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DRAFT REGULATORY GUIDE

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(Proposed Revision 1 of Regulatory Guide 3.69)

TOPICAL GUIDELINES FOR THE LICENSING SUPPORT NETWORK

A. INTRODUCTION

Subpart J, "Procedures Applicable to Proceedings for the Issuance of Licenses for the Receipt of High-Level Radioactive Waste at a Geologic Repository" (10 CFR 2.1000 to 2.1027), of 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," sets forth procedures for an adjudicatory proceeding on the application for a license to receive and possess high-level radioactive waste at a geologic repository under 10 CFR Part 60, "Disposal of High-Level Radioactive Wastes in Geologic Repositories," or Part 63, "Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada." Pursuant to these regulations, the Licensing Support Network (LSN), an electronic information management system, is being designed and implemented to provide for the entry of and access to potentially relevant licensing information.

This regulatory guide defines the scope of documentary material that should be included in the LSN. Topical guidelines were adopted by the U.S. Nuclear Regulatory Commission (NRC) as Regulatory Guide 3.69 in September 1996. This draft regulatory guide proposes to update the topical guidelines consistent with the license application content specified in 10 CFR 63.21 and the content and structure of the "Yucca Mountain Review Plan," the proposed Revision 2 of NUREG-1804.

Document is defined in 10 CFR 2.1001 as "any written, printed, recorded, magnetic, graphic matter, or other documentary material, regardless of form or characteristic." In addition, 10 CFR 2.1001 defines documentary material as:

> (1) any information upon which a party, potential party, or interested governmental participant intends to rely and/or to cite in support of its position in the proceeding for a license to receive and possess high-level radioactive waste at a geologic repository

operations area pursuant to Part 60 of this chapter; (2) any information that is known to, and in the possession of, or developed by the party that is relevant to, but does not support, that information or that party's position; and (3) all reports and studies, prepared by or on behalf of the potential party, interested governmental participant, or party, including all related 'circulated drafts,' relevant to both the license application and the issues set forth in the Topical Guidelines in Regulatory Guide 3.69, regardless of whether they will be relied upon and/or cited by a party. The scope of documentary material shall be guided by the topical guidelines in the applicable NRC Regulatory Guide.

The forms of these materials are listed in Appendix A to this guide, a nonexhaustive list of types of documents that may be included in the LSN.

The requirements in 10 CFR 63.21 for a license application and the structure and content of the Yucca Mountain Review Plan, Draft NUREG-1804, were considered in developing this draft regulatory guide. The principal purpose of the Yucca Mountain Review Plan is to ensure the quality, uniformity, and consistency of NRC staff reviews of the license application and any amendments. Topics for information entered into the LSN also encompass additional information related to the U.S. Department of Energy Final Environmental Impact Statement for a Yucca Mountain repository.

Regulatory guides are issued to describe to the public methods acceptable to the NRC staff for implementing specific parts of the NRC's regulations, to explain techniques used by the staff in evaluating specific problems or postulated accidents, to describe data needed by the NRC staff in its review of applications and licenses, and to provide guidance to applicants. Regulatory guides are not substitutes for regulations, and compliance with regulatory guides is not required. Applicants and licensees may use alternatives to regulatory guides provided the alternatives satisfy NRC regulations. Regulatory guides are issued in draft form for public comment to involve the public in developing the regulatory positions before they become final. Draft regulatory guides have not received complete staff review; they therefore do not represent official NRC staff positions.

The information collections contained in this regulatory guide are covered by the requirements in 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," which were approved by the Office of Management and Budget, approval number 3150–0136. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

B. DISCUSSION

PURPOSE OF THE REGULATORY GUIDE

The purpose of this regulatory guide is to provide a list of the topics (in Section C) for which LSN participants should submit documentary materials for entry into the LSN under 10 CFR 2.1003. Participants in proceedings regarding the proposed issuance of construction authorization and licenses for the receipt and possession of high-level

radioactive waste at a geologic repository include parties, potential parties, or interested governmental participants. The topical guidelines are designed to be broad enough to encompass all potential licensing issues.

