

FINAL SUPPORTING STATEMENT
FOR
10 CFR PART 51

"ENVIRONMENTAL PROTECTION REGULATIONS FOR DOMESTIC LICENSING AND
RELATED REGULATORY FUNCTIONS"

(3150-0021)

EXTENSION

DESCRIPTION OF THE INFORMATION COLLECTION

The Nuclear Regulatory Commission (NRC) regulations pertaining to environmental protection for domestic licensing and related regulatory functions are found in 10 CFR Part 51. The regulations require NRC licensees to submit certain information to the NRC if they seek exemptions from the requirements of the regulations or wish to have proprietary information withheld from public disclosure. In addition, each applicant or petitioner for rulemaking shall submit with its application one signed original environmental report.

The potential respondents to Part 51 information collections include:

- Applicants for a power reactor operating licenses.
- Applicants for research and test reactor operating licenses.
- Applicants for manufacturing licenses.
- Applicants for materials licenses.
- Applicants for early site permits or design certifications for power reactors.
- Power reactor licensees requesting to renew or amend their licenses or obtain an exemption.
- Applicants for a license amendment approving a license termination plan or decommissioning plan
- Applicants for a license or license amendment to store spent fuel at a nuclear power reactor after expiration of the operating license for the nuclear power reactor
- Non-power reactor licensees seeking to renew their licensees for research reactor power upgrades, or decommissioning requests.
- Members of the public petitioning for rulemaking

A detailed description of the requirements in Part 51 is included at the end of this supporting statement, along with a list of guidance documents issued by the NRC.

A. JUSTIFICATION

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

10 CFR Part 51 specifies the information to be provided by applicants and licensees so that the NRC can make determinations necessary to adhere to the policies, regulations, and public laws of the United States, which are interpreted and administered in accordance with the provisions set forth in the National Environmental Policy Act (NEPA) of 1969, as amended. 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 Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, the Uranium Mill Tailings Radiation Control Act of 1978, and the Commission's announced policy to voluntarily take account of the regulations of the Council of Environmental Quality published November 29, 1978 (43 FR 55978-56007), subject to certain conditions.

2. Agency Use of Information

The NRC will use the information to make determinations necessary to protect the environment and to adhere to the policies, regulations, and public laws of the United States that are to be interpreted and administered in accordance with the policies set forth in NEPA.

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 Information Exchange (EIE) process, 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. It is estimated that approximately 99% of the potential responses are filed electronically. (The exception to electronic submission is that a few members of public send their comments on agency environmental actions through the mail).

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

This information is submitted by applicants and licensees when they request that the NRC make a decision on an action. As part of its evaluation of the request, the agency is required to make a determination consistent with the provisions of NEPA. If this information were not submitted, by the applicants and licensees, the NRC's environmental reviews would be more challenging, more time consuming, and require more fee-billable resources.

7. Circumstances That Justify Variation from OMB Guidelines

The NRC complies with OMB Guidelines. No variances are needed.

8. Consultations Outside the NRC

Opportunity for public comment on the information collection requirements for this clearance package was published in the *Federal Register* on February 13, 2019 (84 FR 3830). Additionally, NRC staff contacted seven potential respondents via email in the areas of operating reactor owner/operator licensee's representatives from Arizona Public Service Company, Entergy Operations, Inc., Exelon Generation Company, LLC, Florida Power & Light Co., NextEra Energy Seabrook, LLC, Tennessee Valley Authority, and Virginia Electric and Power Company. Of the companies contacted, Michael P. Gallagher of Exelon Generation Company, LLC responded with the following comments in response to four questions posed in the *Federal Register* Notice:

Comment 1

The commenter recommended that in the description of the information collection in the supporting statement, the list of potential respondents to the information collection should be expanded to include applicants seeking license termination or a license amendment to store spent fuel at a power reactor after expiration of its operating license under 51.53(d) and materials licensees submitting environmental reports under 51.60(b).

