January 29, 1982

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. 11 to Facility Operating License No. DPR-77 - Sequoyah Nuclear Plant, Unit 1

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The Nuclear Regulatory Commission has issued the enclosed Amendment No. 11 to Facility Operating License No. DPR-77.

This amendment is in response to a portion of your letter dated November 23, 1981. Amendment 10 addressed some of the changes requested in that letter. The remaining item will be addressed in a subsequent amendment. This amendment extends the date by which the Commission must confirm that an adequate hydrogen control system for the plant is installed and will perform its intended function from January 31, 1982, to no later than startup following the first refueling outage.

A copy of the related safety evaluation supporting Amendment No. 11 to Facility Operating License DPR-77 is enclosed. Also enclosed is a copy of the <u>Federal</u> <u>Register</u> Notice which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

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

Enclosures:

- 1. Amendment No. 11
- 2. Safety Evaluation

3. Federal Register Notice

cc w/enclosures: See next page

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#### 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

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. 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

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

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#### TENNESSEE VALLEY AUTHORITY

### DOCKET NO. 50-327

#### SEQUOYAH NUCLEAR PLANT, UNIT 1

#### AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 11 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 November 23, 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.
- Accordingly, Facility Operating License DPR-77 is amended by the following change:
  - A. Change paragraph 2.C.(22)D. to read as follows:

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- D. Hydrogen Control Measures (Section 22.2, II.B.7)
  - (1) Prior to startup following the first refueling outage, the Commission must confirm that an adequate hydrogen control

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system for the plant is installed and will perform its intended function in a manner that provides adequate safety margins.

- (2) During the interim period of operation, TVA shall continue a research program on hydrogen control measures and the effects of hydrogen burns on safety functions and shall submit to the NRC quarterly reports on that research program.
  - (a) TVA shall amend its research program on hydrogen control measures to include, but not be limited to, the following items:
    - 1) Improved calculational methods for containment temperature and ice condenser response to hydrogen combustion.
    - 2) Research to address the potential for local detonation.
    - Confirmatory tests on selected equipment exposed to hydrogen burns.
    - New calculations to predict differences between expected equipment temperature environments and containment temperatures.
    - 5) Evaluate and resolve any anomalous results occurring during the course of its ongoing test program.
  - (b) A schedule for confirmatory tests shall be provided by TVA consistent with the requirement to meet Section (22)D.(2) of the license.
- 3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Darrell G. Eisenhut, Director Division of Licensing Office of Nuclear Reactor Regulation

Date of Issuance: January 29, 1982

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## SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

#### RELATED TO AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE DPR-77

#### TENNESSEE VALLEY AUTHORITY

#### INTRODUCTION

On November 23, 1981, TVA proposed eight revisions to the Sequoyah Unit 1 operating license. Six of the proposed revisions were implemented in amendment No. 10 to the license. Item (2) of the TVA letter on hydrogen control measures is discussed in this safety evaluation. Item (1) will be covered in a separate amendment.

#### DISCUSSION

Interim distributed ignition systems are installed and operable in Sequoyah Units 1 and 2. The Commission approved their use as an interim measure to mitigate the consequences of any significant releases of hydrogen to containment. Permanent hydrogen control measures were to be installed for both units by January 31, 1982.

TVA provided "good cause" for the delays encountered to date that preclude the licensee from meeting the stipulated license installation date of January 31, 1982. Also, TVA proposed extending the installation until the next refueling to avoid an additional plant outage to make the necessary modifications to the current oper-able interim system.

The basis for the delays and its reasons for selecting the new installation are identical to those that the Commission agreed were acceptable for Unit 1 at the meeting on September 8, 1981.

#### 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.

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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 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: January 29, 1982

Principal Contributor: Carl Stahle, Licensing Branch No. 4, DOL

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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. 11 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 extends the date by which the Commission must confirm that an adequate hydrogen control system for the plant is installed and will perform its intended function from January 31, 1982, to no later than startup following the first refueling outage.

