

May 8, 2008

Mr. Ashok Bhatnagar
Senior Vice President
Nuclear Generation Development and Construction
Tennessee Valley Authority
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SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 2 - ASSESSMENT OF REMAINING
OPERATING LICENSE APPLICATION REVIEW SCOPE AND REQUESTS FOR
ADDITIONAL INFORMATION (TAC NO. MD6311)

Dear Mr. Bhatnagar:

This letter forwards the Nuclear Regulatory Commission's (NRC's) initial assessment of the remaining operating license review scope for the Tennessee Valley Authority's (TVA's) Watts Bar Nuclear Plant (WBN) Unit 2. The NRC staff finds that many existing topics within the scope of licensing review have already been addressed. However, the staff's review to date does not completely agree with TVA's position regarding the status of all topics. The staff needs additional information from TVA to resolve differences between the NRC and TVA scope assessments.

The staff has also determined that there are circumstances that could result in re-opening a previously reviewed topic. The attached assessment also outlines processes that should be applied to confirm the relevance of previously-completed NRC safety evaluations to the final WBN Unit 2 design, or identify topics that require supplemental review. The staff requests additional information regarding how TVA will complete this confirmation.

NRC Assessment Results

Enclosure 1 provides the staff's initial inventory of licensing issues that must be resolved to complete the operating license review for WBN Unit 2. The assessment is summarized in six tables.

Table 1 describes the Table of Contents for the review, and is derived from the Table of Contents for NUREG-0847, "Safety Evaluation Report Related to the Operation of Watts Bar Nuclear Plant, Units 1 and 2," with sections added to address (1) generic issues, (2) topics identified from NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants" such as the maintenance rule (Section 50.65 of Title 10, Code of Federal Regulations), (3) TVA Nuclear Performance Plan topics, and (4) other issues, such as orders and conditions on the WBN Unit 1 license that will also be applied to Unit 2.

Table 2 is based on this Table of Contents, and documents the staff's review of NUREG-0847 through Supplement 20, providing an initial determination as to whether a topic is open (with additional review required), or closed (review was documented in NUREG-0847 through Supplement 20).

Table 3 summarizes topics that the staff considers closed based on this initial review, while Table 4 summarizes open topics. The information presented in Tables 3 and 4 is the same as that given in Table 2.

In compiling the information presented in Tables 2, 3, and 4, the NRC staff reviewed only NUREG-0847 and its supplements; the staff did not review TVA submittals or other documents. The staff made conservative status assessments, keeping a topic open when the discussion within NUREG-0847 or its supplements did not clearly apply to WBN Unit 2.

In many cases, the staff's initial review concluded that topics remain open for WBN Unit 2, contrary to an assertion by TVA that those topics are closed per TVA's January 29, and March 13, 2008, submittals. Upon additional review of background documentation used in the initial review, the staff may conclude that some of those topics have actually been previously reviewed and resolved for WBN Unit 2. In other cases, TVA will need to submit additional information before a topic can be considered closed. Table 5 provides a list of topics where the NRC's initial conclusions do not match the status proposed by TVA. Table 6 lists topics considered open by the NRC staff's initial review where no submittal is planned by TVA, per its March 13, 2008, submittal. Additional information will be required to resolve the topics listed in Table 6.

Table 7 lists NUREG-0847 supplements examined by the staff as part of this assessment. In comparing this list to information submitted by TVA, the staff found many cases where tables provided in TVA's January 29, and March 13, 2008, submittals did not identify every supplement to NUREG-0847 where a given topic was addressed. For example, TVA's March 13, 2008, submittal states that SER subsection 5.2.5, "Reactor Coolant System Boundary Leakage Detection," was resolved in NUREG-0847 for both WBN units. The NRC staff determined that this topic is also addressed in NUREG-0847 Supplements 9, 11, and 12. Table 8 lists cases where the staff found that TVA did not identify all NUREG-0847 supplemental safety evaluation reports (SSERs) relevant to a particular topic. Additional information will be required to address these discrepancies.

