

January 22, 1989

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

Dear Mr. Kingsley

SUBJECT: FIRE DETECTION INSTRUMENTS (TAC R00293, R00294, R00423 and R00424)
 (TS 87-45 AND 88-08) SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

The Commission has issued the enclosed Amendment No. 97 to Facility Operating License No. DPR-77 and Amendment No. 86 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 1, 1988 (TS 87-45) and August 10, 1988 (TS 88-08).

These amendments revise the Sequoyah Nuclear Plant, Units 1 and 2 Technical Specifications (TS). The changes are to revise Table 3.3-11, Fire Detection Instruments, to correct typographical errors and omissions, and to add or remove instrumentation to reflect plant modifications.

The application dated February 1, 1988 withdrew the TS change request 87-04 that was submitted by letter dated May 12, 1987.

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 Nuclear Reactor Regulation

Enclosures:

1. Amendment No.97 to
License No. DPR-77
2. Amendment No.86 to
License No. DPR-79
3. Safety Evaluation

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 See next page

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

January 22, 1989

Docket Nos. 50-327/328

Mr. Oliver D. Kingsley, Jr.
Senior Vice President, Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
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A handwritten signature in cursive script that reads "Suzanne Black".

Suzanne Black, Assistant Director
for Projects
TVA Projects Division
Office of Nuclear Reactor Regulation

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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. 97
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 1 and August 10, 1988, complies with the 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.

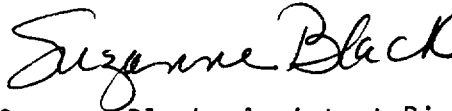
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-77 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 97, 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 Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 22, 1989

TABLE 3.3-11

FIRE DETECTION INSTRUMENTS

Fire Zone	Instrument Location	Minimum Instruments Operable			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
1	Diesel Gen. Rm. 2B-B, El. 722			5	
2	Diesel Gen. Rm. 2B-B, El. 722			5	
3	Diesel Gen. Rm. 1B-B, El. 722			5	
4	Diesel Gen. Rm. 1B-B, El. 722			5	
5	Diesel Gen. Rm. 2A-A, El. 722			5	
6	Diesel Gen. Rm. 2A-A, El. 722			5	
7	Diesel Gen. Rm. 1A-A, El. 722			5	
8	Diesel Gen. Rm. 1A-A, El. 722			5	
9	Lube Oil Storage Rm. El. 722			1	
10	Lube Oil Storage Rm. El. 722			1	
11	Fuel Oil Transfer Rm. El. 722			1	
12	Fuel Oil Transfer Rm. El. 722			1	
13	Diesel Gen. Corridor, El. 722			6	
14	Air Intake & Exhaust Rm. 2B, El. 740.5			9	
15	Air Intake & Exhaust Rm. 1B, El. 740.5			9	
16	Air Intake & Exhaust Rm. 2A, El. 740.5			9	
17	Air Intake & Exhaust Rm. 1A, El. 740.5			9	
18	Diesel Gen. 2B-B Relay Bd., El. 722	3			
19	Diesel Gen. 1B-B Relay Bd., El. 722	3			
20	Diesel Gen. 2A-A Relay Bd., El. 722	3			
21	Diesel Gen. 1A-A Relay Bd., El. 722	3			
22	Diesel Gen. Board Rm. 2B-B, El. 740.5	2			
23	Diesel Gen. Board Rm. 2B-B, El. 740.5			2	
24	Diesel Gen. Board Rm. 1B-B, El. 740.5	2			
25	Diesel Gen. Board Rm. 1B-B, El. 740.5			2	

SEQUOYAH - UNIT 1

3/4 3-59

Amendment No. 37, 97

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Zone	Instrument Location	Minimum Instruments Operable			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
26	Diesel Gen. Board Rm. 2A-A, El. 740.5	2			
27	Diesel Gen. Board Rm. 2A-A, El. 740.5			2	
28	Diesel Gen. Board Rm. 2B-B, El. 740.5	2			
29	Diesel Gen. Board Rm. 1A-A, El. 740.5			2	
30	Cable Spreading Rm. C7-C11, El. 706	14			
31	Cable Spreading Rm. C7-C11, El. 706	14			
32	Cable Spreading Rm. C7-C11, El. 706	14			
33	Cable Spreading Rm. C7-C11, El. 706	14			
34	Cable Spreading Rm. C3-C7, El. 706	14			
35	Cable Spreading Rm. C3-C7, El. 706	14			
39	Cont. Spray Pump 1A-A, El. 653	2			
40	Cont. Spray Pump 1B-B, El. 653	2			
43	RHR Pump 1A-A, El. 653	2			
44	RHR Pump 1B-B, El. 653	2			
47	Aux. Bldg. Corridor, El. 653	10			
48	Corridor, Control Bldg. El. 669	4			
49	Corridor, Control Bldg. El. 669	4			
50	Mech. Equipm Rm. Col. C1, El. 669	2			
51	Mech. Equip. Rm. Col. C1, El. 669			2	

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

<u>Fire Zone</u>	<u>Instrument Location</u>	<u>Minimum Instruments Operable</u>			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
52	Mech. Equip. Rm. Col. C3, El. 669	2			
53	Mech. Equip. Rm. Col. C3, El. 669			2	
54	250-V Batt. Rm. 1, El. 669	3			
55	250-V Batt. Rm. 1, El. 669			3	
56	250-V Batt. Bd. Rm. 1, El. 669	2			
57	250-V Batt. Bd. Rm. 1, El. 669	2			
58	250-V Batt. Bd. Rm. 2, El. 669	2			
59	250-V Batt. Bd. Rm. 2, El. 669	2			
60	250-V Batt. Rm. 2, El. 669	3			
61	250-V Batt. Rm. 2, El. 669			3	
62	24-V & 48-V Batt. Rm. El. 669	3			
63	24-V & 48-V Batt. Rm. El. 669			3	
64	24-V & 48-V Batt. Bd. Rm., El. 669	2			
65	24-V & 48-V Batt. Bd. Rm., El. 669	2			
66	Communications Rm. El. 669	4			
67	Communications Rm. El. 669	4			
68	Mech. Equip. Rm. El. 669	2			
69	Mech. Equip. Rm. El. 669			2	
70	Aux. Bldg. A5-A11, Col. W-X, El. 669	5			
71	Aux. Bldg. A5-A11, Col. W-X, El. 669	5			
72	Aux. FW Pump Turbine 1A-S, El. 669	1			
73	Aux. FW Pump Turbine 1A-S, El. 669			1	
76	S. I. & Charging Pump Rms. El. 669			5	
77	S. I. Pump Rm. 1A, El. 669	1			
78	S. I. Pump Rm. 1B, El. 669	1			
79	Charging Pump Rm. 1C, El. 669	1			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

