

**RULEMAKING ISSUE  
(Notation Vote)**

March 3, 2009

SECY-09-0034

FOR: The Commissioners

FROM: R. W. Borchardt  
Executive Director for Operations

SUBJECT: PROPOSED RULEMAKING - ENVIRONMENTAL PROTECTION REGARDING  
THE UPDATE OF THE 1996 GENERIC ENVIRONMENTAL IMPACT  
STATEMENT FOR NUCLEAR POWER PLANT LICENSE RENEWAL

PURPOSE:

To obtain Commission approval for publication of a proposed rule amending Title 10, Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," of the *Code of Federal Regulations* (10 CFR Part 51).

BACKGROUND:

The objective of the proposed rule is to update the Nuclear Regulatory Commission's (NRC) original findings in Table B-1, "Summary of Findings on National Environmental Policy Act Issues for License Renewal of Nuclear Power Plants," of Appendix B to Subpart A of 10 CFR Part 51. Table B-1 provides a concise summary of the findings of the "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," NUREG-1437 (May 1996) (GEIS). In the introductory paragraph of Appendix B to Subpart A of Part 51, the Commission stated that it intends to review the assessment of impacts in the GEIS and update it on a 10-year cycle, if necessary. This proposed rulemaking is a part of that review and the proposed amendments redefine the number and scope of those environmental issues that must be addressed as part of a license renewal application and those that may be addressed generically.

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The review began in June 2003 when the agency published a *Federal Register* Notice of Intent to update the 1996 GEIS (68 FR 33209, June 3, 2003). In accordance with 10 CFR 51.26, the NRC conducted scoping meetings and collected comments from the public. The comment period began in June 2003 and ended in September 2003. The project was inactive for 2 years due to higher priority work. In October 2005, the scoping period was reopened until December 30, 2005 (70 FR 57628, October 3, 2005). The NRC received numerous comments during the 2003 public comment period. All comments submitted in response to the 2003 scoping request have been considered in preparing the revised GEIS and are publicly available **[insert FRN reference]**. No comments were received during the 2005 public comment period.

In SECY-06-0134, titled "Technical Basis for Revising Environmental Issues to be Considered for License Renewal", dated June 9, 2006, the staff advised the Commission of its intent to update the 1996 GEIS, which is the technical basis for Table B-1 and other related Part 51 provisions (e.g., 10 CFR 51.53(c)(3), which describes the requirements for the license renewal applicant's environmental report). The schedule called for publication of the proposed rule and the revised GEIS in January 2008, and final rule and final GEIS in February 2009. Subsequently, the Office of the Executive Director for Operations and the Commission approved extension requests for these rulemaking actions. Publication of the proposed rule is scheduled for July 2009 with the final rule publication scheduled for April 2011.

#### DISCUSSION:

The 1996 GEIS provides the technical basis for the findings in Table B-1 and related license renewal provisions in Part 51. In the 1996 GEIS and related rulemaking, which promulgated Table B-1 and related Part 51 provisions, the Commission determined that certain environmental impacts associated with the renewal of a nuclear power plant operating license were the same or similar for all plants and could be treated on a generic basis. In this way, repetitive reviews of these impacts could be avoided. The Commission based its generic assessment of certain environmental impacts on the following factors:

- (1) License renewal will involve nuclear power plants for which the environmental impacts of operation are well understood as a result of lessons learned and knowledge gained from operating experience and completed license renewals.
- (2) Activities associated with license renewal are expected to be within this range of operating experience; thus, environmental impacts can be reasonably predicted.
- (3) Changes in the environment around nuclear power plants are gradual and predictable.

The GEIS is intended to improve the efficiency of the license renewal process by (1) providing an evaluation of the types of environmental impacts that may occur from renewing commercial nuclear power plant operating licenses; (2) identifying and assessing impacts that are expected to be generic (the same or similar) at all nuclear plants or plants with specified plant or site characteristics; and (3) defining the number and scope of environmental impacts that need to be addressed in plant-specific Environmental Impact Statements (EISs). The GEIS provides information that aids in the preparation of these plant-specific EISs.

Table B-1 in Appendix B to 10 CFR 51, summarizes the findings of the analyses conducted for the 1996 GEIS. Issues and processes common to all nuclear power plants having the same or similar (i.e., generic) environmental impacts are considered Category 1 issues. Category 2 issues are those issues that cannot be generically dispositioned and require a plant-specific analysis to determine the level of environmental impact.

In the 1996 GEIS, the NRC staff assessed 92 environmental issues. Sixty-nine issues were resolved generically and identified as not requiring additional plant-specific analysis (i.e., Category 1). Twenty-one required further plant-specific analysis (i.e., Category 2) and two required a site-specific assessment (i.e., uncategorized) by the NRC prior to issuance of a renewed license. These environmental issues were listed in Table B-1 of Appendix B to 10 CFR 51.

