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

September 10, 1987

SEE PROPOSED CHANGES TO TECH SPECS

Docket Nos. 50-327/328

Mr. S. A. White
Manager of Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. White:

SUBJECT: TECHNICAL SPECIFICATION CHANGE FOR SECTION 6 - ADMINISTRATIVE CONTROLS (TAC 00124, 00125, 00143, 00144)

Re: Sequoyah Nuclear Plant, Units 1 and 2

The Commission has issued the enclosed Amendment No. 58 to Facility Operating License No. DPR-77 and Amendment No. 50 to Facility Operating License No. DPR-79 for the Sequoyah Nuclear Plant, Units 1 and 2, respectively. These amendments are in response to the Tennessee Valley Authority (TVA), the licensee, application dated May 18, 1987 as supplemented by letter dated June 4, 1987. The May 18, 1987 submittal also withdrew all previous submittals for the Administrative Controls technical specifications.

The amendments revise Section 6, "Administrative Controls" for both units to reflect the new plant organization, a restructuring of the Independent Safety Engineering Group, and changes in the Plant Organization Review Committee responsibilities. These amendments are effective immediately and are to be fully implemented within 60 days from the date of this letter.

The proposed changes to Specifications 6.8.3, 6.8.3.a, and 6.8.3.b are denied so as to maintain full and complete review of intent changes to procedures. A Notice of Denial of Amendments to Facility Operating Licenses and Opportunity for Hearing has been forwarded to the Office of the Federal Register for publication.

Minor changes were made to proposed Specifications 6.5.1.7.a and 6.5.1A.1.b for consistency and to clarify the specifications. These changes were discussed between J. Donohew (NRC) and M. Burzynski (TVA) on September 4, 1987, and accepted by TVA.

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

Sincerely,

Original signed by:
Gerald E. Gears for

John A. Zwolinski, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Enclosures:
1. Amendment No. 58 to License No. DPR-77
2. Amendment No. 50 to License No. DPR-79
3. Safety Evaluation
4. Notice of Denial

cc w/enclosures:
See next page

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SEbneter	DHagan	BKSingh/MFields	LFMB
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8/12/87	8/12/87	8/12/87	8/14/87	8/26/87	9/10/87

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cc w/enclosures:
See next page

Mr. S. A. White
Tennessee Valley Authority

Sequoyah Nuclear Plant

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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. 58
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 May 18, 1987, supplemented by letter dated June 4, 1987, 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. 58 , 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 the date of issuance and shall be fully implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Gerald E Gary for

John A. Zwolinski, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 10, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 58

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.

REMOVE	INSERT
XVII	XVII
XVIII	XVIII
XIX	XIX
Section 6 in its entirety	New Section 6

INDEX

ADMINISTRATIVE CONTROLS

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 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 Director, shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

OFFSITE

6.2.1.1 The offsite organization for unit management and technical support shall be as shown in Figure 6.2-1.

UNIT STAFF

6.2.2 The Unit organization shall be as shown in Figure 6.2-2 and:

a. Each on-duty 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 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.

#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.

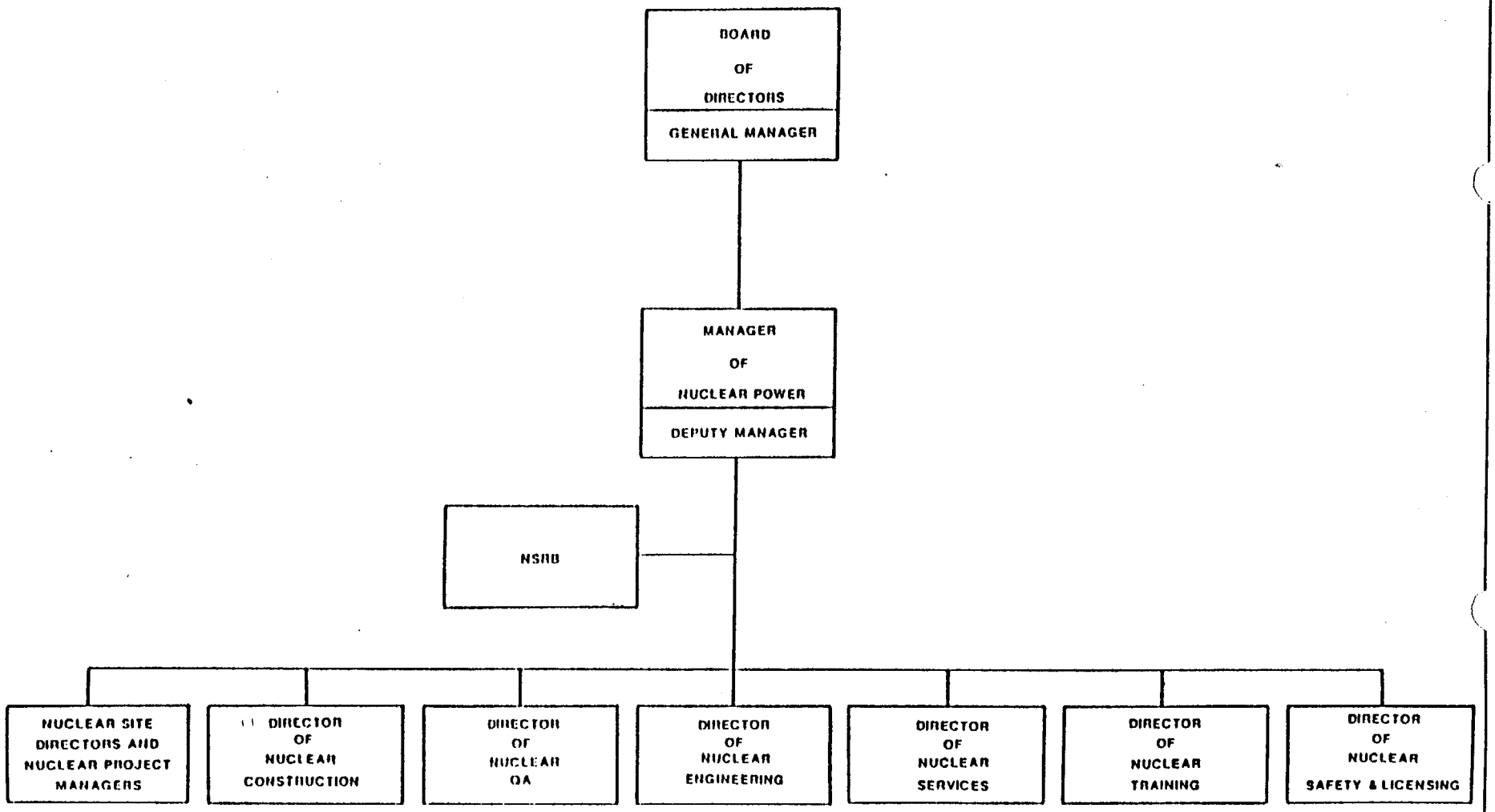


Figure 6.2-1 Offsite Organization for Facility Management and Technical Support

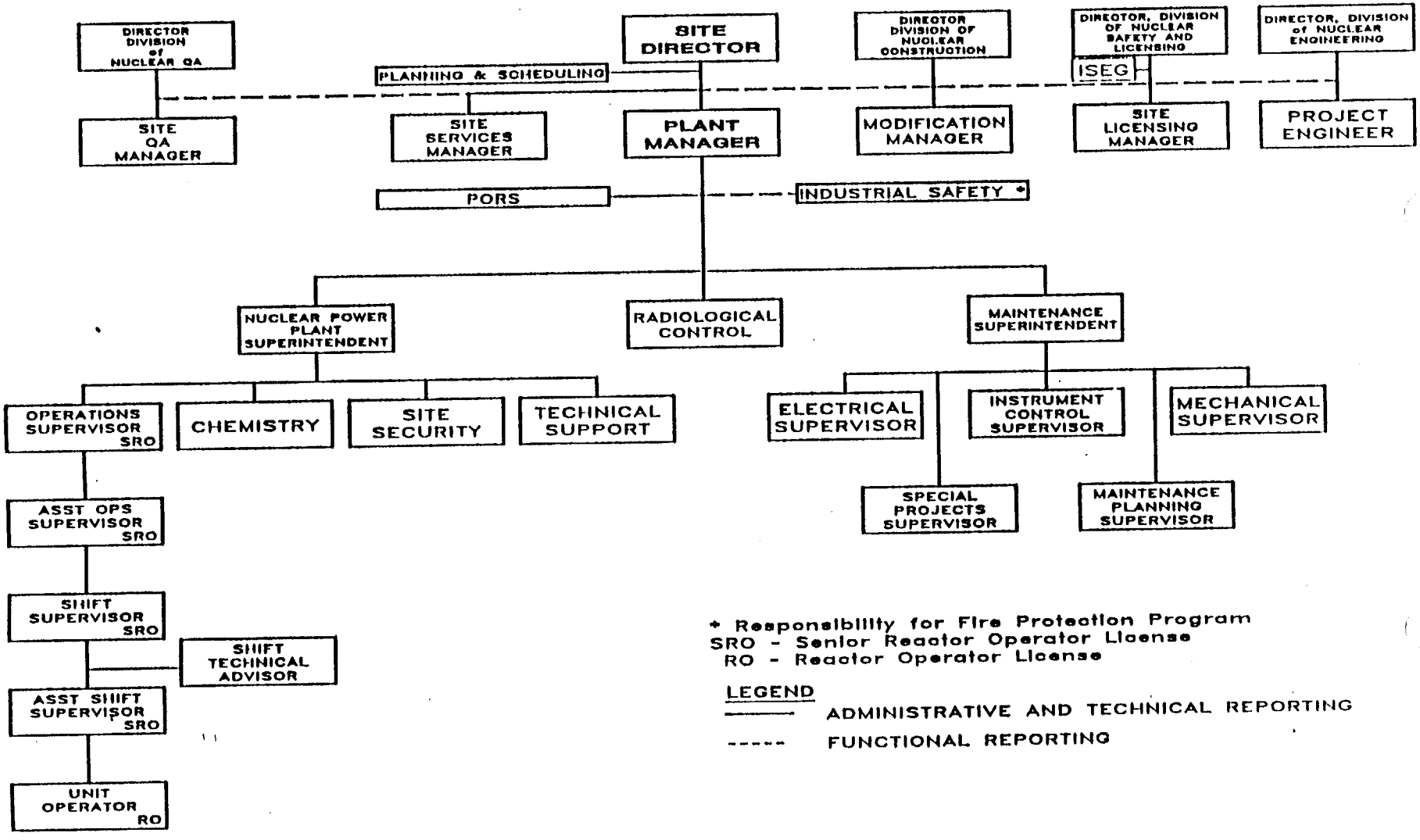


FIGURE 6.2-2

FACILITY ORGANIZATION - SEQUOYAH NUCLEAR PLANT

Table 6.2-1 Minimum shift crew composition

With Unit 2 in Mode 5 or 6 or De-fueled

Position	Number of individuals required to fill position	
	Modes 1, 2, 3, & 4	Modes 5 & 6
SS	1[a]	1[a]
SRO	1	None
RO	2	1
AO	2	2[b]
STA	1	None

