

FINAL SUPPORTING STATEMENT  
FOR 10 CFR PART 50  
APPLICATIONS FOR LICENSES, CERTIFICATIONS, AND REGULATORY APPROVALS  
SECTION 2

50.30, 55(b) & (d) - Filing Application;  
Decommissioned Plants 50.54(bb); License Amend. 50.59(c), 50.90, 50.91(a), (b);  
License Transfers 50.80(b), 50.83(b), (d); NRC Notification, 50.74; 50.33 Contents of  
applications; general information (Early Site Permits; Standard Design Certifications,  
Combined Licenses, Standard Design Approvals, Manufacturing Licenses, Construction  
Permits, Operating Licenses); 50.33(f) Financial Qualifications, 50.34(a) & (b) Contents of  
applications; technical information (Preliminary safety analysis report; Final safety  
analysis report); 50.36, 50.36(c), 50.36a, 50.36a(a)(2), 50.36b & Appendix I, Technical  
Specifications; 50.34(c) & (d) & 50.54(p), Security; 50.35(b), Periodic Reports; 50.34(w)  
(3) & (4), Property Insurance Damage/Accident Recovery Insurance, 10 CFR 50.54(w),  
50.54(w)(3), 50.54(w)(4)(i) and 50.54(w)(4)(ii), 50.150

3150-0011

ABSTRACT

The U.S. Nuclear Regulatory Commission (NRC) is authorized by Congress to have responsibility and authority for the licensing and regulation of nuclear power plants, research reactors and testing facilities (also known collectively as research and test reactors), fuel reprocessing plants and other utilization and production facilities licensed pursuant to the Act. To meet its responsibilities, the NRC conducts a detailed review of all applications for licenses to construct and operate such facilities. The purpose of the detailed review is to ensure that the proposed facilities can be built and operated safely at the proposed locations, and that all structures, systems and components important to safety will be designed to withstand the effects of postulated accident conditions, without undue risk to the health and safety of the public.

Under 10 CFR Part 50, before a company or other entity can build a nuclear power plant or non-power production or utilization facility (NPUF) at a particular site, it must obtain a construction permit from the NRC. Subsequently, an operating license must be obtained from the NRC before an applicant can operate the facility. The decision by the NRC as to whether to approve an application for a construction permit or an operating license is based largely on the NRC staff's detailed review of the information provided as part of an application. Information provided by the applicant as part of the application is crucial to the licensing process as it provides the NRC with the information it needs to make a decision with regard to the proposed facility's impact on the public's health and safety and the environment.

The Commission issues an operating license or construction permit, with appropriate conditions and limitations (including technical specifications), after determining that an application for a license meets certain standards and requirements. Licensees must maintain records and prepare reports to demonstrate their fulfillment of regulatory requirements. The information collection requirements in this section include:

- filing application for a license or combined license which includes both general

(applicant name; type of business; radiological emergency response plans) and technical information (preliminary or final safety analysis report; descriptions of the equipment and systems);

- submitting technical specifications with administrative controls. Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to ensure operation of the facility in a safe manner;
- physical security, training and qualification plan, and safeguards contingency plans;
- periodic reports of the progress and results of research and development programs designed to resolve safety questions and reports on the amount and sources of property damage/accident recovery insurance; and
- report describing the implementation of a newly developed probabilistic risk assessment (PRA) method.

These regulations affect 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities" licensees for operating nuclear power plants, licensed non-power production and utilization facilities (NPUF), other new technologies (ONTs), such as light (LWRs) and non-light-water reactors (non-LWRs), and power plants that are currently being decommissioned. Also, license and permit holders, and applicants under 10 CFR Part 52, "Licenses, Certifications, and Approvals for Nuclear Power Plants." These entities total 195 respondents for the current clearance cycle. Licensees may voluntarily submit a request for an exemption to the Commission and maintain a record of that request. Licensees may voluntarily submit a request for an exemption (See Section 6) to the Commission and maintain a record of that request.

## A. JUSTIFICATION

### 1. Need for Collection of Information

The information is needed in order to determine licensee compliance with the regulations set forth in 50.30, 55(b) & (d); 50.33a & Appendix L; 50.54(bb); 50.59(c), 50.90, 50.91(a), (b); 50.80(b); 50.83(b), (d), 50.74; 50.33; 50.36, 50.36a, 50.36b & Appendix I; 50.34(c) & (d) & 50.54(p); 50.35(b), 50.34(w)(3) & (4) and 50.150. Details of these regulations can be found at the end of this supporting statement in "Description of Requirements."

### 2. Agency Use and Practical Utility of Information

Applicants or licensees requesting approval to construct or operate utilization or production facilities are required by the Atomic Energy Act of 1954, as amended (the Act), to provide information and data that the NRC may determine necessary to ensure the health and safety of the public.

