DESIGNATED ORIGINAL PBR

[7590-01-P]

U. S. NUCLEAR REGULATORY COMMISSION

Agency Information Collection Activities: Proposed Collection; Comment Request

AGENCY: U. S. Nuclear Regulatory Commission (NRC)

ACTION: Notice of pending NRC action to submit an information collection request to OMB and solicitation of public comment.

SUMMARY: The NRC is preparing a submittal to OMB for review of continued approval of information collections under the provisions of the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35).

Information pertaining to the requirement to be submitted:

1. The title of the information collection: 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities"

2. Current OMB approval number: 3150-0011

DF03

3. How often the collection is required: As necessary in order for NRC to meet its responsibilities to conduct a detailed review of applications for licenses and amendments thereto to construct and operate nuclear power plants, preliminary or final design approvals, design certifications, research and test facilities, reprocessing plants and other utilization and production facilities, licensed pursuant to the Atomic Energy Act of 1954, as amended (the Act) and to monitor their activities.

4. Who is required or asked to report: Licensees and applicants for nuclear power plants and non-power reactors (research and test facilities).

5. The number of annual respondents: 175

6. The number of hours needed annually to complete the requirement or request: 4.7M

7. Abstract: 10 CFR Part 50 of the NRC's regulations "Domestic Licensing of Production and Utilization Facilities," specifies technical information and data to be provided to the NRC or maintained by applicants and licensees so that the NRC may take determinations necessary to protect the health and safety of the public, in accordance with the Act. The reporting and recordkeeping requirements contained in 10 CFR Part 50 are mandatory for the affected licensees and applicants.

Submit, by (insert date 60 days after publication in the Federal Register), comments that address the following questions:

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

2. Is the burden estimate accurate?

3. Is there a way to enhance the quality, utility, and clarity of the information to be collected?

4. How can the burden of the information collection be minimized, including the use of automated collection techniques or other forms of information technology?

A copy of the draft supporting statement may be viewed free of charge at the NRC Public Document Room, 2120 L Street, NW (lower level), Washington, DC. OMB clearance requests are available at the NRC worldwide web site (http://www.nrc.gov/NRC/PUBLIC/OMB/index.html). The document will be available on the NRC home page site for 60 days after the signature date of this notice.

Comments and questions about the information collection requirements may be directed to the NRC Clearance Officer, Brenda Jo. Shelton, U.S. Nuclear Regulatory Commission, T-6 E6, Washington, DC 20555-0001, by telephone at 301-415-7233, or by Internet electronic mail at BJS1@NRC.GOV.

Dated at Rockville, Maryland, this 13th day of June 2000.

For the Nuclear Regulatory Commission.

Brenda Jo. Shelton, NRC Clearance Officer
Office of the Chief Information Officer

Comments and questions about the information collection requirements may be directed to the NRC Clearance Officer, Brenda Jo. Shelton, U.S. Nuclear Regulatory Commission, T-6 E6, Washington, DC 20555-0001, by telephone at 301-415-7233, or by Internet electronic mail at BJS1@NRC.GOV.

Dated at Rockville, Maryland, this _____ day of _____ 2000.

For the Nuclear Regulatory Commission.

_____
Brenda Jo. Shelton, NRC Clearance Officer
Office of the Chief Information Officer

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DRAFT SUPPORTING STATEMENT FOR 10 CFR PART 50

"DOMESTIC LICENSING OF PRODUCTION
AND UTILIZATION FACILITIES"

(OMB CLEARANCE NO. 3150-0011)

Extension Request with Revised Burden Estimate

GENERAL* DESCRIPTION OF THE INFORMATION COLLECTION

The regulations in 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," are promulgated by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Atomic Energy Act of 1954, as amended (the Act), to provide for the licensing and regulation of production and utilization facilities. They contain the reporting, recordkeeping and application requirements that are generally applied in the NRC's licensing and regulatory process. Specific requirements for each licensee are contained in documents called "Technical Specifications" that are issued for every utilization facility licensed to operate. (See 10 CFR 50.36 and Section 2 of this submittal.) Guidance on acceptable means of complying with 10 CFR 50 is provided through publications called NRC "Regulatory Guides." These guides often cite standards and other requirements established by national standards bodies such as the American National Standards Institute (ANSI) and the American Society of Mechanical Engineers (ASME).

The provisions encompassed within 10 CFR 50 affect various types of facilities, including nuclear power plants and non-power reactors (research and test), at various stages in the licensing process, including application, construction, operation, amendment, suspension, renewal and shutdown. Therefore, the number of respondents actually affected by each requirement varies depending on the number of licensing requests initiated and/or completed and the number of regulatory reports required by operating events and/or conditions.

Reporting requirements are directed toward licensees or applicants. However, reporting requirements may not be reactor specific, but they may be of a type that applies to a site which is occupied by one or more reactors that have different licenses. Other requirements may be utility specific and, thus, refer to several reactors at more than one site. These considerations may cause apparent conflicts in the use of the terms: licensees, reactor sites, facilities, or plants in our individual estimates of burden.

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* Specific discussions pertinent to the various sections of Part 50 are included in Sections 1-34 enclosed with this transmittal portion of the 10 CFR Part 50 Supporting Statement.

For estimating purposes, NRC has assumed the following annual average number of respondents:

104 - Operating Power Reactors
0 - Nuclear Power Reactor Under Construction
65 - Power Reactor Sites
37 - Operating Non-Power Reactors
13 - Permanently Shutdown Power Reactor Sites
19 - Permanently Shutdown Power Reactors
15 - Permanently Shutdown Non-Power Reactors

Recordkeeping Requirements

The recordkeeping requirements mandated by 10 CFR Part 50 are of two broad types. The first type is the simple filing of copies of reports, letters, and other written documentation that already exist because of a reporting requirement found elsewhere in the regulations or in the license and technical specifications. The second type of recordkeeping is the generation, updating and filing of records because the information in the records may need to be referred to for assessments or subsequent evaluation of occurrences at the facility.

The large volume of records which are kept for 10 CFR Part 50 is required primarily by the technical specifications, the quality assurance program, reports of changes specified in 50.59(b), environmental qualification of equipment, decommissioning, monitoring the effectiveness of maintenance at nuclear power plants, training and qualification of plant personnel, for highly enriched uranium, and for primary reactor containment leakage testing.

Thus, a specific recordkeeping burden has been calculated for each of these technical areas. For all other technical areas, the recordkeeping burden was estimated to be 10 percent of the total burden (recordkeeping plus reporting).

Records Retention Periods

The NRC's codified recordkeeping rule establishes four basic retention periods for all records that must be retained to meet the recordkeeping requirements the NRC imposes on its licensees and applicants. All proposed rules containing recordkeeping requirements must specify one of these four standardized retention periods. Further, the agency has established a policy that all information collection requirements imposed upon licensees and applicants must be contained in its regulations. Therefore, the NRC's technical, licensing, generic requirements, and information resources management staffs carefully scrutinize guidance documents to identify information collections that are being imposed on the licensees to determine if they are mandatory or voluntary and if they are necessary. Where appropriate, procedures are implemented to ensure that the data required to be submitted or retained is clear to the licensees and applicants.

Additional Requirements

This submittal incorporates all finalized information collection requirements contained in 10 CFR 50 that have been approved by OMB since our last extension request for 10 CFR Part 50 dated June 6, 1997. These rulemakings are itemized below and the information collections are described in detail in the applicable supporting statements.

Final Amended Rules

- 10 CFR 50, Decommissioning of Nuclear Power reactors
- 10 CFR 30, 40, 50, 70, and 72, Self-Guarantee of Decommissioning Funding by Non-Profit/Non-Bond Issuing Licensees
- 10 CFR 50.75, Financial Assurance Requirements for Decommissioning Nuclear Power Reactors
- 10 CFR 50 & 73, Frequency of Reviews and Audits of Emergency Preparedness, Safeguards Contingency Plans, and Security Programs for Nuclear Power Reactors
- 10 CFR 50.55a, Codes and Standards to Establish Baseline BPV and OM Code
- Regulatory Guides, Standard Review Plans, and NUREG Documentation in Support of Risk Informed Regulation for Power Reactors
- 10 CFR 50.65, Monitoring the Effectiveness of Maintenance at Nuclear Power Plants
- 10 CFR 50.59, Changes, Tests, and Experiments, Updating of the FSARs
- 10 CFR 50, Appendix K, Emergency Core Cooling System Evaluation Model (ECCS)
- 10 CFR 50.54(a), 50.55a, and 50.55(f), Quality Assurance Program changes

In addition, listed below are areas where we have incorporated burdens where we have determined Part 50 is not capturing all required burden. They are as follows:

- The burden for exemptions under 50.12 and relief requests in 50.55a
- Criticality Accident Requirements in paragraph 50.68(b)(2) and (3) contain evaluations which may be done in lieu of maintaining a monitoring system capable of detecting a criticality.
- Modified Section 24 to include burden to the government related to increased inspection effort required by the Maintenance rule.

This submittal does not address the information collection requirements specified in 10 CFR 50.73, "Licensee Event Reporting System." The burden associated with this regulation is encompassed within OMB Clearance No. 3150-0104, NRC Form 366, Licensee Event Report.

In submitting this request for approval of a revision to the OMB clearance for 10 CFR 50, the NRC realizes its importance and complexity are such that our staff must work closely with yours. Ms. Brenda Jo. Shelton (301-415-7232), NRC Clearance Officer, is available to arrange for the participation of any NRC staff or legal representative if needed by OMB.

A. JUSTIFICATION

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

Pursuant to the Atomic Energy Act of 1954, as amended, NRC has the responsibility and authority for licensing and regulating nuclear power plants, non-power reactors (research and test facilities), fuel reprocessing plants and other utilization and production facilities. Before a company can build a nuclear reactor at a particular site, it must obtain a construction permit from the NRC. Subsequently, the company must obtain an operating license from the NRC before it can operate the plant. The decision by NRC to approve a company's application for a construction permit or an operating license is based largely on the staff's detailed review of the information provided by the company as part of its application. This review responsibility also encompasses applications for approval of design certifications. Information provided by the applicant as part of the application is crucial to the licensing process as it provides NRC with the information it needs to make a decision with regard to the proposed plant's impact on the health and safety of the public. Once a plant is licensed to operate, the NRC continues to regulate its licensed activities. Licensees must comply with the reporting and recordkeeping requirements in 10 CFR Part 50 so that NRC will have the information it needs to ensure that licensed activities are being conducted without endangering the health and safety of the public. Detailed information required by the NRC to be included in each application for a construction permit or an operating license, or required to monitor and ensure safe operation is addressed in the following Supporting Statements specific to the 10 CFR Part 50 Sections (see Enclosure 2).

2. Agency Use of Information

The NRC conducts a detailed review of all applications for licenses to construct and operate utilization and production facilities, in addition to applications for approval of design certifications. 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. A detailed review of operating reports and records continues during the lifetime of the licensed plant until it is decommissioned and its license terminated. Applicants and licensees are required by the Act to provide such technical information and data that the NRC may determine necessary to ensure the public health and safety.

Part 50 affects various types of facilities at various stages in the licensing process. The requested information is reviewed and acted upon consistent with the governing NRC regulation or the Act, whichever is appropriate. For example, when a submittal can be completed without adjudication, the collected information can usually be acted upon within 1 to 6 months. However, submittals which result in litigation may not be completed for 2 years or more.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, fewer then 25% of responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The information required by 10 CFR 50 does not duplicate other information collections required by other government agencies. The Information Requirements Control Automated System (IRCAS) was searched for agency duplication, and none was found. This information is available only from the licensees and applicants of utilization and production facilities.

5. Effort to Reduce Small Business Burden

Certain provisions of 10 CFR 50 affect 37 non-power reactors (critical facilities and research and test reactors) operated by colleges and universities and 15 non-power reactors being decommissioned or with "possession only" licenses. However, most of the provisions affect only nuclear power plant licensees and applicants. This item is addressed in each Supporting Statement enclosed as Sections 1 through 34 (Enclosure 2).

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

This item is addressed in each Supporting Statement enclosed as Sections 1 through 34 (Enclosure 2).

7. Circumstances which Justify Variation from OMB Guidelines

See each section (Enclosure 2) for information specific to any variance from OMB's guidelines.

8. Consultations Outside the NRC

Requirements of 10 CFR 50 are usually the subject of rulemaking proceedings, during which NRC receives public comments. These comments are considered during the promulgation of all applicable final rules. In addition, the NRC has published a Federal Register Notice requesting public comment on this information collection.

Further, because the NRC staff has a continuing interest in reducing burden on applicants and licensees, the assessment of NRC information gathering needs has been the subject of several staff reviews. These reviews have involved, among other initiatives, seeking public comments to determine whether regulatory burdens can be reduced without reducing the protection for public health and safety.

9. Payment or Gift to Respondents

   Not applicable.

10. Confidentiality of Information

    Information that is identified as proprietary or confidential, which is defined as information that, if disclosed, could do substantial harm with respect to (1) an organization's competitive positions; (2) private and personal information; or (3) physical protection of safeguards information would be withheld from public disclosure pursuant to the provisions of 10 CFR 2.790 and 10 CFR 9.17.

11. Justification for Sensitive Questions

    The provisions of 10 CFR 50 regulations generally do not require sensitive information. However, private information (e.g., telephone numbers) provided in Emergency Plans are protected in accordance with the provisions of 10 CFR 2.790 and 10 CFR 9.17.

12. Estimate of Industry Burden and Burden Hour Cost*

13. Estimate of Other Additional Costs*

14. Estimated Annualized Cost to the Federal Government*

15. Reasons for Changes in Burden or Cost

    The estimated burden change (from 5.7 M to 4.7 M hours) is covered in the section-specific statements (Enclosure 2, Sections 1 through 34).

16. Publication for Statistical Use

    The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

    The requirement is contained in a regulation. Amending the Code of Federal Regulations to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

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* Items 12, 13 and 14 are covered in the section-specific statements (see Enclosure 2, Sections 1 through 34).

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Enclosures:
1. Table - Summary of Supporting Statements
2. Supporting Statements (Parts 1-34)
3. 10 CFR 50
4. Reference Publications

ENCLOSURE 1

Enclosure 1

SUMMARY OF DRAFT SUPPORTING STATEMENTS

10 CFR PART 50

Section	Subject	Annual burden hours estimated per respondent	Number of responses annually	Estimated annual recordkeeping burden hours	Estimated annual reporting burden hours	Total estimated annual burden hours	Estimated annual cost to industry	Estimated annual cost to federal government
1	50.12 - Exemptions	400	104	4,160	37,440	41,600	5,865,600	1,099,800
	50.30, 50.33, 50.34 Application for CP/OL	3,333	1	333	3,000	3,333	470,000	188,000
	50.33a and Appendix L Anti-trust Review	0	0	0	0	0	0	0
	50.54(bb), Management of Irradiated Fuel	0	0	0	0	0	0	0
	50.55(b), Construction Completion	0	0	0	0	0	0	0
	50.59(c), 50.90, 50.91(a) & (b), License Amendment Application	526	962	50,573	455,160	505,733	71,308,400	12,410,349
	50.74, License Notification	1	205	21	184	205	28,905	28,905
	50.80(b), Transfer of License	435	17	740	6,660	7,400	1,043,400	521,700
2	50.36, 50.36a, 50.36b & Appendix I, Technical Specifications	277	1,911	223,352	306,275	529,627	74,677,407	5,696,717
	SUBTOTALS:		3,200	279,179	808,719	1,087,898	153,393,712	19,945,471

Enclosure 1

SUMMARY OF DRAFT SUPPORTING STATEMENTS

10 CFR PART 50

Section	Subject	Annual burden hours estimated per respondent	Number of responses annually	Estimated annual recordkeeping burden hours	Estimated annual reporting burden hours	Total estimated annual burden hours	Estimated annual cost to industry	Estimated annual cost to federal government
3	50.33(k), 50.75, & 50.82 Decommissioning	101	73	5,116	2,251	7,367	1,038,747	122,670
4	50.34(c) & (d) & 50.54(p), Security	197	273	5,370	48,330	53,700	7,571,700	1,135,755
5	50.34(g), SRP Conformance	0	0	0	0	0	0	0
6	50.35(b), Periodic Reports	0	0	0	0	0	0	0
7	50.44(c), Hydrogen Control			COMPLETE				
8	Appendix K, 50.46, ECCS	59	107.2	627	5,645	6,272	884,352	394,370
9	50.47, 50.54(q & t), Appendix E, Emergency Planning	6,172	130	80,234	722,114	802,348	113,131,068	815,826
10	50.48, Appendix R, Fire Protection	187	88	1,634	14,710	16,344	2,304,504	76,704
11	50.49, Environmental Qualification	2,080	104	216,320	0	216,320	30,501,120	0
12	50.54(f), Oath or Affirmation	457	210	9,607	86,465	96,072	13,546,152	761,400
	SUBTOTALS:		985.2	318,908	879,515	1,198,423	168,977,643	3,306,725

SUMMARY OF DRAFT SUPPORTING STATEMENTS Enclosure 1

10 CFR PART 50

Section	Subject	Annual burden hours estimated per respondent	Number of responses annually	Estimated annual recordkeeping burden hours	Estimated annual reporting burden hours	Total estimated annual burden hours	Estimated annual cost to industry	Estimated annual cost to federal government
13	50.34(w) & (4), Property Insurance Damage Insurance	4	55	22	198	220	31,020	1,974
14	50.54(cc), Bankruptcy Notifications	0	0	0	0	0	0	0
15	50.55(e), Design and Construction Deficiencies	0	0	0	0	0	0	0
16	50.55(f), Appendices A & B Quality Assurance	8,977	123	828,105	276,035	1,104,140	155,683,740	5,545,389
17	50.55a, ASME Codes	643	416	235,153	32,457	267,610	37,733,010	64,860
18	50.59(b), Reports	2,386	141	280,000	56,400	336,400	47,432,400	1,974,000
19	Appendices G & H, 50.60, Fracture Toughness	115	48	553	4,977	5,530	779,730	313,020
20	50.61, Pressurized Thermal Shock	200	12	240	2,160	2,400	338,400	35,250
21	50.62, ATWS	0	0	0	0	0	0	0
22	50.63, Station Blackout	0	0	0	0	0	0	0
	SUBTOTALS:		795	1,344,073	372,227	1,716,300	241,998,300	7,934,493

Enclosure 1

SUMMARY OF DRAFT SUPPORTING STATEMENTS

10 CFR PART 50

Section	Subject	Annual burden hours estimated per respondent	Number of responses annually	Estimated annual recordkeeping burden hours	Estimated annual reporting burden hours	Total estimated annual burden hours	Estimated annual cost to industry	Estimated annual cost to federal government
23	50.64, Highly Enriched Uranium	210	10	2,000	100	2,100	296,100	186,402
24	50.65, Maintenance	3,055	123	375,727	0	375,727	52,977,507	4,767,633
25	50.66, Thermal Annealing	0	0	0	0	0	0	0
26	50.71, Bulletins & Generic Letters	332	512	17,000	153,000	170,000	23,970,000	1,621,500
27	50.71(b) & Appendix C, Financial	1	128	13	115	128	18,048	18,048
28	50.71(e), Updated FSAR	903	79	7,137	64,238	71,375	10,063,875	50,319
29	50.72 & 50.54(z), Notification of Events	1.5	1,400	210	1,890	2,100	296,100	5,697,800
30	50.72(a), ERDS	5	454	215	1,937	2,152	303,432	381,264
	50.73, (LERs)	(see OMB Clearance No. 3150-0104)						
31	50.120, Training & Qualification	780	71	55,380	0	55,380	7,808,580	0
	SUBTOTALS:		2,777	457,682	221,280	678,962	95,733,642	12,722,966

SUMMARY OF DRAFT SUPPORTING STATEMENTS Enclosure 1

10 CFR PART 50

Section	Subject	Annual burden hours estimated per respondent	Number of responses annually	Estimated annual recordkeeping burden hours	Estimated annual reporting burden hours	Total estimated annual burden hours	Estimated annual cost to industry	Estimated annual cost to federal government
32	Appendix J, Containment Leakage	41	104	4,260	0	4,260	600,660	0
33	Appendix S, Earthquake Engineering Criteria	0	0	0	0	0	0	0
34	Regulatory Guides RG-1.174 thru RG-1.178)	813	46	31,900	5,500	37,400	5,273,400	1,499,535
	SUBTOTALS:		150	36,160	5,500	41,660	5,874,060	1,499,535
	TOTALS:		7,907.2	2,436,002	2,287,241	4,723,243	665,977,357	45,409,190

ENCLOSURE 2

Section 1

DRAFT SUPPORTING STATEMENT
FOR
APPLICATION FOR CONSTRUCTION PERMIT OR OPERATING LICENSE
(AND OTHER MISCELLANEOUS SECTIONS OF 10 CFR PART 50)

10 CFR 50.12, 50.30, 50.33, 50.34, 50.54(bb),
50.55(b), 50.55(d), 50.59(c), 50.74, 50.80, 50.90, 50.91(a) and (b)

DESCRIPTION OF THE INFORMATION COLLECTION

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.

Applications must contain information in three major categories to permit a complete evaluation by the NRC. These categories are general information, safety information which is submitted in two phases through a Preliminary Safety Analysis Report (PSAR) and a Final Safety Analysis Report (FSAR), and environmental information.

Additionally, 10 CFR Part 52 (see OMB Clearance 3150-0151) provides for issuance of early site permits, standard design certifications, and licenses which combine construction permits and conditional operating licenses for commercial nuclear power reactors. These licensing procedures are options to the two-step licensing process in 10 CFR Part 50, which provides for a construction permit and an operating license. Thus, Part 52 often incorporates by reference information collection requirements set forth in 10 CFR Part 50 for construction and operating license applicants.

The section of 10 CFR Part 50 that addresses each category of information for construction permit and operating license applications and NRC's detailed need within each category of information is outlined below. No power reactor applications for construction permits or operating licenses are anticipated during the next 3 years. No applications for design certification pursuant to Part 52 are anticipated during the next 3 years. One non-power reactor application for an operating license is expected within the next 3 years. Such applications are expected to require 10,000 hours of license applicant resources and 4,000 hours in NRR staff resources over a 2-year period. No construction permit applications are expected for non-power reactors.

1. Section 50.12, Specific Exemptions

Section 50.12 specifies that the Commission may, upon application by any interested person or upon its own initiative, grant an exemption from the requirements of 10 CFR Part 50 when (1) the exemption is authorized by law, will not present an undue risk to public health and safety, and is consistent with the common defense and security and (2) when special circumstances are present.

Special circumstances exist when:

(1) Application of the regulation conflicts with other Commission rules or requirements, or

(2) Application of the regulation would not serve the underlying purpose of the rule or is not necessary to achieve the underlying purpose of the rule, or

(3) Compliance with the regulation would result in hardship or other costs that are significantly in excess of those contemplated when the regulation was adopted, or that are significantly in excess of those incurred by others similarly situated, or

(4) The exemption would benefit public health and safety and compensates for any decrease in safety that may result by granting the exemption, or

(5) The exemption would provide temporary relief from the regulation and the applicant or licensee had made good faith efforts to comply with the regulation, or

(6) There are other material circumstances present that were not considered when the regulation was adopted, which would be in the public's interest to grant the exemption. If this condition is relied on exclusively to satisfy the issues of "special circumstances," the exemption may not be granted without further review.

It is estimated that there will be an average of 1 exemption per unit per year requiring approximately 400 licensee hours and 75 NRC staff hours per exemption.

Industry

104 units x 1 exemption x 400 hours = 41,600 hours

41,600 hours x $141 = $5,865,600

Federal Government

104 units x 1 exemption x 75 hours = 7800 hours

7800 hours x $141 = $1,099,800

2. Construction Permit

Section 50.30(a) provides for the filing of an application for a construction permit.

Contents of Applications:

a. General information (Sections 50.33, 50.33(f) and Appendix C, Sections I and II).

This information identifies the applicant and provides details about the applicant's financial qualifications.

Section 50.33(f) requires applicants to submit financial information that demonstrates reasonable assurance that required funds are available. Financial information is necessary because the NRC must make a decision as to whether the applicant's financial resources are adequate to permit construction of the plant in a safe manner and to permit implementation of safety-related programs described elsewhere in the application. Sections I and II of Appendix C of 10 CFR Part 50 outlines the information to be furnished by the applicant in the construction permit application to establish financial qualifications. The Commission requires the minimum amount of information necessary to determine an applicant's financial qualification. No special forms are prescribed for submitting the information. In many cases, the financial information usually contained in current annual financial reports, including summary data of prior years, will be sufficient for the Commission's needs.

Information required for antitrust review also must be included in the construction permit application. The need for such information is addressed in Item 3 below.

b. Safety information (Sections 50.34(a), 50.34a, 50.34a(a), 50.34a(b), Appendix B, Appendix E).

Safety information is provided by the applicant at the construction permit stage in the Preliminary Safety Analysis Report (PSAR). Section 50.34(a) outlines the minimum information that is necessary in the PSAR to permit the NRC to perform a safety evaluation. The PSAR includes the design criteria and preliminary design information for the proposed reactor and comprehensive data on the proposed site. (For earthquake engineering criteria and geologic and seismic siting factors, see Appendix S of 10 CFR Part 50 (Section 33 Supporting Statement) or 10 CFR Part 100 (OMB Clearance 3150-0093), respectively.) The PSAR also discusses situations and the safety features which will be provided to prevent accidents or, if they should occur, to mitigate their effects on both the public and the facility's employees.

The principal features of the staff's safety review of the information provided in the PSAR by the applicant is summarized as follows:

(1) A review is made of the population density and use characteristics of the site environs, and the physical characteristics of the site, including seismology, meteorology, geology and hydrology. This review is necessary to determine whether these characteristics have been evaluated adequately and have been given appropriate consideration in the plant design and whether site characteristics are in accordance with NRC siting criteria.

(2) A review is performed of the facility design, and of programs for fabrication, construction and testing of plant structures, systems, and components important to safety for the purpose of determining whether they are in accord with the NRC regulations and other NRC requirements.

(3) A review is performed of the applicant's preliminary calculations of the response of the facility to a broad spectrum of hypothetical accidents for the purpose of determining whether site acceptability guidelines are satisfied.

(4) For the purpose of determining whether the applicant is technically qualified to operate the plant and whether he has established effective organizations and plans for continuing safe operation of the facility, a review is made of the applicant's plans for:

  (i) plant operations including organizational structure,

  (ii) technical qualifications of operating and technical support personnel,

  (iii) planning for emergency actions to be taken in the event of an accident that might affect the general public (elements of preliminary planning that are required to be specified in the PSAR are set forth in 10 CFR 50.34(a) and Appendix E), and

  (iv) quality assurance (Appendix B) requires that the applicant provide in the PSAR, a description of the quality assurance program to be applied to the design, fabrication, construction, and testing of safety-related structures, systems, and components.

(5) A review is made of the description of the preliminary design in systems to be provided by the applicant for control of radiological effluents from the plant. This review is necessary to evaluate the general adequacy of the systems proposed to control the release of radioactive wastes from the facility within the limits specified by the NRC regulations. Minimum information required by the NRC for this review is specified in Sections 50.34a(a) and 50.34a(b).

The NRC has completed its review of the safety analysis report under 10 CFR 50.34 provisions for the Westinghouse AP600 design. No other design certification applications are either under review or anticipated.

c. Environmental Information

An Environmental Report, which provides a basis for the staff's evaluation of the environmental impact of the proposed plant, is specified as a requirement of the application for a construction permit in Section 50.30(f) and is justified in the OMB clearance for 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions" (3150-0021).

d. 50.55(b), Construction Completion

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 thereunder 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 licensee will be required to meet the regulations specified in 50.55(b) over the next 3 years.

3. Operating License

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 50.30(d).

Section 50.30(d) provides for the filing of an application for an operating license. The information provided in this application is essentially an update of the information categories (i.e., general, safety, and environmental) previously submitted in the application for a construction permit.

a. General information (Section 50.33).

Section 50.33(f) also requires applicants for operating licenses to submit financial information that demonstrates reasonable assurance that required funds are available. The applicant's financial qualifications must be detailed as they were for the construction permit application, but now the details must demonstrate that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operating costs for the period of the license, plus the estimated costs of permanently shutting down the facility and maintaining it in a safe condition. The applicant shall submit estimates of total annual operating costs for each of the first 5 years of facility operation and estimates of the costs to permanently shut down the facility and maintain it in a safe condition. The

applicant shall also indicate the source(s) of funds to cover these costs. An application to renew or extend the term of an operating license must include the same financial information as is required in an application for an initial license.

b. Safety information (Sections 50.34(b), 50.34(c), 50.34(d), 50.34a(c), Appendix B, and Appendix E).

Safety information is provided by the applicant at the operating license stage in the Final Safety Analysis Report (FSAR). Section 50.34(b) outlines the minimum information that should be provided in the FSAR to permit the NRC to perform a safety evaluation. This is essentially an update of information provided in the PSAR and allows the same editorial format. Among other things, the applicant must address the following items in the FSAR:

Pertinent details on the final design of the facility, including final containment design of the nuclear core and waste handling system; the applicant's latest plans for operation of the facility, as well as substantive procedures for coping with emergencies (Appendix E provides elements of emergency planning to be considered in the FSAR); the quality assurance program (Appendix B requires that information pertaining to managerial and administrative controls necessary to ensure safe operation of the plant be provided in the FSAR).

The final equipment design and procedures to be used by the applicant to control radiological effluents from the plant to permit the staff to determine whether such systems can control the release of radioactive wastes from the facility within the limits specified by NRC regulations. Information required by the NRC in the FSAR in this area of review is specified in Section 50.34a(c).

c. Physical Security Plan (Section 50.34(c)).

This plan describes the physical program that will be provided in accordance with the requirements of Section 50.34(c) to assure that the plant will be sufficiently protected against acts of sabotage that could cause releases of radioactive materials in amounts sufficient to represent a hazard to the public health and safety. Also see Supporting Statement for 50.54(p), Section 4 to this 10 CFR Part 50 OMB package.

d. Safeguards Contingency Plan (Section 50.34(d)).

The Safeguards Contingency Plan, as provided for in 10 CFR Part 50, will provide a structured, orderly, and timely response to safeguards contingencies and will be an important segment of NRC's contingency planning programs. Licensee safeguards contingency plans will result in organizing licensees' safeguard resources in such a way that, in the unlikely event of a safeguards contingency, the responding participants will be identified, their several responsibilities specified, and their responses coordinated.

e. Environmental Information

One non-power reactor application for an operating license is expected within the next 3 years. Such applications are expected to require 10,000 hours of license applicant resources and 4,000 hours in NRR staff resources over a 2-year period.

Industry:

10,000 hours x $141 = 1,410,000
Annualized over three years = $1,410,000 = $470,000

Federal government:

4000 hours x $141 = $564,000
Annualized over three years = $564,000/3 = $188,000

Section 50.54(bb) 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 Part 50 or Part 72. The licensee must demonstrate to 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 require NRC authorizations, the licensee shall verify in the notification that submittals for such actions have been or will be made to 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.

There are no facilities projected to be permanently shutdown during this clearance period.

4. 50.33a and Appendix L, Information Requested by the Attorney General for Antitrust Review

Under the Act as well as other laws to protect trade and commerce against unlawful restraints and monopolies, the NRC is required to report promptly to the Attorney General any information it may have with respect to nuclear power generation which appears to violate or to tend toward violation of antitrust laws or to restrict competition in private enterprise. Further, upon request of the Attorney General, the NRC must furnish

or cause to be furnished such information as the Attorney General determines to be appropriate for his advice on antitrust aspects of license applications for a utilization or production facility under Section 103 of the Act. The Attorney General's request is the basis for the NRC's antitrust reporting requirements.

The NRC staff estimates that no facility will be required to meet the provisions of 10 CFR 50.33a and Appendix L while this clearance is in place.

5. 50.34(f) TMI Requirements

Requires that applications for operating licenses contain the Three Mile Island related requirements relative to the way the requirements will be implemented or satisfied prior to issuance of an operating license. These requirements include operational safety features, siting and design, and emergency preparedness, and are intended to provide substantial, additional protection in the operation of nuclear facilities based on experience from the accident at Three Mile Island and the various studies and investigations of the accident. Estimated burden for this requirement is zero because the NRC does not anticipate any submittal of an application for an operating license during the duration of this clearance nor does it anticipate submittal of further applications for design certification during the clearance period.

6. 50.59(c), 50.90, 50.91(a) and (b), Application for Amendment of License

The 10 CFR Parts 50.59(c), 50.90, 50.91(a) and (b) are applicable for amendment of licenses to operating nuclear power plants and non-power reactors, and amendment of licenses to permanently shutdown nuclear power and non-power reactors. Section 50.59(c) requires the holder of a license authorizing operation of a production or utilization facility who desires (1) to make a change in technical specifications (TS) or (2) to make a change in the facility or procedures described in the safety analysis report, or to conduct tests or experiments that involve an unreviewed safety question or a change in TS to submit an application for amendment of the license pursuant to 50.90. Section 50.90 requires the application for amendment of the license or construction 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 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 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' analyses to quickly make and publish for public comment its "proposed determination" on significant hazards issues; the States need licensees' analyses in order to quickly consult with 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). Record keeping and reporting requirements for revisions that do not require an amendment are covered in Section 18 of this clearance submitted.

For the purpose of assessing the reporting requirement burden for the NRC and the regulated industry, the NRC will assume that the number of operating nuclear power plants will be 104, the number of operating non-power reactors will be 37, the number of permanently shutdown power plants will be 19, and the number of permanently shutdown non-power plants will be 15 throughout the clearance period. These burden estimates also assume that, throughout the clearance period, the average level of effort remains constant (**400 licensee hours/amendment**, **75 NRC hours/amendment** and **$141/staff hour**, respectively), and the average number of license amendments are: **10.5/unit/year** for "unconverted" power reactor licenses, **7/unit/year** for "converted" power reactor licenses, **1.5/unit/year** for permanently shutdown power reactor licenses, **1.5/unit/year** for operating non-power reactors, and **1/unit/year** for a permanently shutdown non-power reactors.

Each application for conversion to the STS is estimated to cost the industry approximately **$1.75M per unit**, which is comparable to 12,500 hours at a cost of $141 per hour.

The number of plants converted to the improved STS are expected to increase from 56 units at the beginning of FY 2001 to 86 units at the end of FY 2003, as summarized on the tables below.

Industry

FY	Unconverted Licenses		Non-Power Licenses		Conversions		Converted Licenses		Permantly Shutdown				TOTAL Burden
	Units	Burden[1] (hrs)	Units	Burden[2] (hrs)	Units	Burden[3] (hrs)	Units	Burden[4] (hrs)	Power Units	Burden[5](hrs)	Non-power Units	Burden[6] (hrs)	
2001	48	201,600	37	22,200	14	175,000	56	156,800	19	11,400	15	6,000	573,000
2002	34	142,800	37	22,200	9	112,500	70	196,000	19	11,400	15	6,000	490,900
2003	25	105,000	37	22,200	7	87,500	79	221,200	19	11,400	15	6,000	453,300
												Estimated Total Burden	1,517,200
												Estimated Annualized Burden	505,733

1. 10.5 amendments per unit per year, 400 licensee staff hours per amendment.
2. 1.5 amendments per unit per year, 400 licensee staff hours per amendment.
3. 12,500 hours per unit.
4. 7 amendments per unit per year, 400 licensee staff hours per amendment.
5. 1.5 amendments per unit per year, 400 licensee staff hours per amendment.
6. 1 amendment per unit per year, 400 licensee staff hours per amendment.

Total annualized industry cost @ $141/hour is $71,308,400 (505,733x$141).

Federal Government

The licensing burden on the NRC includes the effort to process license amendments, and the effort to review applications to completely "convert" existing TS to the improved STS. The effort to process a license amendment application for a conversion to the improved STS is estimated to be **1,450 staff-hours**, plus **$30K** for contractor assistance for each unit.

Although estimates below are based on fiscal years, they represent accurate averages for this clearance period.

FY	Unconverted Licenses		Non-Power Licenses		Conversions		Converted Licenses		Permantly Shutdown				TOTAL Burden
	Units	Burden[1] (hrs)	Units	Burden[2] (hrs)	Units	Burden[3] (hrs)	Units	Burden[4] (hrs)	Power Units	Burden[5] (hrs)	Non-power Units	Burden[6] (hrs)	
2001	48	37,800	37	4,163	14	20,300	56	29,400	19	2,138	15	1125	94,926
2002	34	26,775	37	4,163	9	13,050	70	36,750	19	2,138	15	1125	84,001
2003	25	19,688	37	4,163	7	10,150	79	41,475	19	2,138	15	1125	78,739
												Estimated Total Burden	257,666
												Estimated Annualized Burden	85,889

1. 10.5 amendments per unit per year, 75 staff-hours per amendment.
2. 1.5 amendments per unit per year, 75 staff-hours per amendment.
3. 1450 staff-hours per unit.
4. 7 amendments per unit per year, 75 staff-hours per amendment.
5. 1.5 amendments per unit per year, 75 staff-hours per amendment.
6. 1 amendment per unit per year, 75 staff-hours per amendment.

In addition to the Federal burden shown above for conversions to STS, each amendment is expected to require $30K for contractor assistance. Annualized (14 units x $30K + 9 units x $30K + 7 units x $30K = $900,000 ÷ 3), this cost is $300,000. Thus, the total annualized Federal cost is $12,410,349 (85,889 hours x $141/hour + $300,000 contractor cost).

7. 50.74, Licensee Notification to NRC

Section 50.74 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. It is estimated that there will be up to 205 notifications a year involving 1 hour each of industry and NRC staff effort. Thus, the estimated cost for industry and the Federal government is expected to be $28,905 ($141 x 205) each. (Note that notifications involving 10 CFR 55.25 are cleared under OMB Clearance No. 3150-0024.)

8. 50.80(b), Application for Transfer of Licenses

Section 50.80(b) specifies that an application for a transfer of a license shall include as much of the information described in sections 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. Section 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.

Deregulation of the electric utility industry has resulted in a large number of license applications involving mergers and restructurings. The NRC estimates that there will be approximately 12 of these applications annually. Each application normally involves approximately 200 hours of effort by industry and 100 hours by the NRC.

In addition, the NRC estimates that approximately 15 licensees will submit applications for transfer of the license to new operating companies. We anticipate that approximately 5 will be submitted annually. The review of these applications is expected to be extensive. Therefore, we believe review effort by the Federal government will encompass approximately 500 hours; licensee preparation of the applications is expected to involve approximately 1,000 hours.

Summary of Annual Burden and Cost, Section 50.80(b)

Industry:

12 applications (ownership changes) x 200 hours = 2,400 hours

5 applications (new operating company) x 1,000 = 5,000 hours

2,400 hours + 5,000 hours = 7,400 hours; 7,400 x $141 = $1,043,400

Federal government:

12 applications (ownership changes) x 100 hours = 1,200 hours

5 applications (new operating company) x 500 hours = 2,500 hours

1,200 hours + 2,500 hours = 3,700 hours; 3,700 hours x $141 = $521,700.

A. JUSTIFICATION

1. Need for the Collection of Information

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 and test facilities, 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.

Before a company can build a nuclear power plant at a particular site, it must obtain a construction permit from the NRC. Subsequently, the company must obtain an operating license from the NRC before it can operate the plant. The decision by NRC as to whether to approve a company's application for a construction permit or an operating license is based largely on the staff's detailed review of the information provided by the company as part of its application. Information provided by the applicant as part of the application is crucial to the licensing process as it provides NRC with the information it needs to make a decision with regard to the proposed plant's impact on the public's health and safety. Information required by the NRC to be included in each application for a construction permit or an operating license is addressed in the specific 10 CFR Part 50 sections for which this Supporting Statement, including those contained in Sections 2 through 34, is written.

"Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants," Regulatory Guide 1.70, Revision 3, indicates the information to be provided in the Safety Analysis Reports and represents a format for SARs that is acceptable to the NRC staff. Conformance with the Standard Format, however, is not required. Safety Analysis Reports with different formats will be acceptable to the staff if they provide an adequate basis for the findings requisite to the issuance of a license or permit. However, because it may be more difficult to locate needed information, the staff review time for such reports may be longer, and there is a greater likelihood that the staff may regard the report as incomplete.

2. Agency Use of Information

Upon receipt of an application, the NRC staff performs a preliminary review to determine if the SAR provides a reasonably complete presentation of the information that is needed to form a basis for the findings required before issuance of a permit or license in accordance with 10 CFR 2.101. The Standard Format will be used by the staff as a guideline to identify the type of information needed unless there is good reason for not doing so. If the SAR does not provide a reasonably complete presentation of the necessary information, further review of the application will not be initiated until a reasonably complete presentation is provided. The information provided in the SAR should be up to date with respect to the state

of technology for nuclear power plants and should take into account recent changes in the NRC regulations and guides and in industry codes and standards, results of recent developments in nuclear reactor safety, and experience in the construction and operation of nuclear power plants. The Standard Format should be used for both Preliminary Safety Analysis Reports (PSARs) and Final Safety Analysis Reports (FSARs); however, any specific item that applies only to the FSAR will be indicated in the text by adding (FSAR) at the end of the guidance for that item. An entire section that is applicable only to the FSAR will be indicated by including (FSAR) following the heading.

The staff reviews in detail applications for construction permits and operating licenses to determine if the public health and safety will be fully protected. These reviews are conducted in some 50 different technical disciplines organized within the Office of Nuclear Reactor Regulation.

If any portion of an application is considered to be inadequate, the staff requests the applicant to make appropriate modifications or to provide needed additional information. In many cases, the staff review results in modifications to the facility's design or operating procedures. The result of the staff review is provided in a Safety Evaluation Report. This report represents a summary of the review and evaluation of the application by the staff relative to the anticipated effect of the proposed facility on the public health and safety. Safety Evaluation Reports are prepared for both the construction permit and operating license applications.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use. The NRC is implementing it's "ADAMS" electronic documents system, which provides for electronic submission of reports from licensees, including these reports.

4. Effort to Identify Duplication and Use Similar Information

Licensees authorized to construct and to operate production or utilization facilities are the only source for this information. The provisions of these regulations are not duplicated in other Federal regulations. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found.

5. Effort to Reduce Small Business Burden

This information collection affects 37 operating and 15 permanently shutdown non-power reactor licensees. For certain provisions of 10 CFR 50, the burden for non-power reactor licensees is significantly less than that for power reactor licensees. It is not possible to reduce this burden without impairing NRC's mandated responsibilities.

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

These regulations do not require that applications for construction permits or operating licenses be filed at a certain time. This information is mandated by the Atomic Energy Act to ensure the health and safety of the public.

7. Circumstances which Justify Variation from OMB Guidelines

These information collections do not vary from OMB guidelines.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential or proprietary information is handled in accordance with the provisions of 10 CFR 2.790 and 10 CFR 9.17, "Agency Records Exempt from Public Disclosure."

11. Justification for Sensitive Questions

These regulations do not involve sensitive questions.

