

DRAFT SUPPORTING STATEMENT  
FOR INFORMATION COLLECTIONS CONTAINED IN  
THE RENEWING NUCLEAR POWER PLANT OPERATING LICENSES – ENVIRONMENTAL  
REVIEW PROPOSED RULE

10 CFR PART 51  
ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING AND  
RELATED REGULATORY FUNCTIONS

(3150-0021)  
REVISION

DESCRIPTION OF THE INFORMATION COLLECTION

As mandated by the Atomic Energy Act (AEA) of 1954, as amended, the U.S. Nuclear Regulatory Commission (NRC) is responsible for protecting public health and safety in the civilian use of nuclear power. The NRC's Office of Nuclear Reactor Regulation is responsible for ensuring the public health and safety through the licensing and inspection of activities at all commercial nuclear power reactor facilities in the United States. The AEA allows the NRC to issue licenses to operate commercial nuclear power plants for up to 40 years. The AEA and NRC regulations allow for renewals of these licenses for up to an additional 20 years, for each renewal term. The NRC terms the first renewal of the operating license to be the initial license renewal (initial LR), and any additional renewals are referred to as a subsequent license renewal (SLR). The approval or disapproval of the license renewal application depends upon an NRC determination as to whether the nuclear facility can continue to operate safely during the additional 20-year period of extended operation and whether the adverse environmental impacts of license renewal are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable. No specific limitations exist in the AEA or in NRC's regulations as to the number of times a power reactor operating license may be renewed.

As a Federal agency, the NRC is subject to the National Environmental Policy Act (NEPA) of 1969, as amended. The NRC's environmental protection regulations in Title 10 of the *Code of Federal Regulations* (10 CFR) Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," are the NRC's regulations for implementing NEPA.<sup>1</sup> The preparation of an environmental impact statement (EIS) is required for a plant-specific license renewal review in accordance with 10 CFR 51.20. In 1996, the NRC issued NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (hereafter referred to as the "LR GEIS"), to assist the NRC staff in preparing the license renewal EISs. The LR GEIS was revised in 2013, to incorporate lessons learned and knowledge gained from plant-specific environmental reviews, as well as changes to Federal laws and new information and research published since the 1996 LR GEIS.

The purpose of the LR GEIS is to identify and generically address issues and processes that are common to all, or a subset of, nuclear power plants and have the same or similar environmental impacts. These issues are called Category 1 issues. The LR GEIS also identifies issues and processes that are unique to each nuclear power plant, require site-specific information, or have different impacts, and which need to be addressed separately in plant-

---

<sup>1</sup> The NRC's regulations for the license renewal safety review are set forth in 10 CFR Part 54 (OMB clearance 3150-0155). The NRC's environmental protection regulations are set forth in 10 CFR Part 51.

specific supplements to the LR GEIS. These are called Category 2 issues. The findings of the LR GEIS are codified in Table B-1, “Summary of Findings on NEPA Issues for License Renewal of Nuclear Power Plants,” of Appendix B to Subpart A, “Environmental Effect of Renewing the Operating License of a Nuclear Power Plant, of 10 CFR Part 51 (hereafter referred to as “Table B-1”).

The NRC’s regulations in 10 CFR Part 51.53(c) require each applicant to prepare and submit a report entitled “Applicant’s Environmental Report – Operating License Renewal Stage,” as part of the applicant’s license renewal application. The information provided by an applicant in the environmental report helps the NRC meet its regulatory obligations under NEPA. In the environmental report, the applicant provides information about the plant, the environment that could be affected by license renewal, and an assessment of the environmental impacts from issues identified as Category 2 issues in Table B-1. The applicant is also required to include descriptive information and any new and significant information for Category 1 issues in Table B-1.

In Appendix B to Subpart A of 10 CFR Part 51, the Commission indicated that it intended to review the material in Table B-1 on a 10-year basis and update it, if necessary. The LR GEIS provides the technical basis for Table B-1. The previous 10-year review and update was completed in 2013, when the findings of the last revision of the LR GEIS were published as a final rule on June 20, 2013 (78 FR 37282). In 2020, the NRC staff initiated the 10-year review and update with the publication of a notice of intent to review and potentially update the 2013 LR GEIS in the *Federal Register* (85 FR 47252; August 4, 2020).

In February 2022, the Commission issued orders CLI-22-02, CLI-22-03, and CLI-22-04 that concluded that the staff could not rely on the LR GEIS and Table B-1 for Category 1 issues for SLRs. In April 2022, the Commission directed the staff to initiate a rulemaking that would align with the recent Commission orders regarding the NEPA analysis for SLR applications as well as to remove the word “initial” from 10 CFR 51.53(c)(3), which governs the content of license renewal applicants’ environmental reports, and to revise the LR GEIS and Table B-1 and associated guidance to affirm their applicability to SLR reviews.

