

FINAL SUPPORTING STATEMENT FOR
10 CFR PART 50
INSPECTIONS, RECORDS, REPORTS, NOTIFICATIONS
SECTION 4

50.71(b), 50.76 & Appendix C Section III, Financial;
50.71(e), Updated FSAR;
50.72, 50.54(z) & Appendix E, Notification of Events;
50.72(a) & 50 Appendix E.VI, Emergency Response Data System;
50.73, (LERs) - (see OMB Clearance No. 3150-0104);
50.70, Team Inspections;
50.69, Risk-Informed Categorization of Structures, Systems, and Components

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/test facilities, fuel reprocessing plants and other utilization and production facilities licensed pursuant to the Act. Once a facility has received a license, the licensee submits information and keeps records to allow the NRC to verify that activities are properly conducted and to ensure safe operations in accordance with NRC's regulations.

These regulations affect 89 licensees for operating nuclear power plants, 31 non-power production and utilization facilities, 15 combined operating license holders/applicants and 29 power plants that are currently being decommissioned. Licensees may voluntarily submit a request for an exemption to the Commission and maintain a record of that request. Licensees must perform certain tasks, maintain records and prepare reports to demonstrate their fulfillment of regulatory requirements. The reporting and recordkeeping requirements pertain to financial reports, including certified financial statements; periodic update of the originally submitted Final Safety Analysis Report (FSAR), (describes important structure, systems and components at a licensed site); reactor event reports; electronic real-time transmittal of data during an alert or higher emergency at a nuclear power facility; copies of analyses, evaluations or documentation regarding the implementation and maintenance of the station fire protection program, including post-fire safe shutdown capability, fire protection compliance assessment, corrective actions, risk-related documents and license amendment applications.

A. JUSTIFICATION

1. Need for the Collection of Information

In order to determine licensee compliance with the regulations set forth in 50.71(b) & Appendix C; 50.71(e); 50.72 & 50.54(z), Appendix E; 50.72(a); 50.73; 50.70; and 50.69. 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 and to ensure that the ERDS link is maintained for reliable communication of critical parameters during an emergency.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. 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 80% of the 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

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. If the information is not collected, NRC will not be in a position to assess whether licensees are operating within the specific safety requirements applicable to the licensing and operating activities for existing nuclear power reactors and research and test reactors.

The information and required frequency from licensees that seek to license and operate nuclear power reactors and research and test reactors 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

Section 10 CFR 50.71(e)(1) The updated FSAR must be retained until the operating license is terminated in order for the NRC to ensure the health and safety of the public at all times, the staff must be certain of the current status of a facility's design and supporting analysis.

Section 10 CFR 50.72(a)(1) and 10 CFR 50.72(a)(2) Notification of significant events is needed within one to eight hours to ensure that the NRC promptly responds to situations with the potential to seriously impact public health and safety. Additionally, it allows the NRC to be informed of significant events in order to respond to public inquiries.

Section 10 CFR 50.70 Normally, this information collection will not vary from OMB guidelines. However, there may be occasions when the information will be requested in less than 30 days to ensure that the information is current.

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 19, 2021, (86 FR 10360). Additionally, NRC staff contacted five stakeholders via email. The stakeholders were new, operating and research and test reactor owner licensee representatives and interested stakeholders from Duke Energy Progress, LLC, Kairos Power, Southern Nuclear Operating Co., Washington State University and X-Energy.

The NRC received one out-of-scope comment as a result of the FRN. No additional responses or comments were received as a result of the FRN or the staff's direct solicitation of comment.

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 98,726 hours at a cost of \$27,544,554 (98,726 hours x \$279/hr).

Total Burden and Responses Section 4		
	Hours	Responses
Reporting	70,036	34,190
Recordkeeping	28,690	120
TOTAL	98,726	34,310

Detailed burden estimates are included in the supplemental burden spreadsheet titled, "Table 1 - Summary of Supporting Statements." The \$279 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 2020 (85 FR 37250, June 19, 2020).