NRC staff response

The list of potential respondents in the Description of the Information Collection has been updated. Although they were not included in the description, these respondents were included in burden estimates included in the draft supporting statement and supplemental burden spreadsheet.

Comment 2

The commenter requested staff verify the 15,990 hours total reporting burden estimate for post-construction environmental reports in Table 1 10 CFR Part 51 Annual Reporting Burden for license renewals.

NRC staff response

The accompanying Table 1, 10 CFR Part 51 Annual Reporting Burden indicates that the burden per response estimate is 12,300 hours per respondent per year. With four applicants anticipated during the clearance period, the annual number of respondents is estimated to be 1.3, making the total annual burden estimate 15,990 hours annually (12,300 hours x 1.3 respondents). The wording in item #12 has been updated so that it is clear that the burden listed for each requirement is the total burden during the clearance period, and not the burden for a single entity to submit the report.

Comment 3

Mr. Gallagher observed that reviews by NRC staff of recent Exelon Generation power reactor license renewal applications appears to be approximately half of the annual burden estimate assumed for NRC in the draft supporting statement.

NRC staff response

In response, the estimated burden for such reviews is based on many years of collaboration with NRC stakeholders. Burden estimates take into account a number of factors, including, but not limited to: (1) the technical complexity of the site and issues involved, (2) the level of completeness of the information received by the staff, and (3) the level of comments received and if hearing activities are involved. While the estimates reflect uncertainty in projecting the cost of a review; the NRC staff strive to enhance the efficiency and effectiveness of its reviews and still maintain high quality technical standards. The NRC staff are always open to feedback from our stakeholders.

Comment 4

The commenter asked whether the supporting statement should be amended to include burden for National Environmental Policy Act (NEPA) activities in the context of Post Shutdown Decommissioning Activities Reports for power reactors.

NRC staff response

Among other requirements, Post Shutdown Decommissioning Activities Reports must contain a discussion that provides the reasons for concluding that the environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate previously issued environmental impact statements. This requirement is in 10 CFR 50.82(a)(4)(i). This information collection is covered under the Part 50 clearance (3150-0011). Part 51 does not contain a requirement for Post Shutdown Decommissioning Activities Reports and therefore burden estimates are not included for these reports.

Comment 5

The commenter recommended that the NRC consider developing clarified environmental guidance for applicant preparation and NRC staff review of Post Shutdown Decommissioning Activities Reports.

NRC staff response

The NRC is currently pursuing this activity. The staff has presented to the Commission proposed Post Shutdown Decommissioning Activities Report guidance for applicants and for NRC staff. Note that Post Shutdown Decommissioning Activities Reports are required under 10 CFR Part 50.82 and are covered under the OMB clearance for Part 50 (3150-0011), rather than the clearance for 10 CFR Part 51.

No other comments were received from the public. In summary, staff considered interactions with licensees and has not received any other information indicating that the burden is under or overestimated.

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

Part 51 information collections do not involve sensitive or private information.

12. Estimated Industry Burden and Burden Hour Cost

The estimated annual reporting burden under Part 51 is shown on Table 1, based on the average number of annual submissions that are anticipated for different types of licensees and applicants. The total estimated annual burden is 30,462 hours, at a cost of \$8,377,050 (30,462 hours x \$275/hr).

The following lists the number and type of applications that are anticipated to require environmental reviews during the 3 year clearance period and the total annual burden associated with each reporting requirement. The annual number of applications was calculated by dividing the number of applications anticipated over the three-year clearance period by 3. For example, 1 application over the 3-year period would equal 0.3 applications annually.

