

July 7, 1982

Docket Nos: 50-327  
and 50-328

Mr. H. G. Parris  
Manager of Power  
Tennessee Valley Authority  
500A Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

Dear Mr. Parris:

Subject: Issuance of Amendment No. 14 to Facility Operating License  
No. DPR-77 and Amendment No. 5 to Facility Operating  
License No. DPR-79 - Sequoyah Nuclear Plant, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 14 to Facility Operating License No. DPR-77 and Amendment No. 5 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, located in Hamilton County, Tennessee. The amendments consist of changes to the Technical Specifications in response to your application telecopied to us on June 18, 1982. The amendments were authorized by telephone on June 18, 1982, and were confirmed by letter dated June 23, 1982.

The amendments authorize, for a period of 30 days, changes in the requirement that containment sump level instrumentation be operable for automatic switchover from Refueling Water Storage Tank to containment sump and accident monitoring. These amendments were issued on an expedited basis to permit both Sequoyah units to remain at 100 percent power.

A copy of the related safety evaluation supporting Amendment No. 14 to Facility Operating License DPR-77 and Amendment No. 5 to Facility Operating License No. DPR-79 is enclosed. Also enclosed is a copy of the Federal Register Notice which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

15  
Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Enclosures:

1. Amendment No. 14 to DPR-77
2. Amendment No. 5 to DPR-79
3. Safety Evaluation
4. Federal Register Notice

8208030021 820707  
PDR ADOCK 05000327  
P PDR

cc w/enclosures:		LA:DL, LB #4	DL:LB #4	DL:LB #4	AD:DL
OFFICE	See next page	MDuncan/hmc	CSuhle	EAdensam	RFedesco
SURNAME		6/28/82	6/28/82	6/16/82	6/10/82
DATE					

SEQUOYAH

Mr. H. G. Parris  
Manager of Power  
Tennessee Valley Authority  
500A Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

cc: Herbert S. Sanger, Jr., Esq.  
General Counsel  
Tennessee Valley Authority  
400 Commerce Avenue  
E 11B 33  
Knoxville, Tennessee 37902

Mr. H. N. Culver  
Tennessee Valley Authority  
400 Commerce Avenue, 249A HBB  
Knoxville, Tennessee 37902

Mr. Bob Faas  
Westinghouse Electric Corp.  
P.O. Box 355  
Pittsburgh, Pennsylvania 15230

Mr. Jerry Wills  
Tennessee Valley Authority  
400 Chestnut Street, Tower II  
Chattanooga, Tennessee 37401

Mr. J. F. Cox  
Tennessee Valley Authority  
400 Commerce Avenue, W10C131C  
Knoxville, Tennessee 37902

Resident Inspector/Sequoyah NPS  
c/o U.S. Nuclear Regulatory  
Commission  
2600 Igou Ferry Road  
Soddy Daisy, Tennessee 37379

Director, Office of Urban  
& Federal Affairs  
108 Parkway Towers  
404 James Robertson Way  
Nashville, Tennessee 37219

Attorney General  
Supreme Court Building  
Nashville, Tennessee 37219

U.S. Environmental Protection  
Agency  
ATTN: EIS Coordinator  
345 Courtland Street  
Atlanta, Georgia 30308

Honorable Don Moore, Jr.  
County Judge  
Hamilton County Courthouse  
Chattanooga, Tennessee 37402

Regional Administrator  
Nuclear Regulatory Commission,  
Region II  
101 Marietta Street, Suite 3100  
Atlanta, Georgia 30303

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-327

SEQUOYAH NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 14  
License No. DPR-77

1. The Nuclear Regulatory Commission (the Commission) having found that:
  - A. The application for amendment to the Sequoyah Nuclear Plant, Unit 1 (the facility) Facility Operating License No. DPR-77 filed by the Tennessee Valley Authority (licensee), dated June 18, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the license, as amended, 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 hereby amended by page changes to the Appendix A Technical Specifications as indicated in the attachments 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 Appendix A, as revised through Amendment No. 14, are hereby incorporated into the license.

