REPLACES SF83 (REV. 3-81)

REQUEST FOR OMB REVIEW

INTERIM USE FORM SF 83 FOR USE BEGINNING 4-83

IMPORTANT — READ INSTRUCTIONS BEFORE COMPLETING FORM. DO NOT USE THE SAME SF 83 TO SIMULTANEOUSLY REQUEST AN EXECUTIVE ORDER 12291 REVIEW AND APPROVAL UNDER THE PAPERWORK REDUCTION ACT.

ANSWER ALL QUESTIONS IN PART I. IF THIS REQUEST IS FOR REVIEW UNDER E.O. 12291, COMPLETE PART II AND SIGN THE CERTIFICATION. IF THIS REQUEST IS FOR APPROVAL UNDER THE PAPERWORK REDUCTION ACT AND 5 CFR 1320, SKIP PART II, COMPLETE PART III AND SIGN THE CERTIFICATION.

SEND THREE COPIES OF THIS FORM, THE MATERIAL TO BE REVIEWED, AND FOR PAPERWORK -- THREE COPIES OF THE SUPPORTING STATEMENT TO: OFFICE OF INFORMATION AND REGULATORY AFFAIRS, OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, D.C. 20503 -ATTENTION DOCKET LIBRARY ROOM 3201

PART I.

1. DEPARTMENT/AGENCY and BUREAU/OFFICE ORIGINATING REQUEST: U.S. Nuclear Regulatory Commission

2. AGENCY CODE: 3150

3. NAME AND TELEPHONE NUMBER OF PERSON WHO CAN BEST ANSWER QUESTIONS REGARDING THIS REQUEST: Hazel Smith, (301) 492-8972; Jerry Carter, (301)492-8434

4. TITLE OF INFORMATION COLLECTION OR RULEMAKING: 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities"

5. LEGAL AUTHORITY FOR INFORMATION COLLECTION OR RULE (CITE UNITED STATES CODE, PUBLIC LAW, OR EXECUTIVE ORDER): 10 CFR 50; ER Act of 1974; AE Act of 1954, as amended

6. AFFECTED PUBLIC (CHECK ALL THAT APPLY)
- [ ] 1. INDIVIDUALS OR HOUSEHOLDS
- [X] 2. STATE OR LOCAL GOVERNMENTS
- [ ] 3. FARMS
- [X] 4. BUSINESSES OR OTHER FOR-PROFIT
- [X] 5. FEDERAL AGENCIES OR EMPLOYEES
- [X] 6. NON-PROFIT INSTITUTIONS
- [ ] 7. SMALL BUSINESSES OR ORGANIZATIONS

PART II. COMPLETE THIS PART ONLY IF THE REQUEST IS FOR OMB REVIEW UNDER EXECUTIVE ORDER 12291.

7. REGULATORY INFORMATION NUMBER (RIN)

8. TYPE OF SUBMISSION

CLASSIFICATION
- [ ] 1. MAJOR
- [ ] 2. NONMAJOR

STAGE OF DEVELOPMENT
- [ ] 1. PROPOSED OR DRAFT
- [ ] 2. FINAL OR INTERIM FINAL, WITH PRIOR PROPOSAL
- [ ] 3. FINAL OR INTERIM FINAL, WITHOUT PRIOR PROPOSAL

TYPE OF REVIEW REQUESTED
- [ ] 1. STANDARD
- [ ] 2. PENDING
- [ ] 3. EMERGENCY
- [ ] 4. STATUTORY OR JUDICIAL DECREE

9. CFR SECTION AFFECTED: ____ CFR ____

10. DOES THIS REGULATION CONTAIN REPORTING OR RECORD-KEEPING REQUIREMENTS THAT REQUIRE OMB APPROVAL UNDER THE PAPERWORK REDUCTION ACT AND 5 CFR 1320? YES [ ] NO [ ]

11. IF A MAJOR RULE, IS THERE A REGULATORY IMPACT ANALYSIS ATTACHED? 1. YES [ ] 2. NO [ ] — IF NO, DID OMB WAIVE THE ANALYSIS? 3. YES [ ] 4. NO [ ]

12. DOES THIS REGULATION AFFECT ANY TRADE SENSITIVE ACTIVITY? YES [ ] NO [ ]

CERTIFICATION FOR REGULATORY SUBMISSIONS: IN SUBMITTING THIS REQUEST FOR OMB REVIEW, THE AUTHORIZED REGULATORY CONTACT AND THE PROGRAM OFFICIAL CERTIFY THAT THE REQUIREMENTS OF E.O. 12291 AND ANY APPLICABLE POLICY DIRECTIVES HAVE BEEN COMPLIED WITH.

SIGNATURE OF PROGRAM OFFICIAL	DATE	SIGNATURE OF AUTHORIZED REGULATORY CONTACT	DATE
8509230605 850717 PDR REVGP NRGCRGR MEETING079 PDR			

PART III. COMPLETE THIS PART ONLY IF THE REQUEST IS FOR APPROVAL OF A COLLECTION OF INFORMATION UNDER THE PAPERWORK REDUCTION ACT AND 5 CFR 1320.

13. ABSTRACT - DESCRIBE NEEDS, USES AND AFFECTED PUBLIC IN 50 WORDS OR LESS

10 CFR Part 50 of the NRC's regulations, "Domestic Licensing of Production and Utilization Facilities," specifies technical information and data to be provided by applicants and licensees so that the NRC may make determinations necessary to promote the health and safety of the public, in accordance with the Act.

14. TYPE OF INFORMATION COLLECTION (CHECK ONE ONLY)

INFORMATION COLLECTIONS NOT CONTAINED IN RULES
- [X] 1. REGULAR SUBMISSION
- [ ] 2. EMERGENCY SUBMISSION (CERTIFICATION ATTACHED)

INFORMATION COLLECTIONS CONTAINED IN RULES
- [X] 3. EXISTING REGULATION (NO CHANGE PROPOSED)
- [ ] 4. NOTICE OF PROPOSED RULEMAKING (NPRM)
- [ ] 5. FINAL, NPRM WAS PREVIOUSLY PUBLISHED
- 6. FINAL OR INTERIM FINAL WITHOUT PRIOR NPRM
  - [ ] A. REGULAR SUBMISSION
  - [ ] B. EMERGENCY SUBMISSION (CERTIFICATION ATTACHED)

DATE OF EXPECTED OR ACTUAL FEDERAL REGISTER PUBLICATION AT THIS STAGE OF RULEMAKING — _____ ____, 19____

15. TYPE OF REVIEW REQUESTED (CHECK ONE ONLY)
- [ ] 1. NEW COLLECTION
- [X] 2. REVISION OF A CURRENTLY APPROVED COLLECTION
- [ ] 3. EXTENSION OF THE EXPIRATION DATE OF A CURRENTLY APPROVED COLLECTION WITHOUT ANY CHANGE IN THE SUBSTANCE OR IN THE METHOD OF COLLECTION
- [ ] 4. REINSTATEMENT OF A PREVIOUSLY APPROVED COLLECTION FOR WHICH APPROVAL HAS EXPIRED
- [ ] 5. EXISTING COLLECTION IN USE WITHOUT AN OMB CONTROL NUMBER

16. AGENCY REPORT FORM NUMBER(S)

N/A

17. ANNUAL REPORTING OR DISCLOSURE BURDEN

1. NUMBER OF RESPONDENTS	202
2. NUMBER OF RESPONSES PER RESPONDENT	Varies
3. TOTAL ANNUAL RESPONSES (1 x 2)	2,126
4. HOURS PER RESPONSE	Varies
5. TOTAL HOURS (3 x 4)	2,594,178

18. ANNUAL RECORDKEEPING BURDEN

1. NUMBER OF RECORDKEEPERS	202
2. ANNUAL HOURS PER RECORDKEEPER	Varies
3. TOTAL RECORDKEEPING HOURS (1 x 2)	1,283,674
4. RECORDKEEPING RETENTION PERIOD	Life YEARS

19. TOTAL ANNUAL BURDEN

1. REQUESTED (17-5 + 18-3)	3,877,852
2. IN CURRENT OMB INVENTORY	6,021,170
3. DIFFERENCE (1 - 2)	(2,143,318)
EXPLANATION OF DIFFERENCE	
4. PROGRAM CHANGE	(2,143,318)
5. ADJUSTMENT	±

20. CURRENT (MOST RECENT) OMB CONTROL NUMBER OR COMMENT NUMBER

3150-0011

21. REQUESTED EXPIRATION DATE

April 30, 1988

22. PURPOSE OF INFORMATION COLLECTION (CHECK AS MANY AS APPLY)
- [ ] 1. APPLICATION FOR BENEFITS
- [ ] 2. PROGRAM EVALUATION
- [ ] 3. GENERAL PURPOSE STATISTICS
- [X] 4. REGULATORY OR COMPLIANCE
- [ ] 5. PROGRAM PLANNING OR MANAGEMENT
- [ ] 6. RESEARCH
- [ ] 7. AUDIT

23. FREQUENCY OF RECORDKEEPING OR REPORTING (CHECK ALL THAT APPLY)
- [X] 1. RECORDKEEPING
- REPORTING
  - [X] 2. ON OCCASION
  - [ ] 3. WEEKLY
  - [X] 4. MONTHLY
  - [ ] 5. QUARTERLY
  - [ ] 6. SEMI-ANNUALLY
  - [X] 7. ANNUALLY
  - [ ] 8. BIENNUALLY
  - [X] 9. OTHER -DESCRIBE

As needed to promote the health and safety of the public.

24. RESPONDENTS OBLIGATION TO COMPLY (CHECK THE STRONGEST OBLIGATION THAT APPLIES)
- [ ] 1. VOLUNTARY
- [ ] 2. REQUIRED TO OBTAIN OR RETAIN A BENEFIT
- [X] 3. MANDATORY

25. ARE THE RESPONDENTS PRIMARILY EDUCATIONAL AGENCIES OR INSTITUTIONS OR IS THE PRIMARY PURPOSE OF THE COLLECTION RELATED TO FEDERAL EDUCATION PROGRAMS?

YES [ ] NO [X]

26. DOES THE AGENCY USE SAMPLING TO SELECT RESPONDENTS OR DOES THE AGENCY RECOMMEND OR PRESCRIBE THE USE OF SAMPLING OR STATISTICAL ANALYSIS BY RESPONDENTS?

YES [ ] NO [X]

27. REGULATORY AUTHORITY FOR THE INFORMATION COLLECTION

10 CFR 50 , or

_____ FR _____ , or

OTHER (SPECIFY) _____

PAPERWORK CERTIFICATION: IN SUBMITTING THIS REQUEST FOR OMB APPROVAL, THE AGENCY HEAD, THE SENIOR OFFICIAL OR AN AUTHORIZED REPRESENTATIVE, CERTIFIES THAT THE REQUIREMENTS OF THE PRIVACY ACT AND OMB DIRECTIVES HAVE BEEN COMPLIED WITH INCLUDING PAPERWORK REGULATIONS, STATISTICAL STANDARDS OR DIRECTIVES, AND ANY OTHER INFORMATION POLICY DIRECTIVES PROMULGATED UNDER THE PAPERWORK REDUCTION ACT OF 1980.

SIGNATURE OF PROGRAM OFFICIAL	DATE	SIGNATURE OF AGENCY HEAD OR THE SENIOR OFFICIAL OR AN AUTHORIZED REPRESENTATIVE	DATE
N/A		Patricia G. Norry	7-5-85

SUMMARY OF SUPPORTING STATEMENTS

10 CFR 50

Part	Subject	Annual Burden Hours Per Respondent	Number of Respondents Annually	Annual Recordkeeping Burden Hours[1]	Annual Reporting Burden Hours	Total Annual Burden Hours	Total Annual Cost To Industry	Annual Cost to Federal Government
1	Applications 50.30, 50 30a, 50.33, 50.34, 50.54(bb), and 50.55(d)	0	0 (new applications not expected for the next 3 years)	0	0	0	0	0
	50.55b, Const. Permit Ext.	200	23	460	4,140	4,600	$276,000	$138,000
	Appendix K; 50.33a and Appendix L; Appendicies M, N, O and Q; 50.34(f), TMI	0	0	0	0	0	0	0
	50.36 and 50.36a, Tech Specs		(delineated in Part 2 of the Supporting Statements)					
	50.59(c), 50.90, 50.91(a) and (b), License Amend. Appl.	168	95	1,600	14,400	16,000	$960,000	$1,020,000

[1] Based on 10% of total burden, except in the areas of Technical Specifications (Part 2); QA (Part 3); 50.59(b) reports (Part 12); and EQ (Part 20). See supportive discussion in the cognizant statements and in the letter to OMB.

SUMMARY OF SUPPORTING STATEMENTS

10 CFR 50

Part	Subject	Annual Burden Hours Per Respondent	Number of Respondents Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Total Annual cost To Industry	Annual Cost to Federal Government
	Appendices A&B, 50.55a, 50.55(f)-QA Records	(Delineated in Part 3 of the Supporting Statements)						
	50.54(cc), 50.54(dd) and 50.74 (proposed)	(Burden will be imposed when the rules become final)						
	50.80(b)	0	0	0	0	0	0	0
	50.82, license termination	0	0	0	0	0	0	$115,200 (for in-house applications)
2	50.36, Tech Specs	2047	168	192,000	151,970	343,970	$20,638,200	$957,600
3	Appendices, A&B, 50.55a 50.55(f)-QA	12,458	131	669,104	962,856	1,631,960	$97,917,600	$9,791,760

SUMMARY OF SUPPORTING STATEMENTS

10 CFR 50

Part	Subject	Annual Burden Hours Per Respondent	Number of Respondents Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Total Annual cost To Industry	Annual Cost to Federal Government
4	50.71, Bulletins and Generic Letters	4,800	40	39,200	352,800	392,000	$23,520,000	$960,000
5	50.48, Appendix R, Fire Protection	144	95	1,368	12,312	13,680	$820,800	$28,500
6	50.54(p), security	538	93	5,000	45,000	50,000	$3,000,000	$672,000
7	50.54(q, r, and t) Appendix E, Emerg. Planning	4,442	168	74,625	671,625	746,250	$44,775,000	$326,400
8	50.71(e) Updated FSAR	1,000	93	9,300	83,700	93,000	$5,580,000	$27,900
9	50.54(f) Oath or Affirm	408	202	8,250	74,250	82,500	$4,950,000	$580,800

SUMMARY OF SUPPORTING STATEMENTS

10 CFR 50

Part	Subject	Annual Burden Hours Per Respondent	Number of Respondents Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Total Annual cost To Industry	Annual Cost to Federal Government
10	50.72 Notification of Events	10	53	93	837	930	$55,800	$6,245,600
11	50.55(e) Design and Const. Deficiencies	500	34	1,700	15,300	17,000	$1,020,000	$294,000
12	50.59(b) Reports	2,000	168	268,800	67,200	336,000	$20,160,000	$806,400
13	Appendicies G and H; 50.60, Fracture Toughness	233	127	2,962	26,658	29,620	1,777,200	$86,400
14	Appendix J, Contain. Leakage	248	93	2,306	20,752	23,058	$1,383,480	$3,780
15	50.35(b) Periodic Reports	0	0	0	0	0	0	0

(See supportive discussion in the Statement regarding the negligible estimates)

SUMMARY OF SUPPORTING STATEMENTS

10 CFR 50

Part	Subject	Annual Burden Hours Per Respondent	Number of Respondents Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Total Annual cost To Industry	Annual Cost to Federal Government
16	50.71(b) and Appendix C, Financial	1	127	13	114	127	$7,620	$7,620
17	50.54(w)(4) Property Damage Insurance	4	50	20	180	200	$12,000	$720
18	50.34(g) Implementation of SRP	0	0 (see discussion in the statement with respect to negligible estimates)	0	0	0	0	0
19	50.44(c) Hydrogen Control	1,500	6	900	8,100	9,000	$540,000	$345,600
20	50.49, Environmental Qualification	622	127	5,080	73,940	79,020	$4,741,200 (Includes one-time cost to industry and Federal Gov. as discussed in Part 20)	$152,880
21	50.62 ATWS	52	127	660	5,944	6,604	$396,240 (one-time cost to Industry and the Federal Government)	$182,880

SUMMARY OF SUPPORTING STATEMENTS

10 CFR 50

Part	Subject	Annual Burden Hours Per Respondent	Number of Respondents Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Total Annual cost To Industry	Annual Cost to Federal Government
22	50.61 Pressurized Thermal Shock	35	66	233	2100	2,333	$139,980	$155,000
23	50.64 (proposed) Highly Enriched Uranium	0	0	0	0	0	0	0
			(Burden will be imposed when the rule becomes final)					
Totals:		31,410	2,126	1,283,674	2,594,178	3,877,852	$232,671,120	$22,985,440

Part 1

SUPPORTING STATEMENT

FOR

Application for Construction Permit or Operating License

10 CFR 50.30, 50.30a, 50.33, 50.33a, 50.34, 50.34a, 50.34c, 50.34d, 50.36, 50.36a, 50.54(bb), Proposed 50.54 (cc) and proposed 50.54(dd), 50.55(b), 50.55(d), 50.59(c), Proposed 50.74, 50.80, 50.82, 50.90, 50.91(a) and (b), and Appendices A, B, K, L, M, N, O and Q to CFR 50

JUSTIFICATION

The 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 Atomic Energy Act of 1954. 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 assure 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. Applicants are required by the Atomic Energy Act to provide such technical information and data that the NRC may determine necessary to assure the public health and safety.

