UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

July 24, 2014

LICENSEE: Tennessee Valley Authority

FACILITY: Watts Bar Nuclear Power Plant, Unit 2

SUBJECT: SUMMARY OF JUNE 26, 2014, MEETING WITH TENNESSEE VALLEY AUTHORITY REGARDING THE WATTS BAR NUCLEAR PLANT UNIT 2 OPERATING LICENSE APPLICATION

On June 26, 2014, a Category 1 public teleconference was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of the Tennessee Valley Authority (TVA) via teleconference. The purpose of this teleconference was for TVA staff to discuss issues related to the operating license application review for Watts Bar Nuclear Plant (WBN), Unit 2. The discussion focused primarily on TVA's plan to demonstrate feasibility of all operator manual actions (OMAs) taken in response to a fire in accordance with the guidance in NUREG-1852 "Demonstrating the Feasibility and Reliability of Operator Manual Actions in Response to Fire," (Agencywide Documents Access and Management System (ADAMS) Accession No. ML073020676). A list of attendees for the teleconference is included in Enclosure 1. The handouts discussing the OMAs and control room abandonment procedures provided by TVA is Enclosure 2.

During the meeting, TVA described a potential change to the fire protection report from what had been previously submitted to and that the NRC had documented in Supplement 26 to NUREG-0847 "Safety Evaluation Report [SER] Related to the Operation of Watts Bar Nuclear Plant, Unit 2." TVA's potential change was that the Main Control Room abandonment OMAs demonstrated performance times would be less than or equal to 80 percent of the allowable time (25 percent margin). What was previously submitted by TVA, and NRC had documented in Supplement 26 to the SER, was that all OMAs would demonstrate performance times less than 50 percent of the allowable time (100 percent margin).

The NRC staff suggested the following points be considered prior to making any changes:

1. Are all available auxiliary unit operators (AUOs) being used, or can staffing be augmented to have more AUOs available, to meet the approved 100 percent margin criteria?

2. Has the cost impact of schedule delays related to the additional NRC review of the 25% margin criteria been considered?

3. Would additional training, labeling, or other timing enhancements, help to meet the 100 percent margin criteria?

4. Determine whether only operator manual actions included in the analysis of Part VI of the Fire Protection Report should be governed by the 100 percent margin criteria. If this assumption can be justified, other operator manual actions may be evaluated to another standard without impacting the fire protection report.

5. Since the current report is approved the staff suggested that TVA minimize the scope of the changes to the Fire Protection Report. Robust analysis for significant changes like this one will be required.

6. Scheduling an additional, face to face, public meeting.

No regulatory decisions were made during the teleconference.

Two members of the public participated. One member of the public asked why Sequoyah Nuclear Plant and WBN Unit 1 do not have to adhere to the guidance in NUREG-1852. The staff explained that NUREG-1852 was issued after Sequoyah and WBN Unit 1 received their operating licenses. The current licensing bases for those plants differ from the licensing basis for WBN Unit 2. For plants that do not follow the NUREG-1852 methodology, the NRC ensures compliance with inspection of OMAs using the agency's Reactor Oversight Process (http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/).

Please direct any inquiries to me at 301-415-2048 or via e-mail at Justin.Poole@nrc.gov

Sara P. Kirkham for

Justin C. Poole, Senior Project Manager
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-391

Enclosures:
1. List of Attendees
2. TVA Handouts

cc w/encls: Distribution via Listserv

MEETING ATTENDANCE LIST

Applicant: Tennessee Valley Authority

Plant: Watts Bar Nuclear Plant, Unit 2

Subject: Construction Status

Date: June 26, 2014

Location: U.S. Nuclear Regulatory Commission Headquarters, Room O-4B6

Time: 9:30 a.m. – 11:00 a.m.

NAME	TITLE	ORGANIZATION
Jessie Quichocho	Branch Chief	NRC/NRR/DORL/Watts Bar Special Projects Branch
Justin Poole	Sr. Project Manager	NRC/NRR/DORL/Watts Bar Special Projects Branch
Siva Lingam	Project Manager	NRC/NRR/DORL/Watts Bar Special Projects Branch
Jeanne Dion	Project Manager	NRC/NRR/DORL/Watts Bar Special Projects Branch
Michael Miernicki	Project Manager	NRC/NRR/DORL/Watts Bar Special Projects Branch
Alex Klein	Branch Chief	NRC/NRR/DRA/AFPB
Daniel Frumkin	Senior Fire Protection Engineer	NRC/NRR/DRA/AFPB
Charles Moulton	Fire Protection Engineer	NRC/NRR/DRA/AFPB
Bob Haag*	Branch Chief	NRC/Region II/DCP