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 \$3,201 (28,690 recordkeeping hours x \$279 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 \$11,521,305 (41,295 staff hours x \$279) 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

	2018 estimates	Current submission	Change
Reporting	78,048.0	70,036	-8,012
Recordkeeping	27,381.7	28,690	1,308
Third Party Disclosure	.0	0	0
Total	105,429.7	98,726	-6,704

Change in Responses

	2018 estimates	Current submission	Change
Reporting	35,479.0	34,190	-1,289
Recordkeeping	125.0	120	-5
Third Party Disclosure	.0	0	0
Total	35,604	34,310	-1,294

Overall, for this section, the changes are attributed the increase in certificate holders and decommissioning plants, and a decrease in operating reactors and sites.

The most notable burden hour increases occurred in the following requirements:

- In the previous clearance period, all inspection burdens under 50.70 were included in a single estimate. In this submission, inspections were broken out into two separate burden estimates, one for team inspections and one for other inspections (Resident, Supplemental, Special and Infrequently Performed, Temporary Instructions, and Reactive). Additional burden was added to cover all inspections. As a result, burden for inspections under 50.70, increased 2,295 hours.

50.71(e), Updated FSAR (power reactors that have ceased operating), increased by 900 hours, whereas 50.71(e), Updated FSAR (operating reactors), decreased 9,900 hours due to operating reactors ceasing operations. The burden for an FSAR for an operating reactor is higher than the burden for a decommissioning reactor (900 hours compared to 225 hours).

The most notable reductions in recordkeeping occurred for section 50.69. Based on staff knowledge of the program, the burden estimate for licensees to maintain records associated with 50.69 has been reduced from 1,150 to 833 per recordkeeper. The requirements in this section include time for licensees to maintain processes to control the inspection, testing, and corrective actions for structures, systems, and components, other structures, systems and components (SSC) records. Licensees may voluntarily comply with the requirements in this section as an alternative to

compliance with certain other requirements. Over time, as licensees have more experience implementing these voluntary requirements, the burden has been reduced because their processes and procedures are established and they have become more familiar with the information necessary to meet the requirements. This change in estimate resulted in a decrease in burden of 3,170 hours, from 11,500 to 8,330 hours.

The most notable decrease in respondents occurred for 10 CFR Part 50, Appendix E, Paragraph E.9.d, which decreased 1,095 responses. This is a daily test of the ENS system (365 responses per respondent annually) for operating reactors. A decrease in the number of respondents greatly influences the number of responses for this requirement.

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

Inspections, Records, Reports, Notifications

10 CFR 50.68(b)(8) requires licensees to comply with eight specific criticality accident requirements as an alternative to maintaining a monitoring system capable of detecting a criticality as described in 10 CFR 70.24. Should licensees elect to comply with 10 CFR 50.68(b), they are required to indicate that it has chosen to comply with 10 CFR 50.68 in lieu of 10 CFR 50.74 as part of its FSAR update (in accordance with 10 CFR 50.71(e)). Burden for this requirement is included in 50.71 for FSAR updates.

Section 10 CFR 50.69 provides a voluntary alternative set of requirements under which a licensee may obtain relief from some unnecessary regulatory burden for those SSCs that are determined through a risk-informed categorization process to be of low safety-significance. The regulation is intended to provide more flexibility to licensees in the application of treatment requirements for low safety-significant SSCs, by replacing some of the prescriptive programmatic requirements with more general performance requirements. Requirements are included to specify the process for obtaining the Nuclear Regulatory Commission (NRC) approval for implementing the alternative requirements and for licensee preparation of ongoing SSC performance evaluations against established standards. Recordkeeping and reporting requirements are modified only for those licensees or applicants who voluntarily choose to implement the alternative requirements of 10 CFR 50.69.

To use the alternative provisions of 10 CFR 50.69, a licensee or applicant must evaluate the safety significance of SSCs and categorize each SSC into one of four categories defined as risk-informed safety class (RISC)-1, RISC-2, RISC-3, and RISC-4. Section 10 CFR 50.69 establishes revised treatment and less prescriptive and burdensome information collection requirements for safety and non-safety SSCs categorized as performing low safety-significant functions (RISC-3 and RISC-4), but also contains requirements for on-going evaluations to ensure safety standards are maintained and that records of categorization decisions are maintained.