8208030023 820707  
PDR ADOCK 05000327  
P PDR

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment was effective June 18, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

*sl*

Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Attachment:  
Appendix A Technical  
Specification Changes

Date of Issuance: July 7, 1982

OFFICE	LA:DL:LB #4	DL:LB #4	OELD	DL:LB #4	AD:DL		
SURNAME	MDuncan/hmc	CStahle	<i>Michael...</i>	EAdensam	R Tedesco		
DATE	6/18/82	6/18/82	6/18/82	6/18/82	6/18/82		

ATTACHMENT TO LICENSE AMENDMENT NO. 14

FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

<u>Overleaf</u> <u>Page</u>	<u>Amended</u> <u>Page</u>
3/4 3-22	3/4 3-21
	3/4 3-28
	3/4 3-37
	3/4 3-37a (new page)
	3/4 3-56
	3/4 3-57

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-328

SEQUOYAH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 5  
License No. DPR-79

1. The Nuclear Regulatory Commission (the Commission) having found that:
  - A. The application for amendment to the Sequoyah Nuclear Plant, Unit 2 (the facility) Facility Operating License No. DPR-79 filed by the Tennessee Valley Authority (licensee), dated June 18, 1982, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's regulations as set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the license, as amended, 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 hereby amended by page changes to the Appendix A Technical Specifications as indicated in the attachments 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 Appendix A, as revised through Amendment No. 5, are hereby incorporated into the license.

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment was effective June 18, 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

*15/*

Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

Attachment:  
Appendix A Technical  
Specification Changes

Date of Issuance: July 7, 1982

OFFICE	LA:DL:LB #4	DL:LB #4	OELD	DL:LB #4	AD:L:DL		
SURNAME	MDuncan/hmc	CSahle	<i>[Signature]</i>	EAdensam	RTesco		
DATE	6/18/82	6/18/82	6/20/82	6/16/82	6/16/82		

ATTACHMENT TO LICENSE AMENDMENT NO. 5

FACILITY OPERATING LICENSE NO. DPR-79

DOCKET NO. 50-328

Replace the following pages of the Appendix "A" Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. The corresponding overleaf pages are also provided to maintain document completeness.

<u>Overleaf</u>		<u>Amended</u>	
<u>Page</u>		<u>Page</u>	
3/4	3-22	3/4	3-21
3/4	3-27	3/4	3-28
3/4	3-37	3/4	3-38
		3/4	3-57
		3/4	3-58

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION  
RELATED TO AMENDMENT NO. 14 TO FACILITY OPERATING LICENSE DPR-77  
AND AMENDMENT NO. 5 TO FACILITY OPERATING LICENSE DPR-79  
TENNESSEE VALLEY AUTHORITY

INTRODUCTION

On June 18, 1982, TVA submitted a proposal for Sequoyah, Units 1 and 2, to replace the current automatic ECCS switchover (from injection mode to recirculation mode) design with a manual procedure for the period between June 18, 1982, and July 18, 1982, while improvements are implemented in containment sump level instrumentation. Because the sump level instrumentation feeds into the automatic switchover logic for ECCS, that logic would be compromised in the event of a LOCA or secondary system break while the containment sump monitors are not properly functioning. The licensee has proposed that, during the period while improvements are being implemented, a manual switchover procedure be authorized.

EVALUATION

The licensee has stated that simply bypassing the input from the containment sump level into the automatic switchover logic is not desirable. For certain scenarios involving failure of the RWST, this configuration could place an unacceptable demand on the operator to respond in order to avert cavitation of ECCS pumps after a premature automatic switchover (normally averted with properly functioning containment sump level instrumentation). The licensee states that the manual switchover procedure is preferable in this situation because even the reduced amount of water from a damaged RWST would provide a greater amount of time than pumping from a dry sump for the operator to take corrective action. Extended operation of the ECCS with either suction would cavitate the pumps, but its steamline break safety function of injecting boron would have been accomplished.

We have reviewed the concept of this manual procedure and its impact on the ECCS design. We have considered the impact of the manual procedure on the ECCS, including injected volume, NPSH to ECCS pumps during the recirculation mode, time available to complete switchover, and RWST volume.