With Unit 2 in Modes 1, 2, 3, or 4

Postion	Number of individuals required to fill position	
	Modes 1, 2, 3, & 4	Modes 5 & 6
SS	1[a]	1[a]
SRO	1[a]	None
RO	2[b]	1
AO	2[b]	1
STA	1[a]	None

[a]Individual may fill the same position on Unit 2.

[b]One of the two required individuals may fill the same position on Unit 2.

SS - Shift Supervisor with a Senior Reactor Operators License on Unit 1
SRO - Individual with a Senior Reactor Operators License on Unit 1
RO - Individual with a Reactor Operators License on Unit 1
AO - Auxiliary Operator
STA - Shift Technical Advisor

Except for the Shift Supervisor, the Shift Crew Composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the Control Room while the unit is in MODE 1, 2, 3 or 4, an individual (other than the Shift Technical Advisor) with a valid SRO license shall be designated to assume the Control Room command function. During any absence of the Shift Supervisor from the Control Room while the Unit is in Mode 5 or 6, an individual with a valid SRO or RO license (other than the Shift Technical Advisor) shall be designated to assume the Control Room command function.

6.2.3 INDEPENDENT SAFETY ENGINEERING GROUP (ISEG)

FUNCTION

6.2.3.1 The ISEG 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 ISEG shall be composed of at least 3 dedicated full-time engineers located onsite. These engineers will be supplemented by 2 full-time engineers shared among all TVA nuclear sites.

RESPONSIBILITIES

6.2.3.3 The ISEG 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 ISEG shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving plant safety to the Director of Nuclear Safety and Licensing.

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 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit 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 Superintendent 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 unit staff shall be maintained under the direction of the Nuclear Power Plant (NPP) Superintendent 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 Manager of Nuclear Power is responsible for the safe operation of all TVA power plants. The functional organization for Review and Audit is shown on Figure 6.2-1.

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:	Superintendent (NPP or Maintenance)
Member:	Operations Group Manager or Assistant Operations Group Manager
Member:	Site Radiological Control Superintendent
Member:	Maintenance Group Manager (I), (E), or (M)
Member:	Technical Support Services Group Manager
Member:	Quality Engineering and Control Manager

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 Director 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 Director 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 Director 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 or Site Director as appropriate. The Site Director, Plant Manager, NPP Superintendent, or Maintenance Superintendent shall approve designated Administrative Procedures.

b. Workplans used to implement 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 and the implementing workplans shall be approved prior to implementation by the Plant Manager, NPP Superintendent, or Maintenance Superintendent.

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 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 the Office of 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 Manager of 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 unit 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 Manager of 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 Manager of 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 Manager of 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 Manager of 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 Manager of 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 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 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 Manager of Nuclear Power and the Nuclear Safety Review Board of disagreement between the SQN RARC and the Manager of Radiological Control; however, the 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 Manager of 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 Director.

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 Director 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 Director 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.

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.

h. Quality Assurance Program for effluent monitoring, using the guidance contained in Regulatory Guide 4.15, December 1977, or Regulatory Guide 1.21, Rev. 1, 1974 and Regulatory Guide 4.1, Rev. 1, 1975.

6.8.2 Each procedure of 6.8.1 above, and changes thereto, shall be reviewed and approved prior to implementation as set forth in Specification 6.5.1A above.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

a. The intent of the original procedure is not altered.

b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected.

c. The change is approved in accordance with Specification 6.5.1A above within 14 days of implementation.

6.8.4 Written procedures shall be established, implemented and maintained by Radiological Control covering the activities below:

a. OFFSITE DOSE CALCULATIONAL MANUAL implementation.

b. Quality Assurance Program for environmental monitoring, using the guidance contained in Regulatory Guide 4.15, December 1977.

c. Surveillance requirements and environmental monitoring requirements shown in Table 6.1-1.

6.8.5 The following programs shall be established, implemented, maintained, and changes thereto made in accordance with Section 6.5.1A:

a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The

systems include the charging system, safety injection system, residual heat removal system, chemical and volume control system, containment spray system, iodine cleanup system, and hydrogen recombiner system. The program shall include the following:

(i) Preventive maintenance and periodic visual inspection requirements, and

(ii) Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentrations in vital areas under accident conditions. This program shall include the following:

(i) Training of personnel,

(ii) Procedures for monitoring, and

(iii) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

(i) Identification of a sampling schedule for the critical variables and control points for these variables,

(ii) Identification of the procedures used to measure the values of the critical variables,

(iii) Identification of process sampling points,

(iv) Procedures for the recording and management of data,

(v) Procedures defining corrective actions for off-control point chemistry conditions,

(vi) Procedures identifying (a) the authority responsible for the interpretation of the data; and (b) the sequence and timing of administrative events required to initiate corrective action, and

(vii) Monitoring of the condensate at the discharge of the condensate pumps for evidence of condenser in-leakage. When condenser in-leakage is confirmed, the leak shall be repaired, plugged, or isolated within 96 hours.

d. Backup Method for Determining Subcooling Margin

A program which will ensure the capability to accurately monitor the Reactor Coolant System Subcooling Margin. This program shall include the following:

(i) Training of personnel, and

(ii) Procedures for monitoring.

e. Postaccident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

(i) Training of personnel,
(ii) Procedures for sampling and analysis,
(iii) Provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Director of the Regional Office of Inspection and Enforcement unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

ANNUAL REPORTS[1/]

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

6.9.1.5 Reports required on an annual basis shall include a tabulation on an annual basis for the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions,[2/] e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT[3/]

6.9.1.6 The radiological environmental operating reports covering the operation of the unit during the previous calendar year shall be submitted prior to May 1 of each year.

6.9.1.7 The annual radiological environmental operating reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparision with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of land use censuses required by Specification 3.12.2 and a listing of the new locations for dose calculations and/or environmental monitoring identified by the land use census. If harmful effects or evidence of irreversible damage are detected by the monitoring, the report shall provide an analysis of the problems and a planned course of action to alleviate the problem.

1/ A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

2/ This tabulation supplements the requirements of § 20.407 of 10 CFR Part 20.

3/ A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

The annual radiological environmental operating reports shall include summarized and tabulated results in the format of Regulatory Guide 4.8, December 1975 of all radiological environmental samples taken during the report period. In the event that some results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: a summary description of the radiological environmental monitoring program; a map of all sampling locations keyed to a table giving distances and directions from one reactor; and the results of licensee participation in the Interlaboratory Comparison Program, required by Specification 3.12.3.

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT[1/]

6.9.1.8 The semiannual radioactive effluent release report covering the operation of the unit during the previous 6 months of operation shall be submitted within 60 days after January 1 and July 1 of each year. The period of the first report shall begin with the date of initial criticality.

6.9.1.9 Semiannual radioactive effluent release reports shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit as outlined in Regulatory Guide 1.21, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," Revision 1, June 1974, with data summarized on a quarterly basis following the format of Appendix B thereof.

The annual radioactive effluent release report (Radiological Impact) to be submitted 60 days after January 1 of each year shall include an annual summary of hourly meteorological data collected over the previous year. This annual summary may be either in the form of an hour-by-hour listing of wind speed, wind direction, atmospheric stability, and precipitation (if measured) on magnetic tape, or in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability.* This same report shall include an assessment of the radiation doses due to the radioactive liquid and gaseous effluents released from the unit or station during the previous calendar year. This same report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to members of the public due to their activities inside the site boundary (Figure 5.1-1) during the report period. All assumptions used in making these assessments (i.e., specific activity, exposure time and location) shall be included in these reports. The meteorological conditions concurrent with the time of release of radioactive materials in gaseous effluents (as

1/ A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

*In lieu of submission with the annual radioactive effluent release report, this summary of required meteorological data may be retained on site in a file that shall be provided to NRC upon request.

determined by sampling frequency and measurement) shall be used for determining the gaseous pathway doses. The assessment of radiation doses shall be performed in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM).

The annual radioactive effluent release report to be submitted after January 1 of each year shall also include an assessment of radiation doses to the likely most exposed members of the public from reactor releases and other nearby uranium fuel cycle sources (including doses from primary effluent pathways and direct radiation) for the previous calendar year to show conformance with 40 CFR 190, Environmental Radiation Protection Standards for Nuclear Power Operation. Acceptable methods for calculating the dose contribution from liquid and gaseous effluents are given in Regulatory Guide 1.109, Rev. 1.