12. Estimated Industry Burden and Burden Hour Cost

See the attached Summary Table.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

The annualized estimated cost to the government is shown on the attached Summary Table. This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The overall burden for Section 1 has decreased by 21,709 hours as explained below. One non-power reactor operating license application is anticipated with an annualized burden of 3,333 hours. Although the number of amendments is expected to increase slightly, the anticipated burden per submittal is anticipated to decrease, resulting in a total burden decrease of almost 70,000 hours for license amendments. A slight decrease in the number of amendments had occurred over the past three years; however, for FY 2000, the staff notes that the number of incoming licensing actions has increased by about 10 percent. Additionally, the number of license transfers will increase in this clearance period and will increase the burden for section 50.80(b) by over 2,700 hours. The burden for exemption requests has been incorporated into this clearance for the first time and will result in a burden increase of 41,600 hours.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirements are contained in a regulation. Amending the Code of Federal Regulations 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.

Enclosure:
Summary Table (Part 1)

Section 1
SUMMARY TABLE
Application for Construction Permit or Operating License

Subject	Annual Burden Hours Per Respondent	Number of Responses Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Annual Cost to Industry	Annual Cost to Federal Government
50.12, exemptions	400	104	4,160	37,440	41,600	$5,865,600	$1,099,800
50.30, 50.33, 50.34 50.54(bb), et al	3333	1	333	3,000	3333	$470,000	$188,000
50.55b, Const. permit ext.	0	0	0	0	0	0	0
50.33a and Appendix L	0	0	0	0	0	0	0
50.34(f), TMI	0	0	0	0	0	0	0
50.59(c), 50.90 and 50.91 (a) and (b), license amend. appl.	526	962	50,573	455,160	505,733	$71,308,400	$12,410,349
50.74, licensee notification to NRC	1	205	21	184	205	$28,905	$28,905
50.80(b) transfer of license	435	17	740	6,660	7,400	$1,043,400	$521,700
Totals:	433	1,289	55,827	502,444	558,271	$78,716,305	$14,248,754

Section 2

DRAFT SUPPORTING STATEMENT FOR TECHNICAL SPECIFICATIONS CONTAINED IN LICENSES TO OPERATE NUCLEAR POWER PLANTS AND NON-POWER REACTORS AND THEIR REPORTING AND RECORDKEEPING REQUIREMENTS

10 CFR 50.36, 50.36a, 50.36b, AND APPENDIX I[1]

DESCRIPTION OF THE INFORMATION COLLECTION

The Section 2 Supporting Statement reflects the reporting and recordkeeping requirements for nuclear power plants that have converted to the Standard Technical Specifications (STS), Revision 1, those nuclear power plants that have not converted, non-power reactors, and permanently shutdown reactors.

The STS, Rev. 1 (published April 7, 1995), does not include requirements for the following reports: the Startup Report, Sealed Source Leakage Report, Non-Routine Environmental Reports, and a Special Report on Emergency Core Cooling System (ECCS) actuating and injecting of water into the Reactor Coolant System in MODE 1, 2, or 3. Therefore, nuclear power plants that have converted to the STS, Rev. 1, will not submit these reports. Conversely, those nuclear power plants that have not converted to the STS will be responsible for submitting all the reports listed in this Supporting Statement, for technical specifications (TS). Non-power reactors and permanently shutdown reactors will be responsible for reporting as required by their facility-specific TS.

Section 50.36(a) requires each applicant for a license authorizing operation of a production or utilization facility to include in its application proposed TS. A summary statement of the bases or reasons for such specifications, other than those covering administrative controls, shall also be included in the application.

Section 50.36(b) requires each license authorizing operation of a production or utilization facility to include TS. The TS are derived from the analyses and evaluations included in the safety analysis report, and amendments thereto, submitted pursuant to 10 CFR 50.34. (See Section 1 Supporting Statement.)

Section 50.36(c) states that TS will include (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls. For nuclear power plants that have submitted

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[1] Appendix I to 10 CFR 50 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.

the certifications required by 10 CFR 50.82(a)(1) and for non-power reactors which are not authorized to operate, TS involving (1)-(5) are developed on a case-by-case basis. Section 50.36(c) also requires that certain records be maintained as described in A.1.k of this Supporting Statement.

Section 50.36(c)(7) requires that if the TS for any of the above-mentioned categories are exceeded, the nuclear power plant licensee must notify the Commission, make a record of the review and retain such record until the Commission terminates the license. These notifications are made pursuant to 10 CFR 50.72 (Section 10 Supporting Statement) and 10 CFR 50.73 (OMB Clearance 3150-0104).

Section 50.36a requires each nuclear power reactor license to include TS on effluents. Section 50.36a(a)(1) requires that operating procedures be established and maintained until the Commission terminates the license with superseded procedures retained for three years. Section 50.36a(a)(2) requires the licensee to submit to NRC an annual report of radionuclides released as liquid and gaseous effluents to unrestricted areas (see "Radioactive Effluent Report," below).

Section 50.36b states that 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 operation required by 50.82(a)(1) has been submitted, which is of a type described in 50.21(b)(2) or (3) or 50.22 or a testing facility may include conditions to protect the environment to be set out in an attachment to the license. 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.)

No applications for licenses are expected during this clearance period; hence, no initial TS filings are anticipated. However, for the purpose of bounding these estimates, we have assumed that 104 operating and 19 permanently shutdown nuclear power reactors and 37 operating and 15 permanently shutdown research and test (non-power) reactors are affected by the provisions of the various reporting and recordkeeping requirements that NRC approves as part of the TS submitted pursuant to 10 CFR 50.36 and 50.36a. These reporting/recordkeeping requirements are set forth as "administrative controls" in the Appendix A TS appended to each facility license. They are designed to ensure operation of the facility in a safe manner. Additionally, pursuant to 10 CFR 50.36b, environmental reporting and recordkeeping requirements are set forth in Appendix B TS or environmental protection plans. (A few facilities have a single appendix that contains the combined aspect of Appendices A and B.)

The July 19, 1995, final rule on TS for nuclear power reactors (60 FR 36953) codifies the criteria identified in the final policy statement for determining the content of TS. Each licensee covered by these regulations may voluntarily use the criteria as a basis to propose relocation of existing TS that do not meet any of the criteria from the facility license to licensee-controlled documents. The NRC encourages licensees to implement a program to upgrade their TS consistent with the final rule. However, guidelines exist for adopting significant portions of the improved Standard Technical Specifications (STS) (line item improvement) in lieu of a complete conversion. These guidelines are published as Generic Letters or Administrative Letters. (See Section 1 Supporting Statement.)

A. JUSTIFICATION

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

Unless stated otherwise, all reports listed are required to be submitted by all converted and non-converted nuclear power plants and all non-power reactors during this clearance period. Those reports required by permanently shutdown reactors are so identified.

The reporting and recordkeeping burdens with associated justifications are explained below. NRC Regulatory Guide 1.16, Rev. 4, "Reporting of Operating Information - Appendix A Technical Specifications," provides the program being used by the NRC staff in order to standardize the reporting requirements section of Appendix A TS for all operating nuclear power plant licenses.

For nuclear power plant licensees holding operating licenses without Appendix B environmental TS or environmental protection plans, the unique reporting requirements section of the Appendix A TS include those reports identified in Regulatory Guide 1.21, Rev. 1, "Measuring, Evaluating, and Reporting Radioactivity in Solid Wastes and Releases of Radioactive Materials in Liquid and Gaseous Effluents from Light-Water-Cooled Nuclear Power Plants," and Regulatory Guide 4.1, Rev. 1, "Programs for Monitoring Radioactivity in the Environs of Nuclear Power Plants."

For non-power reactors, the American National Standards Institute (ANSI)/American Nuclear Society (ANS) Standard 15.1-1990 provides the guidance for technical specifications, including reporting and recordkeeping.

a. Radioactive Effluent Report

The Radioactive Effluent Reports are divided into Exceeding Design Objectives Reports and Annual Effluent Reports. Both of these reports are required to be submitted by converted and unconverted plants and reviewed by the NRC. The non-power reactors and permanently shutdown reactors are required to submit only the Annual Effluent Report for NRC review.

Section 50.36a of 10 CFR Part 50 specifies that to keep releases of radioactive materials to unrestricted areas as low as is reasonably achievable, each nuclear power reactor license must include TS. The NRC staff has 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. The contents of these three documents (as applicable) and the reporting requirements specified therein are being made part of the Appendix A TS for new operating licenses. These same requirements are

also being added to existing operating licenses as license amendments. (Appendix A TS are approved by the NRC, incorporated in the facility operating license, and are conditions of the license.)

Routine radioactive effluent release reports covering the operation of the nuclear power plant during the previous 12 months of operation are to be submitted prior to May 1 of each year covering the prior year. This report includes a summary of the quantities of radioactive liquid and gaseous effluents released to the environment and solid waste shipped from the site.

Special reports, or reports on exceeding design objectives, are required when certain conditions exist or parameters are exceeded, e.g., when the radiation dose for any calendar quarter is equal to or greater than one half the actual limit, or the annual dose exceeds twice the annual limit; when the liquid, gaseous or solid rad-waste treatment system or the building ventilation system are inoperable for more than 31 days.

b. Startup Report

The Startup Report is not required to be submitted by plants that have converted to the STS or by permanently shutdown reactors. Plants that have not converted and all non-power reactors are required to submit this report.

This report is submitted within (1) 90 days following completion of the startup test program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. The report addresses each test identified in the Final Safety Analysis Report (FSAR) and should include a description of the test and the test conditions, the measured values of the operating conditions or characteristics obtained during the test program, and a comparison of these values with design predictions and specifications.

The startup report provides the staff with evidence that the plant systems are functioning as designed and can be expected to perform as planned in the safe operation of the plant.

The report is necessary to identify design deficiencies and to obtain data on plant operation to verify (or provide a basis to modify) TS limits for operation. The data are also necessary for guidance in determining core reload requirements based on physics data obtained in testing to reveal areas where additional performance verification testing is required or where further guidance is needed through additional regulatory guides or revision of existing guides.

c. Sealed Source Leakage Report

The Sealed Source Leakage Report is not required to be submitted by some of the more recent plant TS and by plants that have converted to the STS. All other nuclear power plants and all non-power reactors are required to submit this report.

Records documenting sealed source leakage data are to be maintained by the licensee for at least 5 years. Depending on the degree and circumstances of the sealed source leakage, a report may still be required by other 10 CFR requirements (e.g., 10 CFR 20).

For some nuclear facility licenses, the reporting requirements for sealed sources licensed under 10 CFR Part 50 are included as a TS appended to the nuclear facility license or other applicable license requirements (10 CFR 70). For some plants, a special report should be submitted within 90 days following a test in which the results indicate removable contamination levels greater than 0.005mCi. Most reporting will be made annually since any license that requires more frequent reporting can be amended, at the request of the licensee, to call for annual reports.

Information on any sealed source that exceeds the limitation on removable contamination should be reported annually for the licensed nuclear facility. If such information was not received, the quality assurance record for sealed sources used in operating a nuclear facility would be incomplete and failures would not be reported. Thus, the manufacturing process for maintaining the integrity of sealed sources under various operating conditions could be unknowingly deficient.

d. Monthly Operating Report

The Monthly Operating Reports are applicable only to operating nuclear power plants, not to the non-power reactors, nor to permanently shutdown reactors. The TS require a report of operating statistics and shutdown experience. This report is submitted to the Commission by licensees on a monthly basis. Information submitted in the "Monthly Operating Report" includes (1) Average Daily Unit Power Level; (2) Operating Data; (3) Unit Shutdowns and Power Reductions; and (4) Spent Fuel Storage Capacity, and is used as performance indicators.

Using the data from licensees' monthly reports and information received from NRC regional offices, the NRC prepares a monthly report entitled "Operating Units Status Report." The report indicates, for each licensed unit, average daily power levels, operating status, unit shutdowns and power reductions, and summaries for all nuclear plant operations, including the capability to off-load spent fuel.

This monthly report is used by the NRC, the Department of Energy, and other Federal and State agencies. This report is necessary for Federal and State agencies to keep abreast of current plant operating data, including plant availability, which is of particular use during periods of reduced power output from other energy sources. Copies of the report are sent to the utilities to share with them the operating experience of other operators of nuclear power plants. The report is also available to the public.

e. Non-Routine Environmental Reports

The Non-Routine Environmental Reports are not required to be submitted by plants that have converted to the STS. These reports have been removed from the improved STS because they fall within the jurisdiction of other agencies. The removed reports do not meet any of the established criteria for inclusion in the STS. Those operating and permanently shutdown plants that have not converted to the improved STS must continue to comply with the requirements in their current TS.

Non-power reactors are not required to submit this report unless an event occurs at a facility which is beyond the TS or 10 CFR 20 requirements.

The non-routine report provides information which specifies and quantifies data concerning unusual events and provides the basis for recommending appropriate action. It provides data in a timely fashion so that changes in operating procedures or design modifications can be implemented as soon as possible. The NRC staff performs a detailed analysis of each event warranting such a study.

f. Annual Environmental Operating Report

Section 50.36b authorizes conditioning of applicable licenses to protect environmental values, e.g., commercial and sport fisheries, rare and endangered species, recreational land and water use. Nonradiological license conditions are generally incorporated in the license as Appendix B Environmental Technical Specifications or environmental protection plans. These conditions include requirements for an Annual Environmental Operating Report.

The purpose of nonradiological environmental monitoring is to confirm the environmental assessments presented in the Final Environmental Statement (FES) which described the impact of the proposed facility. The nonradiological programs are also designed to detect unanticipated adverse impacts (i.e., adverse impacts which exceed predictions of the FES or impacts that were not predicted) soon enough to take appropriate action.

Monitoring programs are usually incorporated to assess the magnitude of predicted adverse impacts. If the impacts are different from those anticipated, the licensee or staff can take action to change the TS, plant design, or operating procedures to more adequately account for the actual effects of facility operation.

g. Annual Radiological Environmental Operating Report

Each reactor license includes a TS requiring submission of annual radiological environmental operating reports. This report covers the operation of the plant during the previous calendar year and shall be submitted by May 15 of each

year for nuclear power plants and as required by TS for non-power reactors. The material in the report is outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I.

The annual radiological environmental operating reports include summaries, interpretations, and an analysis of trends of the results of the radiological environmental surveillance activities for the report period, including a comparison with preoperational studies, operational controls (as appropriate), and previous environmental surveillance reports and an assessment of the observed impacts of the plant operation on the environment. The reports also include the results of land use censuses required by the TS and/or ODCM. If harmful effects or evidence of irreversible damage are detected by the monitoring, the report provides an analysis of the problem and a planned course of action to alleviate the problem.

The annual radiological environmental operating reports include summarized and tabulated results in the format of the table in the "Radiological Assessment Branch Technical Position," Revision 1, November 1979[2], of all radiological environmental samples taken during the report period. In the event that some results are not available for inclusion with the report, the report is submitted noting and explaining the reasons for the missing results. The missing data are submitted as soon as possible in a supplementary report.

The report also includes the following: a summary description of the radiological environmental monitoring program; a map of all sampling locations keyed to a table giving distances and directions from the reactor; and the results of licensee participation in the Interlaboratory Comparison Program, required by the TS.

The report provides a record of environmental radiation around the plant. The report is reviewed by the NRC staff to determine whether radioactive material released routinely by nuclear power plants may have resulted in excessive environmental radiation. Without the report, the NRC staff could not provide adequate assurance that the public is being protected from such environmental radiation.

h. Occupational Radiation Exposure Report

The Occupational Radiation Exposure Report, submitted annually as required by the TS, is a statistical summary of ranges of exposures. It provides data on sources of radiation exposure that provides key feedback to licensing and inspection programs related to radiation protection. Specifically, it is generally a tabulation of the number of station, utility, and other personnel (including

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[2] This document pertains to the radioactive effluent reporting requirements discussed in paragraph a.

contractors) receiving exposures > 100 mrem/yr and their associated man rem exposures according to work and job functions, e.g., reactor operations and surveillance, in service inspection, routine maintenance, special maintenance, waste processing, and refueling. This tabulation supplements the requirements of 10 CFR Part 20.

The information on occupational personnel radiation exposure submitted by the licensees is necessary to enable the NRC staff to analyze procedures and hardware radiation exposure problems associated with operation, outage, or maintenance. The information provides a basis for evaluation of new plant designs or for modifications to present plant designs with respect to assuring that plants are designed for as low as reasonably achievable occupational radiation exposure.

Using data submitted by the licensees, the NRC also prepares an annual report entitled "Occupational and Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities" (NUREG-0713). Included in the report is a compilation of in-plant occupational exposure data by work and job function. The information is required to establish trends among plants and within plants.

i. Special Reports

Special Reports may be required covering inspection, test, and maintenance activities. These special reports are determined for each unit individually and are prepared and submitted as designated in the units' TS.

Special Reports shall be submitted in accordance with 10 CFR 50.4 within the time period specified for each report.

Some Special Reports are:

(1) Emergency Core Cooling System (ECCS) Events Report

This report refers to ECCS events that actuate and inject water into the Reactor Coolant System (RCS) in MODE 1, 2, or 3. It describes the circumstances of the actuation and the total accumulated actuation cycles to date. This special report is not required to be submitted by nuclear power plants that have converted to the STS, nor by permanently shutdown reactors. Nuclear power plants that have not converted are required to submit this report. Non-power reactors are required to submit this report in accordance with their TS.

(2) EDG Failure Report for Nuclear Power Plants

If an individual emergency diesel generator (EDG) experiences four or more valid failures in the last 25 demands, these failures and any nonvalid failures experienced by the EDG in that time period shall be reported within 30 days.

(3) PAM Report for Nuclear Power Plants

When a special report is required by TS Limiting Condition for Operation, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days from the time the action is required.

(4) Tendon Surveillance Report for Nuclear Power Plants

Any abnormal degradation of the containment structure detected during the tests required by the Pre-Stressed Concrete Containment Tendon Surveillance Program shall be reported to the NRC within 30 days.

(5) Steam Generator Tube Inspection Report for Nuclear Power Plants

Following each in-service inspection of steam generator (SG) tubes, in accordance with the SG Tube Surveillance Program, the number of tubes plugged and tubes sleeved in each SG shall be reported to the NRC within 15 days.

The complete results of the SG tube in-service inspection shall be submitted to the NRC within 12 months following the completion of the inspection.

Results of SG tube inspections that fall below a prescribed standard shall be reported to the NRC prior to resumption of plant operation.

j. Core Operating Limits Report (COLR) for Nuclear Power Plants

Core operating limits are established prior to each reload cycle, or prior to any remaining portion of a reload cycle, and are documented in the COLR. The core operating limits are determined such that all applicable limits (e.g., fuel thermal mechanical limits, core thermal hydraulic limits, ECCS limits, nuclear limits such as SDM, transient analysis limits, and accident analysis limits) of the safety analysis are met.

The COLR reduces NRC and industry burden. The COLR includes core operating limits that vary from cycle to cycle and are determined through an NRC approved methodology. By having these limits located in the COLR, which is referenced by TS, the need for a license amendment after each refueling is reduced and hence all the effort associated with a license amendment is reduced.

k. Recordkeeping Requirements

NRC regulations in 10 CFR 50.36 and 50.36a establish requirements for recording results of reviews of events reported to the Commission, including those reported in accordance with 50.36(c) (See below) and 50.72 and 50.73,

and requirements for recordkeeping as part of administrative controls. These records are maintained primarily for the life of the plant. Certain records are only retained for 3 years or as specified in TS.

Section 50.36(c)(1)(i)(A) requires recording the results of reviews of nuclear reactor events in which a safety limit has been exceeded.

Section 50.36(c)(1)(i)(B) requires recording the results of the reviews of fuel reprocessing plant events in which a safety limit has been exceeded.

Section 50.36(c)(1)(ii)(A) requires recording the results of reviews of nuclear reactor events in which an automatic safety system does not function as required.

Section 50.36(c)(1)(ii)(B) requires recording the results of reviews of fuel reprocessing plant events in which an automatic alarm or protective device does not function as required.

Section 50.36(c)(2) requires recording the results of reviews of events in nuclear reactors and fuel reprocessing plants in which a limiting condition for operation is not met. Each of the above records of review must include the cause of the condition and the basis for corrective action taken to preclude recurrence.

Section 50.36(c)(5) requires that administrative controls, including recordkeeping, be included in the TS of a production or utilization facility as necessary to assure operation of the facility in a safe manner. Details of recordkeeping are delineated in Section 5.10 of Standard Technical Specification NUREG-1433 for General Electric BWR/4 and NUREG-1434 for BWR/6 reactors, NUREG-1432 for Combustion Engineering pressurized water reactors, NUREG-1430 for Babcock and Wilcox pressurized water reactors and NUREG-1431 for Westinghouse pressurized water reactors. Details of recordkeeping are delineated in ANSI/ANS 15.1 for non-power reactors.

The records required by Section 50.36(c)(5) include the following:

The following records shall be retained for at least 3 years:

1. All Licensee Event Reports required by 10 CFR 50.73;

2. Records of changes made to the procedures required by Specification 5.4.1; and

3. Records of radioactive shipments.

The following records shall be retained for at least 5 years:

1. Records and logs of unit operation covering time intervals at each power level;

2. Records and logs of principal maintenance activities - inspections, repair, and replacement of principal items of equipment related to nuclear safety;

3. Records of surveillance activities, inspections, and calibrations required by the TS and the Fire Protection Program;

4. Records of sealed source and fission detector leak tests and results; and

5. Records of the annual physical inventory of all sealed source material of record.

The following records are generally required to be retained for the duration of a typical operating license:

1. Records and drawing changes reflecting unit design modifications made to systems and equipment described in the FSAR;

2. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories;

3. Records of radiation exposure for all individuals entering radiation control areas;

4. Records of gaseous and liquid radioactive material released to the environs;

5. Records of transient or operational cycles for those unit components identified in the FSAR;

6. Records of reactor tests and experiments;

7. Records of training and qualification for members of the unit staff;

8. Records of in service inspections performed pursuant to the TS;

9. Records of quality assurance activities required by the Operational Quality Assurance (QA) Manual;

10. Records of reviews performed for changes made to procedures, equipment, or reviews of tests and experiments pursuant to 10 CFR 50.59;

11. Records of the reviews and audits of the QA program required by the TS, includes changes to procedures, programs, systems or equipment that affect nuclear safety, tests or experiments that affect nuclear safety, and changes to TS and the operating license;

12. Records of the service lives of all hydraulic and mechanical snubbers, including the date at which the service life commences, and associated installation and maintenance records;

13. Records of secondary water sampling and water quality;

14. Records of analyses required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date (these records should include procedures effective at specified times and QA records showing that these procedures were followed);

15. Records of reviews performed for changes made to the Offsite Dose Calculation Manual and the Process Control Program;

16. Records of pre-stressed concrete containment tendon surveillance; and

17. Records of steam generator tube surveillance.

These records are used by the licensees, the NRC and other Federal, State and local government agencies for the review of a variety of activities in the facility, many of which affect safety. The records are also historical in nature and provide data on which future activities can be based. NRC inspection and enforcement personnel can spot check the records required by 50.36 and 50.36a to determine, for example, if (1) plant modifications were performed satisfactorily, (2) the plant was operated within the TS, (3) personnel training has been kept current, (4) plant effluents have been kept within allowable values, and (5) operating procedures maintained, etc. Because of the multiple-use nature of many of the records, NRC has estimated only the incremental burden.

2. Agency Use of Information

NRC uses this information to determine whether releases of radioactive materials to unrestricted areas during normal reactor operations, including expected operational occurrences, are as low as is reasonably achievable. The agency also uses this information to ensure the protection of the non-radiological environment.

Moreover, safety limits, limiting safety system settings, and limiting control settings, limiting conditions for operation, surveillance requirements, and design features are monitored by the TS for ensuring that the health and safety of the public are not affected adversely from the operation of nuclear power reactors.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no source for the required information other than licensees. Some duplication of agency requirements has been identified. The STS were developed to limit duplication, reduce burden, and clarify requirements.

5. Effort to Reduce Small Business Burden

There are only 37 operating and 15 permanently shutdown non-power reactors subject to the provisions of the TS regulations. The burden for non-power reactors cannot be further reduced without potentially affecting the health and safety of the public.

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

If the collection is not conducted or is conducted less frequently, the NRC would not be able to ensure that the health and safety of the public is not adversely affected by the operation of a reactor.

7. Circumstances which Justify Variation from OMB Guidelines

A few special reports such as the Licensee Event Reports required by 50.36(c), 50.72, and 50.73 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 29 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 affected adversely by the operation of the plant.

8. Consultations Outside the NRC

Requests by licensees for changes to TS are noticed in the Federal Register. Public comments or requests for hearing are considered by the NRC.

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is handled in accordance with 10 CFR 2.790.

11. Justification for Sensitive Questions

The subject regulations do not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Reporting Burden

Reporting burden is estimated below. The attached Tables reflect this burden applied to nuclear power plants that have converted to STS, to nuclear power plants that have not converted, to non-power reactors, and to permanently shutdown reactors. While many plants will not have totally converted to the STS during the clearance period, most plants will have adopted the revised reporting and recordkeeping requirements at the STS through line item improvements. For ease of burden calculation for the clearance period, the burden has been calculated based on an assumption of 100 converted and 4 unconverted operating power plants and 63 converted and 2 unconverted sites.

a. Radioactive Effluent Reports

1) The Exceeding Design Objectives Reports include (a) Exceeding Design Objectives Doses, (b) Inoperable Radwaste Equipment, (c) Dose Contribution from Effluents, (d) Unplanned Radioactive Release, (e) Exceeding 10 CFR Part 20 Release Limits and (f) Exceeding Ci Content in Liquid or Gaseous Tank or Ci Release Rate for Offgas System (BWR), which involve approximately 50 hours each for 3 nuclear power plants (a total of about 150 hours annually). The total number of reports is 3.

2) Annual Effluent Reports for each operating nuclear power plant require 140 hours preparation/report. Therefore, the estimated burden is 140 hours/plant x 104 plants = 14,560 total burden hours. These reports for each permanently shutdown nuclear power plant require 35 hours preparation/report for a total burden of 665 hours (35 hours/plant x 19 plants). The total number of reports is 123 (104 + 19 = 123).

Each non-power reactor licensee submits an Annual Effluent Report. It is estimated that 70 hours are required to prepare each of these 37 reports for operating non-power reactors and approximately 20 hours for 15 permanently shutdown non-power reactors for a total of 2,890 burden hours (70 hours x 37 = 2,590 hours + 20 hours x 15 = 300 hours). The total number of reports is 52 (37 + 15 = 52).

b. Startup Report

Startup Reports are not required to be submitted by nuclear power plants that have converted to the STS. Only nuclear power plants that have not converted and non-power reactors are required to submit this report. Of the 4 unconverted plants, approximately 2 are estimated to submit a report each year. The burden is estimated to be 140 hours/report x 2 reports = 280 burden hours. The total number of reports is 2.

On the average, each non-power reactor submits a Startup Report each year. One hundred (100) hours are estimated for preparation time (100 hours x 37 facilities = 3,700 total burden hours). The total number of reports is 37.

c. Sealed Source Report

Sealed Source Reports are not required to be submitted by plants that have converted to the STS. Unconverted plants, non-power reactors, and permanently shutdown reactors are required to submit this report.

Plants are required to report only those sealed source test results which exceed the removable contamination limit. Of the 4 unconverted plants, none are estimated to submit a report.

The combined non-power reactors prepare about one Sealed Source Report/year. It is estimated that the burden is 10 hours. The total number of reports is 1.

The combined permanently shutdown power reactors also prepare about one Sealed Source Report/year. It is estimated that the burden is also 10 hours. The total number of reports is 1.

d. Monthly Operating Report

Each operating nuclear power plant submits 12 reports annually, imposing a preparation burden of 50 hours per report (50 hours x 104 plants x 12 reports = 62,400 burden hours). The total number of reports is 1,248 (104 x 12 = 1,248).

Non-power and permanently shutdown reactor licensees do not submit Monthly Operating Reports.

e. Non-Routine Environmental Report

Non-Routine Environmental Reports are not required to be submitted by converted nuclear power plant sites. Only sites that have not converted are required to submit this report.

Each unconverted site submits one report annually and each report requires 50 hours preparation time. Each permanently shutdown site submits one report annually with an estimated preparation time of 5 hours. Thus, the estimated burden at 50 hours x 2 unconverted sites and 5 hours x 13 permanently shutdown sites = 165 burden hours. The total number of reports is 15 (2 + 13 = 15).

Non-power reactors do not submit Non-Routine Environmental Reports.

f. Annual Radiological Environmental Operating Report

Operating nuclear power plant licensees will submit this report for an estimated 65 sites in response to this requirement. The burden is estimated to be 1,400 hours/report x 65 sites = 91,000 burden hours. Permanently shutdown nuclear power plant licensees also submit this report for approximately 13 sites at an estimated burden of 700 hours/report = 9,100 hours. The total number of reports is 78 (65 + 13 = 78).

Each operating and permanently shutdown non-power reactor submits this report. It is estimated that the preparation time for each operating non-power reactor is 200 hours/report and approximately 100 hours/report for each permanently shutdown non-power reactor. Therefore, the estimated burden for non-power reactors = 8,900 hours (37 x 200 hours = 7,400 hours + 15 x 100 hours). The total number of reports is 52 (37 + 15 = 52).

g. Annual Environmental Operating Report

Licensees for 65 operating and 13 permanently shutdown nuclear power plant sites are required to submit this report. Each report could require approximately 1,400 hours to prepare for each operating plant site and approximately 140 hours to prepare for each permanently shutdown plant site for a total estimated burden of 92,820 hours (65 sites x 1,400 hours/operating site + 13 sites x 140 hours/permanently shutdown site). The total number of reports is 78 (65 + 13 = 78).

The non-power reactor licensees do not submit Annual Environmental Operating Reports.

h. Annual Radiation Exposure Report

Each operating and permanently shutdown nuclear power plant licensee is required to prepare one report per year. The preparation time is estimated to be 40 hours per report for operating plants and 20 hours per report for permanently shutdown plants. The total annual burden is thus estimated to be 4,540 hours (40 hours/plant x 104 plants + 20 hours/plant x 19 plants). The total number of reports is 123 (104 + 19 = 123).

The estimated burden for operating non-power reactors is 10 hours preparation for each facility and for each permanently shutdown non-power reactor, the preparation time is estimated at 5 hours (10 hours preparation x 37 operating non-power reactors + 5 hours x 15 permanently shutdown non-power reactors = 445 total burden hours). The total number of reports is 52 (37 + 15 = 52).

i. Special Reports

Prior to conversions, and based upon 104 nuclear power plants, approximately 55 special reports/year were submitted (1 report for every 2 plants/year). The industry burden for a special report is estimated at 320 hours per report. Based on the STS, Rev. 1, the converted plants will not submit the ECCS Events Report (1 out of 5 special reports). It is therefore estimated that the industry burden for converted plants is 4/5 of the prior experience, or approximately 40 reports for 100 converted plants. It is estimated that 2 reports will be submitted from the 4 unconverted plants. Industry burden is estimated to be 13,440 hours (42 reports x 320 hours/report). The total number of reports is 42 (40 + 2 = 42).

Operating non-power and permanently shutdown reactors are required to submit special reports on abnormal occurrences. The combined operating non-power/ permanently shutdown reactors submit a total of about 4 abnormal occurrence (special) reports/year. It is estimated that 300 hours is the required preparation time for this report (4 reports x 300 hours = 1,200 burden hours). The total number of reports is 4.

j. Core Operating Limits Report (COLR)

With adoption of the COLR, a nuclear power plant licensee no longer needs to submit license amendment requests for the sole purpose of updating cycle-specific parameter limits. These limits are established and documented in the COLR. The analytical methods used to determine the limits are those previously approved by NRC. The limits and analytical methods would need to be determined and documented by licensees in the normal course of power plant operation.

The non-power and permanently shutdown reactors do not submit this report.

Industry Reporting Burden and Cost

Based on the Standard Technical Specifications, Rev. 1 (April 1995), converted plants do not prepare the Startup Report, Sealed Source Leakage Report, Non-Routine Environmental Report, and one of five special reports (ECCS Events Report).

Thus, as reflected above and in Table 1, the total industry reporting burden for nuclear power plants and non-power reactors is 306,275 hours. At an hourly rate of $141, the total cost is $43,184,775.

Recordkeeping Burden and Cost

The recordkeeping requirements called for under 10 CFR 50.36(c) impact 104 operating power plants and 37 non-power reactors, and 19 permanently shutdown power plants and 15 permanently shutdown non-power reactors.

The burden annually for an operating power reactor is estimated to be approximately 2,080 hours. One hundred four (104) operating power plants x 2,080 hours totals 216,320 hours.

The burden annually for an operating non-power reactor is estimated to be approximately 80 hours. Thirty-seven (37) non-power reactors x 80 hours totals 2,960 hours.

The annual burden for each permanently shutdown power reactor is estimated to be about 208 hours and for each non-power reactor is estimated to be 8 hours for a total of 4,072 hours (19 plants x 208 + 15 plants x 8 hours).

The total recordkeeping burden of all licensees is 223,352 hours (216,320 + 2,960 + 4,072) for a total cost of $31,492,632 ($141 x 223,352).

Total Industry Burden and Cost

Total annual burden for all reporting/recordkeeping requirements for TS is expected to be 529,627 (306,275 reporting + 223,352 recordkeeping) hours. The total annual cost to industry at $141 per hour would be $74,677,407.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

Estimated hours of staff effort involved for the review of each report is delineated below. The cost for this effort is fully recovered by fee assessment to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

a. Radioactive Effluent Report

1) Exceeding Design Objectives Reports - combined, the 104 plants submit 3 reports/year. Forty (40) staff hours are estimated to review each report for a total of 120 staff review hours (40 hours x 3 reports = 120 staff hours review).

The non-power reactors do not submit a report under Exceeding Design Objectives but would include such under special reports.

2) Annual Effluent Reports - each operating and permanently shutdown nuclear power plant will submit one report per year. Forty (40) hours are estimated to review each report/operating plant and 10 hours for each report/permanently shutdown plant (40 hours/plant x 104 plants + 10 hours/plant x 19 plants = 4,350 total review hours).

Each operating and permanently shutdown non-power reactor submits an Annual Effluent Report each year. About one hour staff time is required to review this report for operating non-power reactors, and about .25 hours for permanently shutdown non-power reactors (40.75 hours total review for all non-power reactors).

b. Startup Reports

Startup Reports are not required to be submitted by nuclear power plants that have converted to the STS. Only nuclear power plants that have not converted and non-power reactors are required to submit this report. Of the 4 unconverted plants, approximately 2 are estimated to submit this report. The Federal staff review burden is estimated to be 80 hours/report x 2 reports = 160 burden hours.

All non-power reactors submit about one Startup Report/year on average. Eighty (80) staff hours are required to review each report (80 hours x 37 facilities = 2,960 total review hours).

c. Sealed Source Reports

Sealed Source Reports are not required to be submitted by plants that have converted to the STS. Plants that have not converted are required to submit this report. Non-power reactors submit about one report/year, as do permanently shutdown reactors.

Of the 4 unconverted plants, none is estimated to submit a report.

Combined, the non-power reactors submit about one report/year. The average staff review time is 10 hours.

Combined, the permanently shutdown reactors also submit about one report/year. The average staff review time is 8 hours.

d. Monthly Operating Report

Each operating nuclear power plant submits 12 reports annually. The staff assesses each of these reports in approximately 8 hours (8 hours x 12 reports/plant x 104 plants = 9,984 total review hours).

The operating non-power and permanently shutdown reactors do not submit Monthly Operating Reports.

e. Non-routine Environmental Report

Non-routine Environmental Reports are not required to be submitted by nuclear power plant sites that have converted to the STS. Only nuclear power sites that have not converted are required to submit this report.

Of the unconverted sites, one report is submitted annually for each site. The staff's effort to assess these reports is usually about 40 hours each. Each permanently shutdown site also submits one report annually, and the staff's review takes about 20 hours for each report (40 hours/site x 2 unconverted sites + 20 hours/site x 13 permanently shutdown sites = 340 total review hours).

Non-power reactors do not submit Non-Routine Environmental Reports. These facilities submit environmental reports under Annual Radiological Environmental Operating Reports or special reports.

f. Annual Radiological Environmental Operating Report

This report will be submitted for 65 operating nuclear power plant sites and for 13 sites with permanently shutdown power plants. It is estimated that approximately 173 hours will be needed to review this report for each of 65 sites, and approximately 4 hours per report for 13 sites. Therefore, the staff burden is estimated to be 11,297 total review hours (173 hours/site x 65 sites + 4 hours/site x 13 sites).

For operating and permanently shutdown non-power reactors, each of the 37 operating and 15 shutdown facilities submit a report. About 4 hours staff review are required to review each of 37 reports and about 1 hour of staff review is required to review each of 15 reports (4 hours x 37 reports + 1 hour x 15 reports = 163 hours total review/year).

g. Annual Environmental Operating Report

The report, in general, contains non-radiological environmental effects of low safety significance and low impact (e.g., cooling tower blowdown) and therefore, the NRC does not expend a significant effort to review this report. Thus, the Federal burden associated with this report is small. Industry's burden is higher because of the licensee's time to prepare the report. Non-power reactors do not submit Annual Environmental Operating Reports.

h. Annual Radiation Exposure Report

It is estimated that the staff will expend 30 hours assessing each report for each operating nuclear power plant licensee. One hundred and four licensees will respond annually. Staff will also expend 15 hours assessing reports for each of 19 permanently shutdown power plants. (Thus, the burden is expected to be 30 hours/plant x 104 plants + 15 hours/plant x 19 plants = 3,405 total review hours.)

For operating and permanently shutdown non-power reactors, about 1 hour per operating facility and one-half hour per shutdown facility are required to assess this report for a total of about 44.5 hours (1 hour/plant x 37 plants + .5 hour/plant x 15 plants).

i. Special Reports

It is estimated that 42 reports will be submitted annually by operating power plants. The staff burden for special reports is estimated at 160 hours per report. Therefore, the staff burden is estimated to be 6720 hours (42 reports x 160 hours/report).

Operating non-power and permanently shutdown reactors are required to submit abnormal occurrence (special) reports. On the average, operating non-power reactors submit a total of two abnormal occurrence (special) reports a year that require about 200 staff hours for review and assessment of each report. Permanently shutdown reactors also submit a total of two abnormal occurrence (special) reports a year. These require about 200 staff hours for review and assessment (4 reports x 200 hours = 800 total review hours).

j. Core Operating Limits Report (COLR)

The NRC no longer needs to review and approve license amendments related to the core that varies from cycle to cycle, that can be determined through an approved process, that include a reload analysis.

A reload analysis has to be done for each cycle and TS values, if they change, have to be developed; this is included in the reload analysis, that is reviewed by NRC. Only specific numbers from the reload analysis and specific TS numbers are included in the COLR report. Therefore, the NRC does not expend any significant review time for the COLR report.

Federal Burden and Cost for Nuclear Power Plants and Non-Power Reactors

Based on the Standard Technical Specifications (STS), Rev. 1 (April 1995), the converted plants do not submit the Startup Report, Sealed Source Leakage Report, Non-Routine Environmental Report, and one of five special reports (the ECCS Events Report).

The NRC does not expend a significant effort to review either the converted or unconverted plant's Annual Environmental Operating Report or the Core Operating Limits Report (COLR).

Thus, as reflected above and in Table 2, the total annual Federal burden for operating and permanently shutdown nuclear power plants and non-power reactors is 40,402.25 hours. At an hourly rate of $141, the total cost to the Federal government is $5,696,717.25.

15. Reasons for Changes in Burden or Cost

The burden per report has remained constant. However, the overall industry hourly burden has decreased from 558,527 hours to 529,627 hours, primarily based on licensees' conversion to STS, which has eliminated the requirement to file some reports. However, the dollar estimate is slightly higher due to the increased hourly rate.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Attachments:
Tables 1-2

Table 1
Industry Reporting Burden for Nuclear Power Plants
and Non-Power Reactors

	No. Plants/Sites Affected						Burden for Each Type						
Report	**All Power Types**	**Conv.**	**Non-Conv.**	**Non-Pwr.**	**Shdn Pwr.**	**Shdn Non-Pwr.**	**All Power Types**	**Conv.**	**Non-Conv.**	**Non-Pwr.**	**Shdn Pwr.**	**Shdn Non-Power**	**Total Burden**
Exceed Design	3						50						150
Annual Effluent	104			37	19	15	140			70	35	20	18,115
Start-Up			2	37					140	100			3,980
Sealed Source			0	1	1	*			16	10	10	*	20
Monthly Operating	104						600						62,400
Non-Routine Environmental			2		13				50		5		165
Annual Radiological	65			37	13	15	1,400			200	700	100	109,000
Annual Environmental Operating	65				13		1,400				140		92,820
Annual Radiation Exposure	104			37	19	15	40			10	20	5	4,985
Special Report		40	2	2	2	*		320	320	300	300	*	14,640
Core Operating Limits	0	0	0	0	0	0							0
Total Burden													306,275

* Included under Non-Power

Table 2
Federal Reporting Burden for Nuclear Power Plants
and Non-Power Reactors

	No. Plants/Sites Affected						Burden for Each Type						
Report	**All Power Types**	**Conv.**	**Non-Conv.**	**Non-Pwr.**	**Shdn Pwr.**	**Shdn Non-Pwr.**	**All Power Types**	**Conv.**	**Non-Conv.**	**Non-Pwr.**	**Shdn Pwr.**	**Shdn Non-Power**	**Total Burden**
Exceed Design	3						40						120.00
Annual Effluent	104			37	19	15	40			1	10	.25	4,390.75
Start-Up			2	37					80	80			3,120.00
Sealed Source			0	1	1	*			8	10	8	*	18.00
Monthly Operating	104						96						9,984.00
Non-Routine Environmental			2		13				40		20		340.00
Annual Radiological	65			37	13	15	173			4	4	1	11,460
Annual Environmental Operating	65				13		0				0		0
Annual Radiation Exposure	104			37	19	15	30			1	15	.50	3,449.50
Special Report		40	2	2	2	*		160	160	200	200		7,520
Core Operating Limits	0	0	0	0	0	0							0
Total Burden													40,402.25

* Included under Non-Pwr.

Section 3

DRAFT SUPPORTING STATEMENT
FOR
DECOMMISSIONING REQUIREMENTS

10 CFR 50.33(k)(1) AND (2), 50.75, AND 50.82

DESCRIPTION OF THE INFORMATION COLLECTION

The decommissioning regulations specify requirements for financial assurance, recordkeeping and planning and termination procedures. These regulations ensure that decommissioning of production and utilization facilities will be handled by the licensee in a way that will result in minimal or negligible impact on public health and safety and the environment. These regulations affect 104 licensees for operating nuclear power plants, and 37 licensees for operating non-power reactors. It also affects licensees for 19 power plants and 8 non-power reactors that are currently being decommissioned, and 7 non-power reactors that currently have possession only licenses.

A. JUSTIFICATION

1. Need and Practical Utility for the Collection of Information

The provisions of the decommissioning regulations encompass requirements with respect to maintenance of records, submittal and updating as necessary of financial information, either as a certification or plan, and submittal of decommissioning plans.

Section 50.33(k)(1) requires that an application for an operating license include information on how reasonable assurance will be provided that funds will be available to decommission the facility. No applications are expected during this clearance period.

Section 50.33(k)(2) required holders of operating licenses to provide the above information by July 26, 1990. This information has been supplied.