SEQUOYAH - UNIT 1	Fire Zone	Instrument Location	Minimum Instruments Operable			
			<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
3/4 3-62	80	Charging Pump Rm. 1B, El. 669	1			
	81	Charging Pump Rm. 1A, El. 669	1			
	88	Aux. Bldg. Corridor A1-A8, El. 699	8			
	89	Aux. Bldg. Corridor A1-A8, El. 669	8			
	90	Aux. Bldg. Corridor A8-A15, El. 669	8			
	91	Aux. Bldg. Corridor A8-A15, El. 669	8			
	92	Aux. Bldg. Corridor Col. U-W, El. 669	4			
	93	Aux. Bldg. Corridor Col. U-W, El. 669	4			
	94	Valve Galley, El. 669	2			
	95	Valve galley, El. 669	2			
	98	Cntmt Purge Air Fltr., El. 690		2	2	
	99	Cntmt Purge Air Fltr. El. 690		2	2	
	102	Pipe Gallery, El. 690	4			
	103	Pipe Gallery, El. 690	4			
Amendment No. 97	106	Aux. Building, El. 690	8			
	107	Aux. Building, El. 690	8			
	108	Radio Chemical Lab. Area, El. 690	3			
	109	Radio Chemical Lab. Area, El. 690	3			
	110	Aux. Bldg. A1-A8, Col. Q-U, El. 690	10			
	111	Aux. Bldg. A1-A8, Col. Q-U, El. 690	10			
	112	Aux. Bldg. A8-A15, Col. Q-U, El. 690	9			
	113	Aux. Bldg. A8-A15, Col. Q-U, El. 690	9			
	114	Waste Packaging Area El. 706	3			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

<u>Fire Zone</u>	<u>Instrument Location</u>	<u>Minimum Instruments Operable</u>			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
115	Waste Packaging Area El. 706	3			
116	Cask Loading Area El. 706	2			
117	Cask Loading Area El. 706	2			
118	New Fuel Storage Area El. 706	2			
119	New Fuel Storage Area El. 706	2			
120	Aux. Bldg. Gas Trtmt. Fltr. El. 714		1	1	
121	Aux. Bldg. Gas Trtmt. Fltr. El. 714		1	1	
122	Add. Egpt. Bldg. El. 706 & 717.5	6			
123	Volume Cont. Tank Rm. 1A, El. 690	1			
124	Additional Equip. Bldg. El. 706	6			
125	Volume Cont. Tank Rm. 1A, El. 690	1			
126	ABGTS Rm. El. 714	2			
127	ABGTS Rm. El. 714	2			
128	ABGTS Rm. El. 714	2			
129	ABGTS Rm. El. 714	2			
130	Ventilation & Purge Air Rm. El. 714	3			
131	Ventilation & Purge Air Rm. El. 714	3			
132	Ventilation & Purge Air Rm. El. 714	3			
133	Ventilation & Purge Air Rm. El. 714	3			
134	Aux. Bldg. A5-A11, Col. U-W, El. 714	7			
135	Aux. Bldg. A5-A11, Col. U-W, El. 714	7			
136	Heating & Vent. Rm. El. 714	4			
137	Heating & Vent. Rm. El. 714	4			
138	Heating & Vent. Rm. El. 714	4			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Zone	Instrument Location	Minimum Instruments Operable			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
139	Heating & Vent. Rm. El. 714	4			
140	Above Hot Instr. Rm. El. 714	1			
141	Above Hot Instr. Rm. El. 714	1			
142	Aux. Bldg. A1-A8, Col. Q-U, El. 714	12			
143	Aux. Bldg. A1-A8, Col. Q-U, El. 714	12			
144	Aux. Bldg. A8-A15, Col. Q-U, El. 714	9			
145	Aux. Bldg. A8-A15, Col. Q-U, El. 714	9			
146	N ₂ Storage Area, El. 706	4			
147	ABGTS filter El. 714		1	1	
148	ABGTS filter El. 714		1	1	
149	Cable Spreading Rm. C3-C7, El. 706	15			
150	Cable Spreading Rm. C3-C7, El. 706	15			
153	Add. Eqpt. Bldg. El. 740.5	4			
154	Add. Eqpt. Bldg. El. 740.5	6			
155	Refuel Rm. El. 734	19			
156	RB Access Rm. El. 734	2			
157	RB Access Rm. El. 734	2			
160	SG Blwdn. Rm. El. 734	4			
161	SG Blwdn. Rm. El. 734	4			
162	EGTS Rm. El. 734	3			
163	EGTS Rm. El. 734	3			
164	EGTS Fltr. A El. 734		1	2	
165	EGTS Fltr. A El. 734		1	2	
166	EGTS Fltr. B El. 734		1	2	
167	EGTS Fltr. B El. 734		1	2	
172	Mech. Eqpt. Rm. El. 734	1			
173	Mech. Eqpt. Rm. El. 734	1			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Zone	Instrument Location	Minimum Instruments Operable			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
174	Mech. Eqpt. Rm. El. 734	1			
175	Mech. Eqpt. Rm. El. 734	1			
176	480-V Shtdn. Bd. Rm. 1A1 El. 734	2			
177	480-V Shtdn. Bd. Rm. 1A1 El. 734	2			
178	480-V Shtdn. Bd. Rm. 1A2 El. 734	2			
179	480-V Shtdn. Bd. Rm. 1A2 El. 734	2			
180	480-V Shtdn. Bd. Rm. 1B1 El. 734	2			
181	480-V Shtdn. Bd. Rm. 1B1 El. 734	2			
182	480-V Shtdn. Bd. Rm. 1B2 El. 734	3			
183	480-V Shtdn. Bd. Rm. 1B2 El. 734	3			
184	6.9-KV Shtdn. Bd. Rm. A El. 734	6			
185	6.9-KV Shtdn. Bd. Rm. A El. 734	6			
186	6.9-KV Shtdn. Bd. Rm. B El. 734	6			
187	6.9-KV Shtdn. Bd. Rm. B El. 734	6			
188	480-V Shtdn. Bd. Rm. 2A1 El. 734	2			
189	480-V Shtdn. Bd. Rm. 2A1 El. 734	2			
190	480-V Shtdn. Bd. Rm. 2A2 El. 734	3			
191	480-V Shtdn. Bd. Rm. 2A2 El. 734	3			
192	480-V Shtdn. Bd. Rm. 2B1 El. 734	2			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