The semiannual radioactive effluent release reports shall include the following information for each type of solid waste identified in Regulatory Guide 1.21, Rev. 1, Table 3, Part A, which is shipped offsite during the report period:

a. Total volume of containers,

b. Total curie quantity (specify whether determined by measurement or estimate),

c. Principal radionuclides (specify whether determined by measurement or estimate),

d. Type of quantity (e.g., LSA, Type A, Type B, etc.)

The semiannual radioactive effluent release reports shall include unplanned releases from the site to unrestricted areas of radioactive materials in gaseous and liquid effluents on a quarterly basis and shall include any changes to the PROCESS CONTROL PROGRAM (PCP) and the Offsite Dose Calculation Manual (ODCM) made during the reporting period. It shall include the type of solidification agent used, if applicable.

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 to the Director, Office of Management and Program Analysis, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Office of Inspection and Enforcement, no later than the 15th of each month following the calendar month covered by the report.

Any changes to the OFFSITE DOSE CALCULATION MANUAL shall be submitted with the Monthly Operating Report within 90 days in which the change(s) was made effective. In addition, a report of any major changes to the radioactive waste treatment systems shall be submitted with the Monthly Operating Report for the period in which the evaluation was reviewed and accepted by the PORC.

RADIAL PEAKING FACTOR LIMIT REPORT

6.9.1.14 The W(z) function for normal operation shall be provided to the Director, Nuclear Reactor Regulation, Attention, Chief of the Core Performance Branch, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 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 to the Director of the Office of Inspection and Enforcement Regional Office within the time period specified for each report.

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

A supplemental report shall be prepared within 30 days after each subsequent failure during a valid demand for so long as the affected diesel generator unit continues to violate the criteria (3/20 or 6/100) for the reliability improvement program remedial action. The supplemental report need only update the failure/demand history for the affected diesel generator unit since the last report for that diesel generator. The supplemental report shall also present an analysis of the failure(s) with a root cause determination, if possible, and shall delineate any further procedural, hardware or operational changes to be incorporated into the diesel generator improvement program and the schedule for implementation of those changes.

Diesel Generator Reliability Improvement Program (Continued)

In addition to the above, submit a yearly data report on the diesel generator reliability.

6.10 RECORD RETENTION

In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

6.10.1 The following records shall be retained for at least five years:

a. Records and logs of unit operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

c. All REPORTABLE EVENTS submitted to the Commission.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

e. Records of changes made to the procedures required by Specification 6.8.1 and 6.8.4.

f. Records of radioactive shipments.

g. Records of sealed source and fission detector leak tests and results.

h. Records of annual physical inventory of all sealed source material of record.

6.10.2 The following records shall be retained for the duration of the Unit Operating License:

a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of radiation exposure for all individuals entering radiation control areas.

d. Records of gaseous and liquid radioactive material released to the environs.

e. Records of transient or operational cycles for those unit components identified in Table 5.7-1.

f. Records of reactor tests and experiments.

g. Records of training and qualification for current members of the unit staff.

h. Records of in-service inspections performed pursuant to these Technical Specifications.

i. Records of Quality Assurance activities required for lifetime retention by the Nuclear Quality Assurance Manual.

j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

k. Records of meetings of the PORC, SQN RARC, and the NSRB.

l. Records of analyses required by the radiological environmental monitoring program.

m. Records of secondary water sampling and water quality.

n. Records of the service life monitoring of all safety-related hydraulic and mechanical snubbers, required by T/S 3.7.9, including the maintenance performed to renew the service life.

o. Records for Environmental Qualification which are covered under the provisions of Paragraph 2.c.(12)(b) of License No. DPR-77.

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 Superintendent 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 Superintendent.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Licensee initiated changes to the PCP:

1. Shall be submitted to the Commission in the semi-annual Radioactive Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:

   a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information,

*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.

b. a determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and

c. documentation of the fact that the change has been reviewed and found acceptable in accordance with Section 6.5.1A.

2. Shall become effective upon review and approval in accordance with Section 6.5.1A.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 The ODCM shall be approved by the Commission prior to implementation.

6.14.2 Licensee initiated changes to the ODCM:

1. Shall be submitted to the Commission in the next Semi-Annual Radioactive Effluent Release Report pursuant to Specification 6.9.1.9. This submittal shall contain:

a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consistent of a package of those pages of the ODCM to be changes with each page numbered and provided with an approval and date box, together with appropriate analyses or evaluations justifying the change(s);

b. a determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and

c. documentation of the fact that the change has been reviewed and found acceptable by the SQN RARC.

2. Shall become effective upon review and acceptance by the SQN RARC.

6.15 MAJOR CHANGES TO RADIOACTIVE WASTE TREATMENT SYSTEMS (Liquid, Gaseous and Solid)

6.15.1 Licensee initiated major changes to the radioactive waste systems (liquid, gaseous and solid):*

1. Shall be reported to the Commission in the Semi-Annual Radioactive Effluent Release Report for the period in which the evaluation was reviewed in accordance with Section 6.5.1A. The discussion of each change shall contain:

a. A summary of the evaluation that led to the determination that the change could be made in accordance with 10 CFR 50.59;

*Submittal of information required by this section may be made as part of the annual FSAR update.

b. sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information;

c. a detailed description of the equipment, components and processes involved and the interfaces with other plant systems;

d. an evaluation for the change which shows the predicted releases of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the license application and amendments thereto;

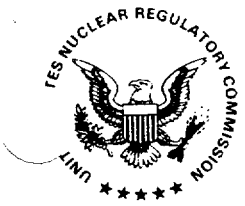
e. an evaluation of the change which shows the expected maximum exposures to individual in the unrestricted area and to the general population that differ from those previously estimated in the license application and amendments thereto;

f. a comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;

g. an estimate of the exposure to plant operating personnel as a result of the change; and

h. documentation of the fact that the change was reviewed and found acceptable in accordance with Section 6.5.1A.

2. Shall become effective upon review and acceptance in accordance with Section 6.5.1A.



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. 50
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 May 18, 1987, as supplemented by letter dated June 4, 1987, 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. 50 , 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 the date of issuance and shall be fully implemented within 60 days from the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Harold E Gaines for

John A. Zwolinski, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: September 10, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 50

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.

REMOVE	INSERT
XVII	XVII
XVIII	XVIII
XIX	XIX
Section 6 in its entirety	New Section 6

INDEX

ADMINISTRATIVE CONTROLS

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 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 Director shall be reissued to all station personnel on an annual basis.

6.2 ORGANIZATION

OFFSITE

6.2.1.1 The offsite organization for unit management and technical support shall be as shown on Figure 6.2-1.

UNIT STAFF

6.2.2 The Unit organization shall be as shown on Figure 6.2-2 and:

a. Each on duty 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 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.

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.