Section 50.75 establishes detailed information on what the NRC will accept as reasonable assurance that decommissioning funds will be available when needed. This section also specifies requirements for reporting and recordkeeping for decommissioning planning. Specifically:

Section 50.75(b) requires each electric utility applicant for or holder of an operating license to submit a decommissioning report, as required by 50.33(k), containing a cost estimate for decommissioning and certification that financial assurance for decommissioning will be provided and adjusted annually. As part of the certification, a copy of the financial instrument is to be submitted to NRC.

Section 50.75(d) requires each non-electric utility applicant for or holder of an operating license to submit a decommissioning report as required by 50.33(k) containing a cost estimate for decommissioning, an indication of the method(s) to be used to provide decommissioning funds, and a description of the means of adjusting the cost estimate over the life of the facility.

50.75(f)(1) requires each power reactor license to report to the NRC every 2 years the status of decommissioning funding for each reactor that it owns and any modifications to its method of providing financial assurance. Any plant within 5 years of end of operations or any plant involved in mergers or acquisitions must submit this report annually. No plants are expected to be submitting the annual report during this clearance period.

Section 50.75(f)(2) requires that each power reactor licensee submit, at or about 5 years prior to the projected end of operation, a preliminary decommissioning cost estimate which includes an up-to-date assessment of the major factors that could affect the cost to decommission.

Section 50.75(f)(3) requires that each non-power reactor licensee submit, at or about 2 years prior to the projected end of operation, a preliminary decommissioning plan containing a cost estimate for decommissioning and an up-to-date assessment of the major factors that could affect planning for decommissioning.

Section 50.75(f)(4) requires, if necessary, the cost estimate for power and non-power reactors to include plans for adjusting funding levels.

Section 50.75(g) requires each licensee to keep records of information important to safe and effective decommissioning until the license is terminated. This information consists of records of spills, as-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used or stored, and of locations of possible inaccessible contamination, records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and of the funding method used.

Section 50.82 defines the decommissioning process and information collection requirements for power and non-power reactors. Specifically:

Section 50.82(a)(1)(i) and (ii) requires that a power reactor licensee submit written certifications to the NRC after determination to permanently cease operation and once fuel has been permanently removed from the reactor vessel.

Section 50.82(a)(4)(i) requires that a power reactor licensee submit prior to or within 2 years following permanent cessation of operations a post-shutdown decommissioning activities report (PSDAR). The PSDAR is sent to the NRC with a copy to the affected State(s) and provides a description of the planned decommissioning activities along with a schedule for their accomplishment, an estimate of expected costs, and a discussion of whether environmental impacts associated with site-specific decommissioning activities will be bounded by appropriate previously issued documents.

Section 50.82(a)(7) requires that a nuclear power licensee notify the NRC, in writing and send a copy to the affected State(s), before performing any decommissioning activity inconsistent with, or making any significant schedule change from, those actions and schedules described in the PSDAR, including changes that significantly increase the decommissioning cost. This notification is necessary to keep the NRC informed of changes in the licensee's planned activities.

Section 50.82(a)(8)(ii) requires that a nuclear power licensee submit to the NRC a site-specific decommissioning cost estimate prior to using any funding in excess of the amounts specified in this section. This submittal is necessary to ensure that the licensee will have enough funding for future decommissioning actions.

Section 50.82(a)(8)(iii) requires that within 2 years following permanent cessation of operations, if not already submitted, a nuclear power licensee submit a site-specific decommissioning cost estimate.

Section 50.82(a)(8)(iv) requires licensees to provide a means of adjusting cost estimates and funding levels during decommissioning delays or periods of plant storage.

Section 50.82(a)(9) requires that a power reactor licensee submit an application for termination of license. The application must be accompanied or preceded by a license termination plan and be submitted at least 2 years before termination of the license.

Section 50.82(a)(9)(ii)(A)-(G) prescribes the content of the license termination plan. Items (A), (C), and (D) require the licensee to evaluate the site for radiological hazards, perform suitable decontamination (remediation) activities, and perform a suitable final radiation survey after site decontamination. Item (B) requires the licensee to identify any residual dismantlement activity that remains at the time of license termination plan submittal. Item (E) requires the licensee to identify the end use of the site, if a restricted release is sought by the licensee. Item (F) requires the licensee to provide an updated site-specific estimate of remaining decommissioning costs. Item (G) requires the licensee to submit a supplement to the environmental report that describes any new or significant environmental change associated with the licensee's proposed termination activities.

50.82(b)(1) requires that a non-power reactor licensee that permanently ceases operations must make application for license termination within 2 years following permanent cessation of operations, and in no case later than 1 year prior to expiration of the operating license. Each application must be accompanied or preceded by a proposed decommissioning plan. The contents of the decommissioning plan are specified in 50.82(b)(4).

50.82(b)(2) states for decommissioning plans in which the major dismantlement activities are delayed by first placing the facility in storage, planning for these delayed activities may be less detailed. Updated detailed plans must be submitted and approved prior to the start of these activities.

50.82(b)(4) prescribes the content of decommissioning plans for non-power reactors. This includes (i) the choice of the alternative for decommissioning with a description of activities involved; (ii) a description of the controls and limits on procedures and equipment to protect occupational and public health and safety; (iii) a description of the planned final radiation survey; (iv) an updated cost estimate for the chosen alternative for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and plan for assuring the availability of adequate funds for completion of decommissioning; and (v) a description of technical specifications, quality assurance provisions and physical security plan provisions in place during decommissioning.

2. Agency Use of Information

The NRC uses this information to determine if proposed decommissioning activities will be performed in accordance with the Commission's regulations, will not be inimical to the common defense and security or to the health and safety of the public, and will not have a significant effect on the quality of the environment.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

Licensees of production and utilization facilities are the only source for this information. The Information Requirements Control Automated System (IRCAS) was searched for duplication, and none was found. There is no similar information available to the NRC.

5. Effort to Reduce Small Business Burden

Approximately one university will be required to submit a decommissioning plan during the next three years. There is no way to obtain the necessary information and yet reduce the small business burden.

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

Conduct of decommissioning activities and collection of information concerning them at the required frequency is essential to provide the assurance of protection for the health and safety of the workers and the public.

7. Circumstances which Justify Variation from OMB Guidelines

To assure the protection of public health and safety, each licensee must keep records of information important to the safe and effective decommissioning of the facility in an identified location until NRC terminates the license.

8. Consultations Outside the NRC

Proposed rulemakings affecting this information collection during the current clearance period were published for comment in the Federal Register. Comments received were considered prior to final rulemaking. Moreover, State radiological health agencies are asked for their comments prior to approval of decommissioning plans and associated license amendments.

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

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential submittals are not anticipated. However, confidential or proprietary information would be handled in accordance with 10 CFR 2.790 of NRC's regulations.

11. Justification for Sensitive Questions

The provisions of decommissioning regulations do not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

See the enclosed table.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

See the enclosed table. This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

An increase of 346 hours is due to new regulations effective in November, 1998, which require power reactors to report decommissioning trust fund status to NRC at least every 2 years and annually when the reactor is within 5 years of end of operations. The increase is partially offset by a reduction in burden of 119 hours because of a reduction in the number of reactors. Therefore, the total burden increase is 227 hours.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Burden for Licensees and the NRC - Decommissioning Reports, Records and Plans

Requirement	Type	Reactor	Licensee hrs. each	Licensee average annual burden (Responses x hrs)	NRC hrs. each	NRC average annual burden (responses x hrs)	(Notes)
50.33(k)(1)	Report	Power	200 hrs.	0	24 hrs.	0	note 1
50.33(k)(1)	Report	Research	72 hrs.	0	32 hrs.	0	note 2
50.33(k)(2)	Report	Power	Complete				note 3
50.75(b)	Record	Power	20 hrs	104 x 20 = 2,080 hrs	0	0	note 4
50.75(d)	Record	Research	2	37 x 2 = 74 hrs	0	0	note 5
50.75(f)(1)	Report	Power	5 hrs	69 x 5 hrs = 346 hrs	1 hr	69 x 1 hour = 69 hrs	note 11
50.75(f)(2)&(4)	Report	Power	250 hrs	0	16 hrs	0	note 6
50.75(f)(3)&(4)	Report	Research	16 hrs	1 x 1/3 x 16 = 5.30 hrs	2 hrs	1 x 1/3 x 2 = .66 hrs	note 7
50.75(g)	Record	Power	23	123 x 23 = 2,829	0	0	
50.75(g)	Record	Research	2.5	53 x 2.5 = 132.5 hrs	0	0	
50.82a(1-8)	Report	Power	1,000 hrs	1 x 1000 = 1,000 hrs	400 hrs	1 x 400= 400 hrs	note 8
50.82a(9)	Report	Power	500 hrs	1 x 500 = 500 hrs	200 hrs	1 x 200 = 200 hrs	note 9
50.82(b)(1)-(4)	Report	Research	400 hrs	1 x 400 = 400 hrs	200 hrs	1 x 200 = 200 hrs	note 10

Total Annual Burden: (Licensee) 7,367 hours; (NRC) 870 hours
Total Annual Cost: (Licensee) $1,038,747; (NRC) $122,670 (hours x $141)

note 1: Assumes no power reactor operating licenses issued during 3-year period 7/97 - 6/2000.
note 2: Assumes no new research reactor license applications.
note 3: Completed in 1990 for all power and research reactors.
note 4: Annual updating of decommissioning costs for all power reactors.
note 5: Annual updating of decommissioning costs for all research reactors.
note 6: Assumes no power reactor licenses will expire requiring preliminary decommissioning cost estimate in the 3-year period.
note 7: Assumes 1 research reactor license expires during 3-year period.
note 8: Assumes 3 power reactor PSDARs during the 3-year period.
note 9: Assumes 1 partial site license termination plan (i.e., reduction in the licensed site area) per year during the 3-year period.
note 10: Assumes 1 research reactor decommissioning plan per year during 3-year period.
note 11: Reporting decommissioning trust fund status every 2 years; assume 5 hrs for each licensee to prepare and 1 hr for NRC to review.

Section 4

DRAFT SUPPORTING STATEMENT
FOR
PHYSICAL SECURITY AND SAFEGUARDS CONTINGENCY PLANS

10 CFR 50.34(c) & (d) & 50.54(p)

DESCRIPTION OF THE INFORMATION COLLECTION

Section 10 CFR 50.34(c) requires that each application for a license to operate a production or utilization facility must include a physical security plan. The plan must describe how the applicant will meet the requirements of 10 CFR Part 73 (and 10 CFR Part 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 Parts 11 and 73, if applicable. Part 73 prescribes requirements for the establishment and maintenance of a physical protection system which will have capabilities for the protection of special nuclear material (SNM) at fixed sites and in transit and of plants in which SNM is used. Part 11 prescribes criteria and procedures for determining eligibility for access to or control over certain quantities of SNM.

Section 10 CFR 50.34(d) requires that each application for a license to operate a production or utilization facility that will be subject to 10 CFR 73.50, 73.55, or 73.60 must include a licensee safeguards contingency plan (SCP) in accordance with Appendix C to 10 CFR Part 73. The SCP shall include plans for dealing with threats, thefts, and radiological sabotage as defined in 10 CFR Part 73. Four categories of information must be included in the applicant's SCP. These categories are specified in Appendix C to 10 CFR Part 73. 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 10 CFR 50.54(p)(1) requires that each licensee prepare and maintain SCP procedures in accordance with Appendix C of 10 CFR Part 73. 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 NRC staff on a periodic basis.

10 CFR 50.54(p)(1) also specifies that a licensee may make no change which would decrease the effectiveness of a security plan, or guard training and qualification plan (required by §73.55) prepared pursuant to 10 CFR 50.34(c) or 10 CFR Part 73 or of the first four categories of information contained in the SCP prepared pursuant 10 CFR 50.34(d) or 10 CFR Part 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.

10 CFR 50.54(p)(2) 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 overall 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.

10 CFR 50.54(p)(3) requires the licensee to provide for the development, revision, implementation, and maintenance of its safeguards contingency plan. To this end, the licensee shall provide for a review at least every 12 months of the safeguards contingency plan by individuals independent of both security program management and personnel who have direct responsibility for implementation of the security program. 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.

A. JUSTIFICATION

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

The reporting and recordkeeping requirements cited above are for the purpose of assuring the physical protection of plants and materials.

2. Agency Use of Information

Physical security regulations include general performance requirements which recognize explicitly the need to provide protection from potential threats originating externally, from within a licensed facility, or both. The NRC staff continually reviews licensee security plans and amendments to ensure that there is a comprehensive physical protection system that is capable of protecting against certain adversarial threats.

This continual review of the reactor safeguards program provides a high level of assurance to the NRC and the public that malevolent acts against operating nuclear power plants and research and test facilities will not result in undue risk to public health and safety.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

This information is only available from licensees and does not duplicate nor overlap other information collections by NRC or other government agencies. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found.

5. Effort to Reduce Small Business Burden

This information collection does not affect small business.

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

This information is required when an application for a license to operate a production or utilization facility is filed with NRC. There are no applications scheduled at this time. Requests for changes to current security and safeguards contingency plans are submitted on an as-needed basis. Additionally, 50.54(p)(2) reports, required within two months after making changes to the plan, and 50.54(p)(3) annual reviews are required so that the Commission and the licensee may evaluate the continued effectiveness of the plan. Less frequent notification and review could result in failure to adequately protect nuclear facilities from malevolent acts.

7. Circumstances which Justify Variation from OMB Guidelines

This information collection does not vary from OMB guidelines.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

The plans get a very limited distribution and are stored in secured containers. They are protected and withheld from public disclosure pursuant to 10 CFR Part 2 (Proprietary Information), 10 CFR Part 73 (Safeguards Information), and 10 CFR Part 95 (National Security Information), as applicable.

11. Justification for Sensitive Questions

The plans are sensitive because they detail the measures and methods used to counter potential acts of sabotage and thefts of special nuclear material.

12. Estimated Industry Burden and Burden Hour Cost

No new applications are expected; thus, no burden is estimated for information required by 10 CFR 50.34(c) and (d). Currently, there are 78 licensed nuclear power plant sites (includes 13 sites with permanently shutdown power plants) and 52 non-power reactors (includes 15 permanently shutdown reactors) for a total of 130 reactor sites subject to the information collection requirements of 10 CFR 50.54(p).

Based on staff experience, the NRC estimates that approximately 273 (241 operating power reactors + 7 operating non-power reactors + 23 permanently shutdown power reactors + 2 permanently shutdown non-power reactors) notifications under 50.54(p) will be made annually to the NRC by power reactor (3.7 per operating power reactor site and 1.8 per shutdown site), operating non-power reactor (.20 each) and shutdown non-power reactor (.10 each) licensees. It is estimated that, on the average, 200 hours per power reactor and 100 hours per non-power reactor are required to prepare the notifications to the NRC, maintain records of reviews and changes, and file each 50.54(p) amendment for a current industry burden of 53,700 hours per year (241 + 23 x 200/hours + 7 + 2 x 100/hours). At $141 per hour, industry cost is expected to be $7,571,700.

13. Estimate of Other Additional Costs

None.

14. Estimate of the Cost to the Federal Government

The annual cost to the government is associated with analyzing and assessing the 50.54(p) amendment reports and reviews. As stated above, approximately 241 changes are expected annually from the nuclear power industry for operating power reactors (3.7 per site), 23 changes for permanently shutdown power reactors (1.8 per site) and .20 changes per operating non-power reactor and .10 changes per permanently shutdown non-power reactor. The NRC has determined that

accomplishing these activities require 8 to 40 hours each depending on the complexity of the issues raised. On the average, approximately 30 hours per power plant site and 15 hours per non-power reactor are required. Therefore, the estimated Federal burden is expected to be as follows:

Power plant sites

65 operating sites x 3.7 changes/year = 241 changes
13 permanently shutdown sites x 1.8 changes/year = 23 changes
264 changes x 30 hours = 7,920 hours

Nonpower reactors

37 operating x .20 changes = 7 changes
15 permanently shutdown x .10 changes = 2 changes
9 changes x 15 hours = 135 hours

Thus, the total Federal burden is expected to be 8,055 hours (7,920 + 135) at a cost of $1,135,755 (8,055 hours x $141).

This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

Although the burden was reduced as some operating power reactors and non-power reactors shifted from operating to shutdown status, the total industry and Federal cost increased due to the use of a higher value for hourly costs ($141 per hour).

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 5

DRAFT SUPPORTING STATEMENT
FOR
CONFORMANCE WITH
THE STANDARD REVIEW PLAN

10 CFR 50.34(g)

DESCRIPTION OF THE INFORMATION COLLECTION

The NRC conducts a detailed review of all applications for licenses to construct and operate nuclear facilities. In March 1982, the NRC adopted 10 CFR 50.34(g) which requires applicants for a construction permit (CP), operating license (OL), preliminary design approval (PDA), or final design approval (FDA) to provide, as part of the material currently required by 10 CFR 50.34, an evaluation of the facility against the Standard Review Plan (SRP) (NUREG-0800) acceptance criteria, for those applications docketed after May 17, 1982. The evaluation required shall include an identification of all differences in design features, analytical techniques, and procedural measures proposed for a facility and those corresponding features, techniques and measures given in the SRP acceptance criteria. Where differences exist, the evaluation shall discuss how the proposed alternative provides an acceptable method of complying with the Commission's regulations that underlie the corresponding SRP acceptance criteria. The SRP was issued to establish the criteria that the NRC staff uses in evaluating whether an applicant/licensee meets the Commission's regulations. The SRP is not a substitute for the regulations, and compliance is not a requirement.

A. JUSTIFICATION

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

The objective of the requirement contained in 10 CFR 50.34(g) and of the implementing guidance of NUREG-0906 is to allow the limited NRC staff resources to quickly focus on those areas involving differences from the SRP acceptance criteria in order to make the most effective use of the staff's resources. Experience has shown that such differences usually involve issues of safety significance and require the greatest amount of time to resolve. Since the applicants are familiar with their plant's designs, they are in a better position to identify the differences from the SRP acceptance criteria during the normal course of preparing the technical supporting information for an application.

2. Agency Use of Information

The SRP reflects the NRC's detailed interpretations of the acceptable means to satisfy the applicable regulatory requirements, which ensure that the proposed facilities can be constructed and operated without any undue risk to the health and safety of the public. Because of limited resources, the NRC staff conducts audit reviews of the Safety Analysis Reports (SARs) submitted with an application, in accordance with the review procedures in the SRP.

The material currently found in SARs does not lend itself to ready identification of the differences from the SRP acceptance criteria. These differences are often found in responses to staff questions or during meeting discussions. Differences from the SRP acceptance criteria do not necessarily imply nonconformance with regulatory requirements. However, they do reflect a departure from accepted practice that should be highlighted by the licensee to ensure a thorough staff review.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use. However, as of the current time, no responses have been submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

This provision is not required by other Federal regulations. Licensees for nuclear power plants or applicants requesting standard design certification are the only source for this information. The Information Requirements Control Automated System (IRCAS) was searched for duplication and none was found.

5. Effort to Reduce Small Business Burden

The provisions of the subject regulation do not affect small businesses.

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

Less frequent collection or not collecting the information at all would impact NRC's detailed review and interpretations of the acceptable means to satisfy the applicable regulatory requirements to ensure that a proposed facility can be constructed and operated without any undue risk to the health and safety of the public.

7. Circumstances which Justify Variation from OMB Guidelines

This information collection does not vary from OMB guidelines.

8. Consultations Outside the NRC

In April 1994, the Commission published proposed design certification rules for reactor designs evaluated, in part, with the information collected under 10 CFR 50.34(g). Interested parties were invited to submit comments. Comments were received from a wide range of industry (architect engineers, vendors, utilities) and general public respondents. These comments were considered and resolved in the final rulemakings. The final rules for the Advanced Boiling Water Reactor and CE System 80+ were issued in May, 1997. The final rule for the AP600 was issued in December, 1999. In addition, several public meetings and workshops were held on the design certification rulemakings.

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

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is protected in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

This regulation does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

During the next 3 years, the NRC does not expect any new CP, OL, PDA, or FDA applications. Thus, burden and cost associated with this regulation are expected to be negligible.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

During the next 3 years, the NRC does not expect any new CP, OL, PDA, or FDA applications. Thus, cost associated with the regulation is expected to be negligible.

15. Reasons for Changes in Burden or Cost

There is no change in burden.

16. Publication for Statistical Use

The information collected under this provision is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Section 6

DRAFT SUPPORTING STATEMENT FOR PERIODIC RESEARCH AND DEVELOPMENT REPORTS

10 CFR 50.35(b)

DESCRIPTION OF THE INFORMATION COLLECTION

Section 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."

A. JUSTIFICATION

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

The reports required under 10 CFR 50.35(b) would keep the staff apprised of the progress and findings of licensee research and development programs and increase the likelihood that any safety problems would be resolved in a timely manner.

2. Agency Use of Information

The NRC staff will review information submitted in accordance with 10 CFR 50.35(b) to evaluate the results of research and development programs. This evaluation is to determine what, if any, corrective measures would be appropriate and to develop regulatory procedures, including revisions to existing review processes and possible facility modifications, if necessary. This procedure allows the NRC, by special reference in a facility construction permit, to request information concerning ongoing research and development activities that are in support of a construction permit.

This reporting requirement has not resulted in the submittal of any information from licensees during the past 3 years. However, NRC requests renewal of the clearance for this section in order to receive timely information from licensees on potential new technological developments for both power reactor and fuel reprocessing systems should they occur. Ongoing research and development programs throughout the industry create the possibility of safety-related issues arising at any time. The NRC staff must be able to obtain information from licensees concerning current research projects in order to make informed judgments about the effects of current research on future licensing actions.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

This provision is not required by other Federal regulations. Licensees for nuclear power plants are the only source for this information. The Information Requirements Control Automated System (IRCAS) was searched for agency duplication, and none was found.

5. Effort to Reduce Small Business Burden

This provision only affects licensees for nuclear power plants and, therefore, does not affect small business.

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

Less frequent collection or not collecting the information at all could mean that research information that could impact future licensing actions might not be available on a timely basis.

7. Circumstances which Justify Variation from OMB Guidelines

This information collection does not vary from OMB guidelines. It is highly unlikely that the periodic reports provided for in 10 CFR 50.35(b) would be required more often than quarterly or required sooner than 30 days after issuance of a construction permit.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential or proprietary information is protected in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

This provision does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

There is no anticipated response from industry during the next 3 years.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

NRC does not anticipate any responses from industry based on this regulation. Therefore, there is no anticipated cost to the government during the next 3 years.

15. Reasons for Changes in Burden or Cost

There is no change in the burden since the last OMB review.

16. Publication for Statistical Use

The collected information is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 7

DRAFT SUPPORTING STATEMENT FOR HYDROGEN CONTROL REQUIREMENTS

10 CFR 50.44(c)

DESCRIPTION OF THE INFORMATION COLLECTION

Section 50.44(c)(3)(iv)(A) requires each licensee with a boiling water reactor (BWR) with a Mark III containment and each licensee with a pressurized water reactor (PWR) with an ice condenser containment issued a construction permit before March 28, 1979, to provide its nuclear power reactor with a hydrogen control system justified by a suitable program of experiment and analysis.

Section 50.44(c)(3)(iv)(B) specifies that containment structural integrity must be demonstrated by use of an analytical technique that is accepted by the NRC staff. This demonstration must include sufficient supporting justification to show that the technique describes the containment response to the structural loads involved.

Section 50.44(c)(3)(vi)(A) requires each applicant for or holder of an operating license for a BWR with a Mark III type of containment or for a PWR with an ice condenser type of containment issued a construction permit before March 28, 1979, to submit an analysis to the Commission. This analysis must, for example, provide an evaluation of the consequences of large amounts of hydrogen generated after the start of an accident and include consideration of hydrogen control measures as appropriate; include the period of recovery from the degraded condition; and support the design of the hydrogen control system selected. (Contents of the analysis are specifically covered in 50.54(c)(3)(vi)(B).)

Section 50.44(c)(3)(vii)(A) requires by June 25, 1985, each applicant or licensee subject to specified requirements of 50.44 to develop and submit to the Commission a proposed schedule for meeting these requirements. Section 50.44(c)(3)(vii)(B) requires for each applicant for an operating license as of February 25, 1985, that the schedule shall provide for compliance with the requirements of 50.44(c)(3)(iv)(A) prior to operation of the reactor in excess of 5 percent power. Completed final analyses are not necessary for NRC to determine that a plant is safe to operate at full power provided that the applicant has provided a preliminary analysis which NRC has determined provides a satisfactory basis for a decision to support interim operation at full power until the final analysis has been completed. However, such preliminary analyses are not necessary for NRC under specified circumstances.

All of these information collections are now complete. Since the last OMB clearance review, the NRC has received no plant-specific reports discussing both the hydrogen control system and the demonstration of survivability during a hydrogen burn.

A. JUSTIFICATION

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

The accident at Three Mile Island, Unit 2 (TMI-2), resulted in a severely damaged reactor core, a concomitant release of radioactive material to the primary coolant system, and a fuel cladding-water reaction which resulted in the generation of a large amount of hydrogen. The NRC has taken numerous actions to correct the design and operational limitations revealed by the accident. Included in these actions are rulemakings intended to improve the hydrogen control capability of light-water nuclear power reactors and to provide specific design and other requirements to mitigate the consequences of accidents resulting in a degraded reactor core.

Specific hydrogen control analysis requirements for BWRs with Mark III containments and PWRs with ice condenser containments have been completed. Ice condenser and Mark III plants were required to submit analyses to justify the hydrogen control systems selected and to provide assurance that containment structural integrity will be maintained and important safety systems will continue to function following a hydrogen burn. The information was submitted by licensees and reviewed and approved by the NRC. This effort is now complete.

2. Agency Use of Information

The information contained in the analyses described in Item A.1 was necessary to permit the NRC staff to evaluate whether the requirements are met for hydrogen control and safety equipment functioning during a hydrogen burn. Without this information, the NRC staff could not have evaluated the design of the hydrogen control systems selected or determined whether or not needed safety equipment could indeed function during a hydrogen burn.

3. Reduction of Burden Through Information Technology

Not applicable. Task is completed.

4. Effort to Identify Duplication and Use Similar Information

Not applicable. Task is completed.

5. Effort to Reduce Small Business Burden

Not applicable. Task is completed.

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

This was a one-time requirement for each respondent, and it has been completed.

7. Circumstances which Justify Variation from OMB Guidelines

This information collection did not vary from OMB guidelines.

8. Consultations Outside the NRC

Not applicable. Task is completed.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Any information identified as proprietary or confidential is protected in accordance with the provisions of 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

No sensitive information was requested.

12. Estimated Industry Burden and Burden Hour Cost

None. This information collection has been completed.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

None. This information collection has been completed.

The cost of NRC's evaluation of the licensees' reports was fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

This activity has been completed and there is no further need for information collection for this topic.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 8

DRAFT SUPPORTING STATEMENT FOR ACCEPTANCE CRITERIA FOR EMERGENCY CORE COOLING SYSTEMS (ECCS)

10 CFR 50.46 AND APPENDIX K

DESCRIPTION OF THE INFORMATION COLLECTION

Section 50.46 provides an alternate method of meeting the Appendix K requirements for Emergency Core Cooling Systems (ECCS). It permits licensees or applicants to analyze ECCS performance using realistic calculations. This method of calculation may remove some operating restrictions and, thus, motivate licensees to submit realistic analyses for review. This aspect of the rule represents a voluntary information collection burden to the industry. Realistic analyses are not required of licensees not electing this option.

Sections 50.46(a)(3)(i) and (ii), respectively, require:

(i) Each applicant for or holder of an operating license or construction permit, other than a holder of a license for a reactor facility for which the certifications required under 50.82(a)(1) have been submitted, shall estimate the effect of any change to or error in an acceptable evaluation model or in the application of such a model to determine if the change or error is significant. For this purpose, a significant change or error is one which results in a calculated peak fuel cladding temperature different by more than 50^{0}F from the temperature calculated for the limiting transient using the last acceptable model, or is a cumulation of changes and errors such that the sum of the absolute magnitudes of the respective temperature changes is greater than 50^{0}F.

(ii) For each change to or error discovered in an acceptable evaluation model or in the application of such a model that affects the temperature calculation, the applicant or licensee shall report the nature of the change or error and its estimated effect on the limiting ECCS analysis to the Commission at least annually. If the change or error is significant, the applicant or licensee shall provide this report within 30 days and include with the report a proposed schedule for providing a reanalysis or taking other action as may be needed to show compliance with 10 CFR 50.46 requirements. This schedule may be developed using an integrated scheduling system previously approved for the facility by the NRC. For those facilities not using an NRC-approved integrated scheduling system, a schedule will be established by the NRC staff within 60 days of receipt of the proposed schedule. Any change or error correction that results in a calculated ECCS performance that does not conform to the criteria set forth in 10 CFR 50.46(b) is a reportable event as described in 10 CFR 50.55(e), 50.72 and 50.73. The affected applicant or licensee shall propose immediate steps to demonstrate compliance or bring plant design or operation into compliance with 10 CFR 50.46 requirements.

The effort associated with the reports required by section 50.46 will vary, depending upon the nature of the ECCS model change or error being addressed. Most of the annual reports disclose that no changes were made to the ECCS evaluation or convey information about minor changes. These reports will require little effort to prepare. Other annual reports may be based on extensive re-analysis of ECCS performance, resulting in a greater expenditure of effort. To arrive at its estimate of the burden associated with the annual reports, the staff used its understanding of the types of reports typically submitted and its experience in the level of effort required to conduct ECCS evaluations.

Appendix K.II.1.a of 10 CFR Part 50 requires that a description of each evaluation model be furnished. The description shall be sufficiently complete to permit technical review of the analytical approach including the equations used, their approximations in difference form, the assumptions made, and the values of all parameters or the procedure for their selection, as for example, in accordance with a specified physical law or empirical correlation.

Appendix K.II.1.b of 10 CFR Part 50 requires that a complete listing of each computer program be furnished to the NRC upon request in the same form as used in the evaluation model (EM). NRC does not anticipate the need to request such information during this clearance period.

A final rule, effective in this clearance renewal, revises Appendix K.I.A to offer licensees the option to use a reduced power level margin for ECCS (emergency core cooling system) evaluation or a maintain the current margin of 2% power. To use the option and apply a lower assumed power level, licensees would be required to demonstrate the uncertainties associated with measuring reactor thermal power. The resulting change to ECCS evaluation results must be reported per Section 50.46(a)(3).

A. JUSTIFICATION

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

   In order to determine licensee compliance with the regulations set forth in 10 CFR 50.46 and Appendix K of 10 CFR Part 50, the NRC needs to know what models and methods have been used to assess ECCS performance.

2. Agency Use of Information

   The information identified will be used to determine licensee compliance with the requirements of Appendix K and 10 CFR 50.46(b) and, thus, ensure that the reactor operates within the limits required to protect public health and safety. If not in compliance, the information will allow NRC to assess how and when compliance to the applicable requirements will be achieved.

   Without the information required in Section II of Appendix K, the NRC staff would be unable to determine the adequacy of the calculation methods used to evaluate ECCS performance.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

This information is not required by other Federal regulations. Applicants and licensees for nuclear power plants are the only source for this information. The Information Requirements Control Automated System (IRCAS) was searched for agency duplication, and none was found.

5. Effort to Reduce Small Business Burden

The provisions of this regulation do not affect small businesses.

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

The frequency with which this information is collected is determined by how often the accepted ECCS EM is modified and whether these changes significantly affect the calculated peak clad temperature. Less frequent collection could adversely affect public health and safety. The proposed rule is a one time voluntary collection from the licensees. The licensees participation is an advantage to the plant operational parameters.

7. Circumstances which Justify Variation From OMB Guidelines

This information collection does not vary from OMB guidelines.

8. Consultations Outside the NRC

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

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

The NRC will protect classified, proprietary and sensitive information according to the guidelines provided in 10 CFR 2.790 of its regulations.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Based on staff experience, the annual burden to industry for modified EM submittals, realistic generic model submittals, schedule and computer printout submittals is estimated at 4,013 burden hours. Attachment A provides a breakdown of this burden.

This is based on an estimate that the average cost to industry for performing an analysis of ECCS performance is 2,500 person hours, a modified EM will involve 1,500 hours, and that preparation and submittal of 1.6 schedules would involve about 13 person hours (8 hours per schedule). An EM printout, if submitted, is expected to involve approximately one hour. Based on an estimate of an average of 1.6 submittals annually (one generic realistic model submittal and 0.6 modified EM submittals annually), the total burden to industry is estimated at 4,013 person hours annually.

One annual report required by Section 10 CFR 50.46(a)(3)(ii) will be submitted by each of the 104 licensees. Based on the staff's experience, the effort involved to prepare these reports is dependent upon the nature of the change to the ECCS evaluation. The staff estimates that, on average, it will take a licensee approximately 20 hours to prepare an annual report. The change allowed by the revision to Appendix K.I.A is expected to require approximately 10.5 additional hours, on average (10 hours for analysis and one-half hour to include the results in the annual report). Not all licensees are expected to use the option provided by the revised Appendix K.I.A. Therefore, the staff assumes that 50 plants will use the option, or 17 respondents per year over 3 years. Therefore, the staff expects that the requirement for an annual report will result in approximately 2259 hours annually [(104-17)20 + (17 x 30.5)= 2258.5 or 2259 hours, rounded up].

Therefore, the total annual burden for industry is estimated to be 6272 hours (4,013 + 2259), at an annual cost of $884,352 (6272 hours x $141).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

It is expected that three generic calculations using realistic models will be submitted during the clearance period, and three modified EM models will be submitted during the next 5-year period, or 0.6 submittals per year. Staff review of a modified EM will require one half of a staff year (SY), and a generic analysis of ECCS performance will require an average of one SY per submittal. The number of reviews performed per year as a result of this regulation is estimated as follows:

Modified EM Submittals:	0.6/yr at .5 SY =	.3 SY
Generic Model Submittals:	1.0/yr at 1 SY =	1.0 SY
Totals:	1.6/yr	1.3 SY

The annualized cost to the NRC would be $293,280 (2,080 hours x $141) for the generic analyses and $90,522 (624 hours x $141) for modified EM submittals. The total annualized cost to the NRC for both generic and modified submittals is estimated as $389,802.

The regulation requires that a schedule for completing the actions needed to comply with applicable Appendix K and 10 CFR 50.46(b) requirements be submitted to NRC with each analysis. Schedule review would require 4 hours of staff time per submittal. At $141 per hour and 1.6 submittals per year, the annualized cost to the NRC would be $902 (1.6 x 4 hours = 6.4; 6.4 x $141).

The annual reports required by the provisions of 10 CFR 50.46(a)(3)(ii) will result in a total burden of 26 hours. One report is expected to be submitted by 104 licensees. It is estimated that it would only take approximately 15 minutes on the average for the staff to peruse these reports. At $141 per hour, the annual cost to NRC would be $3,666 (104 reports x 15 minutes = 26 hours x $141).

Listings of computer programs as required by Appendix K.II.1.b are not expected during this clearance period.

The total cost to the NRC is therefore $394,370 ($389,802 + 902 + 3,666) annually.

This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

There is an increase in the estimated burden for section 50.46(a)(3)(ii) based on a correction to the previous clearance submittal. The previous submittal estimated a burden of 4 hours for each annual report required by section 50.46(a)(3)(ii). Information collection and analysis needed to support the report had not been included in the estimated burden. The staff estimates that, on average, it will take a licensee approximately 20 hours to prepare an annual report.

A revision to Appendix K.I.A will allow licensees an option which will require additional data to be supplied in an annual report for those licensees choosing the option. The change allowed by the revision is expected to require approximately 10.5 additional hours, on average. An estimated 17 licensees are expected to choose this option annually, increasing their burden by approximately 519 hours (10.5 x 17).

Although the number of licensees has been reduced from 109 to 104 since the previous clearance submittal, the re-estimated burden required for analysis and reporting under 50.46(a)(3)(ii) has increased the total burden by 1834 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 requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Enclosure:
Attachment A

ATTACHMENT A

OMB STATEMENT FOR THE ECCS RULE CONTAINED
IN APPENDIX K AND SECTION 50.46 OF 10 CFR PART 50
ANNUAL BURDEN AND COST TO INDUSTRY

	Responses per year	Hours per response	Total Annual burden hours	Estimated annual industry cost @$141/hr.
1. Section 50.46 Requirements				
- Realistic EM Submittals	1	2500	2500	$ 352,500
- Modified EM Submittals	0.6	2500	1500	$ 211,500
- Schedule Submittals	1.6	8	13	$ 1,833
- EM Printout Submittal	0	0	0	0
2. Appendix K. II.1.b.	0	0	0	0
3. Appendix K.I.A	Burden included in 50.46(a)(3)(ii)			
4. Reports under 50.46(a)(3)(ii)	87	20	1740	$ 245,340
	17	30.5	519	73,179
Totals:	107.2		6,272	$ 884,352

Section 9

DRAFT SUPPORTING STATEMENT
FOR
EMERGENCY PLANNING

10 CFR 50.47, 50.54 (q, t)
AND PART 50, APPENDIX E*

DESCRIPTION OF THE INFORMATION COLLECTION

The Nuclear Regulatory Commission requires that all production and utilization facility licensees shall, as a condition of their license, submit emergency plans for NRC review and approval, and maintain the emergency plans up to date until the Commission terminates the license. Emergency plans are required to be submitted as part of the Preliminary Safety Analysis Report (PSAR) [10 CFR 50.34(a)(10)] and the Final Safety Analysis Report (FSAR) or final license application [10 CFR 50.34(b)(6)(v)] to address the elements of 10 CFR 50.47 and Appendix E to 10 CFR Part 50. In addition, copies of the detailed implementing procedures should be submitted pursuant to 10 CFR 50, Appendix E, Part V. Copies of State and local government radiological emergency response plans are also required to be submitted [10 CFR 50.33(g)].

Section 50.54(q) authorizes licensees to make changes to their emergency plans if such changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the requirements of 10 CFR Part 50. A report of these changes must be submitted to the NRC within 30 days after the change is made. Records of these changes must be retained for a period of 3 years from the date of the change. Proposed changes that decrease the effectiveness of the emergency plans are to be submitted to and approved by the Commission prior to implementation.

Section 50.54(t) requires each licensee to provide for the development, revision, implementation, and maintenance of its emergency preparedness program. The licensee shall conduct program reviews and audits at intervals not to exceed 12 months as is currently required or as necessary, based on an assessment by the licensee against performance indicators, and as soon as reasonably practicable after a change occurs in personnel, equipment or facilities that potentially could adversely affect EP or security, but no longer than 12 months after the change. In any case, each element of the EP program must be reviewed at least every 24 months. The results of this review, along with recommendations for improvements, shall be documented, reported to the licensee's corporate and plant management, and retained for a period of 5 years.

Part 50, Appendix E, Section IV.D.(2) requires licensees to annually disseminate to the public within the plume exposure pathway EPZ basic emergency planning information that would be helpful if an accident occurs.

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* See Supporting Statement for 50.72(a), Section 29, for Emergency Response System Data.

Part 50, Appendix E, Section V requires each licensee to submit any changes to the emergency plan implementing procedures to the NRC within 30 days of such changes.

As required by 10 CFR 50.4(b)(5), the signed original of documents submitted to NRC must be submitted to the NRC Document Control Desk, two copies to the appropriate Regional Office, and one copy to the appropriate Resident Inspector.

A. JUSTIFICATION

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

Emergency plans are needed to provide reasonable assurance that appropriate measures can and will be taken to protect public health and safety in the event of a radiological emergency.

Changes to the emergency plans must be submitted within 30 days in order to permit the NRC to review such changes as quickly as possible. Without a quick review, the NRC would be unaware for extended periods of time, whether the revised plans for emergencies are still adequate to assure the health and safety of the public.

Documentation of the annual review and recommendations required by 50.54(t) provides information on the adequacy of emergency planning programs, including the adequacy of interfaces with state and local governments, and of licensee drills, exercises, capabilities, and procedures. This information is used by licensees to make adjustments to site programs.

2. Agency Use of Information

The NRC must find that the emergency plans conform to the requirements of 10 CFR Part 50 and that the plans provide reasonable assurance that in the event of an emergency appropriate measures can and will be taken to protect the public health and safety.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The provisions of these regulations are not duplicated in other Federal regulations. The information is only available from NRC licensees. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found.

5. Effort to Reduce Small Business Burden

The provisions of these regulations affect power reactors and non-power reactors (research, test and critical facilities) operated by colleges and universities. Regulatory Guide 2.6, Rev. 1, and NUREG-0849 provide information that lessens the emergency planning burden on the educational institutions.

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

If the information were not collected or collected less frequently, the NRC would be unaware, for extended periods of time, whether the revised plans for emergencies are still adequate to assure the health and safety of the public.

7. Circumstances Which Justify Variations from OMB Guidelines

Pursuant to 50.54(q), the licensees must retain the updated emergency plan until termination of the license to ensure the plans are maintained to protect the health and safety of the public in case of an emergency. The records required by 50.54(t) are retained for 5 years to provide documentation on the adequacy of licensee emergency preparedness programs.

8. Consultations Outside the NRC

Efforts pertaining to emergency plans are coordinated between local, State, and Federal agencies.

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

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary, confidential, or private information is handled in accordance with 10 CFR 2.790 and 10 CFR 9 of the NRC's regulations.

11. Justification for Sensitive Questions

Personal telephone numbers are needed in the event of a nuclear emergency. This information is protected in accordance with the provisions of the Privacy Act and 10 CFR 2.790.

12. Estimated Industry Burden and Burden Hour Cost

Based on staff's best estimate, the burden for maintaining the emergency preparedness program, including annual dissemination of emergency planning information and annual program review, is estimated to be 11,725 hours per year for each of the 65 operating power reactor sites (762,125 hours) and 30 hours for each of 37 operating non-power reactor licensees (1,110 hours). For each of 13 permanently shutdown power reactor sites, the burden is estimated to be 3,000 hours per year (39,000 hours), and for each of 15 permanently shutdown non-power reactors, the burden is estimated to be 7.5 hours per year (112.5 hours). Thus, the total annual burden is 802,348 hours, and the cost to licensees for the maintenance of their emergency preparedness program is $113,131,068 (802,348 x $141).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

NRC estimates 80 hours per year for each of the 65 operating nuclear power reactor sites (5200 hrs) and 20 hours for 13 permanently shutdown power reactor sites (260 hrs) for review of revised emergency plans and procedures. Therefore, the burden estimated for this effort is 5,460 hours. Approximately 8 hours of effort is involved for reviewing revised plans for 37 operating non-power reactors (296 hrs) and 2 hours for 15 permanently shutdown non-power reactors (30 hrs), and results in 326 hours of Federal burden. Thus, the total annual Federal burden is expected to be 5,786 hours, at a cost of $815,826 (5,786 hours x $141).

The cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 171.

15. Reasons for Changes in Burden or Cost

Although the estimated burden hours have decreased because some operating power reactors and non-power reactors shifted from operating to shutdown status, the total industry and Federal cost has increased due to the use of a higher value for hourly costs ($141 per hour).

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 10

DRAFT SUPPORTING STATEMENT
FOR
FIRE PROTECTION

10 CFR 50.48 AND APPENDIX R

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.48 requires certain provisions for fire protection in operating and permanently shutdown nuclear power plants. This regulation upgrades fire protection at nuclear power plants licensed to operate prior to January 1, 1979, by requiring resolution of certain contested generic issues in fire protection safety evaluation reports. The program on which this part is dependent is Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979," which makes requirements of certain items of fire protection guidance that have been used by the staff since the Browns Ferry fire on March 22, 1975, to evaluate the adequacy of fire protection programs at operating nuclear power plants.

