



# REGULATORY GUIDE

OFFICE OF NUCLEAR REGULATORY RESEARCH

## REGULATORY GUIDE 1.181

(Draft was issued as DG-1083)

### CONTENT OF THE UPDATED FINAL SAFETY ANALYSIS REPORT IN ACCORDANCE WITH 10 CFR 50.71(e)

#### A. INTRODUCTION

In 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," Section 50.34, "Contents of Applications; Technical Information," contains requirements for the contents of applications for construction permits and operating licenses for nuclear power reactors. An application for a construction permit must include a preliminary safety analysis report (PSAR) pursuant to 10 CFR 50.34(a). An application for an operating license must include a final safety analysis report (FSAR) in accordance with 10 CFR 50.34(b). For holders of operating licenses, 10 CFR 50.71(e) requires updated FSARs<sup>1</sup> to be developed and periodically updated.

Guidance for the organization and contents of PSARs and FSARs has existed since June 30, 1966, when the "Guide to the Organization and Contents of Safety Analysis Reports" was issued. The most recent guidance document is Revision 3 of Regulatory Guide 1.70, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants (LWR Edition)," (November 1978). Limited guidance for the format and content of UFSARs was also provided in Generic Letter 80-110, "Periodic Updating of Final Safety Analysis Reports (FSARs)" (December 15, 1980).

As a result of lessons learned from the Millstone experience and other initiatives related to UFSARs, the NRC has determined that additional guidance regarding compliance with 10

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<sup>1</sup>The terminology for "updated FSARs" varies throughout the industry. In this guide, the terms updated FSAR, UFSAR, and USAR (updated Safety Analysis Report) are equivalent and have the same meanings.

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Regulatory guides are issued to describe and make available to the public such information as methods acceptable to the NRC staff for implementing specific parts of the NRC's regulations, techniques used by the staff in evaluating specific problems or postulated accidents, and data needed by the NRC staff in its review of applications for permits and licenses. Regulatory guides are not substitutes for regulations, and compliance with them is not required. Methods and solutions different from those set out in the guides will be acceptable if they provide a basis for the findings requisite to the issuance or continuance of a permit or license by the Commission.

This guide was issued after consideration of comments received from the public. Comments and suggestions for improvements in these guides are encouraged at all times, and guides will be revised, as appropriate, to accommodate comments and to reflect new information or experience. Written comments may be submitted to the Rules and Directives Branch, ADM, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

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CFR 50.71(e) is necessary. The staff recommended specific actions in SECY-97-036, "Millstone Lessons Learned Report, Part 2: Policy Issues," dated February 12, 1997. In a staff requirements memorandum dated May 20, 1997, the Commission directed the staff, in part, to issue guidance for complying with 10 CFR 50.71(e) so that UFSARs are updated to reflect changes to the design bases and to reflect the effects of other analyses performed since original licensing that should have been included under 10 CFR 50.71(e). This regulatory guide provides the guidance requested by the May 20, 1997, staff requirements memorandum.

The information collections contained in this regulatory guide are covered by the requirements of 10 CFR Part 50, which were approved by the Office of Management and Budget, approval number 3150-0011. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

## **B. DISCUSSION**

### **OBJECTIVE**

The objectives of 10 CFR 50.71(e) are to ensure that licensees maintain the information in the UFSAR to reflect the current status of the facility and address new issues as they arise, so that the UFSAR can be used as a reference document in safety analyses.

### **DEVELOPMENT OF INDUSTRY GUIDELINE, NEI 98-03**

On November 14, 1997, the Nuclear Energy Institute (NEI) provided a draft guidance document, NEI 98-03, "Draft Industry Update Guidelines for Final Safety Analysis Reports," to the NRC staff for information. In parallel with industry's efforts, the staff developed a proposed generic letter, "Interim Guidance for Updated Final Safety Analysis Reports in Accordance with 10 CFR 50.71(e)." This proposed generic letter and NEI's draft guideline were provided to the Commission in SECY-98-087,<sup>2</sup> dated April 20, 1998. In SECY 98-087, the staff recommended that the Commission approve issuance of the proposed generic letter for public comment as interim guidance. The staff proposed to continue to work with NEI to resolve differences between the positions in the proposed generic letter and the draft industry guideline so that the industry guideline could be endorsed in a regulatory guide and thereby serve as permanent guidance for the content of UFSARs.