IP 37060 10 CFR 50.69 Risk-Informed Categorization and Treatment of Structures, Systems, and Components Inspection: Title 10 of the Code of Federal Regulations (10 CFR) Section 50.69, “Risk-Informed Categorization and Treatment of Structures, Systems and Components for Nuclear Power Reactors,” became effective on December 22, 2004 (69 Federal Register (FR) 68008). 10 CFR 50.69 provides a voluntary, alternative approach for establishing the requirements for treatment of structures, systems and components (SSCs) for nuclear power reactors using a risk-informed method of categorizing SSCs according to their safety significance. Within recent years, nearly 40% of power reactor sites have either adopted the provisions of 10 CFR 50.69 or have license amendment requests under NRC review to allow them to do so. As a result of increased licensee adoption of 10 CFR 50.69, risk-informed categorization inspection is performed as needed at all U.S. nuclear sites. Information requested for this inspection includes copies of procedures that describe the categorization and treatment process for Structures, Systems, and Components (SSCs), and analysis of SSCs that have been categorized.

Section 10 CFR 50.70 requires power-reactor licensees to permit inspection of licensee records, premises, activities, and licensed material as necessary for the NRC to ensure

public health and safety. Inspection activities include performance of ROP Baseline Inspection (resident and team inspections), Supplemental Inspections, Special and Infrequently Performed Inspections, Temporary Instructions, and Reactive Inspections. Prior to conducting the inspection activity, the agency may request information from the licensees to aid the inspector. This information typically consists of analysis records, maintenance records, program implementation documents, and corrective action documents. Licensees may submit this information via traditional mail, email, other electronic means such as information portals, or have such information readily assembled on site prior to conduct of an inspection.

Section 50.71(b) of 10 CFR requires licensees and holders of construction permits to file with the Commission annual financial reports, including certified financial statements. This requirement is also specified in 10 CFR 50 Appendix C, Section III, for holders of construction permits. The fundamental purpose of the financial qualifications provision is the protection of public health and safety and the common defense and security. A licensee's or holder's (including a co-owner's) financial resources may affect its ability to meet its responsibilities on safety matters.

Section 10 CFR 50.71(e)(1) requires licensees to submit revisions containing the updated FSAR information on a replacement-page basis, accompanied by a list which identifies the current pages of the FSAR following page replacement.

Section 10 CFR 50.71(e)(2) requires that FSAR-update submittals include a certification by a duly authorized official of the licensee that either the information accurately presents changes made since the previous submittal, necessary to reflect information and analyses submitted to or required by the Commission, or that no such changes were made; and an identification of changes made under the provisions of 10 CFR 50.59 but not previously submitted to the Commission.

Section 10 CFR 50.71(e)(3) requires a revision of the original FSAR containing those original pages that are still applicable plus new replacement pages to be filed with 24 months of either July 22, 1980, or the date of issuance of the operating license, whichever is later, and shall bring the FSAR up to date as of a maximum of 6 months prior to the date of filing the revision.

Section 10 CFR 50.71(e)(4) requires the filing of revisions annually or 6 months after each refueling outage provided the interval between successive updates to the FSAR does not exceed 24 months. The revisions must reflect all changes up to a maximum of 6 months prior to the date of filing. For nuclear power reactor facilities that have submitted 10 CFR 50.82(a)(1) certifications, subsequent revisions must be filed every 24 months.

Section 10 CFR 50.71(e)(5) requires each replacement page to include both a change indicator for the area changed, e.g., a bold line vertically drawn in the margin adjacent to the portion actually changed, and a page change identification (date of change or change number or both).

Section 10 CFR 50.71(e)(6) requires licensees to retain the updated FSAR until termination of the license.

Section 10 CFR 50.54(z) makes it a license condition that each licensee licensed under Sections 103 or 104b of the Atomic Energy Act shall make the notifications specified in 10 CFR 50.72.

