



~~**OFFICIAL USE ONLY**~~
~~SENSITIVE INTERNAL INFORMATION~~
~~LIMITED TO THE NRC UNLESS THE~~
~~COMMISSION DETERMINES OTHERWISE~~

POLICY ISSUE (Notation Vote)

April 25, 2022

SECY-22-0036

FOR: The Commissioners

FROM: Daniel H. Dorman
Executive Director for Operations

SUBJECT: RULEMAKING PLAN FOR RENEWING NUCLEAR POWER PLANT
OPERATING LICENSES—10-YEAR ENVIRONMENTAL REGULATORY
UPDATE (NRC-2022-0087)

PURPOSE:

The purpose of this paper is to respond to Staff Requirements Memorandum (SRM)-SECY-21-0066.¹ This paper provides options for a future rulemaking effort to incorporate changes determined to be necessary as part of the 10-year regulatory update to amend Table B-1, "Summary of Findings on NEPA [National Environmental Policy Act] Issues for License Renewal of Nuclear Power Plants," in Appendix B, "Environmental Effect of Renewing the Operating License of a Nuclear Power Plant," to Subpart A to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions." The future rulemaking effort also would include updates to NUREG-1437, Revision 1, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants," (LR GEIS) as revised, which provides the technical and regulatory bases for Table B-1. The staff also would make conforming changes to the associated guidance. As discussed below, the staff recommends deferring rulemaking related to the LR GEIS until the next 10 year update cycle.

The enclosure transmitted herewith contains Official Use Only - Sensitive Internal Information. When separated from the enclosure this transmittal document is decontrolled.

CONTACTS: Yanely Malave, NMSS/REFS
301-415-1519

Jennifer Davis, NMSS/REFS
301-415-3835

~~**OFFICIAL USE ONLY**~~
~~SENSITIVE INTERNAL INFORMATION~~
~~LIMITED TO THE NRC UNLESS THE~~
~~COMMISSION DETERMINES OTHERWISE~~

¹ Staff Requirements – SECY-21-0066 - Rulemaking Plan for Renewing Nuclear Power Plant Operating Licenses—Environmental Review (RIN 3150-AK32; NRC-2018-0296), dated February 24, 2022, (Agencywide Documents Access and Management System (ADAMS) Accession No. ML22053A308).

SUMMARY:

As directed in SRM-SECY-21-0066, this rulemaking plan provides options for a future effort to incorporate any changes determined to be necessary for the 10-year regulatory update cycle. These options would be scheduled to take place following the rulemaking approved by the Commission in SRM-SECY-22-0024, dated April 5, 2022. In SECY-22-0024 the staff responded to the Commission's direction in SRM-SECY-21-0066 to remove the word "initial" from 10 CFR 51.53(c)(3) and revise Table B-1 and the LR GEIS to include a thorough evaluation of the environmental impacts of renewing the operating license of a nuclear power plant for one term of subsequent license renewal (SLR). The scope of a second rulemaking would address new regulatory changes, new data or information obtained, and lessons learned and knowledge gained from license renewal environmental reviews performed after completion of the rulemaking described in SECY-22-0024. Additionally, the staff would consider and incorporate, as appropriate, NEPA and license renewal-related issues that were identified in SECY-21-0066 but deferred in the proposed rulemaking plan presented in SECY-22-0024.

BACKGROUND:

In SRM-SECY-21-0066, the Commission directed the staff to provide a rulemaking plan for updating the LR GEIS and Table B-1 to account for SLR and removing the word "initial" from 10 CFR 51.53(c). The staff provided this rulemaking plan in SECY-22-0024. In SRM-SECY-21-0066, the Commission also directed the staff to provide a follow-on paper that would consider options for a future effort that would incorporate any changes determined to be necessary for the 10-year regulatory update cycle. These options are discussed below.

The introduction to Appendix B to Subpart A of 10 CFR Part 51 states that, on a 10-year cycle, the Commission intends to review the material in Appendix B, including Table B-1, and update it if necessary (61 FR 28467; June 5, 1996). The comprehensive 10-year review and update process established by the Commission ensures that the license renewal review process remains efficient and that the analyses of environmental impacts in the LR GEIS remain accurate. It also ensures that future environmental reviews meet the "hard look" standard under NEPA.

The primary purpose of the LR GEIS is to identify all NEPA issues for license renewal and evaluate those environmental impacts considered to be generic to all nuclear power plants, or a subset of plants. The LR GEIS also identifies issues that need to be addressed in nuclear power plant site-specific environmental reviews for nuclear power plant license renewals. The U.S. Nuclear Regulatory Commission (NRC) documents these reviews in supplemental environmental impact statements to the LR GEIS.

