



OFFICE OF THE  
INSPECTOR GENERAL

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

December 4, 2018

MEMORANDUM TO: Margaret M. Doane  
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: DIRECTOR, OFFICE OF NUCLEAR REACTOR  
REGULATION (NRR), MEMORANDUM DATED  
OCTOBER 31, 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 October 31, 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 January 31, 2019. 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  
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## 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  
October 31, 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."

October 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. The staff has completed its review of the EPRI methodology and issued a draft safety evaluation for the EPRI/NEI review. The staff is setting up a public meeting with EPRI/NEI to discuss the proposed conditions of approval. The staff is planning to issue the draft RG for public comment in the first quarter of 2019 and to publish the final RG by the end of 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, as well as revisions to NUREG-0800 that identify a generic regulatory solution for spent fuel pool criticality analysis.

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  
October 31, 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.

October 2018 Status Update: On April 7, 2016, the agency issued a GL requesting information on monitoring of neutron-absorbing materials in spent fuel pools. NRC staff has completed its evaluation of all submitted responses, and the GL has been closed out for all licensees. The staff has conducted several followup inspections to verify the adequacy of corrective actions for specific licensees with degraded neutron-absorbing materials. The staff will perform additional inspections as needed, based on the progress being made by licensees who are implementing long-term resolutions.

The staff has also identified specific engagement/oversight activities that are appropriate to ensure that the problems identified in the GL do not recur. An effectiveness review memo will be finalized by the end of 2018, which will document the NRC staff evaluations, findings, and actions associated with this GL. The completion of the effectiveness review memo will close Recommendation 3 in OIG-15-A-06.

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 finalizes the effectiveness review memo.

**Status:** Resolved.