The NRC uses the records and reports required in this part to ascertain that licensees' licensing the design, construction, operation, and decommissioning of commercial nuclear power plants and other nuclear facilities programs are adequate to protect public health and minimize danger to life and property and

that licensees' personnel are aware of and follow up on the information and steps needed to perform licensed activities in a safe manner. The reports and recordkeeping requirements allow NRC to determine whether to take actions, such as to conduct inspections or to alert other licensees to prevent similar events that may have generic implications.

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), or by e-mail. It is estimated that approximately 45% of the potential responses are filed 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

Not applicable.

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

If the information is not collected, NRC will not be able to assess whether licensees are operating within the specific safety requirements applicable to the licensing, constructing, and operating activities for nuclear power reactors; research and test reactors; and other production and utilization facilities.

The information and required frequency from licensees that seek to construct and operate nuclear power reactors, research and test reactors; and other production and utilization facilities is essential to NRC's determination of whether the applicant has adequate equipment, training, funds and experience throughout the life of the licensee to protect the public health and safety.

7. Circumstances which Justify Variation from OMB Guidelines

10 CFR 50.74 requires that licensees notify the NRC within 30 days of any change in the status of licensed reactor operators or senior operators. The variation is necessary to be sure that temporarily or permanently replaced licensed or senior reactor operators are immediately staffed by qualified personnel.

A few special reports, such as the Licensee Event Reports, required by 10 CFR 50.36(c), 10 CFR 50.72, and 10 CFR 50.73, the Post Accident

Monitoring Report (when required), and the Steam Generator Tube Inspection Report, are required in fewer than 30 days to ensure that the NRC promptly responds to situations with the potential to seriously impact public health and safety (also see the Section 4 Supporting Statement). Many of the records involved with this information collection are retained longer than 3 years, some for the life of the plant, to establish patterns or base-line performance to anticipate and assess future trends. These variations are deemed necessary to ensure that the health and safety of the public will not be adversely affected by the operation of the plant.

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 June 13, 2024 (89 FR 50381). Additionally, NRC staff contacted eight stakeholders via email. The stakeholders included operating reactor licensees, licensed and under construction non-power production and utilization facilities, as well as power reactors being decommissioned and industry representatives from Constellation Energy, Holtec International, Southern Nuclear Operating Co., Inc, SHINE Technologies, Abilene Christian University, Oregon State University, Texas A & M University, and Energy Solutions.

Staff received one comment related to this section from the publication of the Federal Register Notice from Abilene Christian University as follows:

1. Is the proposed collection of information necessary for the NRC to properly perform its functions? Does the information have practical utility? Please explain your response.

Comment: Yes, the proposed information collection is necessary for the NRC to perform its functions properly. Yes, the information has practical utility because it enables the NRC to use the information and assess the safety of a reactor.

***NRC Response:***

Agree.

2. Is the burden estimate accurate? Please explain your response.

Comment: The estimated burden per response for the reporting requirements under 50.33(f), Financial qualification information of 3,580 hours is too high; per their experience the burden would be 200 hours per submission.

***NRC Response:***

Disagree. The estimate also includes financial qualification information as requested by the Commission at the time of initial application or additional information as requested by the Commission; therefore, staff estimate is based on overall industry experience and remains consistent.

Comment: The estimated burden per response for the reporting requirements

under 50.34, NPUF Operating License application - technical information (FSAR) of 7,000 hours per response is too low and should be increased to 12,000 hours per response.

***NRC Response:***

Disagree. The estimate is based on staff continuous interactions with and feedback from industry overall; staff has no adequate justification to increase the estimate 5,000 hours per response.

Comment: Abeline Christian University noted reporting requirements under 50.34, NPUF Construction Permit application – technical information (PSAR), with an estimated burden per response of 10,000 hours should be added to the clearance.

***NRC Response:***

Agree.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b).

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

The total estimated cost for information collection requirements in this section is estimated to be 990,856 hours at a cost of \$ 297,256,800 (990,856 hours x \$300/hr).

Total Burden and Responses Section 2		
	Hours	Responses
Reporting	748,749	2,297
Recordkeeping	242,107	162
<b>TOTAL</b>	<b>990,856</b>	<b>2,459</b>

Detailed burden estimates are included in the supplemental burden spreadsheet titled, "Table 1 - Summary of Supporting Statements." The \$300 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 2023 (88 FR 39120, June 15, 2023).

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs.

Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be \$29,053 (242,107 recordkeeping hours x \$300 x .0004).

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 annualized estimated cost to the government is \$30,585,900 (101,953 hours x \$300) as shown on the attached Summary Table.

