



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

September 1, 2015

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

**SUBJECT: MID-CYCLE ASSESSMENT LETTER – WATTS BAR NUCLEAR PLANT
UNIT 2 (NRC INSPECTION REPORT 05000391/2015606)**

Dear Mr. Skaggs:

On August 10, 2015, 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 July 1, 2014, through June 30, 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.

During the most recent quarter 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 (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. These inspection activities will be described in a later inspection report.

During the first three quarters of the assessment period, and in the 4th quarter with the exception noted above, WBN Unit 2 construction activities were generally conducted in a manner that complied with the Commission's rules and regulations, the conditions of your construction permit, 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. In conclusion, project performance for the most recent quarter, as well as for the previous three quarters of the assessment cycle, was acceptable. No substantive cross-cutting issues were identified during this assessment period. Based on verification that adequate corrective actions have been implemented for the Severity Level III violation, no further actions are required for this matter. We plan to continue with our inspection activities specified by Inspection Manual Chapter (IMC) 2517.

The NRC staff spent over 23,000 hours during the 12-month Mid-Cycle Assessment period performing inspections, assessments, public meetings, allegation follow-up, and inspection program support for WBN Unit 2. The NRC staff anticipates the level of effort will remain

constant as inspections of WBN Unit 2 construction, pre-operational testing, and operational preparedness activities are completed in preparation of a licensing decision for Unit 2.

The enclosed inspection plan contains inspection activities that we have currently scheduled. The inspections listed in the enclosed inspection plan were scheduled based on information your staff provided to the NRC. For other inspections specified in IMC 2517 that were unable to be scheduled, we will continue to communicate with your staff on a routine basis to develop an agreed upon time frame to completion of 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.

The NRC will continue with implementation of IMC 2513, Light Water Reactor Inspection Program – Preoperational Testing and Operational Preparedness Phase. We have not listed preoperational testing inspections in the enclosed inspection plan due to likelihood that the inspection dates will change as adjustments to your preoperational testing schedule occur.

Additionally, if an Operating License is issued, the NRC will initiate implementation of IMC 2514, Light Water Reactor Inspection Program – Startup Testing Phase.

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/

Robert C. Haag, Chief
Construction Projects Branch 3
Division of Construction Projects

Docket No. 50-391
Construction Permit No: CPPR-92

Enclosure: Watts Bar Unit 2 Inspection Plan

cc w/encl: See next page

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cc w/encl: See next page

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 ADAMS: Yes ACCESSION NUMBER: **ML15244B443** SUNSI REVIEW COMPLETE

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SIGNATURE	/RA/	/RA/					
NAME	D. Seat	R. Haag					
DATE	08/31/2015	08/31/2015					
E-MAIL COPY?	YES NO	YES NO					

cc w/encl:

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Electronic Mail Distribution

Letter to Michael D. Skaggs from Robert C. Haag dated September 01, 2015.

SUBJECT: MID-CYCLE ASSESSMENT LETTER – WATTS BAR NUCLEAR PLANT
UNIT 2 (NRC INSPECTION REPORT 05000391/2015606)

Distribution w/encl:

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WATTS BAR UNIT 2 INSPECTION PLAN

Planned Dates Start End	Inspection Activity	Title
09/07/2015 – 09/11/2015	TI 2512/038	Inspection of Watts Bar Nuclear Plant Mechanical Equipment Qualification Special Program
09/07/2015 – 09/11/2015	GL 04-02 TI 2515/166, R1	Potential Impact of Debris Blockage on Emergency Recirculation during Design Basis Accidents at PWRs Pressurized Water Reactor Containment Sump Blockage (NRC Generic Letter 2004-02)
09/07/2015 – 09/25/2015	GL 89-10 TI 2515/109, R4 GL 96-05 TI 2515/140	Safety-Related Motor-Operated Valve Testing and Surveillance Inspection Requirements for Generic Letter 89- 10, Safety-Related Motor-Operated Valve Testing and Surveillance Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves Periodic Verification of Design-Basis Capability of Safety-Related Motor-Operated Valves (GL 96-05)
09/14/2015 – 09/18/2015	BL 80-04	Analysis of PWR Main Steam Line Break with Continuous Feedwater Addition
09/14/2015 – 09/18/2015	CDR 86-11	Lack of Thermal Qualification for Systems 43 & 90 Piping
09/21/2015 – 09/25/2015	GL 88-14	Instrument Air Supply System Problems Affecting Safety-Related Equipment

	IFI 86-10-03	U2 instrument air preop test
09/28/2015 – 10/02/2015	TI 2500/20	Inspection To Determine Compliance with ATWS Rule, 10 CFR 50.62
10/05/2015 – 10/09/2015	BL 80-06	Emergency Safety Feature Reset Controls
11/02/2015 – 11/06/2015	IMC 2517	CAP/SP Final Inspection