- Eight exemption requests (2.6 annually) for operating reactors (13 hrs/yr);
- No requests to withhold proprietary information from disclosure for operating reactors.
- Fifteen license amendments (5 annually) for operating reactors (100 hrs/yr);
- One application (0.3 annually) for a combined operating license (COL) for a new nuclear reactor (3,090 hrs/yr);
- No construction permit applications for a new nuclear reactor;
- No amended design certification applications for a new nuclear reactor;
- One early site permit application (0.3 annually) for a new nuclear reactor (3,420 hrs/yr);
- Four design certifications or design certification renewals (1.3 annually) for a new nuclear reactor (78 hrs/yr);
- No manufacturing license applications for new nuclear reactors;
- Four license renewal applications (1.3 annually) for commercial power reactors (15,990 hrs/yr);
- One application (0.3 annually) for research and test reactors (18 hrs/yr);
- Fourteen Nuclear Materials licensing actions (4.6 annually) (7,673 hrs/yr); and
- Three petitions (1 annually) for rulemaking (80 hrs/yr).

Recordkeeping requirements are not specified in Part 51. For new reactors submitting environmental reports under Part 51.50, there is a requirement for applicants to identify the procedures for reporting and keeping records of environmental data. As part of the licensing process, should any of the applicants' procedures be included as environmental conditions in the license, the burden for recordkeeping is captured under 50.36b, Environmental Conditions (3150-0011).

The \$275 hourly rate used in the burden estimates is based on the Nuclear

Regulatory Commission's fee for hourly rates as noted in 10 CFR 170.20 "Average cost per professional staff-hour." For more information on the basis of this rate, see the Revision of Fee Schedules; Fee Recovery for Fiscal Year 2018 (83 FR 29622, June 25, 2018).

13. Estimate of Other Additional Costs

There are no additional costs.

14. Estimated Annualized Cost to the Federal Government

The staff has developed estimates of annualized costs to the Federal Government related to the conduct of this collection of information. These estimates are based on staff experience and subject matter expertise and include the burden needed to review, analyze, and process the collected information and any relevant operational expenses. The staff reviews vary in complexity (and in cost to the government) depending on the type of proposed action and the type of required NRC response (i.e., EA or EIS). Cost estimates are shown on Table 2 and are based on the anticipated number of annual submissions. The total annual NRC staff time to review submissions is estimated to be 32,632.6 hours at a cost of \$8,973,965 (32,632.6 hrs x \$275/hr).

15. Reasons for Change in Industry Burden or Cost

The overall annual burden is estimated to decrease from 48,103.8 hours to 30,462 hours, a decrease of 17,641.8 hours. The number of responses has also decreased, from 49 responses in the previous submission to an estimated of 17 responses for this clearance period, a decrease of 32 responses.

The decrease in burden is due to a projected decrease in the number of licensees submitting applications, renewals, and amendments that require environmental reports under Part 51. Estimates of the number of applications renewals, and amendments are based on information about projected submissions that has been provided by industry¹, staff experience, and trends showing a reduction in submissions.

The NRC staff also anticipates a decrease in the number of exemption requests submitted based on staff knowledge of the industry and submission trends. The estimated number of ERs submitted for license amendments has decreased from 25 to 5 annually, a decrease of 20 responses. Although ERs for license amendments are relatively low burden (at 20 hours per response), this change significantly contributed to the overall decrease in responses.

Annual burden estimates are expected to decrease from the previous burden estimates by the following:

- Combined operating license applications for a new nuclear reactor (-7,210 hrs/yr);

¹ See clearance 3150-0228, "Voluntary Reporting of Planned New Reactor Applications"

- Construction permit applications for a new nuclear reactor (-6,968 hrs/yr);
- Early site permit applications for a new nuclear reactor (-4,218 hrs/yr);
- Design Certification applications (-1.8 hrs/yr)
- License amendments for operating reactors (-400 hrs/yr);
- Exemption requests for operating reactors (-27 hrs/yr);
- Requests to withhold proprietary information from disclosure for operating reactors (-10 hrs/yr).
- Applications for research and test reactors (-162 hrs/yr); and
- Nuclear Materials licensing actions (-2,335 hrs/yr).