TVA has also provided information regarding the status of generic issues for WBN Unit 2 in two letters dated September 7, 2007, and in a letter dated March 20, 2008. The NRC staff's review of this information is not part of this assessment and will be completed at a later date.

Methodology for Evaluation of Previously-Reviewed Topics

Even if a topic was previously reviewed and closed within NUREG-0847 and its supplements, there are circumstances that could lead to revision of a previous evaluation, or a new evaluation being performed. Therefore, the assessment also outlines a methodology to screen previously-reviewed topics to determine if a revised safety evaluation is necessary. As the staff's review proceeds, this methodology may be revised.

Requests for Additional Information (RAIs)

In the course of developing this assessment, the NRC staff has identified several areas where additional information will be needed from TVA to complete screening of review topics and to ensure compliance with regulatory requirements. These requests for additional information are described in Attachment 2 of the Enclosure.

You should particularly note the last RAI, where the staff requests that TVA address all supplements to NUREG-0847 pertinent to a given topic in future revisions of the regulatory framework letter, updating the review status for WBN Unit 2, as necessary. The staff found that for many of the topics described by the NUREG-0847 table of contents, TVA did not identify all NUREG-0847 supplements affecting those topics. The staff expects TVA to ensure that its submittals thoroughly address all relevant licensing information. Please take appropriate corrective actions to ensure your future submittals address all relevant licensing information.

We request that you respond to these requests or provide a schedule for your response within 30 days of the date of this letter.

Please contact Joe Williams at 301-415-1470 or joseph.williams@nrc.gov if you have questions regarding this assessment.

Sincerely,

/RA/

L. Raghavan, Chief
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-391

Enclosure:
Assessment of Remaining Review Scope

cc w/encl: See next page

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cc w/encl: See next page

Accession Number: PKG:ML080860033; LTR: ML080860026; ASSES: ML080860040;
TABLE: ML081010116 * Via E-mail

OFFICE	WBN2/PM	WBN2/LA	AADB/BC	AFPB/BC	CPNB/BC	CSGB/BC
NAME	JWilliams	BClayton	RTaylor	AKlein*	TChan*	AHiser*
DATE	/ /08	/ /08	4/9/08	04/03/08	04/02/08	4/2/08
OFFICE	CVIB/BC	EEEB/BC	EICB/BC	EMCB/BC	EQVB/BC	IOLB/BC
NAME	MMitchell*	GWilson*	WKemper	KManoly*	DThatcher*	NSalgado*
DATE	04/04/08	4/9/08	4/9/08	4/9/08	04/07/08	04/04/08
OFFICE	IRIB/BC	ITSB/BC	PFPB/BC	SBPB/BC	SCVB/BC	SNPB/BC
NAME	TKobetz*	RElliott	ACosta*	DHarrison*	RDennig*	AMendiola*
DATE	04/07/08	4/9/08	4/9/08	4/9/08	04/04/08	04/02/08
OFFICE	SRXB/BC	NSIR/LIB/BC	NSIR/RSPLB/BC	OGC, NLO	WBN2-BC	CPTB/BC
NAME	GCranston*	KWilliams*	DHuyck*	DRoth	LRaghavan	JMcHale*
DATE	04/04/08	04/04/08	04/07/08	05/01/08	/ /08	4/2/08

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Letter to Ashok Bhatnagar from L. Raghavan dated

SUBJECT: WATTS BAR NUCLEAR PLANT, UNIT 2 - ASSESSMENT OF REMAINING
OPERATING LICENSE APPLICATION REVIEW SCOPE (TAC NO. MD6311)

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RidsNrrEICB

RidsNrrEMCB

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RidsNrrIOLB

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RidsNrrITSB

RidsNSIR-RSPLB

RidsNSIR-LIB

RidsNrrPFPB

RidsNrrSBPB

RidsNrrSCVB

RidsNrrSNPB

RidsNrrSRXB

TABLES (8)

REVIEW TOPICS FOR SAFETY EVALUATION

WATTS BAR NUCLEAR PLANT, UNIT 2

ATTACHMENT 1

Ashok S. Bhatnagar
Tennessee Valley Authority

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