ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION CHANGE SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2 DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-90-22)

LIST OF AFFECTED PAGES

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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. Corporate

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. Qvice President

6.2 ORGANIZATION

6.2.1 OFFSITE AND ONSITE ORGANIZATIONS

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

- a. Lines of authority, responsibility, and communication shall be established and defined from the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organizational charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the FSAR and will be updated in accordant with 10 CFR 50.71(e).
- b. The Senior Vice President, Nuclear Fower shall have corporate responsibility for overall plant nuclear safety. This individual shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support in the plant so that continued nuclear safety is assured.
- c. The Plant Manager shall be responsible for overall unit safe operation and shall have control over those onsite resources necessary for safe operation and maintenance of the plant.
- d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.2.2 FACILITY STAFF

- a. Each on-duty unit shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Reactor Operator shall be in the unit Control R78 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.

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- A Radiological Control technician" shall be onsite when fuel is in the Ċ., reactor.
- All CORE ALTERATIONS shall be observed and directly supervised by d. either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.
- A Fire Brigade of at least 5 members shall be maintained onsite at е. 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 Operations, Manager shall fold a Senior Reactor Operator license. f.

#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 accommo. te unexpected absence provided immediate action is taken to fill the required positions.

Amendment No. 32, 58/74 June 30, 1988

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

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

- An individual should not be permitted to work more than 16 hours straight, excluding shift turnover time.
- An individual should not be permitted to work more than 16 hours in any 24-hour period, nor more than 24 hours in any 48-hour period, nor more than 72 hours in any 7-day period, all excluding shift turnover time.
- A break of at least 8 hours should be allowed between work periods, including shift turnover time.
- Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

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

6.2.3 INDEPENDENT SAFETY ENGINEERING (ISE)	R
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Manager

*Not responsible for sign-off function.

SEQUOYAH - UNIT 1

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Appenditions 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 Senior Vice President, Nuclear Power is responsible for the safe operation of all TVA power plants.

6.5.1 PLANT OPERATIONS REVIEW COMMITTEE (PORC)

FUNCTION

6.5.1.1 The PORC shall function to advise the Plant Manager on all matters R62 related to nuclear safety.

COMPOSITION

6.5.1.2 The EORC shall be composed of the:

4	Chairman:	Plant Manager	~
9	Member-	Operations Superintendent	5
6	Member: Member:	Operations Manager Site Radiological Control Superintendent Manag er	AR78
6	Member:	Maintenance Superintendent Manager	5
6	Member:	Technical Support Superintendent Manager	5
5	Member: Member:	Quality Engineering Manager and Monitoring Supervisor Division of Nuclear Engineering Representative	R78
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- 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 Girector 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:

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

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Amendment No. /58 74 κ/8 June 30,1988

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ADMINISTRATIVE CONTROLS (Continued)

- 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 of anization as the individual/group which designed the 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, Operations Superintendent, Maintenance Superintendent, or Technical Support Superintendent, Or Purty ManukGER.
- c. Individuals responsible for reviews performed in accordance with Specifications 6.5.1A.1a and -b, shall be designated by approved written procedures. Each such review shall be performed by qualified personnel of the appropriate discipline and shall include a determination of whether or not additional, cross-disciplinary review is necessary. Each such review shall also include determination of whether or not an unreviewed safety question is involved pursuant to Section 10 CFR 50.59.

6.5.2 NUCLEAR SAFETY REVIEW BOARD (NSRB)

FUNCTION

proprietary

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. mechanica' 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.

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- k. The radiological environmental monitoring program and the results thereof at least once per 12 months.
- 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 recently by the Quality Assurance Program to meet the criteria of Foulatory 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

RECORDS

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

- a. Minutes of each NSRB meeting shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Power within 14 days following R78 each meeting.
- b. Reports of reviews encompassed by Section 6.5.2.7 above, shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Power within 14 days following completion of the review.
- c. Audit reports encompassed by Section 6.5.2.8 above, shall be forwarded to the Senior Vice President, Nuclear Power and to the management R7 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 rediological assessments R62 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 Momber: Health Physicist, Gaseous, Radiological Control Member: Health Physicist, Liquid, Radiological Control

