



DRAFT REGULATORY GUIDE

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DRAFT REGULATORY GUIDE DG-3031

(Proposed Revision 2 of Regulatory Guide 3.52, dated November 1986)

STANDARD FORMAT AND CONTENT FOR THE HEALTH AND SAFETY SECTIONS OF LICENSE RENEWAL APPLICATIONS FOR URANIUM PROCESSING AND FUEL FABRICATION

A. INTRODUCTION

This guide directs the reader to the type of information acceptable to the U.S. Nuclear Regulatory Commission (NRC) in its evaluation and verification of the safety basis for the licensing of special nuclear material (SNM). It references the application of NUREG-1520, "Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility" (Ref. 1), to the format and content of license renewal applications for fuel cycle facilities.

The regulatory framework that the NRC has established for procedures and criteria for the licensing of SNM is set forth in Title 10, Part 70, "Domestic Licensing of Special Nuclear Material," of the *Code of Federal Regulations* (10 CFR Part 70) (Ref. 2). In 10 CFR 70.73, "Renewal of Licenses," the regulations specify that applications for license renewal (including licenses for enriched uranium processing, fuel fabrication, uranium enrichment, enriched uranium hexafluoride conversion, plutonium processing, fabrication of mixed-oxide fuel, and scrap recovery of SNM) must be filed in accordance with 10 CFR 2.109, "Effect of Timely Renewal Application" (Ref. 3); 10 CFR 70.21, "Filing"; 10 CFR 70.22, "Contents of Applications"; 10 CFR 70.33, "Renewal of Licenses"; 10 CFR 70.38, "Expiration and Termination of Licenses and Decommissioning of Sites and Separate Buildings or Outdoor Areas"; and 10 CFR 70.65, "Additional Content of Applications."

This regulatory guide is being issued in draft form to involve the public in the early stages of the development of a regulatory position in this area. It has not received final staff review or approval and does not represent an official NRC final staff position.

Public comments are being solicited on this draft guide (including any implementation schedule) and its associated regulatory analysis or value/impact statement. Comments should be accompanied by appropriate supporting data. Written comments may be submitted to Rulemaking, Directives, and Editing Branch, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; emailed to NRCREP@nrc.gov; submitted through the NRC's interactive rulemaking Web page at <http://www.nrc.gov>; faxed to (301) 415-5144; or hand-delivered to the Rulemaking, Directives, and Editing Branch, Office of Administration, U.S. NRC, 11555 Rockville Pike, Rockville, MD 20852, between 7:30 a.m. and 4:15 p.m. on Federal workdays. Copies of comments received may be examined at the NRC's Public Document Room, 11555 Rockville Pike, Rockville, MD. Comments will be most helpful if received by November 10, 2008.

Electronic copies of this draft regulatory guide are available through the NRC's interactive rulemaking Web page (see above); the NRC's public Web site under Draft Regulatory Guides in the Regulatory Guides document collection of the NRC's Electronic Reading Room at <http://www.nrc.gov/reading-rm/doc-collections/>; and the NRC's Agencywide Documents Access and Management System (ADAMS) at <http://www.nrc.gov/reading-rm/adams.html>, under Accession No. ML082110220.

While the regulations provide general information for filing license renewal applications, NUREG-1520 identifies the specific information to be submitted by an applicant and evaluated by the staff. This NUREG provides guidance on the information to be included in licensing applications and establishes a format for presenting the information. Use of a standard format will help to ensure uniformity and completeness in the preparation of licensing applications.

In addition to the contents of the application required in 10 CFR 70.22, applicants must also submit an integrated safety analysis (ISA) summary and a description of the safety program established under 10 CFR 70.62, "Safety Program and Integrated Safety Analysis," in accordance with 10 CFR 70.65. However, the license issued by the NRC does not incorporate the ISA summary. Lists of the types of information required to be submitted in an ISA summary appear in 10 CFR 70.65(b); Chapter 3 of NUREG-1520 describes the acceptance criteria. NUREG-1513, "Integrated Safety Analysis Guidance Document," issued May 2001 (Ref. 4), provides additional guidance applicable to performing an ISA and documenting the results. NUREG/CR-6410, "Nuclear Fuel Cycle Accident Analysis Handbook," issued March 1998 (Ref. 5), provides guidance on acceptable methods for evaluating the chemical and radiological consequences of potential accidents.

