

October 14, 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

Dear Mr. White:

SUBJECT: BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING (TAC R00323, R00400)
(TS 87-46 and 88-09) - SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

The Commission has issued the enclosed Amendment No. 90 to Facility Operating License No. DPR-77 and Amendment No. 79 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2. These amendments are in response to your applications dated March 1, 1988 (TS 87-46) and July 25, 1988 (TS 88-09).

These amendments revise Table 3.6-1, "Bypass Leakage Paths to the Auxiliary Building," of the Sequoyah Units 1 and 2 Technical Specifications. The revision adds four potential bypass leakage paths associated with the hydrogen analyzer system to the table for each unit. In addition, two penetration entries in the table for each unit are revised for clarification.

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

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1/1

Enclosures:

1. Amendment No. 90 to License No. DPR-77
2. Amendment No. 79 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures:
See next page

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CP

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. 90
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 July 25, 1988, 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.

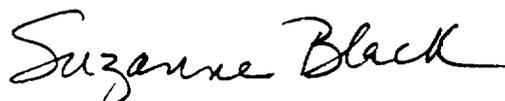
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-77 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 90, 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: October 14, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 90

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. Asterisked page* is provided to maintain document completeness.

REMOVE

3/4 6-5
3/4 6-6
3/4 6-6a

INSERT

3/4 6-5*
3/4 6-6
3/4 6-6a

TABLE 3.6-1
BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING
SECONDARY CONTAINMENT BYPASS LEAKAGE PATHS

| <u>PENETRATION</u> | <u>DESCRIPTION</u> | <u>RELEASE LOCATION</u> |
|--------------------|---|-------------------------|
| X-2A | Personnel Lock | Auxiliary Area |
| X-2B | Personnel Lock | Auxiliary Area |
| X-3 | Fuel Transfer Tube | Auxiliary Area |
| X-15 | Letdown | Auxiliary Area |
| X-23 | Postaccident Sampling, Hot Leg 3 | Auxiliary Area |
| X-25A | Pressurizer Gas Sample | Auxiliary Area |
| X-25D | Pressurizer Liquid Sample | Auxiliary Area |
| X-26B | Control Air | Auxiliary Area |
| X-27C | ILRT | Auxiliary Area |
| X-29 | CCS | Auxiliary Area |
| X-30 | Accumulator Fill | Auxiliary Area |
| X-34 | Control Air | Auxiliary Area |
| X-35 | CCS | Auxiliary Area |
| X-39A | N ₂ to Accumulators | Auxiliary Area |
| X-39B | N ₂ to Pressurizer Relief Tank | Auxiliary Area |
| X-40D | Hydrogen Purge | Auxiliary Area |
| X-41 | Normal RB Sump | Auxiliary Area |
| X-42 | Primary Water | Auxiliary Area |
| X-44 | RCP Seal Water Injection Return | Auxiliary Area |
| X-45 | RC Drain Tank | Auxiliary Area |
| X-46 | RC Drain Tank | Auxiliary Area |
| X-47A | Glycol | Auxiliary Area |
| X-47B | Glycol | Auxiliary Area |
| X-50A | CCS | Auxiliary Area |
| X-50B | CCS | Auxiliary Area |
| X-51 | Fire Protection | Auxiliary Area |
| X-52 | CCS to RCP Oil Cooler | Auxiliary Area |
| X-56 | ERCW | Auxiliary Area |
| X-57 | ERCW | Auxiliary Area |
| X-58 | ERCW | Auxiliary Area |
| X-59 | ERCW | Auxiliary Area |
| X-60 | ERCW | Auxiliary Area |
| X-61 | ERCW | Auxiliary Area |
| X-62 | ERCW | Auxiliary Area |
| X-63 | ERCW | Auxiliary Area |

TABLE 3.6-1 (Continued)
BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING
SECONDARY CONTAINMENT BYPASS LEAKAGE PATHS

| <u>PENETRATION</u> | <u>DESCRIPTION</u> | <u>RELEASE LOCATION</u> |
|--------------------|---|-------------------------|
| X-64 | A/C Chilled Water (ERCW) | Auxiliary Area |
| X-65 | A/C Chilled Water (ERCW) | Auxiliary Area |
| X-66 | A/C Chilled Water (ERCW) | Auxiliary Area |
| X-67 | A/C Chilled Water (ERCW) | Auxiliary Area |
| X-68 | ERCW | Auxiliary Area |
| X-69 | ERCW | Auxiliary Area |
| X-70 | ERCW | Auxiliary Area |
| X-71 | ERCW | Auxiliary Area |
| X-72 | ERCW | Auxiliary Area |
| X-73 | ERCW | Auxiliary Area |
| X-74 | ERCW | Auxiliary Area |
| X-75 | ERCW | Auxiliary Area |
| X-76 | Service Air | Auxiliary Area |
| X-77 | Demineralized Water | Auxiliary Area |
| X-78 | Fire Protection | Auxiliary Area |
| X-82 | Fuel Pool | Auxiliary Area |
| X-83 | Fuel Pool | Auxiliary Area |
| X-84A | Pressurizer Relief Tank Gas Sample | Auxiliary Area |
| X-85A | Excess Letdown Heat Exchanger | Auxiliary Area |
| X-90 | Control Air | Auxiliary Area |
| X-91 | Postaccident Sampling, Hot Leg 1 | Auxiliary Area |
| X-92A,B | Hydrogen Analyzer | Auxiliary Area |
| X-93 | Accumulator Sample | Auxiliary Area |
| X-94A,B,C | Radiation Sample | Auxiliary Area |
| X-95A,B,C | Radiation Sample | Auxiliary Area |
| X-96C | Hot Leg Sample | Auxiliary Area |
| X-98 | ILRT | Auxiliary Area |
| X-99 | Hydrogen Analyzer | Auxiliary Area |
| X-100 | Hydrogen Analyzer | Auxiliary Area |
| X-101 | Postaccident Sampling, Containment | Auxiliary Area |
| X-103 | Postaccident Sampling, Liquid Discharge to Containment | Auxiliary Area |