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Member: Meteorologist, Air Quality Branch Member: Chemical Engineer, Chemistry Section, SQN Member: Health Physicist, Environmental Monitoring, Radiological Control	R62			
Alternates				
6.5.3.3 All alternate members shall be appointed in writing by the SQN RARCR62Chairman to serve on a temporary basis; however, no more than two alternatesshall participate as voting members in SQN RARC activities at any one time.R62				
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 specifica- tions shall consist of the Chairman or his designated alternate and 4 members (including alternates) as long as one is a plant representative.				
Responsibilities				
5.5.3.6 The SQN RARC shall be responsible for:	162 +			
a. Review of changes to the OFFFITE DOSE CALCULATION MANUAL.				
b. Review of procedures required by Specification 6.8.4 and changes R thereto.	62			
c. Review for information purposes	(62			
d. Review of proposed changes to the Technical Specifications related to radiological assessments involving dose calculations and projections R and environmental radiological monitoring.	62			
Authority				
6.5.3.7 The SQN RARC shall:	62			
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b. Render determinations in writing with regard to whether or not each item considered under 6.5.3.6 constitutes an unreviewed safety question.				

c. Provide written notification within 24 hours to the Senior Vice President, Nuclear Power and the Nuclear Safety Review Board of disagreement between the SQN RARC and the Mahager of Radiological Control; however, the Manager of Radiological Control shall have responsibility for resolution pf, 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 Reasonand and authority provisions of these technica' specifications. Copies shall be provided to the Senior Vice President, Nuclear 'ower; PORC; and R78 the Nuclear Safety Review Doard.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVEN'S

- 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 D rector.

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. Vice President
- 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.

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Amendment No. 26//88/ 74 R78 June 30, 1988

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Vice President

MONTHLY REACTOR OPERATING REPORT

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

Any changes to the OFFSITE DOSE CALCULATION MANUAL shall be submitted with the Monthly Operating Report within 30 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 at least 60 days prior to cycle initial criticality. In the event that these values would be submitted at some other time during core life, it will be submitted 60 days prior to the date the values would become effective unless otherwise exempted by the Commission.

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

SPECIAL REPORTS

6.9.2.1 Special reports shall be submitted within the time period specified $_{\rm R76}$ for each report, in accordance with 10 CFR 50.4.

6.9.2.2 Diesel Generator Reliability Improvement Program

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

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- (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 engineeredsafety-feature equipment

Amendment Nos. 52,58,72,74,117 June 19, 1989

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 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 MANMOUR 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 MANAGER Superintendent.

^{*}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.

6.1 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

6.2.1 OFFSITE AND ONSITE ORGANIZATIONS

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

- a. Lines of authority, responsibility, and communication shall be established and defined from the highest management levels through intermediate levels to and including all operating organization positions. These relationships shall be documented and updated, as appropriate, in the form of organizational charts, functional descriptions of departmental responsibilities and relationships, and job descriptions for key personnel positions, or in equivalent forms of documentation. These requirements shall be documented in the FSAR and will be updated in accordance with 10 CFR 50.71(e).
- b. The Senior Vice President, Nuclear Power shall have corporate responsibility for overall plant nuclear safety. This individual shall take any measures needed to ensure acceptable performance of the staff in operating, maintaining, and providing technical support in the plant so that continued nuclear safety is assured.
- c. The Plant Manager shall be responsible for overall unit safe operation, and shall have control over those onsite resources necessary for safe operation and maintenance of the plant.
- d. The individuals who train the operating staff and those who carry out health physics and quality assurance functions may report to the appropriate onsite manager; however, they shall have sufficient organizational freedom to ensure their independence from operating pressures.

6.2.2 FACILITY STAFF

- a. Each on duty unit shift shall be composed of at least the minimum shift crew composition shown in Table 6.2-1.
- b. At least one licensed Reactor Operator shall be in the unit Control Room when fuel is in the reactor. In addition, while the unit is in MODE 1, 2, 3 or 4, at least one licensed Senior Reactor Operator shall be in the Control Room.

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Amendment No. 24, /50 66 June 30, 1988

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- c. A Radiological Control technician" shall be onsite when fuel is in the R50 reactor.
- d. All CORE ALTERATIONS shall be observed and directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator 'imited to Fuel Handling who has no other concurrent responsibilities during this operation.
- e. A Fire Brigade of at least 5 members shall be maintained onsite at all times". The Fire Brigade shall not include the Shift Supervisor and the 2 other members of the minimum shift crew necessary for safe shutdown of the unit or any personnel required for other essential functions during a fire emergency.