In a staff requirements memorandum dated June 30, 1998, the Commission disapproved issuance of the proposed generic letter and directed the staff to attempt to resolve differences between the draft industry guideline and the proposed generic letter so that the industry guideline could be endorsed.

Subsequently, the NRC staff held public meetings with NEI to resolve the differences between the documents, which resulted in NEI submitting Revision 0 of NEI 98-03 to the

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<sup>2</sup>Copies are available for inspection or copying for a fee from the NRC Public Document Room at 2120 L Street NW., Washington, DC; the PDR's mailing address is Mail Stop LL-6, Washington, DC 20555; telephone (202)634-3273; fax (202)634-3343.

NRC staff for endorsement in November 1998. The NRC staff proposed endorsing Revision 0 of NEI 98-03 in the draft version, DG-1083, of this Regulatory Guide 1.181. DG-1083 was issued for public comment in March 1999.

After the public comment period, the staff held a public meeting with NEI to discuss the public comments received, the NRC staff comments, and the clarification of Regulatory Position 5 of DG-1083. NEI then submitted Revision 1 of NEI 98-03 in June 1999 for NRC endorsement in this regulatory guide. Revision 1 of NEI 98-03 incorporates the public comments, the NRC staff's comments, and addresses the concerns of Regulatory Position 5 of DG-1083.

### **C. REGULATORY POSITION**

#### **1. NEI 98-03**

Revision 1 of NEI 98-03, "Guidelines for Updating Final Safety Analysis Reports,"<sup>2</sup> dated June 1999, provides methods that are acceptable to the NRC staff for complying with the provisions of 10 CFR 50.71(e).

#### **2. OTHER DOCUMENTS REFERENCED IN NEI 98-03**

NEI 98-03 references other documents, but NRC's endorsement of NEI 98-03 should not be considered an endorsement of the referenced documents.

#### **3. USE OF EXAMPLES IN NEI 98-03**

NEI 98-03 includes examples to supplement the guidance. These examples are illustrative only, and the NRC's endorsement of NEI 98-03 should not be considered a determination that the examples are applicable for all licensees. A licensee should ensure that an example is applicable to its particular circumstances before implementing the guidance as described in an example.

#### **4. LICENSEES COMMITTED TO REGULATORY GUIDE 1.70**

This regulatory guide does not supersede any prior commitments made by licensees with respect to their FSARs (and by extension, their UFSARs), such as Regulatory Guide 1.70 (any revision) or its predecessor guidance documents. Therefore, a licensee that has made such a commitment to updated FSAR format and content must continue to meet this prior commitment, or the commitment should be modified in accordance with the licensee's commitment management process to allow full implementation of NEI 98-03.

#### **5. USE OF OTHER METHODS**

Licensees may use methods other than those proposed in Revision 1 of NEI 98-03 to meet the requirements of 10 CFR 50.71(e). The NRC will determine the acceptability of other methods on a case-by-case basis.

#### **D. IMPLEMENTATION**

The purpose of this section is to provide information to applicants and licensees regarding the NRC staff's plans for using this regulatory guide.

Except in those cases in which an applicant or licensee proposes or has previously established an acceptable alternative method for complying with specified portions of the NRC's regulations, the methods described in this guide will be used in the evaluation of licensee compliance with the requirements of 10 CFR 50.71(e).

#### **CAUTION STATEMENT**

Licensees are cautioned against possible deletion of information which may be important to risk-informed evaluation and decision making. Extent of the information which can be deleted without any adverse impact will be visited during efforts related to risk-informing Part 50.

## VALUE/IMPACT STATEMENT

A separate Value/Impact Statement was not prepared for this regulatory guide. The Value/Impact Statement that was prepared for and printed with the draft of this guide, DG-1083, in March 1999, is still applicable. That Value/Impact Statement concluded that the value to individual licensees, the industry, the NRC, and the public that results from complete and accurate UFSARs outweighs the costs to licensees and the NRC that are presently associated with using UFSARs that are incomplete and inaccurate. Copies of the Value/Impact Statement are available for inspection or copying for a fee in the NRC's Public Document Room at 2120 L Street NW., Washington, DC, under Draft Regulatory Guide DG-1083. The PDR may be reached by telephone at (202)634-3273 or fax at (202)634-3343.

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