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10 CFR 50.4

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-001

Sequoyah Nuclear Plant, Units 1 and 2
Facility Operating License Nos. DPR-77 and DPR-79
NRC Docket Nos. 50-327 and 50-328

Subject: Annual Non-Radiological Environmental Operating Report

This letter transmits the Sequoyah Nuclear Plant (SQN) Annual Non-Radiological Environmental Operating Report for the period from October 1, 2009, through September 30, 2010. This report is submitted in accordance with Appendix B of the SQN Operating License, Section 5.4.1.

Please direct questions concerning this issue to Beth A. Wetzel at (423) 843-7170.

Respectfully,

R. M. Krich

Enclosure

Sequoyah Nuclear Plant Annual Non-Radiological Environmental Operating
Report, October 1, 2009 - September 30, 2010

cc (Enclosure):

NRC Regional Administrator – Region II
NRC Senior Resident Inspector – Sequoyah Nuclear Plant
NRC Project Manager – Sequoyah Nuclear Plant
Division of Radiological Health - State of Tennessee

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ENCLOSURE

SEQUOYAH NUCLEAR PLANT

ANNUAL NON-RADIOLOGICAL ENVIRONMENTAL OPERATING REPORT

OCTOBER 1, 2009, THROUGH SEPTEMBER 30, 2010

TABLE OF CONTENTS

TABLE OF CONTENTS	2
I. INTRODUCTION	3
II. REPORTING FOR THOSE PROGRAMS NOT CONCERNED WITH WATER QUALITY OR PROTECTION OF AQUATIC BIOTA, WHICH ARE REGULATED BY THE CLEAN WATER ACT	3
III. ENVIRONMENTAL MONITORING PERFORMED.....	5
IV. REPORTS PREVIOUSLY SUBMITTED AS SPECIFIED IN THE SQN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT	6
V. ENVIRONMENTAL TECHNICAL SPECIFICATION (ETS) NONCOMPLIANCES	7
VI. CHANGES MADE TO APPLICABLE STATE AND FEDERAL PERMIT CERTIFICATIONS	7
VII. CHANGES IN FACILITY DESIGN OR OPERATION.....	7
VIII. NON-ROUTINE REPORTS.....	8
IX. SPECIAL STUDIES	9
X. CHANGES IN APPROVED ENVIRONMENTAL TECHNICAL SPECIFICATIONS	9

I. INTRODUCTION

The Sequoyah Nuclear Plant Annual Non-Radiological Environmental Operating Report for the period of October 1, 2009 through September 30, 2010 is prepared in accordance with Environmental Technical Specifications (ETS) (Non-Radiological), Appendix B, Section 5.4.1. This report includes a summary of:

- A. Reporting for those programs not concerned with water quality or protection of aquatic biota, which are regulated by the Clean Water Act
- B. Environmental monitoring performed
- C. Reports previously submitted as specified in the SQN National Pollutant Discharge Elimination System (NPDES) Permit No. TN0026450
- D. ETS noncompliances and the corrective actions for remediation
- E. Changes made to applicable State and Federal permits and certifications
- F. Changes in station design that could involve a significant environmental impact or change the findings of the Final Environmental Statement (FES)
- G. Nonroutine reports submitted per ETS Section 4.1
- H. Special studies
- I. Changes in approved ETS

Reporting, monitoring, and inspections conducted as required by permits and regulations indicated no adverse impact on the environment as a result of station operation.

II. REPORTING FOR THOSE PROGRAMS NOT CONCERNED WITH WATER QUALITY OR PROTECTION OF AQUATIC BIOTA, WHICH ARE REGULATED BY THE CLEAN WATER ACT

- A. Waste Stream 68 - submitted to Tennessee Department of Environment and Conservation on October 6, 2009
- B. Third Quarter 2009 Summary of Asbestos Removal Projects - submitted to the Hamilton County Air Pollution Control Bureau on October 7, 2009
- C. Material Safety Data Sheet for Spectrus CT1300 - submitted to Soddy-Daisy Fire Department, Hamilton County Emergency Services and the Tennessee Emergency Response Commission on October 20, 2009
- D. Spill Prevention Control and Countermeasures Plan, revision 15 - submitted to Soddy-Daisy Fire Department on October 20, 2009
- E. Spill Prevention Control and Countermeasures Plan, revision 15 - submitted to Erlanger Hospital, and Memorial Northpark Hospital on October 21, 2009
- F. Vice President Signatory Authority Letters – submitted to Tennessee Department of Environment and Conservation, Hamilton County Air Pollution Control Bureau, Soddy-Daisy Fire Department, Hamilton County Emergency Services, and the Tennessee Emergency Response Commission on November 3, 2009
- G. Annual Asbestos Removal Notification - submitted to Hamilton County Air Pollution Control Bureau on November 9, 2009
- H. Vice President Signatory Authority Letters – submitted to Tennessee Department of Environment and Conservation, Hamilton County Air Pollution Control Bureau, Soddy-Daisy Fire Department, Hamilton County Emergency Services, and the Tennessee Emergency Response Commission on December 14, 2009
- I. Fourth Quarter 2009 Summary of Asbestos Removal Projects - submitted to the Hamilton County Air Pollution Control Bureau on January 6, 2010
- J. Report on Diesel Fuel Shipments for Auxiliary Boilers A and B - submitted to the Hamilton County Air Pollution Control Bureau on January 6, 2010