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 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.

Upon receipt of an application, the NRC staff will perform 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 Section 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 and Final Safety Analysis Reports; 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.

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

The section of the regulation 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.

1. Construction Permit:

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

a. Contents of Applications:
General information (Section 50.33, 50.33(f) and Appendix C). Here the applicant is identified and his financial qualifications are detailed.

Section 50.33(f) requires applicants to submit financial information that demonstrates reasonable assurances 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. Appendix C outlines the informaton to be furnished by the applicant in the construction permit application to establish financial qualifications.

Information required for antitrust review must also be included in the construction permit application. The need for such information is addressed in the Supporting Statement for Section 50.33a.

b. Safety information (Sections 50.34, 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. Included in the PSAR are the design criteria and preliminary design information for the proposed reactor and comprehensive data on the proposed site. 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 can be 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),

(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).

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), but is justified as part of 10 CFR Part 51, "Licensing and Regulatory Policy and Procedures for Environmental Protection."

d. 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. This requirement is specified in 10 CFR 50.55(b).

There are approximately 23 licensees who will be required to meet the regulations specified in 50.55(b) within the next 3 years. Preparing and filing the information that NRC needs in order to complete its review of requests for extension of construction permits will involve approximately 200 hours per licensee annually. This represents an annual industry cost of $276,000 (200 hours X 23 = 4,600 hours; 4,600 hours X $60 = $276,000).

Based on experience, NRC estimates that 100 staff hours will be involved for reviewing each of the 23 requests for construction permit extensions. This totals up to 2,300 annual person hours. Thus, annual Federal cost is expected to be $138,000 (2,300 hours X $60).

2. 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 or 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). Except for electric utilities, Section 50.33(f) also requires applicants for operating licenses to submit financial information that demonstrates reasonable assurances 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 operation costs for the period of the license, plus the estimated costs of permanently shutting the facility down and maintaining it in a safe condition. The applicant shall submit estimates for total annual operating costs for each of the first five years of operation of the facility and estimates of the costs to permanently shut down the facility and maintain it in 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 assure 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 radioactve 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).

Safeguards Contingency Plan (Section 50.34(d))

The Safeguards Contingency Plan, as provided for in 10 CFR 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.

d. Environmental information. Justified in the Supporting Statement for 10 CFR Part 51.

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 construction permit and operating license applications. The public may obtain copies of Safety Evaluation Reports from the Public Document Room.

No applications for construction permits or operating licenses are anticipated during the next three years.

Section 50.54(bb) requires that for operating nuclear power reactors, the licensee shall no later than 5 years before expiration of the reactor operating license, 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 upon expiration of the reactor operating license 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.

Negligible burden is anticipated for this regulation because no reactor licensee is expected to be required to meet this provision during the duration of this three-year clearance.

3. Appendix K, Emergency Core Cooling System (ECCS) Evaluation Models

Section II of Appendix K delineates the documentation requirements for the Emergency Core Cooling System (ECCS) evaluation models of Appendix K. Section II-1.a. requires that a description of each evaluation model be furnished and that the description 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. Section II-1.b. requires that the documentation be sufficiently detailed and specific such that changes to the model which result in a calculated fuel clad temperature different by more than 20°F from the temperature calculated for a postulated Loss of Coolant Accident (LOCA) using the last previously accepted model shall be specified in amendments of the model description. Section II-1.c. requires a complete listing of each computer program in the same form as used in the evaluation model.

Section II-2. requires that, for each computer program, convergency shall be demonstrated by modeling or noding studies and calculational time steps to provide sufficient data for a thorough review.

Section II-3. requires that appropriate sensitivity studies be made for each evaluation model, to evaluate the effect on the calculated results of variations in noding, phenomena assumed in the calculation to predominate, including pump operation or locking, and values of parameters over their applicable ranges.

Section II-4. requires that, to the extent practicable, predictions of the evaluation models, or portions thereof, be compared with applicable experimental information.

The reporting requirements delineated in Section II of Appendix K are needed to provide the NRC staff with sufficient information to judge the adequacy of the ECCS analysis and its compliance with the regulations.

The information provided under Section II-1.a. allows the NRC staff to assess the adequacy and validity of the overall technical approach used in a respondent ECCS evaluation model. Without this information, it would not be possible for the NRC staff to make such an assessment.

The information provided under Section II-b. allows flexibility for small changes in an evaluation model while at the same time providing stability to an ECCS model. A change in an evaluation model that results in a calculated difference in the peak clad temperature of more than 20°F (approximately a 1% change in peak reactor power density) is considered by the NRC as being significant and, as such, should be documented in approved amendments to the model.

The information provided under Section II.1.c. allows the NRC staff to audit an evaluation model. This documentation is usually provided as a magnetic computer tape and is controlled by NRC to protect proprietary information.

The information provided under Section II-2, II-3, and II-4, allows the NRC staff to assess the mathematical stability of an evaluation model as well as its sensitivity to various physical phenomena and parameters expected to occur during a LOCA. Comparison of model predictions with applicable experimental data permits the NRC staff to assess the technical validity of the calculational techniques and the accuracy of the predicted results.

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

Burden anticipated for this provision is negligible because the NRC expects no new applications. However, the staff is presently preparing a proposed revision to the Appendix K rule which may prompt licensees to voluntarily submit Technical Specification change requests.

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

Under the Atomic Energy 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 atomic energy 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 Atomic Energy Act, as amended. The Attorney General's request is the basis for the NRC's antitrust reporting requirements. During the effectiveness of this clearance, the NRC does not anticipate having to report antitrust information to the Attorney General. Thus, burden associated with this provision will be negligible.

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 the submittal of applications for operating licenses during the duration of this clearance.

6. 50.36a Technical Specifications

Requires each applicant for a license to operate a production or utilization facility to include in the application proposed technical specifications. (Reference Part 2, "Technical Specifications" of the Supporting Statement for the burden associated with this requirement.) This section further requires that a summary statement of the bases or reasons for such specifications other than those covering administrative controls, be included in the application, but shall not become part of the technical specifications.

7. 50.59(c), 50.90, 50.91(a) and (b), Application for Amendment of License

Section 50.59(c) requires the holder of a license authorizing operation of a production or utilization facility who desires a change in technical specifications, or who desires a change in the facility or procedures described in the safety analysis report, or who desires to conduct tests or experiments which involve an unreviewed safety question to submit an application for amendment of the license. Section 50.90 requires the application for amendment of license or construction permit to be filed with the Commission, fully describing the changes and following as far as applicable the form prescribed for original applications.

The requirement for the amendment of the license application is needed to enable 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. See the self-contained Supporting Statement prepared for 50.91(a) and (b), notification and State Consultation, for the burden associated with this regulation (page 15).

8. 50.74 (Proposed), Licensee Notification to NRC

Proposed 10 CFR 50.74 would require licensees of nuclear power facilities to notify the NRC within 30 days of a change in status of a licensed reactor operator. It is estimated that there will be up to 400 respondents a year, that will involve 1 hour each of staff effort. Thus, the total Federal cost is expected to be $24,000 ($60 X 400). Burden will be imposed on the public when the rule becomes final.

9. 50.80(b), Application for Transfer of Licenses

NRC regulations in 10 CFR Part 50 establish requirements for the licensing of production and utilization facilities. The regulations were issued pursuant to the Atomic Energy Act of 1954, as amended, and Title II of the Energy Reorganization Act of 1974. Section 50.80, "Transfer of

Licenses," specifies in paragraph 50.80(b) 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 assure the transferee's technical capabilty to properly and safely operate the facility in a way that protects the health and safety of the public.

No applications for transfer of licenses are expected during the effectiveness of this clearance. Thus, burden associated with this provision will be negligible.

10. 50.82, Application for termination of licenses

Section 50.82, Application for termination of licenses, specifies that any licensee may apply to the Commission for authority to surrender a license voluntarily and to dismantle the facility and dispose of its component parts. The Commission requires information, including information as to proposed procedures for the disposal of radioactive material, decontamination of the site, and other procedures, to provide reasonable assurance that the dismantling of the facility and disposal of the component parts will be performed such that common defense and security and public health and safety will not be compromised.

The information provided by the licensee will be used by the NRC staff to evaluate the safety and health aspects of dismantling the facility. Upon satisfactory evaluation, the Commission may issue an order authorizing such dismantling and disposal, and the termination of the license upon completion of such procedures. No new applications for termination of licenses are expected during the effectiveness of this clearance. Thus, industry burden associated with this provision will be negligible.

The NRC is currently reviewing 2 applications filed under the provisions of Section 50.82. The staff estimates that a total of 960 person hours will be required for completing the review of each of these applications. Thus, a total of 1,920 staff hours will be required. Estimated cost to the Federal government is, therefore, expected to be $115,200 (60 X 1,920 hours).

10a. Decommissioning Rule (Proposed)

Licensing activities concerning decommissioning have been made on a case-by-case basis in direct response to licensee's requests to decommission and in current licensing hearing cases. This procedure results in a lack of uniformity of application, inefficiency on the part of the licensee and NRC in implementation, and finally a lack of timeliness and comprehensiveness that affects proper application of

the ALARA principle in carrying out NRC licensing responsibilities. In the case of a few non-fuel-cycle licensees, both a lack of available funds to carry out decommissioning and improper termination procedures have occurred. This situation has potential for adverse effects on health and safety. The proposed rules would specify requirements for financial assurance, recordkeeping, and planning and termination procedures. Their implementation through the NRC licensing process would ensure that decommissioning would be handled by the licensee in a way that would result in minimal or even negligible impact on health, safety and the environment. This proposed rule encompasses Sections 50.33(k), 50.54(cc), 50.54(dd) and 50.82. Burden will be imposed on industry when the rule is final.

11. Appendix M, Standardization of Design; Manufacture of Nuclear Power Reactors

An application for a manufacturing license pursuant to Appendix M shall meet all the requirements of §§ 50.34(a)(1)-(9) and 50.34a (a) and (b), except that the preliminary safety analysis report shall be designated as a "design report" and any required information or analyses relating to site matters shall be predicated on postulated site parameters which shall be specified in the application. Such application also includes information pertaining to design features of the proposed reactor(s) that affect plans for coping with emergencies in the operation of the reactor(s).

Applications for this type of license are not anticipated during the duration of this clearance. Therefore, estimated burden is zero.

12. Appendix N, Licenses to Construct and Operate Reactors of Duplicate Design at Multiple Sites

This appendix sets out the particular requirements and provisions applicable to situations in which applications are filed by one or more applicants for licenses to construct and operate nuclear power reactors of essentially the same design to be located at different sites.

1. Except as otherwise specified in this appendix or as the context otherwise indicates, the provisions of this part applicable to construction permits and operating licenses, including the requirement in § 50.58 for review of the application by the Advisory Committee on Reactor Safeguards and the holding of public hearings, apply to construction permits and operating licenses subject to Appendix N.

2. Applications for construction permits submitted pursuant to Appendix N shall include the information required by §§ 50.33, 50.33a, 50.34(a) and 50.34a (a).

No applications for this type of license are anticipated during the duration of this clearance. Therefore, estimated burden is zero.

13. Appendix O, Staff Review of Standard Design

The submittal for review of the standard design shall be made in the same manner and in the same number of copies as provided in § 50.30(a), (c)(1) and (3) for license applications.

This submittal shall include the information described in § 50.33(a)-(d) and the applicable technical information required by §§ 50.34(a) and (b), as appropriate, and 50.34a [other than that required by 50.34(a)(6), (a)(10), (b)(1), (b)(6), (i), (ii), (iv), (v), (b)(7), and (b)(8)]. The submittal shall also include a description, analysis and evaluation of the interfaces between the submitted design and the balance of the nuclear power plant. With respect to the requirements of §§ 50.34(a)(1), the submittal for review of a standard design shall include the site parameters postulated for the design, and an analysis and evaluation of the design in terms of such postulated site parameters.

Applications for this type of review are not anticipated during the duration of this clearance. Therefore, estimated burden is zero.

14. Appendix Q, Pre-Application Early Review of Site Suitability Issues

The submittal for early review of site suitability issue(s) shall be made in the same manner and in the same number of copies as provided in § 50.30(a), (c)(1) and (c)(3) for license applications. The submittal must include sufficient information concerning a range of postulated facility design and operation parameters to enable the staff to perform the requested review of site suitability issues. The submittal contains suggested conclusions on the issues of site suitability submitted for review and shall be accompanied by a statement of the bases or the reasons for those conclusions.

Estimated burden for this type of review is zero because no new requests are not anticipated.

Consultations Outside the Agency

Appendix L of 10 CFR Part 50 was developed in consultation with the Antitrust Division of the Department of Justice and has been amended twice at the request of the Department of Justice to refine the information needed for antitrust review.

Estimate Respondent Burden

See the Summary Table for application for Construction Permit or Operating License which follows.

Estimated Cost to the Government

The annual estimated cost to the Government is delineated at the end of the Summary Table which follows.

SUMMARY TABLE
Application For Construction Permit Or Operating License
(Part 1)

Subject	Annual Burden Hours Per Respondent	Number of Respondents Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Annual Cost To Industry	Annual Cost to Federal Government
50.30, 50.30a 50.33 50.34, 50.54(bb) and 50.55(d)	0	0 (new applications not expected for the next 3 years)*	0	0	0	0	0
50.55(b), const. permit ext.	200	23	460	4,140	4,600	$276,000	$138,000
Appendix K*	0	0	0	0	0	0	0
50.33a and Appendix L*; Appendices M, N, O and Q*	0	0	0	0	0	0	0
50.34(f), TMI*	0	0	0	0	0	0	0
50.36a Tech Specs	(see Part 2 of the Supporting Statements for Part 50)						
50.59(c) 50.90 and 50.91 (a) and (b), license amend. appl.	168	95 (See page 15 for supportive discussion)	1,600	14,400	16,000	$960,000	$1,020,000

Table (Continued)

Subject	Annual Burden Hours Per Respondent	Number of Respondents Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Annual Cost To Industry	Annual Cost to Federal Government
50.74 (proposed)		(Burden will be imposed on the public when the rule becomes final)					
50.80(b)*	0	0	0	0	0	0	0
50.82, license termination*	0	0	0	0	0	0	$115,200 (for in-house applications)
Proposed Decommissioning Rule (50.33(k), 50.54(cc), and 50.54(dd)	0	0	0	0	0	0	0
		(Burden will be imposed on the public when the rule becomes final)					
Totals:	368	118	2,060	18,540	20,600	$1,236,000	$1,273,200

SUPPORTING STATEMENT

"Notice and State Consultation," 10 CFR 50.91(a) and (b).

