

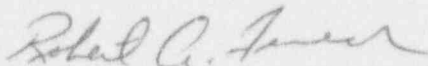
U.S. Nuclear Regulatory Commission

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June 16, 1993

If you have any questions or if we can be of any assistance, please telephone D. V. Goodin at (615) 843-7734.

Sincerely,



Robert A. Fenech

Sworn to and subscribed before me
this 16th day of June 1993



Notary Public

My Commission Expires 2/8/97

Enclosure

cc (Enclosure):

Mr. D. E. LaBarge, Project Manager
U.S. Nuclear Regulatory Commission
One White Flint, North
11555 Rockville Pike
Rockville, Maryland 20852-2739

Mr. Michael H. Mobley, Director (w/o Enclosures)
Division of Radiological Health
3rd Floor
L & C Annex
401 Church Street
Nashville, Tennessee 37243-1532

NRC Resident Inspector
Sequoyah Nuclear Plant
2600 Igou Ferry Road
Soddy-Daisy, Tennessee 37379-3624

Regional Administrator
U.S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30323-2711

ENCLOSURE 1

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-93-06)

LIST OF AFFECTED PAGES

Unit 1

1-4
1-7
3/4 11-2
B 3/4 11-1
6-17
6-18
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6-23
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6-26

Unit 2

1-4
1-7
3/4 11-2
B 3/4 11-1
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- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE, or
- c. Reactor coolant system leakage through a steam generator to the secondary system.

MEMBER(S) OF THE PUBLIC

1.17 MEMBER OF THE PUBLIC means an individual in a controlled or unrestricted area. However, an individual is not a member of the public during any period in which the individual receives an occupational dose.

~~for recreational, occupational, or other purposes not associated with plant functions. This category does not include non-employees such as vending machine servicemen or postmen who, as part of their formal job function, occasionally enter an area that is controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.~~

OFFSITE DOSE CALCULATION MANUAL (ODCM)

1.18 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints, and in the conduct of the Radiological Environmental Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.5 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Semiannual Radioactive Effluent Release Reports required by Specifications 6.9.1.6 and 6.9.1.8.

OPERABLE - OPERABILITY

1.19 A system, subsystem, train, or component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s), and when all necessary attendant instrumentation, controls, a normal and an emergency electrical power source, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

OPERATIONAL MODE - MODE

1.20 An OPERATIONAL MODE (i.e., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level and average reactor coolant temperature specified in Table 1.1.

PHYSICS TESTS

1.21 PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation and 1) described in Chapter 14.0 of the FSAR, 2) authorized under the provisions of 10 CFR 50.59, or 3) otherwise approved by the Commission.

UNIDENTIFIED LEAKAGE

1.36 UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE or CONTROLLED LEAKAGE.

| R159

UNRESTRICTED AREA

1.37 UNRESTRICTED AREA shall be any area to which access is neither limited nor controlled by the licensee."

| R159

~~to which licensee."~~
~~of individuals from exposure to radiation and radioactive materials or any~~
~~area within the site boundary used for residential quarters or industrial,~~
~~commercial, institutional, and/or recreational purposes.~~

| R75

VENTILATION EXHAUST TREATMENT SYSTEM

1.38 A VENTILATION EXHAUST TREATMENT SYSTEM is any system designed and installed to reduce gaseous radioiodine or radioactive material in particulate form in effluents by passing ventilation or vent exhaust gases through charcoal adsorbers and/or HEPA filters for the purpose of removing iodines or particulates from the gaseous exhaust stream prior to the release to the environment (such a system is not considered to have any effect on noble gas effluent). Engineered Safety Feature (ESF) atmospheric cleanup systems are not considered to be VENTILATION EXHAUST TREATMENT SYSTEM components.

| R159

VENTING

1.39 VENTING is the controlled process of discharging air or gas from a confinement to maintain temperature, pressure, humidity, concentration or other operating condition, in such a manner that replacement air or gas is not provided or required during VENTING. Vent, used in system names, does not imply a VENTING process.

| R159

RADIOACTIVE EFFLUENTS

LIQUID HOLDUP TANKS

LIMITING CONDITION FOR OPERATION

3.11.1.4 The quantity of radioactive material contained in each of the following tanks shall be limited by the following expression:

$\frac{\text{concentration of isotope } i}{\text{maximum permissible concentration of isotope } i} \leq 6,700$	$\text{Concentration of isotope } i \leq 6,700$ (Effluent concentration limit of isotope i)
--	---

excluding tritium and dissolved or entrained noble gases.