NRC staff anticipates a small increase in the number of respondents submitting an environmental report for a license renewal for operating reactors. In the last clearance period, staff estimated receiving 3 over the clearance period (1 annually), whereas in the current clearance, staff estimates 4 will be submitted (1.3 annually). Burdens are expected to increase from the previous burden estimates by the following amounts:

- License renewal applications for commercial power reactors (3,690 hrs/yr);

In addition, the fee rate has changed from \$279/hr. to \$275/hr.

16. Publication for Statistical Use

NRC does not publish information submitted in accordance with 10 CFR Part 51 for statistical use.

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

There are no exceptions.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

DESCRIPTION OF PART 51 INFORMATION COLLECTION REQUIREMENTS

Section 51.6 requires that persons who wish to seek an exemption to requirements in Part 51 submit an application for exemption. The Commission may also grant an exemption to requirements in Part 51 that it determines are authorized by law and in the public interest, even in the absence of a submittal. Exemption requests require discussion of whether the proposed activity will give rise to a significant adverse impact on the environment and the nature and extent of such impacts. 10 CFR 50.12 discusses the regulatory requirements necessary for specific exemption requests in the nuclear reactor context. Other regulations exist which discuss such requirements in other contexts, such as materials licensing.

Section 51.16(b) requires that persons who wish to have proprietary information withheld from public disclosure submit a request justifying the withholding pursuant to 10 CFR 2.390. 10 CFR 2.390(b) provides specific procedures that must be followed by anyone submitting a document to the NRC who seeks to have a document, or a portion of it, withheld from public disclosure because it contains trade secrets, privileged, or confidential commercial or financial information. The information required by 10 CFR 2.390 is needed by NRC to determine if the applicant/licensee's reasons are valid and if the information qualifies for exemption from disclosure. The NRC will promptly determine whether the justification supports a finding that the information is qualified to be tracked as proprietary. Should staff determine the request to be justified, disclosure is withheld. Should staff determine the request to be unjustified, the applicant/licensee is notified.

Section 51.41 allows the Commission to require an applicant for a permit, license, or other form of permission, or amendment to or renewal of a permit, license, or other form of permission, or a petitioner for rulemaking, to submit such information to the Commission as may be useful in aiding the Commission in complying with section 102(2) of NEPA.

Section 51.45(a) requires that certain persons submit environmental information and environmental reports (ERs), respectively. These persons may be applicants for initial or renewal permits, licenses, or other forms of permission; or petitioners for rulemakings. The ERs are submitted to NRC for its use in preparing an Environmental Assessment (EA) or Draft Environmental Impact Statement (DEIS). Subsequent to the receipt of public comments on the DEIS, NRC staff prepares a Final Environmental Impact Statement (FEIS). An Environmental Impact Statement (EIS) documents the staff's detailed consideration to the environmental impacts associated with construction, initial operation, or continued operation of a proposed facility or complex cases for decommissioning materials licensees. Environmental Impact Statements also document the staff's assessment of such impacts within the framework of a range of reasonable alternatives. Without the information provided in the ER, NRC cannot evaluate environmental impacts or prepare EAs, DEISs or FEISs as required by Section 102(2) of NEPA and 10 CFR Part 51.

Section 51.45(b) requires that the ER contain a description of the proposed action, a statement of its purposes, a description of the environment affected, and a discussion of the following considerations: (1) the impact of the proposed action on the environment, (2) any adverse environmental effects that cannot be avoided should the proposal be implemented, (3) alternatives to the proposed action, (4) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (5) any irreversible and irretrievable commitments of resources that would be involved in the proposed action, if implemented.

Section 51.45(c) requires that the ER include an analysis that considers and balances the environmental effects of the proposed action, the environmental impacts of alternatives to the proposed action, and alternatives available for reducing or avoiding adverse environmental effects. Except for ERs prepared for nuclear power reactors at the license renewal stage, the analysis in the ER should also include consideration of the economic, technical, and other benefits and costs of the proposed action and of alternatives. ERs prepared for nuclear power reactors at the license renewal stage need not include discussion of certain issues. These issues include the economic or technical benefits and costs of either the proposed action or alternatives except insofar as such benefits and costs are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation. Other issues not related to the environmental effects of the proposed action and alternatives need not be included in ERs.

