



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

April 19, 2010

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 – REQUEST FOR ADDITIONAL
INFORMATION REGARDING INDIVIDUAL PLANT EXAMINATION
(TAC NO. ME3334)

Dear Mr. Bhatnagar:

In its letter dated February 9, 2010, Tennessee Valley Authority (TVA) provided the results of the Individual Plant Evaluation (IPE) for Watts Bar Nuclear Plant, Unit 2 (WBN Unit 2). In U.S. Nuclear Regulatory Commission (NRC) Generic Letter (GL) 88-20, "Individual Plant Examination [IPE] for Severe Accident Vulnerabilities," dated November 23, 1988, as supplemented, the staff requested licensees and construction permit holders to perform a systematic examination to identify any plant-specific vulnerabilities to severe accidents and report the results to the NRC.

The NRC staff is reviewing the IPE Summary Report in TVA's letter of February 9, 2010, in support of the information requested in GL 88-20 for WBN Unit 2. The staff has determined that it needs additional information to complete its review. The specific information is detailed in the enclosed request for additional information (RAI). In this regard, the NRC staff requests a response to this RAI within 30 days of receipt of this letter.

If you should have any questions, please contact me at 301-415-1457.

Sincerely,

A handwritten signature in black ink, appearing to read "P. D. Milano", is positioned below the word "Sincerely,".

Patrick D. Milano, Senior Project Manager
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-391

Enclosure: RAI

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION
WATTS BAR NUCLEAR PLANT, UNIT 2
INDIVIDUAL PLANT EXAMINATION AND PROBABILISTIC RISK ASSESSMENT
TENNESSEE VALLEY AUTHORITY
DOCKET NO. 50-391

In a letter dated February 9, 2010, Tennessee Valley Authority (TVA) provided the results of the Individual Plant Evaluation (IPE) for Watts Bar Nuclear Plant, Unit 2 (WBN Unit 2). In U.S. Nuclear Regulatory Commission (NRC) Generic Letter 88-20, "Individual Plant Examination [IPE] for Severe Accident Vulnerabilities," dated November 23, 1988, as supplemented, the staff requested licensees and construction permit holders to perform a systematic examination to identify any plant-specific vulnerabilities to severe accidents and report the results to the NRC.

In the February 9 letter, TVA provided an IPE summary report and stated that the IPE was performed in accordance with the applicable portions of American Society of Mechanical Engineers (ASME) Standard RA-Sb-2005, "Standard for Probabilistic Risk Assessment [PRA] for Nuclear Power Applications," and NRC Regulatory Guide (RG) 1.200, Revision 1, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk Informed Activities."

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing this report and finds that additional information is needed to complete its review. The specific information is described as follows in this request for additional information:

1. TVA states the IPE was performed using ASME Standard RA-Sb-2005. However, it appears that the peer review that was performed used RA-Sa-2009. Clarify which version of the standard was used to conduct the peer review. If RA-Sa-2009 was used, how were the differences addressed? For example, if a requirement changed from 2005 to 2009 version, or a new requirement added, which specific findings and observations (F&Os) address these changes? If not included in the submittal, provide the F&Os.
2. When the peer review was performed, did the peer review members take into account the NRC staff's positions on the requirements in the ASME standard as described in RG 1.200? If not, what was the basis for not considering the NRC position?
3. The standard provides specific requirements for a peer review, and the NRC staff took a few exceptions to these in RG 1.200. How were the NRC exceptions to the peer review requirements addressed?
4. As discussed in RG 1.200, meeting the standard involves both meeting the technical requirements and the peer review requirements as endorsed in RG 1.200. Should this be accomplished, the NRC staff stated in RG 1.200 that a detailed staff review would be

Enclosure

obviated, allowing the staff to focus on, for example, assumptions. In this regard, the staff finds the information in the submittal on the peer review to be very brief. Thus, address the following:

- a. The submittal states there are 112 F&Os, but there only appears to be 50 F&Os submitted. Even taking into account that some of the F&Os address more than one supporting requirement (SR), the number still does not add up to 112 F&Os.
- b. The submittal states that nine SRs were judged not applicable, and no justification or identification of these SRs was provided. Which SRs from the standard were judged not applicable?

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 – REQUEST FOR ADDITIONAL
INFORMATION REGARDING INDIVIDUAL PLANT EXAMINATION
(TAC NO. ME3334)

Dear Mr. Bhatnagar:

In its letter dated February 9, 2010, Tennessee Valley Authority (TVA) provided the results of the Individual Plant Evaluation (IPE) for Watts Bar Nuclear Plant, Unit 2 (WBN Unit 2). In U.S. Nuclear Regulatory Commission (NRC) Generic Letter (GL) 88-20, "Individual Plant Examination [IPE] for Severe Accident Vulnerabilities," dated November 23, 1988, as supplemented, the staff requested licensees and construction permit holders to perform a systematic examination to identify any plant-specific vulnerabilities to severe accidents and report the results to the NRC.

The NRC staff is reviewing the IPE Summary Report in TVA's letter of February 9, 2010, in support of the information requested in GL 88-20 for WBN Unit 2. The staff has determined that it needs additional information to complete its review. The specific information is detailed in the enclosed request for additional information (RAI). In this regard, the NRC staff requests a response to this RAI within 30 days of receipt of this letter.

If you should have any questions, please contact me at 301-415-1457.

Sincerely,

/RA/

Patrick D. Milano, Senior Project Manager
Watts Bar Special Projects Branch
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-391

Enclosure: RAI

cc w/encl: Distribution via Listserv

DISTRIBUTION:

PUBLIC

LPWB Reading File

RidsAcrsAcnw_MailCTR Resource

ADAMS Accession No. ML101060365

RidsOgcRp Resource

RidsNrrDorLPwb Resource

RidsNrrLABClayton Resource

RidsNrrDorLDpr

RidsRgn2MailCenter Resource

RidsResDraPrb Resource

RidsNrrPMWattsBar2 Resource

M. Drouin, RES

OFFICE	LPWB/PM	LPWB/LA	RES/DRA/PRB/BC	OGC	LPWB/BC
NAME	PMilano	BClayton	GDeMoss	DRoth	LRaghavan
DATE	04/16/10	04/16/10	04/09/10	04/16/10	04/19/10

OFFICIAL AGENCY RECORD