

March 17, 2003

MEMORANDUM TO: Stephen Dembek, Chief, Section 2  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

FROM: Alan Wang, Project Manager, Section 2                    /RA/  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

SUBJECT:                    SUMMARY OF MEETING HELD ON FEBRUARY 13, 2003, WITH THE  
                                  BOILING WATER REACTOR OWNERS GROUP EXECUTIVES

On February 13, 2003, the NRC staff held a public meeting with the Boiling Water Reactor Owners Group (BWROG) at the NRC Headquarters in Rockville, Maryland. The purpose of the meeting was to exchange information and to provide a forum for discussion of topics related to NRC and BWROG activities. Attachment 1 lists the meeting participants. The meeting slides are available in ADAMS under accession number ML030550790.

In his opening remarks, William R. Borchardt (Acting Deputy Director, Office of Nuclear Reactor Regulation) discussed in general terms the status of several Commission activities of interest to the BWROG. He noted that, in the past, these meetings have been useful for the prioritizing of staff resources. Mr. Lewis Sumner (Chairman of the Executive Committee for the BWROG) thanked the staff for the opportunity for the BWROG to discuss some of the more pertinent issues concerning boiling water reactors (BWRs).

There were no outstanding action items from previous meetings.

The BWROG representatives and the NRC staff provided presentations in the following areas:

- Reactor stability/detect and suppress
- Risk-informed 10 CFR Part 50 - Option 3
- Risk-informed technical specifications (TSs) - safety limit minimum critical power ratio (SLMCPR)
- Joint Owners Group (JOG) motor-operated valve periodic verification
- Pipe ruptures from hydrogen detonation
- Status of various risk management TSs
- Combustible gas control systems/10 CFR 50.44 rulemaking
- Generic Safety Issue (GSI)-189

### Reactor Stability/Detect and Suppress Methodology

The BWROG informed the staff that they are still working on finding a detect and suppress solution that was robust and could apply to all plants. Since they are looking for a more robust solution, they have fallen behind schedule. The BWROG noted that a August 8, 2002, meeting to discuss the new criteria was positive. The BWROG is meeting with the staff on February 20, 2003, to discuss a draft licensing framework document which would define all necessary licensing elements, establish a work scope, and propose milestones for this review. This report will be made available to the staff prior to the February 20, 2003, meeting.

### Risk-Informed 10 CFR Part 50 - Option 3

The BWROG stated the three main purposes of Option 3 are: (1) separation of loss-of-coolant accident - loss-of-offsite power (LOCA-LOOP), (2) elimination of single-failure criterion, and (3) replace the 1971 decay heat standard in 10 CFR 50.46 with the 1994 standard. The BWROG noted that potential safety benefits include: (1) focus on risk-significant structures, systems, and components (SSCs), (2) improved emergency diesel generator (EDG) reliability, and (3) improved emergency core cooling system (ECCS) equipment reliability. As a result of meeting with the staff on November 20, 2002, the BWROG is concerned about whether there is a viable success path. The BWROG wanted to stress the importance of Option 3 as they consider it a cornerstone for risk-informed regulations. As a result of the November 2002 meeting, the BWROG has drafted an outline for a licensing topical report as the basis for an exemption to 10 CFR 50.46. The draft will be the discussion point for a meeting on February 27, 2003. The BWROG noted that they prefer a rulemaking rather than multiple exemptions. The staff stated that they would confer with our legal office to see if multiple exemptions are possible and to determine the preferred route to implement Option 3.

### Removal of SLMCPR from the TS

The BWROG proposed to remove the SLMCPR from the TS. They believe this routine TS change is a burden to the industry and the staff due to the number of changes needed, about 13 a year, and the timing (usually requires a short turn-around to support restart after a refueling). The BWROG is proposing a Core Operating Limits Report (COLR) type change to relocate the SLMCPR to a licensee-controlled document. The staff noted that the SLMCPR meets criteria in 10 CFR 50.36 and cannot be taken out of the TS. The staff is sensitive to the SLMCPR TS change and believes they have been supportive of the industry regarding this issue by issuing these changes in a timely manner. The staff did note that if an acceptance criteria rather than a limit could be developed in the TS, this might allow a COLR type approach. The BWROG will look into this, by possibly proposing a revision to Technical Specification Task Force (TSTF)-357.

### Pipe Ruptures from Hydrogen Detonation

The BWROG has issued a guidance document, "BWR Piping and Component Susceptibility to Hydrogen Detonation." A survey is in progress to determine plant-specific actions taken to date. The NRC is considering issuing a Regulatory Information Summary for this issue and has requested the BWROG to provide a final report. The BWROG stated they are would issue a closeout letter when they have the final results of the survey.

### Risk-Informed TSs

The staff provided the BWROG with the status of Initiatives 1, 3, 4b, 5b, 6 and 8. The BWROG expressed satisfaction with the schedules resulting from the meeting.

### Combustible Gas Control Systems/10 CFR 50.44 Rulemaking

The NRC staff provided a status of the rulemaking efforts regarding 10 CFR 50.44. The staff noted that the comment period closed on October 16, 2002, and the comments are being categorized and evaluated.

### GSI-189

The NRC staff provided a status of GSI-189. The NRC staff noted that the cost benefit has been determined to be slightly negative, but with large uncertainties. Consequently, the staff and the Advisory Committee on Reactor Safeguards have recommended pursuing the addition of a backup power supply for both the ice condenser and Mark III containments. The staff has estimated the cost of a backup power supply to be in the range of \$250,000. The BWROG felt this cost is too low by possibly an order of magnitude. The BWROG asked if they could see the analysis and have a call with the staff to discuss it.

At the conclusion of the meeting, Mr. Jack Gray thanked the NRC staff for the opportunity to brief the staff on the status of the BWROG efforts and receive feedback. Mr. William Borchardt stated these meetings are useful to the staff for prioritizing work and highlighting issues that are important to the industry.

As a result of the meeting, the BWROG or NRC staff has agreed to provide the following:

1. The BWROG will provide the staff with the licensing application framework for the new criteria for the BWR stability issue. The licensing application framework document will discuss the BWROG Suppress and Detect methodology and will be made available to the staff prior to the February 20, 2003, meeting.
2. The BWROG will propose a revision to the TSTF-357 regarding removal of the SLMCPR requirement from TS.
3. The BWROG will issue a final closeout letter with any plant-specific actions taken to date with regard to hydrogen detonation.
4. The staff will provide the BWROG with the cost benefit analysis performed in support of GSI-189 and arrange a conference call to discuss this analysis.

The BWROG suggested June 2003, for the next meeting.

Project No. 691

Attachment: Meeting Attendees

cc w/att: See next page

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**Package: ML030210358**

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ATTENDANCE LIST

BOILING WATER REACTOR OWNERS GROUP (BWROG)/NRC MANAGEMENT MEETING

FEBRUARY 13, 2003

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L. Sumner  
J. Gray  
K. Putnam  
J. Meister  
M. Reddemann

**GE NUCLEAR ENERGY**

R. Hill  
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**OTHER**

M. May, Exelon  
N. Chapman, Search Bechtel

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