Section 51.49 (Environmental Report - Limited Work Authorization (LWA)) requires LWA applicant to submit an ER containing certain specified information. Paragraphs (a) and (b), which apply to applicants submitting a complete or two-part application, require the applicants to submit an environmental report describing activities conducted under the LWA, need to conduct those activities, description of environmental impacts, mitigation measures imposed, and a discussion of reasons for rejecting other mitigation measures that could further reduce environmental impacts. Paragraph (c) describes the contents of the environmental report when the request for the LWA is part of an ESP application. Paragraph (d) describes the contents of the environmental report when the LWA request is submitted by an ESP holder, and paragraph (e) establishes a limited exception from the information required by paragraphs (a) and (b) to be submitted in the environmental report. Paragraph (f) requires for all applications containing a LWA request, that the environmental report separately evaluate the environmental impacts and the proposed alternatives to the activities proposed to be conducted under the LWA. This information is needed by the NRC to prepare in parallel the Environmental Impact Statement (EIS) for the LWA activities and a supplemental EIS for the underlying construction permit or combined license, or a complete EIS at the LWA stage.

Section 51.50 (Environmental Report - Construction Permit Stage) requires that an applicant for a permit to construct a production or utilization facility, that is within the purview of Section 51.20, submit information specified in Sections 51.45, 51.51, and 51.52.

Section 51.51 (Uranium Fuel Cycle Environmental Data - Table S-3) requires that every ER prepared for the construction permit stage of a light-water-cooled nuclear power reactor, and submitted on or after September 4, 1979, shall take Table S-3, Table of Uranium Fuel Cycle Environmental Data, as the basis for evaluating the contribution of the environmental effects of uranium mining and milling, the production of uranium hexafluoride, isotopic enrichment, fuel fabrication, reprocessing of irradiated fuel, transportation of radioactive materials, and management of low-level wastes and high-level wastes related to uranium fuel cycle activities to the environmental costs of licensing the nuclear power reactor. Table S-3 shall be included in the environmental report and may be supplemented by a discussion of the environmental significance of the data set forth in the table as weighed in the analysis for the proposed facility.

Section 51.52 (Environmental Effects of Transportation of Fuel and Waste - Table S-4) requires that every ER prepared for the construction permit stage of a light-water-cooled nuclear power reactor, submitted after February 4, 1975, shall contain a statement concerning transportation of fuel and radioactive wastes to and from the reactor. That statement shall

indicate that the reactor and this transportation either meet all of the conditions in paragraph (a) of this section or meet all of the conditions in paragraph (b) of this section.

Section 51.53(a) (Post-Construction Environmental Reports) allows that an ER may incorporate, by reference, any information contained in a prior ER or supplement thereto that relates to the production or utilization facility or any information contained in a final environmental document previously prepared by the NRC staff that relates to the production or utilization facility.

Section 51.53(b) requires that an applicant submit supplemental information to the ER with the application for an operating license. The applicant only needs to discuss matters described in Sections 51.45, 51.51, and 51.52 to the extent that they differ from those described in the NRC's FEIS in connection with the construction permit. In addition, the ER is not required to include discussions of (1) the need for power, (2) alternative energy sources, (3) alternative sites for the facility, or (4) the environmental impacts of the continued storage of spent fuel as stated in Section 51.23.

