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

August 22, 1991

Docket Nos. 50-327
and 50-328

Mr. Dan A. Nauman
Senior Vice President, Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Nauman:

SUBJECT: ISSUANCE OF AMENDMENTS (TAC NOS. 79301 AND 79302) (TS 90-22)

The Commission has issued the enclosed Amendment No. 152 to Facility Operating License No. DPR-77 and Amendment No. 142 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 December 14, 1990.

The amendments consist of Technical Specification changes to incorporate the overtime limit guidance provided in Generic Letter 82-16. In addition, certain personnel position title and approval authority changes are incorporated in Section 6.0.

However, a proposed change to Specification 6.2.2.f, to change the title of the person on the Operations Department staff holding a Senior Reactor Operator (SRO) license from the Operations Manager to the Operations Superintendent, has been denied. The staff has determined that an SRO license is needed for the individual who performs the duties and responsibilities of the Operations Manager described in the Updated Final Safety Analysis Report and the Organizational Topical Report. The enclosed Notice of Partial Denial of Amendment and Opportunity for Hearing has been forwarded to the Office of the Federal Register for publication.

In addition, since the person who presently occupies the position of Operations Manager does not possess an SRO license, it is requested that you confirm that the person executing the duties and responsibilities described in ANSI N18.1-1971 as requiring an SRO license, has the appropriate qualifications as required by the current Technical Specifications. Your confirmation letter should also describe your plans to resolve this issue, and should be supplied within 60 days of receipt of this letter. The TAC numbers will remain open to address this issue.

The requirement affects 9 or fewer respondents and, therefore, is not subject to Office of Management and Budget review under P.L. 96-511.

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

Sincerely,

Original signed by

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

Enclosures:
1. Amendment No.152 to License No. DPR-77
2. Amendment No.142 to License No. DPR-79
3. Safety Evaluation
4. Notice of Partial Denial

cc w/enclosures:
See next page

*SEE PREVIOUS CONCURRENCE

OFC	:PDII-4/LA	:PDII-4/PM	:BC:LPEB*	:OGC	:PDII-4/DD	:PDII-4/D	:	:	:
NAME	:MSanders	:DLaBarge	:EBrach	:	:SBlack	:FHebdon	:	:	:
DATE	:8/21/91	:8/21/91	: 7/11/91	:8/16/91	: /91	:8/21/91	:	:	:

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AMENDMENT NO. 152 FOR SEQUOYAH UNIT NO. 1 - DOCKET NO. 50-327 and
AMENDMENT NO. 142 FOR SEQUOYAH UNIT NO. 2 - DOCKET NO. 50-328
DATED: August 22, 1991

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OC/LFMB MNBB-9112

Mr. Dan A. Nauman

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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. 152
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 December 14, 1990, 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 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 amended by changes to the 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 Appendices A and B, as revised through Amendment No. 152, are hereby incorporated in 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 and shall be implemented within 60 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon

Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 22, 1991

ATTACHMENT TO LICENSE AMENDMENT NO.152

FACILITY OPERATING LICENSE NO. DPR-77

DOCKET NO. 50-327

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages* are provided to maintain document completeness.

REMOVE	INSERT
6-1	6-1
6-2	6-2
6-5	6-5
6-6	6-6
6-7*	6-7*
6-8	6-8
6-9	6-9
6-10*	6-10*
6-11*	6-11*
6-12	6-12
6-13	6-13
6-14	6-14
6-21	6-21
6-24	6-24

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Plant Manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Corporate Manager of Radiological Control shall be responsible for implementing the radiological environmental program and dose calculations and projections as described in the Offsite Dose Calculation Manual (ODCM).

6.1.3 The Shift Supervisor (or during his absence from the Control Room, a designated individual) shall be responsible for the Control Room command function. A management directive to this effect, signed by the Site Vice President, shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

6.2.1 OFFSITE AND ONSITE ORGANIZATIONS

An onsite and an offsite organization shall be established for unit operation and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

a. Lines of authority, responsibility, and communication shall be established and defined from the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organizational charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the FSAR and will be updated in accordance with 10 CFR 50.71(e).

b. The Senior Vice President, Nuclear Group shall have corporate responsibility for overall plant nuclear safety. This individual shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support in the plant so that continued nuclear safety is assured.

c. The Plant Manager shall be responsible for overall unit safe operation and shall have control over those onsite resources necessary for safe operation and maintenance of the plant.

d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.2.2 FACILITY STAFF

a. Each on-duty unit shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.

b. At least one licensed Reactor Operator shall be in the unit Control Room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3 or 4, at least one licensed Senior Reactor Operator shall be in the Control Room.

c. A Radiological Control technician# shall be onsite when fuel is in the reactor.

d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.

e. A Fire Brigade of at least 5 members shall be maintained onsite at all times.# The Fire Brigade shall not include the Shift Supervisor and 2 other members of the minimum shift crew necessary for safe shutdown of the unit or any personnel required for other essential functions during a fire emergency.

f. The Operations Manager shall hold a Senior Reactor Operator license.

g. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions (i.e., senior reactor operators, reactor operators, assistant unit operators, Radiological Control, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the unit is operating. However, in the event that unforseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintanance, or major plant modification, on a temporary basis the following guidelines shall be followed:

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.

2. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.

3. A break of at least 8 hours should be allowed between work periods, including shift turnover time.

4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the Plant Manager (or Duty Plant Manager), or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Plant Manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

#The Radiological Control technician and fire brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

6.2.3 INDEPENDENT SAFETY ENGINEERING (ISE)

FUNCTION

6.2.3.1 The ISE shall function to examine plant operating characteristics, NRC issuances, industry advisories, Licensee Event Reports and other sources which may indicate areas for improving plant safety.

COMPOSITION

6.2.3.2 The ISE shall be composed of at least 3 dedicated full-time engineers located onsite. These engineers will be supplemented as necessary by full-time engineers shared among all TVA nuclear sites to achieve an equivalent staffing of 5 full-time engineers performing the ISE functions applicable to Sequoyah.

RESPONSIBILITIES

6.2.3.3 The ISE shall be responsible for maintaining surveillance of plant activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

AUTHORITY

6.2.3.4 The ISE shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving plant safety to the Manager of Nuclear Managers Review Group.

6.2.4 SHIFT TECHNICAL ADVISOR (STA)

6.2.4.1 The STA shall serve in an advisory capacity to the Shift Supervisor on matters pertaining to the engineering aspects of assuring safe operation of the unit.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions and the supplemental requirements specified in Section A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees, except for the Site Radiological Control Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

*Not responsible for sign-off function.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Plant Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55 and the supplemental requirements specified in Section A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees, and shall include familiarization with relevant industry operational experience.