This regulatory guide may also be used by the Pre-License Application Presiding Officer in evaluating petitions for access to the LSN during the pre-license application phase under 10 CFR 2.1007.

This regulatory guide provides the detailed topical index for documentary evidence contained in the LSN. It is not to be used to establish standing in the high-level waste licensing proceeding nor to define the scope of contentions that may be proffered under 10 CFR 2.1014.

USE OF THE REGULATORY GUIDE

The regulatory guide is consistent with requirements for the content of a license application in 10 CFR 63.21 and with licensing information specified in the Yucca Mountain Review Plan. The actual format of the documents submitted is not specified in this regulatory guide. Requirements regarding electronic formats of LSN documents are defined in 10 CFR 2.1011.

Section C of this regulatory guide lists the topics of documents to be placed in the LSN. Appendix A to this guide contains a nonexhaustive list of the types of documents to which the topical guidelines in Section C should be applied. Documents not included in Appendix A should also be included in the LSN if they are related to a topic in Section C of this regulatory guide.

Because the topical guidelines of Section C have been kept broad and at a fairly high level of detail, the user should consider each topic to be inclusive rather than exclusive with regard to documents germane to that topic for the site. For example, much of the information that supports the licensing proceeding will be based on the use of methodologies, computer codes, and models. Such information should be included in the LSN. The Yucca Mountain Review Plan, Draft NUREG-1804, provides guidelines on, and 10 CFR 63.21 sets the requirements for information that should be submitted in the license application. Section C of this regulatory guide is based on these provisions.

The guidelines also include subcategories for the “Information for a Geologic Repository Environmental Impact Statement.” This information may be made available to the LSN pursuant to 10 CFR 2.1003(b). Only information on transportation of high-level waste from a reactor, from an independent spent fuel storage facility, or from a monitored retrievable storage facility to a repository should be included under the transportation topical guideline.

C. TOPICAL GUIDELINES

1. GENERAL INFORMATION
   - 1.1 General Description
   - 1.2 Proposed Schedules for Construction, Receipt, and Emplacement of Waste
   - 1.3 Physical Protection Plan
   - 1.4 Material Control and Accounting Program
   - 1.5 Description of Site Characterization Work

2. SAFETY ANALYSIS REPORT
   - 2.1 Repository Safety Before Permanent Closure
     - 2.1.1 Preclosure Safety Analysis
       - 2.1.1.1 Site Description as it Pertains to Preclosure Safety Analysis
       - 2.1.1.2 Description of Structures, Systems, Components, Equipment, and Operational Process Activities
       - 2.1.1.3 Identification of Hazards and Initiating Events
       - 2.1.1.4 Identification of Event Sequences
       - 2.1.1.5 Consequence Analyses
         - 2.1.1.5.1 Consequence Analysis Methodology and Demonstration that the Design Meets 10 CFR Parts 20 and 63 Numerical Radiation Protection Requirements for Normal Operations and Category 1 Event Sequences
         - 2.1.1.5.2 Demonstration that the Design Meets 10 CFR Part 63 Numerical Radiation Protection Requirements for Category 2 Event Sequences
       - 2.1.1.6 Identification of Structures, Systems, and Components Important to Safety; Safety Controls; and Measures to Ensure Availability of the Safety Systems
       - 2.1.1.7 Design of Structures, Systems, and Components Important to Safety and Safety Controls
         - 2.1.1.7.1 Design Criteria and Design Bases
         - 2.1.1.7.2 Design Methodologies
         - 2.1.1.7.3 Repository Design and Design Analyses
       - 2.1.1.8 Meeting the 10 CFR Part 20 As Low As Is Reasonably Achievable Requirements for Normal Operations and Category 1 Event Sequences
     - 2.1.2 Plans for Retrieval and Alternative Storage of Radioactive Wastes
     - 2.1.3 Plans for Permanent Closure and Decontamination, or Decontamination and Dismantlement of Surface Facilities
   - 2.2 Repository Safety After Permanent Closure
     - 2.2.1 Performance Assessment
       - 2.2.1.1 System Description and Demonstration of Multiple Barriers
       - 2.2.1.2 Scenario Analysis and Event Probability
         - 2.2.1.2.1 Scenario Analysis
         - 2.2.1.2.2 Identification of Events with Probabilities Greater Than 10^{-8} Per Year