Section 10 CFR 50.72(a)(1) and 10 CFR 50.72(a)(2) require that each power reactor licensee notify the NRC of specified events via the Emergency Notification System (ENS). If the ENS is inoperable, the licensee shall make the notifications via commercial telephone or other means. Many of these events are also subject to follow-up written reports as required by 10 CFR 50.73. These written follow-up reports are covered by a separate Office of Management and Budget clearance, 3150-0104.

Section 10 CFR 50.72(a)(ii)(4) requires the licensee to activate the ERDS as soon as possible but not later than one hour after declaring an emergency class of alert, site area emergency, or general emergency.

Section 10 CFR 50.72(a)(3) specifies notification immediately after notification of State and local authorities and not later than one hour after the licensee declares one of the Emergency Classes. Activation of the ERDS, as required by 10 CFR 50.72(a)(4), is covered in Section 4 of this clearance.

Section 10 CFR 50.72(b)(1) requires notification as soon as practical and in all cases within one hour of the occurrence of any deviation from the plant's Technical Specifications (TS) authorized pursuant to 10 CFR 50.54(x).

Section 10 CFR 50.72(b)(2) requires notification as soon as practical and in all cases within 4 hours of events such as plant shutdown required by TS, an event that results or should have resulted in an emergency core cooling system discharge into the reactor coolant, an event that results in actuation of the reactor protection system, or any event or situation related to the health and safety of the public or protection of the environment for which a news release is planned.

Section 10 CFR 50.72(b)(3) requires notification as soon as practical and in all cases within 8 hours of events such as (1) an event or condition that results in the nuclear power plant or any of its principal barriers being seriously degraded or the nuclear plant being in an unanalyzed condition that degrades plant safety; (2) events or conditions that result in valid actuation of specified safety systems; (3) events or conditions that could have prevented fulfillment of the safety condition of structures and systems needed to shut down and maintain the reactor in a safe condition, remove residual heat, control the release of radioactive material, and mitigate the consequences of an accident; (4) hospitalization of contaminated personnel; and (5) any event that results in a major loss of communications or emergency assessment capability.

Section 10 CFR 50.72(c) requires that during the course of the event, the licensee shall: (1) immediately report any further degradation, any change of Emergency Class, (2) the results of ensuing evaluations, the effectiveness of response or protective measures, or plant behavior that is not understood; and (3) maintain an open, continuous communication channel with the NRC Operations Center upon request by the NRC.

Section 50.76 requires that an electric utility licensee holding an operating license (including a renewed license) for a nuclear power reactor shall provide the NRC with the

financial qualifications information that would be required for obtaining an initial operating license as specified in § 50.33(f)(2) within 75 days prior to ceasing to be an electric utility in any manner not involving a license transfer under § 50.80. The financial qualifications information must address the first full five years of operation after the date the licensee ceases to be an electric utility.

10 CFR Part 50, Appendix E, Paragraph E.9.d., requires each licensee to perform monthly testing from the control room, the technical support center and the emergency operations facility. Additionally, the ENS system is exercised each morning, usually between the hours of 0400 and 0800 Eastern Time, by the Headquarters Operations Officer's (HOOs) placement of a call to each licensed facility to collect voluntary reactor status and grid information.

10 CFR 50 Appendix E.VI, Emergency Planning and Preparedness for Production and Utilization Facilities

10 CFR 50 Appendix E.VI.1 requires that licensees test the ERDS periodically to verify system availability and operability. The frequency of ERDS testing is quarterly unless otherwise set by NRC based on demonstrated system performance.

10 CFR 50 Appendix E.VI.2.a requires that computer systems transmit in-plant data points for pressurized water reactors or boiling water reactors if the data points are resident in the in-plant computer.

10 CFR 50 Appendix E.VI.2.b requires the selected parameter sets of data to be transmitted at time intervals of not less than 15 seconds or more than 60 seconds.

10 CFR 50 Appendix E.VI.2.c requires all link control and data transmission be established in a format compatible with the NRC receiving system.

