Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37379

November 6, 1995

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Gentlemen:

In the Matter of	)	Docket Nos. 50-327
Tennessee Valley Authority	)	50-328

SEQUOYAH NUCLEAR PLANT (SQN) - ANNUAL ENVIRONMENTAL OPERATING REPORT

The enclosure contains the Annual Environmental Operating Report for SQN for the period from September 15, 1994, through September 14, 1995. This report is submitted in accordance with Appendix B, Technical Specification 5.4.1.

Please direct questions concerning this issue to W. C. Ludwig at (423) 843-7460.

Sincerely,

R. H. Shell

R. H. Shell
Manager
SQN Site Licensing

Enclosure
cc: See page 2

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cc (Enclosure):

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TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT (SQN)

ANNUAL NONRADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

SEPTEMBER 15, 1994

THROUGH

SEPTEMBER 14, 1995

ANNUAL ENVIRONMENTAL OPERATING REPORT

SEPTEMBER 15, 1994, THROUGH SEPTEMBER 14, 1995

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ANNUAL ENVIRONMENTAL OPERATING REPORT

SEPTEMBER 15, 1994, THROUGH SEPTEMBER 14, 1995

I. INTRODUCTION

The Sequoyah Nuclear Plant Annual Environmental Operating Report for the period of September 15, 1994, through September 14, 1995, is prepared in accordance with Environmental Technical Specification (ETS) (Non-Radiological), Appendix B, 5.4.1. ETS, Section 4.2, requires no special studies at this time. This report includes a summary of:

- Reports previously submitted as specified in the SQN National Pollutant Discharge Elimination System (NPDES) Permit No. TN0026450.
- All ETS noncompliances and the corrective actions taken to remedy them.
- Changes made to applicable State and Federal permits and certifications.
- Changes in station design that could involve a significant environmental impact or change the findings of the Final Environmental Statement (FES).
- All nonroutine reports submitted in accordance with ETS Section 4.1.
- Changes in approved ETS.

II. REPORTS PREVIOUSLY SUBMITTED AS SPECIFIED IN THE SQN NPDES PERMIT

The following reports were submitted as specified in the SQN NPDES Permit No. TN0026450:

- Aquatic Toxicity Monitoring Study, submitted January 1995.
- Aquatic Toxicity Monitoring Study, submitted July 1995.

III. ETS NONCOMPLIANCES

There were no ETS noncompliances for this period.

IV. CHANGES MADE TO APPLICABLE STATE AND FEDERAL PERMIT CERTIFICATIONS

On September 16, 1994, the annual sampling requirements for polychlorinated biphenyls (PCBs) were eliminated at Discharge Serial Number (DSN) 103, low-volume waste treatment pond effluent and were changed from quarterly to annually at DSN 101, diffuser pond effluent. This change was based on the historical quarterly sample results indicating no presence of PCBs in these discharges.

Clean closure of the mixed waste storage area was approved by the Tennessee Department of Environment and Conservation, Corrective Action Division in June 1995.

V. CHANGES IN FACILITY DESIGN OR OPERATION

In accordance with Technical Specification (TS) 5.3.c., facility design and operational changes were reviewed for potential effect on the environment. A study of facility design and operational changes proposed from September 15, 1994, through September 14, 1995, was performed. Projects considered as having potential impact on the environment included: those that could have caused waste stream generation and or alteration; or that required the acquisition/modification of permits; or involved the use of hazardous material; or required physical construction. The study identified and documented a basis that the design and operational changes did not involve an unreviewed environmental question. A copy of this study is attached (Attachment 1).

VI. NONROUTINE REPORTS

One nonroutine report was submitted in accordance with TS 4.1. This report involved a minor spill that did not reach waters of the United States. The incident is summarized below:

A reportable spill of hydrazine occurred when SQN Unit 2 was shut down for refueling on October 5, 1994. Concurrent work activities on the turbine cycle systems caused the charging of a line that had been drained for maintenance with water containing 0.28% (2,800 parts per million) hydrazine. Approximately 900 gallons of the 0.28% solution drained from the line, which was open for valve testing, onto a concrete area, ran across approximately 50 feet of gravel overlaying compacted clay and into a yard drain. The yard drainage system consists of approximately 1100 feet of concrete piping of 42- to 48-inch diameter and a total of 5 3-foot by 3-foot catch basins along a 2- to 3-degree slope. The yard drainage system empties into an onsite yard drainage pond constructed by TVA to collect storm water runoff and as an alternate flow path for low

volume waste. The yard drainage pond effluent enters the diffuser pond where it mixes with 600,000 gallons per minute of cooling water before entry into the Tennessee River.