A. JUSTIFICATION

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

Section 50.48(a) requires that each operating nuclear power plant have a fire protection plan that satisfies Criterion 3 of Appendix A to 10 CFR 50. This fire protection plan must describe the overall fire protection program for the facility, identify the various positions within the licensee's organization that are responsible for the program, state the authorities that are delegated to each of these positions to implement those responsibilities, and outline the plans for fire protection, fire detection and suppression capability, and limitation of fire damage. The plan must also describe specific features necessary to implement the program described above, such as administrative controls and personnel requirements for fire prevention and manual fire suppression activities, automatic and manually operated fire detection and suppression systems, and the means to limit damage to structures, systems, or components important to safety so that the capability to safely shut down the plant is ensured. Licensees shall retain the fire protection plan and each change to the plan as a record until the Commission terminates the reactor license and shall retain each superseded revision of the procedures for three years from the date it was superseded. These requirements will not affect nuclear power plants that were licensed to operate prior to January 1, 1979, and that already have the Appendix R requirements identified in their safety evaluation reports. Section 50.48(a) does not affect presently licensed plants since they have already completed these requirements with their approved fire protection programs. Section 50.48(a) will apply to new licensees as their applications are submitted to the NRC. No special requirement for a format or form is imposed with this rule. Each licensee is free to develop the method and forms that best suits its individual operation. No new applications are anticipated in the next 3 years.

Section 50.48(c)(5) requires licensees to submit plans and schedules for meeting the provisions of paragraphs (c)(2), (c)(3), and (c)(4) within 30 days after the effective date of this section and Appendix R of 10 CFR 50.

Section 50.48(c)(5) also requires licensees to submit design descriptions of modifications needed to satisfy Section III.G.3 of Appendix R to this part within 30 days after the effective date of this section and Appendix R of 10 CFR 50 (2/17/81).

Both of the requirements under 50.48(c)(5) have already been satisfied by all licensees. Therefore, there is no additional burden.

Section 50.48(f) requires licensees that have submitted 50.82(a)(1) certifications to maintain a fire protection program to address the potential for fires which could cause the release or spread of radioactive materials.

Section 50.48(f)(2) requires that the fire protection program be assessed by the licensee on a regular basis and revised, as appropriate, during decommissioning.

Section 50.48(f)(3) permits the licensee to make changes to the fire protection program without prior NRC approval if the changes do not reduce the effectiveness of fire protection for facilities, systems, and equipment which could result in a radiological hazard.

Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979," requires manual fire fighting capability at each plant. It states that a fire brigade of at least five persons on each shift shall be maintained at each nuclear power plant unit. In addition, Appendix R requires certain minimum levels of training for each brigade member, and training and drills for each brigade as a team. Appendix R also requires maintaining certain records of the training and drills provided for the brigades and brigade members. The recordkeeping requirements were agreed to by licensees as part of the license amendments that resulted from the staff's fire protection review of each plant. The two specific recordkeeping requirements, as committed to by licensees, are:

a. Section III.I.3.d

   At 3-year intervals, a randomly selected unannounced drill must be critiqued by qualified individuals independent of the licensee's staff. A copy of the written report from such individuals shall be available for NRC review and shall be retained as a record as specified in Section III.I.4 of Appendix R.

b. Section III.I.4

   Individual records of training provided to each fire brigade member, including drill critiques, shall be maintained for at least 3 years to ensure that each member receives training in all parts of the training program. These records of training shall be available for NRC review. Retraining or broadened training for fire fighting within buildings shall be scheduled for all those brigade members whose performance records show deficiencies.

Requirements to establish procedures and controls contained in Appendix R, Sections II.C.7 and III.K, have been completed by all affected licensees.

2. Agency Use of Information

These records are required to enable the staff to evaluate the effectiveness of each licensee's fire protection plan, and specifically, each fire brigade training program and, thus, determine the expected effectiveness of each fire brigade to cope with any fire emergency which may occur.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found. Reactor power licensees are the only source for this information.

5. Effort to Reduce Small Business Burden

This regulation does not affect small business.

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

This information is required so that the NRC can determine that fire training and drills are adequate in the event there is a fire emergency. It is collected only at the time of training and when drills are conducted. The frequency cannot be further reduced. The health and safety of the public could be affected adversely if this information is not available as specified.

7. Circumstances Which Justify Variation from OMB Guidelines

Licensees must retain the fire protection plan until the NRC terminates the license in order to ensure the health and safety of the public.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collection requirements has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Information identified as proprietary or confidential would be handled in accordance with 10 CFR 2.790 of the NRC regulations. However, this information is usually not submitted as confidential.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Appendix R	No. of Plants Affected	Hours Per Plant	Annual Burden
Section III.I.3.d	104	24	2,496
Section III.I.4	104	120	12,480
10 CFR 50.48			
Section 50.48(f)	19	72	1,368
	Total Annual Burden		16,344

The estimated burden is based on staff's experience. The estimated cost to industry is $2,304,504 ($141 x 16,344).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

We estimate that the average review time of fire brigade drill and training records per plant is 5 staff-hours. One hundred and four (104) plants are expected to comply with this requirement annually for an annual cost of $76,492 to the Government (104 plants x 5 staff hours/plant = 520 staff hours; 520 staff hours x $141/hr). We estimate that 1.25 staff hours per plant are required to review records maintained by 19 permanently shutdown plants pursuant to 50.48(f) for an annual cost of $3,384 (19 plants x 1.25 staff hours/plant = 24 staff hours; 24 staff hours x $141). Thus, the total annual cost to the Government is $76,704 ($73,320 + $3,384). This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The estimated burden has changed from 16,704 hours to 16,344 hours because the number of plants required to meet Appendix R information collections decreased from 109 to 104 plants and the number of permanently shutdown plants has changed from 14 to 19 plants.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 11

DRAFT SUPPORTING STATEMENT
FOR
ENVIRONMENTAL QUALIFICATION OF ELECTRIC EQUIPMENT IMPORTANT TO SAFETY FOR NUCLEAR POWER PLANTS

10 CFR 50.49

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.49 contains the following information collections:

Section 50.49(a) requires applicants and licensees of nuclear power plants, other than a nuclear power plant for which 50.82(a)(1) certifications have been submitted, to establish a program for qualifying the electric equipment important to safety as defined in 50.49. Since all licensees have completed this requirement and no new applications for commercial nuclear power plants are expected to be docketed in the foreseeable future, no further collection of information is anticipated under this section of the regulation.

Section 50.49(d) requires applicants and licensees to prepare a list of electric equipment important to safety, and include the performance specifications under conditions existing during and following design basis accidents, the electric characteristics for which performance under specified conditions can be ensured, and the environmental conditions in which it must operate. Applicants and licensees must keep the list and information in the file current. All licensees have prepared lists of equipment and performance specifications, and future information collection under this section of the regulation is only required to the degree it is necessary for keeping the information current.

Section 50.49(f) requires each item of electric equipment important to safety to be qualified by one of four specified methods all with a supporting analysis to show that the equipment to be qualified is acceptable. Licensees have completed this requirement for existing plant equipment. However, this requirement remains active for qualification of new equipment installations and for replacement equipment that fall under the scope of this regulation.

Section 50.49(g) requires, by May 20, 1983, each holder of an operating license issued prior to February 22, 1983, to identify the electric equipment important to safety already qualified and submit a schedule for either qualifying or replacing the remaining electric equipment important to safety. Since this requirement has been completed by all licensees, no further collection of information is required under this section of the regulation.

Section 50.49(h) requires each licensee to notify the NRC of any significant equipment qualification problem that may require extension of the completion date, provided pursuant to 50.49(g), within 60 days of its discovery. Since this requirement has been completed by all licensees, no further collection of information is required under this section of the regulation. Section 50.49(i) requires applicants for operating licenses granted after February 22, 1983, but

prior to November 30, 1985, to perform and submit an analysis, for NRC consideration prior to granting an operating license, to ensure that the plant can be safely operated pending completion of equipment qualification required by 50.49. Since this requirement has been completed by all licensees, no further collection of information is required under this section of the regulation.

Section 50.49(j) requires that a record of the qualification, including documentation required by 50.49(d), be maintained in an auditable form for the entire period during which the covered item is installed or stored for future use in the nuclear power plant. This is required to permit verification that each item of electric equipment important to safety is qualified for its application and meets its specified performance requirements when it is subjected to the conditions predicted to be present when it must perform its safety function up to the end of its qualified life.

Section 50.49(l) requires replacement equipment to be qualified in accordance with the provisions of 10 CFR 50.49 unless there are sound reasons to the contrary. Therefore, unless there is suitable justification for some alternate course of action, new equipment installations and replacement equipment that fall under the scope of 10 CFR 50.49 must be qualified in accordance with 10 CFR 50.49 requirements, including the documentation requirements of 50.49(d), (f) and (j).

A. JUSTIFICATION

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

Nuclear power plant electric equipment important to safety must be able to perform its safety functions throughout its installed life. Records that demonstrate equipment performance capabilities must be maintained in an auditable form to permit verification that each item important to safety is qualified. These records are maintained for the entire period during which the equipment item is installed in the plant or is stored for future use.

2. Agency Use of Information

The reports and records required by 10 CFR 50.49 allow NRC to periodically assess whether 104 operating plants meet requirements pertaining to environmental qualification of electrical equipment. This information has been used by licensees to address various equipment qualification issues over time, to confirm equipment design adequacy when making plant changes, and when performing plant design reviews and assessing vulnerabilities that are periodically identified. This information has also been used by NRC personnel when assessing equipment design adequacy during periodic routine and reactive inspections.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The Information Requirements Control Automated System (IRCAS) was searched for duplication. None was found. There is no source for the required information other than applicants/licensees of nuclear power plants.

5. Effort to Reduce Small Business Burden

This requirement only affects nuclear power reactor applicants/ licensees and, therefore, does not affect small businesses.

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

The provisions of 10 CFR Section 50.49 require the applicant/licensee to set up a program for the environmental qualification (EQ) of electric equipment, submit a safety analysis report, and maintain equipment qualification records for the installed life of the component. If this information was not required to be assembled and maintained, there would be no record of the basis for equipment qualification and in particular, there would be no record of what the boundaries of qualification are for the equipment of a particular plant. Establishing and maintaining the specified information is needed to provide assurance of equipment operability in the most severe environments that are postulated to exist at each commercial nuclear power plant.

There is no specific frequency associated with the collection and maintenance of environmental qualification information per se. Following the initial certification efforts, the information is reviewed and enhanced and new qualification information is gathered by the licensee on an "as needed" basis depending on specific plant circumstances that arise, equipment vulnerabilities that are identified, plant upgrades, and the periodic replacement of components.

7. Circumstances which Justify Variation from OMB Guidelines

The records required by 10 CFR 50.49(d) and (j) are required to be maintained for the life of the component so that the NRC and the licensees can periodically assess and determine if equipment important to safety at nuclear power plants meets specified performance requirements.

8. Consultation Outside the NRC

Notice of opportunity for public comment on this collection of information has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential or proprietary information is handled in accordance with 10 CFR 2.790 of the NRC's regulations.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Future information collection that is required to be conducted under this regulation is relatively minor and situational dependent, pertaining primarily to the maintenance and upkeep of existing equipment qualification records as equipment ages with some effort required for establishing new records as equipment is replaced and for new equipment installations. Those sections of the regulation that are currently active in this regard are 50.49(d), (f) and (j). On the average, staff estimates that collection and maintenance of information as required under this regulation will require on the order of about 2,080 hours per year per licensee for a total industry burden of 216,320 hours (2080 hrs x 104). Using a cost of $141/hour, this amounts to $293,280 per year per licensee. This results in a total cost of about $30,501,120 for the regulated nuclear industry (i.e., 104 power plants).

13. Estimate of Other Additional Costs

There are no additional costs.

14. Estimated Annualized Cost to the Federal Government

Because the information that is required to be established and maintained per 10 CFR 50.49 requirements is kept by the licensees and made available for NRC review during routine site inspections and as the need arises, the total annual cost to the Federal government is negligible.

15. Reasons for Changes in Burden or Cost

The cost per licensee increased from $266,240 to $293,280 per year due to an increase of the burden cost from $128.00 per hour to $141 per hour. The total cost (to all licensees) increased only slightly as a result of a decrease in the number of operating nuclear power plants from 109 to 104.

16. Publication for Statistical Use

This information collection is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 12

DRAFT SUPPORTING STATEMENT
FOR
COLLECTION OF INFORMATION UNDER OATH OR AFFIRMATION

10 CFR 50.54(f)

DESCRIPTION OF THE INFORMATION COLLECTION

Section 50.54(f) of the NRC regulations provides that a licensee shall, upon request by the Commission, submit written statements under oath or affirmation to enable the Commission to determine whether a license should be modified, suspended, or revoked. When the NRC staff has identified a potential health, safety, or environmental problem at a particular plant or series of plants, the staff may require the licensee or licensees to submit information to evaluate the particular situation and to make a determination whether the situation is serious enough to require that the license be modified, suspended, or revoked.

A. JUSTIFICATION

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

The time allotted the licensee to respond to the request for information depends upon the perceived risk associated with the potential problem. Most responses will be requested within a 30 to 120-day period.

Periodically there are equipment failures, construction problems, and issues discovered or raised by the technical staff during the safety review and brought to the attention of the NRC through licensee reporting procedures, the safety review process itself, or by the NRC inspection staff.

Since many of the flaws and malfunctions which are detected are novel, there is little data available which would enable the NRC to predict, with certainty, what the consequences might be. To develop a reliable data base, accurately appraise the potential long-term significance of the anomaly, and determine what, if any, corrective measures may be necessary, NRC must obtain information from licensees. Should the information provided by the licensees show that there is only minor safety significance associated with the problem/situation, the facility license would not be modified, suspended, or revoked. On the other hand, the Commission may issue an Order that does modify, revoke, or suspend the license to operate a nuclear reactor.

2. Agency Use of Information

The Commission requests specific information either from one licensee, on a problem or situation believed to be unique to a particular facility, or from more than

one licensee on a problem or situation believed to be generic in nature, i.e., that may affect more than one facility. Before licensees are requested to provide such information, the staff will have identified the problem or situation as one having potential health, safety or environmental significance.

Based on the information obtained from licensees or applicants and the staff's evaluation of the problem, new regulatory requirements may be identified. Depending upon the nature of the problem and its resolution, these new requirements could be imposed by regulation, or they could be imposed on affected facilities individually by amendment to the technical specifications or conditions of their construction permit or operating license (see 50.109, Backfitting). In addition, the NRC could issue a Regulatory Guide which would describe the nature of the problem and the method or methods found adequate by the regulatory staff for its resolution.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

This information collection is not required by any other regulations. The Information Requirements Control Automated System (IRCAS) was searched for duplication, and none was found. There is no source for the required information except from licensees and construction permit holders.

5. Effort to Reduce Small Business Burden

The provisions of 10 CFR 50.54(f) affect approximately 37 universities (research/test reactors). However, a review of our records indicate that bulletins and generic letters rarely encompass research/test reactors.

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

Without the information provided in the licensee's written statements, timely staff action could not be taken and unsafe conditions could continue to exist, thereby potentially endangering public health and safety.

7. Circumstances which Justify Variation from OMB Guidelines

The requirements of 10 CFR 50.54(f) normally do not vary from OMB guidelines. Only when the risk associated with a problem affects the health and safety of the public is a response requested in fewer than 30 days.

8. Consultations Outside the NRC

When appropriate, prior to NRC issuing a bulletin or generic letter, the NRC publishes the document in the Federal Register, seeks comments on the matter from industry (utilities, Nuclear Energy Institute, nuclear steam system suppliers, vendors, etc.), and occasionally holds public meetings. These techniques have proven effective in ensuring the accuracy of statements and bringing faster and better responses from licensees.

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is handled in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

This regulation does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Plant-Specific Concerns

Staff estimates that perhaps 2 plants will receive one request each year. Our estimate of the burden is that, on the average, each request would require several people about 2 weeks to answer. Therefore, 300 hours per request for each of 2 requests totals 600 hours.

Generic Considerations

The number of bulletins and generic letters vary and so does the number of respondents and the level of effort required to prepare the different responses. Staff estimates that there will be approximately 2 bulletins/generic letters issued per year requesting information pursuant to 10 CFR 50.54(f).

The 2 bulletins/generic letters could involve up to 141 operating reactors (37 research/test reactors and a total of 104 nuclear power reactors). Although unlikely, bulletins/generic letters could also involve 19 permanently shutdown

nuclear power reactors and 15 shutdown research/test reactors. The burden to respond could be between 200 and 1,000 hours per letter. However, a realistic upper bound can be computed by using all 104 operating nuclear power reactors and the historic average of 459 hours for each bulletin/generic letter.

Thus, for bulletins/generic letters, the annual burden for power reactors would be 95,472 hours (459 x 2 bulletins/generic letters = 918 hours; 918 hours x 104 plants = 95,472 hours).

Based on current experience, no responses are anticipated to be required from non-power reactors or permanently shutdown facilities.

Total Estimated Industry Burden for plant specific and generic 50.54(f) letters would, therefore, be 96,072 hours (600 + 95,472 hours); the cost would be $13,546,152 (96,072 hours x $141).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

Prior to requesting information from the respondents, the NRC staff assesses the potential problem and identifies the needed information and how the information is to be used. Based on staff experience, the overall burden estimate for the preparation of information requests and analysis of responses is estimated to take 200 hours for each plant-specific request and 2,500 hours for each bulletin or generic letter since each bulletin or generic letter request for information is carefully justified prior to review by the NRC Committee to Review Generic Requirements. Thus, 2 plant-specific letters will involve approximately 400 hours (200 hours x 2 letters), and 2 bulletins/generic letters will involve approximately 5,000 hours (2,500 hours x 2 bulletins/generic letters), for a total estimated burden to the Federal government of 5,400 hours. At $141 per hour the cost is $761,400.

This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Part 170 and/or 171.

15. Reasons for Change in Burden

The estimated industry burden has decreased from 300,786 hours to 96,072 hours because of a trend towards fewer plant-specific letters and bulletins/generic letters that are 10 CFR 50.54(f)-type information requests and because of a reduction in the number of operating nuclear power reactors (used as the upper bound) from 109 to 104. Federal burden has decreased accordingly.

16. Publication for Statistical Use

The information collected under the provisions of 10 CFR 50.54(f) is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The OMB approval number and expiration date are included in all generic communications (bulletins and generic letters).

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Section 13

DRAFT SUPPORTING STATEMENT
FOR
PROPERTY DAMAGE/ACCIDENT RECOVERY INSURANCE

10 CFR 50.54(w)(3)
AND 10 CFR 50.54(w)(4)(i) & (ii)

DESCRIPTION OF THE INFORMATION COLLECTION

Section 10 CFR 50.54(w) requires that each electric utility licensee under 10 CFR Part 50 for a production or utilization facility shall take steps to obtain onsite property damage insurance available at reasonable costs and on reasonable terms from private sources or to demonstrate that it possesses an equivalent amount of protection. Proceeds from such insurance will be used, in the event of an accident, to stabilize and decontaminate the reactor to prevent a situation that could threaten public health and safety. Under 50.54(w)(3), lead reactor licensees (approximately 55) are required to report annually on the amount and sources of this required insurance. Under 50.54(w)(4)(i) and (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.

Section 50.54(w)(4)(i) establishes a threshold of $100 million before a cleanup plan would be required. Section 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 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 NRC for authority to decommission the reactor and to surrender the license voluntarily.

A. JUSTIFICATION

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

Licensees of commercial nuclear power plants are required to submit proof annually that they carry onsite property damage/accident recovery insurance available from private sources. A licensee suffering an accident is also required to submit a cleanup plan within 30 days after the reactor is stabilized. This cleanup plan also explicitly includes costs of performing each cleanup operation. This information is required to demonstrate that licensees are complying with NRC's

requirement to carry adequate accident recovery insurance and, in the event of a reactor accident, to provide the NRC with sufficient information to monitor cleanup and to allow insurance proceeds to be released from the decontamination priority and to be used for non-cleanup purposes.

2. Agency Use of Information

The information submitted by licensees is used by the NRC staff to ensure that licensees are complying with the requirements to maintain appropriate levels of onsite property damage/accident recovery insurance and to use the proceeds from this insurance for decontamination and cleanup after an accident before any other purpose.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use. The NRC is implementing its "ADAMS" electronic documents system, which provides for electronic submission of reports from licensees, including these reports.

4. Effort to Identify Duplication and Use Similar Information

The Information Requirements Control Automated System (IRCAS) was searched for duplication, and none was found. There is no source for the required information other than NRC licensees.

5. Effort to Reduce Small Business Burden

This information collection requirement only affects power reactor licensees and thus does not affect small businesses.

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

Annual reporting of coverage is considered the least frequent reporting interval which will still give reasonable assurance of insurance coverage in order to protect the health and safety of the public in case of an accident.

7. Circumstances which Justify Variation from OMB Guidelines

As stated above, 10 CFR 50.54(w)(4)(ii) requires licensees to provide written notification when the reactor is and can be maintained in a safe and stable condition. This event could occur in less than 30 days, at which time licensees are expected to provide the required notification. This notification is necessary to provide the NRC with information to monitor cleanup and to begin allowing the release of insurance proceeds from the decontamination priority and to be used for non-cleanup purposes.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

The NRC does not anticipate the receipt of confidential information. However, if confidential information is submitted, it would be protected in accordance with 10 CFR 2.790.

11. Justification for Sensitive Questions

These regulations do not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Average reporting burden to each licensee for the annual report is a letter to NRC of usually no more than one paragraph indicating both the amount of onsite property damage insurance being carried by the licensee and the insurer(s) from whom the insurance was obtained. Time to complete this is estimated to be no greater than 4 hours per licensee. No significant variation in burden among licensees is expected. There are currently 55 licensees who are lead operators of single or multiple unit sites affected by the reporting requirements. (This includes 45 lead licensees of operating plants and 10 licensees of plants that are shutdown but who continue to maintain insurance.) Thus, the current annual burden is no more than 220 hours (55 X 4 hours). The estimated industry cost is, therefore, $31,020 ($141 x 220). Because an accident requiring a licensee to submit notification and a cleanup plan is unlikely, no burden for this requirement is projected. It is estimated that a licensee required to prepare and submit notification and a cleanup plan after an accident* could face a burden of 2,000 hours at a cost of $282,000 (2,000 hours x $141).

13. Estimate of Other Additional Costs

None.

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* If there is such an accident of the severity that is specified in Section 50.54(w)(4).

14. Estimated Annualized Cost to the Federal Government

Total staff review time per year for the annual report is 15 minutes/licensee x 55 licensees = 14 staff hours. At a cost of $141 per hour, the total dollar cost to the Federal government is expected to be $1,974 annually (14 hours x $141). The cleanup plan required to be submitted by a licensee suffering an accident is expected to require approximately 1,000 staff hours, or $141,000 per review (1,000 hours x $141). However, it is unlikely that there will be an accident of the severity addressed in 50.54(w). Thus, the NRC estimates no burden for this potential reporting requirement. This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

There has been no change in burden since the last OMB review.

16. Publication for Statistical Use

The collected information is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 14

DRAFT SUPPORTING STATEMENT
FOR
BANKRUPTCY FILING; NOTIFICATION REQUIREMENTS

10 CFR 50.54(cc)

DESCRIPTION OF THE INFORMATION COLLECTION

Under Section 50.54(cc), licensees are required to notify the appropriate NRC regional office immediately in writing in the event of the commencement of a bankruptcy proceeding involving the licensee, indicating the bankruptcy court in which the petition was filed and the date of the filing. There is no action required of a licensee unless and until a bankruptcy petition is filed.

A. JUSTIFICATION

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

A licensee who is experiencing severe economic hardship may not be capable of carrying out licensed activities in a manner which protects public health and safety. In particular, a licensee involved in bankruptcy proceedings can have problems affecting payment for proper handling of licensed radioactive material and for decontamination and decommissioning of the licensed facility in a safe manner. Improper materials handling or decontamination activities can lead to spread of contamination throughout a licensee's facility and the potential for dispersion of contaminated material offsite. Financial difficulties can also result in problems affecting the licensee's waste disposal activities.

Instances have occurred in which licensees filed for bankruptcy and the NRC has not been aware that this has happened. NRC inspectors have found belatedly that a licensee has vacated property and abandoned licensed material or that a licensee has been unable to decontaminate its facility and properly dispose of the waste. The NRC is to be notified of these situations promptly so that it can take necessary actions to assure that the health and safety of the public is protected.

2. Agency Use of Information

Notification to NRC in cases of bankruptcy would alert the NRC so that it may deal with potential hazards to public health and safety posed by a licensee that does not have the resources to properly secure the licensed material or clean up possible contamination. The information provided by the required notification would be used by the regional inspection and licensing staff, in consultation with headquarters legal and program staff, to initiate a determination of the need for prompt NRC response or regulatory action. NRC actions may include orders to modify or amend a license or other necessary action and could include limitations on licensed activity which would only permit the storage of licensed material. The NRC has

taken these actions in the past in similar circumstances. In addition, prompt notification to NRC would allow it to take timely and appropriate action in a bankruptcy proceeding to seek to have available assets of the licensee applied to cover costs of site cleanup before funds are disbursed and become unavailable for cleanup.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use. The NRC is implementing its "ADAMS" electronic documents system, which provides for electronic submission of reports from licensees, including these reports.

4. Effort to Identify Duplication and Use Similar Information

This requirement is not duplicated in other Federal regulations. The Information Requirements Control Automated System was searched for duplication and none was found.

There is no similar information available in a form which can be used by NRC for the purpose described in Item 2. Thus, although a licensee's involvement in a bankruptcy proceeding will be recorded at a bankruptcy court and although the United States Code contains requirements regarding notification of creditors of the commencement of bankruptcy proceedings, this information is not generally available to the NRC in a timely manner so that it can take necessary actions to protect public health and safety. The resources which would have to be committed by the NRC in monitoring bankruptcy court filings are far in excess of the small burden imposed by this regulation.

5. Effort to Reduce Small Business Burden

All affected licensees are either electric utilities operating power reactors or universities operating research and test reactors. No notifications are expected to be received from universities.

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

Information is required to be collected only following the filing of a petition for bankruptcy which is not expected to occur more than one time during the license period of a licensee. If the requested information were not collected at this time, NRC might not be aware of a licensee's significant financial problems. Without this information, NRC may not be aware of potential public health and safety problems and not able to act in a timely manner to protect public health and safety.

7. Circumstances which Justify Variation from OMB Guidelines

The subject regulation varies from OMB guidelines by requiring that licensees submit the notification in less than 30 days from the date of filing of the petition in bankruptcy. The requirement to provide notification promptly following the filing of the petition is a reasonable measure to ensure that NRC is made aware of the bankruptcy so as to take effective action to protect public health and safety. Allowing a period of 30 or more days to elapse might preclude NRC from becoming aware of the licensee's distressed financial circumstances in time to prevent the development or aggravation of a potential hazard to the public. Moreover, the United States Code contains requirements regarding notification of creditors of bankruptcy. This regulation requires one additional notification. Notifying NRC promptly after the filing of the petition would in fact be less of a burden on the bankrupt than a separate notification later in the proceedings since these notifications are accomplished by forwarding to NRC a copy of the petition.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential or proprietary information will be protected in accordance with the provisions of 10 CFR 2.790 and 9.17 of the NRC's regulations.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

It is estimated that 127 licensees would need approximately 1 hour each to notify the NRC about a bankruptcy filing. However, no industry burden is expected during the clearance period because no bankruptcy notifications are anticipated at this time.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

No cost is expected because no bankruptcy notifications are anticipated at this time.

15. Reasons for Changes in Burden or Cost

There has been no change in burden.

16. Publication for Statistical Use

The collected information is not used for statistical purpose.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 15

DRAFT SUPPORTING STATEMENT FOR REPORTING OF SIGNIFICANT DESIGN AND CONSTRUCTION DEFICIENCIES

10 CFR 50.55(e)

DESCRIPTION OF THE INFORMATION COLLECTION

Appendix B to 10 CFR Part 50 requires an applicant for a license to construct or operate a nuclear power plant to establish a quality assurance (QA) program. This program is to ensure, among other things, that all conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances, in the final design or construction, or any significant breakdown in the QA program are promptly identified. Section 10 CFR 50.55(e) requires that construction permit (CP) holders report such deficiencies to the Commission via telephone or facsimile within 2 days following receipt of information by a director or responsible officer that a defect or failure to comply associated with a substantial safety hazard (SSH) exists. A written report is to follow within 30 days. The requirements of Section 50.55(e) were added to the regulations in 1972 and recently amended in 1992 to ensure that the more significant of these deficiencies be reported to the Commission.

A. JUSTIFICATION

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

Section 50.55(e) of 10 CFR Part 50 establishes requirements for reporting deficiencies occurring during the design and construction of nuclear power plants. The regulation is designed to enable the NRC to receive prompt notification of deficiencies and to have timely information on which to base an evaluation of the potential safety consequences of the deficiency and determine whether regulatory action is required. Therefore, the holder of a permit for the construction of a nuclear power plant is required to notify the Commission of each significant deficiency found in design and construction, which if it were to remain uncorrected, could adversely affect the safety of operations of the nuclear power plant at any time throughout the expected lifetime of the plant.

Section 50.55(e)(1)(i) requires each CP holder to adopt appropriate procedures to evaluate deviations and failures to comply to identify defects and failures to comply associated with substantial safety hazards (SSH) as soon as practicable, and, except as provided in 50.55(e)(1)(ii), in all cases within 60 days of discovery, in order to identify a reportable defect or failure to comply that could create an SSH.

Section 50.55(e)(1)(ii) requires each CP holder to adopt appropriate procedures to ensure that if a CP holder cannot complete an evaluation of an identified deviation or failure to comply within 60 days of its discovery, an interim report is prepared and submitted to the Commission. The interim report should describe the deviation or failure to comply that is being evaluated and should also state when the evaluation will be completed. The interim report must be submitted in writing within 60 days of discovery of the potential defect or failure to comply.

Section 50.55(e)(1)(iii) requires each CP holder to adopt appropriate procedures to ensure that a director or responsible officer of a CP holder is informed within 5 working days after completion of the evaluation, described above, if the construction of a facility or activity, or a basic component supplied for such facility or activity fails to comply with the Atomic Energy Act of 1954, as amended (the Act), or any applicable rule, regulation, order, or license of the Commission relating to a SSH; contains a defect; or undergoes any significant breakdown in any portion of the QA program which could have produced a defect in a basic component. Such breakdowns in the QA program are reportable whether or not the breakdown actually resulted in a defect in a design approved and released for construction or installation.

50.55(e)(2) requires a CP holder to notify the Commission, through a director or responsible officer or designated person, of information reasonably indicating that the facility fails to comply with the Act or any applicable rule, regulation, order, or license of the Commission relating to an SSH.

50.55(e)(3) requires a CP holder to notify the Commission, through a director or responsible officer or designated person, of information reasonably indicating the existence of any construction defect or any defect found in the final design of a facility as approved and released for construction.

50.55(e)(4) requires a CP holder to notify the Commission, through a director or responsible officer or designated person, of information reasonably indicating any significant breakdown in the QA program.

50.55(e)(6)(i) requires notifications, as specified above, to be made initially by facsimile or by telephone within 2 days following receipt of information by the director or responsible corporate officer. This does not apply to interim reports described in 50.55(e)(1)(ii). Verification that the facsimile has been received must be made by telephone.

50.55(e)(6)(ii) requires notifications, as specified above, to be made also in writing, with copies to the appropriate Regional Administrator and to the appropriate NRC resident inspector, within 30 days following receipt of information by the director or responsible corporate officer.

50.55(e)(8) requires that the 50.55(e)(6)(ii) written notification clearly indicate that it is being submitted under 50.55(e) and include, to the extent known, the name and address of the individual(s) informing the Commission; identification of the facility,

the activity or the basic component supplied for the facility or the activity within the U.S. which contains a defect or fails to comply; identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect; nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply; the date on which the information of such defect or failure to comply was obtained; in the case of a basic component which contains a defect or fails to comply, the number and location of all the components in use at the facility; the corrective action which has been, is being, or will be taken, the name of the individual or organization responsible for the action, and the length of time that has been or will be taken to complete the action; and any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to other entities.

Section 50.55(e)(9)(i) requires a CP holder to retain procurement documents (records) defining the requirements that facilities or basic components must meet for the lifetime of the basic component.

Section 50.55(e)(9)(ii) requires a CP holder to retain records of evaluations of deviations and failures to comply for 5 years from the date of the evaluation.

Section 50.55(e)(10) specifies that the reporting requirements of 50.55(e) are satisfied when the defect or failure to comply associated with an SSH has been previously reported under 10 CFR 21, 50.55(e), 50.73 or 73.71. For holders of construction permits issued prior to October 29, 1991, evaluation, reporting, and recordkeeping requirements of 50.55(e) may be met by complying with the comparable requirements of 10 CFR 21.

2. Agency Use of Information

Specific uses made of the data reported under Section 50.55(e) include evaluation of impact of the deficiency on the quality of construction and of the adequacy of planned corrective action, identification of generic problems, planning of actions by inspection and enforcement personnel, and identification of problems in management or implementation of the QA program.

3. Reduction of Burden Through Information Technology

No responses will be submitted electronically. There is no legal obstacle to the use of information technology. Industry organizations are urged to share and distribute such information to all affected parties as it becomes available. Automated systems for tracking reports are being used to the extent possible.

4. Effort to Identify Duplication and Use Similar Information

There is no information identifying defects and failures to comply associated with SSHs which exists outside these regulations.

Prior to 1992, the NRC regulations contained several safety deficiency reporting requirements. Although distinctions existed between these requirements, duplication of reporting occurred. In 1992, NRC amended 10 CFR 50.55(e) and 10 CFR 21 to clarify the reporting requirements and to reduce duplicate evaluation, reporting, and recordkeeping in the regulations. The Information Requirements Control Automated System (IRCAS) was searched and no duplication was found.

5. Effort to Reduce Small Business Burden

This regulation does not affect small business.

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

If defects or failures to comply which could create SSHs were not reported or were reported less frequently, the Commission would be unable to make timely determinations on the potential safety consequences of the deficiency and whether regulatory action is required.

7. Circumstances Which Justify Variation from OMB Guidelines

Records are required to be retained beyond the 3-year limit established by OMB. This longer retention is required because experience with existing records indicates that a 3-year retention would not be adequate for review and evaluation of recurring defects. It is necessary to be able to verify that the deviation has been adequately evaluated and corrected as required. Records of evaluations are therefore retained for 5 years. Procurement documents have long been retained for the lifetime of the components. This is standard industry practice. It is necessary so that the records of component characteristics and performance can be reviewed when needed.

Initial notification within 2 days is required to provide NRC with sufficient warning of potentially generic conditions at CP facilities which could affect operating facilities.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is handled in accordance with 10 CFR 2.790.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

None. For the period of this clearance, it is expected that no nuclear plants will be under active construction. Thus, no 50.55(e) reports of deficiencies in design or construction will be submitted. If a report were submitted, staff estimates that each 48-hour notification would require 10 hours to prepare and the 30-day followup report would require 70 hours.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

None.

15. Reasons for Changes in Burden or Cost

During the period of this clearance, it is expected that no nuclear plants will be under active construction. Five plants remain on the indefinitely "deferred construction" list. Thus, no 50.55(e) reports of deficiencies in design or construction will be submitted.

16. Publication for Statistical Use

The 50.55(e) reports are not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 16

DRAFT SUPPORTING STATEMENT
FOR
QUALITY ASSURANCE RECORDS

10 CFR 50.55a*, 50.54(a), 50.55(f), APPENDIX A (CRITERION 1), AND APPENDIX B

DESCRIPTION OF THE INFORMATION COLLECTION

Quality Assurance (QA) records associated with the activities listed below are used by the licensee, the National Board of Boiler and Pressure Vessel Inspectors, insurance companies and the NRC in the review and confirmation of quality related activities. Most States and all nuclear insurers require that the ASME Boiler and Pressure Vessel (B&PV) Code (Section III) be used in the design, construction, testing and inspection of nuclear power reactors.

Appropriate records of the design, fabrication, erection and testing of structures, systems and components important to safety shall be maintained by the licensee throughout the life of the plant.

1. Management: QA manual, procedures, and instructions
2. Qualification and training of personnel
3. Design
4. Procurement, items identification/control, acceptance status
5. Manufacture, installation/testing
6. Handling, storage and shipping
7. Inspection, testing and qualifying, including inspection status
8. Calibration
9. Special processes
10. Operation
11. Maintenance
12. Modification and repair
13. Audits
14. Non-conformance, corrective actions

A. JUSTIFICATION

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

Licensee burden hours will be spent on QA records development and maintenance, which pertain to Items 1 through 14 listed above. Appendix B requires that records be maintained for plant equipment that the licensee has

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* See Part 17, separate Supporting Statement, for information collection requirements specified in 10 CFR 50.55a

designated to be "safety-related." Licensees must also generate records as required by Appendix A for plant equipment that they have determined to be "important-to-safety." The burden hours are estimated to be inclusive of both Appendix A and B records.

Regulatory Guide 1.28 (Rev. 3), "Quality Assurance Program Requirements (Design and Construction)" describes an acceptable method for complying with QA record requirements in accordance with 10 CFR Part 50. Except for a few regulatory positions in the Regulatory Guide, it endorses the common industry standard ANSI/ASME NQA-1-1983, "Quality Assurance Program Requirements for Nuclear Facilities." Maintenance of records as specified above is necessary so that evidence can be furnished to show that activities affecting quality have been accomplished in accordance with NRC regulations.

The type of records identified specifically in Criterion XVII of Appendix B to 10 CFR Part 50 are of particular importance to provide adequate evidence that licensee activities affecting quality have been accomplished in accordance with NRC regulatory requirements. Records pertaining to items which are important to safety are expected to be available for inspection and audit by the NRC in accordance with Criterion 1 of Appendix A to 10 CFR Part 50.

Reporting of changes to the QA program pursuant to 10 CFR Part 50.54(a) and 50.55(f) has been a requirement since March 1983. The licensee's QA Program Plan, after acceptance by the NRC, is a license condition. Any changes to this plan must be reported to the NRC like other license conditions of a similar nature. It is estimated that each licensee/applicant will initiate one such change per year. Such changes are included in the total license amendment requests reflected in the Section 1 Supporting Statement.

2. Agency Use of Information

Records required to be maintained for a specific activity are specified in the license application, license condition or permit, or NRC-approved documents. These records, some of which will be kept for the life of the facility, are available for inspection by the NRC, and are reviewed and examined to ascertain whether the activities affecting quality have been accomplished in accordance with NRC requirements. Also, in case of malfunction or failure of an item affecting safety, availability of plant records is necessary to aid in the determination of the cause of the failure. In addition, records maintenance is necessary for other important specific functions such as providing baseline data for in service inspection and providing data for trend analyses.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

This information is only available from nuclear licensees. These records are not a duplication of any other records maintained by the licensee or Federal government. The Information Requirements Control Automated System (IRCAS) was searched for agency duplication, and none was found.

5. Effort to Reduce Small Business Burden

The subject provisions do not affect small businesses.

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

QA records are collected as they are generated during design, construction, operation, and decommissioning of the plants. Less frequent collection is not an alternative.

7. Circumstances which Justify Variation from OMB Guidelines

The records must be retained throughout the life of the plant in order to support the review and confirmation of quality related activities.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of the Information

This information is usually not confidential. If it were, the information would be handled in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

These regulations do not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

a. Estimated Annual Reporting Burden

Licensee burden for each of 104 operating reactors is 10,000 hours (104 x 10,000)	= 1,040,000 hrs/yr
19 permanently shutdown reactors is 2,500 hours (19 x 2,500) =	47,500 hrs/yr
104 licensees expend 160 burden hrs each per report reporting changes to the QA Programs (104 x 160)	16,640 hrs/yr
Total Burden Hours:	1,104,140 hrs/yr
Cost is based on $141 per hour	= $155,683,740

b. Estimated Recordkeeping Burden

Based on staff experience, it is estimated that 75 percent of the total industry reporting burden encompasses hours expended annually for recordkeeping requirements. Recordkeeping requirements are, therefore, estimated to involve 828,105 hours annually.

13. Estimate of other Additional Costs

As discussed in Section 1 above, Regulatory Guide 1.28 describes an acceptable method for complying with QA record requirements. Licensees preserve the records in storage facilities that provide protection from hazards such as winds, floods, fires, and environmental conditions such as adverse humidity conditions. The costs associated with the records storage facilities are not known by the NRC, and would likely be incurred by licensees in the course of doing business.

14. Estimated Annualized Cost to the Federal Government

QA records are generated and maintained by licensees. The incremental cost of NRC audits and inspection of QA records is a small part of the total NRC inspection program consisting of the resident inspectors, regional inspections, and special inspections. Based on NRC staff experience, it is estimated that 333 hours/operating reactor and 83 hours/permanently shutdown reactor of the inspection effort is associated with records review. The total staff hours spent on records review is estimated to be 36,209 hours (333 hrs x 104 operating reactors and 83 hrs x 19 permanently shutdown reactors). Additionally, the annual NRC staff burden to review licensee QA plan changes is approximately 1.5 FTE (3,120 hours).

Therefore the estimated Federal cost is expected to be $5,545,389 ($141 x 39,329).

This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The change reflects a reduction of 5 operating reactors and corresponding increase of 5 permanently shutdown reactors. It also reflects an increase in the base burden cost from $128 to $141 per hour.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 17

DRAFT SUPPORTING STATEMENT
FOR
CODES AND STANDARDS

10 CFR 50.55a

DESCRIPTION OF THE INFORMATION COLLECTION

The NRC regulations in 10 CFR 50.55a incorporate by reference Division 1 rules of Section III, "Rules for Construction of Nuclear Power Plant Components," and Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components," of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (ASME B&PV Code); and the rules of the ASME "Code for Operation and Maintenance of Nuclear Power Plants" (ASME OM Code). These rules of the ASME B&PV and OM Codes set forth the requirements to which nuclear power plant components are constructed, tested, and inspected. The ASME Codes contain information collection requirements that impose a recordkeeping and reporting burden. In general, the records prepared are not collected by the NRC, but are retained by the licensee to be made available to the NRC, if requested, at the time of an NRC audit.

The information collection requirements imposed by 10 CFR 50.55a through incorporation by reference of the ASME Codes apply to activities associated with the construction and operation of nuclear power plants. The actual number of plants affected by the various ASME Code editions and addenda incorporated by this regulation, and thereby affected by the information collection requirements, is dependent on a variety of factors. These factors include whether the application is for construction, operation, the class and type of components involved; the date of the construction permit application; the schedule of the inservice inspection (ISI) and inservice testing (IST) programs; and whether the plant licensee voluntarily elects to implement updated editions and addenda of the ASME Code. Section III of the ASME B&PV Code applies to the construction of new plants, and, through reference by Section XI of the ASME B&PV Code, the repair and replacement activities in operating plants. Section XI of the ASME B&PV Code and the ASME OM Code apply solely to operating plants. At present, there are no nuclear power plants under construction, and 104 that are operating. The following analysis of information collection requirements determines the ASME B&PV Code, Section XI, and the ASME OM Code burden for 104 operating plants, including the burden associated with repair and replacement activities. In addition, since no new plants are presently scheduled for the future, an evaluation has been made to estimate what the information collection burden for a single new plant would be as a result of Section III being incorporated by reference in § 50.55a.

