



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

March 2, 2006

Tennessee Valley Authority  
ATTN.: Mr. K. W. Singer  
Chief Nuclear Officer and  
Executive Vice President  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

SUBJECT: ANNUAL ASSESSMENT LETTER - WATTS BAR NUCLEAR PLANT (NRC  
INSPECTION REPORT 05000390/2006001, 05000391/2006001)

Dear Mr. Singer:

On February 9, 2006, the NRC staff completed its performance review of the Watts Bar Nuclear Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2005. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include physical protection information. A separate letter, designated and marked as "Official Use Only - Security-Related Information," will include the physical protection review and resultant inspection plan.

Overall, Watts Bar operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, was within the Licensee Response column of the NRC's Action Matrix. We base this conclusion on the fact that all inspection findings were classified as having very low safety significance (Green) and all PIs indicated performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility. We also plan on conducting several non-ROP inspections which include steam generator replacement project inspections, inspection of planned upgrades to the containment sump, and inspections of the lay-up and preservation of Unit 2.

While plant performance for the most recent quarter is within the Licensee Response column of the Action Matrix, Watts Bar was in the Regulatory Response Column of the NRC Action Matrix for the first three quarters of this 12 month assessment period. This was based upon a White inspection finding, regarding corrective actions for raw water cooling silt problems in the Mitigating Systems Cornerstone, that was effective in the fourth quarter of calendar year (CY) 2004.

We completed a Supplemental Inspection in July 2005 and found your investigation and corrective actions to be thorough and appropriate. A Regulatory Performance Meeting was held on November 22, 2005, completing all NRC Action Matrix requirements for this finding. As a result, the finding was only considered in assessing plant performance for a total of four quarters.

In our mid-cycle assessment letter dated August 30, 2005 [ADAMS Ref. ML052430041] we advised you of a substantive cross-cutting issue in the area of Human Performance. Nine findings in that assessment period were identified as having a human performance cross-cutting attribute, six of which contained human performance aspects specifically related to personnel errors that occurred in the Mitigating Systems and Barrier Integrity cornerstones. The findings exhibited a common performance deficiency of failure to implement procedures. Five of the six findings were associated with the Operations organization and four of the six were associated with refueling outage preparations or activities. Your staff presented their response to the NRC staff in two public meetings. A meeting on October 18, 2005, focused on corrective actions in the Operations department to address the human performance issues. A subsequent meeting on December 5, 2005, focused on corrective actions to address the refueling outage human performance issues. Based on the Watts Bar performance trends, the low number of findings, and the ongoing corrective actions that you implemented during the assessment period, including the numerous initiatives contained in the TVA Human Performance Improvement Plan (HPIP), we concluded that the efforts of your staff have demonstrated their effectiveness in reducing the frequency, number, and impact of human performance issues. This substantive cross-cutting issue is therefore closed.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through September 30, 2007. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review. Although our intent is to maintain the enclosed inspection plan fixed for the first nine months, a need may arise to conduct one or more unanticipated inspections prior to issuing an updated inspection plan with the 2006 assessment cycle mid-cycle letter. If an inspection of this type becomes necessary, we will notify you of the planned inspection dates as soon as possible to resolve as much as we can, any scheduling and personnel availability conflicts you may have.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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).

TVA

3

If circumstances arise which cause us to change the inspection plan, we will contact you to discuss the change as soon as possible. Please contact Malcolm Widmann at 404-562-4550 with any questions you may have regarding this letter or our inspection plans.

Sincerely,

**/RA/**

Charles A. Casto, Director  
Division of Reactor Projects

Docket Nos. 50-390 and 50-391  
License Nos. NPF-90 and CPPR-92

Enclosure: Watts Bar Inspection/Activity Plan

cc w/encl: (See page 4)

TVA

4

cc w/encl:

Ashok S. Bhatnagar  
Senior Vice President  
Nuclear Operations  
Tennessee Valley Authority  
Electronic Mail Distribution

Larry S. Bryant, Vice President  
Nuclear Engineering & Technical Services  
Tennessee Valley Authority  
Electronic Mail Distribution

Michael D. Skaggs  
Site Vice President  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
Electronic Mail Distribution

Robert J. Beecken, Vice President  
Nuclear Support  
Tennessee Valley Authority  
Electronic Mail Distribution

General Counsel  
Tennessee Valley Authority  
Electronic Mail Distribution

John C. Fornicola, Manager  
Nuclear Assurance and Licensing  
Tennessee Valley Authority  
Electronic Mail Distribution

Glenn W. Morris, Manager  
Corporate Nuclear Licensing and  
Industry Affairs  
Tennessee Valley Authority  
Electronic Mail Distribution

Paul L. Pace, Manager  
Licensing and Industry Affairs  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
Electronic Mail Distribution

Jay Laughlin, Plant Manager  
Watts Bar Nuclear Plant  
Tennessee Valley Authority  
Electronic Mail Distribution

County Executive  
Rhea County Courthouse  
375 Church Street, Suite 215  
Dayton, TN 37321-1300

County Mayor  
P. O. Box 156  
Decatur, TN 37322

Lawrence E. Nanney, Director  
TN Dept. of Environment & Conservation  
Division of Radiological Health  
Electronic Mail Distribution

Ann Harris  
341 Swing Loop  
Rockwood, TN 37854

James H. Bassham, Director  
Tennessee Emergency Management  
Agency  
Electronic Mail Distribution

Institute of Nuclear Power Operations  
700 Galleria Parkway  
Atlanta, GA 30339-5957

Distribution w/encl: (See page 5)

TVA

5

Distribution w/encl:  
D. Pickett, NRR  
L. Slack, RII EICS  
PUBLIC

☐ PUBLICLY AVAILABLE      ☐ NON-PUBLICLY AVAILABLE      ☐ SENSITIVE      ☐ NON-SENSITIVE  
ADAMS: ☐ Yes      ACCESSION NUMBER: \_\_\_\_\_

OFFICE	DRP:RII	DRP:RII					
SIGNATURE	MTW	JHB1					
NAME	MWidmann	JBartley					
DATE	02/27/2006	02/27/2006					
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY      DOC NAME: E:\Filenet\ML060610433.wpd