Mr. Oliver D. Kingsley, Jr.
President, TVA Nuclear and
Chief Nuclear Officer
Tennessee Valley Authority
6A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. M90197 AND M90198) (TS 93-09)

Dear Mr. Kingsley:

The Commission has issued the enclosed Amendment No.188 to Facility Operating License No. DPR-77 and Amendment No.180 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are in response to your application dated August 19, 1994, in which you requested that the implementation dates for Amendments Nos. 182 and 174 for Units 1 and 2, respectively, be delayed until fiscal year 1995. The original amendments were issued on May 24, 1994, in response to your application dated October 1, 1993, and required that the amendments for each unit be implemented during the Unit 2 Cycle 6 refueling outage. No changes to the Technical Specification pages that were issued with Amendment Nos. 182 and 174 are involved with the present amendment.

The amendments delay implementation of Amendments Nos. 182 and 174 from the Unit 2 Cycle 6 refueling outage to fiscal year 1995; as soon as acceptable plant conditions and modification activities/procedures are established.

A copy of the Safety Evaluation is also enclosed. Notice of Issuance will be included in the Commission's biweekly <u>Federal</u> <u>Register</u> notice.

Sincerely,

Original signed by:
David E. LaBarge, Sr. Project Manager
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-327 and 50-328

Enclosures: 1.

1. Amendment No. 188 to

License No. DPR-77

2. Amendment No. 180 to License No. DPR-79

3. Safety Evaluation

cc w/encls: See next page

DOCUMENT NAMÉ: G:90197.AMM

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SEQUOYAH NUCLEAR PLANT

cc: Mr. Craven Crowell, Chairman Tennessee Valley Authority ET 12A 400 West Summit Hill Drive Knoxville, TN 37902

Mr. W. H. Kennoy, Director Tennessee Valley Authority ET 12A 400 West Summit Hill Drive Knoxville, TN 37902

Mr. Johnny H. Hayes, Director Tennessee Valley Authority ET 12A 400 West Summit Hill Drive Knoxville, TN 37902

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Mr. D. E. Nunn, Vice President New Plant Completion Tennessee Valley Authority 3B Lookout Place 1101 Market Street Chattanooga, TN 37402-2801

Mr. K. P. Powers, Site Vice President Sequoyah Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Soddy, Daisy, TN 37379 General Counsel Tennessee Valley Authority ET 11H 400 West Summit Hill Drive Knoxville, TN 37902

Mr. Roger W. Huston, Manager Nuclear Licensing and Regulatory Affairs Tennessee Valley Authority 4G Blue Ridge 1101 Market Street Chattanooga, TN 37402-2801

Mr. Ralph H. Shell Site Licensing Manager Sequoyah Nuclear Plant Tennessee Valley Authority P.O. Box 2000 Soddy Daisy, TN 37379

TVA Representative Tennessee Valley Authority 11921 Rockville Pike Suite 402 Rockville, MD 20852

Regional Administrator U.S. Nuclear Regulatory Commission Region II 101 Marietta Street, NW., Suite 2900 Atlanta, GA 30323

Mr. William E. Holland Senior Resident Inspector Sequoyah Nuclear Plant U.S. Nuclear Regulatory Commission 2600 Igou Ferry Road Soddy Daisy, TN 37379

Mr. Michael H. Mobley, Director Division of Radiological Health 3rd Floor, L and C Annex 401 Church Street Nashville, TN 37243-1532

County Judge Hamilton County Courthouse Chattanooga, TN 37402

AMENDMENT NO. 188 FOR SEQUOYAH UNIT NO. 1 - DOCKET NO. 50-327 and AMENDMENT NO. 180 FOR SEQUOYAH UNIT NO. 2 - DOCKET NO. 50-328 DATED: October 17, 1994

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S. Varga 014-E-4 M. Lesser RII OGC 015-B-18

C. Grimes DORS/OTSB

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OPA 02-G-5 OC/LFDCB T9-E10

B. Boger, RII



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-327

SEQUOYAH NUCLEAR PLANT, UNIT 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 188 License No. DPR-77

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated August 19, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, 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 rafety of the public, are the such activities to the 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, Facility Operating Licensee DPR-77 is amended by changing the implementation date of Amendment No. 182 to read as follows:

License Amendment 182 is effective as of its date of issuance and is to implemented as soon as acceptable plant conditions and modification activities/procedures are established.

- 3. Paragraph 2.C.(2) of Facility Operating License No. DPR-77 is hereby amended to read as follows:
 - (2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 188, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

4. This license amendment is effective as of its date of issuance, to be implemented as soon as acceptable plant conditions and modification activities/procedures are established in 1995.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon, Director

Projec Directorate II-4

Divis n if Peactor Projects I/II Office of Nuclear Reactor Regulation

Date of Issuance: October 17, 1994



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-328

SEQUOYAH NUCLEAR PLANT, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 180 License No. DPR-79

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated August 19, 1994, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - Chere is reasonable assurance () 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, Facility Operating Licensee DPR-79 is amended by changing the implementation date of Amendment No. 174 to read as follows:

License Amendment 174 is effective as of its date of issuance and is to implemented as soon as acceptable plant conditions and modification activities/procedures are established.