Section 50.55a specifies that the ASME Code edition and addenda to be applied to reactor coolant pressure boundary, and Quality Group B and Quality Group C components must be determined by the provisions of paragraph NCA-1140 of Subsection NCA of Section III of the ASME B&PV Code. NCA-1140 specifies that the Owner (or his designee) shall establish the ASME Code edition and addenda to be included in the Design Specifications, but that in no case shall the Code edition and addenda dates established in the Design Specifications be earlier than three years prior to the date that the nuclear power plant construction permit application is docketed. NCA-1140 further states that later ASME Code editions and addenda

may be used by mutual consent of the Owner (or his designee) and Certificate Holder. It is permissible for individual operating plants to implement improved rules in later editions and addenda on a voluntary basis, but unless they make that choice, there is no additional paperwork burden associated with incorporating later Section III editions and addenda than that to which they are committed. New plants would be required to construct the facility in accordance with applicable Section III edition and addenda.

Owners of nuclear power plants are required to establish ISI and IST programs in accordance with the requirements of the latest edition and addenda of the ASME Code that have been incorporated by reference into 10 CFR 50.55a as of 12 months prior to the date of issuance of the operating license. Licensees are required to update their ISI and IST programs in accordance with the latest edition and addenda of ASME Code that have been incorporated by reference as of 12 months prior to the start of the next 120-month inspection interval. Conservatively, the total number of plants that may ultimately be required to implement a particular ASME Code edition and addenda is 104.

Section III and Section XI specify certain recordkeeping and reporting requirements. These requirements are generally identified in Section III Subsection NCA and Section XI Article IWA-6000 of the ASME B&PV Code, and in Subsection ISTA of the ASME OM Code. In addition, specific technical requirements may result in an additional information collection burden. This analysis of information collection burden evaluates all general information collection activities, any significant additional burden that may be imposed as a result of specific technical requirements, and information collections imposed as a result of licensee requirements specified directly in § 50.55a.

Recordkeeping Requirements

Section III

Section III, Subsection NCA specifies recordkeeping requirements for Class 1 (Subsection NB), Class 2 (Subsection NC), and Class 3 (Subsection ND) components. These provisions require the Owner to:

- Prepare and submit to the ASME necessary forms to obtain an Owner's Certificate of Authorization, and to obtain a written agreement with an Authorized Inspection Agency (AIA), prior to application, to provide inspection and auditing services (NCA-3230). This activity by the Owner occurs after receipt of notification from the NRC that an application for a Construction Permit has been docketed. The information to be supplied by the Owner when making an application is identified in the forms issued by the ASME. It is estimated that completion of these information forms would take 80 p-hours/plant.

- Prepare and file ASME Form N-3, "Owner's Data Report for Nuclear Power Plant Components" (NCA-3270). Information to be included on this form identifies the Owner and location of the plant, and the nuclear vessels, piping, and pumps and valves installed within the plant. Information required to identify each component includes certificate holder and serial number, system identification, state number, national board number, and year built (NCA-3270). Form N-3, which is provided by

the ASME, expedites the documentation of this information. It is estimated that the time to obtain the necessary information and to document that information on Form N-3 would be 400 p-hours/plant.

- Document that a review of the Design Report has been performed to verify that all Design and Service Loadings have been evaluated and meet the acceptance criteria (NCA-3260). It is estimated that review of the Design Report, with documentation of any areas that need to be revised, would take 2000 p-hours/plant.

- Provide and file the Overpressure Protection Report required for the nuclear protection system (NCA-3220 (m) and (n)). This report includes the overpressure protection requirements for each component or system, including location of the overpressure protection devices, identification of the edition and addenda, system drawings, range of operating conditions, and an analysis of the conditions that give rise to the maximum pressure relieving requirements (NB/NC/ND-7200). It is estimated that the time associated with preparing the Overpressure Protection Report would be 2000 p-hrs, which is comprised of 1600 p-hours associated with obtaining and developing the necessary information and 400 p-hrs for collating the information into the necessary report.

- Document a Quality Assurance Program, and file copies of the Quality Assurance Manual with the Authorized Inspection Agency (NCA-8140). This documentation includes programs for surveying, qualifying, and auditing suppliers of subcontracted services (e.g., nondestructive examination contractors, material suppliers, and material manufacturers). Although Section III identifies the need for a documented Quality Assurance (QA) program, the primary NRC requirement for an overall QA program is contained in 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." (See the Section 16 Supporting Statement.) Therefore, no additional information collection burden is imposed on Owners by the quality assurance provisions of Section III which are incorporated by reference into § 50.55a.

- Provide, correlate, and certify Design Specifications (NCA-3250). This requires that the component Design Specification be provided in sufficient detail to form the basis for fabrication in accordance with the rules of Section III. The Design Specifications shall be certified to be correct and complete and to be in compliance with the requirements of NCA-3250 by one or more competent Registered Professional Engineers (NCA-3252). Although this is a requirement of Section III, its incorporation by reference in § 50.55a does not impose an additional information collection burden on the Owner. Preparation and certification of design specifications for construction of engineered structures is a routine and necessary engineering practice, which would occur with or without the incorporation of this Section III provision into § 50.55a.

- Designate records to be maintained and provide for their maintenance (NCA-3280). Although Section III identifies the need for specific record retention, the primary NRC requirement for record retention is specified in 10 CFR 50, Appendix B, Criterion XVII (Quality Assurance Records). (See the Section 16 Supporting

Statement.) Therefore, no additional information collection burden is imposed on Owners by the record retention provisions of Section III which are incorporated by reference into § 50.55a.

Section XI

Section XI, Subsection IWA specifies recordkeeping requirements for ISI of Class 1 (Subsection IWB), Class 2 (Subsection IWC), Class 3 (Subsection IWD), Class MC (Subsection IWE), and Class CC (Subsection IWL) components. These recordkeeping requirements require the Owner to:

- Prepare records of the preservice and inservice examinations of Class 1 and Class 2 pressure retaining components and their supports on ASME Form NIS-1, "Owner's Report for Inservice Inspections." Information to be included on Form NIS-1, which expedites documentation of the required information, includes identification of the component (i.e., name of component, name of manufacturer, manufacturer serial number, state number, national board number), examination dates, the applicable Section XI edition and addenda, and abstracts of the examination and tests, including results, and any corrective measures (IWA-6220).

  Section XI examinations are performed on the basis of a 10-year interval (i.e., all components to be examined, are examined within 10 years), with examinations distributed over three 40-month periods. For the purpose of this burden calculation, it has been estimated that it would take 160 p-hours to obtain and document the information required on Form NIS-1 for the examinations during one 40-month examination period at one plant. This averages to approximately 50 p-hrs/year/plant, or a total of 5,200 p-hrs/year for all 104 plants.

- Document the repairs and replacements in the inservice inspection summary reports on existing Form NIS-2, "Owner's Report for Repair or Replacements." Information to be included on ASME Form NIS-2 includes identification of the component (i.e., name of component, name of manufacturer, manufacturer serial number, national board number, year built) and system, the applicable construction code and Section XI edition and addenda, repair organization, and a description of the work performed (IWA-7520).

  Form NIS-2 expedites documentation of the required information. For the purpose of this burden calculation, it has been estimated that, on the average, 50 components would be repaired each year by each plant in accordance with Section XI rules. It is estimated that it would take 2 hours to document the repair of an individual component on Form NIS-2. This results in a recordkeeping burden associated with this documentation of 100 p-hours/year/plant, or a total of 10,400 p-hrs/year for all plants.

- Prepare plans and schedules for preservice and inservice examination and tests (IWA-6210). It is estimated that the preparation of the plans and schedules for preservice and inservice examination would require 1600 p-hours, and the plans and schedules for preservice and inservice testing would require 400 p-hours.

Assuming that, on average, 10% of the plants prepared plans and schedules for examination and testing (plans and schedules are established for 10 year intervals), this would result in an industry burden of 20,800 p-hrs/year for all plants [(1600+400)p-hrs/plant x (0.10)(104)plants/year].

- Record the results of preservice and inservice examinations of components performed in accordance with Section XI, IWB/IWC/IWD-2000. Specific requirements for examinations are tabulated in IWB/IWC/IWD-2500-1 for components such as vessels and piping. A record of each examination would include the component identification, date of examination, specific Section XI requirement, type of examination (e.g., volumetric, surface, visual), equipment settings, and record of any indications. The examinations are distributed over a 10-year examination interval (three 40-month periods) with examinations being performed at, on average, 18-month refueling outages (i.e., two per period). Therefore, on average, approximately 1/6 of the components are examined/year. The recordkeeping burden associated with these examinations is estimated at 1 hour/component. Based on an estimate of 4000 components/plant, it would take 400 p-hrs/year/plant [4000 components/interval x (1/10) interval/yr x 1 hour/component] to document the testing of these components for each plant, which results in a total burden of 41,600 p-hours for 104 plants.

- Record the results of the preservice and inservice containment inspection results in accordance with Section XI Subsection IWE and Subsection IWL, which provide rules for the preservice and inservice inspection of metal and concrete containments to assess and detect defects that could compromise a containment's structural integrity. The containment inservice inspections are established for a 10-year interval, but the Subsection IWE inspections are performed approximately every 3 years, while the Subsection IWL inspections are performed every 5 years. These ASME Code requirements were incorporated by reference into 10 CFR 50.55a for the first time in 1996. The incorporation by reference of Subsections IWE and IWL into 10 CFR 50.55a required each licensee to develop an initial inservice inspection (ISI) plan for these subsections, implement that ISI plan, and then develop and implement 10-year updates to that ISI plan. The development of the initial ISI plan was estimated to average 1000 p-hrs/yr per plant over a 4-year period is assumed to be essentially complete with no significant additional burden.

  It is estimated that implementing the ISI plan requires 600 p-hrs/yr for each plant performing ISI of the containment. Assuming that on the average 10 plants per year would be performing ISI of the containment, this would result in an industry burden of 6,000 p-hrs/yr.

  Every 10 years each licensee must update the ISI plan. Update of the plan is estimated to average 180 p-hrs per plant. Assuming that 10 plants per year would be updating their containment ISI plans, this would result in an industry burden of 1,800 p-hrs/yr.

  The total burden is estimated to be 7,800 p-hrs/yr.

The following additional significant recordkeeping requirements result from implementation of specific Section XI technical requirements:

- The 1995 Edition up to and including the 1996 Addenda of Section XI requires examination of essentially 100% of the length of all reactor vessel shell welds during the 2nd, 3rd, and 4th inspection intervals. (Section XI has required examination of essentially 100% of the length of reactor vessel shell welds during the 1st interval since the 1974 Edition as modified by addenda through the 1975 Addenda.) Although the data from these examinations is generally automatically recorded and processed, it is estimated that about 200 p-hrs is required to assemble, review, and summarize the additional data that is collected once during each 10-year inspection interval. On average, about 10 percent of all operating plants perform the reactor vessel shell weld examinations each year. Therefore, the additional recordkeeping burden per year resulting from the specified reactor vessel examination is estimated to be 2,080 p-hrs (i.e., 200 p-hrs/plant x [.10 x 104] plants/year).

- Mandatory Section XI, Appendix VII, "Qualification of Nondestructive Examination Personnel for Ultrasonic Examination," specifies requirements for the training and qualification of ultrasonic nondestructive examination (NDE) personnel in preparation for employer certification to perform NDE. Appendix VII specifies requirements for qualification records. These records include those for recertification (e.g., name of individual, qualification level, educational background and experience, statement indicating satisfactory completion of prior training, record of annual supplemental training, results of vision examinations, and current qualification examination results). It is estimated that it would take 65 p-hrs/plant/year to prepare and maintain the specified training records. This results in a yearly burden of 6,760 p-hrs for 104 plants.

- Table IWA-1600-1 (1991 Addenda) references a revised ASME N626 specification which requires that Authorized Inspection Agencies be accredited by ASME. It is estimated that the records associated with this change will result in an average of 10 p-hrs per plant per year. The recordkeeping burden is estimated to be 1,040 p-hrs/yr (i.e., 10 p-hrs/plant-yr x 104 plants). This estimate is based on discussion with an authorized nuclear inspection (ANI) organization, but the impact has been assigned to the owners who ultimately pay for ANI services.

- IWA-2210 (1990 Addenda) improves visual examination requirements and requires calibration records for light meters and test charts. Based on discussion with licensee personnel, it is estimated that the records associated with this change will result in an average of 1 p-hr per plant per year. The recordkeeping burden is estimated to be 104 p-hrs/yr (i.e., 1 p-hr/plant-yr x 104 plants).

- IWA-2322 (1991 Addenda) requires that, before the near-distance test chart is used for the first time, an optical comparator or other suitable instrument be used to verify the height of a representative lower case character. It is estimated that the records associated with this change will result in an average of 2 p-hrs at each plant. The annualized recordkeeping burden is estimated to be 208 p-hrs (i.e., 2 p-hrs/plant x 104 plants). (one-time recordkeeping).

- IWA-4130 (1989 Addenda) requires more detail to be documented in repair plans. It is estimated that the records associated with this change will result in an average of 1 p-hr for each repair operation. Based on discussions with licensee personnel, an average of 100 repair plans per plant per year is assumed. Therefore, the recordkeeping burden is estimated to be 10,400 p-hrs/yr (i.e., 100 p-hrs/plant-yr x 104 plants). (one-time recordkeeping).

- IWA-4340 (1991 Addenda) eliminates a surface examination for certain repair removal cavities. Records will decrease approximately 16 p-hrs per plant per 10-year ISI interval because of the elimination of a need to submit a relief request. The decrease in recordkeeping burden is estimated to be 166 p-hrs/yr (i.e., 16 p-hrs x 104 plants/10 yr interval).

- Table IWB-2500-1 (1994 Addenda) requires an estimated 2 p-hrs for each plant per 10-year ISI interval for records associated with additional pump and valve internal surface visual examinations. The recordkeeping burden is estimated to be 21 p-hrs/yr (i.e., 2 p-hrs x 104 plants/10 yr interval).

- IWB-4300 (1989 Addenda) requires an estimated 4 p-hrs for records for each pressurized water reactor (PWR) plant in conjunction with each series of steam generator sleeving operations during any refueling outage. The additional records include the Sleeving Procedure Specification, procedure qualification, performance qualification for personnel, location records, and examination records. If sleeving operations are performed an average of three times each ten-year interval for each PWR plant, the recordkeeping burden is estimated to be 83 p-hrs/yr (i.e., 69 PWR plants/3 times in 10 years x 4 hrs each).

- IWB-1220, IWC-1220, and IWD-1220 (1991 Addenda) each give an exemption for inaccessible integral attachments. Recordkeeping burden will be reduced about 16 p-hrs per plant per 10-year ISI interval since it will no longer be required to document these inaccessible integral attachments in requests for relief. The decrease in recordkeeping burden is estimated to be 166 p-hrs/yr (i.e., 16 p-hrs x 104 plants/10 yr interval).

- IWC-5222(e) (1991 Addenda) exempts open-ended lines from hydrostatic tests. Records will decrease about 16 p-hrs per plant per 10-year ISI interval because of the elimination of the need for a relief request. The decrease in recordkeeping burden is estimated to be 166 p-hrs/yr (i.e., 16 p-hrs x 104 plants/10 yr interval).

- IWD-2420 (1991 Addenda) adds successive examination requirements for Class 3 components. Records will increase about 8 p-hrs per plant per year. The recordkeeping burden is estimated to be 832 p-hrs/yr (i.e., 8 p-hrs/plant-yr x 104 plants).

- IWA-5221, Table IWB-2500-1, IWB-5200, Table IWC-2500-1, IWC-5200, and IWD-5240 (1993 Addenda) have all been revised to stipulate a "system leakage test" in lieu of a system hydrostatic test during each 10-year interval. Records will decrease about 16 person hours per boiling-water reactor (BWR) plant per 10-year interval through the elimination of the need for a relief request. (Note, the cost

decrease applies only to BWR plants which encounter problems with obtaining the Code-required pressure for hydrostatic testing of Class 2 portions of the main steam system.) The decrease in recordkeeping burden is estimated to be 56 p-hrs/yr (i.e., 16 p-hrs/10 yrs x 35 BWR plants).

- IWF-1230 (1990 Addenda) exempts examination of inaccessible supports. Eliminating the need for a relief request is estimated to save 16 person-hours per plant per 10-year interval. The decrease in recordkeeping burden is estimated to be 166 p-hrs/yr (i.e., 16 p-hrs/10 yrs x 104 plants).

- IWF-2430, IWF-2510, and Table IWF-2500-1 (1990 Addenda) - The exemption for supports of multiple components allowed under previous versions of IWF-2510(b) has been deleted. However, this change does not increase the number of supports required to be examined. In conjunction with the deletion of the IWF-2510 exemption, Table IWF-2500-1 adopts for the first time representative sampling (i.e., grouping) which reduces the number of supports required to be examined by over 100. Even though the adoption of representative sampling is considered an improvement over present procedures in that there is more assurance that defective supports will be detected, the ASME added the provisions of IWF-2430(c) and (d) which would require that if the examinations performed under IWF-2430(a) and (b) result in the detection of a large number of defective supports, additional examinations may be required. The reduction in the number of examinations attained through sampling is estimated to save 12 p-hrs in recordkeeping per plant per year. Records associated with possible additional examinations could add 8 p-hrs per plant per year which gives a net decrease of 4 p-hrs in recordkeeping per plant per year. Thus, the recordkeeping burden is estimated to decrease by 416 p-hrs/yr (i.e., 4 p-hrs/plant-yr x 104 plants).

- Appendix VIII, Article VIII-5000 (1996 Addenda) requires that qualification records be kept. The records will be generated when the qualification activities are performed. A conservative estimate is that ten percent of the total initial Appendix VIII qualification costs per plant will apply to records. The costs are equivalent to an average per plant total of 260 person-hours (p-hrs) for Appendix VIII records. The recordkeeping burden is estimated to be a one-time total of 27,040 p-hrs or an annualized 9,013 hours (i.e., 260 p-hrs/plant x 104 plants/3). (one-time recordkeeping)

OM Code

- Record the results of the preservice and inservice pump tests in accordance with OM Code Subsection ISTB, which provides rules for the preservice and inservice testing of pumps to assess the operational readiness of certain centrifugal and positive displacement pumps. The inservice tests, like the inservice examinations, are established for a 10-year interval, but the testing is performed on a quarterly basis. A record of each test would include the pump identification, date of test, reason for test, values of measured parameters, identification of instruments used, comparisons with allowable ranges of test values, and requirements for corrective

action. It is estimated that it would take 80 p-hrs to document the testing of the quarterly pump tests for each plant, which would result in a yearly burden for each plant of 320 p-hrs. This results in a total burden of 33,280 p-hrs for 104 plants.

- Record the results of the preservice and inservice valve tests in accordance with OM Code Subsection ISTC, which provides rules for the preservice and inservice testing of valves to assess the operational readiness of certain valves and pressure relief devices. The inservice tests, like the inservice examinations, are established for a ten-year interval, but the testing is performed on a frequency, depending on the valve, from quarterly to every two years. The types of records to be retained for valve testing would be similar to those identified above for pump testing. Because of the greater number of valves tested, it is estimated that it would take 200 p-hrs to document the periodic valve tests for each plant, which would result in a yearly burden for each plant of 800 p-hrs, or 83,200 p-hrs for 104 plants.

- Table ISTB 4.7.1-1 (1994 Addenda) requires more accurate pressure instruments for the comprehensive and preservice pump tests. Additional records would be required for the procurement and periodic calibration of these instruments. The burden is estimated at one p-hr per plant per instrument per year. Assuming three new instruments per plant, it is estimated that the increased burden would be 312 p-hrs/yr (i.e., 3 instruments x 1 p-hrs/yr x 104 plants).

- ISTB 5.2.2(b) and Table ISTB 4.1-1 (1994 Addenda) have eliminated the requirement for quarterly measurement of vibration and either flowrate or pressure for standby pumps. This would result in fewer test records and a decrease in burden estimated at 2,080 p-hrs/yr (i.e., 10 standby pumps x ½ p-hr/test x 4 tests/yr x 104 plants).

- Appendix I, 1.3.7(a) (1994 Addenda) changes the test frequency for containment vacuum breakers from 6 months to 2 years or during a refueling outage, whichever is sooner. Assuming 2 vacuum breakers per PWR, the estimated reduction in recordkeeping requirements is 52 p-hrs/yr (i.e., 1.5 less tests/yr x ½ p-hr/test x 69 PWR plants).

- Appendix I, 4.1.2(a) and 8.1.2(a) (1994 Addenda) allow air or nitrogen to be substituted at the same temperature without the additional alternate test media requirements. This will result in fewer records. Assuming two correlation evaluations per plant, the estimated decrease in recordkeeping requirements is 832 p-hrs/yr (i.e., 2 x 4 p-hrs/evaluation x 104 plants).

50.55a

- The recordkeeping burden for Sections 50.55a(b)(2)(viii)(B), (C), (D), and (E), which are modifications to Subsection IWL, and Section 50.55a(b)(2)(ix)(A) which is a modification to Subsection IWE, is estimated to average 12 p-hrs/yr per plant. Assuming that 10 plants per year would be updating their containment ISI plans, this would result in an industry burden of 120 p-hrs/yr.

- Section 50.55a(b)(2)(xiii) permits licensees to voluntarily adopt the provisions of Code Case N-513 for temporary acceptance of a flaw in certain Class 3 piping. Item 2.0(d) of the Code Case requires a flaw evaluation to be performed. In addition, Item 2.0(e) of the Code Case allows the licensee to perform a flaw growth analysis to establish the allowable time for temporary operation. Periodic examinations of no more than 90-day intervals shall be conducted to verify the analysis. It is estimated that each licensee will apply the Code Case 20 times each year. The increase in burden is estimated to be 2080 p-hrs/yr (i.e., 20 occurrences x 1 p-hr/flaw evaluation-flaw growth analysis x 104 plants).

- Section 50.55a(b)(2)(xiii) also permits licensees to voluntarily adopt the provisions of Code Case N-523-1 for temporary use of mechanical clamping devices for Class 2 and Class 3 piping. Section 9.0 of the Code Case requires the Owner to prepare a plan for monitoring defect growth, and perform periodic examinations of no more than 90-day intervals to verify the analysis. It is estimated that each licensee will apply the Code Case 20 times each year. The increase in burden is estimated to be 2080 p-hrs/yr (i.e., 20 occurrences x 1 p-hr/flaw evaluation-flaw growth analysis x 104 plants).

- Section 50.55a(b)(3)(iii)(A) requires that the adequacy of the initial test interval for certain electric operated valve assemblies be evaluated between 5 and 6 years after implementation of Code Case OMN-1. The Code Case is a voluntary alternative, and this would be a one-time burden occurring 5 to 6 years after the rule is issued. Because this one-time burden will not start to occur until approximately November 22, 2004, this one-time requirement is being included for information only. The one-time burden will be included in the next clearance renewal.

- Section 50.55a(b)(3)(iv)(B) requires trending and evaluation of test data to support changes in the check valve test frequency. This one-time evaluation is to be performed at a maximum of 3 years after implementation of Appendix II. Appendix II provides alternative requirements that licensees may implement as an option to OM Code requirements. On average, there are 260 safety-related check valves per plant. The time required for trending and evaluation of test data is estimated at 1 p-hr/valve. Assuming that 12 plants implement the optional appendix, the burden is estimated to be an annualized 1,040 p-hrs/yr (260 check valves x 1 p-hr/evaluation x 12 plants/3). (one-time recordkeeping)
- Section 50.55a(g)(6)(ii)(A) required all licensees to augment their reactor vessel examination by expediting the essentially 100% examination of reactor vessel shell welds that is specified in the Section XI 1989 Edition. Because of certain deferral and acceptance provisions provided in § 50.55a for this examination, many plants did not have to perform any additional examinations while others, estimated at about 50%, had to expand the scope (essentially 100% of reactor vessel shell welds instead of just two beltline welds) of the reactor vessel examination. This resulted in some additional recordkeeping requirements. As noted above (Section XI Recordkeeping), the recordkeeping requirement associated with the full reactor vessel examination requirement is estimated to be 200 p-hrs/plant per examination. As an expansion to the ongoing examination in the present interval, the additional recordkeeping is estimated to be 160 p-hrs/plant per examination.

Assuming that half of the plants have implemented this requirement, the remaining burden over the next 5 years applies to about 26 plants (i.e., 25% of the operating plants), or about 5 plants/year. This would result in a recordkeeping burden of 800 p-hrs/year for all plants (160 p-hrs/plant/examination x 5 exams/yr).

Reporting Requirements

Section III

The following reporting requirement is specified in Section III:

- A copy of the Design Specifications shall be made available to the Inspector at the manufacturing site before fabrication begins, and a copy filed with the NRC before components are placed in service (NCA-5242). No significant time is associated with this reporting requirement since it only represents a transfer of documents that have been routinely and previously prepared. It is conservatively estimated that 40 p-hrs are required to prepare the documentation to transfer the Design Specifications to the appropriate authorities.

Section XI

The following reporting requirement is specified in Section XI:

- Prepare and submit Summary Report to NRC within 90 days following the refueling outage in which the ISI program is implemented (IWA-6230/6240). The Summary Report is prepared to document preservice and inservice examinations for Class 1 and Class 2 pressure retaining components and their supports. This includes documentation on ASME Form NIS-1 of examinations and tests performed, and documentation on ASME Form NIS-2 of repairs and replacements performed since the preceding summary report. On the average, there are two ISI programs per inspection period for each plant (there are three inspection periods per 10-year inspection interval).

Whenever a plant shuts down for refueling, an ISI is performed. Assuming an average refueling schedule of 18 months results in about 69 plants being inspected per year. Each inspection results in a Summary Report. It is estimated that 160 p-hrs/plant are required to prepare the summary report. This results in an industry burden of 11,040 p-hrs/year (69 plants x 160 p-hrs/plant) for all plants.

The following additional reporting requirements result from implementation of specific Section XI technical requirements:

- The reporting burden for Sections 50.55a(b)(2)(viii)(B), (C), (D), and (E), which are modifications to Subsection IWL, Section 50.55a(b)(2)(ix)(A) which is a modification to Subsection IWE, is estimated to average 12 p-hrs/yr per plant. Assuming that 10 plants per year would be responding to the reporting requirements related to the containment ISI program, this would result in an industry burden of 120 p-hrs/yr.

OM Code

- ISTA 3.2.1 (1990 Edition) does not include the existing Section XI requirement for preparing and submitting a summary report for Class 1 and Class 2 pump and valve tests to the NRC. The decrease in burden is estimated to be 4,160 p-hrs/yr (i.e., 40 p-hrs/plant/year x 104 plants).

- ISTB 3.2 and 4.3 (1994 Addenda) require bypass/test loops to accommodate within ±20% of design flow when used for the comprehensive or Group A tests. For the purpose of this analysis, it is assumed that all PWRs would have to modify the test loops in the containment spray system or prepare and submit a relief request to the NRC for approval. The estimated burden to prepare a relief request is 16 p-hr per PWR per ten-year inspection interval. This gives an increased burden of 110 p-hrs/yr (i.e., 16 p-hrs/10 yrs x 69 plants).

50.55a

- Section 50.55a(a)(3) allows applicants to use alternatives to the requirements of 10 CFR 50.55a paragraphs (c), (d), (e), (f), (g), and (h) when authorized by the NRC. It is estimated that all (104) of the plants will choose to use alternatives to the requirements of the 1995 Edition/1996 Addenda to the ASME *Boiler and Pressure Vessel Code* or the 1995 Edition/1996 Addenda to the ASME *Code for the Operation and Maintenance of Nuclear Power Plants.* The estimated burden to prepare and submit an alternative to the NRC for authorization is 20 person-hours per alternative. Assuming each plant submits an average of 6 alternatives per year (4 for ASME Section XI and 2 for the OM Code), the estimated increased burden is 12,480 p-hrs/year (i.e., 6 alternatives/year/plant × 20 p-hrs/alternative × 104 plants).

- Section 50.55a(b)(3)(v) requires that a licensee voluntarily choosing to use Subsection ISTD for the examination of snubbers may do so after processing a one-time plant technical specification change. It is estimated that one-half of the plants will choose to implement Subsection ISTD. The estimated one-time burden to prepare a technical specification change is 1,040 p-hrs/yr or an annualized 347 hours during the clearance period, i.e., 20 p-hrs/plant x 17 plants (52/3). (one-time reporting)

- Sections 50.55a(f)(5) and 50.55a(g)(5) allow applicants to request relief from Code requirements determined to be impractical. It is estimated that all (104) of the plants will need to request relief from some of the requirements of the 1995 Edition/1996 Addenda to the ASME B&PV Code or the 1995 Edition/1996 Addenda to the ASME OM Code. The estimated burden to prepare and submit a request for relief from Code requirements is 20 person-hours per relief request. Assuming each plant submits an average of 6 relief requests per year (4 for ASME Section XI and 2 for the OM Code), the estimated increased burden is 12,480 p-hrs/year (i.e., 6 relief requests/year/plant × 20 p-hrs/relief request × 104 plants).

A. JUSTIFICATION

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

The ASME B&PV and OM Code provides listings of information required and specific forms to assist in documenting required information. In general, Section III records are needed to provide documentation that construction procedures have been properly implemented. ASME B&PV Code, Section XI, and ASME OM Code records are needed to document the plans for and results of ISI and IST programs. The information is generally not collected, but is retained by the licensee to be made available to the NRC in the event of an NRC inspection or audit. ASME B&PV and OM Code requirements are incorporated in 10 CFR 50 to avoid the need for writing equivalent NRC requirements.

2. Agency Use of Information

The records are generally historical in nature and provide data on which future activities can be based. The practical utility of the information collection for NRC is that appropriate records are available for auditing by NRC personnel to determine if ASME B&PV and OM Code provisions for construction, inservice inspection, and inservice testing are being properly implemented in accordance with 10 CFR 50.55a of the NRC regulations, or whether specific enforcement actions are necessary.

3. Reduction of Burden Through Information Technology

No responses are submitted electronically. The information being collected represents the documentation for the various plant-specific construction, inservice inspection, and inservice testing programs. The NRC has no objection to the use of new information technologies and generally encourages their use.

4. Effort to Identify Duplication and Use Similar Information

ASME B&PV and OM Code requirements are incorporated by reference into the NRC regulations to avoid the need for writing equivalent NRC requirements. The provisions of this regulation do not duplicate the information collection requirements contained in any other regulatory requirement.

5. Effort to Reduce Small Business Burden

   The provisions of 10 CFR 50.55a affect only the construction and operation of nuclear power plants and, therefore, do not affect small businesses.

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

   The information generally is not collected but is retained by the licensee to be made available to the NRC in the event of an NRC audit.

7. Circumstances Which Justify Variation from OMB Guidelines

   ASME B&PV Code, Section XI, and ASME OM Code requirements for ISI and IST programs, and 10 CFR 50.55a specify that records and reports must be maintained for the service lifetime of the component or system. Such lifetime retention of the records is necessary to ensure adequate historical information of the design, examination, and testing of components and systems to provide a basis for evaluating degradation of these components and systems at any time during their service lifetime.

8. Consultations Outside the NRC

   In connection with rulemakings to incorporate by reference later editions and addenda of Section III, Division 1, and Section XI, Division 1, of the ASME B&PV Code and the OM Code, the NRC staff consults with personnel from manufacturers, utilities, DOE laboratories, and other users of the Code as the need for specific information arises.

   A proposed rule was published in the *Federal Register* on December 3, 1997 (62 FR 63892), for comment to incorporate by reference the 1995 Edition with the 1996 Addenda of the ASME B&PV Code and the ASME OM Code, with specific limitations and modifications. Five-hundred and sixty four comments were received from 65 separate sources on the proposed rule. Some limitations and modifications were revised or deleted as a result of public comments. The final rule was published on September 22, 1999, and became effective on November 22, 1999. The final rule provisions have been incorporated into this clearance renewal.

   Notice of opportunity for public comment on this information collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

NRC provides no pledge of confidentiality for this collection of information. However, a confidential or proprietary submittal would be handled in accordance with 10 CFR 2.790.

11. Justification for Sensitive Questions

No sensitive questions are involved.

12. Estimated Industry Burden and Burden Hour Cost

a. Number and Type of Respondents

In general, the information collection requirements incurred by 10 CFR 50.55a through incorporation by reference of the ASME B&PV and OM Code could apply to the 104 nuclear power plants presently in operation.

b. Estimated Hours Required to Respond to the Collection

Tables 1 and 2, below, tabulate the estimated hours necessary to respond to the Section III, Section XI, OM Code, and 50.55a information collection requirements discussed above. The total continuing industry information collection burden (recordkeeping and reporting) is 257,002 p-hrs per year plus an additional annualized one-time burden (recordkeeping and reporting) of 10,608 p-hrs, for a total of 267,610 hours.

c. Estimated Cost Required to Respond to the Collection

Based upon an annual burden of 257,002 p-hrs and a rate of $141/hr, it estimated that the cost to the industry for responding to the information collection is a total of $36,237,282/year (257,002 p-hrs x $141/hour) with an additional one-time annualized cost of $1,495,728 (10,608 X$141/hour).

13. Estimate of Other Additional Costs

None.

Table 1

Recordkeeping Burden

Recordkeeping Requirement	Plants per Year	Annual Burden (hrs/plant)	Total Annual Burden (hours)	Retention Period
III/NCA-3230: Owner's Certificate; AIA Agreement	1	80	0	Life
III/NCA-3270: Owner's Data Report	1	400	0	Life
III/NCA-3260: Design Report	1	2,000	0	Life
III/NB/NC/ND-3220: Overpressure Protection Report	1	2,000	0	Life
XI/IWA-6220: Records of Exams: NIS-1 Forms	104	50	5,200	Life
XI/IWA-7520: Records of Repairs: NIS-2 Forms	104	100	10,400	Life
XI/IWA-6210: ISI and IST Plans and Schedules	10	2,000	20,800	Life
XI/IWB/IWC/IWD-2000: Records of Component Tests	104	400	41,600	Life
XI/Subsections IWE & IWL	10	780	7,800	Life
XI/IWB-2500: Reactor Vessel Exam	10	200	2,080	Life
XI/Appendix VII: Qualification of NDE personnel	104	65	6,760	Life
XI/Table IWA-1600-1: ASME N626 Specification	104	10	1,040	Life
XI/IWA-2210: Visual Examinations	104	1	104	Life
XI/IWA-2322: Near-distance Test Chart*	104	2	208*	Life
XI/IWA-4130: Repair Plans	104	100	10,400	Life
XI/IWA-4340: Surface Examinations for Repair	10	-16	-166	Life
XI/Table IWB-2500-1: Pump and Valve Surface Exams.	10	2	21	Life
XI/IWB-4300: PWR Steam Generator Sleeving	2	4	83	Life
XI/IWB/C/D-1220: Inaccessible Integral Attachments	10	-16	-166	Life
XI/IWC-5222(e): Open-ended line hydrostatic tests	10	-16	-166	Life
XI/IWD-2420: Class 3 examinations	104	8	832	Life
XI/IWA-5221: System Leakage Test	4	-16	-56	Life
XI/IWF-1230: Inaccessible supports	10	-16	-166	Life

XI/IWF-2430: Supports of multiple components	104	-4	-416	Life
XI/App. VIII: Qualification records*	104	260	9,013*	Life
OM/Subsection ISTB: Records of Pump Tests	104	320	33,280	Life
OM/Code Subsection ISTC: Records of Valve Tests	104	800	83,200	Life
OM/Table ISTB 4.7.1-1: Pump Pressure Instruments	104	3	312	Life
OM/ISTB 5.2.2(b): Standby Pump Vibrations	104	-20	-2,080	Life
OM/App. I: Containment Vacuum Breakers	69	-0.75	-52	Life
OM/App. I: Air or Nitrogen Alternate Test	104	-8	-832	Life
§ 50.55a(b)(2)(viii) and (ix): Subsections IWE/IWL	10	12	120	Life
§ 50.55a(b)(2)(xiii): Class 3 piping Code Case N-513	104	20	2,080	Life
§ 50.55a(b)(2)(xiii): Mechanical clamping N-523-1	104	20	2,080	Life
§ 50.55a(b)(3)(iii)(A): Code Case OMN-1	52	100	0*	Life
§ 50.55a(b)(3)(iv)(B): Appendix II Check Valve*	4	260	1,040*	Life
§ 50.55a(g)(6)(ii)(A): Augmented RV Exam	5	160	800	Life
TOTAL	2,105		235,153	

* One-time recordkeeping requirements.

Table 2

. Reporting Burden

Reporting Requirement	Plants per Year	Annual Burden (hrs/plant)	Total Annual Hours	Retention Period
III/NCA-5242: Providing Construction Documents to Inspector	1	40	40	Life
XI/IWA-6000: ISI Summary Reports	69	160	11,040	Life
XI/Subsections IWE & IWL	10	12	120	Life
OM/ISTA 3.2.1: Class 1&2 Tests	104	-40	-4,160	Life
OM/ISTB 3.2 and 4.3: Bypass Loops	7	16	110	Life
§ 50.55a(a)(3): Alternatives	104	120	12,480	Life
§ 50.55a(b)(3)(v): Snubbers*	17	20	347*	Life
§ 50.55a(f)(5) and (g)(5): Relief Requests	104	120	12,480	Life
TOTAL			32,457	

* One-time reporting burden.

14. Estimated Annualized Cost to the Federal Government

NRC inspection personnel who routinely audit plant construction, ISI, and IST programs would include, in the audit, verification that the identified records have been properly prepared and maintained. Since NRC inspectors would generally verify these records as part of the normal NRC audit process, the annual cost to the Federal government is considered to be very small.

In addition to records which are prepared but are maintained at the plant site, the licensee submits summary reports of the inservice inspection program directly to the NRC. These summary reports are overviewed by the staff for the purpose of identifying generic issues. A licensee submits a summary report about twice during each inspection period. On the average, this results in about 70 summary report submittals to the NRC each year. A summary report is reviewed on the average in about 2 hours, resulting in a burden to the NRC of 140 p-hrs/year for all plants. This results in an annual cost to the Federal government of $19,740 (140 hours x $141/hour).

The frequency for containment inservice inspection would be once every 3⅓ years (corresponding to the ASME Code Section XI inspection interval for components addressed by Section XI). NRC inspection personnel who audit plant quality assurance records would include in their audit verification that the above records are being properly prepared and maintained. The time associated with NRC inspectors verifying these records would be very small when the activity is performed as part of a normal quality assurance audit. Additional staff time would be required only for cases where containment degradation was reported by licensees. It is estimated that 80 hours of staff time would be spent reviewing licensee documents in such cases. The costs for such reviews would be $11,280 (80 hours x $141). The number of incidences reported on an annual basis where containment degradation has exceeded ASME Code limits is expected to be 4. Therefore, annual government burden is estimated to be 320 hours (4 reports x 80 hours), or $45,120.

Based on the above, the total estimated annual Federal burden is 460 hours at a cost of $64,860. This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 171.

15. Reasons for Change in Burden

The change in burden results from a reduction in operating plants (from 109 to 104) and the issuance of a rule to incorporate by reference the 1995 Edition with the 1996 Addenda of the ASME B&PV Code and ASME OM Code with certain limitations and modifications.

16. Publication for Statistical Use

The information will not be published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 18

DRAFT SUPPORTING STATEMENT
FOR
REPORTS AND RECORDS FOR CHANGES, TESTS AND EXPERIMENTS

10 CFR 50.59(a) and (b)

DESCRIPTION OF THE INFORMATION COLLECTION

Section 10 CFR 50.59(a) allows a holder of a license authorizing operation of a production or utilization facility to (i) make changes in the facility as described in the Safety Analysis Report, (ii) make changes in procedures as described in the Safety Analysis Report, and (iii) conduct tests or experiments not described in the Safety Analysis Report, without prior Commission approval, unless the proposed change, test or experiment involves a change to the technical specifications incorporated in the license or an unreviewed safety question, in which case prior Commission approval is required prior to making the change (50.59(c)).

Section 50.59(b) requires the facility licensee (104 operating power reactor and 37 operating nonpower (research/test) reactor licensees and 19 nuclear power reactor licensees and 15 nonpower reactor licensees covered by 50.59(d) and (e)) to maintain records of changes in the facility and of changes in procedures and records of tests and experiments and to submit a report containing a brief description of any changes, tests, and experiments, including a summary of the safety evaluation of each. The report may be submitted annually or along with the Final Safety Analysis Report (FSAR) updates as required by 10 CFR 50.71(e), or at such shorter intervals as may be specified in the license. This report generally consists of a few pages. The records of changes in the facility shall be maintained until the date of termination of the license, and records of changes in procedures and records of tests and experiments shall be maintained for a period of 5 years.

Section 50.59(c) is covered in the Part 1 Supporting Statement.

Section 50.59(d) states that all provisions of 50.59 apply to each nuclear power reactor licensee that has submitted the certification of permanent cessation of operations required under 50 CFR 50.82(a)(1).

Section 50.59(e) states that the provisions of 50.59(a) through (c) apply to each nonpower reactor licensee whose license no longer authorizes operation of the reactor.

A. JUSTIFICATION

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

The records and reports required by 50.59(b) assist the NRC staff in evaluating the potential effects of changes made pursuant to 50.59(a) and in ensuring that the changes do not involve an unreviewed safety question, or a change in the technical specifications. The ultimate value is received in the form of ensuring the health and safety of the public.

2. Agency Use of Information

The records are used by licensees to interrelate subsequent changes and to prepare reports concerning changes, tests or experiments as required by this section of the regulations.These records are also frequently used by NRC inspectors. The records provide background information needed by the NRC inspector during his or her visit to a licensed facility. The inspector uses these records to confirm the appropriateness of changes, tests or experiments, or during evaluation of abnormal occurrences. Also, the inspector uses these records to ensure that changes and modifications to the plant do not compromise the licensing basis of the plant.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The information is not required by any other Federal regulation. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found. This information can only be obtained from licensees of power and nonpower (research/test) reactors.

5. Effort to Reduce Small Business Burden

The burden on small businesses affects 52 licensees of nonpower reactors. This burden only occurs when licensees choose to make changes, tests, or experiments and cannot be further reduced without endangering the health and safety of the public.

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

The NRC would not be able to ensure the health and safety of the public with respect to changes made to the facility without prior NRC approval.

7. Circumstances which Justify Variation from OMB Guidelines

The information reported pursuant to 10 CFR 50.59 is submitted annually or along with the FSAR updates, or at shorter intervals as may be specified in the license and, therefore, does not vary from OMB guidelines. The record retention periods specified in 50.59(b) (5 years, and until termination of the license) are required because these records provide the NRC with vital information about reactor facility changes, tests, and experiments made without prior Commission approval. Without these records, NRC's ability to protect the health and safety of the public would be reduced.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

No confidential information is generally received. However, proprietary or confidential information is handled in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

This information collection does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Estimation of Recordkeeping Requirements

Based on the staff's experience and in light of the extensive records which have to be maintained on site to meet the requirements specified in 10 CFR 50.59(b), the staff estimates that licensees for 175 facility licensees (104 operating power reactors; 37 operating nonpower reactors; 19 permanently shutdown power reactors; and 15 permanently shutdown nonpower reactors) evaluate an average of approximately 100 changes a year. It is also estimated that approximately 16 hours of burden each is required for records associated with the analysis of 100 changes annually. Thus, recordkeeping burden encompassed within 50.59(b) is estimated to be 280,000 hours (16 hours x 100 changes x 175 facility licensees). Accordingly, annual recordkeeping cost to industry will be ($141 x 280,000) $39,480,000.