File Zone	Instrument Location	Minimum Instruments Operable			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
193	480-V Shtdn. Bd. Rm. 2B1 El. 734	2			
194	480-V Shtdn. Bd. Rm. 2B2 El. 734	2			
195	480-V Shtdn. Bd. Rm. 2B2 El. 734	2			
196	125-V Batt. Bd. Rm. I El. 734	1			
197	125-V Batt. Bd. Rm. I El. 734	1			
198	125-V Batt. Bd. Rm. II El. 734	1			
199	125-V Batt. Bd. Rm. II El. 734	1			
200	125-V Batt. Bd. Rm. III El. 734	1			
201	125-V Batt. Bd. Rm. III El. 734	1			
202	125-V Batt. Bd. Rm. IV El. 734	1			
203	125-V Batt. Bd. Rm. IV El. 734	1			
204	Aux. CR El. 734	2			
205	Aux. CR El. 734	2			
206	Aux. CR Inst. Rm. 1A El. 734	1			
207	Aux. CR Inst. Rm. 1A El. 734	1			
208	Aux. CR Inst. Rm. 1B El. 734	1			
209	Aux. CR Inst. Rm. 1B El. 734	1			
210	Aux. CR Inst. Rm. 2A El. 734	1			
211	Aux. CR Inst. Rm. 2A El. 734	1			
212	Aux. CR Inst. Rm. 2B El. 734	1			
213	Aux. CR Inst. Rm. 2B El. 734	1			
214	Mech. Eqpt. Rm. El. 732	5			
215	Mech. Eqpt. Rm. El. 732	5			
216	CR Fltr. B El. 732	1		1	
217	CR Fltr. B El. 732	1		1	

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Zone	Instrument Location	Minimum Instruments Operable			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
218	CR Fltr. A El. 732	1		1	
219	CR Fltr. A El. 732	1		1	
220	Main CR El. 732	25			
221	Technical Support Center, El. 732	5			
222	Technical Support Center, El. 732	5			
225	Relay Bd. Rm. El. 732	13			
226	Electric Cont. Bds. El. 732	11			
227	Oper. Living Area El. 732	7		1	
228	Oper. Living Area El. 732			8	
229	Main Cont. Bds.	9			
230	Aux. CR Bds. L-4A, 4C, 11A & 10, El. 734	9			
233	Ctrl. Rod Dr. Eqpt. Rm. El. 759	4			
234	Ctrl. Rod Dr. Eqpt. Rm. El. 759	4			
235	Ctrl. Rod Dr. Eqpt. Rm. El. 759	4			
236	Ctrl. Rod Dr. Eqpt. Rm. El. 759	4			
237	Mech. Eqpt. Rm. El. 749	1			
238	Mech. Eqpt. Rm. El. 749	1			
239	Mech. Eqpt. Rm. El. 749	2			
240	Mech. Eqpt. Rm. El. 749	2			
241	480-V XFMR Rm. 1A El. 749	3			
242	480-V XFMR Rm. 1A El. 749	3			
243	480-V XFMR Rm. 1B El. 749	3			
244	480-V XFMR Rm. 1B El. 749	3			
245	480-V xfmr Rm. 2A El. 749	3			
246	480-V xfmr Rm. 2A El. 749	3			
247	480-V xfmr Rm. 2B El. 749	3			
248	480-V xfmr Rm. 2B El. 749	3			
249	125-V Batt. Rm. I El. 749	1			
250	125-V Batt. Rm. I El. 749	1			
251	125-V Batt. Rm. II El. 749	1			
252	125-V Batt. Rm. II El. 749	1			
253	125-V Batt. Rm. III El. 749	1			
254	125-V Batt. Rm. III El. 749	1			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Zone	Instrument Location	Minimum Instruments Operable			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
255	125-V Batt. Rm. IV El. 749	1			
256	125-V Batt. Rm. IV El. 749	1			
257	480-V Bd. Rm. 1B El. 749	4			
258	480-V Bd. Rm. 1B El. 749	4			
259	480-V Bd. Rm. 1A El. 749	4			
260	480-V Bd. Rm. 1A El. 749	4			
261	480-V Bd. Rm. 2A El. 749	4			
262	480-V Bd. Rm. 2A El. 749	4			
263	480-V Bd. Rm. 2B El. 749	4			
264	480-V Bd. Rm. 2B El. 749	4			
267	Aux. Instr. Rm. El. 685	8			
268	Aux. Instr. Rm. El. 685			9	
269	Computer Rm. El. 685	4			
270	Computer Rm. El. 685			4	
271	Aux. Instr. Rm. El. 685	8			
272	Aux. Instr. Rm. El. 685			9	
273	Computer Rm. Corridor	3			
276	Intk. Pumping Sta. El 690 & 670.5	15			
277	ERCW Pump Sta. El. 704	21		8	
296	Aux. CR Bds. L-48, 4D, & 11B, El. 734	6			
297	Main Cont. Bds.	9			
298	Common Main CR Bds. El 732	9			
330	Reactor Building Annulus		3		
331	Reactor Building Annulus		4		
352	Lwr. Compt. Coolers, El. 693		4		
354	Upr. Compt. Coolers, El. 778		4		
356	RCP 2, El. 693			2	
357	RCP 2, El. 693			2	
360	RCP 1, El. 693			2	
361	RCP 1, El. 693			2	
364	RCP 3, El. 693			2	
365	RCP 3, El. 693			2	
368	RCP 4, El. 693			2	

SEQUOYA - UNIT 1

3/4 3-68

Amendment No. 97

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

Fire Zone	Instrument Location	Minimum Instruments Operable			
		<u>Ionization</u>	<u>Photoelectric</u>	<u>Thermal</u>	<u>Infrared</u>
369	RCP 4, El. 693			2	
372	Reactor Bldg. Annulus		22		
373	Reactor Bldg. Annulus		21		
387	Turbine Cont. Bldg. Wall, El. 706			18	
427	125V Batt. Rm. V El. 749	2			
428	125V Batt. Rm. V El. 749	2			
458	Counting Room Ceiling	2			
462	480V Sd Bd Rm. 1B2 El. 734			1	
463	480V Sd Bd Rm. 2A2 El. 734			1	
465	Counting Room Ceiling El. 690	2			
466	480V Sd Bd Rm. 1B2 El. 734			1	
467	480V Sd Bd Rm. 1B2 El. 734			1	
468	480V Sd Bd Rm. 1B2 El. 734			1	
469	480V Sd Bd Rm. 2A2 El. 734			1	
470	480V Sd Bd Rm. 2A2 El. 734			1	
471	480V Sd Bd Rm. 2A2 El. 734			1	

ATTACHMENT TO LICENSE AMENDMENT NO. 97

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

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3/4 3-60
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3/4 3-59
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3/4 3-65
3/4 3-66
3/4 3-67
3/4 3-68
3/4 3-68a



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. 86
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 1 and August 10, 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 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.