Consistent with Commission direction in SRM-SECY-21-0066, this plan presents options for a second rulemaking, and considers any necessary changes to the LR GEIS and Table B-1. When revising the LR GEIS, the NRC staff would consider the need to modify, add to, consolidate, or delete any of the environmental issues evaluated in the LR GEIS. The focus of any amendments conducted by this second rulemaking would be to address new regulatory changes, new data or information obtained, and lessons learned and knowledge gained from license renewal environmental reviews performed since completion of the rulemaking described in SECY-22-0024. The rulemaking would consider and incorporate, as appropriate, license-renewal issues that were identified in SECY-21-0066 but deferred in the proposed rulemaking plan presented in SECY-22-0024.

To ensure a comprehensive 10-year review and update, the staff would conduct an environmental scoping process in accordance with the NRC's regulations at 10 CFR 51.26, "Requirement to publish notice of intent and conduct scoping process." This scoping process would ensure a comprehensive 10-year review and update, and would be conducted in a manner similar to that performed in 2020 (as described in SECY-22-0024). The results of that scoping process are documented in the staff's scoping summary report (ADAMS Package Accession No. ML21039A574). The staff would evaluate any future changes to environmental laws, regulations, and other environmental-related information and would assess the need to further amend the NRC's regulations.

The staff would further consider public and other stakeholder comments to help validate existing issues and identify new NEPA issues; however, the staff would consider using expanded and enhanced opportunities for public involvement to include State government agencies and Tribal officials. For example, the staff proposes to conduct hybrid scoping meetings at NRC headquarters and at select regional locations across the United States.

The following sections present the staff's proposed rulemaking plan.

DISCUSSION:

Title

Renewing Nuclear Power Plant Operating Licenses—10-Year Environmental Regulatory Update

Regulation

This rulemaking will update 10 CFR Part 51 environmental protection regulations specific to nuclear power plant license renewal in Appendix B to Subpart A and 10 CFR 51.53(c). It will also provide necessary underlying updates to the LR GEIS consistent with the 10-year regulatory update to Table B-1.

Regulatory Issue

The LR GEIS provides the technical and regulatory bases for the summary of findings on NEPA issues in Table B-1 in Appendix B to Subpart A of 10 CFR Part 51. The regulations in 10 CFR Part 51 state that the Commission intends to review Appendix B, Table B-1, along with technical supporting documentation (NUREG-1437), on a 10-year cycle and update it if necessary. For this second rulemaking, the staff has identified several specific NEPA and license renewal-related issues for possible revision and update. These include issues and topics that were identified in SECY-21-0066 but deferred in SECY-22-0024. Detailed information about these issues is provided under "Description of Rulemaking: Scope," below.

Existing Regulatory Framework

The NRC's existing regulatory framework consists of the following regulations and guidance:

- Regulations:
 - Table B–1 in Appendix B to Subpart A of 10 CFR Part 51.
 - The 10 CFR 51.53(c) (addressing environmental reports for license renewal).
 - The 10 CFR 51.71(d) (addressing site-specific draft supplemental environmental impact statements).
 - The 10 CFR 51.95(c) (addressing site-specific final supplemental environmental impact statements).
- Technical and regulatory basis document:
 - NUREG-1437, as revised (LR GEIS)
- Guidance:
 - Regulatory Guide 4.2, Supplement 1, as revised, "Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications," issued June 2013.
 - NUREG-1555, Supplement 1, as revised, "Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal," issued June 2013.

Explanation of Why Rulemaking is the Regulatory Solution

In SRM-SECY-21-0066, the Commission directed the staff to provide options for a future effort that would incorporate any changes determined to be necessary for the 10-year regulatory update cycle. This second rulemaking would follow the initial rulemaking approved by the Commission to update the LR GEIS to address SLR and make corresponding amendments to Table B–1 and 10 CFR 51.53(c). Because the findings of the LR GEIS are incorporated in Table B-1, the agency would need to undertake a rulemaking to amend Table B-1 to reflect any changes to the LR GEIS.

The staff has identified two schedule options for implementing the Commission's direction in SRM-SECY-21-0066 for a future 10-year review and update. The scope of the rulemaking, as presented in "Description of Rulemaking: Scope" below, would be the same for each option.

