanne Black, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 21, 1988

ATTACHMENT TO LICENSE AMENDMENT NO.83

FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change.

REMOVE

3/4 4-15a

INSERT

3/4 4-15a

TABLE 3.4-1

REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>
63-560	Accumulator Discharge
63-561	Accumulator Discharge
63-562	Accumulator Discharge
63-563	Accumulator Discharge
63-622	Accumulator Discharge
63-623	Accumulator Discharge
63-624	Accumulator Discharge
63-625	Accumulator Discharge
63-551	Safety Injection (Cold Leg)
63-553	Safety Injection (Cold Leg)
63-557	Safety Injection (Cold Leg)
63-555	Safety Injection (Cold Leg)
63-632	Residual Heat Removal (Cold Leg)
63-633	Residual Heat Removal (Cold Leg)
63-634	Residual Heat Removal (Cold Leg)
63-635	Residual Heat Removal (Cold Leg)
63-641	Residual Heat Removal/Safety Injection (Hot Leg)
63-644	Residual Heat Removal/Safety Injection (Hot Leg)
63-558	Safety Injection (Hot Leg)
63-559	Safety Injection (Hot Leg)
63-543	Safety Injection (Hot Leg)
63-545	Safety Injection (Hot Leg)
63-547	Safety Injection (Hot Leg)
63-549	Safety Injection (Hot Leg)
63-640	Residual Heat Removal (Hot Leg)
63-643	Residual Heat Removal (Hot Leg)
87-558	Upper Head Injection
87-559	Upper Head Injection
87-560	Upper Head Injection
87-561	Upper Head Injection
87-562	Upper Head Injection
87-563	Upper Head Injection
FCV-87-7*	Upper Head Injection (charging header)
FCV-87-8*	Upper Head Injection (charging header)
FCV-74-1*	Residual Heat Removal
FCV-74-2*	Residual Heat Removal

*These valves do not have to be leak tested following manual or automatic actuation or flow through the valve.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

TENNESSEE VALLEY AUTHORITY
DOCKET NO. 50-328
SEQUOYAH NUCLEAR PLANT, UNIT 2
AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 74
License No. DPR-79

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated June 10, 1987, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-79 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 74, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Suzanne Black, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 21, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 74

FACILITY OPERATING LICENSE NO. DPR-79

DOCKET NO. 50-328

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages* are provided to maintain document completeness.

REMOVE

3/4 4-19

3/4 4-20

INSERT

3/4 4-19*

3/4 4-20

REACTOR COOLANT SYSTEM

SURVEILLANCE REQUIREMENTS (Continued)

- a. Monitoring the lower containment atmosphere particulate radioactivity monitor at least once per 12 hours.
- b. Monitoring the containment pocket sump inventory and discharge at least once per 12 hours.
- c. Measurement of the CONTROLLED LEAKAGE to the reactor coolant pump seals when the Reactor Coolant System pressure is 2235 ± 20 psig at least once per 31 days with the modulating valve fully open. The provisions of Specification 4.0.4 are not applicable for entry into Mode 3 or 4.
- d. Performance of a Reactor Coolant System water inventory balance at least once per 72 hours.
- e. Monitoring the reactor head flange leakoff system at least once per 24 hours.

4.4.6.2.2 Each Reactor Coolant System Pressure Isolation Valve specified in Table 3.4-1 shall be demonstrated OPERABLE pursuant to Specification 4.0.5, except that in lieu of any leakage testing requirements required by Specification 4.0.5, each valve shall be demonstrated OPERABLE by verifying leakage to be within its limit:

- a. At least once per 18 months.
- b. Prior to entering MODE 2 whenever the plant has been in COLD SHUTDOWN for 72 hours or more and if leakage testing has not been performed in the previous 9 months.
- c. Prior to returning the valve to service following maintenance, repair or replacement work on the valve.
- d. Within 24 hours following valve actuation due to automatic or manual action or flow through the valve.

The provisions of Specification 4.0.4 are not applicable for entry into MODE 3 or 4.

TABLE 3.4-1

REACTOR COOLANT SYSTEM PRESSURE ISOLATION VALVES

<u>VALVE NUMBER</u>	<u>FUNCTION</u>
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FCV-74-1*	Residual Heat Removal
FCV-74-2*	Residual Heat Removal

*These valves do not have to be leak tested following manual or automatic actuation or flow through the valve.



