

September 27, 2007

Mr. Anthony R. Pietrangelo  
Nuclear Energy Institute  
1776 I Street, NW , Suite 400  
Washington DC, 20006-3708

SUBJECT: DRAFT GUIDANCE FOR REVIEW OF FINAL LICENSEE RESPONSES TO  
GENERIC LETTER 2004-02, "POTENTIAL IMPACT OF DEBRIS BLOCKAGE  
ON EMERGENCY RECIRCULATION DURING DESIGN BASIS ACCIDENTS AT  
PRESSURIZED-WATER REACTORS"

Dear Mr. Pietrangelo:

As you are aware, Generic Letter (GL) 2004-02, "Potential Impact of Debris Blockage on Emergency Recirculation During Design Basis Accidents at Pressurized-Water Reactors," provides the expectation that licensees will, by December 31, 2007, adequately address issues identified in the GL through a mechanistic analysis of sump performance in the presence of plant-specific debris loading. Any modifications needed to demonstrate that adequate core cooling is maintained in the presence of such debris should also be complete by the same date. The NRC, by letter to the Nuclear Energy Institute (NEI) dated November 14, 2006 (ADAMS Accession No. ML063110263), and subsequently to each licensee in early 2007, indicated that all licensees should also provide final supplemental responses to the GL by the end of 2007.

Much of the guidance the staff plans to use in its review of these responses is contained in NEI report (ADAMS Accession No. ML041550279), "Pressurized Water Reactor Containment Sump Evaluation Methodology." The NEI report, in conjunction with the staff's safety evaluation (ADAMS Accession Nos. ML043280007 and ML043280008), provides a method acceptable to the staff for evaluating PWR sump performance as requested in the GL. However, at the time these documents were developed, the discussion of some topics was limited because both the NRC and industry had relatively little knowledge of those topics. The enclosed review guidance addresses some of these topics; specifically chemical effects, protective coatings, and head loss testing. Other topics, such as downstream effects, are being addressed through development of NRC safety evaluations of industry-submitted topical reports.

We are providing you this draft guidance for the information of NEI and PWR licensees. We plan to discuss it at the October 24, 2007 public meeting on Generic Safety Issue 191, PWR Sump Performance. We would welcome written comments on the document before that meeting, or verbal comments during the meeting. If revisions are needed, we will make them and issue the guidance in final form in early 2008, in time to support the NRC's review of final licensee submittals to address GL 2004-02.

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Though this guidance is primarily intended for the use of the NRC staff, we expect it to help licensees ensure their final responses to GL 2004-02 are adequate to support closure of GL 2004-02 for their plants. As with any guidance, its use by licensees is not mandatory. Alternate approaches may be used if adequately supported and the NRC's regulations are met.

If you would like to discuss the contents of this letter further, please contact me at (301) 415-1274.

Sincerely,

**/RA/**

William H. Ruland, Director  
Division of Safety Systems  
Office of Nuclear Reactor Regulation

Enclosures:

1. Draft Review Guidance for Strainer Head Loss and Vortexing
2. Draft Review Guidance for Coatings
3. Draft Review Guidance for Chemical Effects

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Package: ML0726007425

Incoming: ML070230571

Letter: ML072600337 NRR-106

Enclosure 1: ML072600348

Enclosure 2: ML072600335

Enclosure 3: ML072600372

**\*See previous concurrence**

<b>OFFICE</b>	NRR/SSIB	NRR/DCI	NRR/DSS
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