Alternative 1 (Sequential Rulemaking)

Under this alternative, the staff would initiate scoping for the 10-year regulatory review and update immediately upon completion of the rulemaking approved by SRM-SECY-22-0024, which includes updating the LR GEIS to address SLR and making corresponding amendments

to Table B–1 and 10 CFR 51.53(c). Based on the schedule approved in SRM-SECY-22-0024 for the first rulemaking, the staff would initiate this second rulemaking activity in fiscal year (FY) 2025.

Advantages. Proceeding with a sequential rulemaking would have the greatest potential for preserving (retaining) the institutional knowledge of key staff involved with the first rulemaking. The efficiency of the 10-year regulatory review and update will benefit from the immediate application of best practices identified during the initial rulemaking effort. As explained in SECY-22-0024, updating the LR GEIS to account for SLR necessitates a review of all current legal and technical information to comport with NEPA’s hard look requirement. As a result, there would be few (if any) new technical matters to address for either initial license renewal or SLR at the time the first rule is completed.

Disadvantages. While the staff proposes to conduct a new environmental scoping effort, there may not be a sufficient number of new issues (e.g., derived from completed environmental reviews) to consider for the purposes of a comprehensive 10-year regulatory review and update. Additionally, the license renewal related issues identified in SECY-21-0066 but deferred in SECY-22-0024 generally will not arise for many years, as described below. Therefore, at the conclusion of scoping, the staff may not identify any changes affecting the findings on NEPA issues in Table B–1 in Appendix B to Subpart A of 10 CFR Part 51, the LR GEIS, and associated guidance, despite staff resources having been expended on a new environmental scoping effort.

Alternative 2 (Deferred Rulemaking)

Under this alternative, the staff would defer the initiation of the 10-year regulatory review and update until what would be the next 10-year review and update cycle, consistent with the Commission’s intent to review the material in Appendix B, including Table B–1, and update it if necessary (61 FR 28467; June 5, 1996). The staff originally had proposed to begin the 10-year review and update in 2020 (7 years after completion of the last comprehensive update in 2013). Therefore, based on the proposed schedule presented in SECY-22-0024 for completion of the first rulemaking (in FY 2024), the staff recommends that a future rulemaking to consider a comprehensive 10-year review and update of the LR GEIS and Table B–1 be deferred, to begin no sooner than FY 2031. Upon completion of scoping, the staff would submit a new rulemaking plan to the Commission, consistent with the process used in SECY-21-0066 and the previous 10-year update. Should the Commission approve this option, the staff would designate the ongoing rulemaking to update the LR GEIS to apply to subsequent license renewals and Table B-1 as the agency’s 10-year update for this cycle, thus, maintaining the “hard look” standard required by NEPA. As described in SECY-22-0024, the staff will fully evaluate all issues identified in the LR GEIS to comply with NEPA’s hard look requirement.

Advantages. Under this alternative, the staff’s evaluation and the environmental scoping process would be more likely to yield issues and information that are ripe for review and consideration for changes to the findings on NEPA issues in Table B–1 in Appendix B to Subpart A of 10 CFR Part 51, the LR GEIS, and associated guidance. This new information would likely include new regulatory changes, new data or information, and lessons learned and knowledge gained from license renewal environmental reviews performed since completion of the initial rulemaking in accordance with SECY-22-0024.

Further, under this alternative, the staff expects that agency stakeholders would be more likely to engage in environmental scoping associated with the 10-year review and update, including

identification of regulatory and environmental issues of concern, given the additional time that would have elapsed since completion of the first rulemaking.

Disadvantages. In contrast to Alternative 1, given the current expected demographics of the staff with experience in this type of rulemaking activity and environmental reviews, deferring initiation could complicate development of the second rulemaking given the anticipated loss of the knowledgeable staff who supported the first rulemaking. However, this loss of institutional knowledge can be mitigated by conducting appropriate hiring, knowledge management, knowledge transfer, and mentoring with new environmental, rulemaking, and other staff integral to the rulemaking and associated NEPA activities.

Description of Rulemaking: Scope

The scope of the second rulemaking and update would amend the summary of findings on NEPA issues in Table B–1 of Appendix B to Subpart A of 10 CFR Part 51 and update the LR GEIS, as necessary. Specifically, as part of the proposed comprehensive 10-year review and update, the staff would consider and incorporate, as appropriate, new information related to NEPA and license renewal-related issues that were deferred in the proposed rulemaking plan presented in SECY-22-0024. Both alternatives address the same rulemaking scope. Because Alternative 2 would begin approximately 7 years after Alternative 1, the staff expects Alternative 2 is likely to address additional new information related to NEPA and license-renewal related issues; that would not be necessary for a rule that begins immediately after the rulemaking plan approved in SRM-SECY-22-0024 is completed.

