



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

CNL-15-257

December 11, 2015

10 CFR 50.90

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Watts Bar Nuclear Plant, Unit 2
Facility Operating License No. NPF-96
NRC Docket No. 50-391

Subject: **Exceptions to Completion of Preoperational Test Instructions Prior to Fuel Load - Revised Mode of Applicability for 2-PTI-043-04**

Reference: TVA Letter to NRC, "Exceptions to Completion of Preoperational Test Instructions Prior to Fuel Load," dated November 25, 2015

On November 25, 2015, Tennessee Valley Authority (TVA) provided a list of Watts Bar Nuclear Plant (WBN), Unit 2 Preoperational Test Instructions (PTIs) to the Nuclear Regulatory Commission (NRC) that were to be completed after fuel load (Reference letter). The list enclosed in the Reference letter included the technical justification and schedule, including the power level for completion of delayed testing, and was provided as required by WBN, Unit 2 Final Safety Analysis Report (FSAR), Section 14.2, "Test Program."

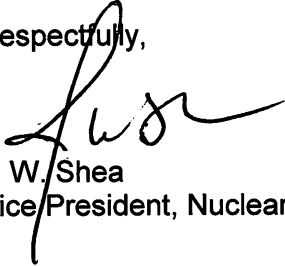
The power level for completion of 2-PTI-043-04, "Primary Sampling System Gas Analyzer," was stated in the Reference letter as "Prior to entering mode 5." This PTI verifies the operability and performance of the active components of the system and demonstrates the operability of the Primary Sampling System Gas Analyzer as a whole under conditions as close to design as possible. It was determined the plant conditions required to be tested and verified for this PTI would be established during Mode 5.

The purpose of this letter is to revise mode of applicability for completion of 2-PTI-043-04 from "prior to entering mode 5" to "prior to entering mode 4." The technical justification and schedule, including the power level for completion of delayed testing are provided in the Enclosure to this letter. The Joint Test Group and Test Review Group have reviewed the technical justification for delaying test completion during mode 5 and the justification has been approved by the Plant Manager. This revision does not impact the commitment that TVA will complete the delayed preoperational test instructions listed in the reference letter prior to WBN Unit 2 initial criticality.

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There are no new regulatory commitments contained in this submittal. Please contact Gordon Arent at (423) 365-2004 if there are questions regarding this submittal.

Respectfully,



J. W. Shea
Vice President, Nuclear Licensing

Enclosure:

Preoperational Test Instructions to be Completed after WBN Unit 2 Fuel Load

cc (Enclosure):

NRC Regional Administrator – Region II
NRC Project Manager – Watts Bar Nuclear Plant
NRC Senior Resident Inspector – Watts Bar Nuclear Plant, Unit 1
NRC Senior Resident Inspector – Watts Bar Nuclear Plant, Unit 2

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bcc (Enclosure):

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Preoperational Test Instruction Number	PTI Step Number(s) and Description of Item(s) Being Deferred	Technical Justification for Delaying Test Until After Fuel Load	Schedule, including Power Level for Completion of Delayed Testing*
2-PTI-043-04 R0 Primary Sampling System Gas Analyzer	All: The PTI tests the functionality of the Primary Sampling System Gas Analyzer. Test completion is being deferred to after Fuel Load during Mode 5.	<p>WBN Unit 2 FSAR 9.3.2.2 [5]: A gas analyzer system sequentially monitors points in the waste disposal and chemical volume and control systems for oxygen concentrations in either a hydrogen or a nitrogen atmosphere. The concentrations are displayed, and recorded, and an alarm is given at the analyzer when appropriate.</p> <p>Technical Specification 5.7.2.15, Explosive Gas and Storage Tank Radioactivity Monitoring Program, discusses controls for potentially explosive gas mixtures contained in the Waste Gas Holdup System. The applicability of the program is anytime there is a cover gas in the tanks. This PTI addresses monitoring of the U2 Pressurizer Relief Tank (PRT) , Reactor Coolant Drain Tank (RCDT), and Volume Control Tank (VCT). The program mode applicability for these U2 tanks is discussed below.</p> <p>2-GO-7, Refueling Operations, requires one charging pump in service to provide Chemistry control during fuel load. With Chemistry's support, manual gas sampling capability for the U2 VCT has been verified to meet the Tech Spec 5.7.2.15 requirement for fuel load. Also, the gas analyzer, which is common for U1 and U2, is functional as demonstrated by its use in providing analysis of U1 samples. Subsequent chemistry sampling requirements are in 2-GO-1, Unit Startup From Cold Shutdown To Hot Standby, and 2-GO-10, Reactor Coolant System Drain and Fill Operations. 2-GO-1 identifies the need to establish the H2 blanket on the VCT prior to Mode 4. 2-GO-10 identifies the need to monitor gas (O2) concentration in the PRT and RCDT during restoration which corresponds with Mode 5. Therefore scheduling this PTI to complete during Mode 5 will not adversely affect fuel loading operations or cause features that have not been tested to be relied upon for safe plant operation.</p>	Prior to entering Mode 4

* All testing described in this Enclosure will be completed prior to initial criticality, thus at a power level of 0%.