Docket Nos.: 50-327
and 50-328

September 16, 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. 46 to Facility Operating License No. DPR-77 and Amendment No. 38 to Facility Operating License No. DPR-79 - Sequoyah Nuclear Plant, Units 1 and 2

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 46 to Facility Operating License No. DPR-77 and Amendment No. 38 to Facility Operating License No. DPR-79. These amendments are in response to your request dated January 25, 1984. Other changes requested in that letter will be addressed in a future amendment.

The amendments change the Technical Specifications (TS) to include the reactor vessel level instrumentation system in the Accident Monitoring TS. The amendments are effective as of their date of issuance. This letter should not be construed as an authorization to commence operations prior to the Tennessee Valley Authority appropriately addressing the concerns identified in the 50.54(f) letter dated September 17, 1985.

A copy of the related safety evaluation supporting Amendment No. 46 to Facility Operating License DPR-77 and Amendment No. 38 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,

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

Enclosures:
1. Amendment No. 46 to DPR-77
2. Amendment No. 38 to DPR-79
3. Safety Evaluation

cc w/enclosures: See next page

* See previous concurrences

| | | | |
|---|---|---|---|
| PWR#4/DPWR-A | PWR#4/DPWR-A | PWR#4/DPWR-A | PWR#4/DPWR-A |
| *MDuncan/mac | *JHolonich | *CStahle | BJYoungblood |
| 07/29/86 | 07/29/86 | 08/04/86 | 9/16/86 |

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Mr. S. A. White
Tennessee Valley Authority

Sequoyah Nuclear Plant

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

W. C. Drotleff
ATTN: J. A. Raulston
Tennessee Valley Authority
400 West Summit Hill Drive, W12 A12
Knoxville, Tennessee 37902

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

R. L. Gridley
Tennessee Valley Authority
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Chattanooga, Tennessee 37402-2801

M. R. Harding
Tennessee Valley Authority
Sequoyah Nuclear Plant
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Soddy Daisy, Tennessee 37379

Resident Inspector/Sequoyah NPS
c/o U.S. Nuclear Regulatory Commission
2600 Igou 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

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

County Judge
Hamilton County Courthouse
Chattanooga, Tennessee 37402

September 16, 1986

AMENDMENT NO. 46 TO FACILITY OPERATING LICENSE NO. DPR-77 - Sequoyah Nuclear Plant Unit 1
AMENDMENT NO. 38 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
OGC-Beth
R. Diggs, ADM
T. Barnhart (8)
E.L. Jordan, DEQA:I&E
L.J. Harmon, I&E
J. Youngblood
J. Holonich
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J. Taylor
G. Zech
B. Hayes
S. Weise. RII

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. 46
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 January 25, 1984, 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:

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(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 46 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

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

Attachment"
Appendix A Technical
Specification Changes

Date of Issuance: September 16, 1986

| PWR#4/DPWR-A | PWR#4/DPWR-A | PWR#4/DPWR-A | OGC/BETH | PWR#4/DPWR-A |
|---|---|---|---|---|
| MDuncan/mac | JHolonich | CStahle | | BJYoungblood |
| 7/29/86 | 8/27/86 | 8/27/86 | 8/27/86 | 9/16/86 |

ATTACHMENT TO LICENSE AMENDMENT NO. 46

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 areas of change.

| Amended Page |
|---|
| 3/4 3-56 |
| 3/4 3-57 |

TABLE 3.3-10

ACCIDENT MONITORING INSTRUMENTATION

| INSTRUMENT | REQUIRED NO. OF CHANNELS | MINIMUM CHANNELS OPERABLE |
|---|---|---|
| 1. Reactor Coolant $T_{Hot}$ (Wide Range) | 2 | 1 |
| 2. Reactor Coolant $T_{Cold}$ (Wide Range) | 2 | 1 |
| 3. Containment Pressure (Wide Range) | 2 | 1 |
| 4. Refueling Water Storage Tank Level | 2 | 1 |
| 5. Reactor Coolant Pressure (Wide Range) | 2 | 1 |
| 6. Pressurizer Level (Wide Range) | 2 | 1 |
| 7. Steam Line Pressure | 2/steam line | 1/steam line |
| 8. Steam Generator Level - (Wide Range) | 1/steam generator | 1/steam generator |
| 9. Steam Generator Level - (Narrow Range) | 1/steam generator | 1/steam generator |
| 10. Auxiliary Feedwater Flow Rate | 1/pump | 1/pump |
| 11. Reactor Coolant System Subcooling Margin Monitor | 1 | 0 |
| 12. Pressurizer PORV Position Indicator* | 2/valve# | 1/valve |
| 13. Pressurizer PORV Block Valve Position Indicator** | 2/valve | 1/valve |
| 14. Safety Valve Position Indicator | 2/valve# | 1/valve |
| °15. Containment Water Level (Wide Range) | 2 | 1 |
| 16. In Core Thermocouples | 4/core quadrant | 2/core quadrant |
| 17. Reactor Vessel Level Instrumentation System*** | 2 | 1 |