- Condensate Storage Tank
- Steam Generator Layup Tank
- Outside temporary tanks for radioactive liquid

APPLICABILITY: At all times.

ACTION:

- With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, immediately suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.
- The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1.4 The quantity of radioactive material contained in each of the above listed tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

3/4.11 RADIOACTIVE EFFLUENTS

BASES

3/4.11.1 LIQUID EFFLUENTS

3/4.11.1.1

This specification is deleted.

3/4.11.1.2

This specification is deleted.

3/4.11.1.3

This specification is deleted.

3/4.11.1.4 LIQUID HOLDUP TANKS

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR ~~Part 20~~, Appendix B, Table ~~II~~, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area.

20.1001 - 20.2401

2

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.1

This specification is deleted.

3/4.11.2.2

This specification is deleted.

3/4.11.2.3

This specification is deleted.

3/4.11.2.4

This specification is deleted.

R152

R152

ADMINISTRATIVE CONTROLS

d. DELETED

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.

f. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- 1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and set-point determination in accordance with the methodology in the ODCM,
- 2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR ~~Part 20~~, Appendix B, Table ~~II~~, Column 2,
20.1001 - 20.2401 *2*
- 3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM, *1302*
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,
- 5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,

ten times the
concentrations
stated in

ADMINISTRATIVE CONTROLS

- 6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,

INSERT

- 7) ~~Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column 1,~~

- 8) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
- 9) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50, and
- 10) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

g. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

- 1) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,
- 2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and
- 3) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

Insert

Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY SHALL BE LIMITED to the following:

1. For noble gases: Less than or equal to a dose rate of 500 mrem/yr to the total body and less than or equal to a dose rate of 3000 mrem/yr to the skin, and
2. For Iodine-131, Iodine-133, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to a dose rate of 1500 mrem/year to any organ.

ADMINISTRATIVE CONTROLS

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 in accordance with 10 CFR 50.4.

R78

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, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance

^{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.

20.2206

ADMINISTRATIVE CONTROLS

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 *and the resulting calculated dose to an individual member of the public.*
- 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 facility staff.
- h. Records of in-service inspections performed pursuant to these Technical Specifications. R73
- i. Records of Quality Assurance activities required for lifetime retention by the Nuclear Quality Assurance Plan. R1
- 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. R62
- 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. R62
- p. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM. R152

ADMINISTRATIVE CONTROLS

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

20.1601(a)

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~~ ^(RWP) Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Site Radiological Control Manager in the ~~Special (Radiation) Work Permit~~. ^(RWP)

R156

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.

R156

RWP

R152

*Radiological Control personnel or personnel escorted by Radiological Control personnel in accordance with approved emergency procedures, shall be exempt from the ~~SWP~~ ^(RWP) 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.

R62

ADMINISTRATIVE CONTROLS

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

1. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.p. This documentation shall contain:
 - a. sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 - b. a determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
2. Shall become effective after review and approval in accordance with Section 6.5.1A.

R152

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

1. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2.p. This documentation shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 - b. A determination that the change will maintain the level of radioactive effluent control ~~required by 10 CFR 20.106, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and~~ not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
2. Shall become effective after review and acceptance by the SQN RARC.
3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Semiannual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

R15

pursuant to

20.1302

ADMINISTRATIVE CONTROLS

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;
 - 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.

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

DEFINITIONS

IDENTIFIED LEAKAGE

1.16 IDENTIFIED LEAKAGE shall be:

- a. Leakage (except CONTROLLED LEAKAGE) into closed systems, such as pump seal or valve packing leaks that are captured and conducted to a sump or collecting tank, or
- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE, or
- c. Reactor coolant system leakage through a steam generator to the secondary system.

1.17 MEMBER OF THE PUBLIC means an individual in a controlled or unrestricted area. However, an individual is not a member of the public during any period in which the individual receives an occupational dose.