6.5 REVIEW AND AUDIT

6.5.0 The Senior Vice President, Nuclear Power is responsible for the safe operation of all TVA power plants.

6.5.1 PLANT OPERATIONS REVIEW COMMITTEE (PORC)

FUNCTION

6.5.1.1 The PORC shall function to advise the Plant Manager on all matters related to nuclear safety.

COMPOSITION

6.5.1.2 The PORC shall be composed of the:

Chairman:	Plant Manager
Member:	Operations Manager
Member:	Site Radiological Control Manager
Member:	Maintenance Manager
Member:	Technical Support Manager
Member:	Quality Engineering and Monitoring Supervisor
Member:	Nuclear Engineering Representative

ALTERNATES

6.5.1.3 All alternate members shall be appointed in writing by the PORC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in PORC activities at any one time.

MEETING FREQUENCY

6.5.1.4 The PORC shall meet at least once per calendar month and as convened by the PORC Chairman or his designated alternate.

QUORUM

6.5.1.5 The minimum quorum of the PORC necessary for the performance of the PORC responsibility and authority provisions of these technical specifications shall consist of the Chairman or his designated alternate and four members including alternates.

RESPONSIBILITIES

6.5.1.6 The PORC shall be responsible for:

a. Providing for an oversight review of selected safety evaluations for: (1) procedures and (2) change to procedures, equipment, systems or facilities to verify that such actions did not constitute an unreviewed safety question.

b. Review of all proposed tests and experiments that affect nuclear safety.

c. Review of all proposed changes to Appendix "A" Technical Specifications.

d. Review of proposed procedures and changes to procedures, programs, equipment, system or facilities which involve an unreviewed safety question as defined in 10 CFR 50.59.

e. Review of reports covering evaluation and recommendations to prevent recurrence of all violations of the Technical Specifications.

f. Review of all REPORTABLE EVENTS.

g. Review of unit operations to detect potential nuclear safety hazards.

h. Performance of special reviews, investigations or analyses and reports thereon as requested by the Plant Manager or the Nuclear Safety Review Board.

i. Review of every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence to the Site Vice President and to the Nuclear Safety Review Board.

AUTHORITY

6.5.1.7 The PORC shall:

a. Recommend in writing to the Plant Manager approval or disapproval of items considered under 6.5.1.6(a), (b) and (c) above.

b. Require a determination in writing with regard to whether or not each item considered under 6.5.1.6(b), (c), and (e) above constitutes an unreviewed safety question.

c. Provide written notification within 24 hours to the Site Vice President and the Nuclear Safety Review Board of disagreement between the PORC and the Plant Manager; however, the Plant Manager shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

RECORDS

6.5.1.8 The PORC shall maintain written minutes of each PORC meeting that, at a minimum, document the results of all PORC activities performed under the responsibility and authority provisions of these technical specifications. Copies shall be provided to the Site Vice President and the Nuclear Safety Review Board.

6.5.1A TECHNICAL REVIEW AND CONTROL

ACTIVITIES

6.5.1A.1. Activities which affect nuclear safety shall be conducted as follows:

a. Procedures required by Specification 6.8.1 and other procedures which affect plant nuclear safety, and changes thereto, shall be prepared, reviewed and approved. Each such procedure or procedure change shall be reviewed by a qualified individual other than the individual who prepared the procedure or procedure change, but who may be from the same organization as the individual who prepared the procedure or procedure change. Procedures shall be approved by the appropriate responsible manager as designated in writing by the Plant Manager. The Plant Manager, or Duty Plant Manager shall approve designated Administrative Procedures.

b. Proposed changes or modifications to structures, systems, and components that affect plant nuclear safety shall be reviewed by a qualified individual/group other than the individual/group which designed the modification, but who may be from the same organization as the individual/group which designed the modifications. Proposed modifications to structures, systems, and components that affect plant nuclear safety shall be approved prior to implementation by the Plant Manager, or Duty Plant Manager.

c. Individuals responsible for reviews performed in accordance with Specifications 6.5.1A.1a and -b, shall be designated by approved written procedures. Each such review shall be performed by qualified personnel of the appropriate discipline and shall include a determination of whether or not additional, cross-disciplinary review is necessary. Each such review shall also include determination of whether or not an unreviewed safety question is involved pursuant to Section 10 CFR 50.59.

6.5.2 NUCLEAR SAFETY REVIEW BOARD (NSRB)

FUNCTION

6.5.2.1 The NSRB shall function to provide for independent review and audit to assure adequacy of designated activities in the areas of:

a. nuclear power plant operations

b. nuclear engineering

c. chemistry and radiochemistry

d. metallurgy

e. instrumentation and control

f. radiological safety

g. mechanical and electrical engineering

h. quality assurance practices

COMPOSITION

6.5.2.2 The NSRB shall be composed of at least five members, including the Chairman. Members of the NSRB may be from Nuclear Power, or other TVA organization or external to TVA.

QUALIFICATIONS

6.5.2.3 The Chairman, members, and alternate members of the NSRB shall be appointed in writing by the Senior Vice President, Nuclear Power and shall have an academic degree in engineering or a physical science field, or the equivalent; and in addition, shall have a minimum of five years technical experience in one or more areas given in 6.5.2.1. No more than two alternates shall participate as voting members in NSRB activities at any one time.

CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the NSRB Chairman to provide expert advice to the NSRB.

MEETING FREQUENCY

6.5.2.5 The NSRB shall meet at least once per calendar quarter during the initial year of unit operation following fuel loading and at least once per six months thereafter.

QUORUM

6.5.2.6 The minimum quorum of the NSRB necessary for the performance of the NSRB review and audit functions of these technical specifications shall consist of more than half the NSRB membership or at least 5 members, whichever is greater. This quorum shall include the Chairman or his appointed alternate and the NSRB members, including appointed alternate members, meeting the requirements of Specification 6.5.2.3. No more than a minority of the quorum shall have line responsibility for operation of the unit.

REVIEW

6.5.2.7 The NSRB shall be cognizant of review of:

a. The safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.

b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

d. Proposed changes to Technical Specifications or this Operating License.

e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.

f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety.

g. All REPORTABLE EVENTS.

h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.

i. Reports and meetings minutes of the PORC and the SQN RARC.

