



OFFICE OF THE
INSPECTOR GENERAL

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

January 30, 2014

MEMORANDUM TO: Mark A. Satorius
Executive Director for Operations

FROM: Stephen D. Dingbaum */RA/*
Assistant Inspector General for Audits

SUBJECT: STATUS OF RECOMMENDATIONS: AUDIT OF
NRC'S OVERSIGHT OF ACTIVE COMPONENT
AGING (OIG-14-A-02)

RERERENCE: DEPUTY EXECUTIVE DIRECTOR FOR REACTOR
AND PREPAREDNESS PROGRAMS
MEMORANDUM DATED DECEMBER 9, 2013

Attached is the Office of the Inspector General's analysis and status of recommendations 1 and 2 discussed in the agency's response dated December 9, 2013. Based on OIG's analysis of this response, both recommendations remain unresolved.

The recommendations remain unresolved because the staff—via the December 9 memo signed by the Deputy Executive Director for Operations (DEDO) for Reactor and Preparedness Programs—did not address the two fundamental points of the OIG report: that NRC (1) has not conducted a systematic evaluation of program needs for overseeing licensees' aging management for active components since the establishment of the Reactor Oversight Process (ROP) in 2000; and (2) has not developed and incorporated within policy and guidance the existing mechanisms used for systematic and continual monitoring, collecting, and trending of age-related data for active components. A detailed analysis for each recommendation is attached.

Given this impasse between OIG and the staff, we request that you intervene, as an initial step towards resolution that is outlined in Management Directive 6.1, *Resolution and Followup of Audit Recommendations*, to resolve “any disagreements between the DEDOs and the IG regarding internal audit findings and recommendations.”

Pending your review, please provide an update by February 28, 2014, regarding the actions the agency will take with regard to the OIG recommendations.

If you have questions or concerns, please call me at 415-5915 or R.K. Wild, Team Leader, at 415-5948.

Attachment: As stated

cc: R. Mitchell, OEDO
K. Brock, OEDO
J. Arildsen, OEDO
C. Jaegers, OEDO

Audit Report

AUDIT OF NRC'S OVERSIGHT OF ACTIVE COMPONENT AGING

OIG-14-A-02

Status of Recommendations

Recommendation 1: 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 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.

Agency Response Dated
December 9, 2013:

The ROP provides a framework for ensuring that both active and passive aging issues with the potential to impact safety are addressed in a timely manner. This framework provides assurance that the U.S. Nuclear Regulatory Commission (NRC) will identify safety-significant, age-related failures of active components. Further, the NRC has processes in place to systematically evaluate the results of the ROP, along with several other data sources. The staff considers the intent of your recommendation is already met by the current program. A more detailed discussion underpinning the staff's position is provided in the staff's September 27, 2013, memorandum (Appendix B to OIG-14-A-02).

OIG Analysis:

The proposed corrective action does not address the intent of OIG's recommendation because the staff response has not addressed a key point in the audit report; primarily, that the agency has made assumptions about the efficacy of ROP regarding aging without a comprehensive analysis that demonstrates the strengths and weaknesses of ROP as a mechanism for oversight of active component aging. The OIG report describes a variety of issues with current regulations and inspection guidance that simply cannot be made to disappear by invoking ROP. This is because (1) numerous undetected

Audit Report

AUDIT OF NRC'S OVERSIGHT OF ACTIVE COMPONENT AGING

OIG-14-A-02

Status of Recommendations

Recommendation 1 (cont.):

active component age-related issues exist *despite* the use of ROP, and (2) the agency has not conducted an analysis of the impact of ROP implementation on the agency's overall assumptions about how these regulations and inspection guidance documents are supposed to work to provide effective oversight of active component aging phenomena.

Moreover, the staff response did not adequately address communications, coordination, and management cognizance challenges described in the report related to the absence of a formal active component aging oversight program. This serves as another basis for NRC to conduct a full-on review of the need for a more formal active component aging oversight program.

OIG will consider this recommendation resolved when the agency outlines a timeline and the steps it plans to take to perform and document a thorough and systematic evaluation of the need for an NRC program to oversee the management of active component aging activities.

Status: Unresolved.

Audit Report

AUDIT OF NRC'S OVERSIGHT OF ACTIVE COMPONENT AGING

OIG-14-A-02

Status of Recommendations

Recommendation 2: Develop and incorporate the mechanisms for monitoring, collecting, and trending age-related data for active components within NRC policy and procedures.

Agency Response Dated
December 9, 2013:

As previously stated and discussed in greater detail in our memorandum, the staff collects or has access to operating experience data gathered from reportable events, international events, industry failure data, and inspection findings. This data is routinely screened for significance and trending and analysis, regardless of cause. The staff considers the intent of your recommendation is already met by the current program.

OIG Analysis:

The proposed corrective action does not address the intent of OIG's recommendation because the staff did not satisfactorily describe how the efforts it claims to have taken to monitor data—which, it should be noted, are not age-specific data—still managed to miss a significant number of safety-related aging issues as documented in its own 2012 Component Aging Study,¹ as well as from other sources including OIG's own data review. OIG stated as much in the Audit Report, Appendix C, OIG Response to Agency Comments:

“...OIG recognizes that NRC collects a great deal of industry operating experience. However, the agency does not collect or evaluate it for aging active component degradation or failures. Given the evidence reviewed in this audit, OIG concluded that NRC should establish a factual basis for its belief that no additional programs for the monitoring, collecting, and trending of active component aging data are necessary.”

¹ IOEB Component Aging Study 2007-2011 — Insights from Inspection Findings and Reportable Events, July 24, 2012 (IOEB Study). This study is publicly available; see ADAMS accession number ML13044A469.

Audit Report

AUDIT OF NRC'S OVERSIGHT OF ACTIVE COMPONENT AGING

OIG-14-A-02

Status of Recommendations

Recommendation 2 (cont.):

OIG will consider this recommendation resolved when the agency (1) demonstrates how new or current data collection efforts have been developed or modified to specifically collect, monitor, and trend data on active component degradation or failures due to aging, and (2) describes a timeline and plan to incorporate these efforts within NRC policy and procedures.

Status: Unresolved.