15. Reasons for Changes in Burden or Cost

The burden and number of responses have changed as described in the tables below:

**Burden change**

	2021 estimates	Current submission	Change
Reporting	456,516	748,749	+292,233
Recordkeeping	225,249	242,107	+16,858
Third Party Disclosure	0.0	0	0
<b>Total</b>	<b>681,765</b>	<b>990,856</b>	<b>+309,091</b>

**Change in Responses**

	2021 estimates	Current submission	Change
Reporting	2,150	2,297	+147
Recordkeeping	164	162	-2
Third Party Disclosure	0	0	0
<b>Total</b>	<b>2,314</b>	<b>2,459</b>	<b>+145</b>

The change in the burden for this section is primarily due to the number of anticipated applications, primarily for non-light water reactors (NLWR), increasing the overall burden from 681,765 to 990,856 an increase of 309,091 hours.

External programs are contributing to the progression of advanced reactor designs, causing an influx of applications during this clearance cycle. Due to these programs, ongoing robust pre-application engagements (i.e., topical report reviews), , and meetings, discussions and continuous contact with prospective stakeholders, the agency is expected to receive applications for, construction permits (CP), early site permits (ESP), standard design approvals (SDAs) and certifications, manufacturing license (MLs), combined licensees (COLs), for commercial nuclear power reactors, as well as operating licenses (OLs) related to the licensing processes that apply to light-water reactors (LWR) and NLWRs. The effects if any of these projected applications on the requirements in this section are captured below:

Additionally, digitized electronic recordkeeping and advancement in technology has impacted the burden to maintain records. Staff has recognized these advancements and applied burden accordingly. The effects if any are captured below.

#### Reporting Increases:

- Section, 50.33(a)-(d), (j), Early Site Permit application - general information, increased by .33 respondents and 119 hours.
- Section, 50.33(a)-(d), (g), Combined OL application - general information, increased by 2 respondents and 5,400 hours.
- Section, 50.33(a)-(d), (j), Standard Design Approval application - general information, increased by .33 respondents and 148 hours.
- Section, 50.33(a)-(d), (j), Manufacturing License application - general information, increased by .66 respondents and 297 hours.
- Section, 50.33(a)-(d), (h), (j), NPUF Construction Permit application - general information, increased by 1.33 respondents and 3,591 hours.
- Section, 50.33(a)-(d), (h), (j), NPUF Operating License application - general information, increased by 2.33 respondents and 6,291 hours.
- Section, 50.33(a)-(d), (h), (j), Nuclear Power Plant Construction Permit application - general information, increased by 1.33 respondents and 3,591 hours.
- Section, 50.33(a)-(d), (h), (j), Nuclear Power Plant Operating License application - technical information, increased by 1 respondent and 2,700 hours.
- Section, 50.33(f), Financial qualification information as requested by the Commission, increased by 2 respondents and 7,160 hours.
- Section, 50.34(a), Nuclear Power Plant Construction Permit application with deterministic emergency plan- general information (PSAR), increased by 1.33 respondents and 18,620 hours.
- Section, 50.34(a), Nuclear Power Plant Construction Permit application with performance based emergency plan in 50.160- general information (PSAR) - SMR or ONT, increased by .66 respondents and 59,268 hours.
- Section, 50.34(b), NPUF Operating License application - technical information (FSAR), increased by 2.33 respondents and 16,310 hours.
- Section, 50.34(a), Nuclear Power Plant Construction Permit application - general information (PSAR), increased by 1.33 respondents and 119,700 hours.

- Section, 50.34(b), Nuclear Power Plant Operating License application - technical information (FSAR), increased by 1 respondent and 40,000 hours.
- Section, 50.34(a), NPUF Construction Permit application - technical information (PSAR) increased 1.33 respondents and 13,300 hours.
- Section, 50.83(b) & (d), Release of facility or site, increased by 2 respondents and 480 hours.
- Section, 50.36(c)(2), Technical Specifications - Risk Informed Completion Times (RICT) Program, increased by 23 respondents and 1,380 hours.
- Section, 50.54(p)(2), Submit Report (prepare and maintain safeguards contingency plan procedures) (operating power reactors), increased by 68 respondents and 3,944 hours.
- Section, 50.54(p)(2) - Submit Report (prepare and maintain safeguards contingency plan procedures) (decommissioned/shutdown power reactors), increased by 25 respondents and 725 hours.
- Section, 50.54(p)(2) - Submit Report - (prepare and maintain safeguards contingency plan procedures) (nonpower reactors), increased by 31 respondents and 145 hours.
- Section, 50.35(b), increased by 31 respondents and 620 hours.
- Section, 50.54(w)(3), increased by 1 respondent and 4 hours.