To support the development of the proposed rule, the NRC staff reviewed and evaluated the environmental issues and impact findings in the 2013 LR GEIS for both initial LR and SLR. Lessons learned, knowledge gained, and experience from license renewal environmental reviews performed by the NRC since 2013 provided a significant source of new information for this assessment. In addition, new scientific research, changes in environmental regulations and impact methodology, and other new information were considered in evaluating the significance of impacts associated with initial LR and SLR. Public comments on previous plant-specific license renewal reviews were also analyzed to assess the existing environmental issues and identify new ones. The purpose of this evaluation was to determine if the findings presented in the 2013 LR GEIS remain valid for initial LR and to ensure that the analysis and assumptions support SLR. In doing so, the NRC considered the need to modify, add to, or delete any of the 78 environmental issues in the 2013 LR GEIS and codified in Table B-1. As a result of the detailed evaluation, the staff identified 80 environmental issues, which are considered in detail in the proposed LR GEIS revision. Fifty-nine of these issues were determined to be Category 1 and would not require additional plant-specific analysis. Of the remaining 21 issues, 20 were determined to be Category 2 and one issue remained uncategorized. No environmental issues identified in Table B-1 and evaluated in the 2013 LR GEIS were eliminated, but certain issues were consolidated, and one issue was divided into three separate issues.

### *Number of Nuclear Power Plants*

This rule would apply after the effective date of the final rule to three groups of nuclear power plant licensees: 1) initial LR applicants; 2) applicants with near-term and submitted applications, and applicants with issued SLRs; and 3) future SLR applicants. The NRC expects the final rule to be published and become effective in 2024. The NRC estimates the following number of nuclear power plants to apply for license renewal during the 3-year period following the effective date of the final rule:

- Initial LR application. The NRC staff does not expect to receive any initial LR applications during June 2024 – May 2027.
- Near-term and submitted applications, and issued SLRs. Near-term and submitted applications, or issued SLRs are those that would be submitted prior to the effective date of the final rule. For the purposes of this analysis, the NRC staff assumes that licensees seeking a near-term SLR or licensees who have submitted an application or received a subsequent renewal license would submit their applications using the information in the current Table B-1; these applicants would incur incremental burden by having to supplement their applications with additional information based on the changes between the current and the proposed Table B-1 (e.g., new Category 1 and 2 issues, changes from Category 1 to Category 2, and issue consolidations). The NRC staff estimates that there will be 10 supplemental submissions of the near-term applications for a subsequent renewed license during the 3-year period following the final rule becoming effective in 2024, or 3.3 applications annually.
- Future SLRs. Future SLR applications are those that would be submitted after the effective date of the final rule. The NRC expects that all future SLR applications will be submitted in 2025 and later because it will take at least 1 year for the licensees to conduct evaluations and prepare applications after the publication of the final rule. Licensees seeking future SLR will rely on the amended regulations in 10 CFR Part 51 and related guidance and will incur burden associated with evaluation of all environmental issues identified in Table B-1. The NRC staff estimates that during the 3-year period following the effective date of the final rule, there will be 15 applications for a future subsequent renewed license, or 5 applications annually, on average.

### *Substantive Provisions in the Proposed Rule*

10 CFR 51.53(c), “Operating License Renewal Stage,” requires that an applicant for a renewal of an operating license submit an environmental report with the application. For those applicants seeking an initial license renewal and holding an operating license, construction permit, or combined license as of June 30, 1995, the environmental report must include the information required in paragraph (c)(2) of Section 51.53 but is not required to contain analyses of the environmental impacts of certain license renewal issues identified as Category 1 (generically analyzed) issues in Appendix B to Subpart A of Part 51 (e.g., Table B-1). The environmental report must contain analyses of the environmental impacts of the proposed action, including the impacts of refurbishment activities, if any, associated with license renewal and the impacts of operation during the renewal term, for those issues identified as Category 2 (plant-specific analysis required) issues in Appendix B to Subpart A of Part 51. In addition, the environmental report must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware.

This proposed rule revises Section 51.53(c)(3) to revise as follows: “For those applicants seeking a license renewal covered by Table B–1 for a power plant for which an operating license, construction permit, or combined license was issued as of June 30, 1995, the environmental report shall include the information required in paragraph (c)(2) of this section subject to the following conditions and considerations.” These changes reflect that the requirement for postconstruction environmental reports would apply to applicants seeking either an initial or subsequent renewed license (specifically limited to one term of SLR). This change would effectively allow applicants for SLR to rely on generically analyzed (Category 1) issues listed in Table B-1. The change in burden associated with this revision is fully captured in the following discussion of changes to Table B-1.

The following discussion describes the changes to the information collection burden associated with substantive changes the proposed rule as they would apply, on a one-time basis, to the near-term and submitted applications, and issued SLRs.