- K. Tier Two Emergency and Hazardous Chemical Inventory - submitted to Soddy-Daisy Fire Department, Hamilton County Emergency Services and the Tennessee Emergency Response Commission on February 19, 2010
- L. Annual Hazardous Waste Activity Report for 2009 - submitted to the Tennessee Department of Environment and Conservation on February 23, 2010
- M. Sequoyah Nuclear Plant Hazardous Waste Minimization Plan - maintained on file at Sequoyah since March 1, 2010
- N. Waste Evaluation Application for Sandblast Grit - submitted to Tennessee Department of Environment and Conservation on April 1, 2010
- O. First Quarter 2010 Report on Nonscheduled Removal of Asbestos Containing Material - submitted to the Hamilton County Air Pollution Control Bureau on April 1, 2010
- P. Waste Evaluation Application for Water Treatment Sand - submitted to Tennessee Department of Environment and Conservation on April 13, 2010
- Q. Waste Evaluation Application for Diesel Fuel Contaminated Soil - submitted to Tennessee Department of Environment and Conservation on April 28, 2010
- R. Update to Failure of Pressure Test for Piping Associated with Underground Storage Tanks - submitted to Tennessee Department of Environment and Conservation on April 28, 2010
- S. Demolition Permit Application for Heavy Equipment Division - submitted to the Hamilton County Air Pollution Control Bureau on May 6, 2010
- T. Toxic Release Inventory (TRI) Electronic Signature Agreement - submitted to the TRI Reporting Center on May 12, 2010
- U. Sequoyah Nuclear Plant Annual Report on The Hours of Operation for diesel permitted equipment - submitted to the Hamilton County Air Pollution Control Bureau on May 13, 2010
- V. 2010 Annual Testing of Backflow Prevention Assemblies - submitted to Hixson Utility District on June 3, 2010
- W. Forms A and R Toxic Chemical Release Information Calendar Year 2009 Required by Emergency Planning and Community Right to Know Act - submitted to the Environmental Protection Agency EPCRA Reporting Center and Tennessee Department of Environment and Conservation on June 28, 2010
- X. Written Annual Document Log of PCBs and PCB Items for Calendar Year 2009 - maintained on file since July 1, 2010
- Y. Second Quarter 2010 Summary of Asbestos Removal Projects - submitted to the Hamilton County Air Pollution Control Bureau on July 7, 2010
- Z. Report on Diesel Fuel Shipments for Auxiliary Boilers A and B - submitted to the Hamilton County Air Pollution Control Bureau on July 7, 2010
- AA. Spill Prevention Control and Countermeasures Plan, revision 16 - submitted to Soddy-Daisy Fire Department, Erlanger Hospital, and Memorial Northpark Hospital on July 16, 2010
- BB. Request for Closure of Cleanup from Failure of Pressure Test for Piping Associated with Underground Storage Tanks - submitted to Tennessee Department of Environment and Conservation on August 3, 2010
- CC. Approval for Closure of Cleanup from Failure of Pressure Test for Piping Associated with Underground Storage Tanks - received from Tennessee Department of Environment and Conservation on August 5, 2010