Justification

Under §§ 50.91(a)(1) and (b)(1) of Part 10 CFR 50 a licensee requesting an amendment must provide to the NRC and the State in which its facility is located its amendment application and its analysis about the issue of significant hazards. To get a quick start on the public notification and State consultation procedures required by legislation, both NRC and the State need licensees' analyses and positions on significant hazards issues because licensees are in the best position to explain their amendment requests.

Description of Information Collection

In addition to needing licensees' analyses of the license amendment requests, this section of the NRC's regulations also involves a reporting requirement concerning the issue of significant hazards consideration. The reporting requirement does not overlap or duplicate any other NRC or Federal information collection requirements. NRC needs licensees' analyses to quickly make and publish for public comment its "proposed determination" on significant hazards issues; and the States also need licensees' analyses in order to quickly consult with NRC.

Estimated Burden

The rule applies to 93 operating nuclear power plants and to two (2) testing facilities. Licensees of these reactors request about 1000 license amendments per year. It is estimated that a licensee will spend approximately 16 hours per analysis under the examples and standards in Section 50.92, "Issuance of Amendment." For 1000 license amendment requests, the total burden on licensees would be 16,000 hours annually. Assuming an hourly rate of $60, an analysis request could cost a licensee about $960 (16 x 60). Thus, the total annual cost to industry for 1000 amendment requests would be about $960,000.

Estimated Cost to the Federal Government

NRC uses a licensee's analysis as a starting point for its significant hazards review. Including time spent in preparation of Federal Register publication, NRC estimates that a total of 17,000 staff hours will be expended on 1000 requests per year. This is derived from our estimate that 20 percent of the .0415 staff-year per amendment request (17 hours) involves the significant hazards review and noticing in the Federal Register. Assuming an hourly rate of $60, for 1000 amendment requests the cost to the government is estimated at $1,020,000.

Part 2

SUPPORTING STATEMENT FOR

10 CFR 50.36, 50.36a, 50.36b, and Appendix I*

Reporting and Recordkeeping Requirements Contained in Technical Specifications Contained in Licenses to Operate Nuclear Power Plants" and

Each licensee under 10 CFR Part 50 is required to perform reporting and recordkeeping requirements that NRC has approved as a part of the technical specifications submitted as a part of original applications for licenses. The reporting/recordkeeping requirements are set forth as "administrative controls' in Section 6 of the Appendix A technical specifications appended to each facility license. They are designed to assure operation of the facility in a safe manner.

The typical reporting and recordkeeping burdens with justifications are explained below. NRC Regulatory Guide 1.16 (Revision 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 technical specifications of all operating licenses.

For licensees holding operating licenses without Appendix B environmental technical specifications or environmental protection plans, it may be necessary to include those reports identified in Regulatory Guide 1.21, "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, "Programs for Monitoring Radioactivity in the Environs of Nuclear Power Plants," in the technical specifications under the unique reporting requirements section of the technical specifications.

1. Radioactive Effluent Report

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 license authorizing operation of a nuclear power reactor must include technical specifications. The NRC staff has developed "Radiological Effluent Technical Specifications for PWRs" (NUREG-0472) and "Radiological Effluent Technical Specifications for BWR's" (NUREG-0473). The contents of these two documents (as applicable) and the reporting requirements specified therein are being made part of the Appendix A technical specifications for new operating licenses. These same requirements are also being

*Appendix I to 10 CFR 50 consists of the 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.

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

Routine radioactive effluent release reports covering the operation of the unit during the previous 6 months of operation are to be submitted within 60 days after January 1 and July 1 of each 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 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 radwaste treatment systems or the building ventilation systems are inoperable for more than 31 days.

2. Startup Report

Section 50.36, "Technical Specifications," of 10 CFR 50, "Domestic Licensing of Production and Utilization Facilities," requires that each applicant for a license authorizing operation of a nuclear power plant include in its application proposed technical specifications. These technical specifications as approved by the NRC, are incorporated into the facility license and are conditions of the license. One of the reports normally required by the technical specifications is a startup 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 FSAR and should include a description of the test and the test conditions the measured values of the operating condition 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) technical specification limits for operation. The data is also necessary for guidance in determining core reload requirements based on physics data obtained in testing reveal areas where additional performance verification testing is required or where further guidance is needed through additional regulatory guides or revision of existing guides.

There is no source for the required information other than the licensees.

3. Sealed Source Leakage Report

Section 50.36, 10 CFR Part 50, requires licensees to adhere to technical specifications for the construction and operation of production and

utilization facilities. One specifically identified submission required of licensees by NRC under this authority is the Sealed Source Leakage Report, which includes technical specifications that establish requirements for testing the integrity of sealed sources transferred and for recording and reporting the test results.

The reporting requirements on sealed sources licensed under 10 CFR Part 50 are included as a Technical Specification appended to the nuclear facility license. For some nuclear facility licenses, the reporting requirements for failed sealed sources require that a special report be submitted within 90 days following a test in which the results indicate removable contamination levels greater than 0.005mCi. Other nuclear facility licenses require reporting of such test results only as part of an annual report. 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.

The information on any sealed source which 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 deficient, unknowingly.

The information obtained from nuclear facility licensees in Sealed Source Leakage Reports reflects a special type of use for sealed sources and provides further assurance that the manufacturing process can produce sealed sources with high integrity.

4. Monthly Operating Report

Section 50.36, "Technical Specifications," of 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," requires that each applicant for a license authorizing operation of a commercial nuclear power plant include in its application proposed technical specifications. These technical specifications, as approved by the NRC, are incorporated into the facility license and are conditions of the license. One of the reports normally required by technical specifications is a report of operating statistics and shutdown experience. This report is submitted to the Commission by the licensees on a monthly basis. Information is submitted in the "Monthly Operating Report" regarding (1) Average Daily Unit Power Level, (2) Operating Data; (3) Unit Shutdowns and Power Reductions; and (4) Spent Fuel Storage Capacity.

Using the data from licensee's monthly reports, plus 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.

The information obtained from the utilities is not otherwise available to the Federal Government on a current basis. Without this information Federal and State agencies could not keep abreast of current plant operations.

There is no source for the required information other than licensees.

5. Non-Routine Environmental Reports

Environmental reviews of nuclear facilities often leave some questions only partially resolved. Data collection efforts authorized under 10 CFR Section 50.36 are intended to resolve these questions. Potentially significant environmental impacts (e.g., fish kills, excessive chemical releases, habitat disruption) need to be reported promptly so that appropriate action can be taken. To accomplish this result, Non-routine Environmental Reports are generally required by the technical specifications whenever an adverse effect may occur.

The non-routine report provides information which specifies and quantifies the data concerning the unusual events and provides the basis for recommending appropriate action. It provides the 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 which warrants such study. The licensee report and the NRC analysis are placed in the public document room and sometimes a press release is prepared. The staff analysis may recommend mitigative action.

There is no source for the required information other than licensees.

6. Annual Environmental Operating Report

Section 50.36 of 10 CFR Part 50 requires inclusion of technical specifications, based on analyses in the Safety Evaluation Report, in each license authorizing operation of a production or utilization facility.

Section 51.52 explicitly authorizes conditioning of a license 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. The technical specifications discussed in section 50.36 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 the predictions of the FES or were not predicted) soon enough to take appropriate action.

The operating procedures of a plant are sometimes conditioned to protect environmental values because of predictions in the FES that a potential for significant adverse impact exists. Monitoring programs are usually incorporated to assess the actual magnitude of predicted adverse impacts. If the impacts are different from those anticipated, the licensee or staff can take action to change the technical specifications or plant design or operating procedures to more adequately account for the actual effects of facility operation.

If the information in the annual reports were not available there would be no information to assess the effectiveness of license conditions or to process requests for changes in those conditions. Unanticipated environmental effects of operation would not be detected and appropriate action could not be taken if the information in the Annual Environmental Operating Report were not available.

There is no source for the required information other than licensees.

7. Annual Radiological Environmental Operating Report

Section 50.36 of 10 CFR Part 50 provides that reactor operating licenses will include technical specifications which NRC finds appropriate. Each reactor license includes a technical specification requiring submission of annual radiological environmental operating reports.

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 Technical Specifications. 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,* 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

*This document pertains to the radioactive effluent reporting requirements discussed in paragraph 1.

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 one reactor; and the results of licensee participation in the Interlaboratory Comparison Program, required by the Technical Specifications.

Reports range from around fifty pages to several hundred pages.

The reports provide a timely record of environmental radiation around the plant. The reports are 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 reports, the NRC staff could not provide adequate assurance that the public is being protected from such environmental radiation.

8. Annual Radiation Exposure Report

Section 50.36, "Technical Specifications," of 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," requires that each applicant for a license authorizing operation of a nuclear power plant include in its application proposed technical specifications. These technical specifications, as approved by the NRC, are incorporated into the facility license and are conditions of the license.

The report on occupational personnel radiation exposure is submitted annually. The tabulation of occupational exposure data may be submitted along with any report of facility changes, tests or experiments, required pursuant to 10 CFR 50.59(b), or as a separate submittal at the option of the licensee.

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 Radiation Exposure at Commercial Nuclear Power Reactors" (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.

9. Recordkeeping Requirements

NRC Regulations in 10 CFR Part 50, Sections 50.36 and 50.36a establish requirements for recording results of reviews of events reported to the Commission and requirements for recordkeeping as part of administrative

controls. The regulations were issued pursuant to the Atomic Energy Act of 1954, as amended, and Title II of the Energy Reorganization Act of 1974.

Section 50.36(c)(1)(i)(A) requires recording of the results of reviews of events in nuclear reactors in which a safety limit has been exceeded. Section 50.36(c)(1)(i)(B) requires recording of the results of the reviews of events in fuel reprocessing plants in which a safety limit has been exceeded. Section 50.36(c)(1)(ii)(A) requires recording of the results of reviews of events in nuclear reactors in which an automatic safety system does not function as required. Section 50.36(c)(1)(ii)(B) requires recording of the results of reviews of events in fuel reprocessing plants 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 is required to include the cause of the condition and the basis for corrective action taken to preclude reoccurrence. Section 50.36(c)(5) requires administrative controls, including recordkeeping, in technical specifications 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 6.10 of Standard Technical Specification, NUREG-0123 for General Electric boiling water reactors, NUREG-0212 for Combustion Engineering pressurized water reactors, NUREG-0103 for Babcock and Wilcox pressurized water reactors and NUREG-0452 for Westinghouse pressurized water reactors.

The records required by Section 50.36(c)(5) involve such matters as:

a. Records and logs of facility operation covering time interval at each power level.

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

c. All Reportable Events.

d. Records of surveillance activities, inspections and calibrations required by the Technical Specifications.

e. Records of changes made to Operating Procedures.

f. Records of Radioactive shipments.

g. Records of sealed source and fission detector leak tests and results.

h. Records of annual physical inventory of all sealed source material of record.

i. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

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

k. Records of facility radiation and contamination surveys.

l. Records of radiation exposure for all individuals entering radiation control areas.

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

n. Records of transient of operational cycles for various facility components.

o. Records of reactor tests and experiments.

p. Records of training and qualification for current members of the plant staff.

q. Records of in-service inspections performed pursuant to the Technical Specifications.

r. Records of Quality Assurance activities required by the QA Manual.

s. Records of reviews performed or changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR Part 50, Section 50.59.

t. Records of meetings of safety review groups.

u. Records of the service lives of all snubbers required by the Technical Specifications.

v. Records of secondary water sampling and water quality.

w. Records of analyses required by the Radiological Environmental Monitoring Program.

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 to determine, for example, if (1) plant modifications were performed satisfactorily, (2) the plant was operated within the technical specifications, (3) personnel training has been kept current, (4) plant effluents have been kept within allowable values, etc. Because of the multiple-use nature of many of the records, NRC has estimated only the incremental burden.

There is no source for the required information other than licensees.

DESCRIPTION OF SURVEY PLAN

There are 93 operating power reactors.

There are 75 operating/research/test reactors licensed to operate.

ESTIMATE OF RESPONDENT REPORTING BURDENS

1. Radioactive Effluent Reports:

   These include reports on (a) Exceeding Design Objective 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 Tanks or Ci Release Rate for Offgas System (BWR), which individually affect fewer than 10 licensees annually, which result in a negligible burden and, a Semi-Annual Effluent Report which requires each on 93 licensees of 140 hours per report for a total burden of 26,040 hours annually.

2. Startup Report

   This reporting requirement affects less than 10 licensees annually with a average burden of 100 hrs or 1000 hrs.

3. Sealed Source Report

   Since the licensee will be required to report only those sealed source test results which exceed the removable contamination limit, burden will be negligible, less than 10 licensees are affected. (160 staff - hrs assuming 16 hrs/report).

4. Monthly Operating Report

   Ninety-three (93) licensees each submit 12 reports annually, each report imposing a burden for preparation of 50 staff-hours.

   93 X 12 X 50 staff hours total 55,800 staff-hours.

5. Non-routine Environmental Report

   An average of about one report is received from each licensee annually; thus, the preparation burden (50 hours per report) upon each respondent is negligible. Total annual burden assuming 45 sites (50 X 45) would be 2250 staff-hours.

6. Annual Environmental Operating Report and Annual Radiological Environmental Operating Report

   Licensees will submit reports for an estimated 45 sites in response to this requirement. Each report causes a preparation burden of 1400 man-hours. Man-hours per report will be reduced as water quality requirements are deleted from existing licenses.

   45 sites X 1400 staff-hours - A total annual burden for all licensees of 63,000 staff-hours.

7. Annual Radiation Exposure Report

The estimated burden upon each power reactor licensee for the preparation of one report is 40 staff-hours.

93 X 40 staff-hours totals 3,720 staff-hours.

The total for reporting burden for all licensees: 151,970 staff-hours

ESTIMATE OF RESPONDENT RECORDKEEPING REQUIREMENTS

These recordkeeping requirements are subject as follows:

93 operating reactors
75 research test reactors

The burden annually for an operating power reactor is estimated to be approximately 2,000 staff-hours.

Ninety-three (93) operating power plants X 2,000 staff-hours totals 186,000 staff-hours.

The burden annually for a research or test reactor is estimated to be approximately 80 staff-hours.

Seventy-five (75) research or test reactors X 80 staff-hours totals 6,000.

Total for recordkeeping burden of all licensees: 192,000 staff-hours.

TOTAL BURDEN

Total burden for all reporting/recordkeeping requirements for technical specifications is 343,970 staff-hours. The total cost to industry at $60 per staff-hour is $20,638,200/yr.