The Appendix to this OMB Supporting Statement presents the six major types of changes that appear in Table B-1. The following four out of six types of changes would result in an increase in burden:

- **New Category 1 Issue.** A new Category 1 issue is an issue not previously evaluated in the 2013 LR GEIS and not currently listed in Table B-1. For this issue, the license renewal applicant will incur an increase in burden because it must include within its environmental report an assessment of any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware (see 10 CFR 51.53(c)(3)(iv)). The NRC will incur an increase in burden to consider and evaluate this information during its plant-specific environmental review.
- **New Category 2 Issues.** New Category 2 issues are issues not previously evaluated in the 2013 LR GEIS and not listed in Table B-1 of the current rule. For each new Category 2 issue, the applicant will incur an increase in burden because it must conduct a plant-specific assessment of the potential environmental impacts related to that issue and include it in its environmental report. In addition, for each new Category 2 issue, the applicant must include in its environmental report a discussion of possible actions to mitigate any adverse impacts associated with license renewal. Similarly, the NRC will incur an increase in burden to evaluate and assess the environmental impacts of each new Category 2 issue during its plant-specific environmental review.
- **Consolidation of an Existing Category 1 Issue into an Existing Category 2 Issue.** This is an existing issue that was determined to be Category 1 in the 2013 LR GEIS and having a similar scope as an existing Category 2 issue, has been evaluated and consolidated into the Category 2 issue. This type of change would result in an increase burden because the applicant would be required to conduct a plant-specific assessment of the potential environmental impacts within the scope previously covered by the existing Category 1 issue that is being consolidated into a Category 2 issue and provide this information in a supplemental submittal. Similarly, the NRC will incur an increase in burden to evaluate and assess the environmental impacts of the issue during its plant-specific environmental review.
- **Dividing an Existing Category 2 Issue into Three Category 2 Issues.** For each separate Category 2 issue, the applicant must conduct a plant-specific assessment of the potential environmental impacts related to that issue and include it in its

environmental report, as applicable. In addition, for each issue, the applicant must include in its environmental report a discussion of possible actions to mitigate any adverse impacts associated with license renewal. This change would result an increase in burden because the applicant would be required to conduct a plant-specific assessment and describe the results of each assessment separately for each issue, as applicable. However, because the scope of the resulting three Category 2 issues, when combined, is essentially the same as the scope of the existing Category 2 issue, the increase in burden would be approximately 50% less than that for new Category 2 issues. Similarly, the NRC will incur an increase in burden to evaluate and assess the environmental impacts of each separate Category 2 issue, as applicable, during its plant-specific environmental review. The increase in burden for the NRC is also approximately 50% less than that for new Category 2 issues.

The remaining two types of changes would not result in an increase in burden for near-term and submitted applications, and issued SLRs:

- Existing Issue Category Change from Category 2 to Category 1. This is an issue that was determined to be Category 2 in the 2013 LR GEIS and has been evaluated and determined to be Category 1 in the revised LR GEIS. This type of change results in no change in burden because each applicant would have already conducted an assessment of the potential environmental impacts related to that issue on a plant-specific basis, and therefore, would not be required to conduct an additional assessment. Similarly, there will be no additional burden for the NRC because the potential environmental impacts related to that issue would have already been analyzed in the LR GEIS. However, consistent with the requirements of 10 CFR 51.53(c)(3)(iv), an applicant is still required to describe in its environmental reports any “new and significant information” of which it is aware. The NRC would then consider and evaluate this information during its plant-specific environmental review.
- Consolidation of One or More Existing Category 1 Issues into an Existing Category 1 Issue. This is an existing issue that was determined to be Category 1 in the 2013 LR GEIS; that issue was evaluated and consolidated with similar aspects of one or more Category 1 issues which affect the same environmental resources. This type of change would result in no change in burden to each applicant and the NRC because it would not require applicants to conduct any additional assessments of the potential environmental impacts beyond what was already provided in the SLR application. However, consistent with the requirements of 10 CFR 51.53(c)(3)(iv), an applicant is still required to describe in its environmental reports any “new and significant information” of which it is aware. The NRC would then consider and evaluate this information during its plant-specific environmental review.

In addition to the above changes, the proposed rule makes several editorial and clarification changes in Table B-1. Several existing Category 1 and Category 2 issues were renamed for clarity purposes; such changes did not affect the scope of the issues. In addition, the finding column of Table B-1 was revised for several existing Category 1 and Category 2 issues, to clarify the scope of issues and resources considered and for consistency with similar environmental issues. Such changes did not change the recordkeeping or reporting burden because the number of issues, the issue Category, and the scope of issues remained the same.

The proposed rule also makes various conforming changes to the provisions of 10 CFR 51.53(c)(3)(ii) and amends 10 CFR 51.95, “Postconstruction Environmental Impact Statements,”

to clarify the reference to the current revision of the LR GEIS. Furthermore, the proposed rule amends Appendix B to Subpart A to clarify the applicability to both initial LR and one term of SLR.