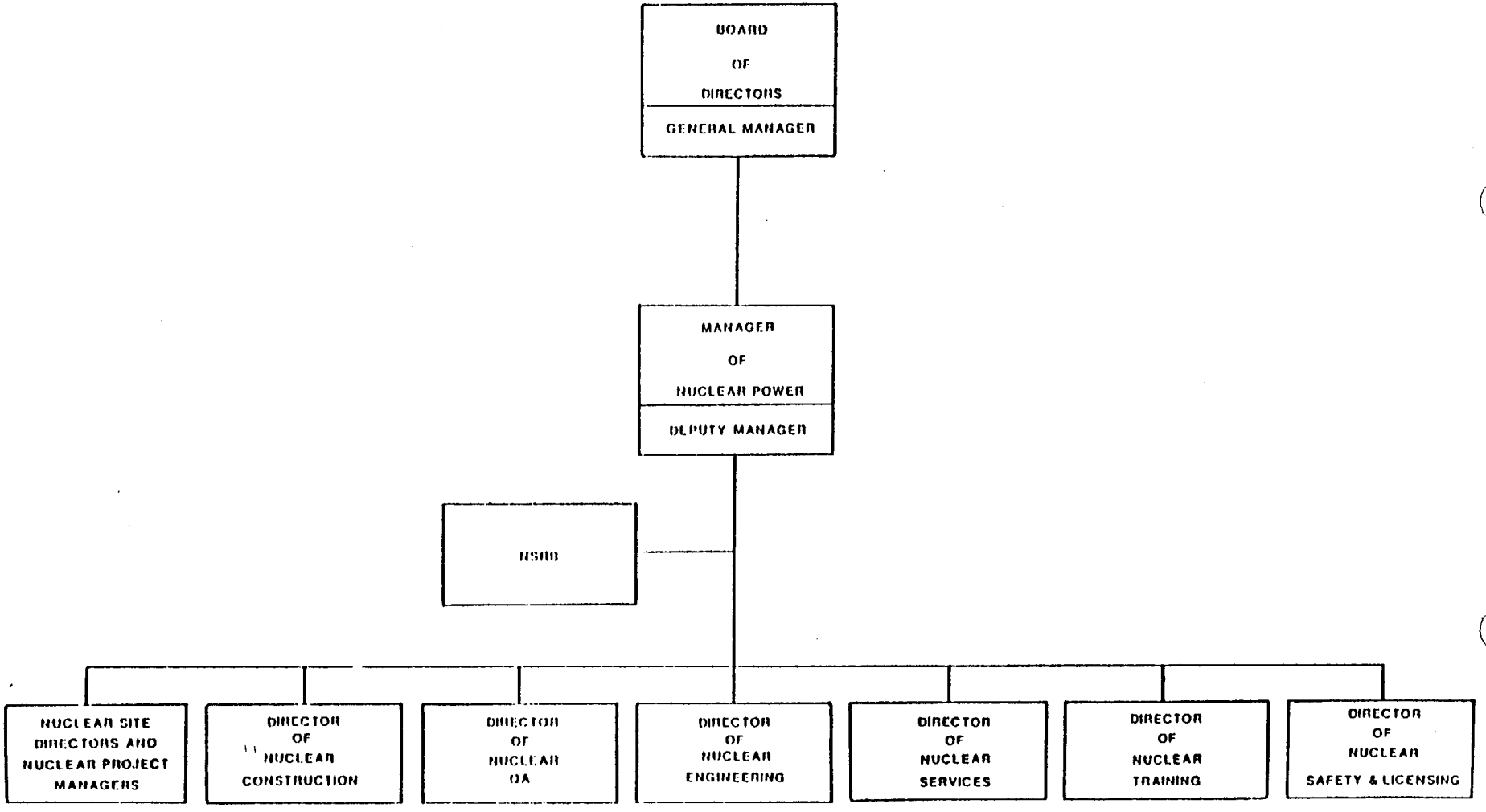


FIGURE 6.2-1 OFFISTE ORGANIZATION FOR FACILITY MANAGEMENT AND TECHNICAL SUPPORT

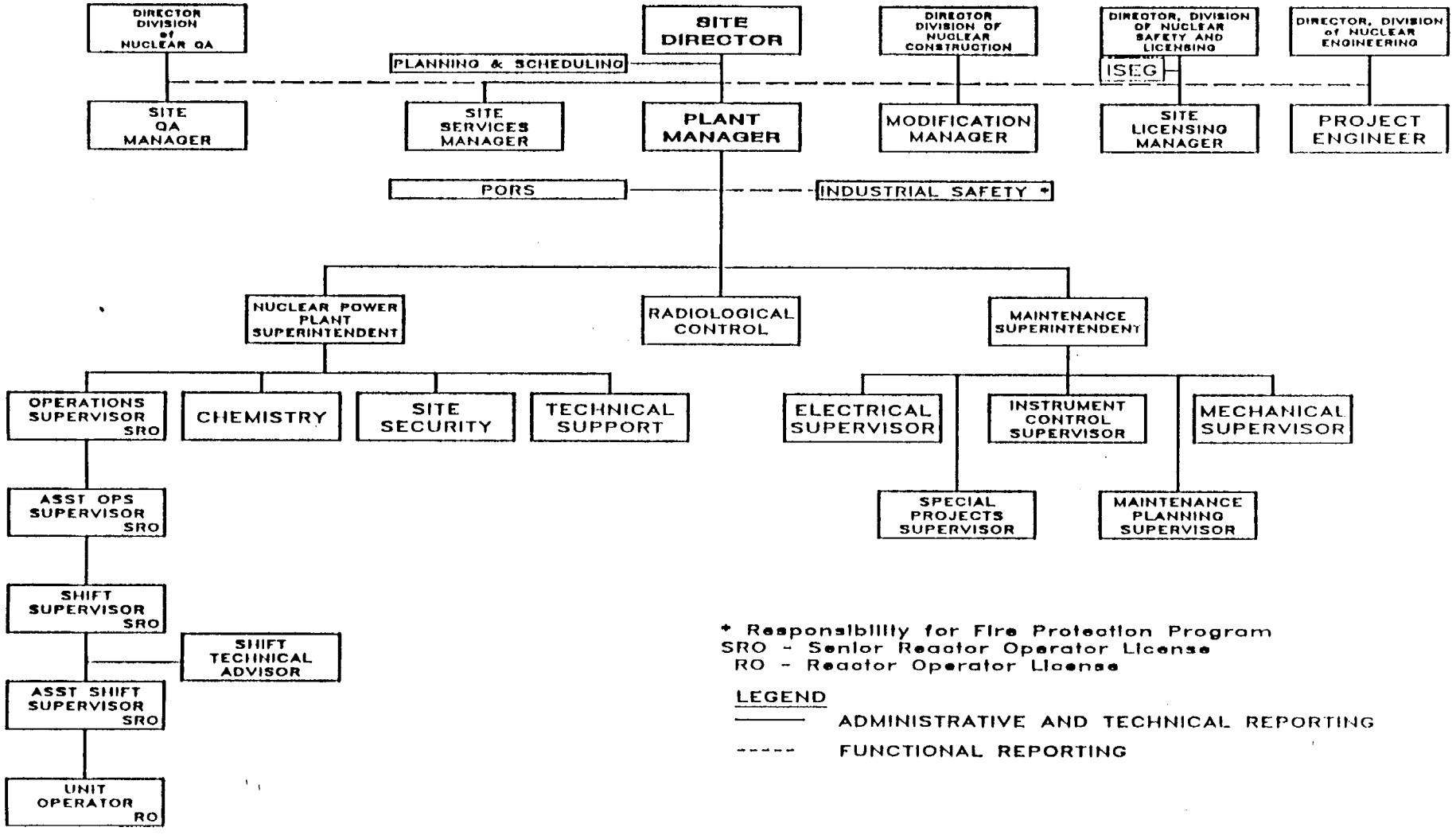


FIGURE 6.2-2
FACILITY ORGANIZATION - SEQUOYAH NUCLEAR PLANT

TABLE 6.2-1

MINIMUM SHIFT CREW COMPOSITION

WITH UNIT 1 IN MODE 5 OR 6 OR DE-FUELED

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	MODES 1, 2, 3 & 4	MODES 5 & 6
SS	1[a]	1[a]
SRO	1	None
RO	2	1[b]
AO	2	2[b]
STA	1	None

WITH UNIT 1 IN MODES 1, 2, 3 OR 4

POSITION	NUMBER OF INDIVIDUALS REQUIRED TO FILL POSITION	
	MODES 1, 2, 3 & 4	MODES 5 & 6
SS	1[a]	1[a]
SRO	1[a]	None
RO	2[b]	1
AO	2[b]	1
STA	1[a]	None

a/ Individual may fill the same position on Unit 1.

b/ One of the two required individuals may fill the same position on Unit 1.

TABLE 6.2-1 (Continued)

TABLE NOTATION

SS - Shift Supervisor with a Senior Reactor Operators License on Unit 2
SRO - Individual with a Senior Reactor Operators License on Unit 2
RO - Individual with a Reactor Operators License on Unit 2
AO - Auxiliary Operator
STA - Shift Technical Advisor

Except for the Shift Supervisor, the Shift Crew Composition may be one less than the minimum requirements of Table 6.2-1 for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on-duty shift crew members provided immediate action is taken to restore the Shift Crew Composition to within the minimum requirements of Table 6.2-1. This provision does not permit any shift crew position to be unmanned upon shift change due to an oncoming shift crewman being late or absent.

During any absence of the Shift Supervisor from the Control Room while the unit is in MODES 1, 2, 3 or 4, an individual (other than the Shift Technical Advisor) with a valid SRO license shall be designated to assume the Control Room command function. During an absence of the Shift Supervisor from the Control Room while the unit is in MODE 5 or 6, an individual with a valid SRO or RO license (other than the Shift Technical Advisor) shall be designated to assume the Control Room command function.

6.2.3 INDEPENDENT SAFETY ENGINEERING GROUP (ISEG)

FUNCTION

6.2.3.1 The ISEG 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 ISEG shall be composed of at least 3 dedicated full-time engineers located onsite. These engineers will be supplemented by 2 full-time engineers shared among all TVA nuclear sites.

RESPONSIBILITIES

6.2.3.3 The ISEG 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 ISEG shall make detailed recommendations for revised procedures, equipment modifications, or other means of improving plant safety to the Director of Nuclear Safety and Licensing.

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 UNIT STAFF QUALIFICATIONS

6.3.1 Each member of the unit 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 Superintendent 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 unit staff shall be maintained under the direction of the Nuclear Power Plant (NPP) Superintendent 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 Manager of Nuclear Power is responsible for the safe operation of all TVA power plants. The functional organization for Review and Audit is shown on Figure 6.2-1.

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:	Superintendent (NPP or Maintenance)
Member:	Operations Group Manager or Assistant Operations Group Manager
Member:	Site Radiological Control Superintendent
Member:	Maintenance Group Manager, (I), (E) or (M)
Member:	Technical Support Services Group Manager
Member:	Quality Engineering and Control Manager

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 Director 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 Director 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 Director 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 or Site Director as appropriate. The Site Director, Plant Manager, NPP Superintendent, or Maintenance Superintendent shall approve designated Administrative Procedures.

b. Workplans used to implement 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 and the implementing workplans shall be approved prior to implementation by the Plant Manager, NPP Superintendent, or Maintenance Superintendent.

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 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 the Office of 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 Manager of 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 unit 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 Manager of 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 Manager of 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 Manager of 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 Manager of 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 Manager of 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 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 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 Manager of Nuclear Power and the Nuclear Safety Review Board of disagreement between the SQN RARC and the Manager of Radiological Control; however, the 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 Manager of 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 Director.

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 Director 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 Director 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.

h. Quality Assurance Program for effluent monitoring, using the guidance contained in Regulatory Guide 4.15, December 1977 or Regulatory Guide 1.21, Rev. 1, 1974 and Regulatory Guide 4.1, Rev. 1, 1975.

6.8.2 Each procedure of 6.8.1 above, and changes thereto, shall be reviewed and approved prior to implementation as set forth in Specification 6.5.1A above.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

a. The intent of the original procedure is not altered.

b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected.

c. The change is approved in accordance with Specification 6.5.1A above within 14 days of implementation.

6.8.4 Written procedures shall be established, implemented and maintained by Radiological Control covering the activities below:

a. OFFSITE DOSE CALCULATIONAL MANUAL implementation.

b. Quality Assurance Program and environmental monitoring, using the guidance contained in Regulatory Guide 4.15, December 1977.

c. Surveillance requirements and environmental monitoring requirements shown in Table 6.1-1.