ESTIMATE OF COST TO FEDERAL GOVERNMENT

1. Radioactive Effluent Reports

Report	Reports/yr	Staff-hour/report	Total Burden Staff-hour/yr
1. Exceeding Design Objective Doses	3	50	0
2. Inoperable Radwaste Equipment	5	12	60
3. Dose Contribution from Effluents	2	50	100
4. Unplanned Radioactive Release	10	24	240
5. Exceeding 10 CFR Part 20 Release Limits	5	20	100

Report	Reports/yr	Staff-hour/report	Total Burden Staff-hour/yr
6. Exceeding Ci Content in Liquid or Gaseous Tanks or Ci Release Rate for Offgas System (BWR)	3	40	120
7. Semi-Annual Effluent	186	20	3,720
		TOTAL	4,490

2. Startup Report

There are 10 reports per year at 40 staff-hours per report. 10 X 40 = 400 staff-hours per year.

3. Sealed Source

There are less than 10 reports per year at 40 staff-hours per report. 10 X 40 totals 400 staff-hours.

4. Monthly Operating Report

The staff hours expended on these reports are approximately 5,400.

5. Non-routine Environmental Report

Approximately 160 hours of staff effort is expended in reviewing reports and followup actions with the Office of Inspection and Enforcement and the licensees.

6. Annual Environmental Operating Report

One to two staff/years (4,160 hours) of staff time are projected for reviewing the annual reports. This estimate includes effort reviewing the reports to provide technical support for specific license amendment actions for individual licensees.

7. Annual Radiological Environmental Operating Report

20 person-hours/report X 45 reports/yr = a total of 900 staff-hours/yr.

8. Annual Radiation Exposure Report

The cost to the Federal Government is approximately 50 staff-hours.

These estimates are based on professional staff experience and incorporate professional staff time to review submitted reports.

TOTAL COST TO FEDERAL GOVERNMENT:

Costs estimates are $60 per hour 15,960 staff-hours X $60 = $957,600/yr.

Part 3

SUPPORTING STATEMENT
FOR
QUALITY ASSURANCE RECORDS

Called for in 10 CFR 50.55a, 50.55(f), Appendix A (Criterion 1), and in Appendix B.

JUSTIFICATION

Licensee burden hours will be spent on QA records development and maintenance, which pertain to the following list of activities (i.e. disciplines):

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

QA records associated with the above activities 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 already require that the ASME B&PV Code (Section III) be used in the design, construction, testing and inspection of nuclear power reactor, which imposes many of the above record keeping requirements.

NRC is preparing a proposed amendment to 10 CFR 50.55a which would incorporate by reference the Winter 1982 Addenda, Summer 1983 Addenda, Winter 1983 Addenda, Summer 1984 Addenda and 1983 Edition of Section III, Division 1, and the Winter 1982 Addenda, Summer 1983 Addenda, and 1983 Edition of Section XI, Division 1 of the ASME Code. The edition and addenda have been reviewed by the staff and found to be acceptable and not inconsistent with regulatory criteria. No changes are proposed to previous supplementary requirements included in the regulation.

Appendix B requires records for "Safety-related" items that are usually found on a plant-specific Q-list. These record requirements were the basis for the burden hours reported in the last Part 50 to allow for the additional QA records required by Appendix A (but not prescribed by the NRC) in connection with items "important-to-safety" but not "safety-related".

Regulatory Guide 1.28 (Rev. 3), "Quality Assurance Program Requirements (Design and Construction)" and Regulatory Guide 1.33 (Rev.3), "Quality Assurance Program Requirements (Operation)" describes an acceptable method for complying with QA records requirements in accordance with 10 CFR Part 50. Except for a few regulatory positions in these Regulatory Guides, they endorse 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. 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 inservice inspection and providing data for trend analysis.

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. Other records pertaining to items important-to-safety are not detailed in any specific NRC requirements document, but are, nevertheless, 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 50.55(f) became a new requirement, effective March 1983. The licensee's QA Program plan, after acceptance by the NRC, is now considered a license condition. Any changes to this plan must now be reported to the NRC like other license conditions of a similar nature. It is estimated that each licensee/applicant will initiate two such changes per year, and that each such change requires approximately 80 staff hours.

Estimated Reporting Burden:

Each of 34 plants under construction generates a licensee burden of 20,000 burden hours 34 x 20,000	=	680,000 hrs/yr
Each of 93 operating reactors generates a licensee burden of 10,000 burden hours per year 93 x 10,000	=	930,000 hrs/yr
Each of four large test reactors causes the licensee to expend 250 staff hours per year; 4 x 250	=	1,000 hrs/yr
Total for Appendix B		1,611,000 hrs/yr
Reporting changes, to the QA Program, 131 licensees x 160 burden hours		20,960 hrs/yr
Total Burden Hours		1,631,960 hrs/yr
Cost is based on $60.00 per hour for licensee; therefore, cost to industry	=	$97,917,600

Estimated Recordkeeping Burden

A comprehensive system of planned and periodic audits must be carried out by licensees to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program. The audits are performed in accordance with quality assurance program procedures. Based on NRC's experience and in light of the magnitude of records required for the audits and the overall program during construction, it is estimated that 41% of the total industry reporting burden (1,631,960 hours) encompasses hours expended annually for recordkeeping requirements. Recordkeeping requirements are, therefore, estimated to involve 669,104 hours annually.

Estimated Cost to the Federal Government:

QA records are generated and maintained by licensees. The incremental cost for NRC audits and inspection of QA records is a small part of the total NRC inspection program, consisting of the resident inspectors, the regional inspections, and the special inspections which include, among others, Construction Assessment Team (CAT), Performance Appraisal Team (PAT), and Independent Design Inspection (IDI). It is estimated that 10 percent of the licensee's burden hours are necessary for NRC audit and inspection (.10 X 1,631,960 = 163,196 staff hours). This estimate is based on 5 years of experience involving follow-up discussion between the NRC staff representative and Team Leaders for CAT, PAT, and IDI.

Therefore, the estimated Federal cost is expected to be $9,791,760 ($60 X 163,196).

Part 4

SUPPORTING STATEMENT

for

Bulletins and Generic Letter Program
10 CFR 50.71

Justification

The Bulletin and generic letter 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 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 Act, including section 105 of the Act. NRC periodically issues Bulletins and generic letters to communicate with industry on matters of generic importance or serious safety significance; i.e., if an event at one reactor raises the possibility of a generic problem, an NRC Bulletin or generic letter may be issued requesting licensees and/or permit holders to take specific actions and to submit a written report describing actions taken and other information NRC may need to assess the need for further actions to assure public health and safety.

These Bulletins and generic letters generally require one-time action and reporting. They are not intended as substitutes for revised license conditions or new regulatory reqirements. Most Bulletins and generic letters identify the regulatory requirements that are currently contained in 10 CFR 50. Prior to proposing the Bulletin or generic letter, the staff considers the potential additional burden caused by either having the NRC inspectors collect the information or having the licensees/applicants provide the information in a report. Having considered both options, NRC deems it more practical to obtain the necessary information via licensee reporting.

Proposed Bulletins and generic letters that request a response are routinely reviewed by the NRC's Committee to Review Generic Requirements (CRGR), except in those rare instances where it is judged by the Director, Office of Inspection and Enforcement (IE), or the Director, Office of Nuclear Reactor Regulation that an immediate emergency 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 Directors have the authority to issue the Bulletin or generic letter.

Each proposed Bulletin or generic letter to be reviewed by CRGR that does not require emergency action is categorized as either Category 1 or 2 requirements. Category 1 requirements are those which are needed to overcome problems requiring priority resolution or to comply with a legal requirement for immediate or near term compliance.

Category 2 requirements are those which do not meet the criteria for emergency action or designation as Category 1. These are to be scrutinized carefully by the CRGR on the basis of written justification submitted by IE or NRR. Upon notice to the members of the CRGR, and without objection, the CRGR Chairman may exempt any Category 2 proposal from review on the grounds that he concludes that it involves only an insignificant effect on the NRC staff and on licensees.

Based on two years of experience and data, the NRC believes that a reliable estimate of the annual impact of Category 1 and 2 Bulletins and generic letters is possible and that this burden is logically included in 10 CFR 50.71.

Tabulation and Publication Plans

Responses to Bulletins and generic letters are made available for public inspection in the NRC's Public Document Rooms.

Time Schedule for Data Collection and Publication

The time schedule for reporting is defined in each Bulletin or generic letter, however, licensees and/or permit holders will not be required to respond in fewer than 30 days under this clearance requirement.

Consultations Outside the Agency

When appropriate, prior to issuing a Bulletin or generic letter, the NRC seeks comments on the matter from the industry (utilities, Atomic Industrial Forum, nuclear steam system suppliers, vendors, etc.) This technique has proven effective in bringing faster and better responses from licensees.

Estimate of Respondent Reporting Burden

The number of licensees and/or permit holders actually affected by a particular Bulletin and generic letter and the associated burden varies in each specific instance; however, an estimated annual average would include 40 respondents to each of 12 Bulletins and 4 generic letters,* each imposing an average burden of 245,000 hours. This amounts to a total annual burden of 392,000 hours or an individual licensee and/or permit holder burden for each response of 612.5 hours, which represents an annual industry cost of $23,520,000 ($60 X 392,000).

Estimate of Cost to Federal Government

Estimate of cost to the Government, which includes preparation of the Bulletin or generic letter obtaining all necessary clearances, mailing, and analysis of responses is estimated at 1,000 hours per Bulletin or generic letter or 16,000 hours annually. The total annual estimated cost to the Government is $960,000 (12 bulletins and 4 letters annually X 1,000 = 16,000 hours @$60).

---

*These 4 generic letters recognize the six generic letters estimated in Part 9, Supporting Statement for 50.54(f).

PART 5

SUPPORTING STATEMENT

10 CFR 50.48 AND APPENDIX R TO 10 CFR 50

Fire Protection

JUSTIFICATION

10 CFR Part 50.48 amends the regulations to require certain provisions for fire protection in operating nuclear power plants. This action was undertaken to upgrade 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.

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 damage to structures, systems, or components important to safety so that the capability to safely shutdown the plant is ensured. Present licensed operating plants have already met the requirement for a plan, therefore, there is no immediate burden.

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) requires licensee 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 these requirements have already been satisfied by all licensees. Therefore, there is no additional burden.

Appendix R - Fire Protection Program for Nuclear Power Facilities Operation, 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, the rule requires certain minimum levels of training for each brigade member, and training and drills for each brigade as a team.

The rule also requires maintaining certain records of the training and drills provided for the brigades and brigade members. The record keeping requirements have already been agreed to by most licensees as part of the license amendments that resulted from the staff's fire protection review of each plant. These records are required to enable the staff to evaluate the effectiveness of each training program and thus determine the expected effectiveness of each fire brigade to cope with any fire emergency which may occur. The two specific record keeping requirements are:

A. "Section III.I.3.d."

At three-year intervals, drills shall 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.

B. "Section III.I.4"

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

Description of fire protection plan

These requirements will not affect the 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. 50.48(a) does not affect presently licensed plants since they have already completed these requirements with their approved fire protection programs. 50.48(a) will apply to new licensees on a case-by-case basis as applications are submitted to the NRC. No special requirement for a format or form is being imposed with this rule. Each licensee is free to develop the method and forms that best suit its individual operation. No new applications are anticipated in the next three years.

Estimate of Respondent Burden

Appendix R	No. of Respondents affected	Staff Hours per response	Annual Burden
Section III.I.3.D	95*	24	2,280
Section III.1.4	95*	120	11,400
		Total Annual Burden	13,680

*Based on 85 licensed plants at the end of 1984 plus an averaged allowance of 10 additional plants to be licensed annually over the next three years.

Therefore, the estimated cost to industry is expected to be $820,800 ($60.00 X 13,680).

Estimate of cost to Federal Government

We estimate that the average review time of fire brigade drill and training records per plant is 5 staff-hours. Ninety-five (95) plants are expected to comply with this requirement annually for a total annual cost of $28,500 to the Government (95 plants x 5 staff hours/plant = 475 staff hours; 475 staff hours x $60/hr = 28,500).

Part 6

SUPPORTING STATEMENT
FOR
SECTION 50.54(p)
Physical Security and Safeguards Contingency Plans

1. JUSTIFICATION

a. Need for and Practical Utility of the Information Collection

Paragraph 50.34(c) of Title 10 of the Code of Federal Regulations provides for the submission of a physical security plan by each licensee who is authorized to operate a production or utilization facility. These plans are for the purpose of protection against acts of industrial sabotage and protection of special nuclear material against theft by establishment and maintenance of a physical protection system.

Section 50.34(d) of 10 CFR Part 50 specifies that each application for a license to operate a production or utilization facility shall include a licensee safeguards contingency plan in accordance with Appendix C to 10 CFR Part 73.

Section 50.54(p) requires that each licensee prepare and maintain safeguards contingency plan procedures in accordance with Appendix C of 10 CFR Part 73. A licensee desiring to make a change which would decrease the effectiveness of a security plan prepared pursuant to Section 50.34(c), Part 73, or a licensee safeguards contingency plan (except for implementing procedures) prepared pursuant to Section 50.34(d) or Part 73, as applicable, must obtain prior approval from NRC by submitting an application for an amendment to the license pursuant to Section 50.90. A licensee desiring to make such a change shall submit an application for an amendment to his license pursuant to Section 50.90. Section 50.54(p) also states that a licensee shall maintain records of changes to the plans, made without prior NRC approval, for a period of two years from the date of the change, and shall furnish to the NRC a report containing a description of each change within two months after the change is made.

Additionally, Section 50.54(p) requires that the licensee review the safeguards contingency plan annually and maintain records documenting the conduct and results of the annual review along with any recommendations derived from the review. These records are to be available at the plant for inspection by NRC personnel for a period of two years.

b. Practical Utility of the Information Collection

Physical Security Plans include general performance requirements which recognize explicitly the need to provide protection from potential threats originating either externally or from within a licensed facility. The NRC staff utilizes these licensee security plans as it conducts a continuous review to identify the changing kinds and degrees of threats and the vulnerabilities of reactors to such threats. This continuing reactor safeguards program provides a high

level of assurance to the NRC and the public that malevolent acts against operating nuclear power plants will not result in undue risk to public health and safety.

c. Duplication of Other Collections of Information

There are no valid alternatives to the licensee providing the Physical Security Plans and the Safeguards Contingency Plans and updating them by amendments or other documented changes. The plans are sensitive and are not widely disseminated. The applicant is the obvious party to supply the required data and no reasonable alternative reporting procedure exists. These requirements duplicate no other requirements and the reports are not provided by the licensee to any other Federal agency.

d. Consultations Outside The NRC

DOE has been consulted on the requirements.

2. Description of Information Collection

a. Number and Type of Respondents

The rule applies to each licensee who is authorized to operate a nuclear power reactor, enrichment or fuel reprocessing plant. There are 93 licensed nuclear power reactors and no enrichment or reprocessing facilities. Thus, 93 respondents are subject to the information collection requirements of 10 CFR Section 50.54(p).

b. Reasonableness of the Schedule for Collecting Information

If the licensee desires to make changes that do not decrease safeguards effectiveness, then he has two months from the time of making such changes to report them to the NRC. This is reasonable since the time only begins to run once the changes are implemented. His yearly review is reasonable since this corresponds with NRC inspection periods. Retention of the Changes for two years is reasonable since this insures that the information on the changes will be available for at least one inspection.

c. Method of Collecting the Information

The licensee must review the safeguards contingency plan annually and maintain records documenting the conduct and results of the annual review along with any recommendations derived from the review. He can do this by any procedure he so desires. In addition, the licensee can collect the information necessary for reporting or requesting an amendment by any method he so desires. The licensee must keep records of any changes and notify NRC by mail within 2 months of any changes under Section 50.54(p).

d. Record Retention Requirements

The licensee must retain records of any 50.54(p) changes for two year from the date of the change. The licensee must retain annual reviews of the 50.54(p) changes and recommendations that result from those reviews for a period of two years. This information is necessary for plant inspections by NRC personnel.

e. Reporting Period

Reports are to be submitted at irregular intervals as amendments are made.

f. Copies to be Submitted

The safeguards reporting rule requires that the licensee submit the original to the Regional office and a copy to Headquarters of the 50.54(p) changes.