## A. JUSTIFICATION

### 1. Need for and Practical Utility of the Collection of Information

NEPA directs that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in NEPA, and (2) all agencies of the Federal Government shall comply with the procedures in Section 102(2) of NEPA except where compliance would be inconsistent with other statutory requirements. The regulations in Subpart A of 10 CFR Part 51 implement Section 102(2) of NEPA in a manner that is consistent with the NRC's domestic licensing and related regulatory authority under the AEA, the Energy Reorganization Act of 1974, as amended, the Uranium Mill Tailings Radiation Control Act of 1978, and the Commission's announced policy to take account of the regulations of the Council of Environmental Quality published November 29, 1978 (43 FR 55978–56007). In order to conduct the environmental (NEPA) review of licensing actions, the NRC requires applicants to collect recent environmental information about their nuclear power plants.

The NRC's regulations in 10 CFR 51.53(c) require each applicant to prepare and submit a report entitled "Applicant's Environmental Report – Operating License Renewal Stage," with the applicant's license renewal application. The information provided by the applicant in the environmental report helps the NRC meet its regulatory obligations consistent with Section 102(2) of NEPA. In the environmental report, the applicant provides information about the nuclear power plant, the environment that could be affected by license renewal, and an assessment of the environmental impacts from issues identified as Category 2 issues in Table B-1. The applicant is also required to address alternatives to the proposed action and provide any new and significant information.

After accepting the license renewal application and environmental report, the NRC prepares a draft supplemental EIS (SEIS) to the LR GEIS that evaluates the environmental impact of plant-specific (Category 2) issues, alternatives to the proposed action, along with the consideration of any new and significant information for Category 1 and/or for any newly identified issues. The draft SEISs are made available for public comment. After considering public comments, the NRC prepares and issues a final SEIS. The final SEIS and the LR GEIS (NUREG-1437), together, serve as the requisite NEPA analysis for license renewal environmental reviews.

### 2. Agency Use of Information

The NRC evaluates the information provided in the license renewal application and environmental report and prepares a draft SEIS to analyze plant-specific issues (Category 2), any new and significant information for generic issues (Category 1), and possibly, any previously unidentified issues. After considering public comments, the NRC prepares and issues a final SEIS. The final SEIS and the LR GEIS (NUREG-1437), together, serve as the requisite NEPA analysis for any given license renewal application.

3. Reduction of Burden Through Information Technology

The NRC has issued [Guidance for Electronic Submissions to the NRC](#), which provides direction for the electronic transmission and submittal of documents to the NRC. Electronic transmission and submittal of documents can be accomplished via the following avenues: The Electronic Submittals application, which is available from the NRC's "Electronic Submittals" Web page, by Optical Storage Media (OSM) (e.g., CD-ROM, DVD), by facsimile, or by e-mail. The Electronic Submittals application allows electronic transmission of information to the NRC pertaining to licensing actions, associated hearings, and other regulatory matters.

It is estimated that 100 percent of the license renewal applications will be submitted to the NRC electronically.

4. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available. There is no duplication of requirements.

5. Effort to Reduce Small Business Burden

This information collection does not affect small businesses.

6. Consequences to Federal Program or Policy Activities if the Collection is Not Conducted or is Conducted Less Frequently

The environmental information collected by the applicant and included in the environmental report is affected by the proposed rule changes to Table B-1. The information provided in the environmental report is used by the NRC to conduct an assessment of the environmental impacts that could result from the renewal of the operating license and the continued operation of the nuclear power plant. The NRC then completes the environmental review and documents the results in a plant-specific SEIS, in compliance with NEPA.

Without the information collected as a result of the proposed changes in Table B-1, the NRC could not complete the environmental review in a timely manner which could delay the overall completion of a license renewal review. Delays in the environmental review process likely would increase the cost burden to both industry and to the NRC because additional time would be required for the licensee to collect and provide missing information to the NRC and for the NRC to conduct supplemental analyses on the additional information provided.

7. Circumstances That Justify Variation from OMB Guidelines

There is no variation from OMB guidelines.

8. Consultations Outside the NRC

Opportunity for public comment on the information collection requirements for this clearance package has been published in the *Federal Register*.

## 9. Payment or Gift to Respondents

Not applicable.

## 10. Confidentiality of the Information

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b). Information considered confidential or proprietary is not normally requested.

## 11. Justification for Sensitive Questions

Not applicable.

## 12. Estimated Industry Burden and Burden Hour Cost

### a. Reporting Burden and Cost

The information required by the environmental impact analysis for renewal of nuclear power plant operating licenses will be collected once from each applicant for either an initial or subsequent license renewal application.