AUDITS

6.5.2.8 Audits of unit activities shall be performed under the cognizance of the NSRB. These audits shall encompass:

a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.

b. The performance, training and qualifications of the entire facility staff at least once per 12 months.

c. The results of actions taken to correct deficiencies occurring in unit equipment, structures, systems or method of operation that affect nuclear safety at least once per 6 months.

d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.

e. The Site Radiological Emergency Plan and implementing procedures at least once per 12 months.

f. The Plant Physical Security Plan, the Safeguards Contingency Plan, and implementing procedures at least once per 12 months.

g. Any other area of unit operation considered appropriate by the NSRB or the Senior Vice President, Nuclear Power.

h. The Facility Fire Protection Program and implementing procedures at least once per 24 months.

i. An independent fire protection and loss prevention program inspection and audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.

j. An inspection and audit of the fire protection and loss prevention program shall be performed by an outside qualified fire consultant at intervals no greater than 3 years.

k. The radiological environmental monitoring program and the results thereof at least once per 12 months.

l. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months.

m. The PROCESS CONTROL PROGRAM and implementing procedures for SOLIDIFICATION of radioactive wastes at least once per 24 months.

n. The performance of activities required by the Quality Assurance Program to meet the criteria of Regulatory Guide 4.15, December 1977 or Regulatory Guide 1.21, Rev. 1, 1974 and Regulatory Guide 4.1, Rev. 1, 1975, at least once per 12 months.

AUTHORITY

6.5.2.9 The NSRB shall report to and advise the Senior Vice President, Nuclear Power those areas of responsibility specified in Sections 6.5.2.7 and 6.5.2.8.

RECORDS

6.5.2.10 Records of NSRB activities shall be prepared, approved and distributed as indicated below:

a. Minutes of each NSRB meeting shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Power within 14 days following each meeting.

b. Reports of reviews encompassed by Section 6.5.2.7 above, shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Power within 14 days following completion of the review.

c. Audit reports encompassed by Section 6.5.2.8 above, shall be forwarded to the Senior Vice President, Nuclear Power and to the management positions responsible for the areas audited within 30 days after completion of the audit.

6.5.3 RADIOLOGICAL ASSESSMENT REVIEW COMMITTEE (RARC)

Function

6.5.3.1 The SQN RARC shall function to advise the Corporate Manager of Radiological Control and the Plant Manager on all matters related to radiological assessments involving dose calculations and projections and environmental monitoring.

Composition

6.5.3.2 The SQN RARC shall be composed of the:

Chairman: Technical Assistance Section Supervisor
Member: Health Physicist, Gaseous, Radiological Control
Member: Health Physicist, Liquid, Radiological Control

Member: Meteorologist, Air Quality Branch
Member: Chemical Engineer, Chemistry Section, SQN
Member: Health Physicist, Environmental Monitoring, Radiological Control

Alternates

6.5.3.3 All alternate members shall be appointed in writing by the SQN RARC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in SQN RARC activities at any one time.

Meeting Frequency

6.5.3.4 The SQN RARC shall meet at least once per six months or as requested by the SQN RARC Chairman, his designated alternate, or a plant representative.

Quorum

6.5.3.5 The minimum quorum of the SQN RARC necessary for the performance of the SQN RARC responsibility and authority provisions of these technical specifications shall consist of the Chairman or his designated alternate and 4 members (including alternates) as long as one is a plant representative.

Responsibilities

6.5.3.6 The SQN RARC shall be responsible for:

a. Review of changes to the OFFSITE DOSE CALCULATION MANUAL.

b. Review of procedures required by Specification 6.8.4 and changes thereto.

c. Review for information purposes of the results of any audits, reviews, or evaluations of the Quality Assurance Program for effluent and environmental monitoring and radiological assessments involving dose evaluations and projections.

d. Review of proposed changes to the Technical Specifications related to radiological assessments involving dose calculations and projections and environmental radiological monitoring.

Authority

6.5.3.7 The SQN RARC shall:

a. Recommend in writing to the Corporate Manager of Radiological Control and the Plant Manager, approval or disapproval of items considered under 6.5.3.6 above.

b. Render determinations in writing with regard to whether or not each item considered under 6.5.3.6 constitutes an unreviewed safety question.

c. Provide written notification within 24 hours to the Senior Vice President, Nuclear Power and the Nuclear Safety Review Board of disagreement between the SQN RARC and the Corporate Manager of Radiological Control; however, the Corporate Manager of Radiological Control shall have responsibility for resolution of such disagreement pursuant to 6.1.2 above.

Records

6.5.3.8 The SQN RARC shall maintain written minutes of each SQN RARC meeting that at a minimum, document the results of all SQN RARC activities performed under the responsibility and authority provisions of these technical specifications. Copies shall be provided to the Senior Vice President, Nuclear Power; PORC; and the Nuclear Safety Review Board.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and

b. Each REPORTABLE EVENT shall be reviewed by the PORC and the results of this review shall be submitted to the NSRB and the Site Vice President.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

a. The unit shall be placed in at least HOT STANDBY within one hour.

b. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within one hour. The Site Vice President and the NSRB shall be notified within 24 hours.

c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PORC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.

d. The Safety Limit Violation Report shall be submitted to the Commission, the NSRB and the Site Vice President within 14 days of the violation.

6.8 PROCEDURES & PROGRAMS

6.8.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.

MONTHLY REACTOR OPERATING REPORT

6.9.1.10 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or Safety Valves, shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

RADIAL PEAKING FACTOR LIMIT REPORT

6.9.1.14 The W(z) function for normal operation shall be provided at least 60 days prior to cycle initial criticality. In the event that these values would be submitted at some other time during core life, it will be submitted 60 days prior to the date the values would become effective unless otherwise exempted by the Commission.

Any information needed to suport W(z) will be by request from the NRC and need not be included in this report.

SPECIAL REPORTS

6.9.2.1 Special reports shall be submitted within the time period specified for each report, in accordance with 10 CFR 50.4.

6.9.2.2 Diesel Generator Reliability Improvement Program

As a minimum the Reliability Improvement Program report for NRC audit, required by LCO 3.8.1.1, Table 4.8-1, shall include:

(a) a summary of all tests (valid and invalid) that occurred within the time period over which the last 20/100 valid tests were performed

(b) analysis of failures and determination of root causes of failures

(c) evaluation of each of the recommendations of NUREG/CR-0660, "Enhancement of Onsite Emergency Diesel Generator Reliability in Operating Reactors," with respect to their application to the Plant

(d) identification of all actions taken or to be taken to 1) correct the root causes of failures defined in b) above and 2) achieve a general improvement of diesel generator reliability

(e) the schedule for implementation of each action from d) above

(f) an assessment of the existing reliability of electric power to engineered-safety-feature equipment

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c) (2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Special (Radiation) Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.

b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.

c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Site Radiological Control Manager in the Special (Radiation) Work Permit.

