

August 10, 2015

MEMORANDUM TO: Gregory T. Bowman, Chief
Policy and Support Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

FROM: Rajender Auluck, Senior Project Manager */RA/*
Policy and Support Branch
Japan Lessons-Learned Division
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF JULY 13, 2015, MEETING TO DISCUSS
ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF NEAR-
TERM TASK FORCE RECOMMENDATION 5.1 RELATED TO
CONTAINMENT VENTING SYSTEMS

On July 13, 2015, a Category 2 public meeting was held between the U. S. Nuclear Regulatory Commission (NRC) staff, representatives from the Nuclear Energy Institute (NEI), and the Boiling Water Reactor Owners Group (BWROG) (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15176A838), to continue discussions on activities directed by the Commission in a staff requirements memorandum (SRM) dated March 19, 2013 (ADAMS Accession No. ML13078A017), SRM-SECY-12-0157, "Consideration of Additional Requirements for Containment Venting Systems for Boiling Water Reactors [BWRs] with Mark I and Mark II containments." These discussions were related to the NRC's Implementation of Order EA-13-109 (ADAMS Accession No. ML13130A067), which addressed Recommendation 5.1 of the Near-Term Task Force (NTTF) report for Enhancing Reactor Safety in the 21st Century report, issued July 12, 2011 (ADAMS Accession No. ML111861807). The main focus of the meeting was on the development of a template for licensees with BWR Mark I and Mark II containments to use in preparation of their site-specific overall integrated plan (OIP) to comply with the requirements for Phase 2 of the order.

The NRC staff began by summarizing the progress made since the last meeting held on March 16, 2015. The Advisory Committee on Reactor Safeguards (ACRS) subcommittee was briefed on March 20, 2015, and May 6, 2015. The ACRS full committee was briefed on April 10, 2015. The Interim Staff Guidance (ISG) for implementation of Phase 2 requirements of the order was issued on April 29, 2015 (ADAMS Accession No. ML15104A118). The ISG also endorsed the industry guidance NEI 13-02, Revision 1 (ADAMS Accession No. ML15113B318). The staff understands the challenge to complete the Phase 2 template in a timely manner, recognizing the order requirements for submission of site-specific OIPs is December 31, 2015. The staff will support the OIP template development to the extent possible.

CONTACT: Rajender Auluck, NRR/JLD
301-415-1025

The industry presentation began with providing an overall proposed schedule of completing the Phase 2 templates and the intermediate milestones. The industry also suggested that based on questions from the licensees, it will be useful to provide additional clarifications in certain selected areas of hardened containment vent system (HCVS) in the form of frequently asked questions (FAQs). The four potential areas include: severe accident multi-unit capability (HCVS-FAQ-10), plant severe accident response to core ex-vessel (HCVS-FAQ-11), potential limitations on operator actions based on gap release and core relocation (HCVS-FQ-12), and verification of first 24 hour time sensitive actions (HCVS-FAQ-13). As noted in the handout slides, a brief justification was provided for each of these potential FAQs. The staff agreed that if needed, clarifications should be provided and stated that once additional information is submitted, the staff will review and include as an agenda item for the next public meeting.

Next, the industry presentation covered Phase 1 topic regarding tornado missile protection for HCVS design considerations and provided a copy of draft white paper (WP) titled "Missile Evaluation for HCVS Components 30 feet Above Grade," and discussed industry's proposed approach to provide reasonable protection for the HCVS against the external hazard of wind-borne missiles that cause an extended loss of alternating current power (ELAP) or a loss of ultimate heart sink (LUHS). The WP concludes that based on certain assumptions as described in the paper, it may be concluded that the HCVS is unlikely to be damaged in a manner that prevents containment venting by a wind-generated missile from the same wind event that generates an ELAP or LUHS. The staff agreed to review the WP and will provide their comments prior to the next meeting scheduled for July 28, 2015.

The NRC and industry meeting handouts can be found under ADAMS Accession Nos. ML15194A105 and ML15194A096, respectively.

Members of the public attended in person, through the bridge line and via 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 some clarifying questions. The NRC staff responded to all questions.

Enclosure:
List of Attendees

The industry presentation began with providing an overall proposed schedule of completing the Phase 2 templates and the intermediate milestones. The industry also suggested that based on questions from the licensees, it will be useful to provide additional clarifications in certain selected areas of hardened containment vent system (HCVS) in the form of frequently asked questions (FAQs). The four potential areas include: severe accident multi-unit capability (HCVS-FAQ-10), plant severe accident response to core ex-vessel (HCVS-FAQ-11), potential limitations on operator actions based on gap release and core relocation (HCVS-FQ-12), and verification of first 24 hour time sensitive actions (HCVS-FAQ-13). As noted in the handout slides, a brief justification was provided for each of these potential FAQs. The staff agreed that if needed, clarifications should be provided and stated that once additional information is submitted, the staff will review and include as an agenda item for the next public meeting.

Next, the industry presentation covered Phase 1 topic regarding tornado missile protection for HCVS design considerations and provided a copy of draft white paper (WP) titled "Missile Evaluation for HCVS Components 30 feet Above Grade," and discussed industry's proposed approach to provide reasonable protection for the HCVS against the external hazard of wind-borne missiles that cause an extended loss of alternating current power (ELAP) or a loss of ultimate heart sink (LUHS). The WP concludes that based on certain assumptions as described in the paper, it may be concluded that the HCVS is unlikely to be damaged in a manner that prevents containment venting by a wind-generated missile from the same wind event that generates an ELAP or LUHS. The staff agreed to review the WP and will provide their comments prior to the next meeting scheduled for July 28, 2015.

The NRC and industry meeting handouts can be found under ADAMS Accession Nos. ML15194A105 and ML15194A096, respectively.

Members of the public attended in person, through the bridge line and via 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 some clarifying questions. The NRC staff responded to all questions.

Enclosure:
List of Attendees

DISTRIBUTION:

PUBLIC	DScrenci
JLD R/F	RidsRgn4MailCenter
RidsOpaMail	RHannah
TWertz	RidsAcrcAcnw_MailCTR
RidsNrrDorl	VMitlyng
RidRidsRgn1MailCenter	SKennedy
RidsRgn2MailCenter	VDricks
RAuluck	RidsNrrLASLent
RidsRgn3MailCenter	

ADAMS Accession No.: ML15215A417

OFFICE	NRR/JLD/PSB/PM	NRR/JLD/LA	NRR/JLD/PSB/BC	NRR/JLD/PSB/PM
NAME	RAuluck	SLent	GBowman	RAuluck
DATE	08/3/2015	08/4/2015	08/7/2015	08/10/2015

OFFICIAL RECORD COPY



**NRC Public Meeting
Recommendation 5.1 Related to Containment Venting System
July 13, 2015**

List of Attendees

Name	Organization
Rajender Auluck	U. S. Nuclear Regulatory Commission (NRC)
Randy Bunt	Southern Nuclear Operating Company
William Reckley	NRC
Nageswara Karipineni	NRC
Sud Basu	NRC
Tim Devik	PS&E Nuclear, LLC
Robert Ginsberg	Duke Energy
Jim Peschel	Certrec Corporation
Phil Amway	Exelon
Patrick Fallon	DTE Energy
Jerry Humphreys	BNE/NJDEP
Terry Farthing	GE Hitachi
Jenna Bergman	Sciencetech/Nuclear Div.
Craig Nichols	Tennessee Valley Authority

Enclosure

Name	Organization
Steven Dolly	PLATTS
Henna Amway	Public
Bruce Heida	NRC
Brian Lee	NRC