VII. CHANGES IN APPROVED ETS

The 18-month frequency specification for environmental audits was removed from TSs during this period. Internal audits are conducted by an Independent Corporate Audit staff currently at an annual frequency. Additionally, the facility is audited by the Environmental Protection Agency, State of Tennessee or Local Regulators in each major area of Environmental Compliance on a frequent basis (generally, less than 18 months).

ATTACHMENT 1

a. **Study of Sequoyah Nuclear Plant (SQN) Design and Operational Changes Between September 15, 1994, and September 14, 1995, for Effects on the Environment**

Facility design and operational changes made or proposed during this report period were reviewed for potential to affect the environment as described below. None were found to result in an unreviewed environmental question. The following criteria were used to identify those projects with a potential for environmental effects:

(1) Waste stream generation/alteration (air, hazardous waste, solid waste, PCB's, asbestos, wastewater).
(2) Permit acquisition/modification (NPDES, air, inert landfill, other [316a, 404, etc.]).
(3) Hazardous materials.
(4) Physical construction involved (erosion/sedimentation effects, transportation effects, noise effects, groundwater effects, surface water effects, floodplain effects, wetland effects, prime farmland effects, unique natural features effects, aquatic ecology effects, terrestrial ecology effects, protected species effects, sensitive habitat effects, visual effects, historical, cultural and archeological effects, changes in site land use, and controversy).

b. **Special Tests**

There were no special tests conducted during this period that met environmental impact criteria.

c. **Temporary Alterations**

Use of high pressure fire protection water for the Instrument Maintenance/Plant Office Building air conditioning unit cooling.

d. **Design and Operational Changes**

- Installation of 12-Inch Diameter Mechanical Sleeve in Additional Equipment Building
- Replacement of X-153/#22 and X-159/#39 Containment Electrical Penetrations
- System 6 GEMAC Transmitter Replacement
- Install Leading Edge Flow Meter

d. **Design and Operational Changes** (continued)

- Erosion/Corrosion - Inspection & Repairs -U1C7
- Lower Containment Qualification of 10 CFR 50.49 Electrical Components
- URI - 88-12-08, Component Damping
- Containment Electrical Penetrations
- Main Turbine Lube Oil Purifier
- Main Feedwater Pump Turbine Lube Oil Purifier
- Super Short Cycle Modification
- Essential Raw Cooling Water (ERCW) Dredge Pond Drainage and Landfill Capping
- Ammonium Chloride Injection System
- Cable Drive Transfer System
- Probable Maximum Precipitation Flooding Issue
- Landfill Closure - Soil Borrow
- SQ940596 PER Shutdown Board Room Chiller Temperature Control Valve Changeout
- Add Gauge & Pressure Switch Access Fitting to Heating, Ventilation, and Air-Conditioning Units
- Glycol Chillers, Instrumentation Upgrade
- SQPER 930017 Replace Condenser Vacuum Radiation Monitoring
- 2-LVC-6-106B Valve Trim Changeout
- Replacement for Obsolete Power Supply 1-PV-3-142
- Exposed Wiring Separation in Panel 1-M-4
- Sink in Category 1 Structure
- Containment Isolation Thermal Relief Valve
- SQP900451SCA Containment Isolation Thermal Relief Valves - Unit 1
- Auxiliary Control System Dryers
- Removal of Heat Trace
- Turbo Generator Set points
- Nuclear Stores Receiving Facility
- Use of Superbolts
- Install Check Valve in Demineralized Water System In Accordance With Design 0-50-53-
- Determine Method and Cost for Onsite Storage of Low Level Radwaste
- Emergency Core Cooling Systems Throttle Valves - Units 1 and 2
- Replacement of Valve 1-68-559
- Replacement of Valve 2-68-559
- Main Control Room Annunciator Backpanel Color Code Corrections
- Ground Couple Noise in Instrument Loops with Micro 100 Recorder - Unit 1
- Ground Couple Noise in Instrument Loops with Micro 100 Recorder - Unit 2

d. **Design and Operational Changes** (continued)

