

Docket Nos: 50-327
and 50-328

July 28, 1986

Mr. S. A. White
Manager of Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. White:

Subject: Issuance of Amendment No.44 to Facility Operating License
No. DPR-77 and Amendment No.36 to Facility Operating
License No. DPR-79 - Sequoyah Nuclear Plant, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 44 to Facility Operating License No. DPR-77 and Amendment No. 36 to Facility Operating License No. DPR-79. These amendments are in response to your request dated October 22, 1985. The other changes requested in that letter will be addressed in a future amendment.

The amendments change the Technical Specifications related to the Reactor Trip System instrumentation trip setpoints. The amendments are effective as of the date of issuance. Under no circumstance should this letter be construed as an authorization to operate. Before operation commences, the Tennessee Valley Authority must address the concerns identified in the 50.54(f) letter dated September 17, 1985.

A copy of the related safety evaluation supporting Amendment No.44 to Facility Operating License DPR-77 and Amendment No.36 to Facility Operating License DPR-79 is enclosed.

Notice of issuance will be included in the Commission's next bi-weekly Federal Register notice.

Sincerely,

Carl R. Stahle, Project Manager
PWR Project Directorate #4
Division of PWR Licensing-A

8608070318 860728
PDR ADDCK 05000327
P PDR

Enclosures:

1. Amendment No.44 to DPR-77
2. Amendment No.36 to DPR-79
3. Safety Evaluation

cc w/enclosures:
See next page

*SEE PREVIOUS CONCURRENCE

*PWR#4/DPWR-A
MDuncan/rad
06/27/86

*PWR#4/DPWR-A
JHJonich
06/15/86

*PWR#4/DPWR-A
CStahle
06/15/86

*PWR#4/DPWR-A
BJYounggood
06/15/86

W.A. King
7/28/86
[Signature]

Mr. S. A. White
Tennessee Valley Authority

Sequoyah Nuclear Plant

cc:
Herbert S. Sanger, Jr., Esq.
General Counsel
Tennessee Valley Authority
400 West Summit Hill Drive, E 11B 33
Knoxville, Tennessee 37902

Tennessee Department of Public
Health
ATTN: Director, Bureau of
Environmental Health Services
Cordell Hull Building
Nashville, Tennessee 37219

Mr. K. W. Whitt
Tennessee Valley Authority
400 West Summit Hill Drive, E3A8
Knoxville, Tennessee 37902

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

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

County Judge
Hamilton County Courthouse
Chattanooga, Tennessee 37402

Mr. Jerry Wills
Tennessee Valley Authority
5N 133B Lookout Place
Chattanooga, Tennessee 37402-2801

Mr. Donald L. Williams, Jr.
Tennessee Valley Authority
400 West Summit Hill Drive, W10B85
Knoxville, Tennessee 37902

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

Regional Administrator, Region II
U.S. Nuclear Regulatory Commission,
101 Marietta Street, N.W., Suite 2900
Atlanta, Georgia 30323



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. 44
License No. DPR-77

1. The Nuclear Regulatory Commission (the Commission) has 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 October 22, 1985, 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 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 Appendix A, as revised through Amendment No. 44 are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications.

8608070320 860728
PDR ADOCK 05000327
P PDR

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

151

B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A

Attachment"
Appendix A Technical
Specification Changes

Date of Issuance: July 28, 1986

MD
PWR#4 / DPWR-A
MDuncan/rad
06/5/86

JH
PWR#4 / DPWR-A
JHtonich
06/5/86

CS
PWR#4 / DPWR-A
CStahle
06/6/86

SET
OELD
06/13/86

BJY
PWR#4 / DPWR-A
BJYoungblood
07/28/86

ATTACHMENT TO LICENSE AMENDMENT NO. 44

FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the areas of change.

Amended
Page

2-5

TABLE 2.2-1

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
1. Manual Reactor Trip	Not Applicable	Not Applicable
2. Power Range, Neutron Flux	Low Setpoint - \leq 25% of RATED THERMAL POWER High Setpoint - \leq 109% of RATED THERMAL POWER	Low Setpoint - \leq 26% of RATED THERMAL POWER High Setpoint - \leq 110% of RATED THERMAL POWER
3. Power Range, Neutron Flux, High Positive Rate	\leq 5% of RATED THERMAL POWER with a time constant \geq 2 seconds	\leq 6.3% of RATED THERMAL POWER with a time constant \geq 2 seconds
4. Power Range, Neutron Flux, High Negative Rate	\leq 5% of RATED THERMAL POWER with a time constant \geq 2 seconds	\leq 6.3% of RATED THERMAL POWER with a time constant \geq 2 seconds
5. Intermediate Range, Neutron Flux	\leq 25% of RATED THERMAL POWER	\leq 30% of RATED THERMAL POWER
6. Source Range, Neutron Flux	\leq 10^5 counts per second	\leq 1.3×10^5 counts per second
7. Overtemperature ΔT	See Note 1	See Note 3
8. Overpower ΔT	See Note 2	See Note 3
9. Pressurizer Pressure--Low	\geq 1970 psig	\geq 1960 psig
10. Pressurizer Pressure--High	\leq 2385 psig	\leq 2395 psig
11. Pressurizer Water Level--High	\leq 92% of instrument span	\leq 93% of instrument span
12. Loss of Flow	\geq 90% of design flow per loop*	\geq 89% of design flow per loop*

*Design flow is 91,400 gpm per loop.



