March 19, 2003

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

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

SUBJECT: SUMMARY OF MEETING WITH THE BOILING WATER REACTOR OWNERS GROUP (BWROG) REGARDING OPTION 3, LOSS-OF-COOLANT ACCIDENT/LOSS-OF-OFFSITE POWER RISK-INFORMED IMPLEMENTATION

On February 27, 2003, an open meeting was held between the BWROG and the NRC staff to discuss the BWROG efforts to separate the loss-of-offsite power (LOOP) from loss-of-coolant accidents (LOCA) based on a risk informed approach. The BWROG reiterated the logic and advantages that separating LOCA-LOOP could provide. The NRC noted that the separation of LOCA-LOOP is a complex and challenging issue. While the change in core damage frequency may be small to slightly positive, the uncertainties are large. The argument needs to be made that defense-in-depth is maintained. The staff agreed a possible approach would be multiple-plant exemptions. The BWROG could develop a generic licensing topical report (LTR) that licensees could reference. The BWROG stated they have developed a shell LTR (ML030730039) for this meeting as a first step for work to support rulemaking for a risk-informed alternative to 10 CFR 50.46/General Design Criterion 35 or as justification for a lead plant exemption request under 10 CFR 50.12.

The BWROG stated that the LTR describes a set of bounding criteria for those plants that are referencing the LTR. If a plant deviates from this set of criteria, it will have to justify it on a plant-specific basis. The BWROG will attempt to make the LTR applicable to all BWRs. They proposed to limit the scope of the LTR to provide the staff a fixed review scope. The LTR proposes eight specific changes that could be justified by LOCA-LOOP separation. These changes will include quantitative and qualitative arguments. The LTR will also address compliance with current regulations, defense-in-depth and safety margins. A generic PRA model will be used to analyze the proposed changes. This model will be constructed such that its results can be applied broadly to BWR plants. The LTR is scheduled to be submitted to the staff in September 2003. The BWROG plans to have periodic status meetings until then.

The staff stated that we have a meeting scheduled with our legal council to discuss the use of exemptions versus rulemaking. We will inform the BWROG of the results of this meeting. The staff noted that we need to know more about the methodologies to be used and the analyses to be performed. In particular, whether a LOCA analysis will be redone or an "assessment" is only

needed. The BWROG noted they are working on the criteria for this determination. In addition, whether a "approved" code or a best-estimate code will be used will also weigh on our decision-making process. The staff was also concerned that if the large breaks are removed from the regulations to severe accidents, what will the NRC's control mechanism or oversight responsibilities be.

The staff thanked the BWROG for the presentation and encouraged an update on developments in the next several months. The staff expressed that this would be an ambitious undertaking. This meeting was informational. No regulatory decisions were made. The BWROG was encouraged by the staff's suggestions and proposed to meet in 4 to 6 weeks. The meeting handout can be found in ADAMS under Accession No. ML030730057. The attendance list is attached.

Project No. 691

Attachment: Meeting Attendees

cc w/att: See next page

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Meeting Notice No.: ML030360388
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MEETING WITH THE BOILING WATER REACTORS OWNERS GROUP

DEVELOPMENT OF A NEW REACTOR CORE STABILITY LIMIT

FEBRUARY 20, 2003

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Attachment 1

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