3. Estimate of Burden

a. Estimated Hours Required to Respond to the Collection

The NRC Estimates that approximately 250 50.54(p) notifications are made annually to the NRC by the Licensees. It is estimated that, on the average, 200 hours are reqired to prepare, notify NRC, keep records, revise and file each 50.54(p) amendment for a current industry burden of 50,000 hours per year.

b. Source of Burden Data and Method of Estimating Burden

The burden estimates were developed using a review of past 50.54(p) amendments made to the NRC by the industry. Using $60.00 per staff hour gives an industry cost of $3,000,000.

c. Reasonableness of Burden Estimates

The burden estimates were derived from consultation with licensee staff responsible for making safeguards reports and NRC staff experienced in documenting and analyzing 50.54(p) amendments.

4. 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. The NRC estimates that accomplishing these activities would require approximately 120 hours per plant. Thus, 11,200 staff hours (93 plants x 120) are anticipated annually for this effort. Therefore, at $60,00 per staff hour, Federal cost is expected to be $672,000 per year.

PART 7

SUPPORTING STATEMENT

FOR

10 CFR Part 50.54(q, r, t)
and Part 50, Appendix E

Emergency Planning

JUSTIFICATION

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. The Commission's interest in emergency planning is focused primarily on situations that may threaten to cause radiological risks affecting the health and safety of workers or the public. The Commission and the public have recognized the increasing importance of emergency planning. Emergency plans should be directed toward mitigating the consequences of emergencies and should provide reasonable assurance that appropriate measures can and will be taken to protect the public health and safety in the event of an emergency. Although it is not possible to develop a completely detailed plan encompassing every conceivable type of emergency situation, advance planning can create a high order of preparedness, including provisions of necessary equipment, supplies, and services, and ensure an orderly and timely decisionmaking process at times of stress.

Emergency plans are required to be submitted as part of the PSAR [10 CFR 50.34 (a)(10)] and 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 State and local government radiological emergency response plans are required to be submitted [10 CFR 50.54(s)(1)]

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 10 CFR Part 50. It also requires that 1 copy of these changes be sent to the appropriate NRC Regional Office and 2 copies be sent to the Document Control Desk, NRC within 30 days after the change is made. Proposed changes that decrease the effectiveness of the emergency plans are to be submitted to and approved by the Commission prior to implementation and 3 copies of such proposed changes are to be submitted.

Part 50, Appendix E, Section V requires each licensee to submit to the NRC changes to emergency plan implementing procedures. One copy shall be submitted to the appropriate NRC Regional office and 2 copies shall be submitted to the Document Control Desk, NRC.

Section 50.54(r) requires that each licensee who is authorized to possess and/or operate a research reactor facility under a license of the type specified in Section 50.21(c) and who had not obtained Commission approval of an emergency plan, as described in Section 50.34(b)(6)(v), prior to obtaining an operating license shall submit such a plan to the Commission for approval as part of the application for a renewal of the operating license. Each licensee who is authorized to possess and/or operate any other production or utilization facility who has not obtained Commission approval of an emergency plan, as described in Section 50.34(b)(6)(v), prior to obtaining an operating license shall submit such a plan for approval.

Section 50.54(t) requires each licensee to provide for the development, revision, implementation, and maintenance of its emergency preparedness program, which shall be reviewed at least every 12 months.

The NRC staff will review new and updated emergency plans and implementing procedures to determine whether or not licensees have devised an effective program for handling emergency situations. NRC Regional Offices will conduct periodic checks at licensee's facilities to assure that the plans and procedures are updated to reflect changing conditions.

There is no source for the required information other than licensees.

Practical Utility of Information Collection

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 public health and safety. The time frame for completing this determination is usually contingent upon adjudicatory actions encompassing the operating license review process and could involve 2-4 years of staff effort.

Estimate of Burden

The burden for maintaining the emergency preparedness program is estimated to be 8,000 person-hours per year for each of 93 power reactor licensees (744,000 hours) and 30 person-hour for each of 75 research/test reactor licensees (2,250 hour) for a total of 746,250 hours annually. The cost to licensees for the maintenance of their emergency preparedness program is $44,775,000.

Estimate of Cost to the Federal Government

NRC estimates 80 hours per year for each of 68 sites for review of revised power reactor emergency plans and procedures. This results in a total of 5,440 person-hours at a cost of $326,400 to the Federal Government annually.

SUPPORTING STATEMENT

FOR

10 CFR 50, SECTION 50.71(e)

Periodic Update of the Final Safety Analysis Record (FSAR)

JUSTIFICATION

The NRC, through adoption of section 50.71(e) amended its regulation to require each nuclear power reactor licensee to submit at least annually to the Commission revised Final Safety Analysis Report (FSAR) pages that reflect changes in information and analyses submitted to the Commission or prepared as a result of a Commission requirement. The amendment is being made to provide an updated reference document to be used in recurring safety analyses performed by the licensee, the Commission, and other interested parties.

The FSAR required to be updated by the rule is the original FSAR submitted as part of the application for the operating license. It would not include the subsequent supplements and amendments to the FSAR or the license that may have been submitted either in response to NRC questions or on the applicant's or licensee's own initiative following the original submittal. These various supplements and amendments must be appropriately incorporated into the original FSAR to create a single, complete and integral document. The initial revision to be filed will contain those pages from the originally submitted FSAR that are still applicable plus new replacement pages that appropriately incorporate the effects of supplements, amendments and other changes that have been made. This will result in a single, complete document, being filed, that can then serve as the baseline for future changes.

This rule is necessary because 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 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 annual reports describing design and procedural changes. Consequently, it is 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. Problems stemming from a lack of accurate reference documents have existed for some time, but are becoming greater with the passage of time and the addition of new operating plants.

In general, the older a facility is, the more difficult it is to identify the correct information. The newly licensed facilities are not presently a problem,

but they would become so in a few years without this new update procedure for licensee FSAR sets. 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 volume of reference material involved, due to lack of a single organized reference, is staggering. In such an event, the possibility of error, due to reference to outdated or incorrect material, is increased and the resultant risk to the public is likewise affected.

An existing regulation, Paragraph 50.30(c)(2) of 10 CFR Part 50, recognized the 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 by the Atomic Safety and Licensing Board. 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, however, do not require that such changes be incorporated into the FSAR.

All changes to the technical specifications are now treated as license amendments and it would be 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.

In addition to the uses of FSARs previously discussed, FSARs are currently being used for a variety of other reasons such as:

a. To evaluate proposed changes, tests or experiments made pursuant to Section 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, orientation, and reassignment by the Commission.

e. A reference document by management and by safety review committees.

f. By IE inspectors to assist in their facility inspections.

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 will utilize the updated information supplied by licensees in response to the reporting requirement of section 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.

There is no source for the required information other than licensees.

Description of the Survey Plan

This reporting requirement would affect 93 licensees.

Consultations Outside the Agency

On November 8, 1976, the Nuclear Regulatory Commission published in the FEDERAL REGISTER (41 FR 49123) a notice of proposed rule making inviting written suggestions or comments on the proposed rule by December 23, 1976. A notice of correction and extension of comment period was published in the FEDERAL REGISTER on December 27, 1976 (41 FR 56204) in which the comment period was extended to January 26, 1977. The notices concerned proposed amendments to 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to require each applicant for or holder of a power reactor license which would be or was issued after January 1, 1963 to periodically submit to the Commission revised pages for its Final Safety Analysis Report (FSAR) that indicate changes made in the facility or the procedures for its operation and any analyses affected by these changes.

In response to the comments received, the Commission modified the rule to (a) extend its applicability to all power reactors licensed to operate, (b) exclude applicants for operating licenses, (c) clarify the wording of the rule, (d) reduce its impact on power reactor licensees by relaxing some of the time requirements, and (e) require the initial revision to be a complete FSAR.

Estimation of Respondent Reporting Burden

Approximately 93 licensees will be affected by this reporting requirement.

The average burden per licensee for the updating is estimated to be 1,000 staff-hours. Therefore, the annual burden for all licensees is 93,000 staff-hours. The estimated cost to the licensees is expected to be $5,580,000 ($60 x 93,000).

Estimate of 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. Thus, annual estimated cost to the Federal Government is expected to be $27,900 (5 staff hrs x 93 plants = 465 staff hours; $60/hr x 465 staff hours = $27,900).

SUPPORTING STATEMENT
FOR
SECTION 50.54(f)

Collection of Information Under Oath or Affirmation

JUSTIFICATION

NRC regulations, 10 CFR Part 50, Section 50.54(f), adopted January 19, 1956 (21 FR 355), provide that the licensee 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 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.

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, and 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.

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 the public health and safety.

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 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.

There is no source for the required information other than licensees.

Description of survey plan

This reporting requirement can affect any of about 200 licensees and construction permit holders. There are 93 operating power reactor licensees, 75 research/test reactor licensees, and 34 construction permit holders.

Estimation of respondent reporting burden

The burden is made up from the sum of the burden for requests of one license for a plant-specific concern and for requests of a generic nature which could apply to a category of licensees or applicants.

Plant Specific Concern

It is estimated that perhaps as many as five requests to a single licensee will be made 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 five requests totals 1500 hours.

Generic Considerations

A review of the list of generic letters sent to the industry that requested information shows that not only does the annual number of letters vary, but so does the number of respondents and the level of effort required to prepare the different responses. It is estimated that there will be six* generic letters/year. Of the six, two are likely to be minor, but affect a large number of licensees.

2 letters x 50 licensees x 120 hrs/letter = 12,000 hrs

One significant request is likely.

1 letter x 25 licensees x 600 hrs/letter = 15,000 hrs

Three average requests to utilities with operating or soon-to-operate power reactors

3 letters x 90 utilities x 200 hrs = 54,000 hrs

The total respondent burden is 82,500 hrs. Therefore, the cost to the respondents is $4,950,000 (82,500 hrs x $60).

---

*These 6 letters recognize the 4 [non-50.54(f)] generic letters estimated in 50.71, part 4 of the Supporting Statements.

Estimate of 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. This is estimated to take 200 hours for each plant specific request and 640 hours for each generic letter. Each specific generic letter request for information is carefully justified prior to review by the NRC Committee to Review Generic Requirements. In addition, staff review of the responses will require an additional 200 hours for the plant specific information and 640 hours for the generic letters. This corresponds to 400 hours for each of 5 plant specific letters and 1280 hours for each of 6 generic letters or a total of 9,680 hrs. The total federal cost is $580,800. (9,680 hrs x $60) = $580,800)

Part 10

SUPPORTING STATEMENT

FOR

10 CFR 50.72(a), (b), and (c), 50.54(z)

Notification of Significant Events

JUSTIFICATION

Following the accident at Three Mile Island on March 28, 1979, the NRC staff acted to ensure the timely and accurate flow of information from licensees of operating nuclear power plants following significant events. Dedicated telephone lines were installed at all operating power plants to facilitate direct and rapid communications between licensees and the NRC Operations Center (and Regional Offices). A line is located in each control room with provisions made for extensions to be located at other specified locations at the facility. When these phones are picked up to report significant events, they automatically ring at the NRC Operations Center and can be held open as long as needed.

NRC's Office of Inspection and Enforcement (OIE) issued Bulletins and sent letters to each licensee asking that current procedures for notification of NRC following significant events be reviewed carefully. The letters were intended to ensure that the licensees would promptly notify NRC when a reactor was determined to be in an uncontrolled or unexpected condition of operation. After this notification, a continuous communication channel was to be established and maintained between the licensee and NRC.

The NRC staff evaluated licensees' responses to OIE's letter and Bulletins and determined that the reporting procedures were not providing the prompt notifications expected by the Commission. The Bulletins issued to licensees by OIE did not impose reporting requirements and as a result, in several instances licensees did not notify NRC promptly. The Commission, therefore, determined that in order to protect the health and safety of the public, a rule was required. Rulemaking was initiated immediately thereafter, and resulted in an immediately final regulation (10 CFR 50.72) published in the Federal Register on February 29, 1980 (45 FR 13435). Meanwhile, the Congress provided for prompt notification in Section 201 of the Nuclear Regulatory Commission Authorization Act for Fiscal Year 1980 (Pub. L. 96 - 295) by amending Section 103 of the Atomic Energy Act of 1954 with a new subsection f at the end as follows: "f. Each license issued for a utilization facility under this section or section 104 b. shall require as a condition thereof that in case of any accident which could result in an unplanned release of quantities of fission products in excess of allowable limits for normal operation established by the Commission, the licensee shall immediately so notify the Commission. Violation of the condition prescribed by this subsection may, in the Commission's discretion, constitute grounds for license revocation. In accordance with section 187 of this Act, the Commission shall promptly amend each license for a utilization

facility issued under this section or section 104 b. which is effect on the date of enactment of this subsection to include the provisions required under this subsection."

The Conference Report accompanying Pub. L. 96-295 stated that the conferees recognized the need for predictability by licensees in determining those situations which would require immediate notification. The conferees further intended that the Commission establish specific guidelines for the identification of accidents which could result in an unplanned release of radioactivity in excess of allowable limits, and that the immediate notification requirement would take effect when such guidelines were established. H. Conf. Rep. No. 96-1070, 96th Cong., 2d Sess., 30 (June 4, 1980).

Although the regulation, 10 CFR 50.72, was published as immediately effective without a prior public comment period, the public was invited to submit its views and comments. Therefore, in response to the above Congressional actions and after obtaining the experience about receiving notification as required by the rule, the Commission published in the Federal Register a notice of proposed rulemaking on December 21, 1981 (46 FR 61894) and invited public comment. The proposal was made to meet two objectives; Change 10 CFR 50.54 to implement section 201 of the NRC's 1980 Fiscal Year Authorization Act and change 10 CFR 50.72 to more clearly specify the significant events requiring licensees to immediately notify NRC. These changes were published in the Federal Register on August 29, 1983, (48 FR 39045).

Section 50.54(z) requires that each licensee with a utilization facility licensed pursuant to sections 103 or 104b of the Act shall immediately notify the NRC Operations Center of the occurrence of any event specified in § 50.72.

The NRC staff will evaluate the information transmitted to the Commission in response to these reporting requirements and make the timely decisions required to provide adequate assurances regarding actual or potential threats to public safety. There is no source for the required information other than licensees.

Description of the Information Collection

Examples of events requiring notification:

a) Declaration of emergency situations as required by the Site Emergency Plan;

b) Any deviation from the plant's Technical Specifications;

c) Any natural phenomenon (forest fire, earthquake, tornado, hurricane) that poses a threat to the plant;

d) Injury or illness of personnel involving radioactive contamination; and

e) Initiation of a plant shutdown required by plant Technical Specifications.

These reporting requirements will affect 93 operating nuclear plants.

Estimation of Burden

It is estimated that 40 reports annually will be received from each of 93 operating plants in response to the reporting requirement of 50.72.

The burden for each phone call is estimated to be 15 minutes. Therefore, the total annual burden for all licensees covered by this reporting requirement is estimated to be:

93 plants x 40 reports per year	=	3,720 reports
3720 reports x .25 hours	=	930 person hours

Cost to industry is, therefore, estimated to be $55,800 (930 person hours x $60).