III. ENVIRONMENTAL MONITORING PERFORMED

- A. Storm water samples taken at required frequencies and Best Management Practices implemented as required by General Industrial Storm Water Discharge Permit TNR050015
- B. Semi-annual facility inspections as required by General Industrial Storm Water Discharge Permit TNR050015
- C. Outfall sampling and inspection is performed as required by NPDES Permit TN0026450 (results previously submitted to NRC as required)
- D. Monthly erosion and sediment control inspections are conducted as required by General Industrial Storm Water Discharge Permit TNR050015
- E. Weekly tank, piping, and secondary containment inspections are performed as required by General Industrial Storm Water Discharge Permit TNR050015 and the Spill Prevention Controls and Countermeasure Plan
- F. Weekly and monthly hazardous waste inspections conducted as required by 40CFR261 and by the Tennessee Rule Chapter 1200, Hazardous Waste Management
- G. Weekly landfill inspections performed as required by 40CFR258 and by the Tennessee Rule Chapter 1200, Solid Waste Processing and Disposal
- H. Daily operational hours of Auxiliary Boilers A and B, Emergency Generators 1A, 1B, 2A, and 2B, and Blackout Generators 1 and 2 as required by Federally Enforceable Certificate of Operation Nos. 4150-10200501-08C and 4150-20200102-11C
- I. Diesel fuel recovery trench, extraction, and monitoring well sampling, maintenance and operation conducted as required by the State of Tennessee
- J. Intake forebay aeration system sampling, maintenance and operation performed as required by the State of Tennessee
- K. Air emissions inspected monthly for equipment permitted by the Hamilton County Air Pollution Control Bureau
- L. Refrigeration equipment performance and repairs are tracked weekly to ensure compliance with Title VI of the Clean Air Act
- M. Waste sampling and characterization as required by 40CFR261 and by the Tennessee Rule Chapter 1200, Hazardous Waste Management
- N. Quarterly PCB transformer inspections as required by 40CFR761
- O. Daily inspections of leaking PCB transformers as required by 40CFR761
- P. PCB spill and leak cleanup as required by 40CFR761
- Q. Asbestos removal tracking as required by the Hamilton County Air Pollution Control Bureau
- R. Hazardous waste minimization (such as chemical control and substitution) as required by the Tennessee Rule Chapter 1200, Hazardous Waste Management
- S. National Environmental Policy Act (NEPA) reviews are conducted to evaluate potential environmental impact of temporary or permanent facility modifications as required by 40CFR1500
- T. Ponds, Dikes, and Channels self-assessment CRP-TPR-S-09-001
- U. Hazardous Waste and Used Oil self-assessment CRP-E&T-10-001

IV. REPORTS PREVIOUSLY SUBMITTED AS SPECIFIED IN THE SQN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT

The following reports were submitted as specified in the SQN NPDES Permit No. TN0026450, General Industrial Discharge Storm Water Permit No. TNR050015.

- A. Monthly Discharge Monitoring Report for September 2009 - submitted to Tennessee Department of Environment and Conservation on October 13, 2009
- B. Correction to Monthly Discharge Monitoring Report for August 2009 - submitted to Tennessee Department of Environment and Conservation and the Environmental Protection Agency on October 13, 2009
- C. DMR - QA Study 29 Provider Graded Test Results - submitted to Tennessee Department of Environment and Conservation and Environmental Protection Agency on October 13, 2009
- D. Monthly Discharge Monitoring Report for October 2009 - submitted to Tennessee Department of Environment and Conservation on November 9, 2009
- E. Biocide/Corrosion Treatment Plan (B/CTP) Missed Spectrus CT1300 sample - submitted to Tennessee Department of Environment and Conservation on November 23, 2009
- F. DMR - QA Study 29 Corrective Action Reports - submitted to Tennessee Department of Environment and Conservation and Environmental Protection Agency on December 2, 2009
- G. Monthly Discharge Monitoring Report for November 2009 - submitted to Tennessee Department of Environment and Conservation on December 14, 2009
- H. Application for the Department of the Army Permit for Unloading and Loading Ramp (boat ramp) for Turbine Low Pressure Rotors and Unit 2 Steam Generators - submitted to the U.S. Corps of Engineers and Tennessee Department of Environment and Conservation on December 14, 2009
- I. Monthly Discharge Monitoring Report for December 2009 - submitted to Tennessee Department of Environment and Conservation on January 11, 2010
- J. Water Withdrawal Registration Forms - submitted to Tennessee Department of Environment and Conservation on February 9, 2010
- K. 2009 Biocide/Corrosion Treatment Plan (B/CTP) Annual Report - submitted to Tennessee Department of Environment and Conservation on February 9, 2010
- L. Monthly Discharge Monitoring Report for January 2010 - submitted to Tennessee Department of Environment and Conservation on February 9, 2010
- M. Monthly Discharge Monitoring Report for February 2010 - submitted to Tennessee Department of Environment and Conservation on March 9, 2010
- N. Multi-Sector Storm Water General Permit 2010 Storm Water Monitoring Report - submitted to Tennessee Department of Environment and Conservation on March 9, 2010
- O. DMR - QA Laboratory Performance Evaluation Study 30 package - submitted electronically to Tennessee Department of Environment and Conservation and the Environmental Protection Agency on March 10, 2010
- P. 30-Day Storm Water Cut-off Concentration Exceedance - submitted to Tennessee Department of Environment and Conservation on April 1, 2010
- Q. Monthly Discharge Monitoring Report for March 2010 - submitted to Tennessee Department of Environment and Conservation on April 13, 2010
- R. Sixty Day Response for Storm Water Cut-off Concentration Exceedance - submitted to Tennessee Department of Environment and Conservation on May 4, 2010