SEQUOYAH - UNIT 1

3/4 5-6

Amendment No. 71, 73, 90

TABLE 3.6-1 (Continued)
BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING
SECONDARY CONTAINMENT BYPASS LEAKAGE PATHS

| <u>PENETRATION</u> | <u>DESCRIPTION</u> | <u>RELEASE LOCATION</u> |
|--------------------|--|-------------------------|
| X-106 | Postaccident Sampling, Air Discharge to Containment | Auxiliary Area |
| X-108 | UHI . | Auxiliary Area |
| X-109 | UHI | Auxiliary Area |
| X-110 | UHI | Auxiliary Area |
| X-114 | Ice Condenser | Auxiliary Area |
| X-115 | Ice Condenser | Auxiliary Area |
| X-116A | Postaccident Sampling, Containment Air Sample | Auxiliary Area |



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.79
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 March 1, 1988, 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. 79, 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: October 14, 1988

ATTACHMENT TO LICENSE AMENDMENT NO. 90

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.

REMOVE

3/4 6-6a

INSERT

3/4 6-6a

TABLE 3.6-1 (Continued)
BYPASS LEAKAGE PATHS TO THE AUXILIARY BUILDING
SECONDARY CONTAINMENT BYPASS LEAKAGE PATHS

| <u>PENETRATION</u> | <u>DESCRIPTION</u> | <u>RELEASE LOCATION</u> |
|--------------------|---|-------------------------|
| X-92A,B | Hydrogen Analyzer | Auxiliary Area |
| X-93 | Accumulator Sample | Auxiliary Area |
| X-94A,B,C | Radiation Sample | Auxiliary Area |
| X-95A,B,C | Radiation Sample | Auxiliary Area |
| X-96C | Hot Leg Sample | Auxiliary Area |
| X-98 | ILRT | Auxiliary Area |
| X-99 | Hydrogen Analyzer | Auxiliary Area |
| X-100 | Hydrogen Analyzer | Auxiliary Area |
| X-101 | Postaccident Sampling, Containment | Auxiliary Area |
| X-103 | Postaccident Sampling, Liquid Discharge to Containment | Auxiliary Area |
| X-106 | Postaccident Sampling, Air Discharge to Containment | Auxiliary Area |
| X-108 | UHI | Auxiliary Area |
| X-109 | UHI | Auxiliary Area |
| X-110 | UHI | Auxiliary Area |
| X-114 | Ice Condenser | Auxiliary Area |
| X-115 | Ice Condenser | Auxiliary Area |
| X-116A | Postaccident Sampling, Containment Air Sample | Auxiliary Area |



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

ENCLOSURE

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

SUPPORTING AMENDMENT NO. 90 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 79 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 letters dated March 1 and July 25, 1988, the Tennessee Valley Authority (TVA) proposed Technical Specifications (TS) changes to the Operating License of Sequoyah Units 1 and 2. The proposed amendments would revise Table 3.6-1, "Bypass Leakage Paths to the Auxiliary Building," for each unit, to add the potential leakage paths associated with the hydrogen analyzer system. In addition, two entries for penetrations in the table for each unit are revised for clarification. The March 1, 1988 submittal is for Unit 2 and the July 25, 1988 submittal is for Unit 1.

2.0 EVALUATION

As a result of recent modifications to the hydrogen analyzer system (Reference 1 in Section 5), TVA determined that, following a postulated LOCA, there exists a potential for bypass leakage to the Auxiliary Building inside the Auxiliary Building Secondary Containment Enclosure (ABSCE). These modifications consisted of moving the hydrogen analyzer system calibration panels from the annulus to the Auxiliary Building as well as providing four containment penetrations for the hydrogen analyzer system lines. This established an indirect release path to the Auxiliary Building and the environment through the system interface with the essential control air system.

A direct release path to the Auxiliary Building and the environment was established on the train B analyzer because its calibration panel was moved outside the ABSCE. It is required in TS 3.6.1.2.c that the combined bypass leakage rate shall be limited to a certain value for all penetrations identified in Table 3.6-1 as secondary containment bypass leakage paths to the Auxiliary Building when pressurized to accident pressure. At the time of the modification, the four penetrations were not included in Table 3.6-1 for the two units. The proposed TS change would add these four penetrations to Table 3.6-1 for each unit. These penetrations are X-99 and X-100 for Train A and X-92A and X-92B for Train B. The proposed TS change reflects current as-built conditions and is, therefore, acceptable. Inclusion of these potential leakage paths in the table ensures that they are adequately tested in accordance with 10 CFR 50 Appendix J and TS 3.6.1.2.c.

Also, two entries in the table are revised for clarification. The revisions are made to table entries X-94 and X-95. The insertion of commas into the entries more clearly identifies that each penetration has three lines passing through it. This proposed TS change is strictly administrative and is acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves 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 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 (53 FR 13019 and 53 FR 30145) on April 20, 1988 and August 10, 1988, respectively, and consulted with the State of Tennessee on October 12, 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.

5.0 REFERENCE

1. Licensee Event Report 50-327/87077 dated June 7, 1988.

Principal Contributors: S. B. Kim and J. Donohew

Dated: October 14, 1988