



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

March 5, 2012

Mr. Joseph Shea  
Manager, Corporate Nuclear Licensing  
Tennessee Valley Authority  
3R Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR SEQUOYAH NUCLEAR PLANT UNITS  
1 AND 2 (REPORT 05000327/2011007 AND 05000328/2011007)**

Dear Mr. Shea:

On February 16, 2012, the NRC completed its end-of-cycle performance review of Sequoyah Nuclear Plant Units 1 and 2. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1, 2011 through December 31, 2011. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

Overall, Sequoyah Unit 1 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. The NRC determined the performance at Sequoyah Nuclear Plant Unit 1 during the most recent quarter was within the Regulatory Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because the Unplanned Scrams per 7000 Critical Hours performance indicator provided a White input in the third quarter of 2011. Therefore, in addition to ROP baseline inspections, the NRC plans to conduct a supplemental inspection in accordance with Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area." On February 8, 2012, your staff notified the NRC of your readiness for it to conduct a supplemental inspection to review the actions taken to address the performance issues. This inspection is planned to begin on March 5, 2012.

Overall, Sequoyah Unit 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Unit 2 plant performance for the assessment cycle was within the Licensee Response Column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green).

The enclosed inspection plan lists the inspections scheduled through June 30, 2013. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In addition to baseline inspection we plan on conducting Inspection Procedure (IP) 71111.08P, Unit 1 and 2 In Service Inspections; IP 71111.07T, Triennial Heat Sink Inspection; IP 50001, (Unit 2) Steam Generator Replacement Inspection; initial reactor operator licensing examinations; Temporary Instruction (TI) 2515/182, Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping and Tanks; and IP 71152B, Problem Identification and Resolution.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Scott Shaeffer at 404-997-4521 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Richard P. Croteau, Director  
Division of Reactor Projects

Docket Nos. 50-327, 50-328  
License Nos. DPR-77, DPR-79

Enclosure: Sequoyah Inspection/Activity Plan

The enclosed inspection plan lists the inspections scheduled through June 30, 2013. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In addition to baseline inspection we plan on conducting Inspection Procedure (IP) 71111.08P, Unit 1 and 2 In Service Inspections; IP 71111.07T, Triennial Heat Sink Inspection; IP 50001, (Unit 2) Steam Generator Replacement Inspection; initial reactor operator licensing examinations; Temporary Instruction (TI) 2515/182, Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping and Tanks; and IP 71152B, Problem Identification and Resolution.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Please contact Scott Shaeffer at 404-997-4521 with any questions you have regarding this letter.

Sincerely,

*/RA/*

Richard P. Croteau, Director  
Division of Reactor Projects

Docket Nos. 50-327, 50-328  
License Nos. DPR-77, DPR-79

Enclosure: Sequoyah Inspection/Activity

PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE

SENSITIVE       NON-SENSITIVE

ADAMS:  Yes      ACCESSION NUMBER: ML12065A326

SUNSI REVIEW COMPLETE       FORM 665 ATTACHED

OFFICE	RII:DRP	RII:DRP						
SIGNATURE	/RA/	/RA/						
NAME	JHamam	SShaeffer						
DATE	2/25/2012	2/25/2012						
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY      DOCUMENT NAME: S:\DRP\PERIODIC ASSESSMENTS & REPORTS\EOC & MID-CYCLE\2011\END-OF-CYCLE\INPUT\RPB6\SEQUOYAH\EOC LETTER SQN 2011.DOCX

cc w/encl:  
J. T. Carlin  
Site Vice President  
Sequoyah Nuclear Plant  
Tennessee Valley Authority  
Electronic Mail Distribution

P. R. Simmons  
Plant Manager  
Sequoyah Nuclear Plant  
Tennessee Valley Authority  
Electronic Mail Distribution

G. M. Cook  
Manager  
Licensing  
Sequoyah Nuclear Plant  
Electronic Mail Distribution

C. D. Mackaman  
Tennessee Valley Authority  
Electronic Mail Distribution

E. J. Vigluicci  
Assistant General Counsel  
Tennessee Valley Authority  
Electronic Mail Distribution

County Mayor  
Hamilton County  
Hamilton County Courthouse  
208 Courthouse  
625 Georgia Avenue  
Chattanooga, TN 37402-2801

Tennessee Department of Environment & Conservation  
Division of Radiological Health  
401 Church Street  
Nashville, TN 37243

Senior Resident Inspector  
U.S. Nuclear Regulatory Commission  
Sequoyah Nuclear Plant  
2600 Igou Ferry Road  
Soddy Daisy, TN 37379-3624

Ann Harris  
341 Swing Loop  
Rockwood, TN 37854

TVA

4

Letter to Joseph W. Shea from Richard P. Croteau dated March 5, 2012

SUBJECT: ANNUAL ASSESSMENT LETTER FOR SEQUOYAH NUCLEAR PLANT UNITS  
1 AND 2 (REPORT 05000327/2011007 AND 05000328/2011007)

Distribution w/encl:

C. Evans, RII EICS (Part 72 Only)

L. Douglas, RII EICS (Linda Douglas)

OE Mail (email address if applicable)

RID ROPassessment.Resource@nrc.gov SNRRDIRS

PUBLIC

R. Pascarelli, NRR ((Regulatory Conferences Only))

RidsNrrPMSequoyah Resource