

July 15, 1983

Docket No. 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. 20 to Facility Operating License
No. DPR-79 - Sequoyah Nuclear Plant, Unit 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 20 to Facility Operating License No. DPR-79.

The amendment changes the Technical Specifications to permit a change in the surveillance requirements for rod drop time and full length control rod position limit switches. The amendment is in response to your letter dated June 21, 1983.

A copy of the related safety evaluation supporting Amendment No. 20 to Facility Operating License DPR-79 is enclosed.

Sincerely,

31

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

Enclosures:

- 1. Amendment No. 20 to DPR-79
- 2. Safety Evaluation

cc w/enclosures:
See next page

8307270290 830715
PDR ADOCK 05000328
P PDR

OFFICE	LA:DL\LB #4	DL:LB #4	DL:LB #4				
SURNAME	MDuncan/hmc	CStahle	EAdensam				
DATE	7/2/83	7/1/83	7/1/83				

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 Willis
Tennessee Valley Authority
400 Chestnut Street, Tower II
Chattanooga, Tennessee 37401

Mr. Donald L. Williams, Jr.
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

Michael H. Mobley, Director
Division of Radiological
Health
T.E.R.R.A. Building
150 9th Avenue North
Nashville, Tennessee 37203

OFFICE ▶							
SURNAME ▶							
DATE ▶							

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-328

SEQUOYAH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 20
License No. DPR-79

1. The Nuclear Regulatory Commission (the Commission) has 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 21, 1983, 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. 20, are hereby incorporated into the license.

8307270297 830715
PDR ADDCK 05000328
P PDR

OFFICE						
SURNAME						
DATE						

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

S/

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

Attachment:
Appendix A Technical
Specification Change

Date of Issuance: July 15, 1983

OFFICE ▶	LA:DL:LB.#4	DL:DB.#4	QELD	DL:LB.#4	AD:LD:DL		
SURNAME ▶	MDuncan/hmc	Stahle	<i>[Signature]</i>	EAdensam	TNovak		
DATE ▶	7/15/83	7/15/83	7/15/83	7/13/83	7/15/83		

ATTACHMENT TO LICENSE AMENDMENT NO. 20

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.

Amended
Page

3/4 1-19
3/4 3-54

OFFICE ▶							
SURNAME ▶							
DATE ▶							

TABLE 4.3-6

REMOTE SHUTDOWN MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Source Range Nuclear Flux	M	R
2. Reactor Trip Breaker Indication	M	N.A.
3. Reactor Coolant Temperature - Hot Leg	M	R
4. Pressurizer Pressure	M	R
5. Pressurizer Level	M	R
6. Steam Generator Pressure	M	R
7. Steam Generator Level	M	R
8. Full Length Control Rod Position Limit Switches	M	R*
9. RHR Flow Rate	M	R
10. RHR Temperature	M	R
11. Auxiliary Feedwater Flow Rate	M	R
12. Pressurizer Relief Tank Pressure	M	R
13. Containment Pressure	M	R

*For cycle 1, this surveillance is to be completed before the next cooldown or by August 5, 1983, whichever is earlier.

REACTIVITY CONTROL SYSTEMS

ROD DROP TIME

LIMITING CONDITION FOR OPERATION

3.1.3.4 The individual full length (shutdown and control) rod drop time from the fully withdrawn position shall be less than or equal to 2.2 seconds from beginning of decay of stationary gripper coil voltage to dashpot entry with:

- a. T_{avg} greater than or equal to 541°F, and
- b. All reactor coolant pumps operating.

APPLICABILITY: MODES 1 and 2.

ACTION:

- a. With the drop time of full length rod determined to exceed the above limit, restore the rod drop time to within the above limit prior to proceeding to MODE 1 or 2.
- b. With the rod drop times within limits but determined with 3 reactor coolant pumps operating, operation may proceed provided THERMAL POWER is restricted to less than or equal to 71% of RATED THERMAL POWER.

SURVEILLANCE REQUIREMENTS

4.1.3.4 The rod drop time of full length rods shall be demonstrated through measurement prior to reactor criticality:

- a. For all rods following each removal of the reactor vessel head,
- b. For specifically affected individual rods following any maintenance on or modification to the control rod drive system which could affect the drop time of those specific rods, and
- c. At least once per 18 months.*

*For cycle 1, this surveillance is to be completed before the next cooldown or by August 5, 1983, whichever is earlier.