Estimation of Respondent Reporting Burden

Since the report may be submitted annually or with the FSAR update (refueling outage basis or about every 18 months), we estimate that annually 141 facility licensees will submit a summary report of the changes that have been evaluated annually. It is expected that approximately 4 hours each are required to summarize and prepare reports for approximately 100 changes per year. Thus, the reporting burden for this provision of the regulation is expected to involve 56,400 hours annually (4 hrs x 100 changes x 141 facility licensees). The annual cost to industry is, therefore, expected to be $7,952,400 (56,400 x $141).

Total annual industry burden is thus 336,400 hours; total annual cost is $47,432,400 ($141 x 334,400).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

It is estimated that cost to the Federal government encompasses approximately 80 hours per facility licensee (104 operating and 19 permanently shutdown power reactors; 37 operating and 15 permanently shutdown nonpower reactors); 175 facility licensees x 80 = 14,000 staff hours. Therefore, the cost to the government is expected to be $1,974,000 ($141 x 14,000).

This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

Estimated overall burden has decreased due to fewer reactors being affected. However, the cost has increased to reflect increased hourly rates.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 19

DRAFT SUPPORTING STATEMENT
FOR
FRACTURE TOUGHNESS TESTS, SURVEILLANCE AND REPORTS

10 CFR 50.60 AND APPENDICES G AND H

DESCRIPTION OF THE INFORMATION COLLECTION

Section 50.60, "Acceptance criteria for fracture prevention measures for lightwater nuclear power reactors for normal operation" provisions are as follows: (a) except as provided in paragraph (b) of 50.60, all lightwater nuclear power reactors, other than reactor facilities for which 50.82(a)(1) certifications have been submitted, must meet the fracture toughness and material surveillance program requirements for the reactor coolant pressure boundary set forth in Appendices G and H; and (b) proposed alternatives to the described requirements in Appendices G and H may be used when an exemption is granted by the Commission. In addition, the licensee must demonstrate that (1) compliance with the specified requirements would result in hardships or unusual difficulties without a compensating increase in the level of quality and safety, and (2) the proposed alternatives would provide an adequate level of quality and safety.

Appendix G to 10 CFR Part 50 specifies minimum fracture toughness requirements for ferritic materials of pressure-retaining components of the reactor coolant pressure boundary of light water nuclear power reactors. The Section I Note requires the adequacy of the fracture toughness of other ferritic materials not covered in Section I to be demonstrated on an individual basis. Section III.A requires supplemental information for a reactor vessel constructed to an ASME Code earlier than the Summer 1972 Addenda of the 1971 Edition to demonstrate equivalence with the fracture toughness requirements of Appendix G. Section III.B requires the submission and approval prior to testing of test methods for supplemental fracture toughness described in Section IV.A.1.b. Section III.C requires that records of the fracture toughness test program be retained until termination of the license to comply with ASME Code requirements. Section IV.A.1 requires licensees to maintain upper-shelf energy throughout the life of the reactor vessel of no less than 50 ft-lb unless it is demonstrated that lower values of upper-shelf energy will provide margins of safety against fracture equivalent to those required by Appendix G of the ASME Code. The analysis for satisfying this section must be submitted for review and approval on an individual case basis at least 3 years prior to the date when the predicted Charpy upper-shelf energy will no longer satisfy the requirements of Section IV.A.1, or on a schedule approved by the NRC. Section IV.A.2 requires licensees to provide pressure-temperature limits for the reactor vessel. Both upper-shelf energy and pressure-temperature limits are dependent upon the predicted radiation damage to the reactor vessel.

Appendix H of 10 CFR Part 50 requires a material surveillance program for each reactor vessel to monitor changes in the fracture toughness of the reactor vessel beltline materials resulting from their exposure to neutron irradiation and the thermal environment. Under the program, fracture toughness test data are obtained from material specimens exposed in surveillance capsules, which are withdrawn periodically from the reactor vessel. Section III.B.1 requires test procedures and reporting requirements that meet the requirements of ASTM E 185-82 to the extent practical for the configuration of the specimens in the capsule. Section III.B.3 requires a proposed withdrawal schedule and technical justification to be submitted to and approved by the NRC. Section III.C.1 requires integrated surveillance programs for reactors with similar design and operating features to be submitted to NRC for approval. Criteria for approval include, among other items, an adequate dosimetry program, a contingency plan to assure that the surveillance program for each reactor will not be jeopardized by operation at reduced power level or by an extended outage of another reactor from which data are expected. Section III.C.3 requires that any reduction in the amount of testing must be authorized by NRC. Section IV requires: A.) a summary technical report, submitted to NRC, of test results obtained from each capsule withdrawal, within one year of the date of capsule withdrawal, unless an extension is granted by NRC; B.) that the report include the data specified in III.B.1 of Appendix H and the results of all fracture toughness tests conducted on the beltline materials in the irradiated and unirradiated conditions; and C.) if a change in the TS is required, either in the pressure-temperature limits or in the operating procedures required to meet the limits, the expected date for submittal of the revised TS must be provided with the report.

A. JUSTIFICATION

1. Need for the Collection of Information

The information in the report required by Appendix G will be used by the staff to perform a safety evaluation of the reactor vessel. This evaluation will be the basis for approval to continue operation for a specified time and approval of the additional procedures that will be required to continue operation beyond that time. The three-year lead time is needed to provide time to obtain supplemental fracture toughness data on archive material that has been subjected to accelerated irradiation, and to evaluate the fracture analyses that will be submitted which use that data.

Appendix G, Section III.A, contains the materials test requirements for the Charpy V-notch tests and drop weight tests. Section III.C specifies that records are to be kept on the test data, the qualification of test personnel, and the calibration of test equipment.

The records maintained by licensees for the life of the facility in response to the requirement are available for inspection by the staff to determine compliance with Appendix G. There is a continuing requirement that certain pieces of the data will be needed to support a licensee's fracture control plan or fracture analysis for some component in an operating plant.

The records that must be retained per Appendix G are of considerable value to the plant owner in the event of some sort of material deterioration problem or the discovery of a flaw that requires a fracture analysis. The frequency of occurrence of such situations for a given plant is difficult to estimate, but averages perhaps once every 10 years. The value to the plant owner lies in the ability to provide a sound basis for estimates of material toughness that are an essential part of the fracture analysis. In 1995 the staff issued Generic Letter 92-01, Supplement 1, which requested all licensees and permittees to provide: (a) a description of actions taken or planned to locate all data relevant to the determination of reactor pressure vessel (RPV) integrity, (b) an assessment of any change in best-estimate chemistry based on consideration of all relevant data, (c) a determination of the need to use the ratio procedure in Regulatory Guide 1.99, Revision 2, "Radiation Embrittlement of Reactor Vessel Materials," for surveillance data, and (d) the need for a revision to existing RPV integrity evaluations.

The impact of not obtaining the information from records would be that the fracture analyses would have to be based on conservative estimates derived from the published data base of typical material properties. The impact of an overly-conservative analysis could be the removal of some unimportant defect found in inspection with considerable economic loss due to the power outage and unnecessary exposure of maintenance personnel to radiation, or possibly, shutdown of the plant prior to the end of its license.

Surveillance program withdrawal schedules which are required by Section III of Appendix H, are periodically changed by licensees. The impact of not obtaining the information is that the program may not adequately monitor changes in the fracture toughness of reactor vessel beltline materials.

Surveillance reports required by Appendix H provide the basis for approval of the pressure-temperature operating limits for the reactor. The impact of not obtaining the reports required by Section IV of Appendix H would be that the pressure-temperature limits for the reactor would have to be checked against conservative estimates of radiation damage such as those given in Regulatory Guide 1.99, Revision 2. At the present time, there are too many uncertainties in the assessment of radiation damage to a reactor vessel to permit a licensee to forego monitoring radiation damage and reporting the surveillance test results to the NRC.

2. Agency Use of Information

This information is needed to ensure that the reactor vessel does not exceed radiation embrittlement limits and meets the requirements of General Design Criteria 31 and 32, as specified in Appendix A to 10 CFR Part 50.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The information is available only from nuclear power reactor licensees and does not duplicate other information collections made by the NRC or other government agencies. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found.

5. Effort to Reduce Small Business Burden

The subject regulations do not affect small business.

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

If this information were not collected or collected less frequently, the NRC would be unable to ensure that reactor vessels had not exceeded radiation embrittlement.

7. Circumstances Which Justify Variations from OMB Guidelines

The provisions of these regulations require that this information be maintained for the life of the plant in order to detect material deteriorations or flaws which might affect the health and safety of the public.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is protected in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

These regulations do not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Appendix G

Licensees submit the following information annually.

Section III.B

1 report (1 from 1 licensee) x 200 hours/report = 200 hours; 200 x $141 = $28,200.

Section IV.A.1

1 report (1 from 1 licensee) x 250 hours/report = 250 hours; 250 hours x $141 = $35,250.

Section IV.A.2

20 reports (1 from 20 licensees) x 80 hours/report = 1,600 hours, 1,600 hours x $141 = $225,600.

Over the next three years, licensees are expected to file information for these sections only.

The burden to maintain the records required by III.C is not significant (less than 80 hours industry wide) and is included in the overall summary table to the entire Part 50 submittal, "Summary of Supporting Statements."

Appendix H

Section III.B.1

Surveillance withdrawal schedules for operator reators are in place. Subsequent changes to the withdrawal schedules are submitted under Section III.B.3.

Section III.B.3

About five reports (1 from 5 licensees) are expected to be filed per year at an estimated burden of 40 hours per report = 200 hours; 200 hours x $141 = $28,200.

Section III.C.1

One report from one licensee is expected annually at an estimated burden of 80 hours = 80 hours; 80 hours x $141 = $11,280.

Section III.C.3

The burden for requesting exemptions from testing requirements is included in the overall burden for the 50.12 exemption requests in Section 1.

Section IV.A-C

20 reports (1 from 20 licensees) are expected to be submitted annually. 20 reports x 160 hours/report = 3,200 hours; 3,200 hours x $141 = $451,200.

Over the next three years, licensees are expected to file information for these sections of Appendix H only.

The total estimated annual burden for industry is, therefore, 5,530 hours (200+250+1,600+200+80+3,200 hours) at a cost of $779,730 (5,530 hours x $141).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

Appendix G

The NRC reviews annually the information described below on fracture toughness. Since Appendix G reports affect the plant's licensing requirements, all of the reports must be reviewed by the NRC.

Section III.B

1 report (1 from 1 licensee) x 160 hours/report = 160 hours; 160 x $141 = $22,560.

Section IV.A.1

1 report (1 from 1 licensee) x 200 hours/report = 200 hours; 200 x $141 = $28,200.

Section IV.A.2

20 reports (1 from 20 licensees) x 60 hours/report = 1,200 hours; 1,200 x $141 = $169,200.

Appendix H

Section III.B.3

5 reports (1 from 5 licensees) x 40 hours/report = 200 hours; 200 x $141 = $28,200.

Section III.C.1

1 report (1 from 1 licensee) x 40 hours/report = 40 hours; 40 x $141 = $5,640.

Section IV.A

Since Appendix H, Section IV.A, reports are surveillance reports, the staff does a cursory review of all reports, and only reviews reports in detail when they affect licensing requirements. Hence, of these 20 reports received by the staff, only 10 get a detailed review.

20 reports x 1 hour/report = 20 hours; 20 x $141 = $2,420

10 reports x 40 hours/report = 400 hours; 400 x $141 = $56,400.

Therefore, the total estimated Federal burden is 2,220 hours (160+200+1,200+200+40+20+400) and the cost is expected to be $313,020 (2,220 x $141).

This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The estimated overall burden for industry has decreased from 7,930 to 5,530 hours. Since licensees have removed many capsules already and P-T limits are submitted for a longer period of time, fewer Appendices G and H reports will be submitted.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 20

DRAFT SUPPORTING STATEMENT
FOR
FRACTURE TOUGHNESS REQUIREMENTS FOR PROTECTION AGAINST PRESSURIZED THERMAL SHOCK EVENTS

10 CFR 50.61

DESCRIPTION OF THE INFORMATION COLLECTION

Pressurized thermal shock (PTS) events are system transients in pressurized water reactors (PWRs) that can cause severe overcooling (thermal shock) concurrent with or followed by immediate repressurization to a high pressure. The thermal stresses caused by rapid cooling of the reactor vessel inside surface combine with the pressure stresses to increase the potential for fracture if an initiating flaw is present in low toughness material. Such material may exist in the reactor vessel beltline, adjacent to the core, where neutron radiation gradually embrittles the material during the plant lifetime. The toughness of reactor vessel materials is characterized by a "reference temperature for nil ductility transition" (RT_{NDT}). The value of RT_{NDT} at a given time in a vessel's life is used in fracture mechanics calculations to determine whether assumed pre-existing flaws would propagate as cracks when the vessel is stressed.

10 CFR 50.61 establishes a screening criterion, a limiting level of embrittlement beyond which operation cannot continue without further plant-specific evaluation. The screening criterion is given in terms of RT_{NDT}, calculated as a function of the copper and nickel contents of the material and the neutron fluence according to the procedure given in 50.61, and called RT_{PTS} to distinguish it from other procedures for calculating RT_{NDT}.

Effective January 1996, 50.61 was amended to change the procedure for calculating the amount of radiation embrittlement when surveillance data meet the credibility criteria of Regulatory Guide 1.99, Revision 2, "Radiation Embrittlement of Reactor Vessel Materials." The amended rule requires resubmittal of the RT_{PTS} analysis if there is a significant change in projected values of RT_{PTS}, or upon a request for a change in the expiration date for operation of the facility.

Section 50.61(b)(1) requires each PWR licensee, other than a licensee for a PWR for which 50.82(a)(1) certifications have been submitted, to have projected values of RT_{PTS}, accepted by the NRC, for each reactor vessel beltline material for the expiration date of the operating license (EOL) fluence of the material. The assessment must use the calculation procedures given in 50.61 and must specify the bases for the projected value, including the assumptions regarding core loading patterns, and must specify the copper and nickel contents and the fluence value used in the calculation for each beltline material. This assessment must be updated whenever there is a significant change in projected values of RT_{PTS}, or upon a request for a change in the expiration date for operation of the facility.

Section 50.61(b)(3) provides for submittal and anticipated approval by NRC of detailed plant-specific analyses, submitted to demonstrate acceptable risk with RT_{PTS} above the screening limit due to plant modifications, new information or new analysis techniques.

Section 50.61(b)(4) requires licensees for PWRs for which the analysis required by 50.61(b)(3) indicates that no reasonably practical flux reduction program will prevent RT_{PTS} from exceeding the PTS screening criterion to submit a safety analysis to determine what, if any, modifications to equipment, systems, and operation are necessary to prevent potential failure of the reactor vessel as a result of postulated PTS events if continued operation beyond the screening criterion is allowed. This analysis must be submitted at least three years before RT_{PTS} is projected to exceed the PTS screening criterion.

Section 50.61(b)(6) states that if NRC concludes that operation of the facility with PT_{PTS} in excess of the PTS screening criterion cannot be approved on the basis of the licensee's analyses submitted in accordance with 50.61(b)(3) and (4), the licensee shall request and receive approval by NRC prior to any operation beyond the criterion.

Section 50.61(c)(3) requires licensees to report to NRC any information believed to significantly improve the accuracy of the RT_{PTS} values. The burden is included in the estimates for RT_{PTS} assessment under Item 12 of this Supporting Statement.

In response to 50.61, the licensees of operating PWRs have submitted the fluence predictions and chemical composition data and these have now been accepted. A number of licensees have undertaken flux reduction programs for those plants having high values of RT_{PTS}. Some of these are still under review. The earliest date for submittal of requests to operate beyond the screening criterion [per 50.61(b)(4)], is expected to be beyond the year 2003. The identity of the licensees who make submittals may change, and the number of licensees affected by 50.61(b)(4) is 1 or 2 because most plants have instituted sufficient flux reduction to prevent them from reaching the screening criteria before end of life.

A. JUSTIFICATION

1. Need for the Collection of Information

Maintaining the structural integrity of the reactor pressure vessel of light-water-cooled reactors is a critical concern related to the safe operation of nuclear power plants. To assure the structural integrity of reactor vessels, NRC has developed regulations, including 10 CFR 50.61, and regulatory guides, including Regulatory Guide 1.99, Revision 2, to provide analysis and measurements methods and procedures to establish that the reactor vessel has adequate safety margin for continued operation. The fracture toughness of the vessel materials varies with time. As the plant operates, neutrons escaping from the reactor core impact the vessel beltline materials causing embrittlement of those materials. The information collections in 10 CFR 50.61, as well as those in 10 CFR 50.60 and Appendices G and H of Part 50, provide estimates of the extent of the embrittlement, and evaluations of the consequences of the embrittlement in terms of the structural integrity of the vessel.

2. Agency Use of the Information

The information and analyses required by 50.61 will be reported on the plant's docket pursuant to the provisions of 10 CFR 50.4 and reviewed by NRC to ensure the requirements of the regulation are met. There is a safety issue involved in the information collection requirement described above. By reviewing the submittals from the PWR licensees, the NRC can make certain that (a) all of them are aware of the potential threat to the integrity of their reactor vessel from pressurized thermal shock events, and (b) those that need to consider additional flux reduction in order to stay below the screening criterion will become aware of the need as early as possible, when flux reduction is most effective.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

There are no other NRC or Federal government requirements regarding analyses for flux reduction or plant PTS safety analyses. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found. However, materials information leading to calculation of an RT_{NDT} value for the reactor vessel is submitted in response to the requirements of Appendices G and H, 10 CFR Part 50 (See Supporting Statement included in this submittal as Section 19.) For new plants, it appears in the final safety analysis report. During the operating life, the information is updated by the individual plant submittals that support requests for changes in the pressure-temperature limits.

5. Effort to Reduce Small Business Burden

This information does not affect small business.

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

This regulation requires one-time information collections only. If this information were not collected, the NRC would be unable to establish that each reactor pressure vessel has an adequate safety margin for continued safe operation.

7. Circumstances Which Justify Variations from OMB Guidelines

There are no variations from OMB guidelines in this collection of information.

8. Consultations Outside the NRC

Notice of opportunity for public comment on the information collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is protected in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

No sensitive information is requested under these regulations.

12. Estimated Industry Burden and Burden Hour Cost

The licensees of all 72 operating PWR plants are subject to the regulation. It is estimated that 30 plants would be affected by the RT_{PTS} assessment; and approximately 6 plants would also be affected by the flux reduction analyses.

1) RT_{PTS} assessment - 120 staff hours per plant - (30 x 120 = 3,600 staff hours total over the 3-year period. Annualized for the 3-year period results in 10 plants x 120 staff hours for a total annual burden of 1,200 staff hours).

2) Flux reduction analyses - 600 staff hours per plant - (600 x 6 = 3,600 staff hours total over 3 years; or annualized for the 3-year clearance period results in 2 plants x 600 staff hours for a total burden of 1,200 staff hours.

3) The NRC does not anticipate that a licensee will need to meet the provisions of 50.61(b)(3) and (4) or will file a request under 50.61(b)(6) during this clearance period.

The total estimated annual industry burden = 2,400 hours (1,200+ 1,200) at a cost of $338,400 (2,400 hours x $141 per hour).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

Licensee submittals will be evaluated by the staff at the estimated cost given below.

1) RT_{PTS} assessment

The staff estimates that reevaluations of RT_{PTS} values will be submitted by 15 PWR licensees within the 3-year clearance period. (Of the 30 licensees affected by the RT_{PTS} assessment, as stated above, only 15 licensees will find significant changes that require NRC review.) On the average, 40 hours are estimated for the review of each submittal. Total review time is estimated at 600 staff hours at an estimated cost of $84,600 (15 x 40 hours x $141) over the 3-year clearance period. Thus, the estimated annualized burden is 200 hours at a cost of $28,200.

2) It is estimated that an analysis and schedule for implementation of a flux reduction program will be submitted by 6 licensees over 3 years. Further, it is estimated that 25 hours will be required to review each submittal. Total review time is estimated to be 150 staff hours at a cost of $21,150 (6 x 25 hours x $141) over 3 years, or annualized for the 3-year clearance period, a burden of 50 hours per year at a cost of $7,050.

Total annual Federal cost = $35,250 ($28,200 + $7,050).

15. Reasons for Changes in Burden or Cost

Most plants gather relevant data and provide analyses early in life. Therefore, as time goes on fewer hours are needed to prepare analyses.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 21

DRAFT SUPPORTING STATEMENT
FOR
ANTICIPATED TRANSIENT WITHOUT SCRAM

10 CFR 50.62

DESCRIPTION OF THE INFORMATION COLLECTION

Section 50.62 requires the installation of certain equipment in nuclear power plants to prevent and mitigate anticipated transient without scram (ATWS) events. The licensee for a nuclear power plant is required, by 10 CFR 50.62(c)(6), to submit a copy of equipment design and installation plans to the NRC to ensure that the equipment will perform its intended safety function.

In addition, 10 CFR 50.62(d) requires the licensee to submit a schedule to the NRC for implementing the requirements of 50.62. This provision allows the establishment of implementation schedules that are tailored to the safety priority needs and resources of the individual licensee.

All licensees for nuclear power plants have submitted design and installation plans to NRC as required by 10 CFR 50.62. Licensees have also submitted schedules for implementing these requirements. Thus, all information collection is now complete.

A. JUSTIFICATION

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

An ATWS is an expected operational transient (such as a loss of feedwater, loss of condenser, or loss of offsite power to the reactor) which is accompanied by a failure of the reactor trip system (RTS) to shut down the reactor. The RTS consists of those power sources, sensors, initiation circuits, logic matrices, bypasses, circuit breakers, interlocks, racks, panels and control boards, and actuation and actuated devices, that are required to initiate reactor shutdown, and includes the control rods and control rod mechanisms as well. That portion of the RTS exclusive of the control rods and control rod mechanisms is referred to as the scram system. ATWS is a cause of concern because under certain postulated conditions it could lead to severe core damage and release of radioactivity to the environment. The ATWS question involves safe shutdown of the reactor during a transient if there is a failure of the RTS. There have been precursors to an ATWS such as the failure of the automatic portion of the RTS at the Salem 1 nuclear generating station on February 25, 1983, although manual shutdown was accomplished after 30 seconds, and no core damage or release of radioactivity occurred. Section 50.62 requires improvements in the design and operation of nuclear power plants to reduce the likelihood of failure of the reactor protection system to shut down the reactor following anticipated transients and to mitigate the consequences of ATWS events. This will significantly reduce the risks of nuclear power plant operation.

2. Agency Use of Information

The NRC has reviewed the design and installation plans to ensure that the equipment will perform its intended safety function.

3. Reduction of Burden Through Information Technology

Not applicable. Task is complete.

4. Effort to Identify Duplication and Use Similar Information

Not applicable. Task is complete.

5. Effort to Reduce Small Business Burden

Not applicable. Task is complete.

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

This was a one-time requirement for each respondent, and it has been completed.

7. Circumstances which Justify Variation from OMB Guidelines

The information collection did not vary from OMB guidelines.

8. Consultations Outside the NRC

Not applicable. Task is complete.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is protected in accordance with 10 CFR 2.790 of the NRC regulations.

11. Justification for Sensitive Questions

No sensitive information was requested.

12. Estimated Industry Burden and Burden Hour Cost

None.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

None.

15. Reasons for Changes in Burden or Cost

All licensees for nuclear power plants have submitted design and installation plans to NRC as required by 10 CFR 50.62. Licensees have also submitted schedules for implementing the requirements of 10 CFR 50.62. NRC has completed its review of the proposed schedules and the design and installation plans and has completed inspections of the installed systems. Therefore, the information collection requirement for the ATWS issue is complete.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 22

DRAFT SUPPORTING STATEMENT
FOR
LOSS OF ALL ALTERNATING CURRENT POWER

10 CFR 50.63

DESCRIPTION OF THE INFORMATION COLLECTION

The provisions of 10 CFR 50.63 require each licensed light-water-cooled nuclear power plant to be able to withstand for a specified duration and recover from a site blackout.

Section 50.63(a)(2) states that the capability for coping with a site blackout of specified duration shall be determined by an appropriate coping analysis. Utilities are expected to have the baseline assumptions, analyses, and related information used in their coping evaluations available for NRC review.

Section 50.63(c)(1) requires licensees to submit the following information 270 days after the date of license issuance:

(i) A proposed station blackout duration for use in determining compliance with 10 CFR 50.63, including a justification for the selection based on the following factors: (1) the redundancy of the onsite emergency AC power sources; (2) the reliability of the onsite emergency AC power sources; (3) the expected frequency of loss of offsite power; and (4) the probable time needed to restore offsite power.

(ii) A description of the procedures that will be implemented for site blackout events for the duration determined in (i), above, and for recovery therefrom.

(iii) A list of modifications to equipment and associated procedures, if any, necessary to meet the requirements of 10 CFR 50.63 for the specified site blackout duration determined in (i), above, and a proposed schedule for implementing the stated modifications.

Section 50.63(c)(4) requires licensees for plants licensed to operate on or before June 21, 1988, to submit a schedule commitment for implementing any equipment and associated procedure modifications. This submittal was required within 30 days after receipt of NRC's regulatory assessment and was required to include an explanation of the schedule and a justification if the schedule did not provide for completion of the modifications within two years of the notification. This information collection has been completed for all affected licensees.

A. JUSTIFICATION

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

This issue concerns the reliability of the alternating current (AC) electrical power for essential and nonessential service in nuclear power plants. Normal AC electrical power is supplied primarily by the onsite/offsite (preferred) power supply; redundant onsite emergency AC power systems also are provided in the event that the preferred power source is lost. The loss of both the preferred and onsite emergency AC power systems results in a condition called station blackout.

The AC electrical power systems provide power for various safety systems including reactor core decay heat removal and containment heat removal. These systems are essential for preserving the integrity of the reactor core and the containment building. The reactor core decay heat also can be removed for a limited time period by safety systems that are independent of AC power. If a total loss of all AC electrical power persists for a sufficient time that the capability of the AC-independent system to remove decay heat is exceeded, core melt and containment failure could result.

This issue has been studied extensively by the Commission under Unresolved Safety Issue A-44, Station Blackout. As a consequence of these studies, the NRC amended its regulations by adding a Section 50.63 to the 10 CFR to require that light water reactor nuclear power plants be designed to withstand a total loss of AC electrical power for a specified time duration and maintain reactor core cooling during that period. This requirement is intended to provide further assurance that a station blackout will not adversely affect public health and safety.

2. Agency Use of Information

The NRC staff reviewed licensees' proposed station blackout duration and the proposed equipment and procedure modifications and their proposed implementation schedule to assure conformance with the regulation and to assure that a station blackout will not adversely affect public health and safety.

3. Reduction in Burden Through Information Technology

Not applicable. Task is complete.

4. Effort to Identify Duplication and Use Similar Information

Not applicable. Task is complete.

5. Effort to Reduce Small Business Burden

Not applicable. Task is complete.

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

   This was a one-time requirement for each respondent, and it has been completed.

7. Circumstances Which Justify Variation from OMB Guidelines

   This information collection did not vary from OMB guidelines.

8. Consultations Outside the NRC

   Not applicable. Task is complete.

9. Payment or Gift to Respondents

   Not applicable.

10. Confidentiality of Information

    Information submitted as confidential or proprietary is handled in accordance with 10 CFR 2.790 of the NRC's regulations.

11. Justification for Sensitive Questions

    No sensitive information was requested.

12. Estimated Industry Burden and Burden Hour Cost

    None. This information collection has been completed.

13. Estimate of Other Additional Costs

    None.

14. Estimated Annualized Cost to the Federal Government

    None. This information collection has been completed.

15. Reasons for Changes in Burden or Cost

    This information collection has been completed.

16. Publication for Statistical Use

    The information collected under 10 CFR 50.63 is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 23

DRAFT SUPPORTING STATEMENT
FOR
LIMITATIONS ON THE USE OF HIGHLY ENRICHED URANIUM (HEU) IN DOMESTIC NON-POWER REACTORS

10 CFR 50.64

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.64 limits the use of highly enriched uranium (HEU) fuel in research and test reactors (nuclear non-power reactors). This regulation requires that new non-power reactors use low enriched uranium (LEU) fuel unless the applicant demonstrates a "unique purpose" as defined in 10 CFR 50.2. Moreover, it requires that existing non-power reactors replace HEU fuel with acceptable LEU fuel when available.

Section 50.64(c)(1) provides existing licensees the option to request a unique purpose exemption from the requirements of converting to LEU fuel. This is a one-time request, and two licensees have current unique purpose exemption requests. No other unique purpose exemptions are expected. The NRC has not completed review of these requests.

Section 50.64(c)(2)(i) requires that licensees authorized to possess and use HEU fuel submit to the NRC written documentation containing a schedule of when a Safety Analysis Report will be submitted and when other events will take place in the conversion from HEU to LEU fuel. This documentation should be updated annually until the Safety Analysis Report is submitted. This documentation containing the schedule will be based upon the availability of replacement fuel acceptable to the NRC and consideration of other factors such as the availability of shipping casks, financial support, and reactor usage. A final schedule will then be determined by NRC. Six licensees are in this situation.

Section 50.64(c)(2)(ii) requires the licensee authorized to possess and use HEU fuel to submit a statement to the NRC that Federal Government funding for conversion to LEU is not available (with supporting documentation) in lieu of the requirement of section 50.64(c)(2)(i) above. If this statement of non-availability of Federal Government funding is submitted, the licensee will be required to submit a proposal for meeting the requirements of 50.64(b)(2) or (3) at 12-month intervals. Two licensees are in this situation.

Section 50.64(c)(2)(iii) requires that the proposal include supportive safety analyses so as to meet the schedule established for conversion.

A. JUSTIFICATION

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

A Commission policy statement published August 24, 1982 (47 FR 37007), explains NRC's interest in reducing the use of HEU in research reactors. This interest stems from NRC's licensing responsibility for both domestic use and for export of HEU and concern about risks of theft or diversion of this material.

The policy statement also describes a continuing program to develop and demonstrate the technology that will facilitate the use of reduced enrichment fuels. The reduced enrichment for research and test reactors (RERTR) program was initiated by the Department of Energy (DOE) and is managed by the Argonne National Laboratory. Its objective is to prove the ability of new LEU fuels to replace existing HEU fuel without significant changes to existing reactor cores or facilities, or significant decrease in performance characteristics of the reactors.

Information shows that a major consideration is the cost of conversion. NRC shares the licensees' expressed view that conversion costs should largely or entirely be financed by the Federal government. Historically, the DOE and its predecessor agencies have provided significant support to research and test reactor programs. The availability of Federal support will be considered in determining the availability of LEU fuel and final schedules for conversion.

10 CFR 50.64, "Limitations on the Use of Highly Enriched Uranium (HEU) in Domestic Non-power Reactors," is intended to reduce the risk of theft or diversion of HEU fuel used in non-power reactors. The reduction in domestic use of HEU fuel may encourage similar action by foreign research reactor operations, and thereby reduce the amount of HEU fuel in international use.

2. Agency Use of Information

A respondent is required to submit a request with supporting information pursuant to 10 CFR 50.64(c)(1) to the NRC. The NRC will use the information to make a determination that the nuclear non-power reactor has a unique purpose as defined in 10 CFR 50.2.

A respondent will develop and submit to the NRC pursuant to 10 CFR 50.64(c)(2) a proposed schedule for meeting the requirements of 10 CFR 50.64(b)(2) or (3). This schedule must be updated annually until the Safety Analysis Report is submitted. The proposed schedule must be based upon availability of replacement fuel acceptable to the Commission and consideration of other factors such as the availability of shipping casks, financial support, and reactor usage. NRC will use the proposed schedule plus the results of the successful accomplishment of the tasks set out in DOE's RERTR program and the development of commercially available replacement fuel to determine a final schedule.

The proposed schedule for meeting the requirements of 10 CFR 50.64(c)(2) will require a comparison between the licensee's existing fuel design and fuels developed or projected for development under the documented RERTR program. Coordination with NRC to formulate proposed schedules for regulatory review and with DOE to develop fuel procurement and supporting equipment schedules will be required.

NRC will review the supportive safety analyses required by the provisions of Section 50.64(c)(2)(iii). Subsequent to this review, the Director of the Office of Nuclear Reactor Regulation will issue an appropriate enforcement order directing both the conversion and, to the extent consistent with protection of public health and safety, any necessary changes to the license, facility, or procedures.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The Information Requirements Control Automated System (IRCAS) was searched for duplication, and none was found.

This information is only available from non-power reactor licensees.

5. Effort to Reduce Small Business Burden

This information collection affects colleges and universities. The schedules for conversion of fuel are necessary so that the NRC can ensure proper controls pertaining to risks of theft or diversion of HEU; thus, it is not possible to reduce burden.

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

Information to justify use of HEU or to schedule its discontinuance is necessary to protect the health and safety of the public.

7. Circumstances which Justify Variation from OMB Guidelines

This information collection does not vary from OMB guidelines.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Information identified as confidential or proprietary is handled in accordance with the provisions specified in 10 CFR 2.790 of NRC's regulations.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Burden estimates discussed in a and b below are based on industry experience.

a. Section 50.64(c)(1). Approximately 10 hours each are required each year for the two "unique purpose" applicants to respond to Commission requests for additional supporting documentation for a "unique purpose" determination. Burden hours would, therefore, be 20.

b. Section 50.64(c)(2). Approximately 10 hours each are required for 8 respondents to develop and submit the annual updated documentation to NRC. (All other licensees have completed the requirements of this section.) This burden will be approximately 80 hours (8 x 10 hours). In addition, it is anticipated that approximately 1,000 hours will be expended by 6 of these licensees over the three-year clearance period to prepare appropriate safety analyses as specified in Section 50.64(c)(2)(iii). Therefore, approximately 2,000 hours (1,000 hours x 6 licensees divided by 3) would be expended annually for this effort.

Thus, the total annual burden to industry is expected to be 2,100 hours (20 + 80 + 2,000 hours), at an annual cost of $296,100 (2,100 hours x $141).

13. Estimate of Other Additional Cost

None.

14. Estimated Annualized Cost to the Federal Government

Section 50.64(c)(1). NRC staff time for making a determination for each of the two "unique purpose" reactor requests will require approximately 10 hours for a total staff burden for two requests of 20 hours annually.

Section 50.64(c)(2). NRC staff time for consideration of a schedule proposed by a non-power reactor licensee and determination of a final schedule will require approximately 47 hours for each of approximately 6 licensees annually for a total of 282 hours.

In addition, it is anticipated that approximately 500 hours will be expended by the NRC for each of these 6 licensees to review their safety analyses over the three-year clearance period. Therefore, approximately 1,000 hours (500 x 6 licensees divided by 3) would be expended annually for this effort.

The two licensees subject to 50.64(c)(2)(ii) will require 10 hours of staff burden each for 20 hours annually.

The total annual Federal burden is, therefore, 1,322 hours (20 + 282 + 1,000 + 20 hours), at an annual cost of $186,402 (1,322 x $141). This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The industry burden has increased by 20 hours because eight versus six licensees are expected to submit updated documentation to NRC required by section 50.64(c)(2). The government burden has significantly increased from 300 to 1,322 hours because not all staff effort was captured in the previous submittal.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 24

DRAFT SUPPORTING STATEMENT FOR REQUIREMENT FOR MONITORING THE EFFECTIVENESS OF MAINTENANCE AT NUCLEAR POWER PLANTS

10 CFR 50.65

Description of the Information Collection

Requirements pertaining to maintenance at nuclear power plants are provided in 10 CFR 50.65, effective July 10, 1996. 10 CFR 50.65 requires monitoring of the overall continuing effectiveness of licensee maintenance programs to ensure that: (1) safety-related and certain non-safety related, structures, systems, and components (SSCs) are capable of performing their intended functions; and (2) for non-safety related equipment, failures will not occur which prevent the fulfillment of safety-related functions, and failures resulting in reactor scrams or trips and unnecessary actuations of safety-related systems are minimized. For a nuclear power plant for which the licensee has submitted the certifications specified in 10 CFR 50.82(a)(1), 10 CFR 50.65 applies to the extent that the licensee shall monitor the performance or condition of all structures, systems, or components associated with the storage, control, and maintenance of spent fuel in a safe condition, in a manner sufficient to provide reasonable assurance that such structures, systems, and components are capable of fulfilling their intended functions.

The performance-oriented maintenance regulation requires that the licensees monitor the performance or condition of SSCs within the scope of the regulation against licensee-established goals, in a manner sufficient to provide reasonable assurance that such SSCs are capable of fulfilling their intended functions. Monitoring is not required where it has been demonstrated that the performance or condition of an SSC is being effectively controlled by appropriate preventive maintenance, such that the SSC remains capable of performing its intended function. Performance and condition monitoring activities and associated goals and preventive maintenance activities shall be evaluated at least every refueling cycle provided the interval between evaluations does not exceed 24 months. The objective of preventing failures through maintenance is to be balanced against the objective of minimizing unavailability of SSCs. In performing monitoring and preventive maintenance activities, an assessment of the total plant equipment that is out of service is to be taken into account to determine the overall effect on performance of safety functions.

Regulatory Guide 1.160, Rev. 2, which provides regulatory guidance to implement the rule, endorses an industry guidance document, NUMARC 93-01, Rev. 2, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants." Although adoption of the regulatory guidance by licensees is voluntary, licensees have adopted this guidance. Therefore, the information collections and burden are based on this guidance.

The industry guidance is described as follows:

Utilities are required to identify plant SSCs that are within the scope of 10 CFR 50.65 that perform a safety-related function, or upon failure could prevent a safety-related function from being fulfilled or cause a scram or actuation of a safety-related system (Section 8.0)[1]. For SSCs not within the scope of 10 CFR 50.65, each utility is to continue existing maintenance programs.

10 CFR 50.65 requires that all SSCs that are within the scope of the regulation will have had their performance assessed and will have been placed in 50.65(a)(2) and be part of the preventive maintenance program. In addition, those SSCs with unacceptable performance will have been moved to 50.65(a)(1) with goals established and monitoring to meet the goals expected. This determination was to be made by licensees' assessments of the risk significance as well as the performance of the SSCs against utility-specific performance criteria. Specific performance criteria must be established for those SSCs that are either risk significant or standby mode; the balance are monitored against the overall plant level performance criteria.

The process addressing 50.65(a)(1) includes licensees establishing goals for structures, systems, trains, and components that have not demonstrated acceptable performance. The key parameter is performance, which includes availability, reliability, or condition, as appropriate.

Risk significant SSCs should be identified by using tools such as an Individual Plant Examination, a Probabilistic Risk Assessment, critical safety functions (e.g., inventory), or other methods, provided they are systematic and documented.

The performance of SSCs that do not meet the performance criteria established by a utility shall be subjected to goal setting and monitoring that leads to acceptable performance. Many goals must be set at the system level. In addition, train and component level goals should be established (Section 9.0) when determined appropriate by the utility. Performance of structures, systems, trains, or components, as measured against established goals, must be monitored and documented until it is determined that the goals have been achieved and performance can be addressed in 50.65(a)(2).

SSCs within the scope of 10 CFR 50.65 whose performance is currently determined to be acceptable must be assessed periodically to assure that acceptable performance is sustained (Section 10.0).

Although goals are established and monitored as part of 50.65(a)(1), the preventive maintenance and performance monitoring activities are part of 50.65(a)(2) and apply to all of the SSCs that are within the scope of 10 CFR 50.65.

An assessment of the overall effect on plant safety must be performed for SSCs that support plant safety functions when they are taken out of service for monitoring or preventive

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[1] Refer to sections in NUMARC 93-01.

maintenance activities.

Periodic performance assessment and monitoring must be implemented through utility specific programs that include, as appropriate, event cause determination, corrective action, consideration of industry operating experience, and trending.

On July 19, 1999, the NRC issued a revised final rule to require that power plant licensees, before performing maintenance, assess and manage the increase in risk that may result from maintenance activities. The revised rule becomes effective 120 days after issuance of the associated regulatory guidance which is currently scheduled for issuance in the 3rd quarter of FY 2000. The staff has developed Draft Regulatory Guide DG-1082, which endorses Final Draft Section 11 of NUMARC 93-01. Section 11 of NUMARC 93-01, "Industry Guidelines for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants," deals with the assessment of risk resulting from performance of maintenance activities.

Based on the NRC staff's regulatory guidance, the licensee's information collections normally consist of program descriptions, data on goals and monitoring efforts, trends of failure data, and trends of availability data. The information is not sent to the NRC, nor is it separately compiled unless it is information that is not otherwise collected. The objective is to rely on licensees' existing documentation collection activities to the greatest extent possible in order to show progress in maintenance by results in terms of performance, condition and availability of SSCs within the scope of 10 CFR 50.65.

Although not explicitly required by 10 CFR 50.65, each licensee needs to collect, process and use existing maintenance records, data, and industry information in setting and monitoring goals. Section 13 of NUMARC 93-01 indicates industry proposed documentation. Plant-specific SSC maintenance history and performance trends based on SSC history must be maintained and kept current by licensees and compared with the licensee's established goals and objectives. The SSC history may include data obtained from the plant-specific maintenance surveillance, preventive and corrective maintenance programs, and industry-wide experience. The monitoring activities must be trended and the results compared with established goals to determine the need for corrective action, e.g., SSC modification, repair, replacement, or changes to maintenance procedures.

A. JUSTIFICATION

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

Licensees must collect and analyze information concerning the performance of SSCs within the scope of 10 CFR 50.65 in order for them to use information from past experience to predict future plant vulnerabilities and plan appropriate maintenance activities aimed at eliminating or mitigating those vulnerabilities.

2. Agency Use of Information

Information on performance criteria, goal setting and monitoring results, failure data, unavailability data, and documentation of periodic assessments required by 10 CFR 50.65 is reviewed at the licensee's facilities by NRC inspectors in order to evaluate SSC performance and ensure that the SSCs are capable of fulfilling their intended function, and thereby maintain safe operation of the plant. Reporting of information to NRC headquarters or regional offices is not required.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

Licensees are currently required to collect and document information concerning the condition and behavior of certain plant equipment in accordance with 10 CFR 50, Appendix B (e.g., procedures, quality assurance programs, records), 50.36 (surveillance requirements), 50.48 (fire protection), 50.49 (environmental qualification), 50.55a (in-service inspection requirements), 50.61 (pressurized thermal shock), 50.62 (anticipated transient without scram), 50.63 (station blackout), and 10 CFR 54 if applicable (license renewal). At least some of this same information will be used by licensees to partially meet the requirements in 50.65 with respect to safety-related SSCs.

5. Effort to Reduce Small Business Burden

10 CFR 50.65 affects only nuclear power reactor licensees. None of these licensees fall within the definition of a small business, as defined in the Commission's Size Standards (50 FR 50241; December 9, 1985).