6.8.5 The following programs shall be established, implemented, maintained, and changes thereto made in accordance with Section 6.5.1A:

a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the safety injection system, residual heat removal system, chemical and volume control system, containment spray system, and RCS sampling system. The program shall include the following:

(i) Preventive maintenance and periodic visual inspection requirements, and

(ii) Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentrations in vital areas under accident conditions. This program shall include the following:

(i) Training of personnel,

(ii) Procedures for monitoring, and

(iii) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

(i) Identification of a sampling schedule for the critical variables and control points for these variables,

(ii) Identification of the procedures used to measure the values of the critical variables,

(iii) Identification of process sampling points,

(iv) Procedures for the recording and management of data,

(v) Procedures defining corrective actions for off-control point chemistry conditions,

(vi) Procedures identifying (a) the authority responsible for the interpretation of the data; and (b) the sequence and timing of administrative events required to initiate corrective action, and

(vii) Monitoring of the condensate at the discharge of the condensate pumps for evidence of condenser in-leakage. When condenser in-leakage is confirmed, the leak shall be repaired, plugged, or isolated.

d. Backup Method for Determining Subcooling Margin

A program which will ensure the capability to accurately monitor the Reactor Coolant System Subcooling Margin. This program shall include the following:

(i) Training of personnel, and

(ii) Procedures for monitoring.

e. Postaccident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

(i) Training of personnel,
(ii) Procedures for sampling and analysis,
(iii) Provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Director of the Regional Office of Inspection and Enforcement unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an operating license, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup reports shall be submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of startup test program, and resumption or commencement of commercial power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

ANNUAL REPORTS[1/]

6.9.1.4 Annual reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

6.9.1.5 Reports required on an annual basis shall include a tabulation on an annual basis for the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions,[2/] e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

ANNUAL RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT[3/]

6.9.1.6 The radiological environmental operating report covering the operation of the unit during the previous calendar year shall be submitted prior to May 1 of each year.

6.9.1.7 The annual radiological environmental operating reports shall include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. The reports shall also include the results of land use censuses required by Specification 3.12.2, and a listing of the new locations for dose calculations and/or environmental monitoring identified by the land use census. If harmful effects or evidence of irreversible damage are detected by the monitoring, the report shall provide an analysis of the problems and a planned course of action to alleviate the problem.

1/ A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

2/ This tabulation supplements the requirements of § 20.407 of 10 CFR Part 20.

3/ A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

The annual radiological environmental operating reports shall include summarized and tabulated results in the format of Regulatory Guide 4.8, December 1975 of all radiological environmental samples taken during the report period. In the event that some results are not available for inclusion with the report, the report shall be submitted noting and explaining the reasons for the missing results. The missing data shall be submitted as soon as possible in a supplementary report.

The reports shall also include the following: a summary description of the radiological environmental monitoring program; a map of all sampling locations keyed to a table giving distances and directions from one reactor; and the results of licensee participation in the Interlaboratory Comparison Program, required by Specification 3.12.3.

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT[1/]

6.9.1.8 The semiannual radioactive effluent release report covering the operation of the unit during the previous 6 months of operation shall be submitted within 60 days after January 1 and July 1 of each year. The period of the first report shall begin with the date of initial criticality.

6.9.1.9 Semiannual radioactive effluent release reports shall include a summary of the quantities of radioactive liquid and gaseous effluents and solid waste released from the unit as outlined in Regulatory Guide 1.21, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," Revision 1, June 1974, with data summarized on a quarterly basis following the format of Appendix B thereof.

The annual radioactive effluent release report (Radiological Impact) to be submitted 60 days after January 1 of each year shall include an annual summary of hourly meteorological data collected over the previous year. This annual summary may be either in the form of an hour-by-hour listing of wind speed, wind direction, atmospheric stability, and precipitation (if measured) on magnetic tape, or in the form of joint frequency distributions of wind speed, wind direction, and atmospheric stability.* This same report shall include an assessment of the radiation doses due to the radioactive liquid and gaseous effluents released from the unit or station during the previous calendar year. This same report shall also include an assessment of the radiation doses from radioactive liquid and gaseous effluents to members of the public due to their activities inside the site boundary (Figure 5.1-1) during the report period. All assumptions used in making these assessments (i.e., specific activity,

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1/ A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station; however, for units with separate radwaste systems, the submittal shall specify the releases of radioactive material from each unit.

* In lieu of submission with the annual radioactive effluent release report this summary of required meteorological data may be retained on site in a file that shall be provided the NRC upon request.

exposure time and location) shall be included in these reports. The meteorological conditions concurrent with the time of release of radioactive materials in gaseous effluents (as determined by sampling frequency and measurement) shall be used for determining the gaseous pathway doses. The assessment of radiation doses shall be performed in accordance with the OFFSITE DOSE CALCULATION MANUAL (ODCM).

The annual radioactive effluent release report to be submitted after January 1 of each year shall also include an assessment of radiation doses to the likely most exposed members of the public from reactor releases and other nearby uranium fuel cycle sources (including doses from primary effluent pathways and direct radiation) for the previous calendar year to show conformance with 40 CFR 190, Environmental Radiation Protection Standards for Nuclear Power Operation. Acceptable methods for calculating the dose contribution from liquid and gaseous effluents are given in Regulatory Guide 1.109, Rev. 1.

The semiannual radioactive effluent release reports shall include the following information for each type of solid waste identified in Regulatory Guide 1.21, Rev. 1, Table 3, Part A, which is shipped offsite during the report period:

a. Total volume of containers,

b. Total curie quantity (specify whether determined by measurement or estimate),

c. Principal radionuclides (specify whether determined by measurement or estimate),

d. Type of quantity (e.g., LSA, Type A, Type B, etc.)

The semiannual radioactive effluent release reports shall include unplanned releases from the site to unrestricted areas of radioactive materials in gaseous and liquid effluents on a quarterly basis, and shall include any changes to the PROCESS CONTROL PROGRAM (PCP) and the Offsite Dose Calculation Manual (ODCM) made during the reporting period. It shall include the type of solidification agent used, if applicable.

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 to the Director, Office of Management and Program Analysis, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Office of Inspection and Enforcement, no later than the 15th of each month following the calendar month covered by the report.

Any changes to the OFFSITE DOSE CALCULATION MANUAL shall be submitted with the Monthly Operating Report within 90 days in which the change(s) was made effective. In addition, a report of any major changes to the radioactive waste treatment systems shall be submitted with the Monthly Operating Report for the period in which the evaluation was reviewed and accepted by the PORC.

RADIAL PEAKING FACTOR LIMIT REPORT

6.9.1.14 The W(z) function for normal operation shall be provided to the Director, Nuclear Reactor Regulation, Attention, Chief of the Core Performance Branch, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 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 to the Director of the Office of Inspection and Enforcement Regional Office within the time period specified for each report.

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

A supplemental report shall be prepared within 30 days after each subsequent failure during a valid demand for so long as the affected diesel generator unit continues to violate the criteria (3/20 or 6/100) for the reliability improvement program remedial action. The supplemental report need only update the failure/demand history for the affected diesel generator unit since the last report for that diesel generator. The supplemental report shall also present an analysis of the failure(s) with a root cause determination, if possible, and shall delineate any further procedural, hardware or operational changes to be incorporated into the diesel generator improvement program and the schedule for implementation of those changes.

Diesel Generator Reliability Improvement Program (Continued)

In addition to the above, submit a yearly data report on the diesel generator reliability.

6.10 RECORD RETENTION

In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.

6.10.1 The following records shall be retained for at least five years:

a. Records and logs of unit operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

c. All REPORTABLE EVENTS submitted to the Commission.

d. Records of surveillance activities, inspections and calibrations required by these Technical Specifications.

e. Records of changes made to the procedures required by Specification 6.8.1 and 6.8.4.

f. Records of radioactive shipments.

g. Records of sealed source and fission detector leak tests and results.

h. Records of annual physical inventory of all sealed source material of record.

6.10.2 The following records shall be retained for the duration of the Unit Operating License:

a. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of radiation exposure for all individuals entering radiation control areas.

d. Records of gaseous and liquid radioactive material released to the environs.

e. Records of transient or operational cycles for those unit components identified in Table 5.7-1.

f. Records of reactor tests and experiments.

g. Records of training and qualification for current members of the unit staff.

h. Records of in-service inspections performed pursuant to these Technical Specifications.

i. Records of Quality Assurance activities required for lifetime retention by the Nuclear Quality Assurance Manual.

j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

k. Records of meetings of the PORC, SQN RARC, and the NSRB.

l. Records of analyses required by the radiological environmental monitoring program.

6.10.2 (Continued)

m. Records of secondary water sampling and water quality.

n. Records of the service life monitoring of all safety-related hydraulic and mechanical snubbers, required by T/S 3.7.9, including the maintenance performed to renew the service life.

o. Records for environmental qualification which are covered under the provisions of paragraph 2.C.(10)(b) of license No. DPR-79.

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 Superintendent in the Special (Radiation) Work Permit.

*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.

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 Superintendent.

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Licensee initiated changes to the PCP:

1. Shall be submitted to the Commission in the semi-annual Radioactive Effluent Release Report for the period in which the change(s) was made. This submittal shall contain:

   a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information,

   b. a determination that the change did not reduce the overall conformance of the solidified waste product to existing criteria for solid wastes; and

   c. documentation of the fact that the change has been reviewed and found acceptable in accordance with Section 6.5.1A.

2. Shall become effective upon review and approval in accordance with Section 6.5.1A.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 The ODCM shall be approved by the Commission prior to implementation.

6.14.2 Licensee initiated changes to the ODCM:

1. Shall be submitted to the Commission in the next Semi-Annual Radioactive Effluent Release Report pursuant to Specification 6.9.1.9. This submittal shall contain:

   a. sufficiently detailed information to totally support the rationale for the change without benefit of additional or supplemental information. Information submitted should consistent of a package of those pages of the ODCM to be changes with each page numbered and provided with an approval and date box, together with appropriate analyses or evaluations justifying the change(s);

   b. a determination that the change will not reduce the accuracy or reliability of dose calculations or setpoint determinations; and

   c. documentation of the fact that the change has been reviewed and found acceptable by the SQN RARC.

