

POLICY ISSUE Information

December 11, 2015

SECY-15-0156

FOR: The Commissioners

FROM: Victor M. McCree
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SUBJECT: IMPROVEMENTS TO THE REACTOR OVERSIGHT PROCESS
SELF-ASSESSMENT PROGRAM

PURPOSE:

The purpose of this paper is to inform the Commission of the U.S. Nuclear Regulatory Commission (NRC) staff's revised approach to and implementation plans for the annual self-assessment of the Reactor Oversight Process (ROP) for calendar year (CY) 2015 and beyond. This paper does not address any new commitments or resource implications.

BACKGROUND:

The ROP was designed and implemented in 2000 to provide an objective, risk-informed, performance-based, transparent, and predictable approach to the regulatory oversight of nuclear power plant performance. The ROP is a mature and effective oversight process that has continued to evolve based on feedback and lessons learned. A contributor to its ongoing success has been the opportunity for, and inclusion of, continuous feedback and ongoing improvements via the staff's ROP self-assessment program. The ROP self-assessment program is governed by Inspection Manual Chapter (IMC) 0307, "Reactor Oversight Process Self-Assessment Program." Every year since 2000, the staff has conducted an ROP self-assessment, issued an ROP self-assessment Commission paper, and briefed the Commission on the results of the self-assessment following the Agency Action Review Meeting

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(AARM). In the most recent paper, SECY-14-0047, "Reactor Oversight Process Self-Assessment for Calendar Year 2013" (Agencywide Documents Access and Management System (ADAMS) Accession No. ML14066A365), the staff noted that it had initiated an effort to improve the ROP self-assessment process and explore more objective performance metrics for assessing ROP effectiveness.

In COMSECY-14-0030, "Proposed Suspension of the Reactor Oversight Process Self-Assessment for Calendar Year 2014" (ADAMS Accession No. ML14168A532), the staff requested Commission approval to suspend the ROP self-assessment for one year to modify the review methodology. Specifically, the staff noted its intent to: (1) develop a more effective self-assessment process with more meaningful metrics for use in 2015 and beyond; and (2) address ROP improvement recommendations from the multiple independent and focused ROP-related assessments performed in CY 2013 and CY 2014. In its staff requirements memorandum (SRM) to COMSECY-14-0030 (ADAMS Accession No. ML14262A078), the Commission approved the staff's suspension of the annual ROP self-assessment for CY 2014 and noted that the staff should inform the Commission of the status of ROP enhancements in the CY 2015 ROP self-assessment.

As a result of early staff discussions on potential program improvements and efficiencies, the staff developed COMSECY-15-0014, "Proposed Elimination of Annual Reporting Requirements for Specific Evaluations within the Reactor Oversight Process Self-Assessment Process" (ADAMS Accession No. ML15072A202). In this COMSECY, the staff recommended eliminating three evaluations that had been enclosures to the annual ROP self-assessment: the regulatory impact summary, the resident inspector demographic analysis, and the ROP resource expenditure analysis. The staff noted that these detailed evaluations had been shown to offer only limited insights, were redundant to other processes, and did not appear to add the level of value as they did when they were initiated by Commission direction. The staff further noted its intent to incorporate certain objective aspects of these three evaluations into the revised ROP self-assessment process performance metrics. In its SRM to COMSECY-15-0014 (ADAMS Accession No. ML15169B131), the Commission approved the staff's request to eliminate annual reporting of these three evaluations from the existing ROP self-assessment process.

DISCUSSION:

In 2015, the NRC staff redesigned the ROP self-assessment process to better assess the effectiveness of a mature program by focusing on the efficacy of recent changes to the program, performing in-depth reviews of specific areas of interest, and verifying agency adherence to program governance. The new self-assessment approach will ensure that the ROP is being implemented reliably and predictably across all four NRC regional offices and Headquarters. In addition, the new approach will ensure that the staff appropriately invests resources in addressing value-added insights that improve the efficiency and effectiveness of the program.

Through a series of meetings and interactions, a multidisciplinary team that included members from the Office of Nuclear Reactor Regulation, Office of Nuclear Security and Incident Response, and each of the four regions, developed the new approach and revised the associated governance documents. Other offices provided support as well as feedback on the draft governance documents. The staff discussed the proposed approach with senior NRC management at the AARM in April 2015 and at the Commission meeting on the results of the

AARM in May 2015. This topic was also discussed during a Commissioner Assistants' briefing on ROP enhancements in July 2015, the Operating Reactor Business Line Commission briefing in August 2015, and an Advisory Committee for Reactor Safeguards briefing in September 2015.