6.12.2 The requirements of 6.12.1, above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the Site Radiological Control Manager.

*Radiological Control personnel or personnel escorted by Radiological Control personnel in accordance with approved emergency procedures, shall be exempt from the SWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

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. 142
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 December 14, 1990, 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 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 amended by changes to the 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 Appendices A and B, as revised through Amendment No. 142, are hereby incorporated in 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 and shall be implemented within 60 days of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 22, 1991

ATTACHMENT TO LICENSE AMENDMENT NO. 142

FACILITY OPERATING LICENSE NO. DPR-79

DOCKET NO. 50-328

Revise the Appendix A Technical Specifications by removing the pages identified below and inserting the enclosed pages. The revised pages are identified by the captioned amendment number and contain marginal lines indicating the area of change. Overleaf pages* are provided to maintain document completeness.

REMOVE	INSERT
6-1	6-1
6-2	6-2
6-5	6-5
6-6	6-6
6-7*	6-7*
6-8	6-8
6-9	6-9
6-10*	6-10*
6-11*	6-11*
6-12	6-12
6-13	6-13
6-14	6-14
6-22	6-22
6-25	6-25

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The Plant Manager shall be responsible for overall unit operation and shall delegate in writing the succession to this responsibility during his absence.

6.1.2 The Corporate Manager of Radiological Control shall be responsible for implementing the radiological environmental program and dose calculations and projections as described in the Offsite Dose Calculation Manual (ODCM).

6.1.3 The Shift Supervisor (or during his absence from the Control Room, a designated individual) shall be responsible for the Control Room command function. A management directive to this effect, signed by the Site Vice President shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

6.2.1 OFFSITE AND ONSITE ORGANIZATIONS

An onsite and an offsite organization shall be established for unit operation and corporate management. The onsite and offsite organization shall include the positions for activities affecting the safety of the nuclear power plant.

a. Lines of authority, responsibility, and communication shall be established and defined from the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organizational charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the FSAR and will be updated in accordance with 10 CFR 50.71(e).

b. The Senior Vice President, Nuclear Group shall have corporate responsibility for overall plant nuclear safety. This individual shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support in the plant so that continued nuclear safety is assured.

c. The Plant Manager shall be responsible for overall unit safe operation, and shall have control over those onsite resources necessary for safe operation and maintenance of the plant.

d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.2.2 FACILITY STAFF

a. Each on duty unit shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.

b. At least one licensed Reactor Operator shall be in the unit Control Room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3 or 4, at least one licensed Senior Reactor Operator shall be in the Control Room.

c. A Radiological Control technician# shall be onsite when fuel is in the reactor.

d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.

e. A Fire Brigade of at least 5 members shall be maintained onsite at all times#. The Fire Brigade shall not include the Shift Supervisor and the 2 other members of the minimum shift crew necessary for safe shutdown of the unit or any personnel required for other essential functions during a fire emergency.

f. The Operations Manager shall hold a Senior Reactor Operator license.

g. Administrative procedures shall be developed and implemented to limit the working hours of unit staff who perform safety-related functions (i.e., senior reactor operators, reactor operators, assistant unit operators, Radiological Control, and key maintenance personnel).

Adequate shift coverage shall be maintained without routine heavy use of overtime. The objective shall be to have operating personnel work a normal 8-hour day, 40-hour week while the unit is operating. However, in the event that unforseen problems require substantial amounts of overtime to be used, or during extended periods of shutdown for refueling, major maintanance, or major plant modification, on a temporary basis the following guidelines shall be followed:

1. An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.

2. An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.

3. A break of at least 8 hours should be allowed between work periods, including shift turnover time.

4. Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

Any deviation from the above guidelines shall be authorized by the Plant Manager (or Duty Plant Manager), or higher levels of management, in accordance with established procedures and with documentation of the basis for granting the deviation. Controls shall be included in the procedures such that individual overtime shall be reviewed monthly by the Plant Manager or his designee to assure that excessive hours have not been assigned. Routine deviation from the above guidelines is not authorized.

The Radiological Control technician and fire brigade composition may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence provided immediate action is taken to fill the required positions.

6.2.3 INDEPENDENT SAFETY ENGINEERING (ISE)

FUNCTION

6.2.3.1 The ISE shall function to examine plant operating characteristics, NRC issuances, industry advisories, Licensee Event Reports and other sources which may indicate areas for improving plant safety.

COMPOSITION

6.2.3.2 The ISE shall be composed of at least 3 dedicated full-time engineers located onsite. These engineers will be supplemented as necessary by full-time engineers shared among all TVA nuclear sites to achieve an equivalent staffing of 5 full-time engineers performing the ISE functions applicable to Sequoyah.

RESPONSIBILITIES

6.2.3.3 The ISE shall be responsible for maintaining surveillance of plant activities to provide independent verification* that these activities are performed correctly and that human errors are reduced as much as practical.

AUTHORITY

6.2.3.4 The ISE shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving plant safety to the Manager of Nuclear Managers Review Group.

6.2.4 SHIFT TECHNICAL ADVISOR (STA)

6.2.4.1 The STA shall serve in an advisory capacity to the Shift Supervisor on matters pertaining to the engineering aspects of assuring safe operation of the unit.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions and the supplemental requirements specified in Section A and C of Enclosure 1 of March 28, 1980 NRC letter to all licensees, except for the Site Radiological Control Manager who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975.

*Not responsible for sign-off function.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Plant Manager and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10 CFR Part 55 and the supplemental requirements specified in Section A and C of Enclosure 1 of the March 28, 1980 NRC letter to all licensees, and shall include familiarization with relevant industry operational experience.

6.5 REVIEW AND AUDIT

6.5.0 Senior Vice President, Nuclear Power is responsible for the safe operation of all TVA power plants.

6.5.1 PLANT OPERATIONS REVIEW COMMITTEE (PORC)

FUNCTION

6.5.1.1 The PORC shall function to advise the Plant Manager on all matters related to nuclear safety.

COMPOSITION

6.5.1.2 The PORC shall be composed of the:

Chairman:	Plant Manager
Member:	Operations Manager
Member:	Site Radiological Control Manager
Member:	Maintenance Manager
Member:	Technical Support Manager
Member:	Quality Engineering and Monitoring Supervisor
Member:	Nuclear Engineering Representative

ALTERNATES

6.5.1.3 All alternate members shall be appointed in writing by the PORC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in PORC activities at any one time.