~~1.17 MEMBERS OF THE PUBLIC shall include all individuals who are not occupationally associated with the plant. This category shall include non-employees of the licensee who are permitted to use portions of the site for recreational, occupational, or other purposes not associated with plant functions. This category does not include non-employees such as vending machine servicemen or postmen who, as part of their formal job function, occasionally enter an area that is controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials.~~

OFFSITE DOSE CALCULATION MANUAL

1.18 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring alarm/trip setpoints and in the conduct of the Radiological Environmental Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.5 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Semiannual Radioactive Effluent Release Reports required by Specifications 6.9.1.6 and 6.9.1.8.

OPERABLE - OPERABILITY

1.19 A system, subsystem, train, or component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s), and when all necessary attendant instrumentation, controls, a normal and an emergency electrical power source, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

DEFINITIONS

SOLIDIFICATION

1.32 Deleted.

|R14

SOURCE CHECK

1.33 Deleted.

|R14

STAGGERED TEST BASIS

1.34 A STAGGERED TEST BASIS shall consist of:

|R14

- a. A test schedule for n systems, subsystems, trains or other designated components obtained by dividing the specified test interval into n equal subintervals,
- b. The testing of one system, subsystem, train or other designated component at the beginning of each subinterval.

THERMAL POWER

1.35 THERMAL POWER shall be the total reactor core heat transfer rate to the reactor coolant.

|R14

UNIDENTIFIED LEAKAGE

1.36 UNIDENTIFIED LEAKAGE shall be all leakage which is not IDENTIFIED LEAKAGE or CONTROLLED LEAKAGE.

|R14

UNRESTRICTED AREA

1.37 An UNRESTRICTED AREA shall be any area, at or beyond the site boundary to which access is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive materials or any area within the site boundary used for residential quarters or industrial, commercial, institutional, and/or recreational purposes.

|R14

R63

1.37 UNRESTRICTED AREA shall be any area to which access is neither limited nor controlled by the licensee."

RADIOACTIVE EFFLUENTS

LIQUID HOLDUP TANKS

LIMITING CONDITION FOR OPERATION

3.11.1.4 The quantity of radioactive material contained in each of the following tanks shall be limited by the following expression:

$$\frac{\sum_i \text{concentration of isotope } i}{\text{maximum permissible effluent concentration of isotope } i} \leq 6,700$$

$$\sum_i \frac{\text{concentration of isotope } i}{(\text{effluent concentration limit of isotope } i)} \leq 6,700$$

excluding tritium and dissolved or entrained noble gases.

- Condensate Storage Tank
- Steam Generator Layup Tank
- Outside temporary tanks for radioactive liquid

APPLICABILITY: At all times.

ACTION:

- With the quantity of radioactive material in any of the above listed tanks exceeding the above limit, immediately suspend all additions of radioactive material to the tank and within 48 hours reduce the tank contents to within the limit.
- The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

SURVEILLANCE REQUIREMENTS

4.11.1.4 The quantity of radioactive material contained in each of the above listed tanks shall be determined to be within the above limit by analyzing a representative sample of the tank's contents at least once per 7 days when radioactive materials are being added to the tank.

3/4.11 RADIOACTIVE EFFLUENTS

BASES

3/4.11.1 LIQUID EFFLUENTS

3/4.11.1.1

This specification is deleted.

3/4.11.1.2

This specification is deleted.

3/4.11.1.3

This specification is deleted.

3/4.11.1.4 LIQUID HOLDUP TANKS

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR ~~Part 20~~, Appendix B, Table ~~X~~, Column 2, at the nearest potable water supply and the nearest surface water supply in an unrestricted area.

20.1001 - 20.2401

2

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.1

This specification is deleted.

3/4.11.2.2

This specification is deleted.

3/4.11.2.3

This specification is deleted.

3/4.11.2.4

This specification is deleted.