Section 51.53(c) requires that an applicant for a renewal of an operating license submit an ER with the application. The ER must contain a description of the proposed action, including the applicant's plans to modify the facility or its administrative control procedures as described in accordance with Section 54.21. The ER must describe in detail the modifications directly affecting the environment or affecting plant effluents that affect the environment. In addition, the applicant shall discuss the environmental impacts of alternatives and any other matters described in Section 51.45. The ER is not required to include discussions of (1) need for power, (2) the economic costs and economic benefits of the proposed action or of alternatives to the proposed action except insofar as such costs and benefits are either essential for a determination regarding the inclusion of an alternative in the range of alternatives considered or relevant to mitigation, (3) other issues not related to the environmental effects of the proposed action and the alternatives, or (4) the environmental impacts of the continued storage of spent fuel as stated in Section 51.23.

For those applicants seeking an initial license renewal and holding an operating license, construction permit, or combined license as of June 30, 1995, the ER shall 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. The ER 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 and must include consideration of alternatives for reducing adverse impacts of Category 2 issues; the required analyses are listed in Sections 51.53(c)(ii)(A)-(M). In addition, the ER must contain any new and significant information regarding the environmental impacts of license renewal of which the applicant is aware.

Section 51.53(d) requires that an applicant for (1) a license amendment authorizing decommissioning activities at non-power reactors, (2) license termination at power reactors, or (3) a license amendment to store spent fuel at a nuclear power reactor after expiration of its operating license, submit copies of a document entitled "Supplement to Applicant's Environmental Report - Post Operating License Stage." The supplement is required to reflect any new information or significant environmental change associated with the applicant's

proposed decommissioning or license termination activities or with the applicant's proposed activities with respect to the planned storage of spent fuel.

Section 51.54 (Environmental Report - Manufacturing License) requires that an applicant for (1) a license to manufacture a nuclear power reactor or (2) amendment to a license to manufacture a nuclear power reactor seeking approval of a final design of a power reactor, submit an ER that addresses environmental matters specified in Part 52 and that contains the information specified in Section 51.45, as appropriate.

Section 51.55 (Environmental Report – Standard Design Certification) requires design certification applicants and applicants for amendments to design certifications to submit an ER, which must address the costs and benefits of Severe Accident Design Mitigation Alternatives (SAMDA) and the bases for not incorporating SAMDA in the design to be certified. The ER must address whether the design change that is the subject of the proposed amendment either renders a SAMDA previously rejected in an environmental assessment to become cost beneficial, or results in the identification of new SAMDA that may be reasonably incorporated into the design certification. The information required under Part 51 is needed to ensure the NRC meets its obligations under NEPA.

Section 51.58 (Environmental Report - Number of Copies; Distribution) requires that an applicant submit one copy of its ER. The applicant is to retain the capacity to generate copies of the report for distribution to parties and Boards in the NRC proceeding (hearing process), and for distribution to Federal, State and local officials. Submittals may be made electronically and the NRC has detailed guidance available to assist submitters.

Section 51.60(b) requires that an applicant prepare an ER for the following types of actions:

- (1) Issuance or renewal of a license or other form of permission for:
 - (i) Possession and use of special nuclear material for processing and fuel fabrication, scrap recovery, or conversion of uranium hexafluoride pursuant to 10 CFR 70.
 - (ii) Possession and use of source material for uranium milling or production of uranium hexafluoride pursuant to 10 CFR 40.
 - (iii) Storage of spent fuel in an independent spent fuel storage installation (ISFSI) or the storage of spent fuel or high-level radioactive waste in a monitored retrievable storage installation (MRS) pursuant to 10 CFR 72.
 - (iv) Receipt and disposal of radioactive waste from other persons pursuant to 10 CFR 61.
 - (v) Procession of source material for extraction of rare earth and other metals.
 - (vi) Use of radioactive tracers in field flood studies involving secondary and tertiary oil and gas recovery.
 - (vii) Construction and operation of a uranium enrichment facility.