#### Reporting Decreases:

- Section, 50.36 - Reports - Administrative Controls, 50.36a, 50.36b & Appendix I, Technical Specifications, decreased by 14 respondents and 11,760 hours to remove COL holders, which resulted in duplicate counting in the previous cycle, these reports are included in the "technical specifications."
- Section, 50.74 - Notification within 30 days of a change in status of a licensed reactor operator or senior operator. In the prior cycle, staff misunderstanding inadvertently reported the total number of responses as the number of respondents and reduced the number of submissions to correspond to the number of respondents. With additional understanding of the reporting requirements, staff has corrected the information, which decreased the number of respondents by 134 and increased the responses per respondent by 2; the overall responses are unchanged.

#### Recordkeeping Increases:

- Section, 50.33(a)-(d), (g), (j), Early Site Permits (records), increased by 8 recordkeepers and 104 hours.
- Section, 50.33(a)-(d), (g), (j), Combined OL (records), increased by 14 recordkeepers and 1,386 hours.
- Section, 50.33(a)-(d), (j), Standard Design Approval (records), increased by 1 recordkeeper and 16.5 hours.
- Section, 50.33(a)-(d), (j), Manufacturing License (records), increased by 2 recordkeepers and 33 hours.



- 50.33(a)-(d), (h), (j), NPUF Construction Permit (records), increased by 4 recordkeepers and 396 hours.
- Section, 50.33(a)-(d), (h), (j), NPUF Operating License (records), increased by 7 recordkeepers and 693 hours.
- Section, 50.33(a)-(d), (h), (j), Nuclear Power Plant Construction Permit (records), increased by 4 recordkeepers and 396 hours.
- Section, 50.33(a)-(d), (h), (j), Nuclear Power Plant Operating License (records), increased by 3 recordkeepers and 297 hours.
- Section, 50.36 - Reports - Administrative Controls, 50.36a, 50.36b & Appendix I, Technical Specifications (Operating power reactor), increased by 5 recordkeepers and 10,400 hours.
- Section, 50.36 - Reports - Administrative Controls, 50.36a, 50.36b & Appendix I, Technical Specifications (operating NPUFs), the burden per recordkeeper increased from 80 to 208 hours, and 128 hours increase; this estimate is in line with the expected burden required, increasing the overall an additional 3,968 hours.

Recordkeeping Decreases:

- Section, 50.36 - Reports - Administrative Controls, 50.36a, 50.36b & Appendix I, Technical Specifications, (shutdown power reactor) decreased by 4 recordkeepers and 832 hours.

16. Publication for Statistical Use

The information being collected is not expected to be published for statistical use.

17. Reason for Not Displaying the Expiration Date

The recordkeeping and 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.

## **Appendix A – Description Requirements**

### **Applications**

10 CFR 50.30 This section provides for the filing of an application for early site permits; standard design certifications, combined licenses, standard design approvals, manufacturing licenses, construction permits, and operating licenses which includes both general and technical information. General information is covered under Section 50.33, and technical information is covered under Section 50.34. The general information required by Section 50.33 will remain in Part 50. Section 50.30(f) also requires that an Environmental Report (ER) be submitted pursuant to Part 51. The information collection burden associated with the ER is covered by a separate OMB clearance for Part 51 (3150-0021) and, therefore, no environmental burden is included for Section 50.30.

10 CFR 50.33. This section requires each application to provide general information such as: applicant name, address, type of business (partnership or corporation), citizenship, to identify the class of license, how the license will be used, the time period for the license, a list of other related licenses and provide details about the applicant's financial qualifications and emergency response plans.

10 CFR 50.33(f) This subsection requires the applicant to submit information demonstrating the financial qualification of the applicant to carry out, in accordance with regulations in this chapter, the activities for which the permit or license is sought. Under subsection 50.33(f)(5) the Commission may request an established entity or newly formed entity to submit additional or more detailed information respecting its financial arrangements and status of funds if the Commission considers this information appropriate. This may include information regarding a licensee's ability to continue the conduct of the activities authorized by the license and to decommission the facility.

10 CFR 50.33(g). This section of 10 CFR 50 requires that the applicant for an operating license submit state and local government radiological emergency response plans. The plans shall define the Emergency Planning Zone (EPZ) for the plume exposure pathway and the ingestion pathway. Generally, with the nuclear facility located at the center, the plume exposure pathway for the EPZ will cover an area with a radius of approximately 10 miles, and the ingestion pathway will cover an area with a radius of approximately 50 miles. The exact size and configuration of the EPZ will be determined in relation to the local emergency response needs and capabilities as they are affected by such conditions as demography, topography, access routes and jurisdictional boundaries.