As discussed above under the “Background” section, the staff also would conduct an environmental scoping process to inform the staff’s review of possible issues for update in the LR GEIS and Table B–1.

The NEPA and environmental issues that the staff proposes to revise and update, discussed below, would incorporate lessons learned and knowledge gained from license renewal environmental reviews conducted by the staff during the period following issuance of the final rule approved by SRM-SECY-22-0024. Other updates would include, but would not be limited to, reflecting changes to environmental laws, regulations, and other environmental related information; incorporating the latest best practices for environmental reviews; and reflecting changes in current and emerging nuclear generation and other replacement power technologies. The staff anticipates that the full scope of these changes would, if implemented, reduce applicant burden in preparing environmental reports; improve the efficiency of staff reviews; better reflect emerging technologies; improve alignment with industry and other Federal agency standards and guidance; and improve the clarity of the LR GEIS. Examples of specific NEPA and license renewal-related issues identified as needing revision and possible update include the following:

Consideration of Current and Emerging Environmental Review Issues:

- *Advanced and/or small modular reactors (SMRs)*—Advanced reactor and SMR licensees could apply for license renewal in the future. The staff considered addressing advanced reactor and SMR license renewal environmental reviews in the LR GEIS. For example, the staff could provide a qualitative impacts analysis in the LR GEIS to lay the framework for generic environmental impact determinations for renewal of advanced reactors and SMRs by leveraging the generic environmental impact determinations for operating light-water reactors.

- *Include the environmental impacts of new, large, light-water reactors holding an operating license, construction permit, or combined license after June 30, 1995, (e.g., Vogtle Electric Generating Plant (Vogtle) Units 3 and 4) (update the LR GEIS and amend the rule to address this issue)*—NRC regulations limit the findings in 10 CFR Part 51, Appendix B to Subpart A, Table B–1, to nuclear plants licensed for operation or permitted for construction before June 30, 1995. NRC regulations at 10 CFR 51.53(c)(3) contain a similar restriction. However, the licensee for Vogtle Units 3 and 4 could apply for license renewal at a future date. The staff proposes to revise the LR GEIS and amend the regulations to consider large, light-water reactors permitted for construction after this date.

Description of Rulemaking: Preliminary Backfitting and Issue Finality Analysis

This rulemaking does not constitute “backfitting,” as defined in 10 CFR 50.109(a)(1) of the Backfit Rule. This rulemaking does not meet the definition of a backfit, because it does not propose a “modification of or addition to systems, structures, components, or design of a facility; or the design approval or manufacturing license for a facility; or the procedures or organization required to design, construct or operate a facility.” Similarly, this rulemaking does not constitute an action inconsistent with any of the issue finality provisions in 10 CFR Part 52, “Licenses, Certifications, and Approvals for Nuclear Power Plants.” Additionally, this rulemaking would not constitute forward-fitting as that term is defined in Management Directive 8.4, “Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests.”

Description of Rulemaking: Estimated Schedule

As specified in Appendix B to Subpart A of 10 CFR Part 51, the staff would follow the standard 10-year review and update process and conduct environmental scoping prior to developing a rulemaking plan. The Commission would review that rulemaking plan and provide direction to the staff within an SRM. The following is the estimated schedule for the rulemaking:

- Deliver proposed rule to the Commission—12 months after issuance of the SRM on the rulemaking plan.
- Deliver final rule to the Commission—12 months after the close of the comment period for the proposed rule.

To ensure a comprehensive 10-year review and update associated with the proposed second rulemaking, the staff would also conduct an environmental scoping process in accordance with the NRC’s regulations at 10 CFR 51.26. The staff also plans to conduct public meetings for this rulemaking and is exploring outreach approaches to solicit diverse feedback (e.g., State and Tribal communication letters).

Description of Rulemaking: Preliminary Recommendation on Priority

The effort to undertake a future 10-year regulatory update to amend Table B–1 in Appendix B to Subpart A of 10 CFR Part 51, to update the LR GEIS, and to make conforming changes to associated guidance is not currently a ranked rulemaking action. However, the staff presumes that a future rulemaking would receive a ranking that would justify its need. Additionally, this action would be consistent with the Commission’s intent to review the material in Appendix B, including Table B–1, and update it if necessary (61 FR 28467; June 5, 1996), as referenced in the “Background” section of this paper. Should the Commission approve this action, the staff

will use the current Common Prioritization of Rulemaking methodology to make a final determination on its priority.

Description of Rulemaking: Estimate of Resources

The enclosure of this report presents an estimate of the resources needed to complete this rulemaking.

