

March 18, 2013

MEMORANDUM TO: Joseph Giitter, Director
Division of Risk Assessment
Office of Nuclear Reactor Regulation

THRU: Sunil Weerakkody, Chief /RA/
PRA Operations and Human Factors Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation

FROM: Michael Montecalvo, Reliability and Risk Analyst
PRA Operations and Human Factors Branch
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SUBJECT: SUMMARY OF FEBRUARY 7, 2014, PUBLIC MEETING ON
ISSUES RELATED TO CURRENT RISK-INFORMED PROCESSES

On February 7, 2014, the U.S. Nuclear Regulatory Commission (NRC) staff held a Category 2 public meeting to discuss issues related to current risk-informed processes at the NRC headquarters location in Rockville, Maryland. The purpose of the meeting was to engage the industry and public in a discussion on current processes and to listen to recommendations for advancing risk-informed decision making.

A summary of the topics discussed at the meeting included: Regulatory Guide 1.200, the significance determination process, and current practices concerning peer reviews. The participants also discussed the charter for the newly formed NRC Risk-Informed Steering Committee (RISC), including how this committee will interact with the industry's own Risk-Informed Steering Committee.

The meeting was attended by over 40 individuals, primarily representing industry, non-governmental organizations, and NRC staff. The feedback from the public was supportive of the efforts of the industry and the NRC staff to further risk-informed decision making with specific recommendations made to reach out to other professionals to move these issues forward.

The meeting notice and NRC RISC charter are available in the Agencywide Documents Access and Management System (ADAMS) under accession numbers ML14009A116 and ML14009A158, respectively.

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Opening Remarks

The opening comments from the NRC Steering Committee Chair, Eric Leeds, focused on the potential benefits that could be realized with the collaboration of the two committees to focus both the industry and the NRC on the most safety significant issues. The NRC re-iterated the fact that two separate committees are involved in this effort and this public meeting and those proposed to be held are a way to bring the two committees together in an open public forum to enhance communication and transparency. NRC also emphasized that challenges with respect to risk-informing regulatory activities are not simple and the committee members need to have a solid understanding of the benefits and limitations of probabilistic risk assessment methods.

The opening comments from the industry began with praise for the NRC and industry for becoming world leaders in the use of PRA methods with the engagement of many of the professionals in the room. This praise was balanced with the declaration that progress has slowed and full realization of the potential benefits of advancing risk-informed regulation has not been realized. The industry said that the implementation of NFPA-805 exemplified this concern, citing too much regulatory uncertainty and overly conservative methodologies which they claim result in inaccurate risk profiles.

Discussion of Issues Related to Current Risk-Informed Processes

The remainder of the meeting was used to discuss the NRC Risk-Informed Steering Committee charter as a loose outline to drive the discussions. There was considerable discussion of RG 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities." Industry maintained that the NRC is not adhering to the principles set out in RG 1.200 in conducting the reviews of NFPA-805, in part, because it is not accepting of the peer review process endorsed by RG 1.200 thereby diminishing the role of the peer review and not realizing the efficiency envisioned by the RG 1.200 philosophy. The NRC staff explained that the industry peer review teams often identified fire PRA methods that were not widely accepted (e.g., different than the methods in the guidance document developed jointly by NRC and EPRI) as part of their findings and observations. NRC further explained that the focus on the review was to understand how the findings and observations identified in the peer review were addressed by the licensee. The NRC staff also noted that NFPA-805 is fundamentally different than other risk-informed initiatives (i.e. risk-informed allowed outage times) because the licensee is dramatically changing the license basis, so it should be expected that this will be a thorough review. Industry expressed their concern that the upcoming seismic PRA reviews may have similar issues. NRC staff agreed that it is important to understand the issues with NFPA-805 implementation and to evaluate whether the staff has strayed from the RG 1.200 philosophy. This will be a topic of discussion at the next joint public meeting.

