

November 6, 1992

Tennessee Valley Authority
ATTN: Dr. Mark O. Medford, Vice President
Nuclear Assurance, Licensing & Fuels
3B Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Dr. Medford:

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M84388 AND M84389)(TS 92-09)

The Commission has issued the enclosed Amendment No. 164 to Facility Operating License No. DPR-77 and Amendment No. 154 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 August 21, 1992.

The amendments address provisions for changes in the operating modes with the control room indication of ice bed temperatures inoperable and changes in the operating modes when the control room emergency ventilation system is inoperable.

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

Sincerely,

Original signed by

David E. LaBarge, Senior Project Manager
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No.164 to License No. DPR-77
2. Amendment No.154 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures:
See next page

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OFC:	PDII-4/LA	PDII-4/PM <i>JL</i>	SPLB-SCSB	OGE <i>AB</i>	PDII-4/D
NAME:	MSanders <i>ms</i>	DLaBarge:dw	^{LOBEL} GMcCracken	<i>E. Baumann</i>	<i>F. Hebdorn</i>
DATE:	10/06/92	10/8/92	10/14/92	10/16/92	11/16/92

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DFOI

Tennessee Valley Authority
ATTN: Dr. Mark O. Medford

Sequoyah Nuclear Plant

cc:

Mr. John B. Waters, Chairman
Tennessee Valley Authority
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County Judge
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General Counsel
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ET 11H
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AMENDMENT NO. 164 FOR SEQUOYAH UNIT NO. 1 - DOCKET NO. 50-327 and
AMENDMENT NO. 154 FOR SEQUOYAH UNIT NO. 2 - DOCKET NO. 50-328
DATED: November 6, 1992

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OC/LFMB MNBB-9112

J. Johnson RII

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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. 164
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 August 21, 1992, 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.

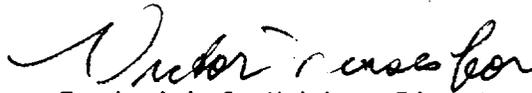
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-77 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 164, 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, to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 6, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 164

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 6-28
3/4 7-17

INSERT

3/4 6-28
3/4 7-17

CONTAINMENT SYSTEMS

ICE BED TEMPERATURE MONITORING SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5.2 The ice bed temperature monitoring system shall be OPERABLE with at least 2 OPERABLE RTD channels in the ice bed at each of 3 basic elevations (10'6", 30'9" and 55' above the floor of the ice condenser) for each one third of the ice condenser.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With the ice bed temperature indication not available in the main control room, determine the ice bed temperature at the local ice condenser temperature monitoring panel every 12 hours. The provisions of Specification 3.0.4 are not applicable.
- b. With the ice bed temperature monitoring system inoperable and unable to determine the ice bed temperatures by alternate means, POWER OPERATION may continue for up to 6 days provided the ice compartment lower inlet doors, intermediate deck doors, and top deck doors are closed and the last recorded mean ice bed temperature was less than or equal to 15°F and steady; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.5.2 The ice bed temperature monitoring system shall be determined OPERABLE by performance of a CHANNEL CHECK at least once per 12 hours.

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7 Two independent control room emergency ventilation systems shall be OPERABLE.

APPLICABILITY: ALL MODES

ACTION:

MODES 1, 2, 3 and 4

With one control room emergency ventilation system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6

- a. With one control room emergency ventilation system inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the control room emergency ventilation system in the recirculation mode.
- b. With both control room emergency air ventilation systems inoperable, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.
- c. The provisions of Specification 3.0.3 are not applicable in MODE 6.
- d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.7 Each control room emergency ventilation system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 104°F.
- b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:



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. 154
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 August 21, 1992, 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.

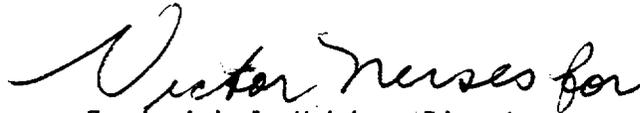
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-79 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 154, 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, to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: November 6, 1992

ATTACHMENT TO LICENSE AMENDMENT NO. 154

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 6-29

3/4 7-17

INSERT

3/4 6-29

3/4 7-17

CONTAINMENT SYSTEMS

ICE BED TEMPERATURE MONITORING SYSTEM

LIMITING CONDITION FOR OPERATION

3.6.5.2 The ice bed temperature monitoring system shall be OPERABLE with at least 2 OPERABLE RTD channels in the ice bed at each of 3 basic elevations (10'6", 30'9", and 55' above the floor of the ice condenser) for each one third of the ice condenser.

APPLICABILITY: MODES 1, 2, 3 and 4.

ACTION:

- a. With the ice bed temperature indication not available in the main control room, determine the ice bed temperature at the local ice condenser temperature monitoring panel every 12 hours. The provisions of Specification 3.0.4 are not applicable.
- b. With the ice bed temperature monitoring system inoperable and unable to determine the ice bed temperatures by alternate means, POWER OPERATION may continue for up to 6 days provided the ice compartment lower inlet doors, intermediate deck doors, and top deck doors are closed and the last recorded mean ice bed temperature was less than or equal to 15°F and steady; otherwise, be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

SURVEILLANCE REQUIREMENTS

4.6.5.2 The ice bed temperature monitoring system shall be determined OPERABLE by performance of a CHANNEL CHECK at least once per 12 hours.

