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**ASLBP** 

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Docket No. 50-327

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. 3 TO FACILITY OPERATNG LICENSE

NO. DPR-77 - SEQUOYAH NUCLEAR PLANT. UNIT 1

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 3 to Facility Operating License No. DPR-77.

This amendment approves your proposal to allow the temporary operation of Unit 1 with 2A and 1B ERCW headers connected together for a one-time period no longer than eight weeks. As agreed by your staff, we have modified your proposal as transmitted in your January 19, 1981 letter by changing the Appendix A Technical Specifications for the Sequoyah Nuclear Plant, Unit 1 rather than changing paragraph 2.C of Facility Operating License DPR-77.

A copy of the related safety evaluation supporting Amendment No. 3 to Facility Operating License DPR-77 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.

A. Schwencer, Chief Licensing Branch No. 2 Division of Licensine

Enclosures:

- Amendment No. 3
- Safety Evaluation
- Federal Register Notice

cc w/enclosures: See next page

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\*SEE PREVIOUS YELLOW FOR CONCURRENCE

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Docket No. 50-327

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. 3 TO FACILITY OPERATING LICENSE NO. DPR-N - SEQUOYAH NUCLEAR PLANT, UNIT NO. 1

The Nuclear Regulatory Commission has issued the enclosed Amendment No. 3 to Facility Operating License No. DPR-77.

This Amendment approves your proposal to allow the temporary operation of Unit 1 with 2A and 1B ERCW headers connected together for a onetime period no longer than eight weeks. As agreed by your staff, we have modified your proposal as transmitted in your January 19, 1981 letter by changing the Appendix A Technical Specifications for the Sequoyah Nuclear Plant, Unit 1 rather than changing paragraph 2.C of Facility Operating License DPR-77.

A copy of the related safety evaluation supporting Amendment No. 3 to Facility Operating License DPR-77 is enclosed. Also enclosed is a copy of the <u>Federal Register Notice</u> which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

A. Schwencer, Chief Licensing Branch No. 2 Division of Licensing

Enclosures:

1. Amendment No. 3

Safety Evaluation

3. Federa/ Register Notice

cc w/enclosures: See next page

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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 Corporation P. O. Box 355 Pittsburgh, Pennsylvania 15230

Mr. Mark Burzynski 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

#### TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-327

#### SEQUOYAH NUCLEAR PLANT, UNIT 1

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 3 License No. DPR-77

- 1. The Muclear 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 January 19, 1981 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 Mo. 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. 3, are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This amended license is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief Licensing Branch No. 2 Division of Licensing

Attachment: Appendix A Technical Specification Changes

Date of Issuance: February 13, 1981

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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. 3 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 January 19, 1981 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. 3, are hereby incorporated into the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This amended license is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief Licensing Branch No. 2 Division of Licensing

Attachment: Appendix A Technical Specification Changes

Date of Issuance: February 13,1981

#### ATTACHMENT TO LICENSE AMENDMENT NO. 3

#### FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

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

<u>Overleaf</u> <u>Page</u>		Amended Page
3/4 7-14	rechnical co	3/4 7-13
	Technical Speci	ifications

#### **PLANT SYSTEMS**

#### 3/4.7.4 ESSENTIAL RAW COOLING WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.7.4.1 At least two independent essential raw cooling water (ERCW) loops shall be OPERABLE.\*

APPLICABILITY: MODES 1, 2, 3 and 4.

#### ACTION:

With only one ERCW loop OPERABLE, restore at least two loops to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

- 4.7.4.1 At least two ERCW loops shall be demonstrated OPERABLE:
  - a. At least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position.
  - b. At least once per 18 months, during shutdown, by:
    - 1. Verifying that each automatic valve servicing safety related equipment actuates to its correct position on a Safety Injection test signal.
    - 2. Verifying that each ERCW pump starts automatically on a Safety Injection test signal.

<sup>\*</sup>Before Unit 2 operation (Unit 2 in either mode 1, 2, 3, or 4), TVA shall be allowed to operate Unit 1 with 2A and 1B ERCW headers connected together. This change shall be allowed for a one-time period of eight weeks while performing modifications to Component Cooling Water Heat Exchanger C.