R134

R134

ADMINISTRATIVE CONTROLS

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.

f. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- 1) Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and set-point determination in accordance with the methodology in the ODCM,
- 2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 CFR ~~Part 20~~, Appendix B, Table ~~II~~, Column 2,
20.1001 - 20.2401 *2*
- 3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.106 and with the methodology and parameters in the ODCM, *1302(a)*
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents release from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR Part 50,
- 5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,
- 6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases

ten times the concentrations stated in

ADMINISTRATIVE CONTROLS

6.8.5 f. Radioactive Effluent Controls Program (Cont.)

of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR Part 50,

- 7) ~~Limitations on the dose rate resulting from radioactive material released in gaseous effluents to areas beyond the SITE BOUNDARY conforming to the doses associated with 10 CFR Part 20, Appendix B, Table II, Column 1,~~

INSERT →

- 8) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50,
- 9) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR Part 50, and
- 10) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR Part 190.

g. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR Part 50, and (3) include the following:

- 1) Monitoring, sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM,
- 2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census, and

Insert

Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY SHALL BE LIMITED to the following:

1. For noble gases: Less than or equal to a dose rate of 500 mrem/yr to the total body and less than or equal to a dose rate of 3000 mrem/yr to the skin, and
2. For Iodine-131, Iodine-133, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to a dose rate of 1500 mrem/year to any organ.

ADMINISTRATIVE CONTROLS

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.

If the results of specific activity analysis in which the primary coolant exceeded the limits of specification 3.4.8.a, then the following information shall be included along with the results of specific activity analysis results in which the primary coolant exceeded the limits of the specifications:

(1) Reactor power history starting 48 hours prior to the first sample in which the limit was exceeded; (2) Results of the last isotopic analysis for radioiodine performed prior to exceeding the limit, results of analysis while the limit was exceeded and results of one analysis after the radioiodine activity was reduced to less than the limit. Each result should include date and time of sampling and the radioiodine concentrations; (3) Clean-up system flow history starting 48 hours prior to the first sample in which the limit was exceeded; (4) Graph of the I-131 concentration and one other radioiodine isotope concentration in microcuries per gram as a function of time for the duration of the specific activity above the steady-state level; and (5) The time duration when the specific activity of the primary coolant exceeded the radioiodine limit.

R107

^{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.

20.2206

ADMINISTRATIVE CONTROLS

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 environment *and the resulting calculated dose to an individual member of the public.*
- 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 facility 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 Plan. R15
- 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. R50
- 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.(10)(b) of license No. DPR-79. R50
- p. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM. R134

ADMINISTRATIVE CONTROLS

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

20.1601(a)

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

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.
- c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Site Radiological Control Manager in the ~~Special (Radiation) Work Permit~~.

(RWP)

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.

RWP

*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.

ADMINISTRATIVE CONTROLS

6.13 PROCESS CONTROL PROGRAM (PCP)

6.13.1 Changes to the PCP:

1. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2p. This documentation shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 - b. A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
2. Shall become effective after review and approval in accordance with Section 6.5.1A.

R13

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

6.14.1 Changes to the ODCM:

1. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.2p. This documentation shall contain:
 - a. Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 - b. A determination that the change will maintain the level of radioactive effluent control ^{pursuant to} ~~required by~~ 10 CFR ~~20.106~~, 40 CFR Part 190, 10 CFR 50.36a, and Appendix I to 10 CFR Part 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations. 20.1302
2. Shall become effective after review and acceptance by the SQN RARC.
3. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Semiannual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.

R13

ADMINISTRATIVE CONTROLS

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.

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

ENCLOSURE 2

PROPOSED TECHNICAL SPECIFICATION CHANGE

SEQUOYAH NUCLEAR PLANT UNITS 1 AND 2

DOCKET NOS. 50-327 AND 50-328

(TVA-SQN-TS-93-06)

DESCRIPTION AND JUSTIFICATION FOR

PROPOSED CHANGE TO SPECIFICATIONS

1.17, 1.37, 3.11.1.4, BASES 3/4.11.1.4, 6.8.5.f.2,
6.8.5.f.3, 6.8.5.f.7, FOOTNOTE TO 6.9.1.5, 6.10.2.d,
6.12.1, 6.14.1.b, AND 6.15.1

TVA proposes to modify the Sequoyah Nuclear Plant (SQN) Units 1 and 2 technical specifications (TSs) to implement the new requirements of 10 CFR 20. A description and justification for each change are described below.

Proposed Change 1, Member(s) of the Public

Revise the definition of member of the public in SQN TS Section 1.17 to read: "A MEMBER OF THE PUBLIC means an individual in a controlled or unrestricted area. However, an individual is not a member of the public during any period in which the individual receives an occupational dose."

Justification

This definition is being revised to incorporate the new 10 CFR 20 definition for member of the public.