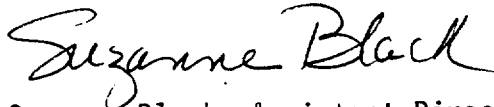
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility Operating License No. DPR-79 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 86, 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 Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: January 22, 1989

ATTACHMENT TO LICENSE AMENDMENT NO. 86

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

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3/4 3-67
3/4 3-67a

TABLE 3.3-11

FIRE DETECTION INSTRUMENTS

FIRE ZONE	INSTRUMENT LOCATION	Ionization	MINIMUM INSTRUMENTS OPERABLE		<u>Infrared</u>
			<u>Photoelectric</u>	<u>Thermal</u>	
1	Diesel Gen. Rm. 2B-B, El. 722			5	
2	Diesel Gen. Rm. 2B-B, El. 722			5	
3	Diesel Gen. Rm. 1B-B, El. 722			5	
4	Diesel Gen. Rm. 1B-B, El. 722			5	
5	Diesel Gen. Rm. 2A-A, El. 722			5	
6	Diesel Gen. Rm. 2A-A, El. 722			5	
7	Diesel Gen. Rm. 1A-A, El. 722			5	
8	Diesel Gen. Rm. 1A-A, El. 722			5	
9	Lube Oil Storage Rm. El. 722			1	
10	Lube Oil Storage Rm. El. 722			1	
11	Fuel Oil Transfer Rm. El. 722			1	
12	Fuel Oil Transfer Rm. El. 722			1	
13	Diesel Gen. Corridor, El. 722			6	
14	Air Intake & Exhaust Rm. 2B, El. 740.5			9	
15	Air Intake & Exhaust Rm. 1B, El. 740.5			9	
16	Air Intake & Exhaust Rm. 2A, El. 740.5			9	
17	Air Intake & Exhaust Rm. 1A, El. 740.5			9	
18	Diesel Gen. 2B-B Relay Bd. El. 722	3			
19	Diesel Gen. 1B-B Relay Bd. El. 722	3			
20	Diesel Gen. 2A-A Relay Bd. El. 722	3			
21	Diesel Gen. 1A-A Relay Bd. El. 722	3			
22	Diesel Gen. Bd. Rm. 2B-B, El. 740.5	2			
23	Diesel Gen. Bd. Rm. 2B-B, El. 740.5			2	
24	Diesel Gen. Bd. Rm. 1B-B, El. 740.5	2			
25	Diesel Gen. Bd. Rm. 1B-B, El. 740.5			2	
26	Diesel Gen. Bd. Rm. 2A-A, El. 740.5	2			
27	Diesel Gen. Bd. Rm. 2A-A, El. 740.5			2	
28	Diesel Gen. Bd. Rm. 1A-A, El. 740.5	2			
29	Diesel Gen. Bd. Rm. 1A-A, El. 740.5			2	

SEQUOYAN - UNITS 2

3/4 3-60

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

<u>FIRE ZONE</u>	<u>INSTRUMENT LOCATION</u>	<u>Ionization</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>		<u>Infrared</u>
			<u>Photoelectric</u>	<u>Thermal</u>	
30	Cable Spreading Rm. C7-C11, El. 706	14			
31	Cable Spreading Rm. C7-C11, El. 706	14			
32	Cable Spreading Rm. C7-C11, El. 706	14			
33	Cable Spreading Rm. C7-C11, El. 706	14			
34	Cable Spreading Rm. C3-C7, El. 706	14			
35	Cable Spreading Rm. C3-C7, El. 706	14			
41	Cont. Spray Pump 2A-A El. 653	2			
42	Cont. Spray Pump 2B-B El. 653	2			
45	RHR Pump 2A-A El. 653	2			
46	RHR Pump 2B-B El. 653	2			
47	Aux. Bldg. Corridor, El. 653	10			
48	Corridor, Control Bldg. El. 669	4			
49	Corridor, Control Bldg. El. 669	4			
50	Mech. Equip. Rm. Col. C1, El. 669	2			
51	Mech. Equip. Rm. Col. C1, El. 669			2	
52	Mech. Equip. Rm. Col. C3, El. 669	2			
53	Mech. Equip. Rm. Col. C3, El. 669			2	
54	250-V Batt. Rm. 1, El. 669	3			
55	250-V Batt. Rm. 1, El. 669			3	
56	250-V Batt. Bd. Rm. 1, El. 669	2			
57	250-V Batt. Bd. Rm. 1, El. 669	2			
58	250-V Batt. Bd. Rm. 2, El. 669	2			
59	250-V Batt. Bd. Rm. 2, El. 669	2			
60	250-V Batt. Rm. 2, El. 669	3			
61	250-V Batt. Rm. 2, El. 669			3	
62	24-V & 48-V Batt. Rm. El. 669	3			
63	24-V & 48-V Batt. Rm. El. 669			3	
64	24-V & 48-V Batt. Bd. Rm. El. 669	2			
65	24-V & 48-V Batt. Bd. Rm. El. 669	2			
66	Communications Rm. El. 669	4			
67	Communications Rm. El. 669	4			
68	Mech. Equip. Rm. El. 669	2			
69	Mech. Equip. Rm. El. 669			2	
70	Aux. Bldg. A5-A11, CoL.W-X, El. 669	5			
71	Aux. Bldg. A5-A11, CoL.W-X, El. 669	5			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

