

January 21, 2015

MEMORANDUM TO: Brian E. Thomas, Director  
Division of Engineering  
Office of Nuclear Regulatory Research

FROM: Lawrence E. Kokajko, Director */RA/*  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

SUBJECT: RESULTS OF PERIODIC REVIEW OF REGULATORY  
GUIDE 1.181

This memorandum documents the U.S. Nuclear Regulatory Commission (NRC) periodic review of Regulatory Guide (RG) 1.181, "Content of the Updated Final Safety Analysis Report (FSARs) in Accordance with 10 CFR 50.71(e)," published in September 2009. The RG provides guidance for periodically updating final safety analysis reports. As discussed in Management Directive 6.6, "Regulatory Guides," the NRC staff reviews RGs approximately every five years to ensure that the RGs continue to provide useful guidance. The documentation of the NRC staff review is enclosed.

Based on the results of the periodic review, the staff concludes that no changes to RG 1.181 are warranted at this time. However, the staff identified some technical identified or regulatory issues in the review that could warrant addressing in a future revision. The staff's lessons-learned report to the Executive Director of Operations in March 2015 will determine if additional or revised guidance to licensees is necessary for periodically updating FSARs in accordance with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.71(e), and if additional staff guidance is necessary for conducting reviews of both 50.71(e) and 50.59(d)(2) submittals. If so, a plan and timeframe will then be developed for updating guidance applicable to 50.71(e) and 50.59(d)(2).

Enclosure:  
Regulatory Guide Periodic Review

CONTACT: Leslie T. Perkins, NRR/DPR  
(301) 415-2375

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| NAME   | LPerkins     | DHarrison     | AMendiola    | AMohseni   | LKokajko  |
| DATE   | 12/15/2014   | 1/13/2015     | 12/15/2014   | 12/23/2014 | 1/21/2015 |

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## Regulatory Guide Periodic Review

Regulatory Guide Number: **1.181**

Title: **Content of the Updated Final Safety Analysis Report in Accordance with 10 CFR 50.71(e)**

Office/division/branch: **NRR/DORL/LPL4-1**  
Technical Lead: **Fred Lyon**

Recommended Staff Action: **Reviewed with issues identified for future consideration**

### 1. **What are the known technical or regulatory issues with the current version of the Regulatory Guide (RG)?**

RG 1.181, "Content of the Updated Final Safety Analysis Report in Accordance with 10 CFR 50.71(e)," issued in September 1999, provides guidance for periodically updating final safety analysis reports (FSARs) in accordance with the requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 50.71(e). The U.S. Nuclear Regulatory Commission (NRC) guidance for updating FSARs was reviewed in 2001, as documented in SECY-01-0055 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML010790282). The staff concluded, based on its review of FSAR updates, that the guidance for FSAR updates (RG 1.181 and Nuclear Energy Institute 98-03, Revision 1, "Guidelines for Updating Final Safety Analysis Reports") and design bases (RG 1.186, "Guidance and Examples for Identifying 10 CFR 50.2 Design Bases") is sufficient, that additional guidance is not needed, and that the current level of regulatory oversight is appropriate.

In October 2014, the NRC Office of the Inspector General (OIG) published the results of its event inquiry into concerns pertaining to NRC'S oversight of Southern California Edison's application of the 10 CFR 50.59 process for the steam generator replacements in San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 (OIG Case No. 13-006; ADAMS Accession No. ML14276A478). The NRC OIG even inquired into the NRC oversight of the licensee's use of 10 CFR 50.59 process to replace the steam generators raised three issues that the NRC is evaluating:

1. There were missed opportunities during the NRC Region IV 2009 inspection to identify weaknesses in the SONGS steam generator 50.59 screening and evaluation package.
2. The 2012 Augmented Inspection Team review of the licensee's 50.59 evaluation did not document the answer to the question of whether a license amendment was required.
3. The NRC did not consistently apply oversight to the SONGS updated FSAR following biannual updated FSAR submittals.

ENCLOSURE

Based on the OIG report, the NRC staff took some immediate actions and is evaluating the need for further lessons-learned. The staff is considering several enhancements, including, in part:

- Revision to NRC's processes (e.g., Project Manager Handbook and coordinated reviews of plant modifications) on the scope, depth, frequency, timeliness, and performance metrics for the staff's review of documented 50.59 evaluations (e.g., in 50.71(e) and 50.59(d)(2) submittals).

The staff's lessons-learned report is due to the Executive Director for Operations (EDO) by March 31, 2015.

2. **What is the impact on internal and external stakeholders of not updating the RG for the known issues, in terms of anticipated numbers of licensing and inspection activities over the next several years?**

None.

3. **What is an estimate of the level of effort needed to address identified issues in terms of full-time equivalent and contractor resources?**

Not applicable.

4. **Based on the answers to the questions above, what is the staff action for this guide (Reviewed with no issues identified, Reviewed with issues identified for future consideration, Revise, or Withdraw)?**

Reviewed with issues identified for future consideration.

5. **Provide a conceptual plan and timeframe to address the issues identified during the review.**

The staff's lessons-learned report to the EDO in March 2015 will determine if additional or revised guidance to licensees is necessary for periodically updating FSARs in accordance with the requirements of 10 CFR 50.71(e), and if additional staff guidance is necessary for conducting reviews of both 50.71(e) and 50.59(d)(2) submittals. If so, a plan and timeframe will then be developed for updating guidance applicable to 50.71(e) and 50.59(d)(2).

**NOTE: This review was conducted in December 2014 and reflects the staff's plans as of that date. These plans are tentative and subject to change.**