MEETING FREQUENCY

6.5.1.4 The PORC shall meet at least once per calendar month and as convened by the PORC Chairman or his designated alternate.

QUORUM

6.5.1.5 The minimum quorum of the PORC necessary for the performance of the PORC responsibility and authority provisions of these Technical Specifications shall consist of the Chairman or his designated alternate and four members including alternates.

RESPONSIBILITIES

6.5.1.6 The PORC shall be responsible for:

a. Providing for an oversight review of selected safety evaluations for: (1) procedures and (2) change to procedures, equipment, systems or facilities to verify that such actions did not constitute an unreviewed safety question.

b. Review of all proposed tests and experiments that affect nuclear safety.

c. Review of all proposed changes to Appendix "A" Technical Specifications.

d. Review of proposed procedures and changes to procedures, programs, equipment, system or facilities which involve an unreviewed safety question as defined in 10 CFR 50.59.

e. Review of reports covering evaluation and recommendations to prevent recurrence of all violations of the Technical Specifications.

f. Review of all REPORTABLE EVENTS.

g. Review of unit operations to detect potential nuclear safety hazards.

h. Performance of special reviews, investigations or analyses and reports thereon as requested by the Plant Manager or the Nuclear Safety Review Board.

i. Review of every unplanned onsite release of radioactive material to the environs including the preparation and forwarding of reports covering evaluation, recommendations and disposition of the corrective action to prevent recurrence to the Site Vice President and to the Nuclear Safety Review Board.

AUTHORITY

6.5.1.7 The PORC shall:

a. Recommend in writing to the Plant Manager approval or disapproval of items considered under 6.5.1.6(a), (b) and (c) above.

b. Require a determination in writing with regard to whether or not each item considered under 6.5.1.6(b), (c), and (e) above constitutes an unreviewed safety question.

c. Provide written notification within 24 hours to the Site Vice President and the Nuclear Safety Review Board of disagreement between the PORC and the Plant Manager; however, the Plant Manager shall have responsibility for resolution of such disagreements pursuant to 6.1.1 above.

RECORDS

6.5.1.8 The PORC shall maintain written minutes of each PORC meeting that, at a minimum, document the results of all PORC activities performed under the responsibility and authority provisions of these technical specifications. Copies shall be provided to the Site Vice President and the Nuclear Safety Review Board.

6.5.1A TECHNICAL REVIEW AND CONTROL

ACTIVITIES

6.5.1A.1. Activities which affect nuclear safety shall be conducted as follows:

a. Procedures required by Specification 6.8.1 and other procedures which affect plant nuclear safety, and changes thereto, shall be prepared, reviewed and approved. Each such procedure or procedure change shall be reviewed by a qualified individual other than the individual who prepared the procedure or procedure change, but who may be from the same organization as the individual who prepared the procedure or procedure change. Procedures shall be approved by the appropriate responsible manager as designated in writing by the Plant Manager. The Plant Manager, or Duty Plant Manager shall approve designated Administrative Procedures.

b. Proposed changes or modifications to structures, systems, and components that affect plant nuclear safety shall be reviewed by a qualified individual/group other than the individual/group which designed the modification, but who may be from the same organization

as the individual/group which designed the modifications. Proposed modifications to structures, systems, and components that affect plant nuclear safety shall be approved prior to implementation by the Plant Manager, or Duty Plant Manager.

c. Individuals responsible for reviews performed in accordance with Specifications 6.5.1A.1a and -b, shall be designated by approved written procedures. Each such review shall be performed by qualified personnel of the appropriate discipline and shall include a determination of whether or not additional, cross-dsciplinary review is necessary. Each such review shall also include determination of whether or not an unreviewed safety question is involved pursuant to Section 10 CFR 50.59.

6.5.2 NUCLEAR SAFETY REVIEW BOARD (NSRB)

FUNCTION

6.5.2.1 The NSRB shall function to provide for independent review and audit to assure adequacy of designated activities in the areas of:

a. nuclear power plant operations

b. nuclear engineering

c. chemistry and radiochemistry

d. metallurgy

e. instrumentation and control

f. radiological safety

g. mechanical and electrical engineering

h. quality assurance practices

COMPOSITION

6.5.2.2 The NSRB shall be composed of at least five members, including the Chairman. Members of the NSRB may be from Nuclear Power, or other TVA organization or external to TVA.

QUALIFICATIONS

6.5.2.3 The Chairman, members, and alternate members of the NSRB shall be appointed in writing by the Senior Vice President, Nuclear Power and shall have an academic degree in engineering or a physical science field, or the equivalent; and in addition, shall have a minimum of five years technical experience in one or more areas given in 6.5.2.1. No more than two alternates shall participate as voting members in NSRB activities at any one time.

CONSULTANTS

6.5.2.4 Consultants shall be utilized as determined by the NSRB Chairman to provide expert advice to the NSRB.

MEETING FREQUENCY

6.5.2.5 The NSRB shall meet at least once per calendar quarter during the initial year of unit operation following fuel loading and at least once per six months thereafter.

QUORUM

6.5.2.6 The minimum quorum of the NSRB necessary for the performance of the NSRB review and audit functions of these technical specifications shall consist of more than half the NSRB membership or at least 5 members, whichever is greater. This quorum shall include the Chairman or his appointed alternate and the NSRB members, including appointed alternate members, meeting the requirements of Specification 6.5.2.3. No more than a minority of the quorum shall have line responsibility for operation of the unit.

REVIEW

6.5.2.7 The NSRB shall be cognizant of review of:

a. The safety evaluations for 1) changes to procedures, equipment or systems and 2) tests or experiments completed under the provision of Section 50.59, 10 CFR, to verify that such actions did not constitute an unreviewed safety question.

b. Proposed changes to procedures, equipment or systems which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

c. Proposed tests or experiments which involve an unreviewed safety question as defined in Section 50.59, 10 CFR.

d. Proposed changes to Technical Specifications or this Operating License.

e. Violations of codes, regulations, orders, Technical Specifications, license requirements, or of internal procedures or instructions having nuclear safety significance.

f. Significant operating abnormalities or deviations from normal and expected performance of unit equipment that affect nuclear safety.

g. All REPORTABLE EVENTS.

h. All recognized indications of an unanticipated deficiency in some aspect of design or operation of structures, systems, or components that could affect nuclear safety.

i. Reports and meetings minutes of the PORC and the SQN RARC.