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

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Amendment No. 30 66 June 30, 1988

[#] 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.

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

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

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- A break of at least 8 hours should be allowed between work periods, including shift turnover time.
- Except during extended shutdown periods, the use of overtime should be considered on an individual basis and not for the entire staff on a shift.

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

6.2.3 INDEPENDENT SAFETY ENGINEERING (ISE)

FUNCTION

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

COMPOSITION

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

RESPONSIBILITIES

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

AUTHORITY

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

6.2.4 SHIFT TECHNICAL ADVISOR (STA)

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

6.3 FACILITY STAFF QUALIFICATIONS

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

*Not responsible for sign-off function.

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Amendment No. 50, 66, 108 July 5, 1989

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6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained under the direction of the Apperations 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 Senior Vice President, Nuclear Power is responsible for the safe operation of all TVA power plants.

6.5.1 PLANT OPERATIONS REVIEW COMMITTEE (PORC)

FUNCTION

6.5.1.1 The PORC shall function to advise the Plant Manager on all matters R50 related to nuclear safety.

COMPOSITION

6.5.1.2 The PORC shall be composed of the:

5	Chairman: Member:	Plant Manager Operations Superintendent		
7	Member: Member:	Operations Manager Site Radiological Control Superintendent Manager	21	R66
7	Member: Member:	Maintenance Superintendent Manager Technical Support Superintendent Manager	31	
4	Member: Member:	Quality Engineering Manager and Monitoring Supervisor Division of Nuclear Engineering Representative	21	266
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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(c), (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.

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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 Dafety Review Board.

6.5.1A TECHNICAL REVIEW AND CONTROL

ACTIVITIES

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

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

PLANT MANASsperintendent, or Site Radiological Control 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

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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, Operations Superintendent, Maintenance-Superintendent, or Technical Support Superintendent. Or Permit Dury, MANAGER, R66

c. Individuals responsible for reviews performed in accordance with Specifications 6.5.1A.1a and ~b, shall be designated by approved written procedures. Each such review shall be performed by qualified personnel of the appropriate discipline and shall include a determination of whether or not additional, cross-dsciplinary review is necessary. Each such review shall R66 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

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

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AUTHORITY

6.5.2.9 The NSRB shall report to and advise the Senior Vice President, Nuclear Power on those areas of responsibility specified in Sections 6.5.2.7 R66 and 6.5.2.8.

RECORDS

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

- a. Minutes of each NSRB meeting shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Power within 14 days following each meeting.
- b. Reports of reviews encompassed by Section 6.5.2.7 above, shall be prepared, approved and forwarded to the Senior Vice President, Nuclear Power within 14 days following completion of the review.
- c. Audit reports encompassed by Section 6.5.2.8 above, shall be forwarded to the Senior Vice President, Nuclear Power and to the management R66 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 [R50]

Alternates

6.5.3.3 All alternate members shall be appointed in writing by the SQN RARC [R50 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. [R50]

Meeting Frequency

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

6.5.3.5 The minimum quorum of the SQN RARC necessary for the performance of the SQN RAFC 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.
- 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:

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- 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 Senior Vice R66 President, Nuclear Power and the Nuclear Safety Beview Board of disagreement petween the SON RARC and the Manager of Radiological Control; however, the Manager of Radiological Control shall have responsibility for resolution of euch disagreement pursuant to 6.1.2 above.

Records

6.5.3.8 The SQN RARC shall maintain written minutes of each SQN RARC meeting that at a minimum, document the results of all SQN RARC activities performed under the responsibility and authority provisions of these technical specifications. Copies shall be provided to the Senior Vice President, Nuclear Power; R66 PORC; and the Nuclear Safety Review Board.

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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 Sole Director. These

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. Vice President T
- 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 Vialation Report shall be submitted to the Commission, the NSRB and the Side Director within 14 days of the violation. R50 Vice President 2

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.

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MONTHLY REACTOR OPERATING REPORT

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

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 inwhich 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 at least 60 days prior to cycle initial criticality. In the event that these values would be submitted at some other time during core life, it will be submitted 60 days prior to the date the values would become effective unless otherwise exempted by the Commission.