The redesigned self-assessment process is governed by the revisions to IMC 0307 and its appendices (ADAMS Accession No. ML15307A023). IMC 0307 describes the process and revised approach, Appendix A to IMC 0307 describes the self-assessment metrics, and Appendix B describes the process for performing the baseline inspection procedure reviews. NRC staff updated each of these three governance documents to reflect the revised self-assessment approach.

The revised self-assessment approach consists of three distinct elements:

Element 1: Measure the effectiveness of and adherence to the current program, using objective metrics;

Element 2: Monitor ROP revisions and assess recent program changes for effectiveness; and

Element 3: Perform focused assessments of specific program areas and peer reviews of regional offices.

This approach also addresses Recommendation 8 from the Commission-directed ROP Independent Assessment, "Reactor Oversight Process Independent Assessment 2013" (ADAMS Accession No. ML14035A571), which recommended revising the ROP self-assessment process to better solicit and assess both tactical and strategic feedback. Specifically, the first element provides for a tactical review of how the ROP is currently operating (from a data collection and analytical perspective). The second and third elements provide for a more strategic review and assessment of the efficacy of recent program changes and specific areas of management focus.

Under Element 1 of the new self-assessment process, the staff will measure the effectiveness of and adherence to the current program using objective, measurable metrics based on readily available data. The metrics align with the Principles of Good Regulation, and a graded approach is used to measure metric adherence. For example, one of the efficiency metrics measures whether ROP feedback forms are completed within the applicable timeliness goals. The metric will be considered green if more than 90% of the feedback forms are timely (expected performance), yellow if less than 90% but greater than 80% are timely, and red (or failed) if less than 80% are timely. Yellow metrics warrant staff attention to address the declining trend, while red metrics require further evaluation and likely staff action to address the cause(s) for the failed metric.

Using the objective metrics and other relevant feedback, the staff will continue to evaluate the effectiveness of each of the four major program areas of the ROP (i.e., the performance indicator program, the inspection program, the significance determination process, and the assessment program). The program area evaluations will also summarize changes to the program, current and/or future focus areas, and potential recommendations for improvement.

These evaluations will continue to serve as the planned program reviews for the ROP as stipulated in Appendix C to NRC's Strategic Plan for Fiscal Years 2014–2018.

Under Element 2 of the new self-assessment process, the staff will monitor ongoing ROP enhancement initiatives and summarize changes to the ROP that were completed during the year. In addition, the staff will select recent significant program changes and perform effectiveness reviews to ensure that the intended results of the implemented changes have been realized and to assess any unintended consequences. The selected topics for the effectiveness reviews will typically be identified early in the calendar year based on the extent of recent changes and whether sufficient implementation time has elapsed to adequately evaluate the effectiveness of the change.

Under Element 3 of the new self-assessment process, the staff will select one or more topics for a focused assessment that delves more deeply into those aspects of the ROP. The assessments will typically involve focused surveys or interviews to gather feedback and perspectives from affected stakeholders. From these activities, recommendations will be provided to Senior NRC leadership to determine which program area(s) to pursue for the focused assessments as part of the AARM.

Another key aspect of Element 3 is the conduct of peer reviews to ensure accountability to program governance as well as predictable and reliable program implementation across the regions. The staff will perform a peer review of a selected region each year on a rotating basis. Every fifth year, in lieu of a peer review, the staff will perform a comprehensive independent assessment similar to the ROP Independent Assessment performed in 2013. Independent assessments performed by other entities (e.g., the Office of the Inspector General, Government Accountability Office) may also serve as the comprehensive independent assessment.

The staff will document the results of the metric analyses, program evaluations, effectiveness reviews, focused assessments, and peer reviews in the annual ROP self-assessment report. Staff will present the self-assessment results and any planned improvement actions at the AARM and subsequent Commission meeting. Complete details of the revised self-assessment process are documented in IMC 0307.

For CY 2015, the staff plans to perform and document a limited self-assessment when it submits its annual report to the Commission in April 2016. The CY 2015 self-assessment will include only the metrics and program evaluations from Element 1 of the revised process and the status of ongoing and recently completed ROP enhancements from Element 2. The more detailed Element 2 and Element 3 assessments require more time to be effectively implemented than was possible before this new self-assessment process was finalized hence will not be included in the CY 2015 self-assessment. For CY 2016 and beyond, the staff will implement all three elements of the revised self-assessment program.

CONCLUSIONS:

The revised self-assessment process provides for a tactical and strategic review of the ROP and will increase opportunities to identify and implement meaningful program improvements.

COORDINATION:

The Office of the General Counsel has reviewed this Commission paper and has no legal objection. The Office of the Chief Financial Officer has reviewed this Commission paper and determined that there is no resource implications.

/RA/

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***Concurrence via e-mail**

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