Proposed Change 2, Unrestricted Area

Revise the definition of unrestricted area in SQN TS Section 1.37 to read: "An UNRESTRICTED AREA shall be any area to which access is neither limited nor controlled by the licensee."

Justification

This definition is being revised to incorporate the new 10 CFR 20 definition for unrestricted area.

Proposed Change 3, Liquid Holdup Tanks

Revise SQN TS 3.11.1.4 regarding the activity limit for the radioactive liquid holdup tanks.

The denominator in the TS equation is changed from "maximum permissible concentration of isotope i" to "effluent concentration limit of isotope i."

The wording in the bases for liquid holdup tanks is changed to read:

"Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tanks' contents, the resulting concentrations would be less than the limits of 10 CFR 20.1001 - 20.2401, Appendix B, Table 2, Column 2, at the nearest potable water supply and at the nearest surface water supply in an unrestricted area."

Justification

The words "maximum permissible concentration" were changed to "effluent concentration limit" to remain consistent with the terminology from the new 10 CFR 20.

Currently, the liquid holdup tank activity limit is based on that quantity that would not exceed the maximum permissible concentration limits of the old 10 CFR 20, Appendix B, Table II, Column 2, at the nearest potable water supply if the tank and components should fail. This concentration corresponds to a dose of 500 millirem (mrem). The proposed change to the TS equation incorporates the effluent concentration limits of the new 10 CFR 20 that will correspond to a dose of 50 mrem.

The proposed change to the bases for the liquid holdup tanks revises the current 10 CFR 20 references to be consistent with the references and acceptance criteria contained in the new 10 CFR 20.

Proposed Change 4. Radioactive Effluent Controls Program (Liquid Effluents)

Revise SQN TS 6.8.5.f.2 to state that the Offsite Dose Calculation Manual effluent control program will contain "Limitations on the concentration of radioactive material released in liquid effluents to unrestricted areas conforming to 10 times the concentrations stated in 10 CFR 20.1001 - 20.2401, Appendix B, Table 2, Column 2."

Revise SQN TS 6.8.5.f.3 to replace the old 10 CFR 20.106 reference with the new 10 CFR 20.1302(a) reference regarding monitoring, sampling, and analyzing radioactive liquid and gaseous effluents.

Justification

The basic requirements for TSs on effluents from nuclear power reactors are stated in 10 CFR 50.36a. The provisions of 10 CFR 50.36a(b) indicate that compliance with TSs will keep average annual releases of radioactive material in effluents at small percentages of the limits specified in the old 10 CFR 20.106 (new 10 CFR 20.1302). This requirement further states that "the licensee is permitted the flexibility of operation, compatible with considerations of health and safety, to assure that the public is provided a dependable source of power even under unusual operating conditions which may temporarily result in releases higher than such small percentages, but still within the limits specified in the 10 CFR 20.106." The 10 CFR 20.106 concentration values (reference Appendix B, Table II) are specific values that relate to an annual dose of 500 mrem. The provisions of 10 CFR 50.36a(b) conclude by saying that when using operational flexibility, best efforts shall be exerted to keep levels of radioactive materials in effluents as low as is reasonable achievable (ALARA) as set forth in 10 CFR 50, Appendix I.

In accordance with the introduction to Appendix B of the new 10 CFR 20, the liquid effluent concentration limits are based on a dose of 50 mrem per year. Since release concentrations corresponding to a limiting value of 500 mrem in a year have been acceptable as a TS limit for liquid effluents, which applies at all times as an assurance that the values of 10 CFR 50, Appendix I, are not likely to be exceeded, it is not necessary to reduce the current TS limit by a factor of ten.

Section VI, Subpart D, of the supplementary information that accompanied the new 10 CFR 20 stated that for power reactors, compliance with the limits of 10 CFR 50, Appendix I, and 40 CFR 190 will demonstrate compliance with the limits of 10 CFR 20.1301 in which dose limits for members of the public are stated. The limits in Appendix I and 40 CFR 190 are specified as annual dose limits; therefore, dose determinations to show compliance with these requirements are in terms of cumulative doses. If a dose limit of 50 mrem (or corresponding effluent concentrations) in a year was included in TSs as a limit that applies at all times, operational flexibility would not be available because the dose rate limit would already be very close to the dose limits specified in 10 CFR 50, Appendix I, and 40 CFR 190.