3 INFORMATION FOR A GEOLOGIC REPOSITORY ENVIRONMENTAL IMPACT STATEMENT

- 3.1 Purpose and Need for Proposed Agency Action
  - 3.1.1 Potential Actions and Decisions Regarding the Proposed Repository
  - 3.1.2 Radioactive Materials Considered for Disposal in a Monitored Geologic Repository
  - 3.1.3 National Effort To Manage Spent Nuclear Fuel and High-Level Radioactive Waste
  - 3.1.4 Yucca Mountain Site and Proposed Repository
  - 3.1.5 Environmental Impact Analysis Process
- 3.2 Proposed Action and No-Action Alternative
  - 3.2.1 Proposed Action
  - 3.2.2 No-Action Alternative
  - 3.2.3 Alternatives Considered but Eliminated from Detailed Study
  - 3.2.4 Summary of Findings and Comparison of the Proposed Action and the No-Action Alternative
  - 3.2.5 Collection of Information and Analyses
  - 3.2.6 Preferred Alternative
- 3.3 Affected Environment
  - 3.3.1 Affected Environment at the Yucca Mountain Repository Site at the Conclusion of Site Characterization Activities
  - 3.3.2 Affected Environment Related to Transportation
  - 3.3.3 Affected Environment at Commercial and DOE Sites
- 3.4 Environmental Consequences of Repository Construction, Operation and Monitoring, and Closure
  - 3.4.1 Short-Term Environmental Impacts of Performance Confirmation, Construction, Operation and Monitoring, and Closure of a Repository
  - 3.4.2 Short-Term Environmental Impacts from the Implementation of a Retrieval Contingency or Receipt Prior to the Start of Emplacement
- 3.5 Environmental Consequences of Long-Term Repository Performance
  - 3.5.1 Inventory for Performance Calculations
  - 3.5.2 System Overview
  - 3.5.3 Locations for Impact Estimates
  - 3.5.4 Waterborne Radiological Consequences
  - 3.5.5 Atmospheric Radiological Consequences
  - 3.5.6 Consequences from Chemically Toxic Materials
  - 3.5.7 Consequences from Disruptive Events
  - 3.5.8 Nuclear Criticality
  - 3.5.9 Consequences to Biological Resources and Soils
- 3.6 Environmental Impacts of Transportation
  - 3.6.1 Summary of Impacts of Transportation
  - 3.6.2 National Transportation
  - 3.6.3 Nevada Transportation
- 3.7 Environmental Impacts of the No-Action Alternative
  - 3.7.1 Short-Term Impacts in the Yucca Mountain Vicinity
  - 3.7.2 Commercial and DOE Sites
  - 3.7.3 Cumulative Impacts for the No-Action Alternative

APPENDIX A
TYPES OF DOCUMENTS TO BE INCLUDED IN THE LICENSING SUPPORT NETWORK

This appendix contains examples of the types of documents that should be included in the Licensing Support Network (LSN) by participants. See 10 CFR 2.1003 and the exclusions in 10 CFR 2.1005.

1. Technical reports and analyses by all participants (including those developed by contractors). Note that this applies only to final technical reports and does not include preliminary drafts (including predecisional and other internal review drafts) other than "circulated drafts," as defined in 10 CFR Part 2, Subpart J (Item 6 below). See 10 CFR 2.1019(i)(2), which states that preliminary drafts, although subject to derivative discovery, are excluded from entry in the LSN.

