

May 23, 1994

Docket Nos. 50-327
and 50-328

Mr. Oliver D. Kingsley, Jr.
President, TVA Nuclear and
Chief Nuclear Officer
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Kingsley:

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M88786 AND M88787) (TS 93-21)

The Commission has issued the enclosed Amendment No. 181 to Facility Operating License No. DPR-77 and Amendment No. 173 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 February 9, 1994, which was supplemented by letter dated April, 13, 1994.

The amendments change Technical Specification Table 3.3-11 to reflect the addition of ionization fire detectors to Fire Zones 184, 185, 186, and 187.

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, Sr. Project Manager
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Enclosures:

1. Amendment No. 181 to License No. DPR-77
2. Amendment No. 173 to License No. DPR-79
3. Safety Evaluation

cc w/enclosures:
See next page

NAME:	PDII-4/LA	PDII-4/PM	SPLB	OGC AG	PDII-4/D
OFFICE:	BCIayson	DLaBarge	CMcCracken	A. JOHNSON	FHebdon
DATE:	4/12/94	4/12/94	4/12/94	5/12/94	5/12/94

DOCUMENT NAME: 88786.AMM

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AMENDMENT NO. 181 FOR SEQUOYAH UNIT NO. 1 - DOCKET NO. 50-327 and
AMENDMENT NO. 173 FOR SEQUOYAH UNIT NO. 2 - DOCKET NO. 50-328
DATED: May 23, 1994

DISTRIBUTION:

Docket Files

NRC & Local PDRs

SQL Reading File

S. Varga 14-E-4

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OGC 15-B-18

D. Hagan MNBB-3206

G. Hill T-5-C-3 (2 per docket)

C. Grimes 11-E-22

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OPA 2-G-5

OC/LFDCB MNBB-9112

cc: Plant Service List



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-327

SEQUOYAH NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 181
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 February 9, 1994, and supplemented by letter dated April 13, 1994, 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. 181, 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 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION

David E. Trumble for

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: May 23, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 181

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 3-65

INSERT
3/4 3-65

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

FIRE ZONE	INSTRUMENT LOCATION	Ionization	MINIMUM INSTRUMENTS OPERABLE		Infrared
			Photoelectric	Thermal	
174	Mech. Eqpt. Rm. E1. 734	1			
175	Mech. Eqpt. Rm. E1. 734	1			
176	480-V Shtdn. Bd. Rm. 1A1, E1. 734	2			
177	480-V Shtdn. Bd. Rm. 1A1, E1. 734	2			
178	480-V Shtdn. Bd. Rm. 1A2, E1. 734	2			
179	480-V Shtdn. Bd. Rm. 1A2, E1. 734	2			
180	480-V Shtdn. Bd. Rm. 1B1, E1. 734	2			
181	480-V Shtdn. Bd. Rm. 1B1 E1. 734	2			
182	480-V Shtdn. Bd. Rm. 1B2 E1. 734	3			
183	480-V Shtdn. Bd. Rm. 1B2 E1. 734	3			
184	6.9-KV Shtdn. Bd. Rm. A E1. 734	7			
185	6.9-KV Shtdn. Bd. Rm. A E1. 734	7			
186	6.9-KV Shtdn. Bd. Rm. B E1. 734	7			
187	6.9-KV Shtdn. Bd. Rm. B E1. 734	7			
188	480-V Shtdn. Bd. Rm. 2A1 E1. 734	2			
189	480-V Shtdn. Bd. Rm. 2A1 E1. 734	2			
190	480-V Shtdn. Bd. Rm. 2A2 E1. 734	3			
191	480-V Shtdn. Bd. Rm. 2A2 E1. 734	3			
192	480-V Shtdn. Bd. Rm. 2B1 E1. 734	2			



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-328

SEQUOYAH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 173
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 February 9, 1994, and supplemented by letter dated April 13, 1994, 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. 173, 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 45 days.