Operational history at SQN has demonstrated that the use of the concentration values associated with the old 10 CFR 20.106 as TS limits has resulted in calculated maximum individual doses to a member of the public that are small percentages of the limits in 10 CFR 50, Appendix I. Therefore, the use of concentration values that correspond to an annual dose of 500 mrem (ten times the concentration values stated in the new 10 CFR 20, Appendix B, Table 2, Column 2) should not have a negative impact on the ability to continue to operate within the limits of 10 CFR 50, Appendix I, and 40 CFR 190.

Having the operational flexibility discussed above is especially important in establishing a basis for effluent radiation monitor setpoint calculations. When applied on an instantaneous basis, the concentrations given in the new 10 CFR 20 correspond to a dose rate of 50 mrem per year. This low dose-rate value is an impractical low value upon which to base effluent monitor setpoints for many liquid effluent release situations when the radiation monitor's background, sensitivity, and performance must be taken into account. The calculated setpoint value of the radiation monitor would, in some instances, go beyond the measurement capability of the instrumentation.

Therefore, to accommodate operational flexibility needed for effluent releases, TS 6.8.5.f.2 is being revised to restate the limit as ten times the concentrations stated in the new 10 CFR 20.1001 - 20.2401, Appendix B, Table 2, Column 2. Compliance with the limits of the new Part 20 will be demonstrated by operating within the limits of 10 CFR 50, Appendix I, and 40 CFR 190.

The proposed change to TS 6.8.5.f.3 is justified since it incorporates the new 10 CFR 20 reference to paragraph 10 CFR 20.1302 that supersedes the old 10 CFR 20 reference to paragraph 10 CFR 20.106.

Proposed Change 5. Radioactive Effluent Controls Program (Gaseous Effluents)

The proposed change revises SQN TS 6.8.5.f.7 to accommodate operational flexibility for gaseous effluents within the new 10 CFR 20 limitations.

The specification is changed to read: "Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY shall be limited to the following:

1. For noble gases: Less than or equal to a dose rate of 500 mrem/yr to the total body and less than or equal to a dose rate of 3000 mrem/yr to the skin, and
2. For Iodine-131, Iodine-133, tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to a dose rate of 1500 mrem/yr to any organ."

Justification

TS 6.8.5.f.7 states that dose rates because of gaseous releases to areas beyond the site boundary must conform to the doses associated with 10 CFR 20, Appendix B, Table II, Column 1. In accordance with the old Part 20, the annual dose to a member of the public upon which these concentrations are based is 500 mrem. Although the old 10 CFR 20.106 allows effluent concentrations to be averaged over a year, the TSs require that gaseous effluent releases be limited to a dose rate of 500 mrem per year (total body). More restrictive limits are contained in the TSs to ensure that the dose limits of Appendix I to 10 CFR 50 or the dose limits of 40 CFR 190 are not exceeded.

The basic requirements for TSs on effluents from nuclear power reactors are stated in 10 CFR 50.36a. These requirements indicate that compliance with effluent TSs will keep average annual releases of radioactive effluents at small percentages of the limits specified in the old 10 CFR 20.106 (new 10 CFR 20.1301). These requirements further indicate that operational flexibility is allowed, compatible with considerations of health and safety, which may temporarily result in releases higher than such small percentages, but still within the limits specified in the old 10 CFR 20.106 that references Appendix B, Table II, concentrations. These referenced concentrations are specific values that relate to an annual dose of 500 mrem. It is further indicated in 10 CFR 50.36a that when using operational flexibility, best efforts shall be exerted to keep levels of radioactive materials in effluents ALARA as set forth in 10 CFR 50, Appendix I.

In accordance with the introduction to Appendix B of the new 10 CFR 20, the gaseous effluent concentration limits stated in Appendix B, Table 2, Column 1, are based on an annual dose of 50 mrem for isotopes for which inhalation or ingestion is limiting, or 100 mrem for isotopes for which submersion (noble gases) is limiting. Since release concentrations corresponding to limiting dose rates less than or equal to 500 mrem per year to the total body, 3000 mrem per year to the skin, and 1500 mrem per year to any organ have been acceptable as a TS limit for gaseous effluents to ensure that the limits of 10 CFR 50, Appendix I, and 40 CFR 190 are not likely to be exceeded, it is not necessary to restrict

the operational flexibility by incorporating the dose rates associated with the effluent concentration values in the new 10 CFR 20.

