



OFFICE OF THE  
INSPECTOR GENERAL

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

March 15, 2018

MEMORANDUM TO: Victor M. McCree  
Executive Director for Operations

FROM: Dr. Brett M. Baker */RA/*  
Assistant Inspector General for Audits

SUBJECT: STATUS OF RECOMMENDATIONS: AUDIT OF NUCLEAR  
REGULATORY COMMISSION'S (NRC) OVERSIGHT OF  
SPENT FUEL POOLS (OIG-15-A-06)

REFERENCE: ACTING DIRECTOR, OFFICE OF NUCLEAR REACTOR  
REGULATION (NRR), MEMORANDUM DATED  
February 21, 2018

Attached is the Office of the Inspector General's (OIG) analysis and status of recommendations 1 and 3 as discussed in the agency's response dated February 21, 2018. Based on this response, recommendations 1 and 3 remain resolved. Recommendations 2 and 4 were previously closed. Please provide an updated status of the resolved recommendations by October 31, 2018. If you have questions or concerns, please call me at (301) 415-5915, or Sherri Miotla, Team Leader, at (301) 415-5914.

Attachment: As stated

cc: R. Lewis, OEDO  
H. Rasouli, OEDO  
J. Jolicoeur, OEDO  
J. Bowen, OEDO  
EDO\_ACS Distribution Resource

## Audit Report

### AUDIT OF NRC'S OVERSIGHT OF SPENT FUEL POOLS

OIG-15-A-06

#### Status of Recommendations

Recommendation 1: Provide a generic regulatory solution for spent fuel pool criticality analysis by developing and issuing detailed licensee guidance along with the NRC internal procedures.

Agency Response Dated  
February 21, 2018:

Planned Action: Upon a satisfactory conclusion to the U.S. Nuclear Regulatory Commission's (NRC) review of Nuclear Energy Institute report (NEI) 12-16, incorporate this detailed guidance into NRC internal processes through a regulatory guide (RG) and through revisions to NUREG-0800, "Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants."

February 2018 Status Update: NEI 12-16, "Guidance for Performing Criticality Analyses of Fuel Storage at Light Water Reactor Power Plants," references an Electric Power Research Institute (EPRI) methodology to determine the bias and uncertainty for the simulated depletion of the fuel. During a telephone call on January 25, 2018, EPRI indicated that their staff expects to complete their quality assurance work in March 2018. When this work is complete, NEI 12-16 can be finalized, and the NRC staff will complete the draft RG endorsing NEI 12-16. Given industry's schedule, NRC staff is planning to issue the draft RG for public comment in late 2018 and publish the final RG in mid-2019.

CONTACT: Kent A. Wood, NRR/DSS  
(301) 415-4120

OIG Analysis: The actions proposed by the agency meet the intent of the recommendation. This recommendation will be closed upon NRR's issuance of the final regulatory guide and revisions to NUREG-0800 that identify a generic regulatory solution for spent fuel pool criticality analysis and provide detailed licensee guidance along with NRC internal procedures.

Status: Resolved.

## Audit Report

### AUDIT OF NRC'S OVERSIGHT OF SPENT FUEL POOLS

OIG-15-A-06

#### Status of Recommendations

Recommendation 3: Develop an enforceable neutron-absorbing material aging management program.

Agency Response Dated  
February 21, 2018:

Planned Action: Use the generic letter (GL) process to collect information and determine which regulatory actions are necessary to ensure compliance with NRC requirements regarding the monitoring of neutron-absorbing materials in spent fuel pools and then initiate the appropriate regulatory actions.

On April 7, 2016, the agency issued the (GL) requesting information on monitoring of neutron-absorbing materials in spent fuel pools. All licensees have submitted responses to the GL. The NRC staff has completed its preliminary evaluation of licensee responses and closed out the GL for 28 sites (51 units). The staff is currently processing additional closeout letters, as well as waiting for a number of responses to requests for additional information necessary to close out the remaining licensee responses. The staff expects to complete closeout of the GL for all licensees and assess any subsequent appropriate regulatory actions by September 2018.

CONTACT: Scott Krepel, NRR/DSS  
(301) 302-0399

OIG Analysis: The actions proposed by the agency meet the intent of the recommendation. This recommendation will be closed when NRR closes out the GL for all sites and develops an enforceable neutron-absorbing material aging management program based on its evaluation of the GL responses from licensees.

**Status:** Resolved.