

October 9, 2014

MEMORANDUM TO: Nathan Sanfilippo, Chief
Performance Assessment Branch
Division of Inspection and Regional Support
Office of Nuclear Reactor Regulation

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

SUBJECT: SUMMARY OF THE REACTOR OVERSIGHT PROCESS WORKING
GROUP PUBLIC MEETING HELD ON SEPTEMBER 11, 2014

On September 11, 2014, the U.S. Nuclear Regulatory Commission (NRC) staff hosted the Reactor Oversight Process (ROP) Working Group (WG) public meeting with the Nuclear Energy Institute (NEI) ROP Task Force and other industry representatives. Enclosure 1 contains the meeting attendance list; Enclosure 2 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14280A468) contains the white papers and handouts discussed during the meeting; Enclosure 3 (ADAMS Accession No. ML14280A468) contains the Frequently Asked Questions (FAQs) Log and the FAQs discussed during the meeting; and Enclosure 4 (ADAMS Accession No. ML14280A468) contains an ROP WG action items log. Meeting attendees discussed topics related to probabilistic risk assessment (PRA), assessment, and performance indicators (PIs).

The PRA Operations and Human Factors Branch (APHB) staff informed meeting participants of the cancelation of a meeting between the NRC's Office of Research and the Electric Power Research Institute (EPRI) to discuss the technical aspects of the use of a minimum joint Human Error Probability threshold for dependent Human Failure Events in risk assessments. In continuing the dialogue on this issue, the NRC's Office of Nuclear Reactor Regulation plans to conduct a public meeting with EPRI and other interested external stakeholders in November 2014, to address industry concerns on this subject. The NRC staff will contact NEI staff to coordinate industry participation in this public meeting.

The Security Training and Support Branch (STSB) staff from the Office of Nuclear Security and Incident Response discussed their current efforts to evaluate the Force on Force program as directed by Staff Requirements Memorandum 14-001. The staff has received input from internal and external stakeholders which has been factored into their response which is currently being reviewed by the Commission for a vote.

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The STSB staff also mentioned that it is currently in the process of conducting a comprehensive review of the Security Significance Determination Process. The staff has agreed to establish a Task Force to review the current Security SDP and make recommendations to enhance it.

The Japan Lessons Learned Division discussed that the most likely approach to mitigating strategies oversight will be baseline inspection and the Significance Determination Process (SDP). The new Mitigating Strategies SDP tool will be risk-informed and involve internal and external stakeholders during its development and implementation. In addition, the staff is considering subsuming the B.5.b SDP into the new Mitigating Strategies SDP.

The Reactor Inspection Branch (IRIB) staff indicated that the proposed Enforcement Guidance Memorandum (EGM) associated with momentary inoperability of the secondary containment is being reviewed and that some concerns have been identified. Staff indicated it would provide further updates on the status of the EGM when additional information is known.

The Performance Assessment Branch (IPAB) staff plans to host a public meeting on November 20th to continue the discussion from the July 24th public meeting regarding the approach to modeling the safety significance of inspection findings caused by initiating event occurrences. A public meeting announcement will be issued sometime in October.

IPAB staff also discussed the implementation of Inspection Manual Chapter (IMC) 0351, "Implementation of The Reactor Oversight Process at Reactor Facilities in an Extended Shutdown Condition for Reasons Other Than Significant Performance Problems," and the regulatory use of Confirmatory Action Letters as part of the NRC's effort of looking at lessons learned from the San Onofre Nuclear Generating Station steam generator tube degradation event. NEI mentioned that they plan on providing the NRC staff with industry input on both topics at a later date.

The IPAB staff discussed the status of activities regarding a revision to the substantive cross-cutting issue (SCCI) process. The SCCI working group has developed a number of recommendations that were briefed to the Regional Division Directors at the August counterpart meeting. Once NRC management alignment has been achieved, the staff plans to present the recommendations to industry at a public meeting, potentially to be held in November.

The staff also discussed the status of activities regarding the review of the ROP Action Matrix criteria, specifically the criteria for a licensee to transition to Column 3. The staff has developed a technical basis for the appropriate criteria, which is being peer reviewed. The working group plans to meet soon to develop a recommendation. If the recommendation is to revise the criteria, then staff will hold a public meeting to gather comments. If a decision is made to move forward with recommending a change to the criteria, then a Commission paper could need to be drafted.

The IPAB staff gave the meeting participants an update on the ongoing ROP Enhancement Project. Staff noted that suggestions and recommendations to the ROP which have been received from various sources, both internally and externally, have been binned and organized and are currently in the process of being worked through. The staff also committed to share their binning process with the WG at the November 19, 2014, ROP WG public meeting.

The IPAB staff discussed that it has initiated an effort to evaluate potential improvements to the ROP self-assessment process and explore more objective performance metrics for assessing ROP effectiveness. The staff will also ensure that the metrics measure ROP conformance with the founding ROP goals and objectives and the NRC's Principles of Good Regulation. Insights for new metrics may be gleaned from several recent and ongoing evaluations of the program.

