



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

January 3, 2011

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

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 2 – POTENTIAL FOR DELAY IN  
SCHEDULE FOR COMPLETING ENVIRONMENTAL REVIEW

Dear Mr. Bhatnagar:

I am writing to inform you about the status of the review of your supplement to the final environmental impact statement (SFEIS) related to the completion and operation of Watts Bar Nuclear Plant (WBN) Unit 2. As you are aware, Tennessee Valley Authority (TVA) submitted this supplement to the U.S. Nuclear Regulatory Commission (NRC) on February 15, 2008, as part of the updated application for an operating license. Subsequently, you provided additional information in January 2009 on the supplemental condenser cooling system and severe accident management alternatives (SAMA) in support of the SFEIS. On September 11, 2009, the staff issued a notice in the *Federal Register* of its intent to prepare a supplement to the NRC's final environmental statement for operation of WBN Unit 2 (FES-OL) and to conduct a scoping process. In this regard, the staff held a meeting in Sweetwater, Tennessee, on October 6, 2009, to inform the public about the environmental review process and to provide the public with an opportunity to participate in the environmental scoping process.

The results of the SAMA analysis that you provided on January 27, 2009, were in part based on the then-current probabilistic risk assessment (PRA) using the RISKMAN methodology and model, which had been used for licensing of Unit 1. On November 30, 2009, the NRC staff requested additional information from TVA on the SAMA. You responded to this request in a letter on July 23, 2010.

However, in January 2010, you submitted a summary of the results of an improved PRA, which followed the guidance in NRC Regulatory Guide 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities." You submitted this as part of the documentation on the individual plant examination program. Your information showed differences in both core damage and large early release frequencies and initiator distribution from the earlier PRA. As a result, the staff raised concerns regarding the potential impact on the prior SAMA results in a meeting with TVA on March 17, 2010. Because of the change in end states, the staff was not sure that the 2007 severe accident consequence analysis results were valid, and thus, requested additional information by letter on July 23, 2010. TVA did not respond to the staff's request until October 14, 2010, and provided a new SAMA analysis report for WBN Unit 2, which superseded the earlier results. Since then, the staff

identified on December 10, 2010, that further additional information will be necessary to address issues in this area.

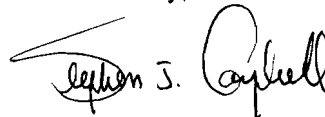
Although the NRC staff's review of your SFEIS submittal continues, the receipt of the new SAMA analysis and the need for you to provide additional information has slowed the staff's progress. Thus, I expect that the staff's schedule for completing and issuing the final supplement to the FES-OL in June 2011 may not be met. Before the supplement to the FES-OL can be issued, the staff must issue it in draft form for public comment for a period of 45 days. Thus, your timely and complete submission of the requested additional information is paramount to minimizing the length of any delay.

Also, the NRC staff understands that TVA has been conducting further confirmatory studies regarding the potential impact on aquatic species from the proposed operation of WBN Unit 2 and, in particular, the use of its supplemental condenser cooling system. Our discussions with TVA indicate that the information in some of the studies may be completed by spring of 2011. In this regard, the staff intends to review this information to further validate the findings and conclusions that will be made in the supplement to the FES-OL.

On the basis of the projected expected time that it will take for TVA to provide the needed information, the staff now estimates that its schedule to complete the review and issue its supplement to the FES-OL could be delayed until fall of 2011. You may want to take appropriate actions to expedite your schedule for submitting the information and to ensure that it is complete in order to enable the staff to complete its review sooner.

When we have a sense to the timing of responses to our requests for information, the staff will need to inform the Atomic Safety and Licensing Board (the Board) of our projected schedule to enable the Board to establish its hearing schedule on the admitted contention.

Sincerely,

A handwritten signature in black ink, appearing to read "Stephen J. Campbell". The signature is fluid and cursive, with a large initial "S" and "C".

Stephen J. Campbell, Chief  
Watts Bar Special Projects Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-391

cc: Distribution via Listserv

identified on December 10, 2010, that further additional information will be necessary to address issues in this area.

Although the NRC staff's review of your SFEIS submittal continues, the receipt of the new SAMA analysis and the need for you to provide additional information has slowed the staff's progress. Thus, I expect that the staff's schedule for completing and issuing the final supplement to the FES-OL in June 2011 may not be met. Before the supplement to the FES-OL can be issued, the staff must issue it in draft form for public comment for a period of 45 days. Thus, your timely and complete submission of the requested additional information is paramount to minimizing the length of any delay.

Also, the NRC staff understands that TVA has been conducting further confirmatory studies regarding the potential impact on aquatic species from the proposed operation of WBN Unit 2 and, in particular, the use of its supplemental condenser cooling system. Our discussions with TVA indicate that the information in some of the studies may be completed by spring of 2011. In this regard, the staff intends to review this information to further validate the findings and conclusions that will be made in the supplement to the FES-OL.

On the basis of the projected expected time that it will take for TVA to provide the needed information, the staff now estimates that its schedule to complete the review and issue its supplement to the FES-OL could be delayed until fall of 2011. You may want to take appropriate actions to expedite your schedule for submitting the information and to ensure that it is complete in order to enable the staff to complete its review sooner.

When we have a sense to the timing of responses to our requests for information, the staff will need to inform the Atomic Safety and Licensing Board (the Board) of our projected schedule to enable the Board to establish its hearing schedule on the admitted contention.

Sincerely,

/RA/

Stephen J. Campbell, Chief  
Watts Bar Special Projects Branch  
Division of Operating Reactor Licensing  
Office of Nuclear Reactor Regulation

Docket No. 50-391

cc: Distribution via Listserv

**DISTRIBUTION:**

PUBLIC	RidsNrrPMWattsBar2 Resource	RidsRgn2MailCenter Resource
LPWB Reading File	RidsNrrLABClayton Resource	RidsOpaMail Resource
RidsNrrDorILp_WB Resource	RidsOgcRp Resource	R. Haag, R-II
RidsNrrDirRerb Resource	W. Bearden, SRI, Watts Bar 2	RidsAcrsAcnw_MailCTR Resource

ADAMS Accession No. ML103480026

OFFICE	LPWB/PM	LPWB/LA	RERB/(A)BC	OGC nlo	LPWB/BC
NAME	PMilano	BClayton	ARivera	EWilliamson	SCampbell
DATE	12/23/10	12/30/10	12/23/10	12/23/10	01/03/11

OFFICIAL AGENCY RECORD