Subsequent to the publication of Revision 1 of Regulatory Guide 3.52 in November 1986, the NRC revised the requirements for the licensing of SNM. NUREG-1520 superseded and replaced this regulatory guide and incorporated the revised requirements. This regulatory guide endorses the methods and procedures for evaluation and verification for the licensing of SNM contained in NUREG-1520 as a process that the NRC staff has found acceptable for meeting the regulatory requirements.

The NRC issues regulatory guides to describe to the public methods that the staff considers acceptable for use in implementing specific parts of the agency's regulations, to explain techniques that the staff uses in evaluating specific problems or postulated accidents, and to provide guidance to applicants. Regulatory guides are not substitutes for regulations and compliance with them is not required.

This regulatory guide contains information collection requirements covered by 10 CFR Part 70 that the Office of Management and Budget (OMB) approved under OMB control number 3150-0009. The NRC may neither conduct nor sponsor, and a person is not required to respond to, an information collection request or requirement unless the requesting document displays a currently valid OMB control number.

B. DISCUSSION

Licensees should file a renewal application in proper form not less than 30 days before the expiration of the existing license (see 10 CFR 70.38(a)(1)). However, earlier filing is preferable.

NUREG-1520 addresses the health, safety, and environmental protection requirements of 10 CFR Part 20, "Standards for Protection against Radiation" (Ref. 6), and 10 CFR Part 70, including the accident safety requirements reflected in Subpart H, "Additional Requirements for Certain Licensees Authorized to Possess a Critical Mass of Special Nuclear Material," of 10 CFR Part 70. NUREG-1520 also describes the specific information to be submitted by a licensee and evaluated by the staff. NUREG-1520 is not a substitute for NRC regulations and compliance with it is not required. Methods and solutions different from those described in the NUREG-1520 may be acceptable if they provide a basis for the staff to make the determination needed to renew a license.

NUREG-1520 discusses the major topics addressed within the safety program description of a renewal application, including general information, organization and administration, the ISA and ISA

summary, radiation protection, nuclear criticality safety, chemical process safety, fire safety, emergency management, environmental protection, decommissioning, and management measures. To facilitate the staff's review, a license renewal application should address the contents of NUREG-1520 in the same order as that presented in the document.

NUREG-1520 focuses on safety and environmental impact reviews and not on safeguards. NUREG-1280, "Standard Format and Content Acceptance Criteria for the Material Control and Accounting (MC&A) Reform Amendment," issued April 1995 (Ref. 7), and NUREG-1065, "Acceptable Standard Format and Content for the Fundamental Nuclear Material Control (FNMC) Plan Required for Low-Enriched Uranium Facilities," issued December 1995 (Ref. 8), contain review criteria applicable to the safeguards sections of a license application.

Appendix A, "Filing Standards for Submittals," to NUREG-1520 provides specific guidance regarding the acceptable and preferred format for new and renewal applications. Appendix A covers style and composition, the handling of proprietary and classified information, and procedures for updating or revising pages and incorporating information by reference, such as previous submittals, statements, or reports filed with the NRC with respect to an existing license.

As part of the content of an application, 10 CFR 70.22(a)(3) requires that an applicant specify the period of time for which the license renewal is requested. In 2006, the NRC established a new policy extending the maximum license term for certain fuel cycle licensees who are required to submit ISA summaries for approval (Ref. 9). The new policy extended the maximum license term to a 40-year period. The NRC may approve license terms for less than 40 years, on a case-by-case basis, when concerns exist about safety risk to the facility or in cases involving a new process or technology.

C. REGULATORY POSITION

This regulatory guide endorses the methods and procedures for evaluation and verification of the licensing of SNM detailed in NUREG-1520 as a process that the NRC has found acceptable for meeting the regulatory requirements.