- For all future initial and SLR applicants (those applications that are received after the effective date of the final rule), the estimate of burden addresses the burden associated with the submittal of the entire environmental report, including evaluation of all environmental issues described in the revised Table B-1. Table 1 below shows the estimated annual reporting burden for future SLR applicants (applications received after the effective date of the final rule) for this information collection during the 3-year period following the effective date of the final rule (i.e., June 2024 – May 2027). All anticipated applicants during this period are SLR applicants; the NRC estimates to receive 15 SLR applications during 3-year period following the effective date of the final rule, or 5 applications annually, on average. The NRC does not expect to receive any initial LR applications during June 2024 – May 2027, therefore, there is no reporting burden for this group of licensees.
- For licensees with near-term and submitted applications, and issued SLRs, the estimate of burden addresses only the burden associated with the licensees having to prepare supplemental submissions to address changes to the existing rule. Table 2 below shows the estimated annual reporting burden for the one-time application supplements submitted by licensees with near-term and submitted applications, and issued SLRs applications for this information collection during the 3-year period following the effective date of the final rule. The NRC estimates to receive 10 supplemental submissions to the near-term and submitted applications, and issued SLRs during the 3-year period following the effective date of the final rule, or 3.3 applications annually, on average.

The net reporting burden (annualized) for this proposed rulemaking is 64,695 hours and 5 responses for future SLR applicants and 6,372 hours and 3.3 responses for licensees with near-term and, submitted applications, and issued SLRs, for a total of 71,067 hours and 8.3 responses. The cost associated with this burden is \$18,761,550 for future SLR



applicants and \$1,847,880 for licensees with near-term and submitted applications, and issued SLRs, for a total of \$20,609,430 (71,067 hours x \$290/hour).

b. Recordkeeping Burden and Cost

Recordkeeping requirements are not specified in 10 CFR Part 51.

13. Estimate of Other Additional Costs

There are no additional costs.

14. Estimated Annualized Cost to the Federal Government

For licensees with near-term and submitted applications, and issued SLRs, the estimated cost to the NRC addresses only the cost associated with the review of supplemental information provided by applicants to address the amendments to the existing rule that affect the information collection requirements. For future SLR applicants, the estimated cost to the NRC addresses the cost associated with review of the entire environmental report, including evaluation of all environmental issues described in the revised Table B-1. The NRC does not expect to receive any initial LR applications during June 2024 – May 2027, therefore, there is no cost to the NRC for this group of licensees.

)Table 3 below shows the one-time cost to the NRC associated with the review of future SLR applications for this information collection during the 3-year period following the effective date of the final rule (i.e., June 2024 – May 2027). Table 4 below shows the one time-cost to the NRC associated with the review of near-term and submitted applications, and issued SLRs for this information collection during the 3-year period following the effective date of the final rule.

The cost to the Federal government for the information collections associated with the proposed rulemaking is \$8,534,700 for future SLR applicants (29,430 hours x \$290/hr) and \$843,900 for licensees with near-term and submitted applications, and issued SLRs (2,910 hours x \$290/hr), for a total of \$9,378,600 (32,340 hours x \$290/hour).

The overall cost to the Federal government for this Information collection has increased from \$18,789,824 to \$28,168,424 (18,789,824 + 9,378,600).

15. Reasons for Change in Burden

The proposed rule would increase the burden for this information collection from 68,933 to 140,000, an increase of 71,067 hours. The number of responses to the Part 51 information collection would increase from 19 to 27.3, an increase of 8.3 responses. The information collection burden increase for applicants for renewal of nuclear power plant operating licenses is primarily driven by the changing landscape in the industry and the revised estimates for the number of respondents to this information collection. The NRC staff expects that there will be no applications for initial LRs received during this period, increases to the burden imposed on these applicants will be included in the next renewal of the Part 51 clearance.

The current OMB clearance for 10 CFR Part 51 estimates the industry burden for license renewal applications based on the expected submission of SLR applications during 2023-2024. Therefore, the NRC staff estimated that 3 license renewal applications would be received during the current clearance period or 1 application annually, on average. The NRC staff calculated the industry burden per response to be 12,300 hours, or \$3,542,400 at a labor rate of \$288/hour. This estimate was based on the best available information at the time of the submission of the clearance renewal in April 2022.

For the proposed rule, the NRC staff revised the estimated number of respondents to reflect the latest information known by the NRC on future SLR applications. The NRC now expects that there will be 15 future SLR applications (all submitted after the effective date of the final rule) and 10 near-term and submitted applications, and issued SLRs. Therefore, the NRC staff concluded that the 15 future SLR applications were not previously included in the estimated burden associated with information collections for license renewal applications. The increase in burden is divided between the future SLR applicants and licensees with near-term and submitted applications, and issued SLRs as follows:

- For future SLR applicants, the estimated burden of 64,695 hours for reporting (annualized) represents the total burden for the licensees to prepare and submit an environmental report as required in 10 CFR 51.53(c) and evaluating all issues described in the revised Table B-1. When divided by 5 responses per year on average, this burden represents an estimated 12,939 hours per respondent. In the current information collections clearance for 10 CFR Part 51, the estimated burden for license renewal applications is 12,300 hours per response. Therefore, the incremental change in burden is 639 hours per application for a future SLR.
- For licensees with near-term and submitted applications, and issued SLRs, the estimated total annual burden of 6,372 hours for one-time reporting represents an increase in reporting requirements to include additional information in the applicant's supplemental submittal to address changes made to Table B-1 (e.g., new Category 1 and 2 issues, consolidation of Category 1 issues into Category 2 issues, and dividing an existing Category 2 issue into multiple Category 2 issues). When divided by 3.3 responses per year on average, this burden represents an estimated 1,931 hours per near-term and submitted applications, and issued SLRs.