10 CFR 50.34(a). This section of 10 CFR 50 requires, for a preliminary safety analysis report, that each application for a construction permit shall include a preliminary safety analysis report.

10 CFR 50.34(b). This section of 10 CFR 50 requires that each application for an operating license shall include a final safety analysis report. The final safety analysis report shall include information that describes the facility, presents the design bases and the limits on its operation, and presents a safety analysis of the structures, systems, and components and of the facility as a whole.

10 CFR 50.54(bb). This section requires that for operating nuclear power reactors, the licensee shall, within 2 years following permanent cessation of operation of the reactor or 5 years before expiration of the reactor operating license, whichever occurs first, submit written notification to the Commission for its review and preliminary approval of the program by which the licensee intends to manage and provide funding for the management of all irradiated fuel at the reactor following permanent cessation of operation of the reactor until title to the irradiated fuel and possession of the fuel is transferred to the Secretary of Energy for its ultimate disposal in a repository. Final Commission review will be undertaken as part of any proceeding for continued licensing under 10 CFR 50 or 10 CFR 72. The licensee must demonstrate to the NRC that the elected actions will be consistent with NRC requirements for licensed possession of irradiated nuclear fuel and that the actions will be implemented on a timely basis. Where implementation of such actions requires NRC authorizations, the licensee shall verify in the notification that submittals for such actions have been or will be made to the NRC and shall identify them. A copy of the notification shall be retained by the licensee as a record until expiration of the reactor operating license. The licensee shall notify the NRC of any significant changes in the proposed waste management program as described in the initial notification.

10 CFR 50.55(b). This section specifies that if the proposed construction or modification of a facility is not completed by the latest completion date specified in the construction permit, the permit shall expire and all rights there under shall be forfeited. However, if good cause can be shown by the applicant, the Commission may extend the completion date for a reasonable period of time. The Commission will recognize, among other things, developmental problems attributable to the experimental nature of the facility or fire, flood, explosion, strike, sabotage, domestic violence, enemy action, an act of the elements, and other acts beyond the control of the permit holder, as a basis for extending the completion date. No completion date extensions are expected during this clearance period. Thus, the relevant burden is zero.

Pursuant to 10 CFR 50.55(d), at or about the time of completion of the construction or modification of the facility, the applicant must file any additional information needed to bring the original application for license up to date, and must file an application for an operating license or an amendment to an application for a license to construct and operate the facility for the issuance of an operating license, as appropriate, as specified in 10 CFR 50.30(d).

10 CFR 50.59(c), 50.90, 50.91(a) and (b). These sections are applicable for amendment of licenses to operating nuclear power plants, research and test reactors, and other production and utilization facilities, amendment of licenses to permanently shut down nuclear power and research and test reactors and other production and utilization facilities and amendments to combined licenses, manufacturing licenses, early site permits and construction permits. 10 CFR 50.59(c) requires the holder of a license authorizing operation of a production or utilization facility who desires to make a change to the facility or procedures as described in the FSAR or to conduct tests or experiments not described in the FSAR to submit an application for amendment of the license pursuant to 10 CFR 50.90 if the change, experiment, or test does meet certain criteria or a change to the TS is required. 10 CFR 50.59 (d)(2) requires the licensee to submit a report of these changes and the corresponding evaluations at intervals not to exceed 24 months. Amendments to permits and licenses may also be submitted by holders of construction permits, early permits, manufacturing licenses, and combined licenses (prior to the operation of the nuclear power plant).

10 CFR 50.90 requires the application for amendment of the license or permit to be filed with the Commission, fully describing the changes and following as far as applicable in the form prescribed for original applications.

The application for amendment of the license or permit enables the staff to evaluate any changes made at the facility or any new information concerning the facility that may potentially affect the safety of the facility and consequently the health and safety of the public.

Under 10 CFR 50.91(a)(1) and (b)(1), a licensee requesting an amendment must provide to the NRC and the State in which its facility is located, the amendment application and an analysis concerning the issue of no significant hazards consideration. NRC needs licensees' and permit holder's analyses to quickly make and publish for public comment its "proposed determination" about no significant hazards consideration; the States need licensees' and permit holder's analyses in order to quickly consult with the NRC.

On July 19, 1995, the Commission published in the Federal Register (60 FR 36953) its final rule on TS for nuclear power reactors. The rule codified the criteria identified in the final policy statement for determining the content of TS. A major benefit of the rule involves the reduction in the number of safety functions controlled by TS (limiting conditions for operation) by applying the criteria. The rule ensures that any changes to the most safety significant features will require prior review and approval by NRC. The safety functions that do not satisfy the criteria can be relocated to licensee-controlled documents and changed pursuant to 10 CFR 50.59. The burden on licensees and the NRC can be reduced by relocating such provisions or, for power reactor licensees, completely converting the existing TS to the improved Standard Technical Specifications (STS). Recordkeeping and reporting requirements for revisions that do not require an amendment are covered in Section 5 of this clearance submittal.