FIRE ZONE	INSTRUMENT LOCATION	Ionization	MINIMUM INSTRUMENTS OPERABLE		<u>Infrared</u>
			<u>Photoelectric</u>	<u>Thermal</u>	
74	Aux. FWPT 2A-S, El. 669	1			
75	Aux. FWPT 2A-S, El. 669			1	
82	SI & Chrg Pmp Rms. El. 669			5	
83	SI Pump Rm. 2A, El. 669	1			
84	SI Pump Rm. 2B, El. 669	1			
85	Chrg. Pump Rm. 2A, El. 669	1			
86	Chrg. Pump Rm. 2B, El. 669	1			
87	Chrg. Pump Rm. 2C, El. 669	1			
88	Aux. Bldg. Corridor A1-A8, El. 669	8			
89	Aux. Bldg. Corridor A1-A8, El. 669	8			
90	Aux. Bldg. Corridor A8-A15, El. 669	8			
91	Aux. Bldg. Corridor A8-A15, El. 669	8			
92	Aux. Bldg. Corridor Col. U-W, El. 669	4			
93	Aux. Bldg. Corridor Col. V-W, El. 669	4			
96	Valve Galley, Elev. 669	2			
97	Valve Galley, Elev. 669	2			
100	Cont. Purge Air Filter, El. 690		2	2	
101	Cont. Purge Air Filter, El. 690		2	2	
104	Pipe Galley, El. 690	4			
105	Pipe Galley, El. 690	4			
106	Aux. Bldg., El. 690	8			
107	Aux. Bldg., El. 690	8			
108	Radio Chemical Lab. Area, El. 690	3			
109	Radio Chemical Lab. Area, El. 690	3			
110	Aux. Bldg. A1-A8, Col. Q-U, El. 690	10			
111	Aux. Bldg. A1-A8, Col. Q-U, El. 690	10			
112	Aux. Bldg. A8-A15, Col. Q-U, El. 690	9			
113	Aux. Bldg. A8-A15, Col. Q-U, El. 690	9			
114	Waste Pkg. Area, El. 706	3			
115	Waste Pkg. Area, El. 706	3			
116	Cask Loading Area, El. 706	2			
117	Cask Loading Area, El. 706	2			

SEQUOYAN - UNITS 2

3/4 3-62

Amendment No. 86

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

FIRE ZONE	INSTRUMENT LOCATION	Ionization	MINIMUM INSTRUMENTS OPERABLE		Infrared
			Photoelectric	Thermal	
118	New Fuel Storage Area, El. 706	2			
119	New Fuel Storage Area. El. 706	2			
120	ABGTS Filter, El. 714		1		
121	ABGTS Filter, El. 714		1		
122	Add. Eqpt. Bldg., El. 706 & 717.5	6			
124	Add. Equip. Bldg. El. 706	6			
126	ABGTS Rm., El. 714	2			
127	ABGTS Rm., El. 714	2			
128	ABGTS Rm., El. 714	2			
129	ABGTS Rm., El. 714	2			
130	Vent. & Purge Air Rm., El. 714	3			
131	Vent. & Purge Air Rm., El. 714	3			
132	Vent. & Purge Air Rm., El. 714	3			
133	Vent. & Purge Air Rm., El. 714	3			
134	Aux. Bldg. A5-A11, Col. U-W, El. 714	7			
135	Aux. Bldg. A5-A11, Col. V-W, El. 714	7			
136	Heat. & Vent. Rm., El. 714	4			
137	Heat. & Vent. Rm., El. 714	4			
138	Heat. & Vent. Rm., El. 714	4			
139	Heat. & Vent. Rm., El. 714	4			
140	Above Hot Instr. Rm., El. 714	1			
141	Above Hot Instr. Rm., El. 714	1			
142	Aux. Bldg. A1-A8, Col. Q-U, El. 714	12			
143	Aux. Bldg. A1-A8, Col. Q-U, El. 714	12			
144	Aux. Bldg. A8-A15, Col. Q-U, El. 714	9			
145	Aux. Bldg. A8-A15, Col. Q-U, El. 714	9			
146	N ₂ Storage Area, El. 706	4			
147	ABGTS Filter, El. 714		1		
148	ABGTS Filter, El. 714		1		
149	Cable Spreading Rm. C3-C7, El. 706	15			
150	Cable Spreading Rm. C3-C7, El. 706	15			
151	VCT Room 2A, El. 690	1			
152	VCT Room 2A, El. 690	1			

SEQUOYAH - UNIT 2

3/4 3-63

Amendment No. 86

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

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

SEQUOYAH - UNIT 2

3/4 3-64

Amendment No. 86

TABLE 3.3-11 (Continued)
FIRE DETECTION INSTRUMENTS

<u>FIRE ZONE</u>	<u>INSTRUMENT LOCATION</u>	<u>Ionization</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>		<u>Infrared</u>
			<u>Photoelectric</u>	<u>Thermal</u>	
192	480-V SD Bd. Rm. 2B1 El. 734	2			
193	480-V SD Bd. Rm. 2B1 El. 734	2			
194	480-V SD Bd. Rm. 2B2 El. 734	2			
195	480-V SD Bd. Rm. 2B2 El. 734	2			
196	125-V Batt. Bd. Rm. I, El. 734	1			
197	125-V Batt. Bd. Rm. I, El. 734	1			
198	125-V Batt. Bd. Rm. II, El. 734	1			
199	125-V Batt. Bd. Rm. II, El. 734	1			
200	125-V Batt. Bd. Rm. III, El. 734	1			
201	125-V Batt. Bd. Rm. III, El. 734	1			
202	125-V Batt. Bd. Rm. IV, El. 734	1			
203	125-V Batt. Bd. Rm. IV, El. 734	1			
204	Aux. CR El. 734	2			
205	Aux. CR El. 734	2			
206	Aux. CR Inst. Rm. 1A, El. 734	1			
207	Aux. CR Inst. Rm. 1A, El. 734	1			
208	Aux. CR Inst. Rm. 1B, El. 734	1			
209	Aux. CR Inst. Rm. 1B, El. 734	1			
210	Aux. CR Inst. Rm. 2A, El. 734	1			
211	Aux. CR Inst. Rm. 2A, El. 734	1			
212	Aux. CR Inst. Rm. 2B, El. 734	1			
213	Aux. CR Inst. Rm. 2B, El. 734	1			
214	Mech. Equip. Rm., El. 732	5			
215	Mech. Equip. Rm., El. 732	5			
216	CR Filter B, El. 732	1		1	
217	CR Filter B, El. 732	1		1	
218	CR Filter A, El. 732	1		1	
219	CR Filter A, El. 732	1		1	
220	Main CR, El. 732	25			
221	Technical Support Center, El. 732	5			
222	Technical Support Center, El. 732	5			
225	Relay Bd. Rm. El. 732	13			
226	Elec. Cont. Bds. El. 732	11			