- (2) Issuance of an amendment that would authorize or result in:
 - (i) A significant expansion of a site.
 - (ii) A significant change in the types of effluents.
 - (iii) A significant increase in the amount of effluents.
 - (iv) A significant increase in individual or cumulative occupational radiation exposure.
 - (v) A significant increase in the potential for or consequences from radiological accidents.
 - (vi) A significant increase in spent fuel storage capacity, in a license or other form of permission to conduct an activity listed in 51.60(b)(1) above.
- (3) Amendment of a license to authorize the decommissioning of an ISFSI or MRS pursuant to 10 CFR 72.
- (4) Issuance of a license amendment pursuant to Part 61 to authorize (i) closure of a land disposal site, (ii) transfer of the license to the disposal site owner for the purpose of institutional control, or (iii) termination of a license at the end of the institutional control period.
- (5) Any other licensing action for which the Commission determines an environmental report is necessary.

Section 51.61 requires that an applicant for issuance of a license for storage of spent fuel in an ISFSI or for storage of spent fuel and high-level radioactive waste in an MRS pursuant to 10 CFR 72 submit an "Applicant's Environmental Report - ISFSI License" or "Applicant's Environmental Report - MRS License," as appropriate, with its application. The ER shall contain the general information specified in 51.45 and shall address the siting evaluation factors contained in Subpart E, 10 CFR 72.

Section 51.62(a) requires that an applicant for issuance of a license for land disposal of radioactive waste pursuant to 10 CFR 61 submit an "Applicant's Environmental Report - License for Land Disposal of Radioactive Waste" with its application. The ER and any supplement to the ER may incorporate, by reference, information contained in the application or in any previous application, statement or report filed with the Commission provided that such references are clear and specific and that copies of the information so incorporated are available at the NRC Web site, <http://www.nrc.gov>, and/or at the NRC Public Document Room.

Section 51.62(b) requires that the ER contain the general information specified in Section 51.45, that the ER address the applicant's environmental monitoring program required by 10 CFR 61.12(l), 61.53, and 61.59(b), and requires that the ER be as complete as possible in the light of information that is available at the time the ER is submitted.

Section 51.62(c) requires that an applicant supplement the ER in a timely manner as necessary to permit the Commission to review, prior to issuance, amendment or renewal of a license, new information regarding the environmental impact of previously proposed activities, information regarding the environmental impact of any changes in previously proposed activities, or any significant new information regarding the environmental impact of closure activities and long-term performance of the disposal site.

Section 51.66 specifies the number of copies that are to be submitted of an environmental report, or any supplement to an environmental report, for an application for a license, an amendment or renewal of a license covered under 10 CFR Parts 30, 32, 33, 34, 35, 36, 39, 40, 61, 70 and 72.

Section 51.68 Certain petitioners for rulemaking must also submit ERs. Section 51.68 requires that petitioners for rulemaking, who request amendments to 10 CFR Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, or 70 concerning the exemption from licensing and regulatory requirements of, or authorizing general licenses for, any equipment, device, commodity, or other product containing byproduct material, source material, or special nuclear material, submit a "Petitioner's Environmental Report," which contains the general information specified in Section 51.45.

PART 51 GUIDANCE DOCUMENTS

Title	Accession number or link
Preparation of Environmental Reports for Nuclear Power Plant License Renewal Applications, Regulatory Guide 4.2, Supplement 1, Revision 3	ML18071A400
Generic Environmental Impact Statement for License Renewal of Nuclear Plants – NUREG-1437	ML040690580, ML040690738
Generic Environmental Impact Statement for License Renewal of Nuclear Plants – NUREG-1437, Revision 1	ML13107A023
Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal, NUREG-1555, Supplement 1, Revision 1	ML13106A246
Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, NUREG-0586	ML18057B048
Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, Regarding the Decommissioning of Nuclear Power Reactors, NUREG-0586	ML023470304
Generic Environmental Impact Statement for Continued Storage of Spent Nuclear Fuel: Final Report, NUREG-2157	ML14196A105, ML14196A107
Generic Environmental Impact Statement for In-Situ Leach Uranium Milling Facilities, NUREG-1910	ML15093A368, ML15093A486
Environmental Review Guidance for Licensing Actions Associated with NMSS Programs, NUREG-1748	ML032450279