10 CFR 50.80(b) This section specifies that an application for a transfer of a license shall include as much of the information described in 10 CFR 50.33 and 50.34 with respect to the identity and technical and financial qualifications of the proposed transferee as would be required by those sections if the application were for an initial license. 10 CFR 50.80(b) also specifies that the Commission may require additional information, such as data with respect to proposed safeguards against hazards from radioactive materials, and the transferee's qualifications to protect against such hazards.

The requirements described above are needed to assure the transferee's financial capability to run the facility safely and to ensure the transferee's technical capability to properly and safely operate the facility in a way that protects the health and safety of the public.

10 CFR 50.83 requires prior written NRC approval to release part of a facility or site for unrestricted use at any time before receiving approval of a license termination plan. Section 50.75 specifies recordkeeping requirements associated with the partial release of a facility or site. Nuclear power reactor licensees seeking NRC approval of a partial release of non-impacted areas may submit a written request for NRC approval of the release if a license amendment is not otherwise required (10 CFR 50.83(b)). For release of impacted areas, the licensee shall submit an application for amendment of its license to reflect the partial release of the property (10 CFR 50.83(d)).

## Procedures for aircraft impact and beyond-design basis threat

The Power Reactor Security Final Rule, approved by OMB in April 2009, established and updated generically applicable security requirements similar to those previously imposed by Commission orders issued after the terrorist attacks of September 11, 2001. This rule added sections 50.54(hh)(1) & (2):

10 CFR 50.74 This section requires licensees of nuclear power facilities to notify the NRC within 30 days of a change in status of a licensed reactor operator or senior operator. The NRC needs to know if operators have been permanently reassigned, terminated, or have undergone permanent disability, or illness as required by 10 CFR 55.25, to ensure that a qualified replacement has been assigned. (Note that notifications involving 10 CFR 55.25 are cleared under OMB Clearance No. 3150-0024.)

10 CFR 50.36 requires licensees to maintain technical specifications with administrative controls. Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to ensure operation of the facility in a safe manner (e.g. Annual Radiological Environmental Operating Report, Radiological Effluent Release Report, Core Operating Limits Report, Steam Generator Tube Inspection Report). These reporting and recordkeeping requirements are set forth in the Technical Specifications (TS), Appendix A to the operating license for each facility license. Pursuant to 10 CFR 50.36b, environmental reporting and recordkeeping requirements are set forth in Appendix B to the operating license for each facility license or in each licensee's environmental protection plans. (A few facilities have a single appendix that contains the combined aspects of both Appendices A and B). The requirements for submission of the Annual Radiological Environmental Operating Reports and the Annual Radioactive Effluent Release Reports are typically found in the administrative controls appendices.

10 CFR 50.36(c)(2) specifies that limiting conditions for operations (LCO) are the lowest functional capability or performance levels of equipment required for safe operation of a facility. When an LCO of a nuclear reactor is not met, the licensee shall shutdown the reactor or follow any remedial action permitted by the technical specifications until the condition can be met. A completion time (CT) is the duration for which a licensee may continue to operate when it does not meet the requirements for lowest functional capability. Licensees can use PRA models acceptable to the NRC to estimate CTs. Those licensees shall submit reports to NRC if their PRA models incorporate newly developed methods.

10 CFR 50.36a requires each nuclear power reactor license and each applicant for a design certification or a manufacturing license to include TS on effluents. The NRC staff developed "Radiological Effluent Technical Specifications (RETS) for PWRs" (NUREG-0472) and "Radiological Effluent Technical Specifications for BWRs" (NUREG-0473). Generic Letter 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications in the Administrative Controls Section of the Technical Specifications and the Relocation of the Procedural Details of RETS to the Offsite Dose Calculation Manual (ODCM) or to the Process Control Program (PCP)," permits relocation of the description of the radioactive effluent report content to the ODCM or the PCP.

10 CFR 50.36b allows each license authorizing operation of a production or utilization facility, and each license for a nuclear power reactor facility for which the certification of permanent

cessation of operations required under §50.82(a)(1) has been submitted, which is of a type described in §50.21(b) (2) or (3) or §50.22 or is a testing facility, to include conditions to protect the environment to be set out in an attachment to the license, which is incorporated in, and made a part of, the license. These conditions will be derived from information contained in the environmental report and the supplement to the environmental report submitted pursuant to §§51.50 and §51.53 of this chapter as analyzed and evaluated in the NRC record of decision, and will identify the obligations of the licensee in the environmental area, including, as appropriate, requirements for reporting and recordkeeping of environmental data, and any conditions and monitoring requirement for the protection of the nonaquatic environment. These conditions are derived from information contained in the environmental report and the supplement to the environmental report. (See Supporting Statement for 10 CFR Part 51, OMB Clearance 3150-0021.)