NAME	TITLE	ORGANIZATION
Scott Shaeffer*	Branch Chief	NRC/ Region II/DRS
Omar Lopez*	Sr. Reactor Inspector	NRC/ Region II/DRS
Gordon Arent*	Director, WBN Licensing	TVA
Rusty Stroud	Licensing	TVA
Bill Crouch*	Engineering	TVA
Steven Hilmes*	Electrical and I&C Manager	TVA
Bob Bryan*	Licensing	TVA
Charles Brush*	Fire Protection	EPM
Gerry Bushnell	Supervisor, Nuclear Site Licensing	TVA
Don Safer*	Member of Public	Sierra Club
Brian Paddock*	Member of Public	Sierra Club

NAME	TITLE	ORGANIZATION
Jack Roe	Member of Public	

*via teleconference

Part I - Operator Manual Action (OMA) Feasibility and Reliability

I Key Elements Applied to Feasibility and Reliability Criteria (Based on NUREG 1852):

A. OMA demonstrated performance times are less than 50% of the allowable time (100% margin).

B. Main Control Room abandonment actions are excluded from NUREG 1852 (Refer to note on the following slide.)

C. For Main Control Room abandonment, demonstrated performance times less than or equal to 80% of the allowable time are acceptable.

II. Additional Considerations:

A. Use of SCBA and entry to Radiological Control Area (RCA) are not required.

B. As an alternative to II.A (above) and the demonstrated performance time (I.A above), the following uncertainty allowances may be added to demonstrated performance time:
   1. Two (2) minute delay to gain access to a RCA.
   2. Three (3) minute delay for human centered uncertainties (size, physical strength, cognitive differences and experience level).
   3. 15 percent penalty (based on Regulatory Guide 8.15) in lieu of actually wearing an SCBA during performance demonstrations.

C. Additional Factors Considered:
   1. Required equipment, support equipment and associated cables are not affected by the fire.
   2. Needed instrumentation, protective equipment and tools are available and staged.
   3. For a Control Building Fire:
      a. Required actions are performed in the Auxiliary Building.
      b. Large time allowances for environmental uncertainties are not needed.

III. Supporting Information from NUREG 1852, "Demonstrating the Feasibility and Reliability of Operator Manual Actions in Response to Fire:"

A. The following excerpts are from Section 1, "Introduction" of NUREG 1852:

"...To provide those assurances, at least in part, many plants plan to or already rely on local operator manual actions[1] (i.e., actions outside the main control room (MCR)) to maintain hot shutdown capability...

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1. "Operator manual actions" are defined in the Glossary of this report. ***For this report, they do not include any actions within the MCR or the action(s) associated with abandoning the MCR in the case of a fire.*** Further, while the April 2001 edition of Regulatory Guide 1.189, "Fire Protection for Operating Nuclear Power Plants," had details on what constitutes hot shutdown for pressurized- water reactors (PWRs) and boiling water reactors (BWRs), including the required systems, Revision 1 of Regulatory Guide 1.189, "Fire Protection for Nuclear Power Plants," issued March 2007 [Ref. 61, excludes that discussion and just identifies the Technical Specifications of each plant providing the definitions of hot shutdown and cold shutdown. This document is applicable to only those actions to achieve and maintain hot shutdown. (emphasis added)

Part II - NRC Approval of OMAs

I. Questions Regarding the need for NRC Approval of OMAs:

A. Unit 1 OMA 727 (Green Box) appears to have not been approved by NRC in a Supplemental Safety Evaluation Report (SSER). There is no equivalent OMA for Unit 2. Is NRC approval on OMA 727 in a SSER required?

B. Unit 1 OMA 612 (Green Box) was approved in SSER 18. Unit 1 OMAs 1397, 1398, 1598 and 1599 (Green Box) perform the same function as OMA 612 but accomplish it in a different manner. Does the change in performance method require NRC approval?

C. Unit 1 OMA 110 (Green Box) was approved in SSER 18. The scope of OMA 110 was expanded to include Unit 1 OMAs 1614, 1411and 1447. Is NRC approval required for the expansion of OMA 110?

4. Determine whether only operator manual actions included in the analysis of Part VI of the Fire Protection Report should be governed by the 100 percent margin criteria. If this assumption can be justified, other operator manual actions may be evaluated to another standard without impacting the fire protection report.

5. Since the current report is approved the staff suggested that TVA minimize the scope of the changes to the Fire Protection Report. Robust analysis for significant changes like this one will be required.

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Please direct any inquiries to me at 301-415-2048 or via e-mail at Justin.Poole@nrc.gov

/RA by SLingam for/

Justin C. Poole, Senior Project Manager
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

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DISTRIBUTION:

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CMoulton, NRR	DFrumkin, NRR	

ADAMS Accession No. PKG ML14188C032
Meeting Notice: ML14167A413 Meeting Summary: ML14188C065

OFFICE	DORL/LPWB/PMiT	DORL/LPWB/PM	DORL/LPWB/LA	DRA/AFPB/BC	DORL/LPWB/BC	DORL/LPWB/PM
NAME	JDion	JPoole	BClayton	AKlein (DFrumkin for)	JQuichocho	JPoole (SLingam for)
DATE	7/9/14	7/13/14	7/9/14	7/15/14	7/16/14	7/24/14

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