

July 13, 2006

MEMORANDUM TO: Stacey L. Rosenberg, Chief
Special Projects Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

FROM: Michelle C. Honcharik, Project Manager **/RA/**
Special Projects Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JUNE 14, 2006, OPEN MEETING WITH BOILING
WATER REACTORS OWNERS' GROUP RE: TOPICAL REPORT
NEDO-33148, "SEPARATION OF LOSS OF OFFSITE POWER FROM
LARGE BREAK LOCA" (TAC NO. MC3042)

On June 14, 2006, a Category 2 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC) and representatives of the Boiling Water Reactors Owners' Group (BWROG) at NRC Headquarters, One White Flint North, 11555 Rockville Pike, Rockville, Maryland. The purpose of the meeting was to discuss the review of Topical Report (TR) NEDO-33148, "Separation of Loss of Offsite Power [LOOP] from Large Break LOCA [loss-of-coolant accident]." Specifically, the purpose of the meeting was to clarify and discuss the BWROG draft responses to NRC staff requests for additional information (RAIs) and proposed revisions to the subject TR. See Agencywide Documents Access and Management System (ADAMS) Accession No. ML061800031 for the meeting slides. A list of attendees is enclosed.

The NRC staff from the Nuclear Performance and Code Review Branch (SNPB) had no questions regarding the draft responses to the SNPB RAIs.

The NRC staff from the Electrical Engineering Branch (EEEB) commented that the TR should provide assurance that the offsite power (OSP) will be available if the unit trips. The EEEB staff focused on clarifying two of the RAI responses: RAI 1 regarding assurance of OSP and RAI 5 regarding delayed LOOP. Due to the greater dependence on the OSP system has the basis to change the design and licensing basis for mitigating a large break LOCA, the EEEB RAI 1b attempted to obtain more assurance of the operability of the OSP system than can be presently inferred from the current technical specifications (TS). The BWROG commented that the TS were not part of this TR. The NRC insisted that a change to the design and licensing basis for mitigation of a large break LOCA may lead to a need to revise the TS requirements for OSP.

Due to the proposed removal of the design and licensing basis of a simultaneous LOCA and LOOP, the EEEB RAI 5 attempted to determine the response to a delayed LOOP. The BWROG commented that delayed LOOP was outside the licensing basis. The NRC staff questioned that if the simultaneous LOCA and LOOP would no longer be the design and licensing basis, then what will replace it? The BWROG position is that the probability of simultaneous LOCA and LOOP was too small to be of concern. The NRC staff stated that if this position is taken, then it is logical that the design and licensing basis should be revised to include LOCA with a delayed LOOP as a direct result of this TR. The BWROG agreed to add a

recommendation to the TR methodology that each plant-specific request for exception include a review of Generic Safety Issue-171 concerns. The NRC staff and the Brookhaven consultant referenced NUREG/CR-6538.

The NRC staff from the Probabilistic Risk Assessment Branch A (APLA) commented that the BWROG had been responsive to comments from the February 14, 2006, public meeting. However, the methodology to be used by licensees to determine the probability of a consequential LOOP remains a key concern to APLA staff. The BWROG stated that the Electrical Power Research Institute (EPRI) has provided guidance and the BWROG will provide this to the NRC and licensees who adopt this TR. The APLA staff stated that the TR needed to provide, or reference, a methodology that will yield a site-specific conditional probability of LOOP given LOCA. If the methodology is referenced, then the NRC staff would need to review that reference. The BWROG must provide the documentation they were relying on to form the basis for any methodology provided.

During the February 14, 2006, meeting, the BWROG stated EPRI Report 1009110, Revision 1, "The Probability and Consequences of Double Sequencing Nuclear Power Plant Safety Loads," dated October 2003 and EPRI Report 1007966, "Double Sequencing Analysis for BWRs: the Probability and Consequences of Double Sequencing Nuclear Power Plant Safety Loads, Considerations Specific to Boiling Water Plants," dated October 2003 were used as a basis for the TR methodology. The NRC staff reminded the BWROG that, if these two EPRI reports describe the required methodology, then the reports need to be submitted to the NRC on the docket and clearly referenced in the TR. Additionally, the BWROG needs to respond to the EEEB staff comments to the EPRI reports, that were issued to the BWROG on September 28, 2004 (ADAMS Accession No. ML042600254).

In conclusion, the BWROG stated that it plans to submit the revised TR and final RAI responses to the NRC by June 30, 2006.

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Enclosure: List of Attendees

cc w/encl: See next page

recommendation to the TR methodology that each plant-specific request for exception include a review of Generic Safety Issue-171 concerns. The NRC staff and the Brookhaven consultant referenced NUREG/CR-6538.

The NRC staff from the Probabilistic Risk Assessment Branch A (APLA) commented that the BWROG had been responsive to comments from the February 14, 2006, public meeting. However, the methodology to be used by licensees to determine the probability of a consequential LOOP remains a key concern to APLA staff. The BWROG stated that the Electrical Power Research Institute (EPRI) has provided guidance and the BWROG will provide this to the NRC and licensees who adopt this TR. The APLA staff stated that the TR needed to provide, or reference, a methodology that will yield a site-specific conditional probability of LOOP given LOCA. If the methodology is referenced, then the NRC staff would need to review that reference. The BWROG must provide the documentation they were relying on to form the basis for any methodology provided.

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MEETING NOTICE ACCESSION NO.: ML061500281

SLIDES ACCESSION NO.: ML061800031

PKG NO. : ML061790571

Meeting Summary: ML061790565

NRC-001

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MEETING WITH THE BOILING WATER REACTORS OWNERS GROUP (BWROG)

JUNE 14, 2006

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J. Gabor

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A. Howe
G. Morris
G. Martinez-Guridi (Brookhaven National Laboratory Contractor for NRC)