With regard to the reactor oversight process, both industry and NRC staff agreed that the significance determination process tended to be more risk-based than risk-informed and that considerable resources are spent on deriving and defending quantitative results. Both NRC staff and industry agreed that the process could benefit from risk-informed improvements. NRC staff cautioned that there are many moving parts to the many risk-informed initiatives (e.g., the risk prioritization process, the RMRF, fire and seismic PRAs, etc.) and a lot of work is currently being done; the goal and outcome of this committee need to be very clear before moving forward. Both

NRC staff and industry agree that the focus should be on using PRA methodologies as a tool for proper decision making; the current focus may be expending too much effort on making the tool perfect and not on driving the correct decisions.

Closing Remarks and Recommendations

At the conclusion of the meeting, the industry provided closing comments focusing on next steps to move forward.

Industry recommendations were as follows:

- There is a need to enhance understanding of the peer review process endorsed by RG 1.200 and why that guidance is not followed.
- Industry and the NRC should come to the next meeting with a prioritized list of major efforts to discuss actionable items for both sides.
- There is a need to provide a briefing from the NFPA-805 executive committee on the progress being made to address process concerns to better inform the committee members of progress in this area.
- An acknowledgement that there will be training required as we move forward, especially for decision makers.

The NRC closed the meeting with the following remarks:

- The issues discussed concerning peer review need to be better understood and addressed.
- There should be a list of specific items in order to foster more discussion.
- The committees should stay engaged and try to meet again in March if possible.
- NRC needs to enhance its understanding of any differences between RG 1.200 principles and current practices.

Public Comments

There were two members of the general public that had comments during the public comment period of the meeting.

The first comment was in support of the NRC reaching out to standards organizations in conjunction with this effort since much of the work that is being done within those organizations could be useful in the context of the challenges being faced.

The second comment was recommending that the NRC and NEI/EPRI establish a joint subcommittee or working group. This group would be drawn from relevant technical individuals from each organization who would be charged with discussing several issues regarding Seismic PRA or margin assessment peer reviews and any other issues that may arise. The group would propose a resolution to each issue, if needed, or clarify the issue if it needs no resolution. The proposal(s) could then be a topic for discussion at the subsequent public meetings held with both organizations Risk-Informed Steering Committees.

The noted individual provided an email following the meeting with a more detailed description of the proposal that was outlined over the bridge line at the meeting.

No public comment feedback forms were received after the meeting.

Enclosure:

List of Attendees

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Enclosure:

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DATE	02/ 26 /2014	03/ 18 /2014	03/ 18 /2014

LIST OF MEETING ATTENDEES

Name	Organization
Jana Bergman	Sciencetech/CWFC
Maria Korsnick	CENG
Tony Pietrangelo	NEI
Biff Bradley	NEI
Joe Grimes	TVA
Paul Harden	First Energy
B.L. Pete Ivey	Southern Nuclear
Jim Becker	STARS Alliance
Rachel Solano	Westinghouse
John Butler	NEI
Victoria Anderson	NEI
Stuart Lewis	EPRI
Robert Rishel	Duke Energy
Elliott Flick	CENG
Sue Perkins-Grew	NEI
Joe Pollock	NEI
Roy Linthicum	Exelon
Paul Amico	Hughes Associates Inc.
Doug True	ERIN
David Gennardo	NRC
Amir Afzali	Southern Nuclear
Samson Lee	NRC
Pat Madden	NRC
Charles Ader	NRC
Nathan Siu	NRC
C.J. Fong	NRC
Alex Klein	NRC
Hossein Hamzehee	NRC
N.P. Kadambi	ANS
Gary Holahan	NRC
Richard Correia	NRC
Ching Ng	NRC
Bill Dean	NRC
Steve West	NRC
Dan Dorman	NRC
Eric Leeds	NRC
Joseph Giitter	NRC
Christiana Lui	NRC
Boby Abu-Eid	NRC
Jeff Mitman	NRC
Laura Kozak*	NRC
Jim Curry*	NuScale Licensing
Robert Budnitz*	Lawrence Berkeley National Laboratory
Stanley Levinson*	AREVA, Inc.
Keith Hoffman*	NRC
Jim Peschel*	Certrec Corporation
Michael Montecalvo	NRC

* Participated by teleconference

ENCLOSURE