

September 22, 2003

LICENSEE: FIRSTENERGY NUCLEAR OPERATING COMPANY

FACILITY: BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2

SUBJECT: SUMMARY OF AUGUST 5, 2003, MEETING REGARDING LICENSEE'S  
MAAP5 COMPUTER CODE MODIFICATIONS TO SUPPORT ITS  
APPLICATION FOR A LICENSE AMENDMENT FOR CONTAINMENT  
CONVERSION (TAC NOS. MB5303 AND MB5304)

On August 5, 2003, the U.S. Nuclear Regulatory Commission (NRC) staff held a Category 1 meeting at NRC headquarters in Rockville, Maryland, with representatives from FirstEnergy Nuclear Operating Company (FENOC), the licensee for the Beaver Valley Power Station, Unit Nos. 1 and 2 (BVPS-1 and 2). The list of meeting attendees is included as Enclosure 1. Enclosure 2 includes a copy of the slides presented at the meeting by FENOC. No other stakeholders were present at the meeting.

FENOC presented an overview of the history and background related to its June 5, 2002, application for license amendments for BVPS-1 and 2 to allow conversion of the containments from subatmospheric to atmospheric operating conditions. The application relied, in part, upon the Westinghouse (W) MAAP5 computer code as technical justification for the proposed changes. FENOC subsequently submitted another amendment application for review and approval of its best-estimate loss-of-cooling accident (LOCA) analysis and plans to submit an application for extended power uprate which both assume containment conversion.

Because of NRC staff concerns with MAAP5, W has subsequently withdrawn the topical report. FENOC stated, however, that rather than withdraw the application for containment conversion in its entirety, it would submit a partial withdrawal of the application. FENOC also requested in its March 31, 2003, application supplement, that the NRC staff continue its review of the portion of the application related to selective implementation of an alternative source term and control room habitability changes.

With respect to the portions of the MAAP5 computer code with which the NRC staff identified concerns, the licensee proposed to modify MAAP5 to align with previously NRC-approved methods, including benchmarking the modified MAAP5 against the NRC-approved GOTHIC computer code. The licensee also proposed a fall 2003 pre-application review meeting and submittal to provide a revised MAAP5 methodology description, discuss the benchmarking of the revised MAAP5 against approved applications and international standards, discuss the need for revised input parameters, and discuss key containment analysis results. The revised application for containment conversion is expected to be submitted in June 2004. The best-estimate LOCA analysis amendment application would be withdrawn and resubmitted following the revised containment conversion application submittal. FENOC plans to submit the extended power uprate amendment application by the end of the first quarter of 2004.

The NRC staff indicated it would entertain the licensee's approach. The NRC staff indicated that it would perform independent confirmatory calculations using the CONTAIN computer code to verify agreement with the licensee's results using the modified MAAP5 code. The NRC staff indicated that the licensee should provide good justification in its submittals for using aerosols in its analysis, should make sure that all points of the GOTHIC code are captured in its benchmarking efforts, and follow Standard Review Plan guidance with respect to treatment of mass energy releases for high energy line breaks. Preliminary agreement for scheduling the pre-application review meeting for the mid to late September time frame was reached and the licensee committed to try and improve on its application schedule. The meeting was then adjourned.

Subsequent to the meeting, the licensee returned a meeting feedback form, containing the suggestions for prescheduled 10-minute breaks every hour, and having computer driven projectors with Power Point presentation capability available in the meeting rooms. These suggestions were forwarded to the appropriate individuals for consideration. Typically, regular breaks are scheduled into the meeting agenda when the estimated length of time necessary for the various presentations has been determined. Current NRC video capability includes Power Point presentation capability in some conference rooms, and these conference rooms can be reserved if enough advance notice is provided.

Sincerely,

**/RA/**

Timothy G. Colburn, Senior Project Manager, Section 1  
Project Directorate I  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket Nos. 50-334 and 50-412

Enclosures: 1. List of Meeting Attendees  
2. FENOC's slides

cc w/encls: See next page

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Official Record Copy

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BEAVER VALLEY POWER STATION, UNIT NOS. 1 AND 2

AUGUST 5, 2003

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Organization

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