#### 16. Publication for Statistical Use

None.

#### 17. Reason for Not Displaying the Expiration Date

The reporting requirements for this information collection are associated with regulations and are not submitted on instruments such as forms or surveys. For this reason, there are no data instruments on which to display an OMB expiration date. Further, amending the regulatory text of the CFR to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

#### 18. Exceptions to the Certification Statement

None

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

**Table 1**  
**Reporting Burden (Annualized) – Industry – Future License Renewal Applicants<sup>2</sup> (June 2024 – May 2027)<sup>3</sup>**

<b>Table B-1 Issues</b>	<b>Number of Respondents</b>	<b>Number of Issues per Respondent</b>	<b>Total Number of Issues</b>	<b>Burden Hours per Response</b>	<b>Total Annual Burden Hours</b>	<b>Cost @ \$290/hour</b>
Category 1 Issues	5	59	295	95	28,025	\$8,127,250
Category 2 Issues (excluding issues resulting from subdividing an existing Category 2 issue into 3 separate issues)	5	17	85	381	32,385	\$9,391,650
Subdivided Category 2 Issues	5	3	15	254	3,810	\$1,104,900
Uncategorized Issue	5	1	5	95	475	\$137,750
<b>Total Industry Burden Increase for Future License Renewal Applicants</b>					<b>64,695</b>	<b>\$18,761,550</b>

<sup>2</sup> Future license renewal applicants are those applicants for either an initial or subsequent renewed license that submit their applications after the effective date of the final rule.

<sup>3</sup> The new estimated burden for an environmental review an operating nuclear power plant license renewal application under 10 CFR Part 51 is 12,939 hours.

**Table 2**  
**One-Time Reporting Burden (Annualized) – Industry – Near-Term and Submitted Applications, and Issued Received**  
**Subsequent License Renewals (June 2024 – May 2027)**

<b>Table B-1 Issues</b>	<b>Number of Respondents</b>	<b>Number of Issues Responses per Respondent</b>	<b>Total Issues</b>	<b>Burden Hours per Issue</b>	<b>Total Annual Burden Hours</b>	<b>Cost @ \$290/hour</b>
Groundwater quality degradation (plants with cooling ponds) (Category 2) <sup>4</sup>	0.3	1	0.3	286	85.8	\$24,882
Impingement mortality and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds) (Category 2)	3.3	1	3.3	286	943.8	\$273,702
Endangered Species Act: federally listed species and critical habitats under U.S. Fish and Wildlife jurisdiction (Category 2)	3.3	1	3.3	254	838.2	\$243,078
Endangered Species Act: federally listed species and critical habitats under National Marine Fisheries Service jurisdiction (Category 2)	3.3	1	3.3	254	838.2	\$243,078
Magnuson-Stevens Act: essential fish habitat (Category 2)	3.3	1	3.3	254	838.2	\$243,078
National Marine Sanctuaries Act: sanctuary resources (Category 2)	3.3	1	3.3	381	1257.3	\$364,617
Greenhouse gas impacts on climate change (Category 1)	3.3	1	3.3	95	313.5	\$90,915
Greenhouse change impacts on environmental resources (Category 2)	3.3	1	3.3	381	1,257.3	\$364,617
<b>Total Industry Burden Increase for Near-Term and Submitted Applications, and Issued Subsequent License Renewals</b>					<b>6,372<sup>5</sup></b>	<b>\$1,847,880</b>

<sup>4</sup> This is a consolidated issue that combines a Category 1 issue, “Groundwater quality degradation (cooling ponds in salt marshes),” with a Category 2 issue, “Groundwater quality degradation (cooling ponds at inland sites).” The salt marshes issue would affect only one applicant for a near-term subsequent license renewal. All other applicants not affected by the salt marshes issue would not be required to provide supplemental information in response to this consolidated Table B-1 issue.

<sup>5</sup> Total industry burden is rounded to the nearest whole number.

