



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

August 30, 2016

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

FROM: William M. Dean, Director /*RA Brian McDermott acting for*/
Office of Nuclear Reactor Regulation

SUBJECT: STATUS OF RECOMMENDATIONS: AUDIT OF THE
U.S. NUCLEAR REGULATORY COMMISSION'S
OVERSIGHT OF ACTIVE COMPONENT AGING

The purpose of this memorandum is to provide the Office of the Inspector General (OIG) with a status update on the two recommendations to OIG-14-A-2, "Audit of the U.S. Nuclear Regulatory Commission's (NRC's) Oversight of Active Component Aging" (ADAMS Accession No. ML15014A307).

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 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 and Status Update:

The staff and OIG agreed that completion of the seven action items associated with the study by the Office of Nuclear Reactor Regulation Operating Experience Branch (IOEB), "IOEB Analysis Team Study on Component Aging – Insights from Inspection Findings and Reportable Events," (ADAMS ML 13044A469) will resolve Recommendation 1. The enclosure to this memorandum contains the current status of the staff's actions from that IOEB study.

CONTACT: John W. 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 and Status Update:

The staff is currently piloting an Operating Experience (OpE) Data analysis tool for trending of age-related failure data for active components. The pilot is scheduled for completion by December 31, 2016. After completion of the pilot, use of the OpE Data tool will be documented in a handbook and/or office instruction. It is anticipated that this documentation will be completed by June 30, 2017.

Enclosure:
As stated

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 is currently piloting an Operating Experience (OpE) Data analysis tool for trending of age-related failure data for active components. The pilot is scheduled for completion by December 31, 2016. After completion of the pilot, use of the OpE Data tool will be documented in a handbook and/or office instruction. It is anticipated that this documentation will be completed by June 30, 2017.

Enclosure:

As stated

DISTRIBUTION: OEDO-16-00191

PUBLIC

RidsEdoMailCenter Resource

RidsNrrOd Resource

RidsOgcMailCenter Resource

RidsNrrMailCenter Resource

ADAMS Accession Nos.: ML16211A331 (memo); ML16084A098 (Pkg); *e-mail concurrence

OFFICE	NRR/DIRS/IOEB	NRR/DIRS/IOEB	NRR/DIRS
NAME	JThompson	HChernoff (EThomas for)	CMiller
DATE	08/01/2016	08/12/2016	08/16 /2016
OFFICE	QTE*	OGC* (NLO)	NRR
NAME	CHsu	BMizuno	WDean (BMcDermott for)
DATE	08/ 3 /2016	08/19/2016	08/30/2016

OFFICIAL RECORD COPY

**Recommendations from the Office of Nuclear Reactor Regulation, Division of Inspection and Regional Support, Operating Experience
Branch Report, "IOEB Analysis Team Study on Component Aging – Insights from Inspection Findings and Reportable Events"
Planned Actions and Current Status**

	2012 Active Component Failure Study Recommendations	Planned/Completed Actions	Status
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 NRC withdrew the TIA on the basis that Region 3 deemed it not necessary to resolve the issues identified at the three plants.</p> <p><u>08/2016 Update</u> The Operating Experience Branch published the draft RIS in the <i>Federal Register</i> on May 17, 2016. A 60-day comment period closed on July 17, 2016. Four comments were received from both internal and external stakeholders.</p> <p>The staff is addressing the comments and will incorporate any changes deemed necessary to the RIS. The staff target date for final RIS issuance is the beginning of the 2017 calendar year.</p>	<p>(TIA) Complete May 2015</p> <p>(TIA Withdrawn) Oct 2015</p> <p>(Draft RIS) Complete July 2016</p> <p>(Final RIS) Jan 2017</p> <p>POC: John Thompson</p>

Enclosure

	2012 Active Component Failure Study Recommendations	Planned/Completed Actions	Status
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. Staff may deliver seminars using telecommunications or at the semiannual resident inspector counterpart meetings.</p> <p><u>08/2016 Update</u> An example involving SSCs installed beyond their documented service life will be added to an interim IMC 0612 revision to Appendix E, "Minor/More-Than-Minor Screening Examples," currently scheduled to be issued on or before the first quarter of 2017. DIRS staff will communicate the revised guidance through the regional OpE contacts and via the bi-weekly DIRS-Regional Division Director calls.</p>	<p>March 2017 (IMC 0612, App E)</p> <p>POC: Chris Cauffman</p>
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.	Staff briefed several regional office managers in November 2012. Staff conducted an updated briefing on November 3, 2014, for the four regional branch chiefs responsible for component design basis inspections (and their respective division directors) to clarify planned actions and to solicit additional comments.	<p>Complete</p> <p>POC: John Thompson</p>
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 Temporary Instruction 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>08/2016 Update</u> Staff will make a decision after issuance of the RIS.</p>	<p>Decision by March 2017</p> <p>POC: Juan Peralta</p>

	2012 Active Component Failure Study Recommendations	Planned/Completed Actions	Status
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.	Staff briefed Industry representatives 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