*Not applicable if the associated block valve is in the closed position.
**Not applicable if the block valve is verified in the closed position with power to the valve operator removed.
***This Technical Specification and surveillance requirement will not be implemented until Sequoyah Specific Instructions are developed for the use of this system as committed to in the TVA response to Supplement 1 of NUREG-0737.
#At least one channel shall be the acoustic monitors.

TABLE 4.3-7

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

| INSTRUMENT | CHANNEL CHECK | CHANNEL CALIBRATION |
|---|---|---|
| 1. Reactor Coolant $T_{Hot}$ (Wide Range) | M | R |
| 2. Reactor Coolant $T_{Cold}$ (Wide Range) | M | R |
| 3. Containment Pressure (Wide Range) | M | R |
| 4. Refueling Water Storage Tank Level | M | R |
| 5. Reactor Coolant Pressure (Wide Range) | M | R |
| 6. Pressurizer Level | M | R |
| 7. Steam Line Pressure | M | R |
| 8. Steam Generator Level - Wide | M | R |
| 9. Steam Generator Level - Narrow | M | R |
| 10. Auxiliary Feedwater Flowrate | M | R |
| 11. Reactor Coolant System Subcooling Margin Monitor | M | R |
| 12. Pressurizer PORV Position Indicator | M | R |
| 13. Pressurizer PORV Block Valve Position Indicator | M | R |
| 14. Safety Valve Position Indicator | M | R |
| 15. Containment Water Level (Wide Range) | M | R |
| 16. In Core Thermocouples | M | R |
| 17. Reactor Vessel Level Instrumentation** | M | R |

**This Technical Specification and surveillance requirement will not be implemented until Sequoyah Specific Instructions are developed for the use of this system as committed to in the TVA response to Supplement 1 of NUREG-0737.

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. 38
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 January 25, 1984, 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. 38 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

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

Attachment
Appendix A Technical
Specification Changes

Date of Issuance: September 16, 1986

| PWR#4/DPWR-A | PWR#4/DPWR-A | PWR#4/DPWR-A | OGC/BETH | PWR#4/DPWR-A |
|---|---|---|---|---|
| MDuncan/mac | JHolonich | CStahle | | BJYoungblood |
| 7/29/86 | /86 | /86 | 8/8/86 | 9/16/86 |

9/16/86

ATTACHMENT TO LICENSE AMENDMENT NO. 38

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 areas of change.

| Amended Page |
|---|
| 3/4 3-57 |
| 3/4 3-58 |

TABLE 3.3-10

ACCIDENT MONITORING INSTRUMENTATION

| INSTRUMENT | REQUIRED NO. OF CHANNELS | MINIMUM CHANNELS OPERABLE |
|---|---|---|
| 1. Reactor Coolant $T_{Hot}$ (Wide Range) | 2 | 1 |
| 2. Reactor Coolant $T_{Cold}$ (Wide Range) | 2 | 1 |
| 3. Containment Pressure (Wide Range) | 2 | 1 |
| 4. Refueling Water Storage Tank Level | 2 | 1 |
| 5. Reactor Coolant Pressure (Wide Range) | 2 | 1 |
| 6. Pressurizer Level (Wide Range) | 2 | 1 |
| 7. Steam Line Pressure | 2/steam line | 1/steam line |
| 8. Steam Generator Level - (Wide Range) | 1/steam generator | 1/steam generator |
| 9. Steam Generator Level - (Narrow Range) | 1/steam generator | 1/steam generator |
| 10. Auxiliary Feedwater Flow Rate | 1/pump | 1/pump |
| 11. Reactor Coolant System Subcooling Margin Monitor | 1 | 0 |
| 12. Pressurizer PORV Position Indicator* | 2/valve# | 1/valve |
| 13. Pressurizer PORV Block Valve Position Indicator** | 2/valve | 1/valve |
| 14. Safety Valve Position Indicator | 2/valve# | 1/valve |
| °15. Containment Water Level (Wide Range) | 2 | 1 |
| 16. In Core Thermocouples | 4/core quadrant | 2/core quadrant |
| 17. Reactor Vessel Level Instrumentation System*** | 2 | 1 |