10 CFR 50 Appendix E.VI.3.a requires that any hardware or software changes that affect the transmitted data points identified in the ERDS Data Point Library (site specific data base residing on the ERDS computer) must be reported to the NRC within 30 days after changes are completed.

10 CFR 50 Appendix E.VI.3.b requires that NRC be notified as soon as practicable and at least 30 days prior to any changes to computer hardware or software, with the exception of data point modifications, that could affect the transmission format and the ERDS computer communication protocol.

10 CFR 50 Appendix E.VI.4.a required the licensees to develop and submit an ERDS implementation program plan to the NRC by October 28, 1991.

The Reactor Oversight Process (ROP) defines the inspection program for power reactors in Inspection Manual Chapter 2515. Within the ROP, three types of inspections require extensive planning and preparation due to their scope and depth. In order to prevent inefficient use of licensee and NRC resources during these inspections certain relevant inspection information is need prior conducting on-site inspections. The recordkeeping requirement for licensees to maintain this relevant inspection information is established in *10 Code of Federal Regulations* (CFR) 50.71 and the burden is included in each relevant

section of this clearance. The three inspection procedures (IPs) are listed below along with a description of needed information.

IP 71111.05T Fire Protection (Triennial) and IP 71111.05XT Fire Protection – NPFA 805 (Triennial): Fire Protection inspection is performed every three years at all U.S. nuclear sites. Information requested for this inspection includes copies of analyses, evaluations or documentation regarding the implementation and maintenance of the station fire protection program, including post-fire safe shutdown capability, fire protection compliance assessment documents, recent problems and corrective actions and risk-related documentation. Also, documents requested include those implementing mitigating strategies and demonstrating the management of licensee commitments for the strategies. There are two versions of this inspection (IP 71111.05T and IP 71111.05XT) depending on the fire protection licensing basis of the plant. This information is needed to assess the licensee's ability to safely shut down the plant after a fire.

IP 71111.21M Design Bases Assurance Inspection (Team) and IP 71111.21N Design Bases Assurance Inspection (Program): Design Bases Assurance (DBA) inspections are performed every three years. Information requested to prepare for this inspection includes a list of recent system performance problems (includes recent corrective maintenance performed on safety-related equipment), corrective action documents, system modifications, and operability evaluations, self-assessments, selected information related to component design (design calculations, design basis), component and operator action risk, and licensing basis information, and a copy of selected system diagrams, operating and surveillance testing procedures. Additionally, for inspection conducted using IP 71111.21N, information requested may include information needed to determine which components are within the scope of the engineering program selected for inspection as well as corrective and preventive maintenance associated with these components. This information is needed to assess whether a selected components or operator actions used to mitigate risk-significant accident sequences can be relied upon to meet functional requirements that would prevent damage to the reactor core during design basis events.

IP 71152 Problem Identification and Resolution: inspection is performed every two years. However, an additional inspection may be performed at a site if warranted by either declining plant performance (typically this triggers one additional inspection per year) or the need to follow-up on an independent safety culture assessment. Information requested to prepare for this inspection includes a list of recent equipment problems, self-assessments, licensee audits, root cause evaluations, and corrective action documents; and a copy of the corrective action program and equipment monitoring program procedures. This information is needed to gain insights regarding the licensee's ability to promptly identify and resolve problems.

GUIDANCE DOCUMENTS FOR INFORMATION COLLECTION REQUIREMENTS
CONTAINED IN
INSPECTIONS, RECORDS, REPORTS, NOTIFICATIONS
SECTION 4

50.71(b) & Appendix C, Financial;
50.71(e), Updated FSAR;
50.72 & 50.54(z), Notification of Events;
50.72(a), ERDS;
50.73, (LERs) - (see OMB Clearance No. 3150-0104);
50.70, Team Inspections;
50.69, Risk-Informed Categorization of SSCs

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Title	Accession number
Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis"	ML100910006
Regulatory Guide 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities"	ML090410014
Regulatory Guide 1.201, "Guidelines for Categorizing Structures, Systems, and Components in Nuclear Power Plants According to Their Safety Significance"	ML061090627