TABLE 3.3-11 (Continued)
FIRE DETECTION INSTRUMENTS

<u>FIRE ZONE</u>	<u>INSTRUMENT LOCATION</u>	<u>Ionization</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>		<u>Infrared</u>
			<u>Photoelectric</u>	<u>Thermal</u>	
227	Operator Living Area, E1. 732	7			
228	Operator Living Area, E1. 732			8	
229	Main CR Bds., E1. 732	9			
230	Aux. CR Bds. L-4A, 4C, 11A & 10, E1. 734	9			
233	CRDM Eqpt. Rm., E1. 759	4			
234	CRDM Eqpt. Rm., E1. 759	4			
235	CRDM Equip. Rm., E1. 759	4			
236	CRDM Equip. Rm., E1. 759	4			
237	Mech. Eqpt. Rm., E1. 749	1			
238	Mech. Eqpt. Rm., E1. 749	1			
239	Mech. Eqpt. Rm., E1. 749	2			
240	Mech. Eqpt. Rm., E1. 749	2			
241	480-V XFMR Rm. 1A, E1. 749	3			
242	480-V XFMR Rm. 1A, E1. 749	3			
243	480-V XFMR Rm. 1B, E1. 749	3			
244	480-V XFMR Rm. 1B, E1. 749	3			
245	480-V XFMR Rm. 2A, E1. 749	3			
246	480-V XFMR Rm. 2A, E1. 749	3			
247	480-V XFMR Rm. 2B, E1. 749	3			
248	480-V XFMR Rm. 2B, E1. 749	3			
249	125-V Batt. Rm. I, E1. 749	1			
250	125-V Batt. Rm. I, E1. 749	1			
251	125-V Batt. Rm. II, E1. 749	1			
252	125-V Batt. Rm. II, E1. 749	1			
253	125-V Batt. Rm. III, E1. 749	1			
254	125-V Batt. Rm. III, E1. 749	1			
255	125-V Batt. Rm. IV, E1. 749	1			
256	125-V Batt. Rm. IV, E1. 749	1			
257	480-V Bd. Rm. 1B, E1. 749	4			
258	480-V Bd. Rm. 1B, E1. 749	4			
259	480-V Bd. Rm. 1A, E1. 749	4			
260	480-V Bd. Rm. 1A, E1. 749	4			
261	480-V Bd. Rm. 2A, E1. 749	4			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

FIRE ZONE	INSTRUMENT LOCATION	Ionization	MINIMUM INSTRUMENTS OPERABLE		Infrared
			Photoelectric	Thermal	
262	480-V Bd. Rm. 2A, El. 749	4			
263	480-V Bd. Rm. 2B, El. 749	4			
264	480-V Bd. Rm. 2B, El. 749	4			
267	Aux. Inst. Rm., El. 685	8			
268	Aux. Inst. Rm., El. 685			9	
269	Computer Rm. El. 685	4			
270	Computer Rm. El. 685			4	
271	Aux. Inst. Rm. El. 685	8			
272	Aux. Inst. Rm. El. 685			9	
273	Computer Rm. Corridor, El. 685	3			
276	Intake Pump Sta. El. 690 & 670.5	15			
277	ERCW Pump Sta. El. 704	21			
296	Aux. CR Bds. L-4B, 4D, & 11B El 732	6			
297	Main CR Bds. El. 732	9			
298	Common MCR Bds. El 732	9			
332	Reactor Building Annulus		3		
333	Reactor Building Annulus		3		
353	Lwr. Compt. Coolers, El. 693		4		
355	Upr. Compt. Coolers, El. 778		4		
358	RCP 2 El. 693			2	
359	RCP 2 El. 693			2	
362	RCP 1 El. 693			2	
363	RCP 1 El. 693			2	
366	RCP 3 El. 693			2	
367	RCP 3 El. 693			2	
370	RCP 4 El. 693			2	
371	RCP 4 El. 693			2	
374	Reactor Building Annulus		20		
375	Reactor Building Annulus		19		
387	Turbine Cont. Bldg. Wall, El. 706			18	
427	125-V Batt. Rm. V, El. 749	2			
428	125-V Batt. Rm. V, El. 749	2			

TABLE 3.3-11 (Continued)

FIRE DETECTION INSTRUMENTS

<u>FIRE ZONE</u>	<u>INSTRUMENT LOCATION</u>	<u>Ionization</u>	<u>MINIMUM INSTRUMENTS OPERABLE</u>		<u>Infrared</u>
			<u>Photoelectric</u>	<u>Thermal</u>	
458	Counting Room Ceiling, El. 690	2			
462	480V Sd Bd Rm 1B2, El. 734			1	
463	480V Sd Bd Rm 2A2, El. 734			1	
465	Counting Room Ceiling, El. 690	2			
466	480V Sd Bd Rm 1B2, El. 734			1	
467	480V Sd Bd Rm 1B2, El. 734			1	
468	480V Sd Bd Rm 1B2, El. 734			1	
469	480V Sd Bd Rm 2A2, El. 734			1	
470	480V Sd Bd Rm 2A2, El. 734			1	
471	480V Sd Bd Rm 2A2, El. 734			1	



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

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

SUPPORTING AMENDMENT NO. 97 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 86 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 February 1 and August 10, 1988, the Tennessee Valley Authority (the licensee) proposed to revise Table 3.3-11, Fire Detection Instruments, of the Sequoyah Units 1 and 2 Technical Specifications (TS). The purposes of the proposed revisions are to (1) correct typographical errors and discrepancies between the table and the plant and (2) have the table reflect instrumentation that has been added or removed as a result of plant modifications. The table is also rearranged to have the fire zones listed in numerical order. The proposed change submitted by letter dated February 1, 1988 withdrew the licensee's TS change request number 87-04 that was submitted by letter dated May 12, 1987.

The application dated February 1, 1988 is TS change request 87-45 and the application dated August 10, 1988 is TS change request 88-08. These applications are evaluated below.

2.0 EVALUATION

2.1 TS 88-08 DATED AUGUST 10, 1988

By letter of August 10, 1988 the licensee proposed change TS 88-08 to Table 3.3-11 of the fire protection technical specifications. The purpose of this change was to add additional fire detection instrumentation to the table. Much of the new instrumentation was added to the Reactor Building Unit 1 annulus and to the Reactor Building Unit 2 annulus to insure compliance with 10 CFR 50 Appendix R in regard to spurious actuations and reactor inventory control. The interactions involved are described in detail in Inspection Reports (IR) 50-327, 328/88-24 and 88-37.

2.1.1 Evaluation

The licensee has proposed to make the following modifications to Table 3.3-11, "Fire Detection Instruments" of the TS:

1. Fire zones 98 and 99, unit 1 containment purge air filter, elevation 690, were modified to have two photoelectric and two thermal detectors in each of the two fire zones.

2. Fire zone 331, unit 1 reactor building annulus, was modified to have four photoelectric detectors.
3. Fire zone 372, unit 1 reactor building annulus, was modified to have 22 photoelectric detectors.
4. Fire zone 373, unit 1 reactor building annulus, was modified to have 21 photoelectric detectors.
5. Fire zone 333, unit 2 reactor building annulus, was modified to have four photoelectric detectors.
6. Fire zone 374, unit 2 reactor building annulus, was modified to have 20 photoelectric detectors.
7. Fire zone 375, unit 2 reactor building annulus, was modified to have 19 photoelectric detectors.
8. Fire zones 216 and 217, control room filter, were incorrectly identified as train A and should have been train B.
9. Fire zones 218 and 219, control filter, were incorrectly identified as train B and should have been train A.