- S. Corps of Engineering Certification of Work Form in reference to Permit No. 2009-00654 - submitted to the U.S. Corps of Engineers and Tennessee Department of Environment and Conservation on May 6, 2010.
- T. Monthly Discharge Monitoring Report for April 2010 - submitted to Tennessee Department of Environment and Conservation on May 13, 2010
- U. Monthly Discharge Monitoring Report for May 2010 - submitted to Tennessee Department of Environment and Conservation on June 10, 2010
- V. DMR - QA Laboratory Performance Evaluation Study 30 - submitted electronically to Environmental Resource Associates on June 25, 2010
- W. Monthly Discharge Monitoring Report for June 2010 - submitted to Tennessee Department of Environment and Conservation on July 12, 2010
- X. Monthly Discharge Monitoring Report for July 2010 - submitted to Tennessee Department of Environment and Conservation on August 11, 2010
- Y. DMR - QA Study 30 Provider Graded Test Results - submitted to Tennessee Department of Environment and Conservation and Environmental Protection Agency on August 13, 2010
- Z. Application for State Operating Permit for Pump and Haul Activities - submitted to Tennessee Department of Environment and Conservation on July 16, 2010
- AA. 5-Day Letter as required by NPDES Permit No. TN0026450 for ERCW Towerbrom 960 spill - submitted to Tennessee Department of Environment and Conservation on August 24, 2010
- BB. Monthly Discharge Monitoring Report for August 2010 - submitted to Tennessee Department of Environment and Conservation on September 9, 2010
- CC. 30 -Day Storm Water Cut-off Concentration Exceedance - submitted to Tennessee Department of Environment and Conservation on September 21, 2010

V. ENVIRONMENTAL TECHNICAL SPECIFICATION (ETS) NONCOMPLIANCES

None.

VI. CHANGES MADE TO APPLICABLE STATE AND FEDERAL PERMIT CERTIFICATIONS

On March 9, 2009, the Nuclear Regulatory Commission was notified of an approved change in regard to Department of the Army File No. 2009-00654 which allowed for the addition of a launching/loading boat ramp in the Tennessee River.

VII. CHANGES IN FACILITY DESIGN OR OPERATION

In accordance with Technical Specification 5.3.c, facility design and operational changes were reviewed for potential effect on the environment. This review is completed per Tennessee Valley Authority upper tier Instruction IX Environmental Review and implementing Environmental Management System (EMS) procedures Environmental Review Process and Standards and Criteria for Environmental Reviews, in compliance with the National Environmental Policy Act. An evaluation of facility design and operational changes proposed from October 1, 2009 through September 30, 2010 was completed.

A. Special Tests

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

B. Temporary Alterations

There were no temporary alterations conducted during this period that met environmental impact criteria.

C. Design and Operational Changes

The facility design and operational changes made during this reporting period with a potential impact on the environment were found to be within the scope of existing permits and in compliance with environmental regulations. Those changes reviewed are as follows:

Environmental Impact Statements

"Draft Environmental Impact Statement, Sequoyah Nuclear Plant Units 1 and 2 License Renewal"

Environmental Assessments

"Sequoyah Nuclear Plant Unit 2 Steam Generator Replacements, Hamilton County, Tennessee" November, 2009

Categorical Exclusion Checklists

1. Generic SQN Blanket Review
2. Generic TVA Paving
3. Generic Facilities HVAC
4. SQN Low Pressure Turbine Rotor Transport
5. Water Treatment Plant Upgrade
6. UPS Replacement
7. Demolition of Two Buildings at Heavy Equipment Division
8. SQN Renovation/Relocation of Oil Lab and Operations Field Office
9. Old Grounds Building Demolition
10. Bathroom Renovation
11. Prep, Prime, and Paint Primary Water Storage Tank
12. Spirit Store Improvements
13. Range Target Installation
14. Access Control Portal Modification
15. Temporary Power to the Training Center

VIII. NON-ROUTINE REPORTS

None.

IX. SPECIAL STUDIES

There was one environmental study conducted during this reporting period.

“Biological Monitoring of the Tennessee River near Sequoyah Nuclear Plant Discharge Autumn 2009” was performed by TVA Aquatic Monitoring and Management. This report was submitted to the Tennessee Department of Environment and Conservation and Nuclear Regulatory Commission on June 1, 2010 as required by the NPDES permit TN0026450 Part III F.1.a. The study concluded that “the downstream site was similar to the upstream site and that a balanced fish community was present at the site downstream of SQN in autumn 2009.”

X. CHANGES IN APPROVED ENVIRONMENTAL TECHNICAL SPECIFICATION

There were no changes in approved ETSS during this period.