2. Shall become effective upon review and acceptance by the SQN RARC.

6.15 MAJOR CHANGES TO RADIOACTIVE WASTE TREATMENT SYSTEMS (Liquid, Gaseous and Solid)

6.15.1 Licensee initiated major changes to the radioactive waste systems (liquid, gaseous and solid):*

1. Shall be reported to the Commission in the Semi-Annual Radioactive Effluent Report for the period in which the evaluation was reviewed in accordance with Section 6.5.1A. The discussion of each change shall contain:

   a. A summary of the evaluation that led to the determination that the change could be made in accordance with 10 CFR 50.59;

   b. sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information;

   c. a detailed description of the equipment, components and processes involved and the interfaces with other plant systems;

   d. an evaluation for the change which shows the predicted releases of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the license application and amendments thereto;

   e. an evaluation of the change which shows the expected maximum exposures to individual in the unrestricted area and to the general population that differ from those previously estimated in the license application and amendments thereto;

   f. a comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and in solid waste, to the actual releases for the period prior to when the changes are to be made;

   g. an estimate of the exposure to plant operating personnel as a result of the change; and

   h. documentation of the fact that the change was reviewed and found acceptable in accordance with Section 6.5.1A.

2. Shall become effective upon review and acceptance in accordance with Section 6.5.1A.

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* Submittal of information required by this section may be made as part of the annual FSAR update.

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

SAFETY EVALUATION BY THE OFFICE OF SPECIAL PROJECTS

SUPPORTING AMENDMENT NO. 58 TO FACILITY OPERATING LICENSE NO. DPR-77

AND AMENDMENT NO. 50 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 May 18, 1987, as supplemented June 4, 1987, Tennessee Valley Authority (TVA, the licensee) requested amendments to the Administrative Controls Section (Section 6) of the Technical Specifications (TS) for Sequoyah Nuclear Plant, (SQNP) Units 1 and 2. The proposed TS changes include: (1) an update of Section 6 to reflect the new onsite and offsite organizational structure being implemented for SQNP, (2) changes to the Plant Operations Review Committee (PORC) to delete several review responsibilities and replace them with an "independent qualified review," (3) changes to the composition of the Independent Safety Engineering Group (ISEG), (4) changes to the titles of the members of the Radiological Assessment Review Committee (RARC) and (5) deletion of the Shift Supervisor as a member of the fire brigade for Unit 1. The May 18, 1987 submittal also withdrew all previous submittals for the Administrative Controls technical specifications (References 1 through 7 of May 18, 1987 letter).

2.0 EVALUATION

2.1 Specification 6.1, Responsibility

Specification 6.1.1 and other applicable Specifications are requested to be revised to change "Plant Superintendent" to "Plant Manager." Specification 6.1.2 has been revised to change "Chief, Radiological Hygiene Branch" to "Manager of Radiological Control." Specification 6.1.3 and other applicable Specifications have been revised to change "NUC PR Division Director" or "Director, Nuclear Power Division" to "Site Director." These changes are acceptable because they represent title changes only.

Specification 6.1.2 has been changed to delete reference to Table 6.1-1. This change is acceptable since Table 6.1-1 will be deleted. (See Section 2.4 below).

2.2 Specification 6.2.1, Organization Offsite

Specification 6.2.1.2 is deleted. This Section referred to Figure 6.2-3 which described the organization for radiological environmental monitoring and dose calculations. This change is acceptable since Figure 6.2-3 will be deleted (see Section 2.4 below).

Figure 6.2-1 is revised to reflect the TVA corporate offsite nuclear organization for facility management and technical support. The corporate level changes represent a restructuring of the corporate offsite organization to provide for centralized direction and control of nuclear activities. Each of the offsite corporate departments shown in Figure 6.2-1 will be responsible for direct support of the sites in their areas of responsibilities. The TVA corporate organization was developed so that support to each of the sites follows clear lines. The new figure describes the new TVA offsite nuclear organization, as detailed in Revision 4 of the TVA Corporate Nuclear Performance Plan (March 26, 1987). The staff has reviewed this revised organization and has found it acceptable (NUREG-1232). The Technical Specification change to include the new organization meets the acceptance criteria of Sections 13.1.1 and 13.1.2 of the Standard Review Plan (SRP) and is, therefore, acceptable.

In a number of places in the TS the title "Manager of Power" is replaced with "Manager of Nuclear Power." This is a title change only and is, therefore, acceptable.

2.3 Specification 6.2.2, Unit Staff

Specification 6.2.2.c and other applicable Specifications are revised to change "health physics technician" to "radiological control technician." This change is acceptable since its represents a title change only.

Specification 6.2.2.e for Unit 1 only is requested to be revised to change the number "3" to "the Shift Supervisor and 2 other" thereby restricting the members of the shift crew who may serve on the Fire Brigade. The change does not alter the numbers of shift members who may serve on the Fire Brigade, but it is more restrictive in that the Shift Supervisor is specifically prohibited from serving as a Fire Brigade member. The staff agrees that the Shift Supervisor should not be a Fire Brigade member. The change is, therefore, acceptable.

Figure 6.2-2 is revised to reflect the new TVA site organization for Sequoyah, as detailed in the latest revision of the Sequoyah Nuclear Performance Plan (SQNPP), Volume 2, submitted to NRC on April 1, 1987. The Sequoyah site support organization has been reorganized into functional departments that generally parallel the functional departments in the headquarters of the Office of Nuclear Power. The SQNPP describes the plan for providing management control and performing specific actions to correct past problems at Sequoyah. Specifically, the SQNPP outlines the management approach for overcoming past problems and improving regulatory performance at Sequoyah. This TS change revises the organization chart in the TS to be consistent with the organization necessary to carry out the improvements specified in the SQNPP.

The Plant Manager is responsible for conducting day-to-day plant operation in compliance with licensing and regulatory requirements. A plant management organization has been implemented with a unit superintendent assigned to each of the units. As a result of the reorganization, the Plant Manager is free to concentrate his attention to the actual conduct of plant operations.

Due to the reorganization many position titles have changed. Of these, the most significant are the following:

Previous Title	New Title
Assistant Director of Nuclear Power (Operations)	Sequoyah Site Director
Plant Superintendent	Plant Manager
Assistant Plant Superintendent	Nuclear Power Plant Superintendent or Maintenance Supertintendent
Health Physics	Radiological Control Supervisor
Quality Assurance Supervisor	Site QA Manager

In conclusion, Figure 6.2-2 represents the Sequoyah organization which (1) reflects an increase in staffing, (2) provides a higher level of management control at the site, (3) shows improved management involvement in plant operations, (4) has distinct functional areas that are separately supervised, (5) meets the acceptance criteria of Section 13.1.2 of the Standard Review Plan (SRP) and (6) is consistent with the Sequoyah organizational structure presented in the SQNPP. Therefore, the changes to Figure 6.2-2 are acceptable.

2.4 Specification 6.2.1.2, Figure 6.2-3 and Table 6.1-1

The licensee proposed to delete Figure 6.2-3 and Table 6.1-1. Figure 6.2-3 described the offsite organization for radiological environmental monitoring and dose calculations, while Table 6.1-1 detailed the radiological environmental surveillance requirements.

The information on the offsite organization for radiological environmental monitoring program and dose calculations is discussed in Section 6.3.2 under the Radiological Assessment Review Committee. The staff does not require that the Technical Specifications include a listing of the radiological environmental surveillance requirements. This information has been deleted from Revision 5 of the Standard Technical Specifications (NUREG-0452). Therefore, deletion of Figure 6.2-3 and Table 6.1-1 from the Technical Specifications is acceptable.

2.5 Specification 6.2.3, Independent Safety Engineering Group (ISEG)

Specification 6.2.3.2 is revised to change the Independent Safety Engineering Group (ISEG) so that it would be composed of three dedicated full-time engineers located onsite, supplemented by two full-time corporate engineers which are shared among all the TVA nuclear sites, in place of the present requirement that the ISEG be composed of at least five dedicated full-time engineers located at Sequoyah. This change would decrease the onsite full-time ISEG coverage. It is, however, consistent with requirements for an ISEG that the staff has required of other utilities having multiple nuclear units at more than one site. The nominal requirement for an ISEG at a single site, required for each plant licensed since the TMI-2 accident, has been five full-time individuals. For utilities with multiple sites, however, the staff has accepted an ISEG site complement of three engineers backed up by at least two additional engineers at the corporate level. To date, TVA has been required to have an ISEG only at the Sequoyah site. However, TVA is now restructuring its ISEG program such that the ISEG will report at the corporate level to the Director of Nuclear Safety and Licensing (Division). This change will make all of the TVA's nuclear sites consistent. Browns Ferry Nuclear Plant will have an ISEG before Unit 2 restart. In addition, an ISEG will be required at Watts Bar at such time as a Watts Bar unit is licensed. Thus, the individual site ISEGs for TVA plants will henceforth report to and be supported by personnel at the corporate level on the staff of the Director of Nuclear Safety and Licensing. This proposed change is in accordance with provisions for ISEG coverage that have previously been approved by the staff for other utilities with multiple sites. Therefore, we find this arrangement provides for an acceptable ISEG and we conclude that the proposed change to the TS meets the guidance in the SRP Section 13.4 and is acceptable.

Proposed Specification 6.2.3.4 changes the "Assistant Director for Maintenance and Engineering of the Division of Nuclear Power" to the "Director of Nuclear Safety and Licensing," as the individual to whom the ISEG reports. This proposed change is consistent with the revised TVA nuclear organization and with the staff requirement that the ISEG report to a high level, technically oriented corporate position not in the management chain for power production. The change is, therefore, acceptable.

2.6 Specification 6.3, Qualifications

Specification 6.3 is changed to replace "Health Physicist" with "Site Radiological Control Superintendent." This change is acceptable since it represents a title change only.