D. IMPLEMENTATION

The purpose of this section is to provide information to applicants and licensees regarding the NRC's plans for using this draft regulatory guide. The NRC does not intend or approve any imposition or backfit in connection with its issuance.

The NRC has issued this draft guide to encourage public participation in its development. The NRC will consider all public comments received in development of the final guidance document. In some cases, applicants or licensees may propose an alternative or use a previously established acceptable alternative method for complying with specified portions of the NRC's regulations. Otherwise, the methods described in this guide will be used in evaluating compliance with the applicable regulations for license applications, license amendment applications, and amendment requests.

REFERENCES

1. NUREG-1520, "Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility," U.S. Nuclear Regulatory Commission, Washington, DC, March 2002.¹
2. 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," U.S. Nuclear Regulatory Commission, Washington, DC.²
3. 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," U.S. Nuclear Regulatory Commission, Washington, DC.
4. NUREG-1513, "Integrated Safety Analysis Guidance Document," U.S. Nuclear Regulatory Commission, Washington, DC, May 2001.
5. NUREG/CR-6410, "Nuclear Fuel Cycle Accident Analysis Handbook," U.S. Nuclear Regulatory Commission, Washington, DC, March 1998.
6. 10 CFR Part 20, "Standards for Protection against Radiation," U.S. Nuclear Regulatory Commission, Washington, DC.
7. NUREG-1280, "Standard Format and Content Acceptance Criteria for the Material Control and Accounting (MC&A) Reform Amendment," U.S. Nuclear Regulatory Commission, Washington, DC, April 1995.
8. NUREG-1065, "Acceptable Standard Format and Content for the Fundamental Nuclear Material Control (FNMC) Plan Required for Low-Enriched Uranium Facilities," U.S. Nuclear Regulatory Commission, Washington, DC, December 1995.
9. 71 FR 70441, "Maximum 40-Year Licensing Terms for Certain Fuel Cycle Facilities," *Federal Register*, Volume 71, Number 232, p. 70441, Washington, DC, December 4, 2006.³

¹ All NUREG-series reports listed herein were published by the U.S. Nuclear Regulatory Commission. Most are available electronically through the Electronic Reading Room on the NRC's public Web site, at <http://www.nrc.gov/reading-rm/doc-collections/nuregs/>. Copies are also available for inspection or copying for a fee from the NRC's Public Document Room (PDR) at 11555 Rockville Pike, Rockville, MD; the mailing address is USNRC PDR, Washington, DC 20555; telephone (301) 415-4737 or (800) 397-4209; fax (301) 415-3548; and e-mail pdr.resource@nrc.gov. In addition, copies are available at current rates from the U.S. Government Printing Office, P.O. Box 37082, Washington, DC 20402-9328, telephone (202) 512-1800, or from the National Technical Information Service (NTIS), at 5285 Port Royal Road, Springfield, VA 22161, online at <http://www.ntis.gov>, by telephone at (800) 553-NTIS (6847) or (703) 605-6000, or by fax at (703) 605-6900.

² All NRC regulations listed herein are available electronically through the Electronic Reading Room on the NRC's public Web site, at <http://www.nrc.gov/reading-rm/doc-collections/cfr/>. Copies are also available for inspection or copying for a fee from the NRC's Public Document Room (PDR) at 11555 Rockville Pike, Rockville, MD; the mailing address is USNRC PDR, Washington, DC 20555; telephone (301) 415-4737 or (800) 397-4209; fax (301) 415-3548; e-mail pdr.resource@nrc.gov.

³ All *Federal Register* notices listed herein were issued by the U.S. Nuclear Regulatory Commission and are available for inspection or copying for a fee from the NRC's Public Document Room (PDR) at 11555 Rockville Pike, Rockville, MD; the mailing address is USNRC PDR, Washington, DC 20555; telephone (301) 415-4737 or (800) 397-4209; fax (301) 415-3548; and e-mail pdr.resource@nrc.gov. Many are also available electronically through the Federal Register Main Page of the public GPOAccess Web site, which the U.S. Government Printing Office maintains at <http://www.gpoaccess.gov/fr/index.html>.