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.

For further details with respect to this action, see (1) Tennessee Valley Authority letter dated November 23, 1981, (2) Amendment No. 11 to Facility Operating License No. DPR-77, and (3) the Commission's related Safety Evaluation.

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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 Board Street, Chattanooga, Tennessee 37402. A copy of Amendment No. 11 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 29<sup>th</sup> day of January 1982.

FOR THE NUCLEAR REGULATORY COMMISSION

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

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

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#### February 2, 1982

Docket No. 50-327

**Docketing and Service Section** Office of the Secretary of the Commission

SUBJECT: Sequoyah Nuclear Plant, Unit 1 (TENNESSEE VALLEY AUTHORITY)

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TOWAS signed originals of the Federal Register Notice identified below and enclosed for your transmittal to the Office of the Federal Register for publication. Additional conformed copies (12) of the Notice are enclosed for your use.

- □ Notice of Receipt of Application for Construction Permit(s) and Operating License(s).
- □ Notice of Receipt of Partial Application for Construction Permit(s) and Facility License(s): Time for Submission of Views on Antitrust Matters.
- □ Notice of Availability of Applicant's Environmental Report.
- □ Notice of Proposed Issuance of Amendment to Facility Operating License.
- □ Notice of Receipt of Application for Facility License(s); Notice of Availability of Applicant's Environmental Report; and Notice of Consideration of Issuance of Facility License(s) and Notice of Opportunity for Hearing.
- □ Notice of Availability of NRC Draft/Final Environmental Statement.
- □ Notice of Limited Work Authorization.
- Notice of Availability of Safety Evaluation Report.
- □ Notice of Issuance of Construction Permit(s).
- X Notice of Issuance of Facility Operating License(37377Amendment(s).

Other:\_

Enclosure: As Stated

#### Office of Nuclear Reactor Regulation

DL:LB#4 OFFICE-MDuncan:md SUBNAME-2/1/82 DATE

January 15, 1982

DISTRIBUTION: Docket No. 50-369

LB #4 r/f

E. Adensam

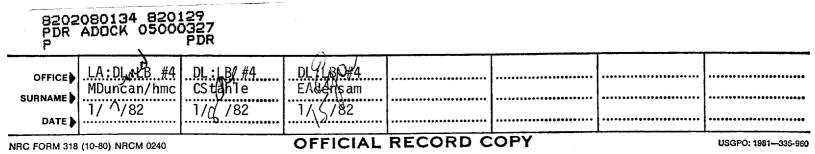
C. Stahle

- M. Duncan
- D. Eisenhut
- E. Ketchen
- MEMORANDUM FOR: Robert. L. Tedesco, Assistant Director for Licensing Division of Licensing
- THRU: Elinor G. Adensam, Acting Chief Licensing Branch No. 4 Division of Licensing
- FROM: Carl Stahle, Project Manager Licensing Branch No. 4 Division of Licensing
- SUBJECT: ISSUANCE OF AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE DPR-77 - SEQUOYAH NUCLEAR PLANT, UNIT 1

Regarding the issuance of the subject amendment, there is no known public

correspondence or irreversible impact associated with this subject.

Carl Stahle, Project Manager Licensing Branch No. 4 Division of Licensing



AMENDMENT NO. 11 TO FACILITY OPERATING LICENSE DPR-77 - SEQUOYAH NUCLEAR PLANT, UNIT NO. 1

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bcc w/enclosures:

Docket No. 50-327 LB #4 r/f C. Stahle M. Duncan I&E (5) E. Ketchen, OELD G. Deegan (4) E. Adensam MPA A. Toalston, DE I. Dinitz, DE R. Diggs, DE D. Eisenhut R. Purple R. Tedesco T. Novak F. Miralgia B. J. Youngblood J. Miller A. Schwencer S. Hanauer R. Vollmer R. Mattson R. Murley NMSS M. Virgilio

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