**Table 3**  
**NRC – Future License Renewal Applicants<sup>6</sup> (June 2024 – May 2027)**

<b>Table B-1 Issues</b>	<b>Total Issues Reviewed per Year</b>	<b>NRC Staff Review Time</b>	<b>Total Review Time per Year</b>	<b>Cost @ \$290/hour</b>
Category 1 Issues	295	43	12,685	\$3,678,650
Category 2 Issues (excluding issues resulting from subdividing an existing Category 2 issue into 3 separate issues)	85	174	14,790	\$4,289,100
Subdivided Category 2 Issues	15	116	1,740	\$504,600
Uncategorized Issue	5	43	215	\$62,350
<b>Total NRC Review Time for Future License Renewal Applicants</b>			29,430	\$8,534,700

---

<sup>6</sup> Future license renewal applicants are those applicants for either an initial or subsequent renewed license that submit their applications after the effective date of the final rule.

**Table 4**  
**One-Time Reporting Burden (Annualized) – NRC – Near-Term and Submitted Applications, and Issued Subsequent License Renewals (June 2024 – May 2027)**

<b>Table B-1 Issues</b>	<b>Total Issues Reviewed</b>	<b>Burden Hours per Response</b>	<b>Total Annual Burden Hours</b>	<b>Cost @ \$290/hour</b>
Groundwater quality degradation (plants with cooling ponds) (Category 2) <sup>7</sup>	0.3	131	39.3	\$11,397
Impingement mortality and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds) (Category 2)	3.3	131	432.3	\$125,367
Endangered Species Act: federally listed species and critical habitats under U.S. Fish and Wildlife jurisdiction (Category 2)	3.3	116	382.8	\$111,012
Endangered Species Act: federally listed species and critical habitats under National Marine Fisheries Service jurisdiction (Category 2)	3.3	116	382.8	\$111,012
Magnuson-Stevens Act: essential fish habitat (Category 2)	3.3	116	382.8	\$111,012
National Marine Sanctuaries Act: sanctuary resources (Category 2)	3.3	174	574.2	\$166,518
Greenhouse gas impacts on climate change (Category 1)	3.3	43	141.9	\$41,151
Greenhouse change impacts on environmental resources (Category 2)	3.3	174	574.2	\$166,518
<b>Total NRC Review Time for Near-Term and Submitted Applications, and Issued Subsequent License Renewals</b>			2,910 <sup>8</sup>	\$843,900

<sup>7</sup> This is a consolidated issue that combines a Category 1 issue, “Groundwater quality degradation (cooling ponds in salt marshes),” with a Category 2 issue, “Groundwater quality degradation (cooling ponds at inland sites).” The salt marshes issue would affect only one applicant for a near-term subsequent license renewal. The NRC would be required to evaluate supplemental information provided by only one applicant for a near-term subsequent license renewal in response to this consolidated Table B-1 issue.

<sup>8</sup> Total NRC review time is rounded to the nearest whole number.

## Appendix

### Proposed Substantive Revisions to Table B-1 in Appendix B to Subpart A to 10 CFR Part 51

Issue #	Issue	Type of Change	Proposed Revision
25	Groundwater quality degradation (plants with cooling ponds) (Category 2)	Consolidation of an Existing Category 1 Issue into an Existing Category 2 Issue	This is a consolidated issue which combines an existing Category 1 issue, "Groundwater quality degradation (cooling ponds in salt marshes)" with an existing Category 2 issue, "Groundwater quality degradation (cooling ponds at inland sites)." The salt marshes issue only affected two nuclear power plants, but the consolidated issue reflects lessons learned and knowledge gained and new and significant information from a recent subsequent license renewal review that showed that cooling ponds can impact groundwater and surface water in ways not previously considered. This consolidated issue considers the environmental effects of saltwater intrusion and encroachment on adjacent surface water and groundwater quality.
35	Impingement mortality and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds) (Category 2)	Consolidation of an Existing Category 1 Issue into an Existing Category 2 Issue	This is a consolidated issue which combines an existing Category 2 issue, "Impingement and entrainment of aquatic organisms (plants with once-through cooling systems or cooling ponds)" with the impingement component of the Category 1 issue, "Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses."
36	Impingement mortality and entrainment of aquatic organisms (plants with cooling towers) (Category 1)	Consolidation of One or More Existing Category 1 Issues into an Existing Category 1 Issue	This is a consolidated issue which combines an existing Category 1 issue, "Impingement and entrainment of aquatic organisms (plants with cooling towers)" with the impingement component of the Category 1 issue, "Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses."