3. Paragraph 2.C.(2) of Facility Operating License No. DPR-79 is hereby amended to read as follows:

(2) <u>Technical Specifications</u>

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 180, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

4. This license amendment is effective as of its date of issuance, to be implemented as soon as acceptable plant conditions and modification activities/procedures are established in 1995.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon, Director

Project Pirectorate II-4

Dir o of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Date of Issuance: October 17, 1994



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION RELATED TO AMENDMENT NO. 188 TO FACILITY OPERATING LICENSE NO. DPR-77 AND AMENDMENT NO. 180 TO FACILITY OPERATING LICENSE NO. DPR-79

TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

1.0 <u>INTRODUCTION</u>

By application dated August 19, 1994, the Tennessee Valley Authority (TVA or the licensee) proposed amendments to delay the implementation dates specified in Amendment Nos. 182 and 174 for Units 1 and 2 respectively, to fiscal year 1995. The amendments issued on May 24, 1994, were in response to the licensee's application dated October 1, 1993 which required that the changes for each unit be implemented during the Unit 2 Cycle 6 refueling outage. The licensee has since determined that implementation should be delayed. No changes to the Technical Specification pages that were issued with Amendment Nos. 182 and 174 are involved with this change.

The purpose of Amendment Nos. 182 (for Unit 1) and 174 (for Unit 2) is to revise the setpoints and time deliya for the auxiliary feedwath (AFW) loss of power and 6.9 kv shutdown board loss-of-voltage and degraded-voltage instrumentation. These changes would also revise the description, total number of channels, channels to trip, minimum channels operable, actions, trip setpoints, allowable values, channel checks, and channel functional test requirements for loss-of-power instrumentation.

The loss-of-voltage and degraded-voltage protection are provided to the 6900-volt shutdown boards to ensure that adequate voltage is available to the safety-related loads. A loss-of-voltage or a sustained degraded-voltage condition will start the emergency diesel generator (EDG) that will be connected to the shutdown board after tripping the normal and alternate feeders and shedding the major loads. After the EDG has been tied to the shutdown board, the loss-of-voltage relays continue to provide the load-shed functions and subsequent resequencing of the loads onto the EDG if necessary.

After the EDG has connected to the shutdown board and the load sequencing interval has been achieved, the loss-of-voltage load-shed feature of the 6.9 kv shutdown board initiates a motor-driven AFW pump start. In addition,

ENCLOSURE 3

the load-shed actuation immediately activates a turbine-driven AFW pump start. The reactor coolant pumps would not be available to provide forced coolant flow in the event of loss of voltage, but the turbine-driven AFW pumps start to initiate natural circulation and heat removal in the reactor coolant system via the steam generators. The AFW pumps provide sufficient heat-removal capability to prevent the pressurizer from filling during design-basis accidents.

In its application for the amendments to implement this design change, the licensee indicated that the modifications to both Units 1 and 2 are necessary to implement the design change and the TS amendments would be accomplished during the Unit 2 Cycle 6 refueling outage. This schedule was reflected in Amendment Nos. 182 and 174 when they were approved by the Commission on May 24, 1994.

Subsequently, by letter dated August 19, 1994, the licensee submitted an amendment requesting that implementation of these amendments be delayed until the related plant modifications are executed during fiscal year 1995. The exact timing will depend on the preparation of appropriate staging and completion of detailed evaluations related to the modification. The licensee explained that during the present Unit 2 Cycle 6 refueling outage, which started on July 4, 1994, the plant modifications were to be performed in two stages so they could be completed within the action limits of TS 3.8.1.1 for Unit 1 that is in power operation. This led to the determination that the additional number of temporary wire terminations and jumpers required for the staged process would increase the risk of exceeding the TS action limit of 72 hours. This concern, along with additional testing and partial modification configurations that the operators would have to contend with while 'he plant changes are being male, aused the licensee to reevaluate the best conditions for implementation of the changes. The result was a decision to move the modification outside the requeling outage, and into the period when both units would be in power operation in fiscal year 1995. TVA considers performance of the modifications during power operation acceptable because it will minimize coordination of activities associated with a refueling outage. It will also allow additional time for planning the staged modification approach to meet TS action times and address any related issues.

TVA has determined that performance of the modification during power operation will not initiate reactor trips. There is a potential for inadvertent diesel generator start signals or 6.9 kv shutdown board load shedding, which would be considered an engineered safety feature actuation. The consequences of such conditions, should they occur, do not generate a reactor trip or significant safety concerns.

The staff has evaluated the licensee's analysis and determined that sufficient justification has been provided to allow delaying implementation of TS Amendment Nos. 182 and 174 for SQN Units 1 and 2, respectively, until desired conditions, plant procedures, modification plans, and modification schedules can be processed and established in fiscal year 1995. Therefore, the proposed change is acceptable.

3.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Tennessee State official was notified of the proposed issuance of the amendments. The State official had no comments.

4.0 ENVIRONMENTAL CONSIDERATION

The amendments change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC 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 previously issued a proposed finding that the amendments involve no significant hazards consideration related to the original amendments, and there has been no public comment on such finding (59 FR 4947). The Commission repeated the proposed finding that the amendments involve no significant hazards consideration in relation to the request to change the implementation date, and there has been no public comment on such finding (59 FR 47182). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 ČFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

5.0 CONCLUSION

The Commission has concluded, based on the commissions discussed above, that: I) there is reasonable assurance that the health and sarety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: David E. LaBarge

Dated: October 17, 1994