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE DPR-79
TENNESSEE VALLEY AUTHORITY

INTRODUCTION

On June 21, 1983, TVA requested a temporary change in the surveillance requirements for Sequoyah Unit 2 for the rod drop time, and full length control rod position limit switches. Sequoyah Unit 2 surveillance requirement 4.1.3.4.c requires that the rod drop time be measured every 18 months plus a 25 percent contingency. The last test was performed on September 2, 1981. The test results expire on July 21, 1983.

Unit 2 surveillance requirement 4.3.3.5, item 8 requires calibration of the control rod bottom lights in the remote shutdown control room every eighteen months plus a 25 percent contingency. The last test performed was on August 28, 1981. The test results will expire on July 17, 1983.

The present shutdown date for the first Sequoyah Unit 2 refueling outage is August 5, 1983. This date is based on the fuel currently available in this core, the stage of outage preparation, and the assumed capacity factor for the remainder of the cycle. The expiration dates for both the rod drop test and the rod bottom light calibration will occur before the end of cycle.

EVALUATION

The proposed amendment would increase the surveillance period by 20 days. The present maximum surveillance interval of 688 days (22.5 months) permitted in the Technical Specifications ends on July 17, 1983. The proposed amendment would permit the licensee to schedule the control rod tests and calibration of the limit switches to coincide with the refueling outage date of August 5, 1983, and preclude the loss of 20 days of core life. The plant would not be restarted, if forced to shutdown on July 17, 1983, because technical requirements associated with the restart for the remaining brief period of time would make it impractical to return to power operation.

The licensee normally conducts such tests during the 18-22.5 month period whenever a forced outage occurs. However, Unit 2 has operated continuously for 170 days, and it is expected to do so until August 5, 1983.

The increase in the surveillance interval is less than 3 percent of the total allowed interval. This small increase in the surveillance interval would not increase the rod drop time. Furthermore, the control rods are verified operable every 31 days in accordance with surveillance requirement 4.1.3.1.2. Also, rod drop times have not been a problem at Westinghouse plants. The testing and experience to date at

B307270301 B30715
PDR ADOCK 05000328
P PDR

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

Sequoyah provides a basis for a high degree of confidence that the rods would drop into the core in the required time. Also, the increase in the surveillance interval would not increase the possibility that the rod bottom limit switches will not operate properly. The remaining portion of the circuit will be tested before the extended period is entered to verify the operability of the rod bottom lights in the remote shutdown control room. Also, the rod position indicators, which provide input to the bottom light bistables, have not exhibited calibration problems in the hot condition. A high degree of confidence also exists that the rod bottom lights would work in the remote shutdown control room in the unlikely event they were needed.

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 §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.

FINAL NO SIGNIFICANT HAZARDS CONSIDERATION (SHC) DETERMINATION

The Commission made a proposed determination that the amendment involves no SHC which was published in the Federal Register (48 FR 29980) on June 29, 1983, and consulted with the State of Tennessee. No public comments were received and the State of Tennessee did not have any comments. Based on the Commission's final review and the absence of State and Public comments, the Commission has made a final determination that the amendment involves no significant hazards consideration.

CONCLUSION

We have concluded, based on the considerations 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.

Dated: July 15, 1983

Principal Contributors: Carl Stahle, Licensing Branch No. 4, DL

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

July 15, 1983

AMENDMENT NO. 20 TO FACILITY OPERATING LICENSE DPR-79 - SEQUOYAH UNIT 2

DISTRIBUTION w/enclosures:

✓ Docket No. 50-327/328
LB #4 r/f
C. Stahle
M. Duncan
OELD
E. Adensam
R. Hartfield, MPA
R. Diggs, ADM
D. Eisenhut/R. Purple
J. Souder
T. Barnhart (4)
E. L. Jordan, DEQA: I&E
J. M. Taylor, DRP: I&E
L. J. Harmon, IE File
D. Brinkman, SSPB
H. Denton

bcc w/enclosures:

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