Having sufficient operational flexibility is especially important in establishing a basis for effluent radiation monitor setpoint calculations. As discussed above, the concentrations stated in the new 10 CFR 20, Appendix B, Table 2, Column 1, relate to a dose-rate value of 50 or 100 mrem in a year. These low dose-rate values would be impractical upon which to base effluent monitor setpoint calculations for many gaseous effluent release situations since radiation monitor background, sensitivity, and performance must be taken into account. The calculated setpoint value of the radiation monitor would, in some instances, go beyond the measurement capability of the instrumentation.

Therefore, to accommodate operational flexibility needed for effluent releases, the limits associated with the gaseous release rate TS will be maintained at the current instantaneous dose rate limit for noble gases of 500 mrem per year to the total body and 3000 mrem per year to the skin; and for Iodine-131, Iodine-133, tritium, and for all radionuclides in particulate form with half-lives greater than eight days, an instantaneous dose rate limit of 1500 mrem per year to any organ.

Compliance with the limits of the new 10 CFR 20.1301 will be demonstrated by operating within the limits of 10 CFR 50, Appendix I, and 40 CFR 190. Operational history at SQN has demonstrated that the use of the dose rate values listed above (i.e., 500 mrem per year, 3000 mrem per year, and 1500 mrem per year) as TS limits has resulted in calculated maximum individual doses to members of the public that are small percentages of the limits of 10 CFR 50, Appendix I, and 40 CFR 190.

Proposed Change 6, Remove "Annual"

The proposed change to a footnote in TS 6.15.1 removes the word "annual" as it relates to the Final Safety Analysis Report (FSAR) update.

Justification

This change is an editorial change that is unrelated to the new 10 CFR 20. By letter dated November 16, 1992, TVA informed NRC of a change to SQN's FSAR update frequency from annual to once every refueling outage. This was based on a recent rule change to 10 CFR 50 entitled, "Reducing the Regulatory Burden on Nuclear Licensees." Because of the change to SQN's FSAR update frequency, the TS is being revised to remove the word annual when describing SQN's FSAR update frequency.

Environmental Impact Evaluation

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:

1. Result in a significant increase in any adverse environmental impact previously evaluated in the Final Environmental Statement (FES) as modified by NRC'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.
3. Result in matters not previously reviewed in the licensing basis for SQN that may have a significant environmental impact.

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:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated. The proposed changes: (1) modify the liquid and gaseous release rate limits, (2) relocate the old 10 CFR 20.106 requirements to the new 10 CFR 20.1302, (3) revise the equation for the liquid holdup tank activity limit, (4) revise references from the old 10 CFR 20 to conform to the corresponding sections of the new 10 CFR 20, and (5) provide an editorial change, unrelated to 10 CFR 20, that removes the word "annual" when describing Final Safety Analysis Report update frequency. These proposed changes will not involve a significant increase in the probability or consequences of an accident previously evaluated because there will be no change in the types and amounts of effluents that will be released, nor will there be an increase in individual or cumulative occupational radiation exposures.
- (2) Create the possibility of a new or different kind of accident from any previously analyzed. The proposed changes related to the new 10 CFR 20 requirements will not create the possibility of a new or different kind of accident from any previously evaluated because the revisions are administrative and will not affect the types and amounts of effluent that will be released. The proposed change to delete the word annual is editorial in nature and will not create the possibility of a new or different kind of accident from any previously analyzed.
- (3) Involve a significant reduction in a margin of safety. The proposed revisions will not reduce any margin of safety because, for the liquid effluent releases, the methodology that will be used in the control of radioactive effluents will result in the same effluent dose to a member of the public. This is acceptable since annual doses will be limited to the doses specified in 10 CFR 50, Appendix I, and 40 CFR 190. Also, for gaseous effluent releases, the limits associated with the gaseous release rate TSs will be maintained at the current dose rate limits. Compliance with the limits of the new 10 CFR 20.1301 will be demonstrated by operating within the limits of 10 CFR 50, Appendix I, and 40 CFR 190. Because compliance with the regulatory requirements has not been compromised and because these changes did not alter the facility or its design, there is no reduction in a margin of safety.