AUDITS

6.5.2.8 Audits of unit activities shall be performed under the cognizance of the NSRB. These audits shall encompass:

a. The conformance of unit operation to provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.

b. The performance, training and qualifications of the entire facility staff at least once per 12 months.

c. The results of actions taken to correct deficiencies occurring in unit equipment, structures, systems or method of operation that affect nuclear safety at least once per 6 months.

d. The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix "B", 10 CFR 50, at least once per 24 months.

e. The Site Radiological Emergency Plan and implementing procedures at least once per 12 months.

f. The Plant Physical Security Plan, the Safeguards Contingency Plan, and implementing procedures at least once per 12 months.

g. Any other area of unit operation considered appropriate by the NSRB or the Senior Vice President, Nuclear Power.

h. The Facility Fire Protection Program and implementing procedures at least once per 24 months.

i. An independent fire protection and loss prevention program inspection and audit shall be performed annually utilizing either qualified offsite licensee personnel or an outside fire protection firm.

j. An inspection and audit of the fire protection and loss prevention program shall be performed by an outside qualified fire consultant at intervals no greater than 3 years.

k. The radiological environmental monitoring program and the results thereof at least once per 12 months.

l. The OFFSITE DOSE CALCULATION MANUAL and implementing procedures at least once per 24 months.

m. The PROCESS CONTROL PROGRAM and implementing procedures for SOLIDIFICATION of radioactive wastes at least once per 24 months.

n. The performance of activities required by the Quality Assurance Program to meet the criteria of Regulatory Guide 4.15, December 1977 or Regulatory Guide 1.21, Rev. 1, 1974 and Regulatory Guide 4.1, Rev. 1, 1975, at least once per 12 months.

AUTHORITY

6.5.2.9 The NSRB shall report to and advise the Senior Vice President, Nuclear Power on those areas of responsibility specified in Sections 6.5.2.7 and 6.5.2.8.

RECORDS

6.5.2.10 Records of NSRB activities shall be prepared, approved and distributed as indicated below:

a. Minutes of each NSRB meeting shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Power within 14 days following each meeting.

b. Reports of reviews encompassed by Section 6.5.2.7 above, shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Power within 14 days following completion of the review.

c. Audit reports encompassed by Section 6.5.2.8 above, shall be forwarded to the Senior Vice President, Nuclear Power and to the management positions responsible for the areas audited within 30 days after completion of the audit.

6.5.3 RADIOLOGICAL ASSESSMENT REVIEW COMMITTEE (RARC)

Function

6.5.3.1 The SQN RARC shall function to advise the Corporate Manager of Radiological Control and the Plant Manager on all matters related to radiological assessments involving dose calculations and projections and environmental monitoring.

Composition

6.5.3.2 The SQN RARC shall be composed of the:

Chairman: Technical Assistance Section Supervisor
Member: Health Physicist, Gaseous, Radiological Control
Member: Health Physicist, Liquid, Radiological Control
Member: Meteorologist, Air Quality Branch
Member: Chemical Engineer, Chemistry Section, SQN
Member: Health Physicist, Environmental Monitoring, Radiological Control

Alternates

6.5.3.3 All alternate members shall be appointed in writing by the SQN RARC Chairman to serve on a temporary basis; however, no more than two alternates shall participate as voting members in SQN RARC activities at any one time.

Meeting Frequency

6.5.3.4 The SQN RARC shall meet at least once per six months or as requested by the SQN RARC Chairman, his designated alternate, or a plant representative.

Quorum

6.5.3.5 The minimum quorum of the SQN RARC necessary for the performance of the SQN RARC responsibility and authority provisions of these technical specifications shall consist of the Chairman or his designated alternate and 4 members (including alternates) as long as one is a plant representative.

Responsibilities

6.5.3.6 The SQN RARC shall be responsible for:

a. Review of changes to the OFFSITE DOSE CALCULATION MANUAL.

b. Review of procedures required by Specification 6.8.4 and changes thereto.

c. Review for information purposes of the results of any audits, reviews, or evaluations of the Quality Assurance Program for effluent and environmental monitoring and radiological assessments involving dose evaluations and projections.

d. Review of proposed changes to the Technical Specifications related to radiological assessments involving dose calculations and projections and environmental radiological monitoring.

Authority

6.5.3.7 The SQN RARC shall:

a. Recommend in writing to the Corporate Manager of Radiological Control and the Plant Manager, approval or disapproval of items considered under 6.5.3.6 above.

b. Render determinations in writing with regard to whether or not each item considered under 6.5.3.6 constitutes an unreviewed safety question.

c. Provide written notification within 24 hours to the Senior Vice President, Nuclear Power and the Nuclear Safety Review Board of disagreement between the SQN RARC and the Corporate Manager of Radiological Control; however, the Corporate Manager of Radiological Control shall have responsibility for resolution of such disagreement pursuant to 6.1.2 above.

Records

6.5.3.8 The SQN RARC shall maintain written minutes of each SQN RARC meeting that at a minimum, document the results of all SQN RARC activities performed under the responsibility and authority provisions of these technical specifications. Copies shall be provided to the Senior Vice President, Nuclear Power; PORC; and the Nuclear Safety Review Board.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified and/or a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and

b. Each REPORTABLE EVENT shall be reviewed by the PORC and the results of this review shall be submitted to the NSRB and the Site Vice President.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

a. The unit shall be placed in at least HOT STANDBY within one hour.

b. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within one hour. The Site Vice President and the NSRB shall be notified within 24 hours.

c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PORC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems or structures, and (3) corrective action taken to prevent recurrence.

d. The Safety Limit Violation Report shall be submitted to the Commission, the NSRB and the Site Vice President within 14 days of the violation.

6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix "A" of Regulatory Guide 1.33, Revision 2, February 1978.

b. Refueling operations.

c. Surveillance and test activities of safety related equipment.

d. Plant Physical Security Plan implementation.

e. Site Radiological Emergency Plan implementation.

f. Fire Protection Program implementation.

g. PROCESS CONTROL PROGRAM implementation.

MONTHLY REACTOR OPERATING REPORT

6.9.1.10 Routine reports of operating statistics and shutdown experience, including documentation of all challenges to the PORVs or Safety Valves, shall be submitted on a monthly basis no later than the 15th of each month following the calendar month covered by the report.