*Not applicable if the associated block valve is in the closed position.
**Not applicable if the block valve is verified in the closed position with power to the valve operator removed.
***This Technical Specification and surveillance requirement will not be implemented until Sequoyah Specific Instructions are developed for the use of this system as committed to in the TVA response to Supplement 1 of NUREG-0737.
#At least one channel shall be the acoustic monitors.

TABLE 4.3-7

ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

| INSTRUMENT | CHANNEL CHECK | CHANNEL CALIBRATION |
|---|---|---|
| 1. Reactor Coolant $T_{Hot}$ (Wide Range) | M | R |
| 2. Reactor Coolant $T_{Cold}$ (Wide Range) | M | R |
| 3. Containment Pressure (Wide Range) | M | R |
| 4. Refueling Water Storage Tank Level | M | R |
| 5. Reactor Coolant Pressure (Wide Range) | M | R |
| 6. Pressurizer Level | M | R |
| 7. Steam Line Pressure | M | R |
| 8. Steam Generator Level - (Wide) | M | R |
| 9. Steam Generator Level - (Narrow) | M | R |
| 10. Auxiliary Feedwater Flowrate | M | R |
| 11. Reactor Coolant System Subcooling Margin Monitor | M | R |
| 12. Pressurizer PORV Position Indicator | M | R |
| 13. Pressurizer PORV Block Valve Position Indicator | M | R |
| 14. Safety Valve Position Indicator | M | R |
| 15. Containment Water Level (Wide Range) | M | R |
| 16. In Core Thermocouples | M | R |
| 17. Reactor Vessel Level Instrumentation System* | M | R |

*This Technical Specification and surveillance requirement will not be implemented until Sequoyah Specific Instructions are developed for the use of this system as committed to in the TVA response to Supplement 1 of NUREG-0737.

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

# SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

# RELATED TO AMENDMENT NO.46TO FACILITY OPERATING LICENSE DPR-77

# AND AMENDMENT NO.38TO FACILITY OPERATING LICENSE DPR-79

# TENNESSEE VALLEY AUTHORITY

## INTRODUCTION

The Tennessee Valley Authority (TVA) in a submittal dated January 25, 1984 requested a license amendment which would include the reactor vessel level instrumentation system (RVLIS) in the Accident Monitoring Instrumentation Technical Specifications.

## EVALUATION

The staff has reviewed this request by comparing it to the requirements provided in Generic Letter 83-37. Based on the result of its review, the staff has concluded the following:

1. The surveillance requirements for channel check and channel calibration as specified in Item 17 of Table 4.3-7, "Accident Monitoring Instrumentation Surveillance Requirements," meet the requirements of Generic Letter 83-37 and are acceptable.

2. The required number of channels and minimum number of channels as specified in Item 17 of Table 3.3-10," Accident Monitoring Instrumentation," are in accordance with the recommendation of Generic Letter 83-37 and also are acceptable.

In summary, the staff has found the proposed technical specification change to add RVLIS to Accident Monitoring Instrumentation acceptable. This proposed technical specification change should be implemented following the startup from the Cycle 3 refueling outage for each unit.

After upgrading of the Subcooling Margin Monitors (SMM) is completed, the technical specification change for SMM on Item 11 of Tables 3.3-10 and 4.3-7 and its action statements should also be changed in accordance with the Generic Letter No. 83-37 requirements.

## 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

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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 September 28, 1984 (49 FR 38410) and consulted with the state of Tennessee. No public comments were received, and the state of Tennessee did not have any comments.

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: Carl R. Stahle, PWR#4, DPWR-A
Joe Holonich, PWR#4, DPWR-A
R. Karsch, RSB

Dated: September 16, 1986