In the area of the PI program, staff and industry addressed the following items:

- (1) The staff notified industry that various licensees reported their PI data late for the second quarter of 2014. The staff mentioned that the delayed submittal from various licensees was abnormal when compared to the previous PI data submittals performed during the last year.
- (2) The staff discussed the white paper on the objective of the RCS Leakage PI. The staff acknowledged industry's response to the white paper and indicated that both industry and the staff agree that the objective of the PI should be revised for alignment with its actual measure. However, the staff noted that there was no language proposed for such revision. The staff plans to provide a proposed revision of the objective for the next ROP WG meeting. This revision of the RCS Leakage PI objective will impact both the guidance in IMC 0308 Attachment 1, "Technical Basis for Performance Indicators," and NEI 99-02 Rev. 7, "Regulatory Assessment Performance Indicator Guideline."
- (3) Industry representatives provided a presentation on "Analysis of Effects of Low Risk Trains from Unavailability Monitoring". This study evaluated the effects of excluding trains from unavailability index calculations based on their Birnbaum value. Industry representatives concluded that: (1) using a Birnbaum exclusion criterion of $\leq 1E-08$ would show essentially no changes in calculated Mitigating Systems Performance Index (MSPI) values, and (2) using a Birnbaum exclusion criterion of $\leq 1E-07$ could result in a color change for MSPI, but only if all trains/segments in the system are at/near 100% unavailability. The staff requested some examples of the occurrences of maximum changes in MSPI that were represented graphically in the presentation. Industry representatives agreed to provide this information by the next ROP WG public meeting.

Staff and industry discussed the following PI FAQs (see Enclosure 3):

- FAQ 14-01: This FAQ is final. This is a generic FAQ developed by Industry to incorporate the MSPI PRA Technical Adequacy white paper into NEI 99-02, Appendix G, "MSPI Basis document Development."
- FAQ 14-02: This FAQ was discussed. This is a site-specific FAQ developed by Fort Calhoun Station (FCS) to address the validity of MSPI performance indicators as a result of an extended shutdown. FCS predicted future MSPI values using a Pressurized Water Reactor Owners Group "What-if" tool and expected plant data. Based on the results of this analysis, FCS proposes that the high pressure injection system MSPI, heat removal system MSPI and cooling water system MSPI become valid on the 4th quarter of 2014. However, FCS proposes that the Emergency AC power and residual heat removal system components of the MSPI become valid on the 1st quarter of 2015 and 1st quarter of 2016, respectively. The staff will review this justification and provide a response during the next ROP WG public meeting.

- FAQ 14-03: This FAQ was discussed. This is a site-specific FAQ for Arkansas Nuclear One (ANO), Unit 2. This FAQ addresses the Unplanned Scrams with Complications PI guidance on the flowchart question regarding the status of main feedwater availability after the scram. Specifically, ANO proposes that because of the unique design of their feedwater system, the intention of the flowchart question regarding the availability of feedwater is met and that the scram should not be considered complicated. ANO provided additional information about the design of their feedwater system and the procedures to recover main feedwater with loss of condenser vacuum during this meeting. The NRC staff expects to provide a revised response during the next ROP WG public meeting
- FAQ 14-04: This FAQ is final. This is a generic FAQ to revise the definition of concurrent failures under the Occupational Exposure Control Effectiveness PI in NEI 99-02. This generic FAQ captures the revision to the definition as proposed in FAQ 12-04.
- FAQ 14-05: This FAQ is tentative final. This is a site-specific FAQ for Hatch. This FAQ addresses the validity of the Alert and Notification System PI for Hatch. The licensee proposes to report the results in accordance with NEI 99-02 and enter zeroes for trailing quarters until four quarters of data have accumulated.
- FAQ 14-06: this FAQ was introduced. This is a site-specific FAQ for Vermont Yankee. This FAQ addresses the Unplanned Power Changes per 7,000 Critical Hours PI guidance on identification and response to degrading conditions. The staff will review this FAQ and provide a response during the next ROP WG public meeting.

A public tele-conference will be held on October 22, 2014, to discuss FAQs. The next ROP WG public meeting is scheduled to be held on November 19, 2014.

Enclosures:

1. Attendance List – September 11, 2014
2. White Papers Discussed in the September 11, 2014, ROP WG Public Meeting
3. Reactor Oversight Process Task Force FAQ Log – September 11, 2014
4. ROP Working Group Action Items Tracking Log – September 11, 2014

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NAME	LCruz for AWaugh	SWong*	CRegan*	NSanfilippo
DATE	10/6/14	10/6/14	10/9/14	10/9/14

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**REACTOR OVERSIGHT PROCESS PUBLIC MEETING
ATTENDANCE LIST
September 11, 2014**

Nathan Sanfilippo	NRC
Dan Merzke	NRC
Andrew Waugh	NRC
Luis Cruz	NRC
Eric Powell	NRC
Aron Lewin	NRC
Steve Vaughn	NRC
Alonzo Richardson	NRC
Steve Campbell	NRC
Ron Frahm*	NRC
See-Meng Wong*	NRC
Jim Slider	NEI
Dave Kline	NEI
Steven Hutchins	NEI
Chris Earls	NEI
Larry Parker	STARS Alliance
Robin Ritzman	FENOC
Adrienne Driver	Duke Energy
Bruce Mrowca	ISC
Tony Zimmerman	Duke
Ken Heffner	Certrec
Suzanne Leblang	Entergy
Pete Wilson	TVA
Eric Bates	TVA
Steve Catron	NextEra Energy
Lenny Sueper	Xcel Energy
Sarah Zafar	Erin Engineering
Elijah DeVaughn	Southern Nuclear
Cindy Williams	FENOC
Carlos Cisco*	Winston
Ron Gaston*	Exelon
Roy Linthicum*	PWROG/Exelon
Deann Raleigh*	Scientech
Bill Ketchum*	
Joshua Beckman*	

*participated via teleconference and/or online meeting