10 CFR 50 Appendix I consists of numerical guides for design objectives and limiting conditions for plant operation to meet the criterion "as low as is reasonably achievable" for radioactive material in light-water-cooled reactor effluents.

Section 50.34(c)(3) requires that each plan must describe how the applicant will meet the requirements of 10 CFR 73 (and 10 CFR 11, if applicable, including the identification and description of jobs as required by 10 CFR 11.11(a), at the proposed facility). The plan must list tests, inspections, audits, and other means to be used to demonstrate compliance with the requirements of 10 CFR 11 and 10 CFR 73, if applicable. 10 CFR 73.67 prescribes requirements for the establishment and maintenance of a physical protection system which will have capabilities for the protection of SNM at fixed sites and in transit and for plants in which SNM is used. 10 CFR 11 prescribes criteria and procedures for determining eligibility for access to, or control over, certain quantities of SNM.

Section 50.34(d)(1) requires that each application for a license to operate a production or utilization facility that will be subject to 10 CFR 73.50 and 10 CFR 73.60 must include a licensee SCP in accordance with 10 CFR 73 Appendix C. The SCP shall include plans for dealing with threats, thefts, and radiological sabotage as defined in 10 CFR 73. Four categories of information must be included in the applicant's SCP. These categories are specified in 10 CFR 73 Appendix C. First, the "Background" must identify and define the perceived dangers and incidents with which the plan will deal and the general way it will handle them. Second, the "Generic Planning Base" must define the criteria for initiation and termination of responses to safeguards contingencies together with the specific decisions, actions, and supporting information needed to bring about such responses. Third, the "Licensee Planning Base" must include the factors affecting contingency planning that are specific to the facility. The fourth category relates to a "Responsibility Matrix" that must include a detailed identification of the organizational entities responsible for each decision and action associated with specific responses to safeguards contingencies.

Section 50.54(p)(1) requires that each licensee prepare and maintain SCP procedures in accordance with 10 CFR 73 Appendix C. Procedures must be established in order to aid execution of the detailed plan as developed in the "Responsibility Matrix" section of the SCP. The procedures must detail the actions to be taken and decisions to be made by each member or unit of the organization as planned in the "Responsibility Matrix." The procedures need not be submitted to the Commission for approval but are inspected by the NRC staff on a periodic basis. The burden to provide this information is included in the OMB clearance for 10 CFR Part 73, "Physical Protection of Plants and Materials" (3150-0002).

Section 50.54(p)(1) specifies that the licensee may make no change which would decrease the effectiveness of a PSP, or T&QP or CSP (required by 10 CFR 73.55 and 10 CFR 73.54) prepared pursuant to 10 CFR 50.34(c) or 10 CFR 73 or to the first four categories of information contained in the SCP prepared pursuant to 10 CFR 50.34(d) or 10 CFR 73, as applicable, without prior approval of the Commission. A licensee desiring to make such a change must submit an application for an amendment to the licensee's license pursuant 10 CFR 50.90.

Section 50.54(p)(2) also specifies that a licensee may make changes to the plans referenced in 10 CFR 50.54(p)(1) without prior approval if the changes do not decrease the safeguards effectiveness of the safeguards plan. The licensee, however, must maintain records of changes to the plans for a period of three years from the date of the change and must submit a report containing a description of each change within two months after the change is made.

Section 50.54(p)(3) requires the licensee to provide for the development, revision, implementation, and maintenance of its SCP. To this end, the licensee shall provide for a review at least every 12 months of the SCP by individuals independent of both security program management and personnel who have direct responsibility for implementation of the security program. All elements of the SCP must be reviewed at least once every 24 months.

Section 50.54(p)(4) requires that the review must include a review and audit of safeguards contingency procedures and practices, an audit of the security system testing and maintenance program, and a test of the safeguards systems along with commitments established for response by local law enforcement authorities. The results of the review and audit, along with recommendations for improvements, must be documented, reported to the licensee's corporate and plant management, and kept available at the plant for inspection for a period of three years. The burden to provide this information is included in the OMB clearance for 10 CFR Part 73, "Physical Protection of Plants and Materials" (3150-0002).

10 CFR 50.35(b) specifies that "The Commission may, in its discretion, incorporate in any construction permit provisions requiring the applicant to furnish periodic reports of the progress and results of research and development programs designed to resolve safety questions.

10 CFR 50.54(w)(3), The licensee shall report to the NRC on April 1 of each year the current levels of this insurance or financial security it maintains and the sources of this insurance or financial security.

