

September 14, 2011

MEMORANDUM TO: Rani L. Franovich, Chief
Performance Assessment Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

FROM: Ronald Frahm, Senior Reactor Operations Engineer */RA/*
Performance Assessment Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

SUBJECT: SUMMARY OF THE PUBLIC MEETING HELD ON AUGUST 25, 2011
TO DISCUSS PREPARATIONS FOR UPCOMING TABLETOP
EXERCISES FOR NEW REACTOR RISK APPLICATIONS IN THE
REACTOR OVERSIGHT PROCESS (ROP)

On August 25, 2011, the U.S. Nuclear Regulatory Commission (NRC) staff hosted a public meeting with the Nuclear Energy Institute and other interested stakeholders at One White Flint North, Room 7B4, to discuss preparations for the upcoming ROP tabletop exercises for new reactor risk applications. The primary purpose of this planning meeting was to discuss the approach and develop a group of examples to further evaluate in preparation for the upcoming ROP-related tabletop exercises in the fall. These tabletops are necessary to address the Commission's Staff Requirements Memorandum (SRM) of March 2, 2001 in response to SECY-10-0121, "Modifying the Risk-informed Regulatory Guidance for New Reactors." The meeting attendance list and agenda are included in Enclosures 1 and 2 respectively.

The staff began the meeting by presenting a series of slides (see Enclosure 3) that discussed the purpose of the meeting, summarized the key points from the SRM, reviewed the status of the tabletop exercises, and provided a proposed approach to and next steps to prepare for the upcoming ROP-related tabletops. The agreed-upon approach was to (1) identify a broad cross-section of well-vetted cases, developed from actual greater-than-green inspection findings, Mitigating System Performance Index (MSPI) data, and event response applications (per Management Directive (MD) 8.3, "NRC Incident Investigation Program,") from the current fleet of reactors, then (2) apply similar situations to the new reactor designs, filling in any gaps with realistic hypothetical situations and reasonable assumptions, and finally (3) compare the risk results from the new reactor scenarios to those derived from the current fleet to assess the adequacy of the current regulatory tools.

CONTACT: Ronald Frahm, NRR/DIRS
301-415-2986

The meeting attendees then reviewed potential samples that had been previously gathered (see Enclosure 4) as well as others that were presented during the meeting to select representative test cases to be further evaluated using applicable risk tools for the new reactor designs. The following cases were selected as a result of the discussions, with the understanding that the list is subject to change upon closer review of the appropriateness of each case:

For greater than green inspection findings/ significance determination process (SDP) results:

- Perry, high-pressure core spray contact, for comparison to ABWR
- Calvert Cliffs, turbine-driven auxiliary feedwater pump, for comparison to APWR
- Comanche Peak, condensate storage tank bladder failure, for comparison to EPR and APWR
- Clinton, reactor core isolation cooling vortexing, for comparison to ABWR
- Browns Ferry, disk-stem failure, for comparison to AP1000

For greater than green MSPI results:

- Brunswick 1, 2Q2006, emergency AC power, for comparison with ABWR
- South Texas 2, 2Q2006, emergency AC power, for comparison to EPR
- Palisades, 2Q2006, high-pressure injection, for comparison to APWR and EPR

For MD 8.3 event response applications:

- Catawba, loss of offsite power reactor trip, 5/20/06, and/or Palo Verde, loss of offsite power reactor trip, 6/14/04, for comparison to AP1000 and ABWR
- Peach Bottom, dual reactor scram, 9/15/03, for comparison to ABWR
- Indian Point 2, steam generator tube rupture, 2/15/00, for comparison to AP1000

The attendees discussed next steps and decided that a conference call with some vendors of the new reactors involved in the proposed case studies would be prudent in the near term to help prepare for the tabletops. The conference call was tentatively scheduled for, and has since occurred on, September 7, 2011. The summary of this conference call will be documented separately. The ROP tabletop exercises were also tentatively scheduled as a Category 3 public meeting on October 5, 2011, and October 26, 2011, was proposed as a potential date for a second tabletop meeting, if necessary.

Enclosures:

As stated

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Enclosures:

As stated

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See next page

ADAMS Accession Number: ML112490087

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| OFFICE | NRR/DIRS/IPAB | BC:NRR/DIRS/IPAB |
| NAME | RFrahm | RFranovich |
| DATE | 09/06/11 | 09/14/11 |

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Memo to Rani L. Franovich from Ronald Frahm dated September 14, 2011

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**Preparations for ROP Tabletops for
New Reactor Risk Applications**

August 25, 2011

Meeting Attendance

| | |
|--------------------|-------------------|
| Ronald Frahm | NRC/NRR/DIRS |
| Lauren Casey | NRC/OE |
| Jim Slider | NEI |
| Don Dube | NRC/NRO |
| Tom Houghton | NEI |
| Biff Bradley | NEI |
| Chris Earls | NEI |
| Bob Fitzpatrick | NRC/NRO/DE/EEB |
| Donald Chung | NRC/NRR/DRA |
| Jeff Circle | NRC/NRR/DRA |
| Christopher Hunter | NRC/RES/DRA |
| Rani Franovich | NRC/NRR/DIRS |
| Steve Nass | Westinghouse |
| Garrett Sanders | Scana/V.C. Summer |

**PREPARATIONS FOR UPCOMING TABLETOP EXERCISES
FOR NEW REACTOR RISK APPLICATIONS
FOR THE REACTOR OVERSIGHT PROCESS
CATEGORY 2 MEETING AGENDA**

August 25, 2011; 1:00 PM – 5:00 PM;
One White Flint North Building;
Conference Room – O-7B4

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|----------------|---|
| 1:00 – 1:05 PM | Introduction and Purpose of Meeting |
| 1:05 – 1:15 PM | Discussion of General Approach to Upcoming ROP Table Top Exercises |
| 1:15 – 2:45 PM | <ol style="list-style-type: none"> 1. Discussion of Approach and Proposed Examples for Risk-Informed SDP Applications 2. Opportunity for Public Comment |
| 2:45 – 3:00 PM | BREAK |
| 3:00 – 3:45 PM | Discussion of Approach and Proposed Examples for Mitigating System Performance Index (MSPI) |
| 3:45 – 4:30 PM | Discussion of Approach and Proposed Examples for MD 8.3 Event Response Determinations |
| 4:30 – 4:50 PM | Next Steps and Action Items in Preparation for Table Tops |
| 4:50 – 5:00 PM | <ol style="list-style-type: none"> 1. Closing Remarks 2. Opportunity for Public Comment |