#### PLANT SYSTEMS

#### AUXILIARY ESSENTIAL RAW COOLING WATER SYSTEM

#### LIMITING CONDITION FOR OPERATION

3.7.4.2 At least two independent auxiliary essential raw cooling water loops shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3 and 4.

#### **ACTION:**

With one auxiliary essential cooling water loop inoperable, restore the inoperable loop to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours and in COLD SHUTDOWN within the following 30 hours.

#### SURVEILLANCE REQUIREMENTS

4.7.4.2 At least two auxiliary essential service water loops shall be demonstrated OPERABLE at least once per 31 days by verifying that each valve (manual, power operated or automatic) servicing safety related equipment that is not locked, sealed, or otherwise secured in position, is in its correct position.

#### SAFETY EVALUATION REPORT BY THE

#### OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 3

#### TO FACILITY OPERATING LICENSE DPR-77

#### TENNESSEE VALLEY AUTHORITY

During pre-operational testing, vibration problems were encountered in the Residual Heat Removal heat exchangers - the tubes tended to vibrate resulting in the tube wear. Other heat exchangers were examined and similar problems were encountered. Component Cooling Water System (CCWS) heat exchangers A and B were modified by staking the tubes. However, modifications to CCWS heat exchanger C could not be completed without a change to Technical Specification 3.7.4.1.

with CCWS heat exchanger C out-of-service, a redundant heat exchanger would not be available to Unit 1 during operation. In order to provide a redundant and qualified CCWS Water supply to the heat exchanger, the licensee proposed to substitute the CCWS heat exchanger C, which acts as "standby" for CCWS heat exchanger A, with CCWS heat exchanger B and tying the ERCW header 1B to ERCW header 2A. The licensee requested that this modified arrangement be allowed for a period of eight weeks while performing modifications to CCWS heat exchanger C.

With CCWS heat exchanger C temporarily out of service, heat exchanger A and heat exchanger B are available for Unit 1 operation and thus all safety requirements are met. Sufficient isolation capability exists for heat exchanger A to be isolated from ERCW header 1B in the event that train A power is lost. Upon loss of train B power, a train A valve automatically closes to isolate ERCW header 2A.from ERCW header 1B.

We have reviewed the proposed temporary (eight weeks) ERCV supply header modification and conclude that the proposed modification does not violate the requirements of General Design Criteria 44 of Appendix A to 10 CFR Part 50 or the position of Regulatory Guide 1.29, "Seismic Design Qualification," and is, therefore, acceptable.

#### 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  $10~\mathrm{CFR}~\$51.5(d)(4)$ , that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

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#### 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 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 complicance 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: February 13, 1981

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#### UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-327

#### TENNESSEE VALLEY AUTHORITY

#### NOTICE OF ISSUANCE OF AMENDMENT

#### FACILITY OPERATING LICENSE NO. DPR-77

The U. S. Nuclear Regulatory Commission (the Commission) has issued

Amendment No. 3 to Facility Operating License No. DPR-77, issued to Tennessee

Valley Authority (licensee) for the Sequoyah Nuclear Plant, Unit 1 (the facility),

located in Hamilton County, Tennessee. This amendment allows the temporary

operation of Unit 1 with 2A and 1B essential raw cooling water (ERCW) headers

connected together for a one-time period no longer than eight weeks.

The application for the amendment 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 amendment. Prior public notice of this amendment was not required since the amendment does not involve a significant hazards consideration.

The Commission has determined that the issuance of this amendment will not result in any significant environmental impact and that pursuant to 10 CFR §51.5 (d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of this amendment.

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For further details with respect to this action, see (1) Tennessee Valley Authority letter dated January 19, 1981, (2) Amendment No. 3 to Facility Operating License No. DPR-77 with Appendix A Technical Specification page changes, and (3) 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. 3 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 (3 day of February 1981.

FOR THE NUCLEAR REGULATORY COMMISSION

A. Schwencer, Chief Licensing Branch No. 2 Division of Licensing

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