PLANT SYSTEMS

3/4.7.7 CONTROL ROOM EMERGENCY VENTILATION SYSTEM

LIMITING CONDITION FOR OPERATION

3.7.7 Two independent control room emergency ventilation systems shall be OPERABLE.

APPLICABILITY: ALL MODES

ACTION:

MODES 1, 2, 3 and 4:

With one control room emergency ventilation system inoperable, restore the inoperable system to OPERABLE status within 7 days or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

MODES 5 and 6:

- a. With one control room emergency ventilation system inoperable, restore the inoperable system to OPERABLE status within 7 days or initiate and maintain operation of the control room emergency ventilation system in the recirculation mode.
- b. With both control room emergency air ventilation systems inoperable, suspend all operations involving CORE ALTERATIONS or positive reactivity changes.
- c. The provisions of Specification 3.0.3 are not applicable in MODE 6.
- d. The provisions of Specification 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.7.7 Each control room emergency ventilation system shall be demonstrated OPERABLE:

- a. At least once per 12 hours by verifying that the control room air temperature is less than or equal to 104°F.
- b. At least once per 31 days on a STAGGERED TEST BASIS by initiating, from the control room, flow through the HEPA filters and charcoal adsorbers and verifying that the system operates for at least 15 minutes.
- c. At least once per 18 months or (1) after any structural maintenance on the HEPA filter or charcoal adsorber housings, or (2) following painting, fire or chemical release in any ventilation zone communicating with the system by:



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

ENCLOSURE 3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 164 TO FACILITY OPERATING LICENSE NO. DPR-77
AND AMENDMENT NO. 154 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 application dated August 21, 1992, the Tennessee Valley Authority (TVA or the licensee) proposed amendments to the Technical Specifications (TSs) for Sequoyah Nuclear Plant (SQN) Units 1 and 2. The requested changes would add a statement to Action a of TS 3.6.5.2 and to the Mode 5 and 6 actions of TS 3.7.7 that would exclude implementation of the provisions of TS 3.0.4.

TS 3.0.4 requires that entry into an operational mode or other specified condition cannot be made unless the TS conditions for the Limiting Conditions for Operation (LCO) are met without reliance on the provisions contained in the action statements. It also requires that exceptions to this requirement be stated in the individual specifications.

2.0 EVALUATION

Generic Letter 87-09, "Sections 3.0 and 4.0 of the Standard Technical Specifications (STS) on the Applicability of Limiting Conditions for Operation and Surveillance Requirements," recognizes that TS 3.0.4 unduly restricts facility operation when conformance with action statements provides an acceptable level of safety for continued operation. In addition, for an LCO that has action statements permitting continued operation for an unlimited period of time, entry into an operational mode should be permitted in accordance with the action statements. The restriction on a change in operational modes should only apply where the action statements establish a specified time interval in which the LCO must be met or a shutdown would be required.

TS 3.6.5.2 requires that certain specified channels of the ice bed temperature monitoring system be operable in plant operating Modes 1, 2, 3 and 4. Action Statement a of this specification requires that if this ice bed temperature indication is not available in the main control room, the ice bed temperature must be determined at the local ice condenser temperature monitoring panel

every 12 hours. Since the present TS do not specifically exclude application of TS 3.0.4 when the control room indication is inoperable, its application has the effect of preventing changes to the plant operating mode, especially plant startup, whenever the control room indication is not available, even though local indication is available. However, plant operation is not affected if it is already operating (or no mode change is desired) and the ice bed temperatures are determined from the local ice condenser temperature monitoring panel every 12 hours. Therefore, the licensee has proposed adding to this requirement, a statement that excludes application of TS 3.0.4 whenever the control room indication is not available. The present requirements to determine the ice bed temperatures locally every 12 hours if the control room indication is not available, and the required action to be taken if neither monitoring system is available, would not be changed by the proposed amendment.

The licensee has determined that a similar condition exists for the control room emergency ventilation system (CREVS). TS 3.7.7 requires that two independent CREVS be operable in all plant operating modes. Since this TS does not specifically exclude application of TS 3.0.4, its application prevents changes between Modes 5 and 6 if one or both of the control room emergency ventilation systems are inoperable. Because this restriction could impact refueling outage activities, the licensee has proposed adding an action statement that would exclude application of the provisions of TS 3.0.4 whenever one or both of the CREVS are inoperable and the plant is in operating Modes 5 or 6. The present statements concerning the actions to be taken in the event that one or both of the CREVS is inoperable would not be changed by the proposed amendment.

For the ice bed temperature monitoring system, Action a of TS 3.6.5.2 allows for indefinite unit operation when the control room indication is inoperable and temperatures can be determined every 12 hours at the local monitoring panel. For the CREVS, the action statements associated with Mode 5 and 6 allow indefinite unit operation in Modes 5 or 6 with one train inoperable provided the train is restored to operable status within 7 days or the CREVS is placed in the recirculation mode. With both trains of CREVS inoperable, indefinite unit operation in Modes 5 or 6 is allowed provided all operations involving core alterations or positive reactivity changes are suspended.

The staff has determined that for the conditions explained above, the provisions of Generic Letter 87-09 are applicable. Therefore, it is unreasonable and unnecessary to apply the restrictions of TS 3.0.4. Compliance with the specified action statements establish an acceptable level of safety when control room monitoring of the ice bed temperature, or one or both CREVS are inoperable. Based on this evaluation, the staff finds the proposed TS changes acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Tennessee State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 off site, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration, and there has been no public comment on such finding (57 FR 45090). 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 or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: D. LaBarge

Date: November 6, 1992