The licensee's justifications for the changes are as follows:

The addition of two thermal fire detectors to each fire zone, 98 and 99, at the unit 1 containment purge air filter, was made to ensure and effective detection methodology. The thermal detectors were added to supplement the smoke detectors in the containment purge filter assemblies, which are ineffective when there is no air flow or when the unit is out of service.

The addition of photoelectric detectors to fire zones 331, 372, and 373, unit 1 reactor building annulus, and fire zones 333, 374, and 375, unit 2 reactor building annulus, was necessary to ensure compliance with 10 CFR 50, Appendix R. These fire protection improvements for Units 1 and 2 were reviewed and approved in Inspection Reports 50-327/88-24, 50-328/88-24, and 50-327/88-37, 50-328/88-37. The improvements were needed to provide a protected letdown path and to prevent a LOCA through the spurious opening and inability to close a PORV - Block Valve path.

2.1.2 Conclusion

The incorporation of these additional fire detectors in Table 3.3-11 of the TS does not diminish safety or increase the probability of an accident in any area of the plant. The changes make the TS consistent with the equipment in the units. Therefore, the staff concludes that the proposed TS changes are acceptable.

2.2 TS 87-45 Dated February 1, 1988

By letter of February 1, 1988, the licensee requested the TS change 87-45. The proposed changes correct typographical errors and omissions made in Table 3.3-11 and adds instrumentation that has been installed as a result of plant modifications. Table 3.3-11 has also been rearranged so that the detectors are listed in numerical order.

2.2.1. Evaluation

Table 3.3-11 in the TS was reviewed by the licensee for comparison to the plant fire protection instrumentation after plant modifications. The following discrepancies were found by the licensee and noted in the submittal:

1. Fire zones 223 and 224, P.S.O. Engineering Shop, elevation 732, were eliminated when that area was made a part of the Technical Support Center, but the two zones are still listed in the TS.
2. Fire zones 221 and 222, Records Storage Vault, have been incorporated in whole as a region within the Technical Support Center, but the TS have not been updated to reflect the change in area designation and the modification of the instrument scheme to consist of five ionization detectors in each of the two fire zones.
3. Fire zone 227, Operating Living Area, elevation 732, has been modified to have seven ionization detectors and one thermal detector rather than the seven ionization detectors currently listed in the TSs.
4. Fire zones 330 and 331, and zones 332 and 333, unit 2, Containment Annulus, are newly designated zones having three photoelectric detectors installed in each fire zone.
5. Fire zones 458 and 465, units 1 and 2, Counting Room Ceiling, are newly designated zones having two ionization detectors installed in each fire zone.
6. Fire zones 462, 463, 466, 467, 468, 469, 470, and 471, units 1 and 2, 480-volt Shutdown Board Rooms 1B2 and 2A2, elevation 734, are newly designated zones having one thermal detector installed in each fire zone.
7. Fire zones 230 and 296, units 1 and 2, are listed as being on elevation 732 when they are actually on elevation 734.
8. Fire zones 126, 127, 128, and 129, units 1 and 2, are listed as being in the Fuel Transfer Valve Room, elevation 706, when they are actually in the Auxiliary Building Gas Treatment System Room, elevation 714.
9. Fire zone 277, Essential Raw Cooling Water (ERCW) Pumping Station, was modified to have 21 ionization detectors and 8 thermal detectors.

10. Fire zones 124 and 153, unit 1, and zone 154, unit 2, Additional Equipment Building, protect areas in the plant that contain components common to both unit 1 and unit 2 (diesel generator cables). Because these zones are considered common, zones 124 and 153 are added to the unit 2 table, and zone 154 is added to the unit 1 table.
11. Fire zones 136 and 137, unit 1, and zones 138 and 139, unit 2, Auxiliary Building General Supply Fan Rooms, are added as necessary to be listed in both the unit 1 and unit 2 tables. This is appropriate because any combination of the unit 1 and unit 2 fans can be used for general Auxiliary Building ventilation.
12. Fire zones 130 and 131, unit 2, and zones 132 and 133, unit 1, Ventilation and Purge Air Rooms, Auxiliary Building elevation 714, are also incorporated into both the unit 1 and unit 2 tables because of common diesel generator cable routed through these zones. Also, the elevations of zones 130 and 131 are corrected in the unit 2 table.
13. Fire zones 172 and 173, unit 1, and zones 174 and 175, unit 2 Auxiliary Building elevation 734 Mechanical Equipment Rooms, also protect common equipment. Components associated with the auxiliary charging system are located in the unit 1 room and the emergency gas treatment system (EGTS) fans and filters are located in the unit 2 room. Because of the common equipment, the tables are revised so that all four zones are reflected in both the unit 1 and unit 2 tables.
14. Fire zones 206, 207, 208, 209, unit 1, and zones 201, 211, 212, and 213 are located in the Auxiliary Control Room Instrument Rooms, Auxiliary Building elevation 734. Because of the vital battery board cables that pass through the instrument rooms, the rooms are considered common. As such, the unit 1 zones are added to the unit 2 table, and the unit 2 zones are added to the unit 1 table.
15. Fire zones 214 and 215, Control Building elevation 732, Mechanical Equipment Room, are added to the unit 2 table because this room contains ventilation equipment common to unit 1 and unit 2 operation.
16. Fire zones 229 and 297 are the unit 1 and unit 2 Main Control Room Boards, respectively. As such, they are common to the Main Control Room area and are included in both unit's specifications.
17. Fire zones 235 and 236, unit 1, and zones 233 and 234, unit 2, Auxiliary Building elevation 759, control rod drive mechanism (CRDM) equipment rooms, contain the pressurizer heater transformer.

The "A" train transformers for both units are located in the unit 1 equipment room, and the "B" train transformers are located in the unit 2 room. Therefore, the rooms contain equipment necessary for the other unit's operation; and all four zones are included in both the unit 1 and unit 2 tables.