Cumulative Effects of Regulation

This rulemaking would have a net positive impact on the cumulative effects of regulation because it would potentially reduce the regulatory burden for both the NRC and license renewal applicants. The staff would conduct environmental scoping meetings as well as public meetings on the draft LR GEIS, proposed rule, and associated guidance documents; provide sufficient time for public comment; and conduct additional public outreach, as needed.

The staff recognizes that there could be other rulemaking projects that would affect 10 CFR Part 51; at the time the rule is developed, the staff will coordinate with other 10 CFR Part 51 rulemaking activities to limit overlapping attributes and requirements to minimize the cumulative effects of regulation on applicants and licensees.

Agreement State Considerations

This rulemaking would not affect Agreement States. The rule changes are limited to 10 CFR Part 51 environmental protection regulations specific to nuclear power plant license renewals.

Guidance

In conjunction with this rulemaking, the staff would update and revise Regulatory Guide 4.2, Supplement 1, as revised, and NUREG-1555, Supplement 1, as revised, to incorporate any changes resulting from the LR GEIS and rule update.

Advisory Committee on Reactor Safeguards Review

This rulemaking would be limited to the environmental protection regulations in 10 CFR Part 51 specific to nuclear power plant license renewal, would not involve safety regulations, and, therefore, would not require Advisory Committee on Reactor Safeguards review.

Committee to Review Generic Requirements Review

This rulemaking would be limited to the environmental protection regulations in 10 CFR Part 51 specific to nuclear power plant license renewal. The staff has determined that backfit regulations and issue finality provisions do not apply to this rulemaking, as explained in "Description of Rulemaking: Preliminary Backfitting and Issue Finality Analysis" above, and, therefore, would not require review by the Committee to Review Generic Requirements.

Analysis of Legal Matters

The Office of the General Counsel has reviewed this rulemaking plan and has not identified any issues necessitating a separate legal analysis at this time.

COMMITMENT:

The NRC is tracking this rulemaking action in its centralized rulemaking tracking and reporting system. If the Commission approves initiation of the rulemaking, the staff will proceed to update the LR GEIS and draft a proposed rule for Commission review and approval on a timeline consistent with the Commission's direction.

RECOMMENDATION:

The staff recommends that the Commission approve Alternative 2 (Deferred Rulemaking) as presented in this rulemaking plan to defer further updates to Table B-1 in Appendix B to Subpart A of 10 CFR Part 51 and the LR GEIS and associated guidance documents to the next revision cycle.

RESOURCES:

The enclosure includes an estimate of the resources needed to complete this rulemaking.

COORDINATION:

The Office of the General Counsel has no legal objection to this action. The Office of the Chief Financial Officer has reviewed this paper and has no concerns with the estimated resources in the enclosure.

Daniel H.
Dorman

Digitally signed by
Daniel H. Dorman
Date: 2022.04.25
22:37:48 -04'00'

Daniel H. Dorman
Executive Director
for Operations

Enclosure:
Resources for Rulemaking Plan for
Renewing Nuclear Power Plant
Operating Licenses—Future 10-Year
Regulatory Update Cycle

SUBJECT: RULEMAKING PLAN FOR RENEWING NUCLEAR POWER PLANT OPERATING

LICENSES—10-YEAR ENVIRONMENTAL REGULATORY UPDATE (NRC-2022-0087) DATED: April 25, 2022

ADAMS Accession Nos: Pkg: ML22083A147, SECY: ML22083A149, Enclosure: ML22083A151

SECY-012

OFFICE	NMSS/REFS/ RRPB/PM	QTE	NMSS/REFS/ RRPB/RS	NMSS/REFS/ RRPB/BC	NMSS/REFS/ ERLRB/BC
NAME	YMalave (SSchneider for)	JDougherty	GLappert	IBerrios	TSmith
DATE	3/24/2022	3/28/2022	3/29/2022	4/1/2022	3/29/2022
OFFICE	NMSS/REFS/RASB/BC	NRR/DNRL/D	NMSS/REFS/D	OCFO	OCIO/GEMSD/ FLICB/ICT/CO
NAME	CBladey	BSmith	JTappert	RAllwein	DCullison
DATE	4/4/2022	4/1/2022	3/31/2022	3/30/2022	4/8/2022
OFFICE	OGC (NLO)	NMSS	NRR	EDO	
NAME	MSmith (BHarris for)	JLubinski (RLewis for)	AVeil (RTaylor for)	DDorman	
DATE	4/8/2022	4/18/2022	4/14/2022	04/25/22	

OFFICIAL RECORD COPY