2.7 Specification 6.4, Training

Proposed Specification 6.4 changes "Assistant Plant Superintendent" to "Nuclear Power Plant (NPP) Superintendent." In the new TVA organization, the previous position of Assistant Plant Superintendent was deleted. The new organization provides for an NPP Superintendent, a Maintenance Superintendent, and a Site Radiological Control Supervisor who jointly discharge most of the responsibilities previously assigned to the Assistant Plant Superintendent. The staff has determined that the NPP Superintendent is the appropriate individual to maintain cognizance of the retraining and placement training program for the Sequoyah staff. The proposed change is, therefore, acceptable.

The proposed change to Specification 6.4.1 would delete the words "identified by the ISEG" regarding training on relevant industry operational experience. Deletion of these words is acceptable since relevant industry operational experience might also be identified by other than ISEG personnel.

2.8 Specification 6.5, Review and Audit

Proposed Specification 6.5 changes "Manager of Power" to "Manager of Nuclear Power" and "Office of Power" to "Office of Nuclear Power." This title change is consistent with the new TVA organization and is, therefore, acceptable.

2.9 Specification 6.5.1.2, Plant Operations Review Committee (PORC) Composition

The proposed changes in Specification 6.5.1.2 to the Plant Operations Review Committee (PORC) Composition make the membership consistent with the reorganization discussed in Section 2.3. The revised committee membership includes the Plant Manager as Chairman and the following members: Superintendent (NPP or Maintenance); Operations Group Manager or Assistant Operations Group Manager; Site Radiological Control Superintendent; Maintenance Group Manager, (I), (E) or (M); and Quality Engineering and Control Manager.

The revised PORC membership provides a broad cross-section of expertise from the plant staff, therefore, preserving interdisciplinary reviews of the subject matter. In addition, the PORC membership will maintain a diversity of backgrounds among its members (i.e., operations, engineering, maintenance, and quality assurance). We find that these proposed changes to the PORC membership meet the acceptance criteria of SRP Section 13.4 and the relevant requirements of Regulatory Guide 1.33 (R.G. 1.33). Therefore, these proposed changes are acceptable.

2.10 Specification 6.5.1.6, PORC Responsibilities and new Specification 6.5.1A, Technical Review and Control

The licensee proposed to revise Specification 6.5.1.6 and to add a new Specification 6.5.1A. As discussed in detail below, several review responsibilities of PORC would be to be transferred to designated technical reviewers. The new proposed process of Specification 6.5.1A will establish an "independent qualified review" and a cross-disciplinary review and approval to support certain changes currently under PORC review responsibility. The PORC review responsibility for tests and experiments that affect nuclear safety and changes to Appendix "A" TS remains unchanged.

The following PORC responsibilities are proposed to be deleted from Specification 6.5.1.6 as discussed below.

- Review and approval of procedures required by Specification 6.8.1 and other procedures which affect plant nuclear safety and changes thereto will be controlled under the new Specification 6.5.1A, "Technical Review and Control."

- Review of all programs required by Specification 6.8.5 and changes thereto will be controlled under the new Specification 6.5.1A. Specification 6.8.5 is being revised to include this review.

- Review of any other proposed procedures or changes thereto as determined by the Plant Manager to affect nuclear safety will be deleted. However, Specification 6.5.1.6.h will be relabeled as f and gives the Plant Manager the authority to escalate any item to be reviewed by PORC.

- Review of all proposed changes or modifications to unit systems or equipment that affect nuclear safety will be controlled under the new Specification 6.5.1A. Additionally, Quality Engineering and Control will review all workplans before initial approval. The Plant Manager, NPP Superintendent, or Maintenance Superintendent must provide final approval of the change.

- Review of the Plant Physical Security Plan, the Site Radiological Emergency Plan, and implementing procedures is also covered by Specification 6.8.1. Review and approval of changes to these procedures will be done in accordance with new specification 6.5.1A. Also, an audit under the cognizance of the Nuclear Safety Review Board (NSRB) will be performed at least once every 12 months of the Plant Physical Security Plan, the Safeguard Contingency Plan, the Site Radiological Emergency Plan, and all implementing procedures. All changes to the Sequoyah Site Radiological Emergency Plan will be approved by the Deputy Manager of the Office of Nuclear Power or his designee.

- Review of changes to the radwaste treatment systems are now covered by Specification 6.15. Review and approval of these changes will be done in accordance with the new Specification 6.5.1A. Additionally, Quality Engineering and Control will review all changes before being approved. The Plant Manager, NPP Superintendent, or Maintenance Superintendent must provide final approval of the change.

- Review of meeting minutes of the Radiological Assessment Review Committee (RARC) is no longer needed under the new organization. Technical and administrative review used to be split between two separate TVA organizations, one non-nuclear. PORC review was necessary to oversee the technical review done by RARC. The new organization has brought the technical expertise under the nuclear organization that PORC is under, thus deleting the need for PORC review. PORC and RARC are equal-level committees subject to the same governing upper-tier nuclear procedures. Reports and meeting minutes of both committees are reviewed under cognizance of NSRB.

The following PORC responsibilities would be revised in Specification 6.5.1.6 as discussed below:

- The proposed change to item "e" replaces the word "investigate" with the word "review" to more accurately reflect the PORC function intended for review of Technical Specification violations. It is not practical for PORC to perform investigation of the violation. Investigation and preparation of reports covering evaluations and recommendations to prevent recurrence are performed by the appropriate line organization. PORC will provide oversight to ensure the evaluations and recommendations are sufficient and complete.

- The proposed change to item "f" will require PORC to review all reportable events. A reportable event is defined by the Technical Specifications as those conditions specified by section 50.73 to 10 CFR Part 50. The change will be consistent with Specification 6.6, "Reportable Event Action," and is consistent with the Westinghouse Standard Technical Specification (NUREG-0452).

The following PORC responsibilities would be added to Specification 6.5.1.6 as discussed below:

- PORC will provide an oversight review of selected safety evaluations which are prepared per Specification 6.5.1A to determine the adequacy of the qualified review process. The review will be performed on a monthly basis and shall screen a minimum of 10 percent of the applicable safety evaluations. A list of activities reviewed and the results of the review, including deficiencies or problems noted, will be reported to PORC at scheduled monthly meetings. This report will become a part of PORC meeting minutes, along with any actions to be taken from the report. Individuals performing oversight review shall meet the qualifications specified in Administrative Instruction, AI-43.

- PORC will provide a 100-percent review of proposed procedures and changes to procedures, equipment, systems, or facilities which involve an unreviewed safety question as defined in 10 CFR 50.59.

Specification 6.5.1A, Technical Review and Control, is added to describe the new technical review and control process. The new process establishes an "independent qualified review" and provides the opportunity for a cross-disciplinary review and approval that supports changes to procedures and plant changes or modifications to plant nuclear safety-related structures, systems and components. On September 4, 1987 the staff discussed with the licensee a minor change to clarify proposed Specification 6.5.1A.b so that it is consistent with Specification 6.5.1A.a. The change will amend Specification 6.5.1A.b to have any changes to both procedures and structures, systems and components that affect plant nuclear safety controlled by Specification 6.5.1A. This change was acceptable to the licensee. This change is minor, to clarify Specification 6.5.1A.b to be consistent with Specification 6.5.1A.a, and, does not change the nature of the amendment request to warrant renoticing this change.

Each procedure required by Specification 6.8.1 of the TS will be reviewed by an individual other than the preparer. The reviewer may be from the same organization or from a different organization. Each review will include a determination of whether or not a cross-disciplinary review is necessary. If so a cross-disciplinary review will be conducted.

Each proposed change or modification to plant nuclear safety-related structures, systems and components will be reviewed by a reviewer designated by the Plant Manager. Each modification will be reviewed by an individual or group other than the person(s) which designed the modification. The Plant Manager, NPP Superintendent or Maintenance Superintendent will approve the modifications and the implementing workplans prior to implementation.

A new Administrative Instruction, AI-43 (Independent Review), will establish requirements for Technical Review and Control. AI-43 establishes qualifications and training requirements necessary for qualified reviewers. Every qualified reviewer will receive training in how to determine if an inter-disciplinary review is necessary. Specific guidelines are given for performing the independent qualified review, including the cross-disciplinary review, and the appropriate level of management to approve changes is specified. AI-43 will contain a clause which allows the qualified reviewer or the responsible manager approving the procedures or procedure change the right to request PORC review.

AI-4, "Preparation, Review, Approval, and Use of Plant Instructions," will require review and approval in accordance with AI-43. Appropriate managers responsible for approval of different groups of procedures will be designated within their field of responsibility. Quality Assurance (QA) will be given the option to review all changes. Additionally, AI-4 will require a larger review and higher level of management approval for designated administrative instructions and procedures affecting safety-related functions.

After revising the PORC, the members will have a reduced administrative burden and, therefore, will have more time available for the review of significant issues. This amendment permits PORC members to focus their attention on the safety significance of the issues essential to the operation of the plant, thereby

improving PORC's effectiveness. This aspect is increasingly important because of the growing number of procedures, procedural changes, and modifications that must be reviewed. PORC will now be responsible for providing an oversight review of selected safety evaluations reviewed under the new process.

The proposed changes will allow for the use of individual qualified technical reviewers who can spend more time on the review. The detailed technical reviews of procedures can be accomplished by qualified technical reviewers not encumbered with other managerial duties, but possessing the technical expertise to conduct a thorough review. The proposed changes allow for an independent technical and cross-disciplinary review and approval.

The current TS requirement for review of changes is actually satisfied by individuals of a similar responsibility level, however, considerable management time is consumed in the assigning of these personnel to review each item, collecting results from those reviews, and finally attending a formal meeting to recommend a disposition. The method requested by this amendment eliminates much of the unnecessary effort and at the same time provides for a more consistent and timely review and approval process. It will focus responsibility and accountability to the technical reviewers and provide a better review. Cross-disciplinary review will also be improved from current methods since reviewers will be able to concentrate on their particular areas of expertise.