Under 10 CFR 50.54(w)(4)(i) and 10 CFR 50.54(w)(4)(ii), a licensee suffering an accident is required to submit a cleanup plan outlining the steps and costs needed to complete decontamination and cleanup and to allow release of the remaining insurance proceeds for non-cleanup purposes.

10 CFR 50.54(w)(4)(I) establishes a threshold of \$100 million before a cleanup plan would be required.

10 CFR 50.54(w)(4)(ii) requires licensees to inform the Director of the Office of Nuclear Reactor Regulation in writing when the reactor is and can be maintained in a safe and stable condition so as to prevent any significant risk to the public health and safety. Within 30 days after the licensee informs the Director that the reactor is in this condition, or at such earlier time as the licensee may elect or the Director may for good cause direct, the licensee shall prepare and submit a cleanup plan for the Director's approval. The cleanup plan must identify and contain an estimate of the cost of each cleanup operation that will be required to decontaminate the reactor sufficiently to permit the licensee either to resume operation of the reactor or to apply to the Commission under § 50.82 for authority to decommission the reactor and to surrender the license voluntarily.



Section 50.150 requires each applicant shall perform a design-specific assessment of the effects on the facility of the impact of a large, commercial aircraft. The applicant shall identify and incorporate into the design those design features and functional capabilities to show that, with reduced use of operator actions, the reactor core remains cooled, or the containment remains intact; and spent fuel cooling or spent fuel pool integrity is maintained.

The NRC topical report program is governed by several relevant regulations. Title 10 of the *Code of Federal Regulations* (10 CFR) Part 2, "Agency Rules of Practice and Procedure, Part 21, "Reporting of Defects and Noncompliance," Part 50 "Domestic Licensing of Production and Utilization Facilities" and Part 170, "Fees for Facilities, Materials, Import and Export Licenses, and other Regulatory Services under The Atomic Energy Act of 1954, As Amended," describes the formal procedures that the NRC uses to implement its topical report program.

A topical report is a document that addresses a technical topic related to nuclear power plant safety, which the industry submits for review and approval by the NRC before publishing the report for use in the licensing process by other nuclear power plant licensees.

Applicants submit a report that addresses a specific safety-related topic, i.e., component design regarding a U.S. nuclear power plant that requires a safety evaluation by the agency. An applicant seeking a topical review must submit the report to the NRC by letter, in accordance with LIC-500, "Topical Report Process" (ADAMS Accession Number ML20247G279).

GUIDANCE DOCUMENTS FOR INFORMATION COLLECTION REQUIREMENTS  
CONTAINED IN  
APPLICATIONS  
10 CFR PART 50  
SECTION 2

50.30, 55(b) & (d) - Filing Application;  
Decommissioned Plants 50.54(bb); License Amend. 50.59(c), 50.90, 50.91(a), (b);  
License Transfers 50.80(b), 50.83(b), (d); NRC Notification, 50.74; 50.33 Early Site Permits  
50.33(a)-(d), (j); 50.33 Non-Power Operating License; 50.33 Standard Design Certification  
50.33(a)-(d); 50.33 Combined OL 50.33(a)-(d), (g) 3150-0011

Title	Accession number
Regulatory Guide 1.21, Rev. 3, "Measuring, Evaluating, and Reporting Radioactive Material in Liquid and Gaseous Effluents and Solid Waste"	ML21139A224
Regulatory Guide 1.174, Rev. 3, "An Approach for Using Probabilistic Risk Assessment in Risk- Informed Decisions on Plant-Specific Changes to the Licensing Basis"	ML17317A256
Regulatory Guide 1.177, Rev. 2, "Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications"	ML20164A034
Regulatory Guide 1.200, Rev. 3, "Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities"	ML20238B871
Regulatory Guide 4.1, Rev. 2, "Programs for Monitoring Radioactivity in the Environs of Nuclear Power Plants."	ML091310141
Regulatory Guide 4.25, Rev. 0, "Assessment of Abnormal Radionuclide Discharges in Ground Water to the Unrestricted Area at Nuclear Power Plant Sites."	ML16253A333
LIC-500, Rev. 9, "Topical Report Process"	ML20247G279
DG-1362 for RG 1.200 Revision 3, Acceptability of Probabilistic Risk Assessment Results for Risk-Informed Activities	ML19308B636
Regulatory Guide 1.70, Revision 3, Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants, LWR Edition.	ML011340122
Regulatory Guide 1.206, Revision 1, Applications for Nuclear Power Plants	ML18131A181
NUREG-1537, Part 1, "Guidelines for Preparing & Reviewing Applications for Licensing of Non-Power Reactors, Format and Content."	ML042430055