



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.

Pkg - ML060610429
Ltr - ML060610433
Encl - ML060610437

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).

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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)

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

Watts Bar
Inspection / Activity Plan
03/01/2006 - 09/30/2007

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
	PSB1-RP - RP PUBLIC PRE-INSPECTION VISIT		1			
1	IP 7112101	Access Control to Radiologically Significant Areas		04/11/2006	04/13/2006	Baseline Inspections
	PSB1-RP - RP PUBLIC BASELINE		4			
1	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		05/08/2006	05/12/2006	Baseline Inspections
1	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		05/08/2006	05/12/2006	Baseline Inspections
1	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control P		05/08/2006	05/12/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		05/08/2006	05/12/2006	Baseline Inspections
	PS2 EP - EP EXERCISE		3			
1	IP 7111401	Exercise Evaluation		06/05/2006	06/09/2006	Baseline Inspections
	OL PREP - INITIAL EXAM PREP		3			
1	V23241	WATTS BAR/SEPTEMBER 2006 EXAM AT POWER FACILITIES		08/07/2006	08/11/2006	Not Applicable
	OL RQ - REQUAL INSPECTION		2			
1	IP 7111111B	Licensed Operator Requalification Program		08/14/2006	08/18/2006	Baseline Inspections
	PS2-EP - EP INSP		1			
1	IP 7111402	Alert and Notification System Testing		09/04/2006	09/08/2006	Baseline Inspections
1	IP 7111403	Emergency Response Organization Augmentation Testing		09/04/2006	09/08/2006	Baseline Inspections
1	IP 7111404	Emergency Action Level and Emergency Plan Changes		09/04/2006	09/08/2006	Baseline Inspections
1	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		09/04/2006	09/09/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		09/04/2006	09/09/2006	Baseline Inspections
	OL EXAM - INITIAL EXAM		3			
1	V23241	WATTS BAR/SEPTEMBER 2006 EXAM AT POWER FACILITIES		09/05/2006	09/15/2006	Not Applicable
	EB3-ISI - U1 INSERVICE INSPECTION		1			
1	IP 7111108P	Inservice Inspection Activities - PWR		09/18/2006	09/22/2006	Baseline Inspections
	RP BR6 - UNIT 2 SYSTEMS LAY-UP INSPECTION		1			
1	IP 92050	Review Of Quality Assurance For Extended Construction Delays		09/25/2006	09/29/2006	Other Routine
	EB1-SUMP - PWR CONTAINMENT SUMP BLOCKAGE TI (U-1)		2			
1	IP 71111	Reactor Safety-Initiating Events, Mitigating Systems, Barrier Integrity		10/01/2006	10/06/2006	Baseline Inspections
	PSB1-RP - RP BASELINE OCCUPATIONAL & S/G REPL-WK1		2			
1	IP 50001	Steam Generator Replacement Inspection		10/02/2006	10/06/2006	Other Routine
1	IP 7112101	Access Control to Radiologically Significant Areas		10/02/2006	10/06/2006	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		10/02/2006	10/06/2006	Baseline Inspections
1	IP 71151	Performance Indicator Verification		10/02/2006	10/06/2006	Baseline Inspections
	EB3SGRP - SG REPLACEMENT		3			
1	IP 50001	Steam Generator Replacement Inspection		10/02/2006	10/06/2006	Other Routine
1	IP 50001	Steam Generator Replacement Inspection		10/23/2006	10/27/2006	Other Routine

This report does not include INPO and OUTAGE activities.
This report shows only on-site and announced inspection procedures.

Enclosure

Watts Bar
Inspection / Activity Plan
03/01/2006 - 09/30/2007

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	EB3SGRP - SG REPLACEMENT		3			
1	IP 50001	Steam Generator Replacement Inspection		10/30/2006	11/03/2006	Other Routine
1	IP 50001	Steam Generator Replacement Inspection		11/13/2006	11/17/2006	Other Routine
	PSB1-RP - RP BASELINE OCCUPATIONAL & S/G REPL WK2		1			
1	IP 50001	Steam Generator Replacement Inspection		10/16/2006	10/20/2006	Other Routine
1	IP 7112101	Access Control to Radiologically Significant Areas		10/16/2006	10/20/2006	Baseline Inspections
	EB1-CDB - COMPONENT DESIGN BASES INSPECTION		6			
1	IP 7111121	Component Design Bases Inspection		01/29/2007	02/02/2007	Baseline Inspections
1	IP 7111121	Component Design Bases Inspection		02/12/2007	02/16/2007	Baseline Inspections
1	IP 7111121	Component Design Bases Inspection		02/26/2007	03/02/2007	Baseline Inspections
1	IP 7111121	Component Design Bases Inspection		03/12/2007	03/16/2007	Baseline Inspections
	TFP - TFP INFO TRIP		5			
1	IP 7111105T	Fire Protection [Triennial]		05/08/2007	05/10/2007	Baseline Inspections
	PSB1-RP - RP OCCUPATIONAL BASELINE INSPECTION		3			
1	IP 7112101	Access Control to Radiologically Significant Areas		05/21/2007	05/25/2007	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		05/21/2007	05/25/2007	Baseline Inspections
1	IP 7112202	Radioactive Material Processing and Transportation		05/21/2007	05/25/2007	Baseline Inspections
1	IP 71151	Performance Indicator Verification		05/21/2007	05/25/2007	Baseline Inspections
	TFP - TRIENNIAL FIRE PROTECTION INSPECTION		5			
1	IP 7111105T	Fire Protection [Triennial]		05/28/2007	06/01/2007	Baseline Inspections
1	IP 7111105T	Fire Protection [Triennial]		06/11/2007	06/15/2007	Baseline Inspections
	PS2-EP - EP INSP		1			
1	IP 7111402	Alert and Notification System Testing		06/04/2007	06/08/2007	Baseline Inspections
1	IP 7111403	Emergency Response Organization Augmentation Testing		06/04/2007	06/08/2007	Baseline Inspections
1	IP 7111404	Emergency Action Level and Emergency Plan Changes		06/04/2007	06/08/2007	Baseline Inspections
1	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		06/04/2007	06/08/2007	Baseline Inspections
1	IP 71151	Performance Indicator Verification		06/04/2007	06/08/2007	Baseline Inspections
	EB3-HS - HEAT SINK		1			
1	IP 7111107B	Heat Sink Performance		06/25/2007	06/29/2007	Baseline Inspections
	RPB6-PIR - BIENNIAL PI&R INSPECTION WEEK 1		4			
1	IP 71152B	Identification and Resolution of Problems		08/27/2007	08/31/2007	Baseline Inspections
	RPB6-PIR - BIENNIAL PI&R INSPECTION WEEK 2		4			
1	IP 71152B	Identification and Resolution of Problems		09/10/2007	09/14/2007	Baseline Inspections

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