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

Licensees must establish procedures for addressing the scope of 10 CFR 50.65, setting goals, monitoring, assessing, and correcting performance, as appropriate. This is a one-time collection. Licensees thereafter have to collect, document, and maintain failure histories for maintenance-preventable functional failures (MPFFs), as defined in the industry guidance. Licensees use collected information to identify trends, update component failure data bases, and propose design, operational, procedural, or other maintenance related corrective action. Licensees are required to assess the overall effectiveness of their maintenance efforts at least once every refueling cycle provided the interval between evaluations does not exceed 24 months.

Collection of failure and unavailability information and attendant cause analyses is driven by the frequency and type of failures. NRC inspectors are expected to judge the adequacy of each licensee's efforts by the results in terms of acceptability of failure rates and unavailability of plant equipment. Accordingly, the frequency of collection of data is driven by events as well as the existing maintenance schedule for each plant. If the information were not collected or collected less frequently, it would not be possible to ensure the safety of the public and plant operation.

7. Circumstances Which Justify Variation from OMB Guidelines

10 CFR 50.65 does not change any of the existing requirements for records retention. Maintenance surveillance and failure records and data must be retained in accordance with existing plant procedures and requirements. If this results in a need for licensees to retain records for longer than three years, it will result from trends in failures and unavailability of SSCs and not as a result of any specific requirements of 10 CFR 50.65 or its implementing guidance. The adequacy of licensees' efforts is judged on the basis of acceptability in equipment performance and availability. Therefore, record retention periods are driven by the needs of licensees to show acceptable trends.

8. Consultations Outside the Agency

No comments were received on the discussion of information collections associated with the final rulemaking issued on July 19, 1999, that require power plant licensees, before performing maintenance, to assess and manage the increase in risk that may result from maintenance activities.

In addition, Notice of Opportunity for Public Comment on this information collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

None, except for proprietary information. Proprietary information is handled in accordance with 10 CFR 2.790 of the NRC's regulations.

11. Justification for Sensitive Questions

No sensitive information is requested under this regulation.

12. Estimated Industry Burden and Burden Hour Cost

The burden varies depending on the quality of the current maintenance program and is calculated for marginally satisfactory plants, satisfactory plants, and good plants. Additionally, 19 plants are in a permanently shutdown status and are required to maintain a significantly reduced maintenance program. The hourly burdens are listed below.

Section 13.3 of NUMARC 93-01: Documentation of Performance Against Goals, Changes to Goals, Expanded Data Collection, Data Analysis, Trending, Cause Analysis, and Programs Analysis

All three categories of operating plants require additional staff for necessary documentation. It is assumed that one additional staff person spends two-thirds of his time on these information collection activities.

Number of Plants	Burden per Plant	Total Burden
104	1,400	145,600

Section 13.4 of NUMARC 93-01: Documentation of Preventive Maintenance Program

It is assumed that one-third of a staff person's time is devoted to related information collection activities for satisfactory and good plants. Marginally satisfactory plants require two-thirds of a staff person's time. It is further assumed that the burden at a permanently shutdown plant is approximately 80 hours per year.

Category	No. of Plants	Burden per Plant	Total Burden
Marginally Satisfactory	15	1,400	21,000
Satisfactory and Good	89	695	61,855
Permanently Shutdown	19	80	1,520
Total			84,375

Section 13.5 of NUMARC 93-01: Periodic Assessments

It is assumed that two-thirds of a staff person's time is devoted to information collections associated with feedback and corrective actions for operating plants. For permanently shutdown plants, 10 CFR 50.65 only applies to maintenance of spent fuel in a safe manner. Thus, the burden is much less.

Number of Plants	Burden per Plant	Total Burden
104	1,400	145,600
19	8	152

Total Burden: 375,727 hours per year. Of this, 374,055 burden hours represent an industry total for operating plants (145,600 + 21,000 + 61,855 + 145,600) for an average of 3597 hours per plant; and 1672 hours represent an industry total for shutdown plants (1520 + 152) for an average of 88 hours per plant.

Total Industry Burden and Cost

Based on the above, the annual burden per operating plant is estimated to be 3,597 hours with a cost of $507,177 per plant (3,597 hours x $141 per hour) and the cost to a shutdown plant is $12,408 (88 hours x $141 per hour). The total annual industry burden is estimated to be 375,727 hours at a total annual cost of $52,977,507 (375,727 hours x $141 per hour). This includes time the licensee expends on all maintenance inspection activities with inspection personnel, i.e. meetings, interviews, locating information, etc.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Burden to the Federal Government

The NRC already performs maintenance inspections and maintenance evaluations. 10 CFR 50.65 strengthens the basis for the inspections and evaluations, but does not require additional inspection activities. The focus of the NRC inspections has changed but the burden is not expected to change. Therefore, there will be no increased burden to the Federal government for information collection activities related to 10 CFR 50.65.

The annual cost to the government is associated with inspection and evaluation of maintenance activities at power reactor facilities. NRC estimates 510 hours per year for each of the 65 operating nuclear power reactor sites and 51 hours per year for each of the 13 permanently shutdown power reactor sites for inspection and evaluation of maintenance activities. Therefore, the burden estimated for this effort is 33,813 hours (510 x 65 sites + 51 x 13 sites), at a cost of $4,767,633 (33,813 hours x $141).

The cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 171.

15. Reasons for Changes in Burden and Cost

Although estimated burden hours have decreased as some operating power reactors shifted from operating to shutdown status, the total industry cost increased due to the use of a higher value for hourly costs ($141 per hour).

16. Publication for Statistical Use

There will be no publication by the NRC of the collected information for statistical use.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods may be used by licensees for the collection or analysis of plant information. NRC inspectors are not expected to use statistical methods in their reviews of licensee documentation. Use of statistical methods is allowed but not required by 10 CFR 50.65 and its implementing guidance.

Section 25

DRAFT SUPPORTING STATEMENT FOR REQUIREMENTS FOR THERMAL ANNEALING OF THE REACTOR PRESSURE VESSEL

10 CFR 50.66

DESCRIPTION OF THE INFORMATION COLLECTION

On January 18, 1996, the NRC amended its regulations for light-water-cooled power plants to provide requirements for thermal annealing of a reactor pressure vessel. This new regulation, 10 CFR 50.66 (known as the thermal annealing rule), provides a set of requirements for the use of thermal annealing by licensees who elect to use this approach to mitigate the detrimental effects of neutron irradiation. This rule requires submittal of a Thermal Annealing Report at least three years prior to the date at which the limiting fracture toughness criteria in 10 CFR 50.61 or Appendix G to Part 50 would be exceeded. This report must include: a Thermal Annealing Operating Plan; a Requalification Inspection and Test Program; a Fracture Toughness Recovery and Reembrittlement Trend Assurance Program; and Identification of Unreviewed Safety Questions and Technical Specification Changes. Under 50.66, the NRC will, within three years of submission of a licensee's Thermal Annealing Report and at least thirty days prior to the start of the annealing, document its views on the report. After completion or termination of thermal annealing, the licensee is required to notify the NRC of the results, and, as required, provide a justification for subsequent operation.

Specifically, 10 CFR 50.66 requires the following information collections:

Section 50.66(b)(1) requires the Thermal Annealing Operating Plan to include (1) a detailed description of the pressure vessel and all structures and components that are expected to experience thermal or stress effects during the annealing operation; (2) an evaluation of the effects of mechanical and thermal stresses and temperatures on the vessel, containment, biological shield, attached piping and appurtenances, and adjacent equipment and components to demonstrate that operability of the reactor will not be detrimentally affected; (3) the methods, including heat source, instrumentation and procedures proposed for performing the thermal annealing; (4) the proposed thermal annealing operating parameters, including bounding conditions for temperatures and times, and heatup and cooldown schedules.

Section 50.66(b)(2) requires the Requalification Inspection and Test Program to requalify the annealed reactor vessel to include enough detail to demonstrate that the limitations of the thermal annealing plan are not exceeded and have not degraded the reactor vessel.

Section 50.66(b)(3) details the parameters and conditions that must be evaluated in the Fracture Toughness Recovery and Reembrittlement Trend Assurance Program to document fracture toughness recovery and reembrittlement rate.

Section 50.66(b)(4) requires the report to identify any changes to the facility as described in the updated final safety analysis report (UFSAR) constituting unreviewed safety questions, and any changes to the technical specifications (TS), which are necessary to either conduct the thermal annealing or operate the nuclear power reactor following the annealing.

Section 50.66(c)(1) requires that if the thermal annealing was completed in accordance with the Thermal Annealing Operating Plan (the Plan) and the Requalification Inspection and Test Program (the Program), the licensee shall so confirm in writing to the NRC.

Section 50.66(c)(2) requires that if the thermal annealing was completed but the annealing was not performed in accordance with the Plan and the Program, the licensee shall submit, to the NRC, a summary of lack of compliance and a justification for subsequent operation. This summary and justification must identify any changes to the facility as described in the UFSAR which are attributable to the noncompliances and constitute unreviewed safety questions, and any changes to the TS which are required as a result of the noncompliances.

Section 50.66(c)(3) requires that if the thermal annealing was terminated prior to completion, the licensee shall immediately notify the NRC of the premature termination. 50.66(c)(3)(i) states that if the partial annealing was otherwise performed in accordance with the Plan and relevant portions of the Program, and the licensee does not elect to take credit for any recovery, the licensee need not submit the Thermal Annealing Results Report (Results Report) required by 50.66(d), but instead shall confirm in writing to the NRC that the partial annealing was otherwise performed in accordance with the Plan and relevant portions of the Program. 50.66(c)(3)(ii) states that if the partial annealing was otherwise performed in accordance with the Plan and relevant portions of the Program, and the licensee elects to take full or partial credit for the partial annealing, the licensee shall so confirm in writing to the NRC. 50.66(c)(3)(iii) states that if the partial annealing was not performed in accordance with the Plan and relevant portions of the Program, the licensee shall submit, to the NRC, a summary of lack of compliance and a justification for subsequent operation. The summary and justification shall also identify any changes to the facility as described in the UFSAR which are attributable to the noncompliances and constitute unreviewed safety questions, and any changes to the TS which are required as a result of the noncompliances.

Section 50.66(d) requires, within three months of completing the thermal anneal, unless an extension is authorized by the NRC, a Thermal Annealing Results Report from every licensee that either completes a thermal annealing, or that terminates an annealing but elects to take full or partial credit for the annealing. The Results Report shall provide time and temperature profiles of the actual annealing, the post-anneal RT_{NDT} and Charpy upper-shelf energy values for use in subsequent reactor operation and projected values at the end of the proposed period of operation addressed in the Thermal Annealing Report, and projected post-annealing reembrittlement trends for both RT_{NDT} and Charpy upper-shelf energy.

Regulatory Guide-1.162 was developed to describe a format and content acceptable to the NRC staff for the report to be submitted for approval to perform a thermal annealing of a reactor vessel. Use of this format by the applicant would help ensure the completeness of the information provided, would assist the NRC staff in location of specific information, and would aid in shortening the time needed for the review process. Also, this guide describes

acceptance criteria that the NRC staff would use in evaluating these reports to ensure that the annealing conditions imposed on the reactor and other equipment, components, and structures do not degrade the original design of the system. Section 2.1 of RG-1.162 directs the licensee to retain reactor annealing measurement records until the facility license is terminated.

A. JUSTIFICATION

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

The information required by 50.66 is needed by the NRC to assess the adequacy of the proposed thermal annealing program and to assure that the plant will continue to be fit for safe operation after the thermal annealing operation. In addition, this information will supply information needed to assess the degree of recovery of fracture toughness properties and the projected reembrittlement rate of the reactor vessel material. This information should be collected and reported, and records should be kept for the duration of the plants' operating license.

2. Agency Use of Information

NRC uses the information required by Section 10 CFR 50.66 to thoroughly review the thermal annealing program, document its views on the plan, including whether thermal annealing constitutes an unreviewed safety question, and place the results of its evaluation in its Pubic Document Room. The NRC also uses the information to determine whether the annealing conditions will detrimentally affect the safe operation of the plant, and whether the fracture toughness recovery and reembrittlement rates meet the requirements of 10 CFR 50.60 and 50.61.

Upon receipt of licensee's Thermal Annealing Results Report after completion or termination of thermal annealing, the NRC will review the report, document whether the thermal annealing was performed in compliance with the Plan and the Program, place the documentation in the NRC Public Document Room, and hold a public meeting to: (a) permit the licensee to explain the results of the reactor vessel annealing to the NRC and the public, (b) allow the NRC to discuss its inspection of the reactor vessel annealing, and (c) provide an opportunity for the public to comment to the NRC on the thermal annealing.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The information is available only from nuclear power reactor licensees and does not duplicate other information being provided to NRC. The Information Requirements Control Automated System (IRCAS) was searched for duplication, and none was found.

5. Effort to Reduce Small Business Burden

This information does not affect small business.

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

These collections are one-time only collections. If the information were not collected, the NRC would be unable to ensure that appropriate limits have been established and that the thermal annealing process would not degrade the integrity of reactor pressure vessel.

7. Circumstances Which Justify Variations from OMB Guidelines

The information records should be retained for the duration of the plants' operating license (over 3 years) to permit assessment of the adequacy of vessel fluence determinations during the period the plant is operating. This information is required to establish that the reactor vessel has adequate toughness as prescribed in Appendix G to 10 CFR Part 50 and 10 CFR 50.61.

8. Consultations Outside the NRC

Notice of opportunity for public comment on the information collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary information is protected in accordance with the provisions specified in 10 CFR Part 2 of the NRC's regulations.

11. Justification for Sensitive Questions

This regulation does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

At the present time, no licensee has proposed to anneal a reactor vessel. However, the reporting burden that could result from compliance with this regulation is estimated to be 6,400 hours per thermal annealing operation at a cost of $902,400 ($141 x 6,400 hours). The recordkeeping burden that could result from compliance with this regulation is estimated to be 200 hours per thermal annealing operation at a cost of $28,200 ($141 x 200 hours).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

At stated above, no licensee has proposed to anneal a reactor vessel. If an application is submitted, the time for the NRC to perform the necessary reviews, prepare the evaluation reports, complete the licensing process and issue approvals is estimated to be an average of 2,000 hours per annealing operation. This one-time cost to the Federal government of activities related to the proposed regulation is estimated to be $282,000 ($141 x 2000 hours). This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

There has been no change in burden.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 26

DRAFT SUPPORTING STATEMENT
FOR
GENERIC COMMUNICATIONS PROGRAM

10 CFR 50.71

DESCRIPTION OF THE INFORMATION COLLECTION

The generic communications program is an adjunct to the NRC regulatory oversight program and functions as an extension of the reporting requirements under 10 CFR 50.71 which require each licensee and each holder of a construction permit, including nuclear power reactor licensees that have submitted the 50.82(a)(1)(i) certification of permanent cessation of operations and nonpower reactor licensees that are no longer authorized to operate, to maintain such records and make such reports, in connection with the licensed activity, as may be required by the conditions of the license or permit or by the rules, regulations and orders of the Commission in effectuating the purposes of the Atomic Energy Act of 1954, as amended (the Act), including Section 105 of the Act. Generic communications may also be issued under the Commission's authority in 10 CFR 30.32(b), 40.31(b), or 70.22(d) to require further statements in order to enable the Commission to determine whether an application should be granted or denied or whether a license should be modified or revoked. Generic communications include bulletins, generic letters, information notices, and regulatory issue summaries, although only bulletins and generic letters are used to request actions and/or information.

A. JUSTIFICATION

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

Generic communications are used to disseminate information and may be used to request actions and responses from the addressees. They are not intended to serve as substitutes for revised license conditions or new regulatory requirements. Most bulletins and generic letters address regulatory requirements that are currently in 10 CFR 50. Prior to proposing the bulletin or generic letter, the NRC staff considers the potential additional burden caused by either having the NRC inspectors collect the information or having the licensees or construction permit (CP) holders provide the information in a report. After considering both options, NRC may deem it more practical to obtain the necessary information via licensee reporting. Information collections in response to an information notice or regulatory issue summary would be the result of voluntary submittals on the part of addressees since it is inconsistent with NRC practice to include reporting requirements in such documents.

Proposed bulletins and generic letters that request actions and require responses from reactor licensees are routinely reviewed by the NRC's Committee to Review Generic Requirements (CRGR), except in those rare instances where it is judged

by the Office Director that an immediately effective action is needed to protect the health and safety of the public. In those circumstances, no review by the CRGR is necessary and the Office Director has the authority to issue the bulletin or generic letter. Each proposed bulletin or generic letter to be reviewed by CRGR that is not an immediately effective action is categorized as either urgent or routine. Urgent actions are those which are needed to overcome problems requiring priority resolution or to comply with a legal requirement for immediate or near-term compliance.

Routine actions are those which do not meet the criteria for immediately effective action or designation as urgent. These actions are scrutinized carefully by the CRGR on the basis of written justification submitted by the cognizent office. Upon notice to the members of the CRGR, and without objection, the CRGR Chairman may exempt any routine proposal from review on the grounds that he or she concludes that it involves only an insignificant effect on the NRC staff and on licensees.

The NRC believes that a reliable estimate of the annual impact of urgent and routine bulletins and generic letters is possible and that this burden is logically included in 10 CFR 50.71.

2. Agency Use of Information

NRC periodically issues generic communications to communicate with the industry on matters of generic importance or serious safety significance; i.e., if an event at one facility raises the possibility of a generic problem, an NRC bulletin or generic letter may be issued requesting licensees and/or CP holders to take specific actions and to submit a written report describing actions taken and providing other information that the NRC may need to assess the need for further actions to ensure public health and safety, or an information notice or administrative letter may be issued to inform the industry about matters of generic concern.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The requested information is not duplicated and is only available from NRC licensees and CP holders. The Information Requirements Control Automated System (IRCAS) was searched, and no agency duplication was found.

5. Effort to Reduce Small Business Burden

The generic communication program encompassed within 10 CFR 50.71 generally does not affect small businesses. Only occasionally does a bulletin or generic

letter affect research/test reactors operated by universities. Some of the licensees who use source, byproduct, and special nuclear material are small businesses. However, the health and safety consequences of improper handling or use of radioactive source, byproduct, or special nuclear material would be the same for large and small entities. Therefore, it is not possible to reduce the burden on small businesses by less complete or less frequent reporting or recordkeeping in response to a generic communication.

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

The information is collected on an as-needed basis to enable the NRC to resolve generic safety issues. If the NRC does not request the information when it is needed, the health and safety of the public could be affected adversely.

7. Circumstances Which Justify Variation from OMB Guidelines

Thirty days or more are allowed to respond. However, in some instances for urgent actions, responses are requested in less than thirty days. This shortened time period is necessary to ensure that NRC is able to obtain significant safety information promptly so as to be able to take effective action to protect public health and safety.

8. Consultations Outside the NRC

When appropriate, prior to issuing a generic communication, the NRC publishes the bulletin or generic letter in the Federal Register, seeks comments on the matter from industry (utilities, Nuclear Energy Institute, nuclear steam system suppliers, vendors, etc.), and occasionally holds public meetings. These techniques have proven effective in ensuring the accuracy of statements and bringing faster and better responses from licensees.

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential responses may be protected under 10 CFR 2.790 of the NRC's regulation.

11. Justification for Sensitive Questions

This information collection does not involve sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

The number of operating license (OL) holders (Note: There are no construction permit holders) affected by a particular bulletin or generic letter and the associated burden varies in each specific instance. However, for power reactor OL holders, an upper bound is used which assumes that all of the 104 licensees for operating plants would respond to each of approximately 3 bulletins and generic letters issued annually containing reporting requirements. (Although unlikely, generic communications could also involve 19 permanently shutdown nuclear power reactors. However, we have assumed that none will be affected.) It is estimated that it would take each licensee approximately 500 hours to respond to each bulletin or generic letter. This will result in approximately 156,000 burden hours for responses (500 hours x 3 bulletins or generic letters = 1,500 hours; 1,500 hours x 104 plants = 156,000 hours).

For materials licensees, the number of licensees affected by a particular bulletin or generic letter would vary widely depending on the license category. For purposes of burden estimates, it is assumed that, on average, approximately 100 licensees would be affected. It is anticipated that there may be one bulletin and one generic letter directed to materials licensees annually that contain reporting or recordkeeping requirements. It is estimated that the burden for each response to a bulletin would be approximately 40 hours and the burden for each response to a generic letter would be approximately 100 hours. Thus, for materials licensees, the estimated burden would be 4,000 hours annually for bulletins (100 x 1 x 40) and 10,000 hours annually for generic letters (100 x 1 x 100). The total industry burden for materials licensees would thus be 14,000 hours.

Therefore, total annual industry burden is expected to be 170,000 hours (156,000 + 14,000 hours). Thus the cost would be $23,970,000 (170,000 hours x $141 per hour).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

Estimate of cost to the Government, which includes the preparation of 3 reactor-related and 2 materials related bulletins or generic letters, mailing, and analysis of responses, is estimated at 2,500 hours per reactor-related bulletin or generic letter, or 7,500 hours annually (2,500 hours X 3), and 2,000 hours per materials-related bulletin or generic letter, or 4,000 hours annually (2,000 hours x 2). Therefore, the total annual estimated cost to the Government is $1,621,500 (11,500 hours x $141).

This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The estimated burden for industry and the Federal Government has decreased due to an expected increase in the number of emergent issues that are resolved through industry initiatives rather than as a consequence of NRC generic communications.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The OMB approval number and expiration date are included in all generic communications.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Section 27

DRAFT SUPPORTING STATEMENT FOR ANNUAL FINANCIAL REPORT AND FINANCIAL REQUIREMENTS

10 CFR 50.71(b) AND APPENDIX C, SECTION III

DESCRIPTION OF THE INFORMATION COLLECTION

The requirement for the annual financial report, including the certified financial statements, arises from the Atomic Energy Act of 1954, as amended, Section 182, "License Applications." Section 182(a) provides, among other things, that each application for a license shall state such information as the Commission, by rule or regulation, may determine to be necessary to decide the financial qualifications of the applicant as the Commission may deem appropriate for the license. Annual financial reporting is specified in 10 CFR 50.71(b) and Appendix C, Section III. Appendix C, Sections I and II, specify the financial data and related information required to establish financial qualifications for facility construction permits. The burden for Appendix C, I and II, is addressed in the Section 1 Supporting Statement.

The annual financial reporting requirement affects 127 power reactor licensees, including co-owners and 1 non-power testing facility.

A. JUSTIFICATION

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

Section 10 CFR 50.71(b) 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 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 qualifications may affect its ability to meet its responsibilities on safety matters.

The Commission reserves the right to require additional financial information during construction or operation of a facility, particularly in cases in which the nuclear power plant will be commonly owned by two or more existing companies, or in which financing depends upon long-term arrangements for the sharing of the electric power output of the facility by two or more electric power generating companies. The annual financial report provides updated financial information after a construction permit has been issued for a nuclear power plant.

2. Agency Use of Information

The annual financial reports, and any other pertinent material that may be needed, are used by NRC staff for financial monitoring of the respondents. If it appears that any respondent is experiencing financial difficulties, this information is used for management consideration of any appropriate actions.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use. The NRC is implementing its "ADAMS" electronic documents system which provides for electronic submission of reports from licensees, including these reports.

4. Effort to Identify Duplication and Use Similar Information

The information requested in Section 50.71(b) and Appendix C, Section III, is not required by any other regulation. The financial information required by Section 50.33(f) for applications for construction permits and operating licenses is used to establish financial qualifications needed before NRC can approve the applications and is not duplicated here (see the Section 1 Supporting Statement). The Information Requirements Control Automated System (IRCAS) was searched and no duplication was found.

There is no source for the required information other than nuclear reactor licensees/construction permit holders, including co-owners.

5. Effort to Reduce Small Business Burden

This information collection does not affect small business as defined by the size standard adopted by NRC in 10 CFR 2.810.

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

If the information is not submitted when required, there could be a situation where a licensee's financial qualifications are questionable, which could affect the licensee's ability to meet responsibilities on safety matters.

7. Circumstances which Justify Variation from OMB Guidelines

This information collection does not vary from OMB guidelines.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential financial information is protected in accordance with 10 CFR 2.790 of the NRC's regulations.

11. Justification for Sensitive Questions

This information collection does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Responses are required from 127 power reactor licensees, including co-owners and 1 non-power testing facility. Staff's best estimate is that approximately one hour is needed by industry to respond to these annual reporting requirements. Therefore, that involves 128 hours of industry burden at a cost of $18,048 ($141 x 128).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

It is estimated that approximately one hour of staff effort is required to review each of the 128 annual submittals. Therefore, total cost to the Federal government is expected to be $18,048 ($141 x 128). This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

Burden has been reduced slightly because of fewer licensees.

16. Publication for Statistical Use

The collected information is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 28

DRAFT SUPPORTING STATEMENT
FOR
PERIODIC UPDATE OF THE FINAL SAFETY ANALYSIS REPORT (FSAR)

10 CFR 50.71(e) and 50.71(f)

DESCRIPTION OF THE INFORMATION COLLECTION

Section 50.71(e) and (f) require each licensee of a nuclear power reactor to update periodically the Final Safety Analysis Report (FSAR) originally submitted as part of the application for the operating license, to assure that the information included in the FSAR contains the latest material developed. Section 50.71(e) is applicable to power reactors licensed to operate. Section 50.71(f) states that provisions of this section apply to power reactor licensees that have submitted the certification of permanent cessation of operations required under 50.82(a)(1)(i). This submittal must contain all the changes necessary to reflect information and analyses submitted to the Commission by the licensee or prepared by the licensee pursuant to the Commission since the submission of the original FSAR or the last updated FSAR. The updated FSAR must be revised to include the effects of all changes made in the facility or procedures as described in the FSAR, all safety evaluations performed by the licensee either in support of requested license amendments or in support of conclusions that changes did not involve an unreviewed safety question, and all analyses of new safety issues.

Section 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 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 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 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 50.82(a)(1) certifications, subsequent revisions must be filed every 24 months.

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

A. JUSTIFICATION

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

The volume of written information in the docket files of operating power reactors is large and is increasing at a rapid rate. By the time a power reactor has been in operation for a few years, much of the information in the original FSAR has been modified, supplemented or superseded. This comes about by the applicant's submittal of designs and analyses supporting requested license amendments or technical specification changes, replies to regulatory requests, incident reports, and reports describing design and procedural changes. Consequently, without an updated FSAR, it would be difficult for anyone, including an NRC staff member, the licensee, or the public to be certain of the current status of a facility's design and supporting analyses.

To properly execute their respective responsibilities, the NRC staff and the licensee must work with accurate information. The updated FSAR is a reference document used in recurring safety analyses performed by the licensee, the Commission, and other interested parties. Thus, it is essential that supplements and amendments to the original information be appropriately incorporated into the original FSAR to create a single, complete and integral document. This document serves as the baseline for future changes.

In general, it is not difficult to identify correct information for newly licensed facilities, but it would become a problem in a few years without this update requirement. In addition, as new staff members and licensee employees are assigned to plants with extensive licensing history and are involved in analyses and decisions affecting facility operation, the possibility of error and risk to the public would increase without an accurate, updated reference document.

Paragraph 50.30(a)(3) of 10 CFR Part 50 recognizes the update need by requiring that the applicant for a construction permit update its application, which includes the Preliminary Safety Analysis Report, to eliminate superseded information and provide an index of the updated application when an Atomic Safety and Licensing Board is appointed prior to public hearing. If an operating license hearing is held, the application must be updated at that time. After the operating license is issued, various sections of Part 50 (Section 50.59, for example) require that additional safety analyses be performed for individual facility changes that affect facility safety. The present regulations reflected in 10 CFR 50.71(e) require that such changes be incorporated into the FSAR.

All changes to the technical specifications are treated as license amendments and it is appropriate to have an updated FSAR available at all times. Additionally, safety evaluations after operation of the facility has been initiated, required by proposed license amendments, technical specification changes and other reasons, warrant at least the same supporting documentation as does the hearing process.

2. Agency Use of Information

In addition to the needs discussed above, updated FSARs are used for a variety of other reasons such as:

a. To evaluate proposed changes, tests or experiments made pursuant to 10 CFR 50.59 and to determine the existence of unreviewed safety questions.

b. To supply adverse operating experience to current safety reviews.

c. For operator training by licensees.

d. For project manager training and orientation.

e. A reference document for management and by safety review committees.

f. By NRR and regional inspectors to assist in their facility inspections to ensure that licensees are maintaining the basis upon which their plants are licensed.

g. By licensing examiners to prepare exams for facility operators.

h. In planning emergency responses.

i. To evaluate operating data by NRC technical reviewers.

The NRC staff utilizes the updated information supplied by licensees in response to the reporting required by 10 CFR 50.71(e) as a primary reference source to be employed during the numerous safety studies undertaken by licensees, the Commission, and other interested parties.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

This information is not required by any other Federal regulations. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found.

The nuclear power reactor licensees are the only source for this information.

5. Effort to Reduce Small Business Burden

This information collection only involves licensees of nuclear power reactors and, therefore, does not affect small business.

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

If the collection is not conducted or is conducted less frequently, NRC staff members and licensee employees would not have a single, organized up-to-date reference document for the plant. The NRC would be unable to effectively carry out its regulatory responsibilities.

7. Circumstances Which Justify Variation from OMB Guidelines

The updated FSAR must be retained until the operating license is terminated because, 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.

The original and 10 copies are distributed to NRC's File Center, Headquarters and local Public Document Rooms, the Advisory Committee on Reactor Safeguards (ACRS), consultants and various technical review and licensing staff members. These entities need copies of the voluminous updated volumes so that the official agency file unit, the public, staff members, consultants, and the ACRS can also be certain of current plant status.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is handled in accordance with 10 CFR 2.790 of the NRC's regulation.

11. Justification for Sensitive Questions

This information collection does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Since the updates for operating nuclear power reactors may be submitted annually or 6 months after each refueling outage, approximately 69 of 104 licensees will be affected by this reporting requirement annually. The average burden per licensee for the updating is estimated to be 1,000 hours. Therefore, the annual burden for licensees of operating plants is 69,000 hours.

Since updates for nuclear power reactors that have ceased operation must be filed every 24 months, approximately 9.5 of 19 licensees will be affected by this reporting requirement annually. The average burden per licensee of these reactor facilities is estimated to be 250 hours. Therefore, the annual burden for licensees of permanently shutdown plants is 2,375 hours.

The total estimated burden to licensees is expected to be 71,375 hours (69,000 + 2,375 hours) at a cost of $10,063,875 (71,375 hours x $141).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

The NRC anticipates that approximately 5 staff hours will be involved annually in the handling and document control/filing systems of the updated FSAR for operating nuclear power reactors. Thus, annual estimated cost to the Federal Government for these facilities is expected to be $48,645 (5 staff hrs x 69 plants = 345 staff hours; $141/hr x 345 staff hours = $48,645). The estimated Federal burden for permanently shutdown reactors is 1.25 staff hours per plant. The annual estimated cost for these facilities is thus $1,674 (1.25 hours x 9.5 plants = 11.9 hours; $141/hr x 11.9 = $1,674). The total annual cost to the Federal government is therefore $50,319 ($48,645 + $1,674). This cost is fully recoverable through fee assessments to the licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The burden decreased slightly from 72,750 to 71,375 hours. This is a result of there being fewer operating plants and more plants undergoing decommissioning.

16. Publication for Statistical Use

The information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 29

DRAFT SUPPORTING STATEMENT
FOR
REACTOR EVENT REPORTING REQUIREMENTS

10 CFR 50.72(a)(1), (a)(2), (a)(3), (b), and (c), 50.54(z)

DESCRIPTION OF INFORMATION COLLECTION

Section 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 §50.72.

Sections 50.72(a)(1) and 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 followup written reports as required by 10 CFR 50.73. These written followup reports are covered by a separate OMB clearance, 3150-0104.

Section 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 Emergency Response Data System (ERDS), as required by §50.72(a)(4), is covered in Section 30 of this clearance.

Section 50.72(b)(1) requires notification as soon as practical and in all cases within one hour of the occurrence of events such as the initiation of a plant shutdown required by the plant's Technical Specifications.

Section 50.72(b)(2) requires notification as soon as practical and in all cases within 4 hours of events such as manual or automatic actuation of an engineered safety feature. Some of these events, involving spent fuel storage casks, are also subject to followup written reports as required by Section 72.216(b); this is covered in OMB clearance 3150-0132.

Section 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, the results of ensuing evaluations, the effectiveness of response or protective measures, or plant behavior that is not understood; and (2) maintain an open, continuous communication channel with the NRC Operations Center upon request by the NRC.

These reporting requirements affect 104 operating nuclear plants and 19 permanently shutdown nuclear plants.

A. JUSTIFICATION

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

The NRC staff evaluates the information transmitted to the Commission in response to these reporting requirements and makes timely decisions required to provide adequate assurances regarding actual or potential threats to public safety. In addition, operational experience feedback is required to meet the NRC's statutory requirements for regulating the nuclear industry.

2. Agency Use of Information

The events reported under 50.72 are assessed immediately to determine the adequacy of emergency response actions, if needed. They are also assessed both individually and collectively to determine their safety significance and their generic implications and to identify any safety concerns with the potential to seriously impact public health and safety. The evaluation of these events provides valuable insights on improving reactor safety.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The information is available only from nuclear power reactor licensees and does not duplicate other information collections made by NRC or other government agencies. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found.

5. Effort to Reduce Small Business Burden

These reporting requirements only affect nuclear power reactor licensees. Therefore, there is no burden on small business.

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

Not collecting this data or less frequent data collection would, in general, substantially reduce the NRC's ability to respond promptly to emergencies and would degrade the NRC's ability to assess operating experience and act on the lessons learned in a timely manner, including corrective actions to prevent recurrences.

7. Circumstances which Justify Variation from OMB Guidelines

Notification of significant events is needed in one to four hours to ensure that the NRC promptly responds to situations with the potential to seriously impact public health and safety.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is protected in accordance with 10 CFR 2.790 of the NRC's regulations. However, confidential information is not anticipated.

11. Justification for Sensitive Questions

The subject regulations do not request sensitive information. However, if any reported information is within the purview of the Privacy Act, it would be handled in accordance with 10 CFR 2.790.

12. Estimated Industry Burden and Burden Hour Cost

Based on experience in recent years, it is estimated that about 1,400 reports per year will be received in response to 10 CFR 50.72. The burden for each call is estimated to be 90 minutes. Therefore, the total annual burden would be about 2,100 person hours. At $141 per person hour, the annual cost to industry would be about $296,100.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

Events Analysis

The cost to the Federal government is estimated as follows:

a. Office of Nuclear Reactor Regulation - 8 person years (2,080 person hours/per year x 8 person years = 16,640 person hours) 16,640 x $141 = $2,346,240.

b. Four Regional offices - 1 person year each (2,080 person hours x 4 = 8,320 person hours) 8,320 x $141 = $1,173,120.

Event Report Receipt

a. 1 operations officer on shift 7 days per week, 24 hours per day (8,760 hours per year) and one additional operations officer on shift for 8 hours on weekdays (2,080 hours per year) for a total of 10,840 hours x $141 = $1,528,440 per year.

b. Cost of maintaining the emergency telecommunications system is estimated at $650,000 per year during this clearance period.

Based on the above, annual Federal cost associated with these regulations is estimated to be ($2,346,240 + $1,173,120 + $1,528,440 +$650,000) $5,697,800. This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 171.

15. Reasons for Changes in Burden or Cost

Licensees Burden

The estimated burden has been reduced from 2,400 to 2,100 hours and is based on experience over the last 3 years.

Cost to the Federal Government

The estimated cost has been reduced from $7,644,800 to $5,697,800 and is attributed to:

a. Walnut Creek field office has been shut down.
b. Maintenance costs for ETS adjusted to reflect current spending levels.
c. Reduced resources in events analysis.

16. Publication for Statistical Use

The collection information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 30

DRAFT SUPPORTING STATEMENT FOR EMERGENCY RESPONSE DATA SYSTEM

10 CFR 50.72(a) AND APPENDIX E, SECTION VI

DESCRIPTION OF THE INFORMATION COLLECTION

Each nuclear power reactor licensee is required to establish and maintain an Emergency Response Data System (ERDS) for all operating nuclear power reactor facilities except for exempt plants or those that are permanently or indefinitely shut down.

A. JUSTIFICATION

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

The Emergency Response Data System is a direct electronic data link between operating reactor computer data systems and the NRC Operations Center (NRCOC) used during the declaration of an alert or higher emergency classification. The ERDS supplements the voice transmission of information over the currently installed Emergency Notification System (ENS) and is activated by a licensee when an alert or higher emergency occurs at a licensed nuclear power facility. ERDS provides NRC with a reliable and effective communication system that allows it to monitor critical parameters during an emergency at operating power reactors.

Section 50.72(a)(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.

Appendix E, VI

Section 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.

Section 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.

Section 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.

Section 2.c requires all link control and data transmission be established in a format compatible with the NRC receiving system.

Section 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.

Section 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.

Section 4.a requires the licensee to develop and submit an ERDS implementation program plan to the NRC by October 28, 1991.

2. Agency Use of Information

The real-time data transmitted utilizing the ERDS is used by NRC to fulfill its role to monitor parameters during an on-site alert or emergency at a nuclear power facility. In addition, information concerning any computer system hardware and software changes must be reported to the NRC to ensure system operational compatibility.

3. Reduction of Burden Through Information Technology

Codification of the ERDS rule reduces the burden on licensees for telephonic transmission of data to the NRC during an emergency by use of a real-time data link. Information concerning the system changes are unique to each licensee and are submitted infrequently under the requirements of this rule, and therefore, will not be adaptable to automated routine information technology.

4. Efforts to Identify Duplication and Use Similar Information

The Information Requirements Control Automated System (IRCAS) was searched for duplication, and none was found.

In the past, during an alert or higher emergency, the NRC would receive plant data from the licensee over telephone lines via the Emergency Notification System (ENS). The ERDS, which supplements the ENS, transmits plant data in a more accurate and timely manner than the ENS, allowing more efficient and accurate assessment of emergencies to protect public health and safety. During an emergency condition, ENS provides voice communication between the NRC and licensee personnel in the technical support center to obtain the status of plant equipment, while ERDS provides the NRC access to the plant computer to monitor process data (pressure, temperature, level, etc.) in real time.

5. Effort to Reduce Small Business Burden

These requirements do not impact small business. The respondents are nuclear power plant licensees.

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

Required reports are collected and evaluated on a continuing basis as events occur. If the information was not collected during an alert or higher emergency, the NRC would have to rely on less accurate and less timely means that could affect the protection of public health and safety. The schedule for collecting the information is the minimum frequency which will permit NRC to assure that public health and safety are adequately protected.

7. Circumstances which Justify Variation from OMB Guidelines

Contrary to the OMB guidelines in 5 CFR 1320.6(b), these sections of Part 50 require that licensees submit reports and transmit real-time data to the NRC.

The requirements of 50.72(a)(4) provide for electronic real-time transmittal of data to the NRC via ERDS during an alert or emergency at a nuclear power facility so that NRC has information needed to fulfill its role for protection of public health and safety.

Appendix E, Section VI, paragraphs 3.a and 3.b require a report within 30 days of any hardware or software changes that affect the transmitted data point identified in the Emergency Response Data System Data Point Library (data base) and changes that could affect the transmission format and communication protocol. This information is needed by the NRC to ensure that any system changes will not affect the ability to transmit critical parameters of a limited set of data to NRC so that NRC can fulfill its role to monitor a nuclear power reactor during an on-site alert or emergency to protect public health and safety.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

None, except for proprietary information.

11. Justification for Sensitive Questions

The subject information collections do not involve sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

There are 104 licensees affected by this rule; however, except for quarterly testing, only a small percentage of licensees are expected to submit a response each year. The table below reflects this and is based on staff's best estimate.

Cost to Licensees

Annualized Requirement	No. Annual Responses	Burden per Response (Staff Hr)	Total Annual Burden (Staff Hr)	Annual Cost at $141/Hr
50.72(a)(4)	4	4	16	$ 2,256
Appendix E, VI.1 Periodic Testing	408	4	1632	$230,112
Appendix E, VI. 2.a, 2.b, & 2.c		(Detail requirements of 50.72(a)(4))		
Appendix E, VI.3.a	30	12	360	$ 50,760
Appendix E, VI.3.b	12	12	144	$ 18,432
Appendix E, VI.4.a		Complete		
Annual Costs	454	5*	2152	$303,432

* Average burden – Staff Hrs

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

Cost to Government

Annualized Requirement	No. Annual Responses	Burden per Response (Staff Hr)	Total Annual Burden (Staff Hr)	Annual Cost at $141/Hr
50.72 (a)(4) Review of Transmitted Data	4	100	400	$ 56,400
Appendix E, VI.1 Periodic Testing	408	4	1632	$230,112
Appendix E, VI.3.a Review Changes Affecting Data Pts.	30	16	480	$ 67,680
Appendix E, VI.3.b Review Changes Affecting Transmission & Protocol	12	16	192	$ 27,072
Appendix E, VI.4.a Review of ERDS Implementation Plan		Complete		
Annual Federal	454	6*	2704	$381,264

* Average burden - Staff Hrs

This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

Estimated licensee burden has been reduced from 2624 to 2154 hours. The estimated cost for the Federal Government has been reduced from $490,496 to $381,264. The primary reasons for this are:

a. Reduction in number of licensees covered due to plant shutdown.
b. Downward trend in the number of emergencies reported over the last 5 years.
c. System maturity has resulted in fewer modifications.

16. Publication for Statistical Use

The collection of information under this provision is not published for statistical use.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 31

DRAFT SUPPORTING STATEMENT
FOR
TRAINING AND QUALIFICATION OF NUCLEAR POWER PLANT PERSONNEL

10 CFR 50.120

DESCRIPTION OF THE INFORMATION COLLECTION

The provisions of 10 CFR 50.120(b)(1) and (2) require that applicants and licensees establish, implement, and maintain training programs for certain nuclear power plant personnel. Applicants and licensees are required to maintain and keep available for NRC inspection, records sufficient to document that the requirements of 10 CFR 50.120 have been met. Specifically, documents related to the establishment, implementation, and maintenance of the training programs must be maintained. Documentation demonstrating the job performance qualifications of personnel covered by 50.120, including certain categories of contractor personnel, are to be retained for each individual for the duration of employment.

A. JUSTIFICATION

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

Section 306 of the Nuclear Waste Policy Act of 1982, Public Law 97-425, directed the NRC to promulgate regulations or other appropriate guidance establishing instructional requirements for the training and qualification of civilian nuclear power plant operators, supervisors, technicians and other appropriate operating personnel. The NRC undertook rulemaking in January 1992 in order to comply with a decision made in April 1990 by the U.S. Court of Appeals for the District of Columbia Circuit which concluded that NRC did not meet the intent of Section 306 when the agency published a non-binding policy statement rather than a prescriptive rule.

Section 50.120 requires that each applicant for and holder of an operating license for a nuclear power plant establish, implement, and maintain a training program for nuclear power plant personnel that provides qualified personnel to operate and maintain the facility in a safe manner in all modes of operation.

Section 50.120(b)(1) requires that applicants and licensees develop and maintain these training programs with an approach based on job performance requirements. Section 50.120 builds on existing industry practice related to training; therefore, training for the personnel covered by 50.120 has already been developed and implemented by the industry.

