September 20, 1990

Docket No. 50-327

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: REVISE CONTAINMENT ISOLATION VALVE NOMENCLATURE (TAC NO. 76844)
SEQUOYAH NUCLEAR PLANT, UNIT 1.

The Commission has issued the enclosed Amendment No. 145 to Facility Operating License No. DPR-77 for the Sequoyah Nuclear Plant, Unit 1. This amendment is in response to your application dated May 21, 1990.

This amendment modifies the Sequoyah Nuclear Plant, Unit 1, Technical Specifications (TSs). The changes revise valve nomenclature in TS Table 3.6-2, Containment Isolation Valves. The nomenclature of 14 sampling valves in the table is changed from flow control valve (FCV) to flow solenoid valve (FSV). The Unit 1 valves were changed in the Unit 1 Cycle 4 refueling outage.

In your application, you also requested changes to Table 3.6-2 of the Sequoyah Unit 2 TSs. As you requested, these changes will be issued after these valves are replaced in the Unit 2 Cycle 4 refueling outage which began in September 1990. The enclosed Safety Evaluation for this amendment is applicable to Unit 2.

A Notice of Issuance for this amendment will be included in the Commission's biweekly Federal Register notice.

Sincerely,

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

Enclosures:
1. Amendment No. 145 to License No. DPR-77
2. Safety Evaluation

cc w/enclosures:
See next page

OFC	:PDII-4/LA	:PDII-4/PM	:SPLB/BC	:OGC	:PDII-4/D	:
NAME	:MKrebs MK	:JDonohew:as	:CMcCracken	: OPW	:FHebdon	:
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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. 145
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 May 21, 1990, 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. 145 , 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

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: September 20, 1990

ATTACHMENT TO LICENSE AMENDMENT NO. 145

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	INSERT
3/4 6-19	3/4 6-19
3/4 6-20	3/4 6-20

TABLE 3.6-2

CONTAINMENT ISOLATION VALVES

VALVE NUMBER		FUNCTION	MAXIMUM ISOLATION TIME (Seconds)
A. PHASE "A" ISOLATION			
1.	FCV-1-7	SG Blow Dn	10*
2.	FCV-1-14	SG Blow Dn	10*
3.	FCV-1-25	SG Blow Dn	10*
4.	FCV-1-32	SG Blow Dn	10*
5.	FCV-1-181	SG Blow Dn	15*
6.	FCV-1-182	SG Blow Dn	15*
7.	FCV-1-183	SG Blow Dn	15*
8.	FCV-1-184	SG Blow Dn	15*
9.	FCV-26-240	Fire Protection isol.	20
10.	FCV-26-243	Fire Protection isol.	20
11.	FSV-30-134	Cntmt Bldg Press Trans Sense Line	4*
12.	FSV-30-135	Cntmt Bldg Press Trans Sense Line	4*
13.	FCV-31C-222	CW-Inst Room Clrs	10*
14.	FCV-31C-223	CW-Inst Room Clrs	10*
15.	FCV-31C-224	CW-Inst Room Clrs	10*
16.	FCV-31C-225	CW-Inst Room Clrs	10*
17.	FCV-31C-229	CW-Inst Room Clrs	10*
18.	FCV-31C-230	CW-Inst Room Clrs	10*
19.	FCV-31C-231	CW-Inst Room Clrs	10*
20.	FCV-31C-232	CW-Inst Room Clrs	10*
21.	FSV-43-2	Sample Przr Steam Space	10*
22.	FSV-43-3	Sample Przr Steam Space	10*
23.	FSV-43-11	Sample Przr Liquid	10*
24.	FSV-43-12	Sample Przr Liquid	10*
25.	FSV-43-22	Sample RC Outlet Hdrs	10*
26.	FSV-43-23	Sample RC Outlet Hdrs	10*
27.	FSV-43-34	Accum Sample	5*
28.	FSV-43-35	Accum Sample	5*
29.	FSV-43-55	SG Blow Dn Sample Line	10*

TABLE 3.6-2 (Continued)