Estimate of Cost to the Federal Government

Events Analysis

The cost to the Federal government is estimated as follows:

1. Office of Nuclear Reactor Regulation - 3 person years (2,080 person hours/ per year x 3 person years = 6,240 person hours)

2. Office of Inspection and Enforcement - 7 person years (2,080 person hours x 7 person years = 14,560 person hours)

3. Five Regional Offices - 1 person year each (2,080 person hours x 5 = 10,400 person hours)

Event Report Receipt

1. 7 Persons to man the Operations around the clock (2,080 X 7 = 14,560 staff hours) 14,560 X $60 = 873,600

2. Cost of the Emergency Notification System line for reporting events $3.5 million

Based on the above, annual Federal cost for events analysis associated with these regulations is estimated to be (31,200 annual person hours x $60) $1,872,000. When this is added to the Federal Cost involving the receipt of the event report, the total annual cost to the Federal government is expected to be $6,245,600.

SUPPORTING STATEMENT

FOR

10 CFR 50.55(e)

Reporting of Significant Design

and Construction Deficiencies

Justification

"Quality Assurance Criteria for Nuclear Facilities" as an Appendix B to 10 CFR Part 50, "Licensing of Production and Utilization Facilities," requires an applicant for, or holder of a license to construct or operate, a nuclear power plant to establish a quality assurance program. This program is to assure, among other things, that all conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformance, are promptly identified and reported to appropriate levels of management. The requirements of 10 CFR Section 50.55(e) were added to the regulations in 1972 to ensure that the more significant of these deficiencies be reported to the Commission. Without the reporting requirement of 10 CFR Section 50.55(e), the Commission would only be notified of deficiencies occurring during the design and construction of nuclear power plants through its Inspection during the design and construction of nuclear power plants through its Inspection staff or through reports submitted by holders of construction permits, either voluntarily or as requested by the Commission on a case-by-case basis.

The reports submitted under Section 50.55(e) are necessary to ensure that the staff is promptly informed of deficiencies identified in design and construction so that a timely inspection and evaluation of the deficiency can be made. Timely evaluation is necessary to adequately protect public health and safety from the potential consequences of the deficiency at the plant reporting and from other similar plants, should the deficiency be generic. 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, inspection and enforcement personnel, and identification of problems in management or implementation of the quality assurance program.

There is no source for the required information other than licensees.

Description of the Information Collection

This reporting requirement affects approximately 34 plants under construction.

Estimation of Burden

The preparation burden per plant is approximately 500 staff-hours. 34 x 500 staff hours = A total annual burden for all licensees of 17,000 hours at a cost of $1,020,000 ($60 x 17,000 hours).

Estimate of Cost to the Federal Government

The burden is expected to be 4,900 hours at a cost of $294,000 ($60 x 4,900 hours).

Part 12

SUPPORTING STATEMENT

FOR

10 CFR 50.59(b)

REPORTS AND RECORDS FOR CHANGES, TEST AND EXPERIMENTS

JUSTIFICATION

Section 50.59 of NRC regulations allows a holder of a license authorizing operation of a production or utilization facility (i) to make changes in the facility as described in the Safety Analysis Report, (ii) to make changes in procedures as described in the Safety Analysis Report, and (iii) to 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 in the technical specifications incorporated in the license or an unreviewed safety question.

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 Regulation.

These records are also frequently used by NRC regional inspectors. The records provide background information needed by the NRC inspector during his visit to a licensed facility. He uses these records to confirm the appropriateness of changes, tests or experiments, or during evaluation of abnormal occurrences.

The records and reports assist the NRC staff in evaluating the potential effects of these changes in relation to the health and safety of the public. The ultimate value is received in the form of assuring the health and safety of the public and is well worth the cost of collecting, storing, and reporting the data.

Description of the survey

These recordkeeping and reporting requirements affect 93 power reactors and 75 research/test reactor licensees.

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 168 facilities evaluate approximately 100 changes a year. It is also estimated that approximately 16 hours of burden is required for records associated with the analysis of 100 changes annually. Thus, recordkeeping burden encompassed within 50.59(b) is estimated to be (1,600 hours x 168 plants) 268,800 hours. Accordingly, annual recordkeeping cost to industry will be ($60 x 268,800) $16,128,000.

Estimation of Respondent Reporting Burden

The reporting burden consist of 168 licensees submitting a summary of the changes, that have been evaluated annually. It is expected that approximately 4 hours 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 67,200 hours annually (400 hours x 168 plants). The annual cost to industry is, therefore, expected to be (67,200 hours x $60) = $4,032,000.

Total industry burden annually would, therefore, be 336,000 hours; total annual cost would be $20,160,000 ($60 x 336,000).

Estimate of Cost to the Federal Government

There is an additional burden to the Federal Government of 80 hours per licensee; (93 power reactor licensees and 75 research/test reactor licensees); 168 licensees x 80 hours = 13,400 staff-hours. Therefore, the cost to the Federal Government is expected to be $806,400 ($60 x 13,440).

Part 13

SUPPORTING STATEMENT

FOR

10 CFR 50, APPENDIX G AND
APPENDIX H, SECTION IV; 50.60

Fracture Toughness Tests, Surveillance and Reports

JUSTIFICATION

Appendix G to 10 CFR Part 50 specifies minimum fracture toughness requirements for the reactor coolant pressure boundary of water-cooled power reactors. Section V specifies how radiation damage to the reactor beltline is to be accounted for in the fracture control plan for the reactor. Paragraph V.C. requires that certain extra steps be taken in the event that the normal fracture analysis requirements specified in Paragraph V.B cannot be satisfied. Paragraph V.D. requires a thermal anneal of the reactor vessel beltline if the procedures of Paragraph V.C. do not indicate the existence of an adequate safety margin. Paragraph V.E. requires that the proposed programs for satisfying the requirements of Paragraphs V.C. and V.D. be reported to the Director of Nuclear Reactor Regulation for review and approval at least three years prior to the date when the predicted fracture toughness levels will no longer satisfy the requirements of Paragraph V.B.

The information in the report required by Paragraph V.E. 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 for 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 willl be submitted which use that data.

Section III.B contains the materials test requirements for the Charpy V-notch tests and drop weight tests. Paragraph III.B.5 specifies that records are to be kept on (1) the test results, with traceability to the material in each component, (2) the qualification of test personnel, and (3) the calibration of test equipment.

The records maintained by licensees for the life of the facility in response to this 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 data will be used by the NRC staff in making its safety evaluation of the licensee's submittal. Material properties of the actual material in the component are an essential input to such evaluations.

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 - perhaps once every three years on the average. 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.

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.

There is no source for the required information other than the licensees.

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. Paragraph IV requires: (a) the test results obtained from the specimens contained in each surveillance capsule shall be reported to the Director of Nuclear Reactor Regulation, NRC, for each capsule withdrawal, and (b) new pressure-temperature operating limits for the reactor, based on the surveillance test results, shall be reported.

Surveillance reports are reviewed by Division of Licensing staff, whose evaluation is the basis for approval of the proposed pressure-temperature operating limits for the reactor.

The impact of not obtaining the reports required by Paragraph IV 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 1. 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. Without the information required by Paragraph IV of Appendix H there would be insufficient basis for approval of continued operation beyond a few years' life.

Section 50.60, acceptance criteria for fracture prevention measures for light water nuclear power reactors for normal operation, provisions are as follows: (a) Except as provided in paragraph (b) of 50.60, lightwater nuclear power reactors must meet the fracture toughness and material surveillance program requirements for the reactor coolant pressure boundary set forth in Appendices G and H. (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 applicant 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. This information is needed to assure that the reactor vessel does not exceed radiation embrittlement limits and meets the requirements of General Design Criterion 31 and 32, specified in Appendix A to 10 CFR Part 50.

There is no source for the required information other than the licensees.

Description of the Survey Plan

The reporting and recordkeeping required effect 5 licensees for Appendix G Section V.E., 93 for Section III.B, and 127 for Appendix H.

Estimation of Respondent Reporting Burden

Appendix G	
Section V.E.	Negligible
Section III.B	100 hours, 93 X 100 = 9,300 hours annually
Appendix H	160 hours, (per report), 127 X 160 = 20,320 hours annually.

Thus, estimated industry cost is (29,620 hours X $60) $ 1,777,200.

Cost to the Federal Government

Appendix G
Section V.E. requires 160 hours per report
160 x 5 = 800 staff-hours at a total cost of $48,000 ($60 X 800).

Section III.B is negligble

Appendix H requires $38,400 based on staff experience.

Therefore, the total estimated Federal cost is $86,400 ($48,000 + $38,400).

Part 14

SUPPORTING STATEMENT

FOR

10 CFR 50, APPENDIX J

Primary Reactor Containment Leakage Testing for
Water-Cooled Power Reactors

JUSTIFICATION

10 CFR 50, Appendix J, "Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactor," 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. Tests are conducted upon completion of construction of the primary reactor containment building (containment), periodically during each 10 year service period (approximately every 3-1/3 years), and during shutdown for refueling (approximately every 18 months but in no case at intervals greater than 2 years). The Appendix also establishes acceptance criteria for such tests. One of the conditions of all operating licenses for water-cooled power reactor is that primary reactor containments shall meet containment leakage test requirements set forth in 10 CFR 50, Appendix J.

Section V.B., "Inspection and Reporting of Tests," requires submission to the NRC of a summary technical report, "Reactor Containment Building Integrated Leak Rate Test," approximately 3 months after the conduct of each preoperational and periodic test. Furthermore, such reports must include a separate accompanying summary report analyzing and interpreting the test data for any tests that failed to meet the acceptance criteria of Appendix J. Results and analyses of the supplemental verification test employed to demonstrate the validity of the leakage rate test measurements are also required to be included.

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 containment. The required tests make sure that the containment is built as designed, and that leakage limits are not exceeded.

Reports of preoperational leakage tests are needed by the NRC (Inspection and Enforcement and the Office of Nuclear Reactor Regulation) since these tests are the only means by which it can be verified that these structures have in fact been built within the leakage levels specified as a condition of licensing by the NRC. Information included in the report is reviewed to determine the results achieved, as well as to judge the accuracy and validity (reliability) of the data.

The reports of the periodic leakage tests are needed by the NRC (IE and NRR) in order to verify 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. If the preoperational or a periodic leakage test was not successfully completed, operation of the reactor would not be permitted.

There is no source for the required information other than licensees.

Description of the Survey Plan

Out of 93 operating reactor licensees, the NRC anticipates 63 reports* annually.

Estimation of Respondent Reporting Burden

The burden on licensees for preparation of each report is estimated to be 366 hours.

Approximately 63 reports are submitted annually.

63 x 366 man-hours = A total annual burden for all licensees of 23,058 man-hours. Therefore, estimated industry cost is expected to be $1,383,480 ($60 X 23,058).

Estimate of Cost to the Federal Government

The cost to the Federal Government for the review of each report is estimated to be $60.00.

Approximately 63 reports are submitted annually:

63 x $60.00 = $3,780.

*Each licensee submits a report on the average of every 18 months.

PART 15

SUPPORTING STATEMENT

FOR

10 CFR 50.35(b)

Periodic Research and Development Reports

JUSTIFICATION

Section 50.35, Issuance of Construction Permits, specifies in paragraph 50.35(b) 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". This procedure allows the Commission, by special reference in a facility construction permit, to request information concerning ongoing R&D activities that are in support of a construction permit. However, reports are not currently being filed under Section 50.35(b).

These reports would keep the staff apprised of the progress and findings of licensee R&D programs and increase the likelihood that any safety problems would be resolved in a timely manner.

The NRC Staff would evaluate the results obtained from licensee R&D programs. The staff would then determine what, if any, corrective measures were appropriate and develop regulatory procedures including revisions to existing review processes and possible facility modification, if necessary.

There is no source for the required information other than licensees.

Description of the survey plan

This reporting requirement is not currently being utilized to obtain information from licensees.

Estimation of respondent reporting burden

This reporting requirement is not being employed by NRC to obtain information from licensees at this time and therefore imposes no respondent burden. NRC requests renewal of the clearance for this section, however, in order to receive timely information from licensees on potential new technological developments for both power reactor and fuel reprocessing systems. Ongoing R&D 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 judgements about the effects of current research on future licensing actions.

Estimate of cost to the Federal Government

Negligible

SUPPORTING STATEMENT

FOR

10 CFR 50.71(b) and APPENDIX C

Annual Financial Report
and
Financial Requirements

JUSTIFICATION

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 or a license shall state such information as the Commission, by rule or regulation, may determine to be necessary to decide such of the financial qualifications of the applicant as the Commission may deem appropriate for the license.

Section 10 CFR 50.71(b) provides for the filing of annual financial reports, including certified financial statements, of facility licensees with the Commission. The fundamental purpose of the financial qualifications provision is the protection of the public health and safety and the common defense and security. An applicant's financial qualifications may affect his ability to meet his responsibilities on safety matters.

The Commission reserves the right to require additional financial information during the operation of a facility, particularly in cases which the nuclear power plant will be commonly owned by two or more existing companies, or in which financial 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 is the only financial document routinely filed by a license after a construction permit has been issued for a nuclear power plant.

The annual financial reports are used by NRC staff for financial monitoring of the respondents. If it appears that any respondent is experiencing financial difficulties, this information is provided to NRC management for their consideration. The information is also placed in NRC docket files and Public Document Room, and thereby made available for inspection by the public.

On September 12, 1984, the Commission promulgated a final rule which eliminates requirements with respect to financial qualifications for electric utility applicants for a license to operate a production or utilization facility as presribed in Section 50.21(b) or Section 50.22. (See Appendix C.)

There is no source for the required information other than licensees.

Description of the Survey Plan

This reporting requirement affects approximately 127 licensees annually.

Estimation of Respondent Reporting Burden

The annual burden per licensee is estimated by the staff to be 1 hour.

127 x 1 hour = A total annual burden for all licensees of 127 hours.

This is based on staff's experience. Therefore, industry cost is estimated to be ($60 x 127) $7,620.

Estimate of Cost to the Federal Government

The annual burden is estimated to be 1 staff-hour/report 127 x 1 = 127 staff-hours total for a total cost of $7,620 ($60 x 127 staff hours).

SUPPORTING STATEMENT

FOR

Property Damage Insurance

10 CFR 50.54(w)(4)

Justification

Licensees of commercial nuclear power plants are required to submit annually proof that they carry onsite property damage insurance available from private sources in an amount specified in 10 CFR 50.54(w)(1) or as established by Commission in response to a request for exemption. This reporting requirement arises out of a Commission regulation promulgated on March 31, 1982 that such insurance be obtained. The information submitted by licensees is used by the NRC staff to assure that licensees are complying with the requirement to maintain onsite property damage insurance.

Description of Survey Plan

Reporting requirement affects 50 licensees.

Tabulation and publication plans

There are no plans to publish the data

Time schedule for data collection and publication

Information will be collected from licensees as long as they remain licensees and the insurance and reporting requirement remains in effect. The information will not be published as such.

Consultations outside the agency

Regulation received public comment during proposed rule stage.

Estimation of respondent reporting burden

Average reporting burden to each licensee 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 50 licensees affected by the reporting requirements. Thus, the current annual burden is 200 hours. The estimated industry cost is $12,000 ($60.00 x 200) .

Sensitive questions

Not applicable.

Estimate of Cost to Federal Government

Staff review time of 15 minutes/licensee is expected. Total staff review time per year is 15 minutes/licensee x 50 licensees = 12+ staff hours. Given the assumption of salary per hour of $60.00, the total dollar cost to the Federal government is expected to be $720 annually.