Issue #	Issue	Type of Change	Proposed Revision
40	Infrequently reported effects of thermal effluents (Category 1)	Consolidation of One or More Existing Category 1 Issues into an Existing Category 1 Issue	This is a consolidated issue which combines an existing Category 1 issue, "Infrequently reported thermal impacts (all plants)" with another Category 1 issue, "Effects of cooling water discharge on dissolved oxygen, gas supersaturation, and eutrophication," and the thermal effluent component of the Category 1 issue, "Losses from predation, parasitism, and disease among organisms exposed to sublethal stresses."
47	Endangered Species Act: federally listed species and critical habitats under U.S. Fish and Wildlife jurisdiction (Category 2)	Dividing an Existing Category 2 Issue into Multiple Category 2 Issues	An existing Category 2 issue, "Threatened, endangered, and protected species and essential fish habitat" was divided into three separate issues, for clarity and consistency with the separate Federal statues and interagency consultation requirements that the NRC must consider with respect to Federally protected ecological resources. This issue aligns with the existing requirements in 10 CFR 51.53(c)(3)(ii)(E). This is the first of the three issues resulting from this change.
48	Endangered Species Act: federally listed species and critical habitats under National Marine Fisheries Service jurisdiction (Category 2)	Dividing an Existing Category 2 Issue into Multiple Category 2 Issues	An existing Category 2 issue, "Threatened, endangered, and protected species and essential fish habitat" was divided into three separate issues, for clarity and consistency with the separate Federal statues and interagency consultation requirements that the NRC must consider with respect to Federally protected ecological resources. This issue aligns with the existing requirements in 10 CFR 51.53(c)(3)(ii)(E). This is the second of the three issues resulting from this change.

Issue #	Issue	Type of Change	Proposed Revision
49	Magnuson-Stevens Act: essential fish habitat (Category 2)	Dividing an Existing Category 2 Issue into Multiple Category 2 Issues	An existing Category 2 issue, "Threatened, endangered, and protected species and essential fish habitat" was divided into three separate issues, for clarity and consistency with the separate Federal statutes and interagency consultation requirements that the NRC must consider with respect to Federally protected ecological resources. This issue aligns with the existing requirements in 10 CFR 51.53(c)(3)(ii)(E). This is third of the three issues resulting from this change.
50	National Marine Sanctuaries Act: sanctuary resources (Category 2)	New Category 2 Issue	This is a new issue added to address NRC consultation requirements under the National Marine Sanctuaries Act. Its applicability is limited to only those plants located near or otherwise likely to affect national marine sanctuaries.
66	Severe accidents (Category 1)	Existing Issue Category Change from Category 2 to Category 1	This issue has been revised from Category 2 to Category 1 and the finding revised accordingly, to reflect the fact that the probability-weighted consequences of severe accidents remain small and to reflect the knowledge gained that severe accident mitigation alternatives do not warrant further plant-specific analysis because the demonstrated reductions in population dose risk and continued severe accident regulatory improvements substantially reduce the likelihood of finding cost-effective significant plant improvements. Although the NRC does not anticipate any license renewal applications for nuclear power plants for which a previous severe accident mitigation design alternative or SAMA analysis has not been performed, alternatives to mitigate severe accidents must be considered for all plants that have not considered such alternatives and would be the functional equivalent of a Category 2 issue requiring site-specific analysis.

Issue #	Issue	Type of Change	Proposed Revision
73	Greenhouse gas impacts on climate change (Category 1)	New Category 1 Issue	This is a new Category 1 issue that evaluates the greenhouse gas impacts on climate change associated with continued operations and refurbishment. The issue of greenhouse gas emissions was not considered in the 2013 LR GEIS and is not listed in the current Table B-1. This issue is identified to improve the efficiency of reviews and to reflect analyses already being performed by the NRC staff in environmental reviews consistent with the Commission direction in CLI-09-21 dated November 3, 2009. The NRC staff evaluated the impacts of greenhouse gas emissions on climate change from continued operations during the license renewal term (initial or subsequent) and any refurbishment activities and concluded that it would be small for all nuclear power plants. Therefore, this is a new Category 1 issue.
74	Climate change impacts on environmental resources (Category 2)	New Category 2 Issue	This is a new Category 2 issue that evaluates the impacts of climate change on environmental resources that are also affected by continued nuclear power plant operations and any refurbishment during the license renewal term. The issue of climate change impacts was not identified as either a generic or site-specific issue in the 2013 LR GEIS. The impacts of climate change on environmental resource that are affected by continued nuclear power plant operations and refurbishment during the license renewal term (initial or subsequent) are location-specific and cannot be evaluated generically. The effects of climate change can vary regionally and climate change information at the regional and local scale is necessary to assess trends and the impacts on the human environment for a specific location. This issue is identified to improve the efficiency of reviews, lessons learned from plant-specific reviews, public comments, and to reflect analyses already being performed by NRC staff in environmental reviews consistent with Commission direction in CLI-09-21 dated November 3, 2009. The NRC would need to perform a site-specific impact assessment as part of each license renewal environmental review. Therefore, this is a Category 2 issue.

10 CFR PART 51 GUIDANCE DOCUMENTS

Title	Agencywide Documents Access and Management System Accession Number
Draft Regulatory Guide DG-4027, "Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications"	ML22165A072
Draft NUREG-1555, Supplement 1, Revision 2, "Standard Review Plants for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal"	ML22165A070