The staff has prepared a revised GEIS. The revised GEIS reviews and reevaluates the issues and findings of the 1996 GEIS. Lessons learned and knowledge gained during previous license renewal reviews provides the primary basis for this assessment. Since 1996, 51 units at 29 nuclear plant sites have undergone license renewal environmental review. In addition, new research, findings, and other information were considered when the significance of impacts associated with license renewal was being evaluated. The purpose of the evaluation was to determine if the findings presented in the 1996 GEIS remain valid. In doing so, the NRC staff considered the need to modify, add to, or delete any of the 92 issues in the 1996 GEIS. After this evaluation, the staff carried forward 78 impact issues for detailed consideration in this GEIS revision. No environmental issues identified in Table B-1 and the 1996 GEIS were eliminated, but several were combined or regrouped according to similarities. Fifty-eight of these issues were determined to be Category 1 and would not require additional plant-specific analysis. Of the remaining 20 issues, 19 were determined to be Category 2 and one remained uncategorized. It is also important to note that the version of the GEIS being issued for comment has numerous tables of information, some of which have data only up to 2005. The staff continues to update these contractor-provided tables and will compare updates with the most recent available data prior to issuance of the final rule.

### Proposed Rule

The proposed changes to 10 CFR 51 include:

- (1) Seventy-eight total environmental impact issues in Table B-1 and the revised GEIS are arranged by resource area. This perspective is a change from the 1996 GEIS where environmental issues are arranged by power plant systems. The structure of the revised GEIS incorporates the NRC's standard format for EISs as established in Appendix A to Subpart A of Part 51, "Format for Presentation of Material in Environmental Impact Statements." The impacts of license renewal activities including plant operations and refurbishment along with replacement power alternatives are addressed in each resource area and then compared in impact summary tables.
- (2) Fifty-eight environmental impact issues identified in Table B-1 are considered adequately addressed for all nuclear power plants in the revised GEIS. These issues are determined to be Category 1 issues, and do not require additional analysis in a plant-specific environmental review unless new and significant information requires consideration.

- (3) Twenty environmental impact issues identified in Table B-1, require a plant-specific review or assessment. 19 are determined to be Category 2 issues, and one remains uncategorized.
- (4) Conforming changes are made to 10 CFR 51.14, 51.53, and 51.95 that reflect the updates to Table B-1 and the 1996 GEIS. In addition, other clarifying and minor changes are made to 10 CFR 51.53 and 51.71.

RESOURCES:

Resources required to complete this rulemaking have been requested in the fiscal year (FY) 2009 budget as follows: 2.0 full-time equivalents (FTE) and \$50K for the Office of Nuclear Reactor Regulation (NRR). For FY 2010, NRR is requesting 1.0 FTE. There are no changes in resources from the budget that has been submitted. FY 2011 resource requirements will be identified during the upcoming FY 2011 budget process.

COORDINATION:

This paper has been prepared by NRR. The Office of the Chief Financial Officer has reviewed this Commission paper for resource implications and has no objection. The Office of the General Counsel has no legal objection to this paper. The Advisory Committee on Reactor Safeguards is not required to review the proposed rulemaking package; however, an information copy has been provided. The Office of Federal and State Materials and Environmental Management Programs reviewed the proposed rule and elected to waive concurrence.

COMMITMENTS:

In addition to the revised GEIS, the NRC is also updating NUREG-1555, Supplement 1, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants," and Regulatory Guide 4.2, Supplement 1, "Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses" now titled, "Preparation of Environmental Reports for License Renewal Applications." These associated guidance documents are used by the NRC to evaluate license renewal applications, conduct site environmental reviews, and assist applicants in the preparation of environmental reports as part of their license renewal applications.

In order to enhance public openness, the NRC staff has determined that the rulemaking process will be more efficient if these three companion documents are revised and issued for public comment with the proposed rule.

RECOMMENDATIONS:

The staff requests that the Commission:

- (1) Approve for publication in the *Federal Register* the proposed rule as presented in Enclosure 1, for a 75 day comment period.

(2) Approve for publication in the *Federal Register* the draft regulatory analysis for the proposed rule, as presented in Enclosure 2, during the same 75 day comment period.

(3) Note that:

- a. This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). This rule will be submitted to the Office of Management and Budget (OMB) for review and approval of the paperwork requirements. The staff will submit the Paperwork Certification to OMB in accordance with established procedures.
- b. The Office of Public Affairs will issue a press release concerning publication of the proposed rule.
- c. The Office of Congressional Affairs will inform cognizant Congressional Committees.

***/RA Bruce Mallett for/***

R. W. Borchardt  
Executive Director  
for Operations

Enclosures:

1. *Federal Register* Notice
2. Draft Regulatory Analysis

(2) Approve for publication in the *Federal Register* the draft regulatory analysis for the proposed rule, as presented in Enclosure 2, during the same 75 day comment period.

(3) Note that:

- a. This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). This rule will be submitted to the Office of Management and Budget (OMB) for review and approval of the paperwork requirements. The staff will submit the Paperwork Certification to OMB in accordance with established procedures.
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1. *Federal Register* Notice
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