Part 18

SUPPORTING STATEMENT

FOR

"Guidance for Implementation of the
Standard Review Plan Rule (10 CFR 50.34(g)) NUREG-0906"

1. JUSTIFICATION

The Nuclear Regulatory Commission (NRC) is authorized by Congress to have responsibility and authority for the licensing and regulation of nuclear power plants. To meet this responsibility, the NRC conducts a detailed review of all applications for licenses to construct and operate such facilities. In March 1982, the NRC adopted a final rule, 50.34(g), which requires the applicants for a construction permit (CP), operating license (OL), preliminary design approval (PDA), or final design approval (FDA) provide, as part of the material currently required by 10 CFR 50.34, an evaluation of the differences from the Standard Review Plan (NUREG-0800) acceptance criteria, for those applications docketed after the effective date of the rule. NUREG-0906, the subject of this statement, is proposed guidance to applicants to assist them in complying with the rule.

The Standard Review Plan (SRP) reflects the NRC's detailed interpretations of the acceptable means to satisfy the applicable regulatory requirements, which assure 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 in accordance 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. Consequently, a concern has been raised regarding the thoroughness of the staff's review and the degree to which the plants conform to the applicable regulatory requirements. 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 receive a thorough staff review.

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 intimately 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. DESCRIPTION

Section 50.34(g) requirements would affect all new applications for CPs, OLs, and PDAs, and FDAs.

There is no requirement for a separate report; the reporting requirement is satisfied by additional information in the SAR, a document required as part of the application.

3. ESTIMATE OF BURDEN AND COSTS

Over the next three-year period, the NRC does not expect any new CP, OL, PDA or FDA applications. Thus, burden and cost associated with this regulation is expected to be negligible for the next 3 years.

Part 19

SUPPORTING STATEMENT

FOR

HYDROGEN CONTROL REQUIREMENTS

10 CFR 50.44(c)

1. JUSTIFICATION

The accident at Three Mile Island, Unit 2 (TMI-2) resulted in a severely damaged or degraded 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 Nuclear Regulatory Commission has taken numerous actions to correct the design and operational limitations revealed by the accident. Included in these actions are several rulemaking proceedings intended to improve the hydrogen control capability of light-water nuclear power reactors. On October 2, 1980, the Nuclear Regulatory Commission published in the Federal Register (45 FR 65466) a notice of proposed rulemaking on "Interim Requirements Related to Hydrogen Control and Certain Degraded Core Considerations" (Interim Rule). The notice concerned proposed amendments to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," to improve hydrogen management in light-water reactor facilities and to provide specific design and other requirements to mitigate the consequences of accidents resulting in a degraded reactor core.

On March 23, 1981, the Commission published in the Federal Register (46 FR 18045) a notice of proposed rulemaking on "Licensing Requirements for Pending Construction Permit and Manufacturing License Applications." The notice proposed a set of licensing requirements applicable to construction permit applications that stemmed from lessons learned from the TMI-2 accident. On May 13, 1981, the Commission published in the Federal Register (46 FR 26491) a notice of proposed rulemaking on "Licensing Requirements for Pending Operating License Applications" (OL Rule).

As a follow-up to the October 2, 1980 notice of proposed rulemaking, the Commission published a notice of final rulemaking on December 2, 1981 (46 FR 58484) on hydrogen control requirements related to inerting of Mark I and II boiling water reactors, hydrogen recombiner capability and high point vents.

The Commission has considered the ability of all light-water nuclear power reactors, particularly pressurized light-water reactor facilities with ice condenser type containments and boiling light-water reactor facilities with Mark III type containments, to withstand an accident with the concomitant generation of large amounts of hydrogen, such as the type which occurred at Three Mile Island, Unit 2 (TMI-2). As a result, three new amendments to the regulations were proposed for public comment on December 23, 1981 (46 FR 62231). The final amendments require: (a) improved hydrogen control systems for boiling water reactors with Mark III containments and pressurized water reactors with ice condenser

type containments: (b) that those light-water nuclear power reactors not relying upon an inerted atmosphere for hydrogen control show that certain important safety systems must be able to function during and following hydrogen burning; and finally (c) analyses to be submitted 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, for those plants in (a) and (b) above.

The subject of this supporting statement is the requirement that analyses should be submitted under (c) above. The information contained in the analyses is necessary to permit the NRC staff to perform an evaluation to determine if the requirements for hydrogen control and safety equipment functioning during a hydrogen burn are met. Without this information the NRC staff could not evaluate the design of the hydrogen control systems selected or determine whether or not needed safety equipment could indeed function during a hydrogen burn.

2. DESCRIPTION OF THE INFORMATION COLLECTION

The requirements to submit analyses for both the hydrogen control system and the demonstration of survivability during a hydrogen burn would apply to Mark III BWRs and ice condenser PWRs in various stages of the licensing process. Due to the similarities between plants, it is estimated that six reports will be received from power reactor licensees, on a site basis.

The requirement for submittal of the analyses would be on a one time only basis and would not be repeated except to correct deficiences in the reports.

3. ESTIMATE OF COMPLIANCE BURDEN

The reporting of the design and survivability analyses for the six plants (three Mark III BWRs and three ice condenser PWRs) will require approximately 1,500 hours per plant for a total of 9,000 burden hours annually. Therefore, cost to industry is expected to be $540,000 ($60 X 9,000 hours).

4. ESTIMATES OF COST TO FEDERAL GOVERNMENT

The evaluation of the reports by the NRC staff will require 960 hours for each Mark III BWR and ice condenser PWR for a total of 5760 (staff hours) or $345,600 annual cost (at 60.00 per hour professional staff time.)

SUPPORTING STATEMENT
FOR
10 CFR 50 Section 50.49
Environmental Qualification of Electric Equipment Important to
Safety for Nuclear Power Plants

Justification

Nuclear power plant equipment important to safety must be able to perform its safety functions throughout its installed life. The final rule is designed to assure the NRC that the electrical equipment will be able to perform its accident mitigation functions under the postulated environmental conditions. To accomplish this objective, the rule requires licensees and applicants to qualify the essential electrical equipment. Qualification methods include testing as the primary method and analysis in combination with partial type. test data or operating experience.

By its Memorandum and Order CLI-80-21, dated May 23, 1980, the Commission directed that the "DOR* Guidelines for Evaluating Environmental Qualification of Class 1E Electrical Equipment in Operating Reactors," and NUREG-0588, "Interim Staff Positi.. of Environmental Qualification of Safety-Related Electrical Equipment," form the basis for the requirements licensees and applicants, respectively, must meet for environmental qualification of electrical equipment. This Memorandum and Order also included certain reporting and recordkeeping requirements with which licensees of the operating nuclear power plants are required to comply. The recordkeeping requirements, in general terms, are contained in Sections XI and XVII of 10 CFR 50, Appendix B. The rule codifies the Commission's current requirements for the qualification of electrical equipment and explicitly states the reporting and recordkeeping requirements.

The information collection requirements contained in the rule consist of the following:

A. 50.49(d): establishment of records listing all electrical equipment covered by the rule, its performance characteristics, its electrical characteristics, and the environmental conditions in which it must operate.

B. 50.49(g): identification of the electrical equipment already qualified prior to the effective date of the rule and submission of a schedule for qualifying or replacing the remaining electrical equipment.

C. 50.49(h): notification of any significant equipment qualification problems that may require extension of the completion date within 60 days of its discovery.

---

*This stands for Division of Operating Reactors, which is currently known as the Division of Licensing.

D. 50.49(i): submission of an analysis by an applicant for an operating license to ensure that the plant can be safely operated pending completion of the environmental qualification of electrical equipment.

E. 50.49(j): maintenance of records of electrical equipment qualified under these regulations, retained for the entire period during which the item is installed or stored for future use.

Description

The rule applies to 93 operating power reactors and 34 construction permit holders (127 respondents).

Time Schedule

The electrical equipment covered by the rule for the operating nuclear power plants must be qualified by the end of the second refueling outage after March 1982 or by March 31, 1985, whichever is earlier. NRC's Director of the Office of Nuclear Reactor Regulation may grant requests for extensions of this deadline to a date no later than November 30, 1985, for specific pieces of equipment if these requests are filed on a timely basis and demonstrate good cause for the extension. In exceptional cases, the Commission itself may consider and grant extensions beyond November 30, 1985, for completion of environmental qualification.

Information under provisions of Section 50.49(d) is not required to be submitted to NRC. Submission of schedule under Section 50.49(g) was required on a one-time-only basis within 90 days after the effective date of the final rule and has been completed. Information under Section 50.49(h) shall be submitted only when a problem occurs. Submission of analysis under Section 50.49(i) is required on a one-time basis only for those components for which full qualification cannot be demonstrated. Recordkeeping requirements under Section 50.49(j) must be completed no later than March 31, 1985 for all operating nuclear power plants unless an extension is granted to the individual licensee.

Consultations Outside the Agency

NRC staff participates in the development of national IEEE standards. Since 1975, these IEEE standards have included specific requirements for qualification documents.

Estimate of Burden

	Reporting Requirements	Annual Compliance Burden: For 93 Operating Nuclear Power Plants (h/plant) To Licensees	For 93 Operating Nuclear Power Plants (h/plant) To Govt.	For 34 plants under construction, 10 to be licensed each year (h/plant) To Applicants	For 34 plants under construction, 10 to be licensed each year (h/plant) To Govt.
50.49(d)	Development of list of electrical equipment and its characteristics (one time only)		Completed	2000	40
50.49(g)	Submission of a schedule for qualification and and replacement (one time only)		Completed	N/A	N/A
50.49(h)	Reporting of significant qualification problem (Average 2 responses annually per plant)	20	4	20	4
50.49(i)	Submission of a safety analysis report (one time only)	N/A	N/A	100	20
	Sub Total Licensee/Applicant Burden	20 h/plant		2,120 h/plant	
	Total Licensee/Applicant Burden:	20 h/plant x 93 plant =		2,120 h/plant x 34 plants =	
	1,860 + 72,080 = 73,940 hours	1,860 h		72,080 h	
	Sub Total Burden to Government		4h/plant		64 h/plant
	Total Burden to Government:		(4 h/plants x 93 plants) =		(64 h/plant x 34 plants)
	372 + 2,176 = 2,548 hours		372 h		= 2,176 h

Estimates of Cost to Industry

The total cost to industry is estimated to be (73,940 hr x $60) $4,436,400 [includes annual cost (60 x 20 x 127) = $152,400]

Estimates of Cost to Federal Government

The total cost to the Government is estimated to be (2548 hr x $60) $152,880 [includes annual cost (60 x 4 x 127) = $30,480]

Recordkeeping Requirements

10 CFR 50.49(j) requires that a record of qualification be maintained in an auditable form for the period of time during which a covered item is installed or stored for future use. This "qualification file" must demonstrate that the equipment is qualified for its application and meets its specified performance requirements for the duration of its qualified life.

Estimate of Burden

		Annual Compliance Burden			
	Recordkeeping Requirements	For 93 Operating Nuclear Power Plants (h/plant)		For 34 plants under construction, 10 to be licensed each year (h/plant)	
		To Licensees	To Govt.	To Applicants	To Govt.
50.49(j)	Maintain records which demonstrate qualification	40	N/A	40	N/A
	Sub Total Licensee/Applicant Burden	40 h/plant		40 h/plant	
	Total Licensee/Applicant Burden: 3,720 + 1,360 = 5,080 hours	40 h/plant x 93 plant = 3,720 h	Total	40 h/plant x 34 plants = 1,360 h	
	Sub Total Burden to Government		N/A		N/A
	Total Burden to Government: None		N/A		N/A

Estimates of Cost to Industry

The total annual cost to industry is estimated to be (5,080 hr x $60) $304,800.

Estimates of Cost to Federal Government

The total annual cost to the Government will be negligible.

SUPPORTING STATEMENT FOR

ANTICIPATED TRANSIENT WITHOUT SCRAM

10 CFR 50.62

1. Justification

A. Need for the Information Collection

An anticipated transient without scram (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 reactor trip system 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 accidents are a cause of concern because under certain postulated conditions they could lead to severe core damage and release of radio activity 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; the latest being 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. The Commission has amended its regulations to require 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 anticipated transients, and to mitigate the consequences of anticipated transients without scram events. This will significantly reduce the risks of nuclear power plant operation.

The rule requires the installation of certain equipment in nuclear power plants, in order to prevent and mitigate ATWS events. The licensee for a nuclear power plant will be required, by 10 CFR 50.62(c)(6), to submit a copy of the design and installation plans to the NRC to ensure that the design and installation of 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 the rule. This provision allows the establishment of implementation schedules that are tailored to the safety priority needs and resources of the individual licensee.

B. Practical Utility of the Information Collected

The NRC would review a proposed design to ensure that it will perform its intended safety function.

C. Duplication With Other Collections of Information

The rule does not duplicate the information collection requirements contained in any other generic regulatory requirement.

D. Consultations Outside the NRC

On November 24, 1981, the Commission invited comments on three alternative proposed rules related to ATWS (46 FR 57521). Each of the three alternative proposed rules had the objective of reduction of risk from ATWS and each had its own approach of achieving that objective. One alternative emphasized individual reactor evaluation to identify needed improvements. The second alternative emphasized reliability assurance and would have also required certain hardware modifications. The third alternative, proposed by the Utility Group on ATWS (PRM 50-29), prescribed specific changes that were keyed to the type of reactor and its manufacturer. The industry proposal provided considerable information on alternative requirements and costs of implementation. A number of negative comments were received from the industry on an alternative involving extensive reporting requirements in the form of a reliability assurance program. This alternative was not selected.

2. Description of the Information Collection

A. Number and Type of Responses

The reporting requirement will apply to 93 operating nuclear power plants and 34 plants to be licensed in the future, for a total of 127 respondents.

B. Reasonableness of the Schedule

The scheduling requirements in 10 CFR 50.62(d) allows licensees to propose schedules keyed to their individual operating situation.

C. Method of Collection

The licensee will submit a copy of all plans and specifications to the NRC.

D. Adequacy of the Description of Information

The designs which are required to be submitted for review are specified in the rule.

E. Record Retention Period

None (No recordkeeping required).

F. Reporting Period

One-time only.

G. Copies

In order to reduce the time spent in reviewing the licensee submittal, ten copies are required. This will allow simultaneous review by the relevant organizations within NRC.

3. Estimate of Burden

A. Estimated Hours Required to Respond

Each respondent must submit a copy of all drawings and diagrams for the required equipment, plus a short explanatory narrative. This will take sixteen hours of professional staff time and four hours clerical time for a total of 20 hours per respondent. Total burden would be 20 hours x 127 respondents or 2,540 hours. The scheduling report required by 10 CFR 50.60(d) will entail 32 hours per respondent, for a total burden of 4,064 hours. Total annual reporting hours for the entire rule are 6,604.

B. Estimate of the Information Collection

At fifty-two hours per response, the total annual industry cost is estimated to be $396,240 (127 responses X 52 hours/response = 6,604 hours; 6,604 hours X $60/hour = $396,240).

C. Reasonableness of Burden Estimates

The estimates are in the same range as the hours expended to comply with similar requirements i.e., submittal of design information.

4. Estimate of Cost to Federal Government

Approximately two days will be required to review the designs submitted under 10 CFR 50.62(c)(6) for a cost of $960 (16 x $60).

Approximately one day will be required to review the proposed implementation schedule submitted under 10 CFR 50.62(d), for a cost of $480 (8 x $60).

Total Government costs per response are $480 + $960; or $1440. Total Government costs are $1440 x 127, or $182,880.