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

SPECIAL REPORTS

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

6.9.2.2 Diesel Generator Reliability Improvement Program

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

- (a) a summary of all tests (valid and invalid) that occurred within the time period over which the last 20/100 valid tests were performed
- (b) analysis of failures and determination of root causes of failures
- (c) evaluation of each of the recommendations of NUREG/CR-0660, "Enhancement of Onsite Emergency Diesel Generator Reliability in Operating Reactors," with respect to their application to the Plant
- (d) identification of all actions taken or to be taken to 1) correct the root causes of failures defined in b) above and 2) achieve a general improvement of diesel generator reliability
- (e) the schedule for implementation of each action from d) above
- (f) an assessment of the existing reliability of electric power to engineered safety-feature equipment

6.11 RADIATION PROTECTION PROGRAM

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

6.12 HIGH RADIATION AREA

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

- A 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. MANAGER,

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

ENCLOSURE 2

PROPOSED TECHNICAL SPECIFICATION C 'ANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-90-22)

DESCRIPTION AND JUSTIFICATION FOR SECTION 6.0 CHANGES

Description of Change

Tennesses Valley Authority proposes to modify Section 6.0 of the Sequoyah Nuclear Plant (SQN) Units 1 and 2 Technical Specifications (TSs) to incorporate the overtime limit requirements that were provided in Generic Letter (GL) 82-16, "NUREG-0737 Technical Specifications," to delete the requirement for reporting Offsite Dose Calculation Manual changes and radiological waste treatment system changes in the monthly report, to change position titles, to change Plant Operations Review Committee (PORC) membership, to specify Plant Manager or Duty Plant Manager to approve administrative procedures and proposed plant modifications that affect plant nuclear safety, to revise wording regarding review and approval of proposed modifications, and to correct typographical errors.

Reason for Change

Overtime requirements as specified in GL 82-16 have been previously defined in site procedures at SQN. NRC issued Violation 87-78-01 to SQN Units 1 and 2 on March 14, 1988, for exceeding overtime limits without proper authorization. On July 26, 1990, Violation 90-22-01 was also issued for exceeding overtime limits without proper authorization. As a result of the recurrent procedural implementation problem, NRC requested in its October 18, 1990, letter that SQN submit TSs consistent with GL 82-16 to control overtime.

To incorporate the recommendations of GL 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications in the Administrative Controls Section of the Technical Specifications and the Relocation of Procedural Details of RETS to the Offsite Dose Calculation Manual or to the Process Control Program," TVA submitted TS Change 90-03. The GL recommends providing Offsite Dose Calculation Manual changes and radioactive waste treatment system changes in the Semiannual Radioactive Effluent Release Report. TVA proposed the necessary TS changes to incorporate the GL 89-01 reporting recommendations in TS change 90-03, but neglected to remove the redundant monthly reporting requirement.

Operations' management is configured such that the Operations Manager reports to the Plant Manager. The Operations Superintendent, among others, reports to the Operations Manager. Given this organization, there is no need to designate both the Operations Manager and Operations Superintendent for membership on PORC.

The change of approval authority for administrative procedures and proposed changes or modifications to structures, systems, and components to only the Plant Manager or Duty Plant Manager removes the allowance for individuals who directly report to the Plant Manager to approve these items unless designated as the Duty Plant Manager. This more restrictive level of approval is desired by TVA management. The modification process at SQN is in the process of being changed such that workplans will not be used for modification implementation. The new process will incorporate the functions of the workplan into the modification package with the exception of the field activities to physically install the hardware. Since the currently defined workplan will not exist in the planned process, the present TS wording could create concerns or confusion. The changes proposed do not impact the current processes but only provide flexibility for changes in modification processes and nomenclature when this new process is implemented.

Position titles have recently changed in the SQN organization. These title changes have been updated in this proposed TS change, as well as the correction of typographical errors.

Justification for Change

The proposed TS change will not alter TVA's overtime limits at SQN as currently defined in site procedures; it will act to reinforce current requirements. Additionally, the change is consistent with the guidance provided in GL 82-16 and draft Revision 5 of the Westinghouse Electric Corporation standard TSs.

The proposed change to the monthly reporting requirements is consistent with GL 89-01 and draft Revision 5 of the Westinghouse standard TSs. Additionally, changes to radioactive waste treatment systems are submitted as part of the annual Final Safety Analysis Report update.