RADIAL PEAKING FACTOR LIMIT REPORT

6.9.1.14 The W(z) function for normal operation shall be provided at least 60 days prior to cycle initial criticality. In the event that these values would be submitted at some other time during core life, it will be submitted 60 days prior to the date the values would become effective unless otherwise exempted by the Commission.

Any information needed to suport W(z) will be by request from the NRC and need not be included in this report.

SPECIAL REPORTS

6.9.2.1 Special reports shall be submitted within the time period specified for each report, in accordance with 10 CFR 50.4.

6.9.2.2 Diesel Generator Reliability Improvement Program

As a minimum the Reliability Improvement Program report for NRC audit, required by LCO 3.8.1.1, Table 4.8-1, shall include:

(a) a summary of all tests (valid and invalid) that occurred within the time period over which the last 20/100 valid tests were performed

(b) analysis of failures and determination of root causes of failures

(c) evaluation of each of the recommendations of NUREG/CR-0660, "Enhancement of Onsite Emergency Diesel Generator Reliability in Operating Reactors," with respect to their application to the Plant

(d) identification of all actions taken or to be taken to 1) correct the root causes of failures defined in b) above and 2) achieve a general improvement of diesel generator reliability

(e) the schedule for implementation of each action from d) above

(f) an assessment of the existing reliability of electric power to engineered-safety-feature equipment

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c) (2) of 10 CFR 20, each high radiation area in which the intensity of radiation is greater than 100 mrem/hr but less than 1000 mrem/hr shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be controlled by requiring issuance of a Special (Radiation) Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.

b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.

c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Site Radiological Control Manager in the Special (Radiation) Work Permit.

6.12.2 The requirements of 6.12.1, above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or the Site Radiological Control Manager.

*Radiological Control personnel or personnel escorted by Radiological Control personnel in accordance with approved emergency procedures, shall be exempt from the SWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

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

ENCLOSURE 3

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO.152 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO.142 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 INTRODUCTION

By letter dated December 14, 1990, the Tennessee Valley Authority (TVA or the licensee) submitted a request for changes to the Sequoyah Nuclear Plant, Units 1 and 2 Technical Specifications (TS). The proposed changes would modify Section 6 of the Sequoyah Nuclear (SQN) Plant Technical Specifications to (a) incorporate the overtime limit guidance specified in Generic Letter (GL) 82-16, "NUREG-0737 Technical Specifications," (b) delete the requirement for reporting Offsite Dose Calculation Manual changes and Radiological Waste Treatment System changes in the Monthly Report, (c) change position titles of various individuals, (d) change the Plant Operations Review Committee (PORC) membership, (e) specify that the Plant Manager or Duty Plant Manager approval is needed for administrative procedures and proposed plant modifications that affect plant nuclear safety, (f) revise wording regarding review and approval of proposed modifications, and (g) correct various typographical errors.

Letters expressing concerns and objections related to the proposed amendment were received from (1) Mr. James T. Springfield, Business Manager for the International Brotherhood of Electrical Workers (IBEW), dated December 29, 1990, and January 1, 1991, (2) Mr. Ken Shaffner, member of the IBEW bargaining unit, dated January 3, 1991, and (3) Mr. Phillip N. Mincy, member of the IBEW bargaining unit, dated January 7, 1991. All are employees at the Sequoyah plant and expressed the opinion that the IBEW should be involved in negotiating changes to the existing overtime policy through the collective bargaining process. Also, by letter dated February 6, 1991, Mr. James T. Springfield, acting as Business Manager for IBEW, formally requested an NRC hearing on the proposed TS change.

On February 22, 1991, the Atomic Safety and Licensing Board was established by Order of the Chief Administrative Judge of the Atomic Safety and Licensing Board Panel in response to the IBEW request for a hearing. On March 11 and March 12, 1991, meetings were held with personnel from the NRC Region II and NRR staff, TVA and IBEW to discuss the issues. These discussions resulted in the IBEW formally withdrawing its request for a hearing on the proposed TS change by letter dated March 15, 1991, from Mr. James T. Springfield. The letter stated that the IBEW and TVA came to a joint understanding which resolved their safety concerns.

2.0 EVALUATION

The licensee had previously incorporated the overtime guidelines specified in GL 82-16 in the appropriate plant procedures. However, as pointed out in Violations 87-78-01 and 90-22-01, the limits have been exceeded without proper authorization. As a result of the recurrent procedural implementation problem, the NRC requested (by letter dated October 18, 1990) that the licensee strengthen their program by incorporating the GL requirements into the TS. Consequently, TVA has proposed addition of Section 6.2.2.g to the TS for Sequoyah Nuclear Plant, Units 1 and 2. The licensee has stated that the proposed change will not alter the overtime limits presently in effect at the plant as defined in the procedures and will reinforce the current requirements.

The staff has reviewed the proposed TS changes concerning overtime limits against (a) the Standard Review Plan, Section 13.5.2, "Administration Procedures;" (b) GL 82-12, "Nuclear Power Plant Staff Working Hours;" and (c) GL 82-16, "NUREG-0737 Technical Specifications." Since the proposed change incorporates this guidance, it is acceptable.

TVA incorporated the recommendations of GL 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications and the Relocation of Procedural Details of RETS to the Offsite Dose Calculation Manual or to the Process Control Program" into proposed TS Change Number 90-03. The changes were subsequently approved as Amendment 148 for Unit 1 and Amendment 134 for Unit 2 by letter dated November 16, 1990. One recommendation of the GL provided that changes to the Offsite Dose Calculation Manual (ODCM) and changes to the Radioactive Waste Treatment System be reported in the Semiannual Radioactive Effluent Release Report. However, when the licensee prepared the TS change proposal, an existing TS requirement for reporting these ODCM and system changes on a monthly basis was inadvertently overlooked and not submitted as a part of the proposed change. Therefore, TVA has requested that the monthly reporting requirement be removed at this time.

The staff has reviewed the proposed TS change to remove the requirement to report ODCM and radwaste system changes on a monthly basis, and determined that it is acceptable since it removes a redundant requirement which is more appropriately controlled through GL 89-01 guidance, which has already been implemented.

The licensee has proposed numerous changes to the titles of various management personnel throughout TS Section 6.0. They are administrative in nature and reflect changes to the structure and responsibilities of the management organization. For example, the Site Director is now the Site Vice President, the Site Radiological Control Superintendent is now the Site Radiological Control Manager, and Plant Manager rather than the Operations Superintendent has the responsibility for the facility staff retraining and replacement program, the Site Director is now the Site Vice President, and the Manager of Radiological Control is now the Corporate Manager of Radiological Control.