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. 36
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 October 22, 1985, 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 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 Appendix A, as revised through Amendment No.36 are hereby incorporated into 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

151

B. J. Youngblood, Director
PWR Project Directorate #4
Division of PWR Licensing-A

Attachment
Appendix A Technical
Specification Changes

Date of Issuance: July 28, 1986

PWR#4/DPWR-A
MDuncan/rad
06/5/86

~~PWR#4/DPWR-A~~
JHornich
06/5/86

PWR#5/DPWR-A
CStable
06/5/86

OELD
SETwe
06/13/86

PAY
PWR#4/DPWR-A
BJYoungblood
07/28/86

ATTACHMENT TO LICENSE AMENDMENT NO. 36

FACILITY OPERATING LICENSE NO. DPR-79

DOCKET NO. 50-328

Replace the following page of the Appendix "A" Technical Specifications with the enclosed page. The revised page is identified by Amendment number and contains vertical lines indicating the areas of change.

Amended
Page

2-5

TABLE 2.2-1

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

<u>FUNCTIONAL UNIT</u>	<u>TRIP SETPOINT</u>	<u>ALLOWABLE VALUES</u>
1. Manual Reactor Trip	Not Applicable	Not Applicable
2. Power Range, Neutron Flux	Low Setpoint - \leq 25% of RATED THERMAL POWER	Low Setpoint - \leq 26% of RATED THERMAL POWER
	High Setpoint - \leq 109% of RATED THERMAL POWER	High Setpoint - \leq 110% of RATED THERMAL POWER
3. Power Range, Neutron Flux, High Positive Rate	\leq 5% of RATED THERMAL POWER with a time constant \geq 2 seconds	\leq 6.3% of RATED THERMAL POWER with a time constant \geq 2 seconds
4. Power Range, Neutron Flux, High Negative Rate	\leq 5% of RATED THERMAL POWER with a time constant \geq 2 seconds	\leq 6.3% of RATED THERMAL POWER with a time constant \geq 2 seconds
5. Intermediate Range, Neutron Flux	\leq 25% of RATED THERMAL POWER	\leq 30% of RATED THERMAL POWER
6. Source Range, Neutron Flux	\leq 10^5 counts per second	\leq 1.3×10^5 counts per second
7. Overtemperature ΔT	See Note 1	See Note 3
8. Overpower ΔT	See Note 2	See Note 3
9. Pressurizer Pressure--Low	\geq 1970 psig	\geq 1960 psig
10. Pressurizer Pressure--High	\leq 2385 psig	\leq 2395 psig
11. Pressurizer Water Level--High	\leq 92% of instrument span	\leq 93.0% of instrument span
12. Loss of Flow	\geq 90% of design flow per loop*	\geq 89% of design flow per loop*

*Design flow is 91,400 gpm per loop.



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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NO. 44 TO FACILITY OPERATING LICENSE DPR-77
AND AMENDMENT NO. 36 TO FACILITY OPERATING LICENSE DPR-79
TENNESSEE VALLEY AUTHORITY

I. INTRODUCTION

By letter dated October 22, 1985, the Tennessee Valley Authority requested a change to the Technical Specifications for the Sequoyah Nuclear Plant, Units 1 and 2. The proposed change would modify the positive and negative neutron flux rate reactor trip setpoints.

II. EVALUATION

The staff has determined that the trip setpoint changes are consistent with the latest setpoint methodology calculations performed by Westinghouse. The technical justification was provided in WCAP-10297-P-A, "Dropped/Rod Methodology for Negative Flux Rate Trip Plants" which NRC approved March 31, 1983. The proposed changes to the "allowable values" are consistent with data used in the WCAP and are acceptable.

Based on the licensee's submittal and the previous staff approval of WCAP-10297-P-A the staff finds the proposed changes acceptable.

III. ENVIRONMENTAL CONSIDERATION

These amendments involve changes in the use of facility components 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 or environmental assessment need be prepared in connection with the issuance of the amendments.

IV. CONCLUSION

The Commission made a proposed determination that the amendments involve no significant hazards consideration which was published in the Federal Register on December 4, 1985 (50 FR 49793) and consulted with the state of Tennessee. No public comments were received, and the state of Tennessee did not have any comments.

8608070382 860728
PDR ADDCK 05000327
P PDR

We have 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 these amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributors: J. Holonich, PD#4
M. Chatterton, PARS
C. Stahle, PD#4

Dated: July 28, 1986

July 28, 1986

AMENDMENT NO.44 TO FACILITY OPERATING LICENSE NO. DPR-77 - Sequoyah Nuclear Plant
Unit 1
AMENDMENT NO.36 TO FACILITY OPERATING LICENSE NO. DPR-79 - Sequoyah Nuclear Plant
Unit 2

DISTRIBUTION w/ enclosures:

Docket No. 50-327/328
NRC PDR
Local PDR
NSIC
PRC System
PD#4 Reading File
C. Stahle
M. Duncan
OELD
R. Diggs, ADM
T. Barnhart (8)
E.L. Jordan, DEQA:I&E
L.J. Harmon, I&E
B. Grimes
J. Partlow
J. Youngblood
J. Holonich
N. Thompson
E. Butcher
W. Jones
H. Denton
J. Taylor
G. Zech
B. Haynes
S. Weise. RII