The deletion of the Operations Superintendent from PORC membership does not degrade the safety review function of PORC. Operations' management is represented by the Operations Manager or his alternate, which may include the Operations Superintendent.

By requiring Plant Manager or Duty Plant Manager to approve nuclear safety-related administrative procedures and modifications, a more restrictive level of approval is implemented than the TSs presently require; accordingly, assurance is maintained for adequate technical and safety review. The deletion of other positions to approve these items is not expected to overburden the Plant Manager; most items already receive this level of approval.

The original intent regarding review and approval of workplans was to ensure appropriate plant staff review and approval of implementation of proposed modifications. The new modification process planned for implementation in early 1991 will incorporate the portions of the current workplan document intended for review and approval into the modification package. The modification package will receive the same level of review and approval presently received by the workplan. The fieldwork portion of the workplan will be performed by the process that maintenance activities currently utilize with the corresponding review and approval process. This portion will not receive the same level of review and approval as the modification package. However, since these are only the field actions approved and authorized by the modification package to implement the modification, this level of approval is not necessary. This change continues to provide for the appropriate review and approval of implementation of proposed modifications to ensure adequate safety review prior to implementation.

The other changes include changes to position titles to reflect the current organization and typographical corrections.

Environmental Impact Evaluation

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The proposed change request does not involve an unreviewed environmental question because operation of SQN Units 1 and 2 in accordance with this change would not:

- Result in a significant increase in any adverse environmental impact previously evaluated in the final environmental statement (FES) as modified by the staff's testimony to the Atomic Safety and Licensing Board, supplements to the FES, environmental impact appraisals, or decisions of the Atomic Safety and Licensing Board.
- 2. Result in a significant change in effluents or power levels.
- Result in matters not previously reviewed in the licensing basis for SQN that may have a significant environmental impact.

ENCLOSURE 3

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PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-90-22)

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION OVERTIME LIMITS

ENCLOSURE 3

Significant Hazards Evaluation

TVA has evaluated the proposed technical specification (TS) change and has determined that it does not represent a significant hazards consideration based on criteria established in 10 CFR 50.92(c). Operation of Sequoyah Nuclear Plant (SQN) in accordance with the proposed amendment will not:

 Involve a significant increase in the probability or consequences of an accident previously evaluated.

The proposed TS revision will not change SQN's policy on overtime limits; it provides administrative control. Reporting of changes to the Offsite Dose Calculation Manual and radioactive waste treatment systems will still be made in the Semiannual Radiological Effluent Report and the Final Safety Analysis Report. Changing the position titles and deleting the Operations Superintendent from Plant Operations Review Committee (PORC) membership do not decrease the level of required management oversight. Further restricting the approval authority level for administrative procedures and modifications and deleting workplan implementation terminology do not decrease level of review or approval. Correcting typographical errors is an administrative change. The proposed amendment, therefore, will have no effect on the probability or consequences of an accident previously analyzed in SQN's Final Safety Analysis Report.

(2) Create the possibility of a new or different kind of accident from any previously analyzed.

The proposed change on overtime limits, position titles, PORC membership, procedure/modification review and approval, and typographical errors cannot in itself create an accident. Reporting of changes to the Offsite Dose Calculation Manual and radioactive waste treatment systems will still be made in the Semiannual Radiological Effluent Report and the Final Safety Analysis Report. The proposed amendment, therefore, does not present the possibility of any new or different kind of accident.

(3) Involve a significant reduction in a margin of safety.

The proposed change provides administrative control of overtime limits and does not involve a reduction in margin of safety. It is intended to minimize fatigue, which may enhance safety by improving alertness and attentiveness. Reporting of changes to the Offsite Dose Calculation Manual and radioactive waste treatment systems will still be made in the Semiannual Radiological Effluent Report and the Final Safety Analysis Report. Deleting the Operations Superintendent from the designated PORC composition is not a reduction in the margin of safety provided by PORC oversight, as Operations' management is still represented. Review and approval for administrative procedures and modifications are not being reduced; therefore, the margin of safety is not reduced. Changing the position titles and correcting typographical errors are administrative changes. The proposed amendment, therefore, will not involve a reduction in margin of safety.