



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

OFFICE OF THE  
INSPECTOR GENERAL

February 20, 2009

MEMORANDUM TO: R. William Borchardt  
Executive Director for Operations

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

SUBJECT: STATUS OF RECOMMENDATIONS: EVALUATION OF  
THE NRC'S USE OF PROBABILISTIC RISK ASSESSMENT  
IN REGULATING THE COMMERCIAL NUCLEAR POWER  
INDUSTRY (OIG-06-A-24)

REFERENCE: DIRECTOR, OFFICE OF NUCLEAR REGULATORY  
RESEARCH, MEMORANDUM DATED DECEMBER 2, 2008

Attached is the Office of the Inspector General (OIG) analysis and status of the recommendations as discussed in the agency's response dated December 2, 2008. Based on this response, recommendation 3 remains resolved and will be closed pending completion of the actions contained in the agency's responses and OIG's review of those actions. Recommendations 1 and 2 were previously resolved and closed. Please provide an updated status of recommendation 3 by August 28, 2009.

If you have questions or concerns, please call me at 415-5915 or Sherri Miotla, Team Leader, at 415-5914.

Attachment: As stated

cc: V, Ordaz, OEDO  
J. Arildsen, OEDO  
P. Shea, OEDO

## Audit Report

# EVALUATION OF THE NRC'S USE OF PROBABILISTIC RISK ASSESSMENT IN REGULATING THE COMMERCIAL NUCLEAR POWER INDUSTRY

OIG-06-A-24

### Status of Recommendations

Recommendation 3: Conduct a full verification and validation of SAPHIRE Version 7.2 and GEM.

#### Agency Response

Dated December 2, 2008: In our status update to the Office of Inspector General dated January 17, 2008, we stated that the Office of Nuclear Regulatory Research expected to release SAPHIRE Version 8 by the end of calendar year 2009. This schedule represented a 6-month delay in the original release date for SAPHIRE Version 8 and was caused by problems in acquiring necessary SAPHIRE development contractor staff resources. Although we have taken steps to resolve this issue, SAPHIRE code development staff was occasionally required to support higher priority NRC work during 2008, including development of the Reliability and Availability Data System (RADS) software. In addition, the scope of independent verification and validation (IV&V) activities has been expanded to ensure that SAPHIRE Version 8 is of sufficient quality for general staff use. These issues have resulted in an additional 4-month delay in the release of SAPHIRE Version 8.

OIG Analysis: OIG notes that the agency continues to incur additional delays on releasing Version 8. Recommendation 3 will be closed when NRC releases Version 8.

**Status:** Resolved.