FOR THE NUCLEAR REGULATORY COMMISSION

David C. Trimble for

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: May 23, 1994

ATTACHMENT TO LICENSE AMENDMENT NO. 173

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 3-64

INSERT
3/4 3-64

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

FIRE ZONE	INSTRUMENT LOCATION	MINIMUM INSTRUMENTS OPERABLE			Infrared
		Ionization	Photoelectric	Thermal	
153	Add. Equip. Bldg., E1. 740.5	4			
154	Add. Equip. Bldg., E1. 740.5	6			
155	Refuel Rm. E1. 734	19			
158	RB Access Rm. E1. 734	2			
159	RB Access Rm. E1. 734	2			
160	SG Bldn. Rm. E1. 734	4			
161	SG Bldn. Rm. E1. 734	4			
162	EGTS Rm. E1. 734	3			
163	EGTS Rm. E1. 734	3			
164	EGTS Filter A, E1. 734		1		2
165	EGTS Filter A, E1. 734		1		2
166	EGTS Filter B, E1. 734		1		2
167	EGTS Filter B, E1. 734		1		2
172	Mech. Equip. Rm., E1. 734	1			
173	Mech. Equip. Rm., E1. 734	1			
174	Mech. Eqpt. Rm. E1. 734	1			
175	Mech. Eqpt. Rm. E1. 734	1			
176	480-V SD Bd. Rm. 1A1, E1. 734	2			
177	480-V SD Bd. Rm. 1A1, E1. 734	2			
178	480-V SD Bd. Rm. 1A2, E1. 734	2			
179	480-V SD Bd. Rm. 1A2, E1. 734	2			
180	480-V SD Bd. Rm. 1B1, E1. 734	2			
181	480-V SD Bd. Rm. 1B1 E1. 734	2			
182	480-V SD Bd. Rm. 1B2 E1. 734	3			
183	480-V SD Bd. Rm. 1B2 E1. 734	3			
184	6.9KV SD Bd. Rm. A E1. 734	7			
185	6.9KV SD Bd. Rm. A E1. 734	7			
186	6.9KV SD Bd. Rm. B E1. 734	7			
187	6.9KV SD Bd. Rm. B E1. 734	7			
188	480-V SD Bd. Rm. 2A1 E1. 734	2			
189	480-V SD Bd. Rm. 2A1 E1. 734	2			
190	480-V SD Bd. Rm. 2A2 E1. 734	3			
191	480-V SD Bd. Rm. 2A2 E1. 734	3			



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

ENCLOSURE 3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 181 TO FACILITY OPERATING LICENSE NO. DPR-77
AND AMENDMENT NO. 173 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 February 9, 1994, the Tennessee Valley Authority (TVA or the licensee) proposed amendments to the Technical Specifications (TS) for Sequoyah Nuclear Plant (SQN) Units 1 and 2. The requested changes would change Technical Specification Table 3.3-11 to reflect the addition of ionization fire detectors to Fire Zones 184, 185, 186, and 187. The proposed changes would increase the number of ionization detectors in each of the four zones from 6 to 7 for each of the units.

A supplemental letter dated April 13, 1994, supplied clarifying information that did not change the initial proposed no significant hazards consideration determination.

2.0 EVALUATION

Fire protection instrumentation includes an early warning fire detection system to notify personnel of a fire, actuate automatic suppression systems, and control auxiliary equipment. The National Fire Protection Association (NFPA) 72E requires ceiling obstructions and potential changes in air movement to be considered in the spacing of fire detectors. However, it has been determined that the 6900 volt shutdown board room corridors on Elevation 734 of the auxiliary building are not within the range of coverage for the existing shutdown board room detectors, contrary to NFPA 72E. Specifically, the corridor ceiling is separated from the general room area ceiling by a concrete beam, which could result in failure to detect smoke from a fire in the corridor when the air flow is low, such as when the general room area fans are not running.

Based on the NFPA requirements, two additional cross-zone detectors will be added in each of the Units 1 and 2 6900 volt shutdown board room corridors on Elevation 734 of the auxiliary building. The additional detectors will provide alarms in the main control room and the local fire detection alarm panel, charging of the shutdown board room spray headers, and actuation of the shutdown board room fire dampers. Water discharge from the spray headers will not, however, occur until the fusible link directly associated with the fire actuates.

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The addition of the detectors and associated equipment will increase the conservatism for the detection and suppression of potential fires in the zones. They will enhance the reliability of the fire protection system and help ensure cross-zone protection for the 6900 volt shutdown board room corridors. Incorporating the new detectors into the TS Table 3.3-11 will ensure that they are controlled in the same manner and receive the same surveillance tests as the existing detectors. Therefore, 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 offsite, 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 (59 FR 12369). 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: David E. LaBarge

Dated: May 23, 1994

Mr. Oliver D. Kingsley, Jr.
Tennessee Valley Authority

cc:

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SEQUOYAH NUCLEAR PLANT

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