Though an automatic switchover design is normally preferable because it relieves the operator of unnecessary burdens and because with it the switchover may be accomplished more efficiently (in terms of gallons of RWST water required), a number of manual switchover designs have been reviewed by the staff in the past and found acceptable.

From our review discussed above, we conclude that the proposal to use a manual switchover procedure provides an acceptable alternative, and that the plant may be operated safely while improvements are made to the containment sump level instrumentation (June 18, 1982, to July 18, 1982).

OFFICE	.....	.....	.....	.....	.....	.....	.....
SURNAME	.....						
DATE	8208030026 820707 PDR ADDCK 05000327 PDR						

ENVIRONMENTAL CONSIDERATION

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR Section 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

CONCLUSION

We have concluded, based on the consideration discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered, does not create the possibility of an accident of a type different from any evaluated previously, and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Date: July 7, 1982

Principal Contributors: Frank Orr, Reactor Systems Branch, DSI  
Carl Stahle, Licensing Branch No. 4, DL

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-327 AND 50-328

TENNESSEE VALLEY AUTHORITY

NOTICE OF ISSUANCE OF AMENDMENTS

FACILITY OPERATING LICENSE NOS. DPR-77 AND DPR-79

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 14 to Facility Operating License No. DPR-77 and Amendment No. 5 to Facility Operating License DPR-79, issued to Tennessee Valley Authority (licensee) for the Sequoyah Plant, Units 1 and 2 (the facilities) located in Hamilton County, Tennessee.

The amendments were authorized by telephone on June 18, 1982, and were confirmed by letter on June 23, 1982. The amendments authorize, for a period of 30 days, changes in the requirement that containment sump level instrumentation be operable for automatic switchover from Refueling Water Storage Tank to containment sump and accident monitoring. These amendments were issued on an expedited basis to permit both Sequoyah units to remain at 100 percent power.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.

The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and that pursuant to 10 CFR §51.5(d)(4) environmental impact statements, or negative declarations and environmental impact

~~appraisals need not be prepared in connection with issuance of these amendments.~~

OFFICE	.....	.....	.....	.....	.....	.....
SURNAME	....	8208030029	820707	....	.....	.....
DATE	....	PDR	ADDOCK	05000327	.....	.....
		P		PDR	.....	.....

For further details with respect to this action, see (1) Tennessee Valley Authority letter dated June 18, 1982, (2) Amendment No. 14 to Facility Operating License No. DPR-77 with Appendix A Technical Specification page changes; (3) Amendment No. 5 to Facility Operating License No. DPR-79 with Appendix A Technical Specification page changes; and (4) the Commission's related Safety Evaluation.

All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D. C., and the Chattanooga Hamilton County Bicentennial Library, 1001 Broad Street, Chattanooga, Tennessee 37402. A copy of Amendment No. 14 and Amendment No. 5 may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 7<sup>th</sup> day of July 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

Elinor G. Adensam, Chief  
Licensing Branch No. 4  
Division of Licensing

*no to form only*

OFFICE	LA:DL:AB #4	DL:LB #4	OELD	DL:LB #4	AD:DL		
SURNAME	MDuncan/bmc	Stahle	<i>[Signature]</i>	Adensam	RTedesco		
DATE	6/28/82	6/28/82	6/28/82	7/1/82	7/6/82		

July 1982

AMENDMENT NO. 14 TO FACILITY OPERATING LICENSE DPR-77 - SEQUOYAH UNIT 1  
AMENDMENT NO. 5 TO FACILITY OPERATING LICENSE DPR-79 - SEQUOYAH UNIT 2

DISTRIBUTION w/enclosures:

Docket No. 50-369  
LB #4 r/f  
R. Birkel  
M. Duncan  
I&E  
OELD  
E. Adensam  
R. Hartfield, MPA  
R. Diggs, ADM  
D. Eisenhut/R. Purple  
J. Souder  
T. Barnhart (4)

bcc w/enclosures:

NRC PDR  
Local PDR  
NSIC  
TERA  
A. Rosenthal, ASLAB  
ASLBP  
ACRS (16)  
W. Jones (10)