



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

October 26, 2016

MEMORANDUM TO: Steven E. Zane  
Acting Assistant Inspector General for Audits  
Office of the Inspector General

FROM: Michael R. Johnson **/RA/**  
Deputy Executive for Reactor  
and Preparedness Programs  
Office of the Executive Director for Operations

SUBJECT: STAFF RESPONSE TO THE OFFICE OF THE INSPECTOR  
GENERAL'S AUDIT OF U.S. NUCLEAR REGULATORY  
COMMISSION'S SIGNIFICANCE DETERMINATION PROCESS FOR  
REACTOR SAFETY (OIG-16-A-21)

The staff has received the Office of the Inspector General's (OIG) Audit of the Nuclear Regulatory Commission's (NRC) Significance Determination Process for Reactor Safety, dated September 26, 2016. This memorandum provides the staff's responses to the four audit recommendations, including the staff's planned actions and target dates for completion.

The Significance Determination Process (SDP) is an integral part of the NRC's Reactor Oversight Process (ROP) and is used to assess the safety significance of inspection findings for nuclear power reactors. Once an inspection finding is identified, NRC staff and managers use the SDP to assess significance to determine the degree of regulatory action needed. The results of the SDP for each NRC licensee are used to assess overall regulatory performance as part of the NRC's Assessment Program.

CONTACTS: Nathan T. Sanfilippo, NRR/DIRS  
301-415-8744

Christopher M. Regan, NRR/DIRS  
301-415-2768

**Recommendation 1:**

Assess SDP workflow, and establish, communicate, and document clear and consistent expectations for staff and managers to complete their roles in the SDP.

**Response**

The staff agrees with the recommendation.

Over the past 2 years, the staff has undertaken an extensive effort to improve the efficiency and effectiveness of the SDP based on internal assessment activities and as directed by the Commission. As a result, the staff has developed proposed changes to the SDP to improve management oversight and project planning of inspection findings preliminarily determined to be of greater than very low safety significance (i.e., greater than Green). These proposed changes are part of an initiative known as Inspection Finding Resolution Management (IFRM). The staff believes that the actions dictated by the IFRM initiative meet the intent of the recommendation. Moreover, due to the oftentimes complex and variable nature of greater than Green inspection findings the staff believes that flexibility is needed in setting clear and consistent expectations for staff and managers as they complete their roles in the SDP.

**Planned actions**

The staff will issue inspection oversight program documents for trial use that are geared to improve the discipline and accountability of deciding on the time and resources used to assess inspection findings and their safety significance. These documents, with an emphasis on the Inspection Finding Review Board (IFRB), will be used to establish, communicate, and document clear and consistent expectations for all staff and managers involved with resolving potentially greater than Green inspection findings. More specifically, the IFRB is a regional activity comprising all relevant staff and led by a director-level Chairman. Assembling the IFRB is done early in the process to ensure managers and staff have a common understanding of the scope, schedule, and resources needed to prepare for the Significance and Enforcement Review Panel (SERP). The SERP is responsible for both the preliminary and final decisions regarding significance determinations of greater than Green findings and enforcement issues.

The trial period for IFRM will begin in the autumn of 2016 and will involve greater than Green inspection findings identified across all regions for the initiating events, mitigating systems, and barrier integrity cornerstones. After the trial period ends, the staff will evaluate the effectiveness of the procedures to identify any needed changes based on lessons learned. The trial period will end no later than December 2017, followed by an assessment period to address the lessons learned. The staff will document the results of the trial period and make the necessary program changes.

Target date for completion: August 2018

Contact: Nathan T. Sanfilippo, Branch Chief, NRR/DIRS  
301-415-8744

**Recommendation 2:**

Clarify IMC 0612 Appendix B issue screening questions, so that they are readily understood and easily applied.

Response/Planned Actions

The staff agrees with the recommendation.

The staff is evaluating revision to IMC 0612 Appendix E, "More than Minor Screening Examples," in the short term, to add an example to illustrate how to apply the more than minor screening. The staff is considering accompanying the example with added clarification to the terms used in the more than minor questions to promote predictability, staff understanding, and ease of application. The staff plans to complete this evaluation by July 2017 and will make necessary changes.

Contact: Christopher M. Regan, Branch Chief, NRR/DIRS  
301-415-2768

**Recommendation 3:**

Implement controls to ensure independent audits of greater than Green inspection findings are performed.

Response

The staff agrees with the recommendation.

Inspection Manual Chapter 0307 Appendix A, "Reactor Oversight Process Self-Assessment Metrics," requires independent audits of greater than Green inspection findings to be performed to ensure significance determination results are predictable and repeatable. Specifically, Metric R-2, "Predictability and Repeatability of Significance Determination Results," states that greater than Green inspection findings and the associated degraded conditions contain adequate detail to enable an independent auditor to trace through the available documentation and conclude that the significance characterization is reasonably justifiable from both programmatic and technical positions. Although this audit has been performed in accordance with this metric, and the metric has been met for many years, the staff has not implemented formal controls to ensure that the audit is properly documented with supporting information to justify the staff's conclusion that the metric was met.

Planned actions

To ensure consistent, repeatable, and dependable audit results going forward, the staff plans to enhance IMC 0307 Appendix A and/or IMC 0307, "Reactor Oversight Process Self-Assessment Program," to specify the requirement to perform and document the evaluation for this and other metrics. For the calendar year (CY) 2016 evaluation of the R-2 metric, the staff will develop instructions to ensure that the independent auditor performs and documents the audit of greater than Green inspection findings. In addition, the staff plans to develop a detailed job guide that includes instruction for how to perform and document the evaluation for all of the metrics. The revision to IMC 0307, Appendix A, and the job guide will be developed as the staff performs its

CY 2016 ROP self-assessment in early 2017 and will be implemented when the staff performs its CY 2017 ROP self-assessment.

Target date for completion: June 30, 2017

Contact: Nathan T. Sanfilippo, Branch Chief, NRR/DIRS  
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**Recommendation 4:**

Document independent audits of greater than Green inspection findings.

Response/Planned actions

The staff agrees with the recommendation.

Although the metric evaluations have been performed and documented annually, adequate supporting documentation has not been maintained. As noted above, the staff plans to enhance IMC 0307 to specify the requirement to perform and document the evaluation for this and other metrics.

Target date for completion: June 30, 2017

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**\*concurrence via e-mail**

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