2. Quality assurance records

3. External correspondence

4. Internal memoranda

5. Meeting minutes/transcripts

6. Draft documents circulated for supervisor concurrence or signature on which a nonconcurrence has been registered

7. Congressional questions and answers

8. Other documents (for 8.1 and 8.9, include references to other databases)

    8.1 Draft and final environmental assessments
    8.2 Site characterization plan
    8.3 Site characterization study plans
    8.4 Site characterization progress reports
    8.5 Issue-resolution reports
    8.6 License application
    8.7 Topical reports, data, and data analyses
    8.8 Any U.S. Department of Energy (DOE) draft, supplemental, and final environmental impact statements
    8.9 NRC preliminary comments on the sufficiency of DOE information for inclusion in a license application for a possible geologic repository at Yucca Mountain, Nevada
    8.10 The DOE site recommendation to the President of the United States (e.g., transmittal letter, statutory materials supporting the recommendation)
    8.11 Publicly available information on rulemakings
    8.12 Public and agency comments on documents
    8.13 Response to comments
    8.14 NRC technical positions
    8.15 NRC regulatory guides
    8.16 The DOE project-decision schedules
    8.17 DOE program-management documents

APPENDIX B
EXCLUDED AND PRIVILEGED INFORMATION

In 10 CFR 2.1005, "Exclusions," the types of information excluded from the Licensing Support Network (LSN) are listed. Discovery privileges are discussed in 10 CFR 2.1006(a), (b), and (c). These sections of 10 CFR are reproduced below.

10 CFR 2.1005 Exclusions.

The following material is excluded from the requirement to provide electronic access, either pursuant to 10 CFR 2.1003, or through derivative discovery pursuant to 10 CFR 2.1019(i)—

(a) Official notice materials;
(b) Reference books and text books;
(c) Material pertaining exclusively to administration, such as material related to budgets, financial management, personnel, office space, general distribution memoranda, or procurement, except for the scope of work on a procurement related to repository siting, construction, or operation, or to the transportation of spent nuclear fuel or high-level waste;
(d) Press clippings and press releases;
(e) Junk mail;
(f) References cited in contractor reports that are readily available;
(g) Classified material subject to Subpart I of this part;
(h) Readily available references, such as journal articles and proceedings, which may be subject to copyright.

10 CFR 2.1006 Privilege.

(a) Subject to the requirements in 10 CFR 2.1003(a)(4), the traditional discovery privileges recognized in NRC adjudicatory proceedings and the exceptions from disclosure in 10 CFR 2.790 may be asserted by potential parties, interested governmental participants, and parties. In addition to Federal agencies, the deliberate process privilege may also be asserted by State and local government entities and Indian Tribes.
(b) Any document for which a claim of privilege is asserted, but is denied in whole or in part by the Pre-License Application Presiding Officer or the Presiding Officer, must be provided in electronic form by the party, interested governmental participant, or potential party that asserted the claim to—
    (1) The other participants; or
    (2) The Pre-License Application Presiding Officer or to the Presiding Officer, for entry into a Protective Order file, if the Pre-License application Presiding Officer or the Presiding Officer so directs under 10 CFR 2.1010(b) or 10 CFR 2.1018(c).
(c) Notwithstanding any availability of the deliberative process privilege under paragraph (a) of this section, circulated drafts not otherwise privileged shall be provided for electronic access pursuant to 10 CFR 2.1003(a).

REGULATORY ANALYSIS

A separate regulatory analysis was not prepared for this regulatory guide. The regulatory analysis prepared for Draft Regulatory Guide DG-3003, "Format and Content for the License Application for the High-Level Waste Repository" (November 1990), provides the regulatory basis for this regulatory guide as well. A copy of the regulatory analysis is available for inspection and copying for a fee at the U.S. Nuclear Regulatory Commission Public Document Room, 11555 Rockville Pike, Washington, DC. The Public Document Room's mailing address is USNRC PDR, Washington, DC 20555; phone (800)397-4209 or (301)415-4737; fax (301)415-3548.