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS
SUPPORTING AMENDMENT NO. 83 TO FACILITY OPERATING LICENSE NO. DPR-77
AND AMENDMENT NO. 74 TO FACILITY OPERATING LICENSE NO. DPR-79
TENNESSEE VALLEY AUTHORITY
SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2
DOCKET NOS. 50-327 AND 50-328

1.0 INTRODUCTION

By submittal dated May 10, 1986, the Tennessee Valley Authority (TVA) submitted TS change 68 and requested a change to delete Table 3.4-1, "Reactor Coolant System Pressure Isolation Valves" of the Sequoyah Units 1 and 2 Technical Specifications (TS). Subsequent to this submittal, the staff issued Generic Letter (GL) 87-06 regarding periodic verification of the leak tight integrity of pressure isolation (PI) valves. Upon receipt and review of GL 87-06, TVA indicated the need to keep Table 3.4-1 in the TS and to add two valves to the existing table. By submittal dated June 10, 1987, TVA withdrew the May 10, 1986 application for amendments and proposed the addition of the two flow control valves, FCV-87-7 and FCV-87-8, to TS Table 3.4-1. This is TS change 87-35.

By letter dated July 6, 1988, the staff issued its safety evaluation report which closed out the staff's actions on GL 87-06.

2.0 EVALUATION

The proposed change would add flow control valves FCV-87-7 and FCV-87-8 to TS Table 3.4-1. These valves, which are PI valves for the Upper Head Injection (UHI) charging header, had been inadvertently omitted from Table 3.4-1 because these valves are PI valves.

By letter dated April 5, 1985, the staff transmitted a safety evaluation report regarding Sequoyah's Inservice Test Program which identified the need for inclusion of valves FCV-87-7 and FCV-87-8 in TS Table 3.4-1. The valves listed in Table 3.4-1 are required to prevent reactor coolant system (RCS) leakage into lower pressure systems. The UHI system is connected to the RCS via two main injection lines which divide into four reactor head injection lines. Series check valves, as depicted in Figure 6.3.2-16 of the Sequoyah Final Safety Analysis Report (FSAR), provide the PI function for the main injection lines. FCV-87-7 and FCV-87-8 connect the UHI system with the Liquid Waste Disposal System and perform an RCS PI function.

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TVA has designed, installed, and currently performs maintenance on these valves as RCS PI valves even though they are not currently in TS Table 3.4-1. The proposed change would add FCV-87-7 and FCV-87-8 to this table thereby ensuring the appropriate TS limiting conditions for operation and surveillance requirements are satisfied. The staff has reviewed the proposed addition of FCV-87-7 and FCV-87-8 to TS Table 3.4-1 and found the addition to be acceptable.

As RCS PI valves, these valves would normally be tested after manual or automatic actuation or flow through the valves. TVA has proposed not to leak check these valves subsequent to their operation as indicated by the astericks assigned to these valves in the proposed TS Table 3.4-1. All of the valves currently listed in Table 3.4-1 are required to be leak tested subsequent to operation with the exception of FCV-74-1 and FCV-74-2 in the Residual Heat Removal system. As shown on Figure 7.1.4-1 (Sheet 15) of the FSAR, visual control room position indication is provided on Panel M-6 (red and green lights for FCV-87-7 and FCV-87-8. FCV-87-7 and FCV-87-8 are air-operated normally closed valves and, therefore, unlike check valves, have a forcing mechanism for closure. FCV-74-1 and FCV-74-2 also have a forcing mechanism for closure. Therefore, the staff finds the proposed leak testing exception for FCV-87-7 and FCV-87-8 to be acceptable, namely that these valves do not have to be leak tested following manual or automatic actuation of flow through the valves.

3.0 ENVIRONMENTAL CONSIDERATION

These amendments involve a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement nor environmental assessment need to be prepared in connection with the issuance of these amendments.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (52 FR 42370) on November 4, 1987 and consulted with the State of Tennessee on September 20, 1988. No public comments were received and the State of Tennessee did not have any comments.

We have concluded, based on the considerations discussed above, that:
(1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of these amendments will not be inimical to the common defense and security nor to the health and safety of the public.

Principal Contributor: T. Rotella

Dated: September 21, 1988