Section 50.120(b)(2) requires power plant applicants and licensees to periodically evaluate and revise the training program to reflect industry experience, changes to

the facility, procedures, regulations, and quality assurance requirements. Section 50.120(b)(2) also requires periodic review of the training program by licensee management and requires licensees and applicants to maintain and keep available for NRC inspection, materials sufficient to verify the adequacy of the training programs. Documents related to the establishment, implementation, and maintenance of the training programs must be maintained; documentation demonstrating the job performance qualifications of personnel performing in positions covered by 50.120, including contractor personnel, must be maintained for each individual for the duration of employment.

Requirements for recordkeeping related to the applicants' and licensees' training programs are necessary to ensure that the training programs are being effectively implemented and result in properly trained nuclear power plant personnel.

2. Agency Use of Information

Requirements for recordkeeping related to the applicants' and licensees' training programs are necessary to ensure that the training programs are being effectively implemented and maintained and result in properly trained nuclear power plant personnel. Routine compliance inspections are not planned.

3. Reduction of Burden through Information Technology

The NRC foresees no opportunity to reduce the burden or information submittal through use of information technology. Individual and program training records are unique and are not developed from other compiled information sources.

4. Effort to Identify Duplication and Use Similar Information

This information does not duplicate nor overlap other information collections made by the NRC or other government agencies, and no similar information is available. The records to be maintained are unique to the organization and are of importance only to the NRC. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found.

5. Effort to Reduce Small Business Burden

No small businesses are affected by the information collection requirements.

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

Section 50.120 only specifies that the necessary records be maintained and kept available for NRC inspection to verify the adequacy of the training program. If these records are not maintained, it would not be possible to ensure that the training programs are being effectively implemented and maintained and result in properly trained nuclear power plant personnel.

7. Circumstances which Justify Variation from OMB Guidelines

Contrary to OMB guidelines, 50.120 requires sufficient records to be maintained to permit NRC verification of the adequacy of the programs. This results in retaining documentation related to establishing, implementing, and maintaining training programs and retaining documentation related to the job performance qualifications of personnel performing in positions covered by 50.120. This includes training records of contractor personnel who occupy regular positions working independently within the licensee's organization and short-term contractor personnel assigned to work independently. Pursuant to 50.71, program records are to be retained until termination of the license. Job performance qualifications are to be retained for each individual for the duration of employment. These record retention requirements will result in an auditable trail for ensuring that training is developed, evaluated, and revised based on job performance requirements, and that individuals are qualified to perform their jobs.

8. Consultations Outside the NRC

Notice of opportunity for public comment on this information collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

The information is not available for public inspection. Some information is proprietary in nature.

11. Justification for Sensitive Questions

No sensitive information is requested.

12. Estimated Industry Burden and Burden Hour Cost

Approximately 71 power reactor sites are required to comply with this rule. The industry has been providing performance-based training since 1985 for the personnel covered by the rule. The documentation requirements contained in 50.120 are already being maintained by the licensees as they maintain and revise existing training programs. It is also anticipated that new licensees, if any, would develop training programs based on job performance requirements consistent with those currently conducted by licensees. Therefore, the recordkeeping burden associated with 50.120 has been confined to record retention associated with update and maintenance of required training programs.

50.120(b) Estimate of Annual Burden to Maintain Records Related to Training and Qualification

Number of Recordkeepers	Annual Burden per Recordkeeper	Total Annual Burden	Total Annual Cost ($141/hr)
71	780 hours	55,380	$7,808,580

The above burden to meet 50.120(b) for all required programs is comprised of the following elements for each licensee:

(a) Job performance qualification documentation for individuals performing in the positions covered by 50.120 (100 hours/annually)

(b) Documentation of the job performance qualifications for contract workers performing in positions covered by 50.120 (200 hours/annually)

(c) Analyses for the positions covered by 50.120 (160 hours/annually)

(d) The listing of learning objectives derived from the analyses (40 hours/annually)

(e) Documentation related to the selection of instructional settings and methods; modes of implementation; training program materials and tests; and trainee tests and performance evaluations including on-the-job training records (100 hours/annually)

(f) Records to determine program effectiveness (100 hours/annually)

(g) Records of the program revisions (80 hours/annually)

50.120(b) Estimate of Initial Burden for New Applicants to Document Training Programs

The burden for initial documentation of the training program is estimated to be 1,440 hours (160 hours for each of nine different types of personnel). There are currently no new applicants (0 hours).

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

There is no cost to the Federal government.

15. Reasons for Changes in Burden or Cost

The change in burden reflects a revised number of power reactor sites and the use of a different value for hourly costs ($141 per hour).

16. Publication for Statistical Use

This information will not be published.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 32

DRAFT SUPPORTING STATEMENT
FOR
PRIMARY REACTOR CONTAINMENT LEAKAGE TESTING FOR WATER-COOLED POWER REACTORS

10 CFR 50, APPENDIX J

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors," provides for preoperational and periodic verification, by tests, of the leakage integrity of the primary reactor containment and systems and components which penetrate containment of water-cooled power reactors other than facilities for which the certifications required under 10 CFR 50.82(a)(1) have been submitted. Tests are conducted upon completion of construction of the primary reactor containment building (containment), and periodically thereafter.

Two major revisions have been made to Appendix J. One rule change affected only the reporting requirements while the second completely changed the character of the rule. The latter change also affected reporting requirements.

On March 14, 1995, the NRC announced in the Federal Register (60 FR 13615) that it was amending 10 CFR 50, Appendix J, to eliminate the requirement for licensees under Part 50 to submit summary reports of containment leakage rate tests to the NRC, but to preserve the requirements of 50.72 and 50.73 under which licensees currently report any instances of leakage exceeding authorized limits in the technical specifications of the license.

On September 26, 1995, the NRC announced in the Federal Register (60 FR 49505) that it was amending Appendix J to provide a performance-based option for leakage rate testing of containments of light water-cooled nuclear power plants. Appendix J is now divided into two options: Option A which is the previous Appendix J, and Option B, which is a performance-based rule in which the intervals between tests are established, in part, based on the previous leakage rate performance of the component or system. A licensee may adopt, on a voluntary basis, either or both the overall leakage testing requirements (Type A tests) and the local leakage rate testing requirements (Type B and C tests). In either case, the recordkeeping requirements of Option B must be implemented. The preoperational and periodic Type A, B and C tests must be documented to show that the performance criteria for leakage have been met. The comparison to previous results of the performance of the overall containment system and of individual components within it must be documented to show that the test intervals established for the containment system and components within it are adequate. These records must be available for inspection at plant sites, but licensees are not required to submit these results to the NRC.

OPTION A

Section III requires licensees to develop a program consisting of a schedule for conducting Type A, B and C tests for leak testing the primary reactor containment and related systems and components penetrating the primary containment pressure boundary. Since this information is presented in the Final Safety Analysis Report (FSAR), any burden involved in its preparation is considered under preparation of the FSAR. (See the Section 1 Supporting Statement.)

Section III.A.6 states that if a licensee's containment does not pass the Type A test, the test schedule applicable to subsequent Type A tests will be reviewed and approved by the Commission. No notifications are expected during this clearance period.

Section V.B requires recordkeeping of test results. The preoperational and periodic tests must be documented in a readily available summary report that will be made available for inspection, upon request, at the nuclear power plant. The summary report shall include a schematic arrangement of the leakage rate measurement system, the instrumentation used, the supplemental test method, and the test program selected as applicable to the preoperational test, and all the subsequent periodic tests. The report shall contain an analysis and interpretation of the leakage rate test data for the Type A test results to the extent necessary to demonstrate the acceptability of the containment's leakage rate in meeting acceptance criteria.

For each periodic test, leakage test results from Type A, B, and C tests shall be included in the summary report. The summary report shall contain an analysis and interpretation of the Type A test results and a summary analysis of periodic Type B and Type C tests that were performed since the last Type A test. Leakage test results from Type A, B, and C tests that failed to meet the acceptance criteria of Appendix J, Sections III.A.5(b), III.B.3, and III.C.3 shall be included in a separate accompanying summary report that includes an analysis and interpretation of the test data, the least squares fit analysis of the test data, the instrumentation error analysis, and the structural conditions of the containment or components, if any, which contributed to the failure in meeting the acceptance criteria. Results and analyses of the supplemental verification test employed to demonstrate the validity of the leakage rate test measurements shall also be included.

OPTION B

Section III.A requires that a Type A test be conducted 1) after the containment system has been completed and is ready for operation and 2) at a periodic interval based on the historical performance of the overall containment system as a barrier to fission product releases to reduce the risk from reactor accidents. The test results must be compared with previous results to examine the performance history of the overall containment system to limit leakage.

Section III.B requires Type B and Type C pneumatic tests to be conducted (a) prior to initial criticality, and (b) periodically thereafter at intervals based on the safety significance and historical performance. The performance-based testing program must be established which contains a performance criterion for Type B and C tests, consideration of leakage-rate limits and factors that affect performance, evaluations of performance, and comparison to previous test results.

Section IV requires that the results of preoperational and periodic Type A, B, and C tests must be documented to show that performance criteria for leakage have been met. The comparison to previous results of the performance of the overall containment system and of individual components within it must be documented to show that the test intervals established for the containment system and components within it are adequate. These records must be available for inspection at plant sites.

Section V.A requires that if the requirements for tests in Option B, Section II.A, or Option B, Section III.B, are implemented, the recordkeeping requirements in Option B, IV, for these tests must be substituted for the reporting requirements of the tests contained in Option A.

Section V.B.2 requires that a licensee or applicant for an operating license can adopt Option B, or parts thereof, by submitting its implementation plan and request for revision to technical specifications. (Burden for changes to technical specifications is covered by the Section 2 Supporting Statement.) The regulatory guide or other implementation document used to develop a performance-based leakage program must be included, by general reference, in the plant's technical specifications. The submittal for technical specification revisions must contain justification, including supporting analyses, if the licensee chooses to deviate from methods approved by the Commission and endorsed in a regulatory guide. The detailed licensee programs for conducting testing under Option B must be available at the plant site for inspection.

A. JUSTIFICATION

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

The primary reactor containment is designed to contain any operational or post-accident releases of radioactivity within specified limits. Calculations of the impact of a radiological release on public health and safety are dependent upon predictable leakage from the containment. The required tests, and their documentation, ensure that the containment is built and maintained as designed, and that leakage limits are not exceeded.

2. Agency Use of Information

Preoperational leakage tests are the only means to verify that containment structures have in fact been built within the leakage levels specified as a condition of licensing by the NRC. Information included in the on-site licensee records is reviewed to determine the results achieved, as well as to judge the accuracy and validity (reliability) of the data.

The records of the periodic leakage tests are needed by the NRC in order to verify, on an audit basis, that containment leakage is maintained below the specified level throughout its operational life. Periodic information is needed for the same reasons as preoperational test information, but in addition, is compared with that in the preoperational test report and previous periodic test reports.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

The provisions of this regulation are not duplicated by other government regulations. The Information Requirements Control Automated System (IRCAS) was searched for duplication, and none was found. Power reactor licensees are the only source for this information.

5. Effort to Reduce Small Business Burden

This information collection requirement does not affect small business.

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

The NRC would not be able to determine, in a timely fashion, whether structures have been built and maintained within limits that have been established to ensure the protection of the health and safety of the public.

7. Circumstances which Justify Variation from OMB Guidelines

Leakage test results, implementation plans and records of the performance-based testing program must be kept for the operating lifetime of each nuclear plant for reference purposes.

8. Consultations Outside the NRC

Notice of opportunity for public comment on the information collections has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

This information is usually not confidential or proprietary. If it is submitted as such, it is protected in accordance with 10 CFR 2.790 of the NRC's regulations.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

OPTION A

Those licensees remaining partially under Option A are expected to document Appendix J test results approximately every 3-1/3 years in a summary report that will be made available for inspection at plant sites. The number of licensees remaining partially under Option A during this clearance period is 4. Each summary report requires about 80 hours. The recordkeeping burden required to maintain the information to produce this report is 320 hours (80 x 4) every 3 1/3 years or approximately 100 hours annually.

OPTION B

40 hours annually are necessary for analysis and maintenance of the ongoing program for each licensee. This results in an estimated recordkeeping burden of 4,160 hours for this clearance period based on 104 licensees per year.

Based on the above, the total annual recordkeeping burden and cost for NRC licensees to comply with Appendix J is 4,260 hours at a cost of $600,660 (100 + 4160 X $141/hr).

See Table 1.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

The NRC has minimized recordkeeping requirements and has eliminated the reporting requirements in Appendix J, except for a one-time requirement to submit implementation plans for licensees adopting Option B which has been completed. The burden on the Federal government for inspection of records is estimated to be minimal. Costs to the NRC are fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

The total annual recordkeeping burden and cost to maintain compliance with Appendix J has decreased from 13,080 hours in the previous OMB clearance period to 4,260 hours for this clearance period because all licensees who wish to have converted partially or completely from Option A to Option B. In addition, the burden associated with producing the summary report required under Option A has been reestimated, resulting in a burden of 80 hours per licensee vs. the 354 hours originally estimated.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations to display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

TABLE 1
ANNUAL INDUSTRY BURDEN AND COST - RECORDKEEPING

Item	Number of Recordkeepers	Estimated Burden Per Recordkeeper	Total Estimated Burden Hours	Estimated Industry Cost @ $141/hr
OPTION A	4	80/3 1/3	100/yr	$14,100
OPTION B Development of performance based leakage program				
Analyses & maintenance of ongoing program	100	40	4,160/yr	$586,560
TOTAL RECORDKEEPING BURDEN			4,260/yr	$600,660

Section 33

DRAFT SUPPORTING STATEMENT
EARTHQUAKE ENGINEERING CRITERIA FOR NUCLEAR POWER PLANTS

Appendix S to 10 CFR Part 50, and 50.54(ff)

DESCRIPTION OF INFORMATION COLLECTION

Appendix S to Part 50, Earthquake Engineering Criteria for Nuclear Power Plants," requires applicants to provide the design bases for a nuclear power plant that will ensure that structures, systems, and components important to safety will be able to withstand the natural phenomena specified in General Design Criterion 2 of Appendix A to 10 CFR Part 50 and 10 CFR Part 100 (OMB Clearance No. 3150-0093) without loss of capability to perform their safety functions. Appendix S and 10 CFR 100, in combination, are a revision of Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants," to Part 100 and apply to applicants who apply for an early site permit, design certification, or combined license pursuant to 10 CFR Part 52, or a construction permit or operating license pursuant to 10 CFR Part 50 on or after January 10, 1997. No new applications are anticipated during this 3-year clearance period. Existing licensees must continue to meet the requirements of 10 CFR 100, Appendix A (3150-0093).

Paragraph IV(a)(3) of Appendix S states that if vibratory ground motion exceeds that of the Operating Basis Earthquake Ground Motion or if significant plant damage occurs, the licensee must shut down the nuclear power plant. If systems, structures, or components necessary for the safe shutdown of the nuclear power plant are not available after the occurrence of the Operating Basis Earthquake Ground Motion, the licensee must consult with the Commission and must propose a plan for the timely, safe shutdown of the nuclear power plant. Both **Paragraph IV(a)(3) of Appendix S and 10 CFR 50.54(ff)** require that prior to resuming operations, the licensee must demonstrate to the Commission that no functional damage has occurred to those features necessary for continued operation without undue risk to the health and safety of the public and the licensing basis is maintained.

A. JUSTIFICATION

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

In support of the agency's mission regarding adequate protection of public health and safety from seismic events, the NRC will need the information requested to assess the adequacy of proposed seismic design bases (siting and engineering) and the design bases for other geological hazards for nuclear power plants. It is to be submitted to the NRC as part of the application and supporting documentation (see the Section 1 Supporting Statement) for a construction permit, operating license, early site permit, design certification, or combined license for a nuclear power plant.

Moreover, Appendix S to Part 50, as well as 10 CFR 100.23, supplemented by the Standard Format, regulatory guides, and the Standard Review Plan, are used by applicants as general guidance in planning investigations of nuclear power plant sites and designing nuclear power plant structures, systems, and components important to safety to withstand the effects of natural phenomena such as earthquakes.

Information required by Paragraph IV(a)(3) of Appendix S and 10 CFR 50.54(ff) is needed by NRC to assess conditions for restart.

2. Agency Use of Information

The NRC reviews the geological and seismological information to determine the suitability of the proposed site for a nuclear plant and the suitability of the plant design bases established on the proposed site. A construction permit, early site permit, standard design certification, or combined license cannot be issued until these data have been reviewed and approved by the NRC.

New geological and seismological information that becomes known during the operating life of a plant is also evaluated on the basis of these criteria. The difficulties experienced with these criteria also serve as the basis for ongoing NRC research in the earth sciences.

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use; however, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

This information does not duplicate other information being provided to NRC. The Information Requirements Control Automated System (IRCAS) was searched, and no duplication was found.

All pertinent geological and seismological information concerning the nuclear site and the region around the site will be used in the analysis of that site, whether it is supplied by the applicant or not. Similarly, any available engineering and design data will be used, as applicable, in the design review of a proposed nuclear power plant whether it is a product of the criteria requirements or not. The availability of geological, seismological, or engineering data may reduce the applicant's effort related to site investigation or design.

5. Effort to Reduce Small Business Burden

This information collection does not affect small business.

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

Less frequent or no collection of information will result in serious delays in the licensing processes of nuclear power plants or potential additional risks to public health and safety.

7. Circumstances which Justify Variation from OMB Guidelines

There is no variation from the guidelines.

8. Consultation Outside the NRC

Notice of opportunity for public comment on the information collection has been published in the Federal Register.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary information is protected in accordance with the provisions specified in 10 CFR Part 2 of NRC's regulations.

11. Justification for Sensitive Questions

This regulation does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

This estimate is based on the requirement that nuclear power plant structures, systems, and components important to safety are designed to withstand the effects of earthquakes without loss of capability to perform their safety functions. In order for applicants to provide information that shows the functionality of structures, systems, and components to vibratory ground motion, suitable analysis, testing or qualification methods are employed. Based on an estimated industry burden associated with the seismic engineering of nuclear power plant structures, systems, and components of 775,000 over 5 years, the annual estimated industry burden is 155,000 hours at a cost of $21,855,000 (155,000 x $141/hour). However, no applications are anticipated during this 3-year clearance period.

Because of the relatively low seismicity near most plants, there is little likelihood that any plant would be required to shut down pursuant to paragraph IV(a)(3). However, in the event of a plant shutdown, approximately 320 hours of effort would be required to inspect the plant and document the inspection.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

The annual Federal burden for staff evaluation of nuclear power plant structures, systems, and components to ensure that they will perform their safety function without loss of capability is estimated at 3,000 hours per respondent. Additionally, consultants and staff from the U.S. Geologic survey and Department of Energy Laboratories would be employed by the NRC on a case-by-case basis to provide advice in activities related to staff reviews. It is anticipated that an average annual effort for these consultants would not exceed 300 hours or $42,300 (300 x $141/hour).

In the unlikely event that a plant would be shutdown pursuant to paragraph IV(a)(3), it is estimated that 80 hours would be required to review and assess conditions for restart.

The total annual cost per respondent to the Federal Government for activities related to Appendix S is estimated to be $476,580 (3,300 + 80 x $141/hour). This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 171.

No applications or plant shutdowns are anticipated during this 3-year clearance period.

15. Reasons for Changes in Burden or Cost

There is no change in burden.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

The requirement is contained in a regulation. Amending the Code of Federal Regulations 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.

Section 34

DRAFT OMB SUPPORTING STATEMENT FOR AN APPROACH FOR USING PROBABILISTIC RISK ASSESSMENT IN RISK-INFORMED DECISIONS ON PLANT-SPECIFIC CHANGES TO THE CURRENT LICENSING BASIS (Regulatory Guides RG-1.174 thru RG-1.178) (3150-0011)

Description of Information Collection

In the specific areas of In-Service Inspection (ISI, RG-1.178), In-Service Testing (IST, RG 1.175), Graded Quality Assurance (GQA, RG-1.176), Technical Specifications (TS, RG-1.177), and in an overall guide generically applicable to all four of these areas (RG-1.174), this new series of Regulatory Guides provides a risk-informed method for licensees to use in requesting changes to their current licensing bases (CLB), the requirements for which are stated or referenced in numerous sections of 10 CFR Part 50 as detailed below in Section A.1. No changes or additions have been made to those sections of Part 50 (nor to any other rules or regulations) in conjunction with the issuance of this series of guides. The new method is an alternative to the deterministically-based CLB change method (which will remain acceptable as an alternative to the new risk-informed method).

The new risk-informed alternative method allows licensees to concentrate on plant equipment and operations that are most critically important to plant safety. For example, existing regulations require certain quality assurance activities to be applied to a wide variety of a plant's systems, structures, and components (SSCs). Although the regulations allow these quality assurance activities to be applied in a way that is commensurate with the safety importance of each SSC, historical precedent has resulted in the same quality assurance activities being applied to SSCs that have a wide range of safety significance. This new risk-informed alternative encourages quality assurance activities that are compatible with safety significance, thus allowing more effort to be expended on the more important equipment, and correspondingly less effort on the less important equipment. In this way, a savings in total effort can be achieved with an insignificant change in overall safety. This savings, together with the greater operating flexibility that is possible utilizing the new method, are among the principal incentives for licensees to voluntarily assume the recordkeeping and reporting burdens that come with the new risk-informed method.

The guides specify the records, analyses, and documents that licensees are expected to prepare in support of risk-informed changes to their CLB in the specified areas. Within each of the four areas, the applicable Regulatory Guide (supplemented by additional generic guidance from the overall guide, RG-1.174) specifies that the licensee should consider the following four items. The licensee should:

1) identify those aspects of the plant's licensing bases that may be affected by the proposed change, including, but not limited to, rules and regulations, final safety analysis report (FSAR), technical specifications, licensing conditions, and licensing commitments; identify all SSCs, procedures, and activities that are covered by the CLB change under evaluation and consider the original reasons for inclusion of each

program requirement; and identify available engineering studies, methods, codes, applicable plant-specific and industry data and operational experience, PRA findings, and research and analysis results relevant to the proposed CLB change;

2) evaluate the proposed CLB change with regard to the principles that adequate defense-in-depth is maintained, that sufficient safety margins are maintained, and that proposed increases in core damage frequency and risk are small and are consistent with the intent of the Commission's Safety Goal Policy Statement;

3) develop an implementation and monitoring plan to ensure that the engineering evaluation conducted to examine the impact of the proposed changes continues to reflect the actual reliability and availability of SSCs that have been evaluated, and to ensure that the conclusions which have been drawn from the evaluation remain valid; and

4) review the proposed CLB change in order to determine the appropriate form of the change request; assure that information required by the relevant regulations(s) in support of the request is developed; and prepare and submit the request in accordance with relevant procedural requirements (for those applications where submittal is required, as specified later in this document).

Changes in NRC expectations regarding licensee recordkeeping and reporting in the technical areas due to a licensee's voluntary use of the new alternative risk-informed method for requesting CLB changes, are the subject of this supporting statement. Part 50 supporting statements describing the current bases for OMB's recordkeeping and reporting approval in these technical areas are as follows:

Section 17 of the current 10 CFR Part 50 OMB clearance covers the recordkeeping and reporting burdens for **inservice inspection and inservice testing** programs. Not included in Section 17 are the recordkeeping and reporting needed to convert the bases of ISI and/or IST programs to the new risk-informed CLB change methodology (a one-time-only effort, as described in items #1, #2, and #4 above), and the recordkeeping and reporting associated with the implementation and monitoring plan that is expected to be an integral part of these Risk-Informed (RI) programs (an ongoing effort, as described in item 3 above, to ensure that no unexpected adverse safety degradation occurs after the requested changes have been made). However, the burden for CLB changes, including but not limited to CLB changes related to In-Service Inspection (ISI) and In-Service Testing (IST), is covered in Section 1 of the OMB clearance for 10 CFR Part 50 (license amendments).

Section 16 of the current 10 CFR Part 50 OMB clearance covers 10 CFR Part 50, Appendix B, which contains NRC's requirements regarding the features of the **quality assurance** (QA) programs that each licensee must establish, update, and follow throughout the life of the plant. Appendix B to 10 CFR Part 50 allows QA activities to be applied in a graded manner, and because there is variety in the exact commitment made by individual licensees in their CLB regarding QA programs, licensees can adopt certain aspects of graded QA programs without prior NRC approval. The last paragraph of Section A.1 of Section 16 states:

"Any changes to this {QA} plan must be reported to the NRC like other license conditions of a similar nature. It is estimated that each licensee/applicant will initiate one such change per year. Such changes are included in the total license amendment requests reflected in the Section 1 Supporting Statement."

Thus the burden for CLB changes, including but not limited to CLB changes related to QA, is covered in Section 1 of the OMB clearance for 10 CFR Part 50 (license amendments).

Section 1 of the Part 50 clearance covers the recordkeeping and reporting required for technical specifications. Technical specifications are required to be part of a licensee's operating license, and license amendments are issued in response to requests for changes to technical specifications. License amendments for technical specifications changes have been anticipated for the clearance period, and the anticipated recordkeeping and reporting requirements burden has been included within Section 1. Over the past several years, applications for license amendments for technical specification changes have made increasing use of quantitative risk evaluations (i.e., the requests have become more "risk-informed"). Thus, the subject RG-1.177 serves more to codify and standardize existing practice than it does to significantly change that practice. Thus, many of the recordkeeping and reporting expectations associated with conversion to, and later maintenance of, risk-informed technical specification changes are already included within Section 1. This includes the implementation and monitoring plan, since technical specifications are required only for significant, safety-related equipment for which implementation and monitoring activities are currently required by 10 CFR 50.65.

A. JUSTIFICATION

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

In cases where the licensee chooses to convert from the present deterministically oriented CLB to the new alternative risk-informed CLB in any one of (or combination of) the subject technical areas, the licensee and the NRC must have sufficient information to determine that the plant continues to be operated in a manner that ensures the health and safety of the public once the changes have been implemented.

The information expected to be collected for the above-stated purpose in each of the technical areas considered by the subject Regulatory Guides is specified in various sections of 10 CFR Part 50, as described below. These regulations remain unchanged by issuance of the subject Regulatory Guides. Only the method for compliance has been changed. The current regulations are:

In-Service Inspection (ISI, RG-1.178, and the generically applicable RG-1.174):

10 CFR 50.55a(g) "Inservice inspection requirements," specifies in detail, according to the date of issuance of the plant's construction permit, the editions of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda to which the inservice inspection of the plant's piping and pressure boundary equipment must comply, including the reporting and recordkeeping that is expected as part of the licensee's ISI program.

In order for the licensee to ensure, and the NRC to verify, that the requirements of this regulation (and the referenced codes and addenda) continue to be met following changes to the licensee's ISI program, in those cases where the licensee chooses to use the risk-informed alternative method for requesting such changes, the NRC expects the licensee to document and submit its consideration of the four items described in the above "Description of the Information Collection" section. This documentation is used by the NRC as indicated in Section A.2 below.

The NRC expects licensees to maintain sufficient information regarding how the plant meets its CLB to support NRC audit of these bases at any time such audit should become necessary. However, the details regarding the related documentation that must be maintained, and for how long, are not explicitly provided in the regulations (other than that provided by the records-retention aspects of 10 CFR 50.71(c), which are discussed in the next-to-last paragraph under "Technical Specifications" below).

Licensee requests for CLB changes to various portions of their inservice inspection programs are voluntary. The availability of the new risk-informed alternative for requesting such changes in no way makes the licensee's present inservice inspection program unacceptable. Each licensee will therefore request such a change if and when the licensee decides it is to its advantage (by virtue of concentrating its inspection efforts on the more risk-significant portions of its piping and pressure boundaries, and by the resulting increased operating flexibility) to request such a change. Therefore, the frequency of inservice inspection program change submittals using the risk-informed alternative method is not known with any certainty, although the staff's best estimates are used in item 12 below ("Estimate of Burden").

In-Service Testing (IST, RG-1.175, and the generically applicable RG-1.174):

10 CFR 50.55a(f), "Inservice testing requirements," specifies in detail, according to the date of issuance of the plant's construction permit, the editions of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda to which the inservice testing of the plant's pumps and valves must comply, including the reporting and recordkeeping that is expected as part of the licensee's IST program.

In order for the licensee to ensure, and the NRC to verify, that the requirements of this regulation (and the referenced codes and addenda) continue to be met following changes to the licensee's IST program, in those cases where the licensee chooses to use the risk-informed alternative method for requesting such changes, the NRC expects the licensee to document and submit its consideration of the four items described in the above "Description of the Information Collection" section. This documentation is used by the NRC as indicated in Section A.2 below.

The NRC expects licensees to maintain sufficient information regarding how the plant meets its CLB to support NRC audit of these bases at any time such audit should become necessary. However, the details regarding the related documentation that must be maintained, and for how long, are not explicitly provided in the regulations (other than that provided by the records-retention aspects of 10 CFR 50.71(c), which are discussed in the next-to-last paragraph under "Technical Specifications" below).

Licensee requests for CLB changes to various portions of their inservice testing programs are voluntary. The availability of the new risk-informed alternative for requesting such changes in no way makes the licensee's present inservice testing program unacceptable. Each licensee will therefore request such a change if and when the licensee decides it is to its advantage (by virtue of concentrating its testing efforts on the more risk-significant pumps and valves, and by the resulting increased operating flexibility) to request such a change. Therefore, the frequency of inservice testing program change submittals using the risk-informed alternative method is not known with any certainty, although the staff's best estimates are used in item 12 below ("Estimate of Burden").

Quality Assurance (GQA, RG-1.176, and the generically applicable RG-1.174):

Appendix B to 10 CFR Part 50, "Quality Assurance Criteria," describes the requirements of the quality assurance (QA) program that must be documented and applied to all activities affecting the safety-related functions of the plant's equipment, including the reporting and recordkeeping that is expected as part of the licensee's QA program. The overall purpose of the QA program is to establish a set of systematic and planned actions that are necessary to provide adequate confidence that safety-related plant equipment will perform satisfactorily in service.

The requirements delineated in Appendix B to 10 CFR Part 50 allow QA program controls to be applied in a "graded" manner, that is, with greater efforts applied to QA programs related to more safety significant equipment and activities, and lesser efforts applied to QA programs related to less safety significant equipment and activities. In the past, engineering judgement provided the general mechanism for evaluating the relative importance to safety of plant equipment and activities, resulting in little advantage being taken of the regulation's provision that graded QA programs could be applied. The new risk-informed alternative for making QA program changes (described in the subject RG-1.176) encourages graded QA (GQA) programs by providing a more systematic methodology for categorizing safety-related equipment and activities according to their safety importance, and for applying commensurate QA activities to each category.

In order for licensees to ensure that the requirements of Appendix B to 10 CFR Part 50 continue to be met following changes to the licensee's QA program, in those cases where the licensee chooses to use the risk-informed alternative method for requesting such changes, the NRC expects licensees to document their consideration of the four items described in the above "Description of the Information Collection" section. Because the governing regulation (Appendix B to 10 CFR Part 50) allows QA activities to be applied in a graded manner, and because there is variety in the exact commitment made by individual licensees in their CLB regarding QA programs, certain licensees can adopt certain aspects of graded QA programs without prior NRC approval. However, in those cases, the NRC expects licensees to document their consideration of the above-described four items for NRC's use during later audits of their QA program. This documentation may be used by NRC as indicated in Section A.2 below.

The NRC expects licensees to maintain sufficient information regarding how the plant meets its CLB to support NRC audit of these bases at any time such audit should become necessary. However, the details regarding the related documentation that must be maintained, and for how long, are not explicitly provided in the regulations (other than that provided by the records-retention aspects of 10 CFR 50.71(c), which are discussed in the next-to-last paragraph under "Technical Specifications" below).

Licensee requests for CLB changes to various portions of their quality assurance programs are voluntary. The availability of the new risk-informed alternative for requesting such changes in no way makes the licensee's present quality assurance program unacceptable. Each licensee will therefore request QA program changes if and when the licensee decides it is to its advantage (by virtue of concentrating its QA efforts on the more risk significant SSCs and activities in its plant, and by the resulting increased operating flexibility) to request such a change. Therefore, the frequency of QA program change submittals using the risk-informed alternative method is not known, although the staff's best estimates are used in item 12 below ("Estimate of Burden").

Technical Specifications (TS, RG-1.177, and the generically applicable RG-1.174):

10 CFR 50.36, "Technical Specifications," requires that technical specifications be included as part of the plant's license specifying certain safety and control limits and settings, limiting conditions for operations, surveillance requirements, design features, administrative controls, and required notifications and reports, and it includes specification of the reporting and recordkeeping that is expected as part of the licensee's TS program. Requests for changes to technical specifications are submitted as applications for amendments to the plant's operating license.

Over the past several years, applications for license amendments for technical specification changes have made increasing use of quantitative risk evaluations (i.e., the requests have become more "risk-informed"). Thus, issuance of the subject RG-1.177 serves more to codify and standardize existing practice than it does to significantly change that practice.

In order for the licensee to ensure, and the NRC to verify, that the requirements of this regulation continue to be met following changes to the licensee's TS program, the NRC expects the licensee to document and submit its consideration of the four items described in the above "Description of the Information Collection" section. This documentation is used by the NRC as indicated in Section A.2 below.

10 CFR 50.71(c) states, "Records that are required by the regulations in this part, by license condition, or by technical specifications, must be retained for the period specified by the appropriate regulation, license condition, or technical specification. If a retention period is not otherwise specified, these records must be retained until the Commission terminates the facility license." Thus, the required retention period varies according to the particular regulations, license conditions, or technical specifications that govern the particular aspect of the plant's CLB that is being changed.

Licensee requests for license amendments for technical specification changes are usually voluntary, but are sometimes in response to regulatory changes or regulatory positions that reflect changes in risk perspectives (for example, as caused by the occurrence of a significant operating event).

2. Agency Use of Information

In-Service Inspection (RG-1.178, and the generically applicable RG-1.174):

The information expected as described in Section A.1 will be used by responsible NRC personnel to make the finding that the requirements of the plant's CLB in areas related to inservice inspection will continue to be satisfied once the requested changes are made, thus insuring the continuing validity of the plant's operating license.

In-Service Testing (RG-1.175, and the generically applicable RG-1.174):

The information expected as described in Section A.1 will be used by responsible NRC personnel to make the finding that the requirements of the plant's CLB in areas related to inservice testing will continue to be satisfied once the requested changes are made, thus insuring the continuing validity of the plant's operating license.

Quality Assurance (RG-1.176, and the generically applicable RG-1.174):

For licensees whose license requires NRC approval prior to implementation of the specific type of QA change being requested (see discussion in Section A.1), the submitted information (also described in Section A.1) is used by the responsible NRC personnel to make the finding that the QA requirements will continue to be met once the requested QA changes are made. For licensees whose license does not require prior approval (see discussion in Section A.1), the same information should be used by the licensee to determine that the QA requirements will continue to be met once the requested changes are made, and also should be retained on-site for possible NRC inspection to confirm that the plant continues to conform to its CLB in areas related to quality assurance.

Technical Specifications (RG-1.177, and the generically applicable RG-1.174):

The information expected as described in Section A.1 will be used by responsible NRC personnel in the review and approval of the requested license amendment, thus insuring the continuing validity of the plant's operating license once the requested technical specification changes are made.

3. Reduction of Burden Through Information Technology

Because each submittal is unique, is made only once, and is unlikely to be developed from other compiled information sources, the reports do not lend themselves readily to the use of technological collection techniques for submission. Thus, no reports are submitted electronically, and the NRC foresees no opportunity to reduce the burden of information submittal through the use of information technology.

4. Effort to Identify Duplication and Use Similar Information

These are licensing submittals describing the CLB of the plant. Each submittal is a unique combination of information which is assembled by the licensee for a specific purpose for its specific plant. No similar information exists. The Information Requirements Control Automated System (IRCAS) was searched and no duplication was found.

5. Effort to Reduce Small Business Burden

Not applicable. These submittals are prepared by licensees of nuclear power plants, which are not small businesses.

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

These voluntary collections are not required on a specified frequency (or at all). The only effect on Federal Programs of not receiving information, or receiving it less frequently, would be that of not allowing licensees the possible savings in resources and the increased operating flexibility that would otherwise result from such submittals.

7. Circumstances which Justify Variation from OMB Guidelines

These records and reports become part of the licensing basis of the plant (or the license itself, as noted in the sections that discuss technical specifications). The NRC expects licensees to maintain sufficient information regarding how the plant meets its CLB to support NRC audit of these bases at any time such audit should become necessary. However, the details regarding how much related documentation must be maintained, and for how long, are not explicitly provided in the regulations (other than that provided by the records-retention aspects of 10 CFR 50.71(c), which are discussed in the next-to-last paragraph under "Technical Specifications" above).

8. Consultations Outside NRC

Opportunity for public comment on the risk-informed regulatory guides was published in the Federal Register on 2/28/98 (63FR8222) and changes were made in the guides to reduce regulatory burden in response to the comments. No changes are made to the OMB clearance package in response to comments that the burden estimates were over estimated. NRC prefers to stay with the present conservative assumption until experience shows that the resulting burden estimates were too high.

Notice of opportunity for public comment on the information collection has been published in the Federal Register.

9. Payment of Gift to Respondents

Not applicable.

10. Confidentiality of the Information

No information normally considered confidential is required.

11. Justification for Sensitive Questions

No sensitive information is requested.

12. Estimate of Burden and Burden Hour Cost

ISI and IST burdens are included in Section 17 of the OMB clearance for 10 CFR Part 50. However, the burden for CLB changes, including but not limited to CLB changes related to ISI and IST, is covered in Section 1 of the OMB clearance for 10 CFR Part 50 (license amendments). The number of licensing submittals listed in the tables below for ISI and IST are the additional annual submittals that are anticipated as a result of the new risk-informed alternative method. These submittals were not anticipated under the present methodology, and thus are not covered by Section 17 and 1 of the present OMB clearance.

Plant licenses require that the sections of the licensees' Final Safety Analysis Reports (FSARs) that describe its ISI program be updated when the ISI programs are changed, e.g., when a risk-informed ISI program is adopted. This is a relatively minor effort since the necessary information will already have been collected in support of the submittal that requests the change. The "FSAR update" burden is shown on a separate line in the "reporting burden" table below.

QA burdens are included in Section 16 of the OMB clearance for 10 CFR Part 50. However, the burden for CLB changes, including but not limited to CLB changes related to QA, is covered in Section 1 of the OMB clearance for 10 CFR Part 50 (license amendments). The single submittal listed in the tables below for GQA is the single additional annual submittal that is anticipated as a result of the new risk-informed alternative method. This submittal was not anticipated under the present methodology, and thus is not covered by Section 16 and 1 of the present OMB clearance.

Burdens for all types of TS changes are included in Section 1 (license amendments) of the OMB clearance package for 10 CFR 50. Section 1 includes, but is not limited to, the relatively small sub-set of all TSs that are related to allowed outage times (AOTs) and surveillance test intervals (STIs), which are the only types of TSs that can be changed utilizing the new risk-informed alternative method presented by the subject regulatory guides. Because the burden is accounted for in Section 1, no additional burden is included in this section.

ANNUAL REPORTING REQUIREMENTS
FOR SUBMITTALS REQUESTING RI PROGRAM APPROVALS

Section/ Reg. Guide	Number of Lic. Submittals	Hours per Submittal	Total Annual Burden (Hrs.)	Cost @ $141/Hr.
10CFR50.55a(g) RG-1.178, ISI	6	530	3,180	$448,380
(FSAR Update)	6	20	120	16,920
10CFR50.55a(f) RG-1.175, IST	3	550	1,650	232,650
10CFR50 App B RG-1.176, GQA	1	550	550	77,550
TOTALS	16		5,500	$775,500

ANNUAL RECORDKEEPING REQUIREMENTS
TO SUPPORT SUBMITTALS REQUESTING RI PROGRAM APPROVALS

Section/ (Reg. Guide)	Number of Lic. Program Chngs.	Hours per Program Chng.	Total Annual Burden (Hrs.)	Cost @ $141/Hr.
10CFR50.55a(g) RG-1.178, ISI	6	3,750	22,500	$3,172,500
10CFR50.55a(f) RG-1.175, IST	3	2,250	6,750	951,750
10CFR50 App B RG-1.176, GQA	1	2,250	2,250	317,250
TOTALS	10		31,500	$4,441,500

ANNUAL RECORDKEEPING REQUIREMENTS
TO SUPPORT IMPLEMENTATION AND MONITORING PLAN

Section/ (Reg. Guide)	Number[1] of Lic. Program Chngs.	Hours per Program Chng.	Total Annual Burden (Hrs.)	Cost @ $141/Hr.
10CFR50.55a(g) RG-1.178, ISI	12	200	2,400	$338,400
10CFR50.55a(f) RG-1.175, IST	6	200	1,200	169,200
10CFR50 App B RG-1.176, GQA	2	200	400	56,400
TOTAL	20		400	$564,000

13. Estimate of Other Additional Costs

There are no additional known costs.

14. Estimated Annualized Cost to the Government

The following tables and text present this information.

ANNUAL GOVERNMENT REVIEW OF
REQUESTS FOR RI PROGRAM APPROVAL

Section/ (Reg. Guide)	Number of Reviews	Hours per Review	Total Annual Review (Hrs.)	Gov. Cost @ $141/Hr.
10CFR50.55a(g) RG-1.178, ISI	6	1,000	6,000	$846,000
10CFR50.55a(f) RG-1.175, IST	3	1,000	3,000	423,000
10CFR50 App B RG-1.176, GQA	1	750	750	105,750
TOTAL	10		9,750	$1,374,750

[1]Recordkeeping for the implementation and monitoring plan is a continuing effort. After making a risk-informed change in the CLB, each licensee would be expected to expend this effort every year on a continuing basis. Thus, in the first year there will be (using, for example, ISI, for which the tables on the previous page indicate 6 submittals are expected each year) 6 such efforts in the first year, 12 such efforts in the second year, and 18 such efforts in the third year, for an average per year for the three year reporting period of (6 + 12 + 18) / 3 = 36 / 3 = 12. This same calculation has been applied to the recordkeeping for the submittals expected each year for ISI, IST, and GQA, (as given in the recordkeeping table on the previous page).

ANNUAL GOVERNMENT REVIEWS/AUDITS OF RECORDS
SUPPORTING IMPLEMENTATION AND MONITORING PLAN

Section/ (Reg. Guide)	Number[2] of Reviews/Audits	Hours per Review/Audit	Total Annual Rev./Aud. (Hrs.)	Cost @ $141/Hr.
10CFR50.55a(g) RG-1.178, ISI	12	50	600	$84,600
10CFR50.55a(f) RG-1.175, IST	6	40	240	33,840
10CFR50 App B RG-1.176, GQA	1	45	45	6,345
TOTAL	19		885	$124,785

This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reason for Change in Burden or Cost

The burden for the risk-informed guidance has decreased since it was approved by OMB because burden was included in the original submittal for risk-informed technical specification changes. Staff has subsequently, re-evaluated this burden and has concluded that the burden is already included in Section 1 of this clearance renewal for amendment requests.

16. Publication for Statistical Use

This information will not be published for statistical use.

17. Reason for Not Displaying the Expiration Date

The information collections contained in these regulatory guides are contained in a regulation. Revising the guides merely to update the expiration date unnecessarily expends scarce agency resources.

18. Exceptions to the Certification Statement

There are no exceptions.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods are not used in this collection of information.

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[2]See footnote #1 (under previous table related to recordkeeping for implementation and monitoring plan)