

May 1, 2013

MEMORANDUM TO: William D. Reckley, Chief  
Policy and Support Branch  
Japan Lessons-Learned Project Directorate  
Office of Nuclear Reactor Regulation

FROM: Rajender Auluck, Senior Project Manager **/RA/**  
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SUBJECT: SUMMARY OF APRIL 25, 2013, MEETING TO DISCUSS  
ASSOCIATED WITH IMPLEMENTATION OF NEAR-TERM  
FORCE RECOMMENDATION 5.1 RELATED TO CONTAINMENT  
VENTING SYSTEMS

On April 25, 2013, a Category 2 public meeting was held between the U.S. Nuclear Regulatory Commission (NRC or Commission) staff and representatives from the Nuclear Energy Institute (NEI) and Boiling Water Owners Group (BWROG) related to industry initiatives for the Implementation of Recommendation 5.1 of the Near-Term Task Force (NTTF) Recommendations for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML111861807). The specific purpose of this meeting was to discuss modifications to the existing Order EA-12-050 upgrading the requirements for the reliable hardened vents to remain functional during severe accident conditions. As part of background information for this meeting, industry had provided some information on severe accident capable vents and their comments on Attachment 2 to Enclosure 7A; Option 2 regarding severe accident capable vents (ADAMS Accession Nos. ML13114A059 and ML13114A061).

The NRC senior management opened the meeting and emphasized that a lot of progress has been made in previous meetings and there are only few remaining areas where further discussions are needed. It is extremely important that we understand the differences, continue to make progress, and reach some conclusions in order to meet the Commission's directed schedule for issuance of the modified Order. In their opening remarks, the industry senior representative thanked the NRC for this opportunity and fully agreed that discussions must focus on the differences and how best to address these differences. Furthermore, while making decisions, one should always keep in mind the overriding message of maximizing the benefits and minimizing rework.

In their technical presentation, the industry representatives briefly provided an overview of schedules and milestones, impact on FLEX, clarification of severe accident definition, and drywell vent and related action in rulemaking.

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The industry representatives also provided information regarding the pressure response of containments during certain severe accident scenarios, including those involving isolation of wetwell vents due to high water levels in suppression pools and those involving molten core debris reaching the drywell floor in Mark II containments. In the presentation, industry representatives highlighted their rationale of why many of these important and relevant issues will best be handled in the rulemaking activity. Later in their presentation, the industry representatives provided detailed comments on the draft proposed Order which was included as an Enclosure in SECY-12-0157, "Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors with Mark I and Mark II Containments." The industry comments focused on reducing the prescriptive nature of some technical requirements proposed in the draft proposed order and the general approach of including in the order only those requirements related to containment overpressure and addressing other issues in the related rulemaking directed by the Commission's staff requirements memorandum related to SECY-12-0157. Much of the discussion was about the Mark II suppression pool bypass concern and whether or not the accident progression and consequences were sufficiently understood to define requirements in the pending revision to Order EA-12-050. The NRC staff asked several clarifying questions to better understand industry and stakeholder's position including assumptions used in their MAPP computer code in evaluating accident sequences.

In their presentation, the NRC staff proposed a phased approach to address the issues raised in previous public meetings and to respond to the Commission's directives in an SRM dated March 19, 2013. This phased approach will ensure minimal delays in implementing adequate protection provisions of the Order, while allowing possible development of alternate approaches. In the second phase, the NRC will envision implementation of Order with subsequent incorporation of requirements into rulemaking activities, which will also include broader accident management strategies. Specifically, under Phase 1, the issue of wetwell venting for both Mark I and II containments will be addressed by revising the requirements in Order EA-12-050 to add severe accident capability for the hardened wetwell vents. For Phase I, the staff, as discussed in previous meetings, will propose an implementation date no later than startup from the second refueling outage that begins after June 30, 2014. The NRC staff further proposed that Phase 2 could be divided into two parts. In Phase 2a, the issues of drywell venting system will be addressed with options of installing a severe accident capable drywell vent or developing a reliable strategy that obviates the need for a drywell vent. In Phase 2b, the issue of Mark II-suppression pool bypass will be addressed for the affected plants. The staff proposed options included (i) installation of engineered system to prevent suppression pool bypass along with a wetwell vent, (ii) installation of drywell vent with engineered filter, and (iii) development and implementation of a reliable strategy to prevent suppression pool bypass. The industry representatives asked numerous clarifying questions. The industry representatives and the NRC staff caucused during the meeting break to assess and evaluate the comments made during the meeting. After the break, the industry representative stated that although there are many good suggestions, they still believe that many of these issues will be better addressed in the rulemaking activity.

Subsequent to the meeting and after further discussions among staff members, the NRC staff concluded that the Mark II suppression pool bypass issue would be better addressed within the rulemaking activity. The NRC staff assessed the comments received during the meeting and revised the draft Order.

This revised draft of the Order is included as Enclosure 3 (ML13121A414) to this meeting summary and will support our next public meeting on this topic, which is being scheduled for early May.

Members of the public attended in person and through the telecommunications bridgeline and webcast. At designated points during the meeting, members of the public were invited to provide any comments on the presentations. Members of the public asked several clarifying questions, and there were some comments similar to previous comments received by the NRC. The NRC staff responded to all questions adequately.

A list of attendees is provided in ADAMS Accession No. ML13121A257. The presentation slides may be located through ADAMS Accession No. ML13121A220, and ML13121A243.

Enclosure:

1. List of attendees
2. Presentation slides
3. Revised draft Order

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**ADAMS Accession No.:** ML13119A076 (pkg.); ML13119A079 (Summary)

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