The proposed changes have been designed so as to improve PORC operations. The above changes are acceptable since they (1) are consistent with the acceptance criteria of SRP Section 13.4, (2) meet the objectives of Regulatory Guide 1.33 which requires that decisions affecting safety are made at the proper level of responsibility and with the necessary technical advice and review, (3) provide the opportunity for interdisciplinary review of the subject matter, (4) allow for independent technical review and approval, and (5) provide qualified designated reviewers.

2.11 Specifications 6.5.1, 6.8, 6.13 and 6.15

Proposed Specifications 6.5.1.7, 6.5.2.7, 6.8.1, 6.8.2, 6.8.5, 6.13 and 6.15 would revise the TS to be consistent with the above discussed changes to PORC responsibilities. On September 4, 1987, the staff discussed with the licensee adding 6.5.1.6(a) to Specification 6.5.1.7.a. This change would clarify the items that the PORC recommends for approval or disapproval in writing to the Plant Manager to be consistent with the responsibilities of the PORC in Specification 6.5.1.6. The licensee agreed to this change. This change is minor, to clarify Specification 6.5.1.7.a to be consistent with Specification 6.5.1.6, and, therefore, does not need to be submitted or noticed under 10 CFR 50.90 and 50.91. Therefore, for the same reasons as those given above, we find the proposed changes acceptable.

2.12 Specification 6.5.2, Nuclear Safety Review Board

Specifications 6.5.2.1 and 6.5.2.7 are revised to avoid confusion in interpreting the way the Nuclear Safety Review Board (NSRB) review is required to be conducted. NSRB delegates the review through use of appointed subcommittees. The proposed change clearly states NSRB's responsibility to be cognizant of the identified review items. The wording change is consistent with SRP Section 13.4 and is, therefore, acceptable.

2.13 Specifications 6.5.2.7i and 6.5.3

Throughout these sections, wherever the term "RARC" is used, the licensee proposes to add the acronym "SQN" before "RARC" to indicate that the Sequoyah Radiological Assessment Review Committee (RARC) is being addressed. This addition is merely a clarification of what is intended by the Specification and is acceptable.

2.14 Specification 6.5.3, Radiological Assessment Review Committee (RARC)

Specification 6.5.3.1 sets forth the functional requirements for SQN RARC. The committee shall advise the Radiological Control Manager and the Plant Manager on all matters related to radiological assessments involving dose calculations and projections and environmental monitoring. The Plant Manager has the authority to request PORC review of any significant items.

In Specification 6.5.3.1, the words "and the Plant Manager" are added. This change would result in the RARC advising the Plant Manager on all matters related to radiological assessments involving dose calculations and projections and environmental monitoring, as well as the Manager, Radiological Control. Since the SQN RARC activities are concerned with the Sequoyah plant, the Plant Manager should be aware of these activities. This change is, therefore, acceptable.

In Specification 6.5.3.2, the licensee proposes to change the titles of the SQN RARC members to be consistent with the positions responsible for those functions in the new organization. In the process, a fifth Committee member is also added. This is an administrative change only and is acceptable.

Specification 6.5.3.4 specifies that the RARC would meet "at least once per six months and as convened by the RARC Chairman or his designated alternate." The licensee proposes to modify this wording so that 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." The revised wording would allow plant management to request a SQN RARC meeting. This should result in the SQN RARC being more responsive to plant needs. Thus, we find this change acceptable.

The minimum quorum, as given in proposed Specification 6.5.3.5 for conduct of SQN RARC activities would be changed from the Chairman or his designated alternate and three members, to the Chairman or his designated alternate and four members. This change recognizes the increase in the SQN RARC membership (see item above) and is acceptable. Further, the change would require that at least one of the members of the minimun quorum be a plant representative. This change should assure that the plant has input to and is aware of SQN RARC activities. We consider it to be an improvement to the plant and, therefore, acceptable.

The wording of Specification 6.5.3.6.c is proposed to be changed from "Review of the results of any audits of the Quality Assurance Program for effluent and environmental monitoring." to "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." The added words (underlined) would clarify the intent of this specification and would expand the range of SQN RARC reviews to include reviews and evaluations as well as formal QA audits, and radiological assessments involving dose evaluations and projects as well as Quality Assurance Program findings. This expansion of SQN RARC activities should help the SQN RARC stay better attuned to radiological control matters at Sequoyah. The change is, therefore, acceptable.

The proposed change to Specification 6.5.3.6.d would insert the word "radiological" between "environmental" and "monitoring." The revision would assure that the SQN RARC is responsible for review of Technical Specification changes related to environmental radiological monitoring rather than to all environmental monitoring. This is consistent with the mission of the SQN RARC and the change is, therefore, acceptable.

A further change to specification 6.5.3.7.a would add the Plant Manager as a recipient of SQN RARC recommendations. Since the SQN RARC is dealing with Sequoyah plant matters, the Plant Manager should be aware of committee recommendations. This change is, therefore, acceptable.

2.15 Specification 6.8.3, Temporary Changes to Procedures

The new proposed Specification 6.8.3 would allow temporary changes to the intent of the original procedure with approval by two reviewers who meet the requirements of Specification 6.5.1A, one of whom holds an SRO. Temporary approval of procedure changes would be allowed even when the intent of the original procedure is changed. This proposed change would not be consistent with Revision 5 of the Westinghouse Standard Technical Specifications, NUREG-0452.

All procedures where the original intent of the procedure is changed need a complete review. Specification 6.8.2 provides for the acceptable method to review procedures where the intent of the procedure is being altered or changed. Therefore the proposed changes to Specifications 6.8.3, 6.8.3.a and 6.8.3.b are denied. Temporary changes, where the intent of the original procedure is not altered or changed, would still be allowed. The change to Specification 6.8.3.c is acceptable since the responsibilities of the PORC have been revised as discussed in Section 2.10.

2.16 Specification 6.10.2

The licensee proposed to add the words "for lifetime retention" to help define those Quality Assurance records which are to be retained for the duration of the unit operating licenses. These added words clarify what was intended by this section and are acceptable.

The title "Operational Quality Assurance Manual" is proposed to be changed to "Nuclear Quality Assurance Manual." This change is consistent with the revisions to the Quality Assurance program, and corrects what otherwise would be an incorrect reference. It is, therefore, acceptable.

3.0 SUMMARY

The proposed amendments to Section 6, "Administrative Controls" revise the TS for both Units 1 and 2 to reflect the new TVA and Sequoyah plant organization, changes to the Plant Operations Review Committee (PORC), a restructuring of the Independent Safety Engineering Group (ISEG) and changes to the Radiological Assessment Review Committee (RARC).

The proposed changes to Specifications 6.8.3, 6.8.3.a, and 6.8.3b are denied so as to maintain full and complete review of temporary intent changes to procedures. The staff concludes for the reasons stated in the above evaluation that all the remaining proposed changes are acceptable.

4.0 ENVIRONMENTAL CONSIDERATIONS

These amendments relate to changes in recordkeeping, reporting or administrative procedures or requirements. The Commission has previously issued a proposal finding that these amendments involve no significant hazards consideration and there has been no public comment on such finding. Accordingly these amendments meet the eligibility criteria for categorial exclusion set forth in 10 CFR 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 these amendments.

5.0 CONCLUSION

We have concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations, and the issuance of these amendments will not be inimical to the common defense and security nor to the health and safety of the public.

Principal Contributor: C. Goodman

Dated: September 10, 1987

7590-01

UNITED STATES NUCLEAR REGULATORY COMMISSION

TENNESSEE VALLEY AUTHORITY

DOCKET NOS. 50-327, 50-328

DENIAL OF AMENDMENTS TO FACILITY OPERATING LICENSES

AND OPPORTUNITY FOR HEARING

The U.S. Nuclear Regulatory Commission (the Commission) has denied a portion of requests by the Tennessee Valley Authority (TVA) for amendments to Facility Operating License Nos. DPR-77 and DPR-79, issued to TVA for operation of the Sequoyah Nuclear Plant, Units 1 and 2, respectively, located in Hamilton County, Tennessee.

The amendments, as proposed by TVA, would change Section 6 - Administrative Control to reflect the new plant organization, a restructuring of the Independent Safety Engineering Group, and changes to the Plant Organization Review Committee responsibilities. The licensee's application for the amendments was dated May 18, 1987, as supplemented June 4, 1987. Notice of Consideration of Issuance of these amendments was published in the FEDERAL REGISTER on July 1, 1987 (52 FR 24561). All of the requested changes were granted except for the changes to Sections 6.8.3, 6.8.3.a, and 6.8.3.b to delete the requirement for Plant Operating Review Committee (PORC) review of temporary procedure "intent" changes. Notice of the issuance of Amendment Nos. 58 and 50 will be published in the Commission's biweekly FEDERAL REGISTER notice.

The proposed changes to delete the requirement for PORC review of temporary procedure "intent" changes were denied. All procedures where the original intent of the procedure is changed must receive a full and complete review. It is not acceptable to the staff that quick changes be made to the intent of procedures.

The licensee was notified of the Commission's denial of the proposed Technical Specification changes by letter dated September 10, 1987.

By October 21, 1987, the licensee may demand a hearing with respect to the denial described above and any person whose interest may be affected by this proceeding may file a written petition for leave to intervene.

A request for a hearing or petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555 Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, 1717 H Street, N.W. Washington, D.C., by the above date.

A copy of any petitions should also be sent to the Office of the General Counsel - Bethesda, U.S. Nuclear Regulatory Commission, Washington D.C. 20555, and to the 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 applications for amendments dated May 18, 1987, as supplemented June 4, 1987, and (2) the Commission's letter and enclosed Safety Evaluation to TVA dated August 1987, which are available for public inspection at the Commission's Public

Document Room, 1717 H Street, NW, Washington, D.C. 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, D.C. 20555, Attention: Director, TVA Projects Division.

Dated at Bethesda, Maryland, this 10 day of September 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

John A. Zwolinski, Assistant Director
for Projects
TVA Projects Division
Office of Special Projects