The staff has reviewed these proposed changes and determined that they are acceptable since they are administrative in nature.

The licensee has also proposed a position title change in Specification 6.2.2.f, which requires that the Operations Manager maintain a Senior Reactor Operator (SRO) license. However, TVA is implementing an organizational change which has inserted an Operations Superintendent position between the Shift Supervisors and the Operations Manager. As a result, the licensee proposed a TS change that would replace the Operations Manager with the Operations Superintendent as the individual who must hold an SRO license.

ANSI Standard N18.1-1971, "Selection and Training of Nuclear Power Plant Personnel," states that the operations manager shall hold an SRO licensee at the time of appointment to the position. This standard, to which TVA has committed, states that positions at the functional level of manager are those to which broad responsibilities for direction of major aspects of a nuclear power plant are assigned.

TVA has provided a description of the Operations Manager position in a TVA Nuclear Power Organization Topical Report, which was submitted by letter dated April 18, 1991 (Topical Report No. TVA-NPOD89-A, Revision 2). This document states that: "The Plant Operations Manager has overall responsibility for plant operation and overall execution of plant operational activities." In addition, this document states that the Operation Superintendent "... is responsible for all plant operations. The Superintendent manages refueling operations, startup, operational testing, water and waste processing, and plant operations." Similar wording is used in the Updated Final Safety Analysis Report (UFSAR), Section 13.1.

By comparing these documents, we have concluded that the description of the duties and responsibilities of the Operations Manager in the ANSI standard very closely match those of the Operations Manager position, as well as the Operations Superintendent position, described in the Topical Report and in the UFSAR.

The staff believes that it is vitally important that all individuals in the line management organization which could affect plant operation by virtue of their job description and responsibilities, have demonstrated detailed plant operating knowledge and training. In view of this, and based on the position descriptions, the staff feels that the TS change proposed by TVA would result in permitting an unacceptable level of qualifications in the operations management chain of command. Also, based on the duties and responsibilities described in the Topical Report and UFSAR, the staff believes that the Operations Manager should possess an SRO license at the time of assignment to the position. In addition, based on the information available, it appears that the Operations Superintendent should also possess an SRO license. Therefore, the staff finds the proposed change to Specification 6.2.2.f which would replace the Operations Manager with the Operations Superintendent as the individual who must hold an SRO license, unacceptable and is therefore denied.

The licensee has also proposed changes to Specification 6.5.1.2 to revise the membership on the Plant Operations Review Committee (PORC) by removing the

Operations Superintendent and changing the titles of many of the members. These proposed changes are a result of the management organization changes. The staff finds this acceptable since the changes agree with the present structure of the facility organization, the required technical expertise and diversity is retained, and because the operations management function will be represented by the Operations Manager.

TVA also proposed changes to Specification 6.5.1A.1.a and b which would specify that only the Plant Manager or Duty Plant Manager have the approval authority for administrative procedures and proposed changes or modifications to structures, systems, and components that affect plant safety. It would remove the Operations, Maintenance, Technical Support, and Site Radiological Control Superintendents from the list. Any of these personnel would be granted this authority only if they are designated as the Duty Plant Manager. The staff has determined that this change is acceptable since the authority remains at the appropriate management level and is more restrictive than the present requirement.

The licensee also proposed a change to Specification 6.5.1A.1.b to delete the review of workplans which are used for implementation of proposed plant changes and modifications. Revisions to the plant change process and the plant modification process which will be implemented soon, will result in the function of the workplans being integrated into the respective plant change or modification package, with the exception of the physical installation of the hardware. Therefore, the use of workplans as currently implied in the TS will no longer exist. However, the controls will continue to be applied to the plant change and modification packages themselves. The proposed TS change will not impact the current processes, but provide flexibility for changes to the modification processes and nomenclature when the new process is implemented (which is awaiting approval of this TS amendment application). The staff finds this change to be acceptable since the necessary level of control is retained.

The typographical errors proposed by the licensee for correction are acceptable since they do not change the intent or meaning of the respective specifications.

3.0 STATE CONSULTATION

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

4.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to administrative procedures or requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR Section 51.22(c)(10). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

5.0 CONCLUSION

The Commission has 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, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: J. Arildson, F. Allenspach, and D. LaBarge

Date: August 22, 1991

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT, UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

NOTICE OF PARTIAL DENIAL OF AMENDMENT TO FACILITY OPERATING LICENSE

AND OPPORTUNITY FOR HEARING

The U. S. Nuclear Regulatory Commission (NRC) has denied a portion of an amendment request by the Tennessee Valley Authority (TVA or the licensee) for an amendment to Facility Operating License Nos. DPR-77 and DPR-79, issued to the licensee for operation of the Sequoyah Nuclear Plant, Units 1 and 2, located in Soddy Daisy, Tennessee. Notice of Consideration of Issuance of this amendment was published in the FEDERAL REGISTER on January 23, 1991 (56 FR 2556).

The purpose of the licensee's amendment request was to revise the Technical Specifications (TS) to incorporate the overtime limit guidance provided in Generic Letter 82-16, and incorporate certain position title and approval authority changes.

The NRC staff has concluded that the portion of the licensee's request regarding changing the title of the line management staff person who must hold a Senior Reactor Operator license from the Operations Manager to the Operations Superintendent cannot be granted. The licensee was notified of the Commission's denial of the proposed change by letter dated August 22, 1991.

By September 30, 1991, the licensee may demand a hearing with respect to the denial described above. Any person who interest may be affected by this proceeding may file a written petition for leave to intervene.

A request for hearing or petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC, 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, DC 20555, by the above date. A copy of any petitions should also be sent to the Office of the General Counsel, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and to E.S. Christenbury, General Counsel, Tennessee Valley Authority, 400 West Summit Hill Drive, E11 B33, Knoxville, Tennessee 37902, attorney for the licensee.

For further details with respect to this action, see (1) the application for amendments dated December 14, 1990, and (2) the Commission's letter to the licensee dated August 22, 1991.

These documents are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, N.W., Washington, DC 20555 and at the Chattanooga-Hamilton County Library, 1001 Broad Street, Chattanooga, Tennessee 37402. A copy of Item (2) may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, DC, 20555, Attention: Document Control Desk.

Dated at Rockville, Maryland this 22nd day of August , 1991.

FOR THE NUCLEAR REGULATORY COMMISSION

Frederick J. Hebdon

Frederick J. Hebdon, Director
Project Directorate II-4
Division of Reactor Projects - I/II
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