18. Fire zones 267 and 268, unit 1, and zones 271 and 272, unit 2, are the Auxiliary Instrument Rooms, Auxiliary Building elevation 685. Because of the common cable shared between these rooms, they are considered common; and the four zones are included in both units' tables.
19. Fire zones 3-237 and 238, unit 1, and zones 239 and 240, unit 2, Mechanical Equipment Rooms, Auxiliary Building elevation 749, contain the air-handling units for the 480-volt board rooms. As such, the zones are common to both units, and the four zones are listed in the unit 1 and unit 2 tables.
20. Fire zones 50, 51, 52, and 53, unit 1, Mechanical Equipment Room, Control Building elevation 669, contain the air-handling units and chillers for the Control Building electrical board rooms. As such, they are common equipment and are added to the unit 2 table. The unit 1 listing for zones 52 and 53 is also corrected to identify their location as column C3.
21. Fire zones 100, 101, 120, 121, 147, 148, 164, 165, 166, 167, 216, 217, 218, and 219 are also revised to reflect the addition of thermal detectors to these zones.
22. Fire zones 140 and 141, units 1 and 2, are changed to reflect that the detectors are located above the hot instrument room, not inside it.
23. Fire zones 356, 360, 364, and 368, unit 1, and zones 358, 362, 366, and 370, unit 2, reactor coolant pumps, elevation 693, are revised to delete a footnote for these zones. The subject detectors are installed and functional, and the footnote no longer applies.

The licensee also notes that the tables were rearranged so that the zones are listed in numerical order.

The reasons for the changes were listed as follows:

The first three discrepancies noted in the preceding section were the result of Fire Protection System modifications made to accommodate the construction of the Technical Support Center without initiation of a complementary TS revision that would reflect the plant modifications. The proposed amendment to the TSs corrects Table 3.3-11 to reflect the current plant configuration of the fire detection instrumentation in the area of the Technical Support Center.

The fourth, fifth, and sixth discrepancies noted in the preceding section are a result of modifications implemented to the Fire Protection System. These modifications were implemented to satisfy the requirements of 10 CFR Part 50, Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating before January 1, 1979." The proposed amendment to the TSs modifies Table 3.3-11 to reflect the plant configuration of the fire detection instrumentation for the modifications.

The seventh discrepancy noted in the preceding section is determined to be a typographical error in the original issue of SQN units 1 and 2 TSs. The proposed amendment to the TSs corrects Table 3.3-11 to reflect the correct elevation of the fire detection instrumentation for fire zones 230 and 296 for both units 1 and 2.

The eighth discrepancy noted in the preceding section is determined to be an error in naming the location of the subject fire zones that was made in the original issue of the SQN units 1 and 2 TSs. The proposed amendment to the TSs changes Table 3.3-11 to reflect the correct location and elevation of fire zones 126 through and including 129.

The ninth discrepancy noted in the preceding section is determined to be an error of omission. Fire zone 277 has been upgraded to have eight thermal detectors, one over each ERCW pump. The proposed amendment to the TSs changes Table 3.3-11 of the unit 1 and unit 2 TSs to reflect the addition of the eight fire detectors to fire zone 277.

The next 11 discrepancies noted in the preceding section were determined to be errors of omission. Those changes reflect the incorporation of zones that protect areas of components common to both unit 1 and unit 2 into both units' specifications. This is done to ensure that each unit's table clearly reflects the zones required operable for that unit's operation. Two typographical errors are also corrected in the twelfth and twentieth discrepancies.

The 21st discrepancy is the result of a plant modification. Thermal detectors are being added to the ducted ventilation systems that have charcoal filter beds which support unit 2 operation. The thermal detectors will provide protection for the charcoal filter beds during the periods when the associated system's fan is not operating. The modifications will be completed before restart of unit 2.

The 22nd discrepancy is a poor description of the instrumentation's location. The detectors are located in the general area of the hot instrument room on elevation 714, but they are not inside the room. The 23rd discrepancy is the result of an outdated footnote. The detector zones were added to the table before the associated

modifications installing the detectors were complete. The footnote indicated that the detectors could not be required to be operable before they were installed and tested. The installation and testing of the detectors were completed, and the footnote is no longer needed.

The rearrangement of the tables is done for human factors considerations. Listing the zones in numerical order will lessen the chances of error in utilizing the tables.

The staff is in agreement with the licensee's justifications as presented in their submittal.

2.2.2 Conclusion

The incorporation of the proposed TS change 87-45 does not diminish safety or increase the probability of an accident in any part of the plant.

The staff concludes that the proposed technical specifications changes in TS 87-45 are acceptable.

2.2.3 Assessment of TS 87-45 and 88-08

Based on the above, the staff concludes that the proposed TS changes 88-08 and 87-45 are acceptable.

4.0 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 be prepared in connection with the issuance of these amendments.

5.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (53 FR 13023) on April 20, 1988, for application TS 87-45 and (53 FR 34613) on September 7, 1988 for application TS 88-08, respectively and consulted with the State of Tennessee. No public comments were received and the State of Tennessee did not have any comments.

The staff 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, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of the amendments will not be inimical to the common defense and security nor to the health and safety of the public.

Principal Contributor: R. Wescott

Dated: January 22, 1989



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

January 22, 1989

Docket Nos. 50-327/328

MEMORANDUM FOR: Sholly Coordinator

FROM: Suzanne Black, Assistant Director
for Projects, NRR

SUBJECT: REQUEST FOR PUBLICATION IN BI-WEEKLY FR NOTICE - NOTICE
OF ISSUANCE OF AMENDMENT TO FACILITY OPERATING LICENSE
(TAC R00293, R00294, R00423 AND R00424)

Tennessee Valley Authority, Docket Nos. 50-327 and 50-328, Sequoyah Nuclear
Plant, Units 1 and 2, Hamilton County, Tennessee

Date of application for amendments: February 1, 1988 (TS 87-45) and
August 10, 1988 (TS 88-08)

Brief description of amendments: These amendments revise the Sequoyah, Units 1
and 2 Technical Specifications (TS). The changes are to revise Table 3.3-11,
"Fire Protection Instruments," to correct typographical errors and omissions
and to add or remove instrumentation to reflect plant modifications.

Date of issuance: January 22, 1989

Effective date: January 22, 1989

Amendment Nos.: 97, 86

Facility Operating Licenses Nos. DPR-77 and DPR-79. Amendments revised the
Technical Specifications.

Date of initial notice in FEDERAL REGISTER: April 20, 1988 (53 FR 13023) for
TS 87-45 and September 7, 1988 (53 FR 34613) for TS 88-08.

The Commission's related evaluation of the amendment is contained in a Safety
Evaluation dated January 22, 1989.

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No significant hazards consideration comments received: No

Local Public Document Room location: Chattanooga-Hamilton County Library,
1001 Broad Street, Chattanooga, Tennessee 37402.

Original Signed by
Suzanne Black, Assistant Director
for Projects, NRR

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