



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II**

245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

March 2, 2016

Mr. Michael D. Skaggs  
Senior Vice President  
Nuclear Construction  
Tennessee Valley Authority  
6A Lookout Place  
1101 Market Street  
Chattanooga, TN 37402-2801

**SUBJECT: END-OF-CYCLE ASSESSMENT LETTER – WATTS BAR NUCLEAR PLANT  
UNIT 2 (NRC INSPECTION REPORT 05000391/2016607)**

Dear Mr. Skaggs:

On February 11, 2016, the U. S. Nuclear Regulatory Commission (NRC) staff completed its performance review of the Watts Bar Nuclear Plant (WBN) Unit 2 construction project. Our technical staff reviewed inspection results for the period from January 1, 2015, through December 31, 2015. 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.

Overall, Watts Bar Nuclear Plant Unit 2 construction and testing activities were conducted in a manner that complied with the Commission's rules and regulations, the conditions of your construction permit, operating license, and the Unit 2 regulatory framework commitments. Our inspections indicated that your construction and testing programs were sufficiently implemented to support ongoing construction and testing activities. Management and Quality Assurance oversight effectively monitored and assessed these activities. The corrective action program implementation activities, including initiation, classification, disposition, and trending were deemed satisfactory.

During the second quarter of 2015 the NRC identified a Severity Level III violation associated with concrete anchor bolt instillation. This violation is described in Inspection Report 05000391/2015614, dated April 7, 2015 in the NRC's Agencywide Document Access and Management System (ADAMS) (Accession No. ML15097A307). The NRC performed follow-up inspection activities associated with this violation and determined that the completed corrective actions were adequate to resolve the issue. This violation was closed in Inspection Report 05000391/2015607 (ADAMS Accession No. ML15273A452). With the exception noted above, project performance for the most recent quarter, as well as for the previous three quarters of the assessment cycle, was acceptable based on the above inspection conclusions, the fact that all violations were classified as severity level IV or below, and that no substantive cross-cutting issues were identified. Therefore, we do not plan to expand our inspection activities beyond what is specified by Inspection Manual Chapter (IMC) 2517, "Watts Bar 2 Inspection Program".

The NRC will continue to evaluate the effectiveness of TVA's oversight and management of operations during Unit 2 startup, in accordance with IMC 2517. This will include inspections and reviews addressing the organizational and operational challenges associated with the integration of both Watts Bar units. The enclosed inspection plan contains the startup and power ascension testing inspection activities that are required by IMC 2514. Not listed are the remaining inspections specified in IMC 2517, for which the NRC will continue to communicate with your staff on a routine basis to develop an agreed upon time frame to complete the inspection. Your staff will be given ample notification of any changes to upcoming inspection activities or newly identified inspections as they become finalized in order to allow for the resolution of any scheduling conflicts and personnel availability. Routine inspections performed by the resident staff are not listed on the inspection plan due to their ongoing and continuous nature.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure 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 me at (404) 997-4446 with any questions you may have regarding this letter or our planned inspections.

Sincerely,

**/RA/**

James B. Baptist, Chief  
Reactor Projects Branch 8  
Division of Reactor Projects

Docket No. 50-391  
License No. NPF-96

Enclosure:  
Watts Bar Unit 2 2016 Inspection/Activity Plan

cc w/encl: See next page

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cc w/encl: See next page

☒ PUBLICLY AVAILABLE
 ☐ NON-PUBLICLY AVAILABLE
 ☐ SENSITIVE
 ☒ NON-SENSITIVE

ADAMS: Yes      ACCESSION NUMBER: **ML 16062A334**      SUNSI REVIEW COMPLETE

OFFICE	RII:DRP	RII: DRP					
SIGNATURE	/RA/	/RA/					
NAME	A. Wilson	J. Baptist					
DATE	3/2/2016	3/2/2016					
E-MAIL COPY?	YES      NO	YES      NO					

cc w/encl:

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Tennessee Valley Authority  
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Letter to Michael D. Skaggs from James B. Baptist dated March 2, 2016.

SUBJECT: END-OF-CYCLE ASSESSMENT LETTER – WATTS BAR NUCLEAR PLANT  
UNIT 2 (NRC INSPECTION REPORT 05000391/2016607)

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**WATTS BAR UNIT 2  
2016 INSPECTION/ACTIVITY PLAN  
INSPECTION MANUAL CHAPTER 2514**

<b>Inspection Procedure</b>	<b>Activity</b>
<b>IP 72566</b>	Pressurizer Effectiveness
<b>IP 72592</b>	Initial Criticality
<b>IP 72572</b>	Moderator Temperature Coefficient Measurement
<b>IP 72572</b>	Boron Reactivity Worth Measurement
<b>IP 72576</b>	Power Reactivity Coefficient Measurement
<b>IP 72578</b>	Core Performance
<b>IP 72583</b>	Shutdown from Outside Control Room
<b>IP 72582</b>	Loss of Offsite Power