- Replacement of 500-KV-Breaker 5038 - Unit 1
- Replacement of 500-KV-Breaker 5074 - Unit 1
- Installation of Vendor (Ecolochem) Makeup Water Treatment System
- Replace the L-B ERCW Pump - Unit 1
- SQPER930071 Replace Fixed Airborne Rad Monitor
- Replacement of Containment Electrical Penetrations - U1C7
- SQPER930049 Safety Injection System Test Header and Centrifugal Charging Pump
- Governor Valve (1&2-FCV-1-52) Stem Binding
- Incore Temperature Monitoring Replacement - Unit 1
- Incore Temperature Monitoring Replacement - Unit 2
- Polar Crane Lights Unit 1
- Steam Generator Blowdown First Stage Heat Exchanger Temperature Control Valve Modification - Unit 2
- Steam Generator Blowdown First Stage Heat Exchanger Temperature Control Valve Modification - Unit 1
- #3 Heater Drain Tank Pump Seal Injection Water Low Delta P Alarm
- Solid State Protection System Fuse Modification - Unit 1
- Solid State Protection System Fuse Modification - Unit 2
- Fuel Transfer Canal High-Efficiency Particulate Air Filters
- Access Walkways in East/West Valve Rooms
- Polar Crane Lights Unit 2
- Terry Turbine Speed Increase
- Steam Generator Chemical Cleaning - Unit 1
- Steam Generator Chemical Cleaning - Unit 2
- Control Rod Drive Motor Damper Replacements
- Residual Heat Removal (RHR) Water Hammer - Unit 1
- RHR Water Hammer - Unit 2
- Insulation of Pressurizer Safety Valves and PORVS - Unit 1
- Insulation of Pressurizer Safety Valves and PORVS - Unit 2
- SQ930225PER Condensate Demineralizer High Crud Waste Processing System
- Condensate Demineralizer Building Emergency Lighting
- Automatic Main Feedwater Pump Miniflow Valve - Unit 1
- Automatic Main Feedwater Pump Miniflow Valve - Unit 2
- Abandon Boric Acid Evaporator Package and Concentrate Filters
- Replace Control Rod Drive Cooler Controllers - Unit 1
- Replace Control Rod Drive Cooler Controllers - Unit 2
- Deletion of the Controllers for the Upper Containment Coolers Temperature Control Valves - Unit 1
- Deletion of the Controllers for the Upper Containment Coolers Temperature Control Valves - Unit 2
- Reach Rod Operated Valves - Unit 1
- Reach Rod Operated Valves - Unit 2

d. **Design and Operational Changes** (continued)

- Make Fifth DG an Available Power Source
- 1-PCV-77-430 and 431 Steam Generator Nitrogen Layup - Unit 1
- 1-PCV-77-430 and 431 Steam Generator Nitrogen Layup - Unit 2
- Auxiliary Feed Water Modifier - Unit 1
- Auxiliary Feed Water Modifier - Unit 2
- C-9 Steam Dump Circuit Noise Reduction - Unit 1
- C-9 Steam Dump Circuit Noise Reduction - Unit 2
- Vehicle Barrier System
- TS 95-11 Change Time Constants - Unit 1
- TS 95-11 Change Time Constants - Unit 2
- Manual Operator for heater Drain Tank Bypass Level Control Valves
- Install Protective Barrier Around Fire Detector 0-TS-013-0214D
- Add Duplex Seal Oil Purification - Unit 1
- Add Duplex Seal Oil Purification - Unit 2
- Reactor Coolant Filter Monorail Load Rating
- Provide Time Delay on Sudden Oil Flow Trip Provided by Bucholtz Relays - Unit 1
- Provide Time Delay on Sudden Oil Flow Trip Provided by Bucholtz Relays - Unit 2

All facility design and operational changes made during this report period with a potential impact on the environment were found to be within the scope of existing permits and in compliance with environmental regulations.

In summary, there have been no facility design or operational changes from September 15, 1994, to September 14, 1995, which have resulted in an unreviewed environmental question.