CONTAINMENT ISOLATION VALVES

VALVE NUMBER		FUNCTION	MAXIMUM ISOLATION TIME (Seconds)
A. PHASE "A" ISOLATION (Cont.)			
30.	FSV-43-58	SG Blow Dn Sample Line	10*
31.	FSV-43-61	SG Blow Dn Sample Line	10*
32.	FSV-43-64	SG Blow Dn Sample Line	10*
33.	FSV-43-75	Boron Analyzer	5*
34.	FSV-43-77	Boron Analyzer	5*
35.	FCV-61-96	Gylcol Inlet to Floor Cooler	30*
36.	FCV-61-97	Gylcol Inlet to Floor Cooler	30*
37.	FCV-61-110	Gylcol Outlet to Floor Cooler	30*
38.	FCV-61-122	Gylcol Outlet to Floor Cooler	30*
39.	FCV-61-191	Ice Condenser - Gylcol In	30*
40.	FCV-61-192	Ice Condenser - Gylcol In	30*
41.	FCV-61-193	Ice Condenser - Gylcol Out	30*
42.	FCV-61-194	Ice Condenser - Gylcol Out	30*
43.	FCV-62-61	RCP Seals	10
44.	FCV-62-63	RCP Seals	10
45.	FCV-62-72	Letdown Line	10*#
46.	FCV-62-73	Letdown Line	10*#
47.	FCV-62-74	Letdown Line	10*#
48.	FCV-62-77	Letdown Line	20
49.	FCV-63-23	Accum to Hold Up Tank	10*
50.	FCV-63-64	WDS N_2 to Accum	10*
51.	FCV-63-71	Accum to Hold Up Tank	10*
52.	FCV-63-84	Accum to Hold Up Tank	10*
53.	FCV-68-305	WDS N_2 to PRT	10*
54.	FCV-68-307	PRT to Gas Analyzer	10*
55.	FCV-68-308	PRT to Gas Analyzer	10*
56.	FCV-70-85	CCS from Excess Lt Dn Hx	10*
57.	FCV-70-143	CCS to Excess Lt Dn Hx	60*
58.	FCV-77-9	RCDT Pump Disch	10*
59.	FCV-77-10	RCDT Pump Disch	10*
60.	FCV-77-18	RCDT and PRT to V H	10*

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

ENCLOSURE 2

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 145 TO FACILITY OPERATING LICENSE NO. DPR-77

TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT, UNIT 1

DOCKET NO. 50-327

1.0 INTRODUCTION

By letter dated May 21, 1990, the Tennessee Valley Authority (TVA) proposed to modify the Sequoyah Nuclear Plant, Unit 1, Technical Specifications (TSs). The proposed changes would revise valve nomenclature in TS Table 3.6-2, Containment Isolation Valves. The nomenclature of 14 sampling valves in the TS table would be changed from flow control valve (FCV) to flow solenoid valve (FSV). The Unit 1 valves were changed in the Unit 1 Cycle 4 refueling outage. This is TVA Change Request 90-14.

This application also included similar proposed changes for Table 3.6-2 of Unit 2 TSs. The Unit 2 valves will be replaced in the Unit 2 Cycle 4 refueling outage which began in September 1990. A separate evaluation will be issued for the proposed changes to the Unit 2 TSs; however, the evaluation below also applies to the proposed changes to the Unit 2 TSs.

2.0 EVALUATION

In its application, TVA stated that 14 air-operated FCVs were replaced with FSVs because the FCVs have limit switches that are not environmentally qualifiable. The FSVs are totally enclosed and have reed switches internal to the valve, and are environmentally qualified. This replacement was required as part of TVA's commitment for complying with RG 1.97 (i.e., Condition 2.C.(24) of the Unit 1 Facility Operating License DPR-77 and License Condition 2.C.(14) of the Unit 2 Facility Operating License DPR-79).

The 14 containment isolation valves are on sampling lines for the reactor coolant system (RCS), cold leg injection accumulator, and steam generator blowdown (SGBD). TVA stated that the change in valve nomenclature for these valves from FCV to FSV does not affect the containment isolation function for these valves. TVA explained that closure times for the new FSVs was evaluated to ensure that these valves will meet the 5- and 10-second maximum isolation time requirements in TS Table 3.6.-2. The new FSVs are designed to close against a pressure drop of 2,485 pounds per square inch gauge with a temperature of 640 degrees Fahrenheit. These valves are compatible with the RCS and capable of closing against RCS pressure. With the exception of four SGBD sampling valves, local leak-rate testing was conducted as a premodification test to determine the "as-found" leak-rate and again following installation of

the new valve to determine the "as-left" leak rate, in accordance with Appendix J of 10 CFR 50. This is done to demonstrate an acceptable leak-rate for containment integrity.

TVA explained that the SGBD sampling valves are a part of the steam generator secondary side piping and are located outside containment. By design, the SGBD piping employs the following two barriers to prevent fission product release from containment following a loss of coolant accident: (1) the secondary side is a closed system inside containment and (2) SG water level provides a water seal. These containment isolation barriers exempt the SGBD valves from the Appendix J leak-rate test program. This is discussed in the Final Safety Analysis Report, Table 6.2.4-1, notes for Containment Penetrations X-14A, B, C, and D.

TVA is replacing 14 containment isolation valves on sampling lines from FCVs to FSVs so that the new valves will meet the requirements in RG 1.97. TVA is proposing to change the valve nomenclature in Table 3.6-2 to reflect the fact that these valves are now FSVs. Nothing else is being changed by the proposed changes. The existing requirements on the leak-rate testing and the maximum valve closure time of these valves are not being changed. The existing requirements on containment integrity are also not being changed. The new valves are qualified for their function as containment isolation valves. Based on this, the staff concludes that the proposed changes are 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 amendment involves 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 this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, the amendment meets 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 this amendment.

4.0 CONCLUSION

The Commission made a proposed determination that the amendment involves no significant hazards consideration which was published in the Federal Register (55 FR 26296) on June 27, 1990 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 (3) 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: Jack Donohew

Dated: September 20, 1990

AMENDMENT NO. 145 FOR SEQUOYAH UNIT NO. 1 - DOCKET NO. 50-327
DATED: September 20, 1990

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