

May 23, 2008

APPLICANT: Tennessee Valley Authority

PROJECT: Bellefonte Combined License

SUBJECT: SUMMARY OF APRIL 25, 2008, PUBLIC MEETING TO DISCUSS
HYDROLOGY REVIEW ASSOCIATED WITH THE BELLEFONTE
COMBINED LICENSE APPLICATION

The U.S. Nuclear Regulatory Commission (NRC) held a public meeting on April 25, 2008, with the Tennessee Valley Authority (TVA). The purpose of the meeting was to discuss a white paper that TVA provided to the staff in an April 17, 2008, letter titled "Hydrologic Analysis Description" for the Bellefonte combined license application. A list of those in attendance is provided in Enclosure 1.

The material TVA presented at the meeting is available in the Agencywide Document Access and Management System (ADAMS), which provides text and image files of the NRC's public documents. The presentation material may be accessed through ADAMS Accession Number ML081200850. Persons who do not have access to ADAMS or who encounter problems in accessing the meeting materials located in ADAMS should contact the NRC Public Document Room (PDR) Reference staff by telephone at 1-800-397-4209, 301-415-4737; or by email to pdr@nrc.gov.

Highlights from the Meeting

TVA discussed the April 17, 2008, submittal. TVA had developed the white paper to describe the methods, procedures, and computer programs used to determine the design basis flood level at the Bellefonte site. Prior to the meeting the NRC staff had identified issues during the pre-application review and during a subsequent inspection of the simulated open channel hydraulics (SOCH) code used to predict the probable maximum flood height and to perform dam breach analyses. The staff issues identified during the pre-application review are documented in a letter to TVA dated January 18, 2008. The results of the inspection of the SOCH code, including staff identified violations of NRC requirements, are documented in an inspection report dated March 19, 2008.

TVA provided an overview of the organization of the paper including a discussion of the Tennessee watershed, development of inputs for the computer program used to model the watershed, development of the computer code itself and TVA's plan to update, verify and validate the computer code and its associated inputs. Prior to the April 25, 2008, meeting, TVA indicated that the code verification and validation would be completed prior to an NRC staff site visit to Knoxville, Tennessee, in late June, 2008. The site visit in June of 2008 was intended to provide the NRC staff with training on the SOCH computer code because the staff is not familiar with the code, which is unique to TVA. A second purpose of the June, 2008 site visit would be to close out quality assurance issues from the March 19, 2008, inspection report.

TVA indicated that, although the computer code would not be verified and validated by the June 2008 site visit, there would still be benefit in having the training since TVA expected that any changes to the code after this date would be minimal. Since the model would not be verified and validated by the June meeting, the staff informed TVA that the quality assurance group would not be part of the June 2008 Knoxville site visit and an additional site visit after the code had been verified and validated would be needed. The staff also indicated that its original intention was to have a verified and validated code at the time of the site visit and that after the staff had received training on the code it would be able to run the code to support the development of its requests for additional information. The staff indicated a concern with using a computer code that had not been verified and validated.

The following are the action items that resulted from the meeting:

- 1) The staff identified that there were several commitments in the April 17, 2008, paper. TVA took an action to provide a discussion of the commitments and a time frame for when these commitments would be completed during a May, 2008 scheduled site visit to discuss the hydrology review.
- 2) TVA and the NRC agreed to have a phone call prior to a May, 2008 site visit to discuss in more detail the agenda for the site visit.
- 3) During the meeting, TVA indicated that the Army Corp of Engineers was updating the bathymetry data (data associated with the depth of the river at different locations). TVA indicated that it intended to use this updated data in the SOCH code when it was available. TVA took an action to discuss with the Army Corp of Engineers contingency plans if current data was not available. In this situation TVA would inquire if the Army Corp of Engineers had data that was more recent than the data from the 1960s that was used to develop the SOCH inputs to support the construction of Bellefonte units 1 and 2.
- 4) During a discussion of the data books that TVA was developing to support the verification and validation of the inputs associated with the SOCH code, the staff indicated that a summary description of the information in the data book and how the data was collected would help the staff better understand the data books when the staff reviewed them in subsequent site visits. TVA indicated that it would provide this summary description and information on how the data was collected at the beginning of the data books.

At the conclusion of the business portion of the meeting the staff provided an opportunity for members of the public to ask questions of the staff. The staff indicated in response to questions from the public that:

- 1) the staff would review minimum water levels in the Tennessee River needed to support the plant as part of its safety review,
- 2) the seismic failure of dams is considered as part of the safety review in establishing the flood levels to which the plant needed to be designed, and

- 3) the environmental effects of discharging heated effluent to the river from the operation of the plant are considered as part of the environmental impact statement that the staff is developing.

A member representing the Bellefonte Efficiency and Sustainability Team (BEST) requested that a representative from BEST accompany the staff on upcoming visits that the staff had planned to the Bellefonte site, TVA's Chattanooga office, and TVA's Knoxville office. The staff indicated that it would discuss the issue with management and also consider possibly having a public meeting at the end of the visits. Subsequent to the meeting the staff determined that it would not make arrangements to have a representative of BEST accompany the staff and that it would not schedule a public meeting at the conclusion of the visits. However, the staff did indicate that it plans to write publicly available trip reports to capture what the staff did and saw during these visits.

/RA/

Joseph Sebrosky, Projects Manager
AP1000 Projects Branch 1
Division of New Reactor Licensing
Office of New Reactors

Docket Nos.: 52-014, 52-015

Enclosure:
Attendance List

cc w/encl: See next page

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Docket Nos.: 52-014, 52-015

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DATE	5/22/08	5/23/08

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Public Meeting Between TVA and NRC
Regarding the Hydrology Review for the Bellefonte
Combined License Application

April 25, 2008

Attendance List

NAME	ORGANIZATION
Mark Thaggard	NRC
Chris Cook	NRC
Ken See	NRC
Kerri Kavanagh	NRC/DCIP/CQVP
Milton Concepcion	NRC/DCIP/CQVP
Joe Sebrosky	NRC/DNRL/NWE1
Ann Hodgdon	NRC/OGC
Andrea Sterdis	TVA
Perry Maddux	TVA
Penny Selman	TVA
Greg Howe	TVA
Alan Levin	AREVA
Martha Shields	US DOE: NP2010
Joe Mihalcik	Unistar. Nuclear Energy
Stephen Burdick	Morgan Lewis
Jan Renfro	Bechtel
Eddie R. Grant	NuStart
Scott Vance	TVA
Kit Ng	Bechtel
Aja Birette	Nuclear Information Resource Service
Diane Yeager	Enercon
Participated Via Teleconference	
Terry Johnson	TVA
Lance Vail	PNNL
Steve Breihopt	PNNL
Louise Gorenflo	Bellefonte Efficiency and Sustainability Team
Steven Sondhei*	Sierra Club

Enclosure

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(Revised 04/28/2008)

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