

June 18, 2015

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 purpose of this memorandum is to provide the OIG with a status update to the two recommendations that are in resolved status but have not yet been closed. 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

Staff Response/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 (IOEB) titled, "Study on Components Exceeding Recommended Service Life." The enclosure to this memorandum contains the current status of the staff's actions.

CONTACT: John Thompson, NRR/DIRS  
(301) 415-1011

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/Status Update:

NRR's IOEB will analyze industry component and system failure data by leveraging its access to the Institute of Nuclear Power Operations' Consolidated Events System data tables. This effort is underway, and a pilot program is anticipated to be underway by the end of calendar year 2015.

Enclosure:

NRR/DIRS/IOEB Study Recommendations

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## Enclosure:

NRR/DIRS/IOEB Study Recommendations

**DISTRIBUTION:** OEDO-15-00063

RidsEdoMailCenter Resource                      RidsNrrOd Resource  
 RidsOgcMailCenter Resource  
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Package No.: ML15020A361

Memo No.: ML15112A523

\*e-mail concurrence

OFFICE	NRR/DIRS/IOEB	NRR/DIRS/IRIB	NRR/DIRS/IOEB	NRR/DIRS
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DATE	04/28/2015	04/29/2015	05/28/2015	05/29/2015
OFFICE	QTE*	OGC*	NRR	
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DATE	05/08/2015	06/03/2015	06/18/2015	

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**Recommendations from 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.	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 Office of Nuclear Reactor Regulation (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 the basis for an NRC generic communication, most likely a regulatory information summary (RIS). The staff will finalize this basis upon completion of a concurrence task interface agreement (TIA) on a closely-related issue identified at three NRC Region 3 plants. The issue involves continued licensee operation of safety-related relays beyond their service life. NRR staff briefly mentioned the draft TIA and its implications at the November 2014 bimonthly Reactor Oversight Process (ROP) working group meeting. The final TIA will be posted on the external NRC Web site. Staff will then process the RIS.</p> <p><u>05/2015 Update</u> The Operating Experience Branch (IOEB) met with Region III management on March 20, 2015, to discuss final wording for the TIA. The IOEB Branch Chief e-mailed a draft copy to Region III on March 25, 2015. The TIA was signed out by Region III on May 7, 2015.</p> <p>The RIS is under development with a project manager from NRR's Division of Policy and Rulemaking under TAC MF5661.</p>	<p><del>January 2015</del> May 2015 (TIA) Complete</p> <p>January 2016 (RIS)</p> <p>POC: John Thompson</p>

Enclosure

	<b>2012 Active Component Failure Study Recommendations</b>	<b>Planned/Completed Actions</b>	<b>Status</b>
		IOEB has circulated a draft to various internal stakeholders to:  1) Obtain internal feedback prior to seeking public comment, and 2) Determine who wishes to be on final concurrence.	
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> (10 CFR) Part 50 Appendix B, "Quality Assurance."	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.  <u>05/2015 Update</u> The staff is evaluating IMC 0612, Appendix E to incorporate examples addressing service life issues. Staff from NRR's Division of Inspection and Regional Support, Reactor Inspection Branch is incorporating regional feedback and comments.	October 2015 (procedures)  January 2016 (seminars)  POC: Christopher Regan
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 TI (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.	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.  <u>05/2015 Update</u> A decision will be made following issuance of the RIS.	Decision by <del>February 2015</del> January 2016  POC: Christopher Regan

	<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