

February 19, 2016

MEMORANDUM TO: Stephen D. Dingbaum  
Assistant Inspector General for Audits  
Office of the Inspector General

FROM: William M. Dean, Director /RA/  
Office of Nuclear Reactor Regulation

SUBJECT: STATUS OF RECOMMENDATIONS: AUDIT OF NRC'S  
OVERSIGHT OF ACTIVE COMPONENT AGING

In a January 14, 2015, memorandum to the Executive Director for Operations (Agencywide Documents Access and Management System (ADAMS) Accession No. ML 15014A307), the Office of the Inspector General (OIG) requested the staff to provide an updated status of the resolved recommendations to OIG-14-A-2, "Audit of the U.S. Nuclear Regulatory Commission's (NRC's) Oversight of Active Component Aging."

The staff provided its first six-month update of the two resolved recommendations by memorandum to the Assistant Inspector General for Audits on June 18, 2015 (ADAMS Accession No. ML15112A523). Both recommendations were in various stages of progress and completeness.

The purpose of this memorandum is to provide the OIG with a status update of the two recommendations. The following is the status of the recommendations.

Recommendation 1 (Resolved):

Perform and document a thorough and systematic evaluation of the need for an NRC program to oversee the management of active component aging activities, all within the context of the current Reactor Oversight Process (ROP) environment. Evaluation elements are to include, but should not be limited to, the need for:

- (a) Program policies, goals, and objectives;
- (b) Program feedback and corrective actions for continual improvement.

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Staff Response and Status Update:

The staff is in the process of completing the recommendations from a report by the Office of Nuclear Reactor Regulation's (NRR's) Operating Experience Branch (OEB) titled, "Component Aging Study (2007-2011) – Insights from Inspection Findings and Reportable Events." The enclosure to this memorandum contains the current status of the staff's actions.

Recommendation 2 (Resolved):

Develop and incorporate the mechanisms for monitoring, collecting, and trending age-related data for active components within NRC policy and procedures.

Staff Response and Status Update:

The staff (NRR/Division of Inspection and Regional Support, Operating Experience Branch) stated in its June 18, 2015, response to OIG regarding Recommendation 2 that it is developing a process to monitor and trend selected system and/or component failures using industry information. A proof of concept is being developed and is projected to be completed by the summer of 2016. A pilot is planned for implementation by fourth quarter 2016.

Enclosure:

Study Recommendations

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ADAMS Accession No.: ML15324A111 (memo); ML15282A087 (Pkg); \*e-mail concurrence

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DATE	02/11/2016	02/11/2016	02/19/2016	

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**Recommendations from the Office of Nuclear Reactor Regulation, Division of Inspection and Regional Support, Operating Experience Branch Report, "Study on Components Exceeding Recommended Service Life"**  
**Planned Actions and Current Status**

	<b>2012 Active Component Failure Study Recommendations</b>	<b>Planned/Completed Actions</b>	<b>Status</b>
1	Issue an Operating Experience Communication describing the study findings and recommendations.	The Office of Nuclear Reactor Regulation (NRR) issued an Operating Experience Communication in June 2012. Operating Experience Communications are distributed to U.S. Nuclear Regulatory Commission (NRC) staff only.	Complete POC: John Thompson
2	Present study findings and recommendations to the NRR Executive Team in a "significant topics" briefing	Briefed the NRR Executive Team in November 2012.	Complete POC: John Thompson
3	Consider issuing a generic communication to alert the industry that operating important-to-safety equipment beyond its qualified service life without adequate justification is contrary to regulatory requirements and NRC expectations.	<p>The staff is developing a regulatory information summary (RIS). The staff issued a task interface agreement (TIA) on a closely-related issue identified at three NRC Region 3 plants. The TIA was withdrawn on the basis that the region deemed it not necessary to resolve the issues identified at the three plants.</p> <p><u>01/2016 Update</u>  The Operating Experience Branch worked with various internal stakeholders in NRR, the Office of New Reactors, and the regions throughout the fall to finalize the draft RIS.</p> <p>A public meeting was held on January 20, 2016, to discuss the draft. Following the public meeting, the staff will issue the draft RIS for public comment.</p>	(TIA) Complete January 2015 May 2015 (TIA Withdrawn) Oct 2015 (Draft RIS) January 2016 June 2016 (Final RIS) Jan 2017 POC: John Thompson

Enclosure

	<b>2012 Active Component Failure Study Recommendations</b>	<b>Planned/Completed Actions</b>	<b>Status</b>
4	Consider how inspectors could be better prepared to identify instances in which licensees are operating systems, structures and components (SSCs) important-to-safety beyond their reasonable expected service life without an adequate engineering justification. Additional guidance and training could be used to alert more inspectors on how these issues can be pursued using criteria from Title 10 of the <i>Code of Federal Regulations</i> Part 50 Appendix B, "Quality Assurance."	<p>Revise selected inspection procedures (e.g., Inspection Manual Chapter (IMC) 0612) and conduct associated inspector seminars. Seminars may be delivered using telecommunications and/or through the semiannual resident inspector counterpart meetings.</p> <p><u>01/2016 Update</u> A working group has been formed to improve the predictability of screening determinations. This issue is being folded into the larger effort to revise IMC 0612.</p>	<u>October 2015</u> <u>April 2016</u> <u>(procedures)</u>  <u>January 2016</u> <u>June 2016</u> <u>(seminars)</u>  POC: Juan Peralta
5	Brief the NRC regional office branch chiefs responsible for component design basis inspections (CDBIs) and the regional operating experience points of contact to alert them of the findings of this study.	Several regional office managers were briefed in November 2012. Staff conducted an updated briefing on November 3, 2014, for the four regional branch chiefs responsible for CDBIs (and their respective division directors) to clarify planned actions and to solicit additional comments.	Complete  POC: John Thompson
6	Conduct a Temporary Instruction (i.e., a one-time inspection) to evaluate whether licensees are documenting appropriate engineering justifications for SSCs in service beyond qualified service life. Results may inform further staff actions, such as enhancements to the baseline inspection program.	<p>The staff will make a decision on whether there is a need for a TI to collect data about licensees' management of component service life. This decision will be based in part on NRC/industry dialogue following development of a generic communication and NRC analysis of any follow-on initiatives proposed by industry.</p> <p><u>01/2016 Update</u> A decision will be made following issuance of the RIS.</p>	Decision by <u>January 2016</u> <u>March 2017</u>  POC: Juan Peralta

	<b>2012 Active Component Failure Study Recommendations</b>	<b>Planned/Completed Actions</b>	<b>Status</b>
7	Consider engaging industry to propose a revision to NRC Regulatory Guide 1.160, "Maintenance Rule" guidance and NUMARC 93-01 to increase discussion of the validity of time-based (periodic refurbishment/replacement) preventive maintenance and/or life cycle management.	Industry representatives were briefed regarding the need for additional regulatory guidance and industry attention to this issue. This will naturally occur as a consequence of the other planned activities as described in response to Recommendations 3 and 6 above.	Complete POC: John Thompson