SUPPORTING STATEMENT FOR PROPOSED 10 CFR 50.61,

"FRACTURE TOUGHNESS REQUIREMENTS FOR PROTECTION AGAINST

PRESSURIZED THERMAL SHOCK EVENTS"

1. Justification

(a) Need for the Information Collection

The issue of pressurized thermal shock (PTS) arises because in pressurized water reactors (PWRs) transients and accidents can occur that result in severe overcooling (thermal shock) of the reactor pressure vessel, concurrent with or followed by repressurization. In these PTS events, rapid cooling of the reactor vessel internal surface results in thermal stress with a maximum tensile stress at the inside surface of the vessel. The magnitude of the thermal stress depends on the temperature profile across the reactor vessel wall as a function of time. The effects of this thermal stress are compounded by pressure stresses if the vessel is pressurized.

Severe reactor system overcooling events which could be accompanied by pressurization or repressurization of the reactor vessel (PTS events) can result from a variety of causes. These include system transients, some of which are initiated by instrumentation and control system malfunctions including stuck open valves in either the primary or secondary system, and postulated accidents such as small break loss-of-coolant accidents, main steam line breaks, and feedwater pipe breaks.

As long as the fracture resistance of the reactor vessel material is relatively high, such events are not expected to cause vessel failure. However, the fracture resistance of reactor vessel materials decreases with exposure to fast neutrons during the life of a nuclear power plant. The rate of decrease is dependent on the metalurgical composition of the vessel wall and welds. If the fracture resistance of the vessel has been reduced sufficiently by neutron irradiation, severe PTS events could cause propagation of fairly small flaws that might exist near the inner surface. The assumed initial flaws might initiate and propagate into a crack through the vessel wall of sufficient extent to threaten vessel integrity and, therefore, core cooling capability.

The data collection aspects of the proposed 10 CFR 50.61, "Fracture Toughness Requirements for Protection Against Pressurized Thermal Shock (PTS) Events" are as follows:

50.61(b) to require each PWR licensee to determine the plant RT_{NDT} (Reference Temperature for Nil Ductility Transition) according to a method uniformly defined for all plants;

50.61(c) to require analyses of flux reduction options that will prevent or delay the plant from operating above the defined RT_{NDT}; and

50.61(d) to require plant-specific PTS risk analyses be submitted before operation beyond the defined RT_{NDT} is considered.

Collection and analysis of the information is necessary to identify needed corrective actions before operation above the identified RT_{NDT} value can be considered.

(b) Practical Utility of the Information Collection

The information and analyses will be reported on the plant's docket through the NRC Licensing Project Manager (LPM). The LPM will coordinate review of the information and analyses by the appropriate branches (depending upon technical subjects covered) leading to a coordinated NRC staff recommendation to the Commission regarding necessary corrective actions before plant operation can be considered at RT_{NDT} values above the screening value. The review will be performed by the staff on a schedule that will ensure adequate time for implementation of any corrective requirement prior to reaching the screening criterion.

(c) Duplication with Other Collections of Information

There are no other NRC requirements regarding analyses for flux reduction or plant PTS safety analyses. 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. For new plants, it appears in the FSAR. During the operating life, the information is updated by the individual plant submittals that support requests for changes in the pressure-temperature limits given in Technical Specifications.

The new request for materials information (RT_{NDT} values) contained in this proposed regulation is required because: (1) the calculation of RT_{NDT} for PTS involves a new trend curve formula that contains nickel as one variable, and this represents a change from past practice which has yet to be adopted for normal operation; and (2) the calculation of RT_{NDT} for PTS purposes requires precise, updated data obtained in many cases by the licensee in response to NRC concerns regarding PTS. In normal operation, there are cases where upper-bound estimates are used in the absence of complete data. For PTS, this can, in some cases, be unnecessarily conservative, and an extra effort to obtain the data is required. For plants where complete data were available initially, this request will result in a verification (with quality assurance acceptable for PTS use) of earlier submittals.

(d) Consultations Outside NRC

We have reviewed our overall PTS recommendations on several occasions with the Advisory Committee on Reactor Safeguards (ACRS), including the information gathering aspects. The ACRS was in basic agreement with our recommendations (letter to Nunzio J. Palladino, Chairman, NRC, from P. Shewmon, Chairman, ACRS, October 14, 1982).

We have also reviewed our recommendations with consultants under contract with us at Pacific Northwest Laboratories. Their recommendations are similar to ours. (NUREG/CR-2837, July 1982).

(e) Other Supporting Information

None

2. Description of Information Collection

(a) Number and Type of Respondents

The licensees of all PWR plants would be subject to the regulation. With respect to the three data collection aspects of the proposed regulation, it is estimated that forty seven plants would be affected by item (1), RT_{NDT} assessment; approximately fifteen plants would be affected by item (2), flux reduction analyses; and between one and four plants would be affected by item (3), plant specific analyses.

(b) Reasonableness of schedule for Collecting Information

The schedule is stated in 10 CFR 50.61.

50.61(b) The initial RT_{NDT} determination "must be submitted (three months after the effective date of the regulation) and must be updated whenever changes in core loading, surveillance measurements, or other information indicate a significant change in projected values."

We feel that it is vital to quickly assess, with reliable information, which PWR plants are nearest the screening criterion so that we know as early as possible which plants most quickly need to complete the flux reduction analyses (see 50.61(c)) and the safety analyses (see 50.61(d)) which results in identification of necessary corrective actions. Appendix H, "Reactor Vessel Material Surveillance Program Requirements," 10 CFR Part 50, requires monitoring the change in the reactor beltline region resulting from exposure to neutron irradiation and thermal environment. This information is available to both the licensee and the Commission. It would require only verification by the licensee and submittal to the NRC by letter to the docket. Therefore, the proposed schedule is reasonable.

50.61(c) "For each pressurized water nuclear power reactor for which the value of RT_{NDT} is projected to exceed the PTS screening criterion before the expiration date of the operating license, the licensee shall submit by (six months after the effective date of the regulation) an analysis and schedule for implementation of such flux reduction programs as are reasonably practicable to avoid exceeding the PTS screening criterion."

The flux reduction option must be implemented as soon as possible for maximum effectiveness. Without this early reporting of flux reduction analyses, when the PTS safety analyses (see 50.61(d)) are submitted, it may be too late to make use of this option.

Due to their own interest in safety and economy, licensees will have already analyzed flux reduction options before this rule is promulgated. Therefore, the schedule proposed to prepare and submit a report on the docket is reasonable.

50.61(d) "For each pressurized water nuclear power reactor for which the analysis required by 50.61(c) indicates that no reasonably practicable flux reduction program will prevent the values of RT_{NDT} from exceeding the PTS screening criterion before the expiration date of the operating license, the licensee shall submit a safety analysis to determine what, if any, modifications to equipment, systems, and procedures are necessary to provide acceptable protection against potential failure of the reactor vessel as a result of postulated pressurized thermal shock events. This analysis shall be submitted at least three years before the value of RT_{NDT} is projected to exceed the PTS screening criterion or by (one year after the effective date of the regulation) whichever is later."

This is the final step to which all others lead, the identification of needed corrective actions. We believe the three year "lead time" before the screening criterion RT_{NDT} is exceeded represents the minimum time necessary to review the analyses, recommend actions, promulgate a requirement by Commission action (if necessary), and have the licensee implement the necessary corrective actions. If less than three years are allowed and the required actions are not completed, plant shutdown could be necessary. Since this would be a plant-specific analysis, we believe a report on the plant's docket to be the most efficient submittal.

(c) Method of Collecting the Information

The data and analyses are plant-specific and plant-unique and must be required from each plant. They are vitally necessary for the NRC

staff's use in evaluating a potential safety concern and identifying corrective actions that may be required to alleviate that concern. The staff members that will perform the evaluation are in the Washington, D.C. (NRC Headquarters) area and are in several different NRC organizational units. Reports filed on the plant docket and subsequently distributed to the reviewers appear to be the most efficient method. The flux reduction analyses and the RT_{NDT} analyses would probably be performed by different technical personnel within the licensee's (or vendor's) organization. If the licensee wishes to combine the two reports into a single report with two major sections, that would be acceptable. This would require, however, that the entire report be submitted on a schedule compatible with the schedule of the RT_{NDT} assessment (the earliest due section). We would distribute copies of the proper sections to the appropriate NRC organizations.

(d) Record Retention Period

Compliance to the requirements of Section IV, "Report of Test Results" of Appendix H of 10 CFR Part 50 ensures that the RT_{NDT} history is retained for the life of the plant. Therefore, this regulation will not impose an additional licensee burden.

The flux reduction and safety analyses should also be retained until and unless the analyses are modified or revised.

(e) Reporting Period

The RT_{NDT} and flux reduction information would be re-reported only when significant changes are indicated, as already discussed.

(f) Copies Required to Be Submitted

The required analyses will be prepared by the licensees and the report submitted for the docket. If additional copies are required of portions of the report(s) due to the number of reviewers involved, then they would be made internally.

3. Estimate of Licensee Burden

The licensees of all PWR plants would be subject to the regulation. Our estimate is that forty seven plants would be subject to RT_{NDT} assessment and fifteen plants would be subject to flux reduction analyses. Depending on the success of these analyses, we estimate that from one to four plants would be subject to PTS safety analyses. The estimates shown below apply only to costs due to the actual reporting requirements. That is, they do not include costs of performing the assessments which would still be necessary even if there were no requirements to submit reports to the NRC.

(a) Estimated staff-hours

1) RT_{NDT} assessment - 100 staff hours per plant - (47 x 100 = 4,700 staff hours total)

2) Flux reduction analyses - 100 staff hours per plant - (15 x 100 = 1,500 staff hours total)

3) PTS safety analyses - 400 staff hours per plant (Estimate 2 plants = 800 staff hours).

Therefore, our total estimated annual staff hours will be 2,333 based on a total estimated staff hours expenditure of 7,000 staff-hours distributed over a three year period.

(b) Estimated cost

1) RT_{NDT} assessment - $5,000 per plant - $235,000 total
2) Flux reduction analyses - $5,000 per plant - $80,000 total
3) PTS safety analyses - $20,000 per plant - from $20,000 to $80,000 (average of $40,000 for two plants).

Therefore, our estimated annual cost will be $118,300 based on a total expenditure of $355,000 distributed over a three year period. The annual recordkeeping burden is included in our estimate.

(c) Source and method for estimating:

RT_{NDT} assessment and flux reduction analyses.

The basic information is available to each licensee through ongoing reactor vessel integrity and surveillance programs. The method for estimating is based on engineering judgment by the NRC staff and our understanding of the assessment of the integrity of the vessel. The cost estimate is based on $100,000 per staff year.

PTS safety analysis

The estimate is based on the use of existing computer codes and modeling procedures. The estimate is based on the use of ten man-years, plant-specific modeling time, and twelve transient calculations. Engineering judgment by the NRC staff and their consultants was the method used for the estimates.

(d) Reasonableness of estimate

The estimates given above represent the best judgment of the NRC staff, and are based on actual experience with the cost of such PTS analyses now being performed by NRC/RES contractors at ORNL, INEL, and LANL.

4. Estimate of Cost to Federal Government

The submittals by the licensee will be evaluated by the staff, at the estimated cost given below. Our estimate is based on the use of a charge of $100,000 per staff man-year, an average currently used by the national laboratories for estimation purpose.

1) RT_{NDT} assessment

We estimate that an RT_{NDT} determination will be submitted by forty seven licensees three months after the effective date of the regulation. An RT_{NDT} assessment was completed by the staff as part of the PTS project and reported in Appendix P of the "NRC Staff Evaluation of Pressurized Termal Shock," November 1982.

The submittals will be evaluated by the Materials Engineering Branch and the Core Performance Branch. The total review time is estimated at 400 staff hours at an estimated cost of $20,000. The expenditure will be equally divided in FY-83 and FY-84.

2) Flux reduction

It is estimated that an analysis and schedule for implementation of flux reduction programs will be submitted by fifteen licensees six months after the effective date of the regulation.

The submittals will be reviewed and evaluated by the Core Performance Branch with assistance from Consultants and the Materials Engineering Branch. The total review time is estimated to be 600 staff hours at a cost of $33,000. The expenditure will be made in FY-84.

3) PTS safety analysis

It is estimated that a PTS safety analyses will be submitted by from one to four licensees three years prior to the reactor vessel reaching the screening criterion or one year after the effective date of the regulation, whichever is later.

The PTS safety analyses will be reviewed and evaluated by the Core Performance Branch, Materials Engineering Branch, Reactor Systems Branch, Reliability and Risk Assessment Branch, and Procedures and Test Review Branch. We estimate the total review time for one submittal as follows:

Branch	Staff Hours	Consultant	Total
CPB	240	$ 50,000	$ 30,000*
MTEB	100	-	5,000
RSB	1,500	$100,000	195,000**
RRAB	500	-	25,000
PTRB	100	-	5,000
Total	2,440	$150,000	$260,000

*$3,000 computer time
**$40,000 computer time

The expenditure will be made in FY-85 at an estimated cost from $260,000 to approximately $1,000,000 depending on the number of submittal for review.

In summary, we estimate the annual cost to the Government at $155,000, based on a total estimated expenditure of $463,000 distributed over a three year period.

The total cost to the government is $463,000.

Task	Branch	Staff Hours	Staff Cost	Consultant Cost	Total Cost
RT_{NDT} Assessment	MTEB/CPB	400	$20,000	-	$20,000
Flux Reduction	CPB/MTEB	600	$33,000	-	$33,000
PTS	CPB	240	$30,000*	$50,000	$80,000*
	MTEB	100	5,000	-	5,000
	RSB	1,500	195,000	100,000	295,000**
	RRAB	500	25,000	-	25,000
	PTRB	100	5,000	-	5,000
TOTAL		3,440	$313,000	$150,000	$463,000

*Plus $3,000 computer time.
**Plus $40,000 computer time.

OMB SUPPORTING STATEMENT

10 CFR 50.64
(Proposed)
Limiting the Use of Highly Enriched Uranium
in Research Reactors

1. Justification

A. Need for the Collection of Information

The Commission is considering amending its regulations to limit the use of highly enriched uranium (HEU) fuel in research and test reactors (nuclear non-power reactors). The proposed amendment generally would require that new non-power reactors use low enriched uranium (LEU) fuel and that existing non-power reactors replace HEU fuel with LEU fuel when available.

A Commission policy statement published August 24, 1982 (47 FR 37007), explains NRC's interest in reducing the use of highly enriched uranium 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 low enriched uranium (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 considered to date indicates that conversion of most non-power reactors from HEU fuel to LEU fuel will be technically feasible prior to or upon completion of the RERTR program. The information also 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.

The RERTR program's progress and anticipated success have encouraged NRC to undertake a rulemaking proceeding which would cause reduction

in the use of HEU fuel in nuclear non-power reactors. In this proceeding, the Commission considers that licensed non-power reactors now using HEU fuel are operated without significant risk to the health and safety of the general public and improved reactor safety is not the objective. The proceeding is intended only to cause replacement of HEU. This reduction is desirable because HEU, in appropriate form and quantity, can be used to make an explosive device. LEU has relatively little value for this purpose.

The proposed rule is intended only 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 operators, and thereby reduce the amount of HEU fuel in international use.

Under the proposed rule, non-power reactors would be required to use LEU fuel or use HEU fuel of enrichment as close to 20% as is available and acceptable to the Commission. Section 50.64(d)(1) of the proposed rule states that any request with supporting documentation for a determination that a reactor has a unique purpose must be submitted within 6 months of the effective date of the rule. Section 50.64(d)(2) of the proposed rule requires each non-power reactor licensee authorized to possess and use HEU fuel to develop and submit, within 12 months of the effective date of the rule, to the NRC's Director of the Office of Nuclear Reactor Regulation a proposed schedule for conversion to LEU fuel or to use HEU fuel as close t 20% as is available and acceptable to the Commission. This proposed 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 the Director.

Section 50.64(d)(3) states that in cases where replacement of HEU fuel with LEU fuel does not change the technical specifications incorporated in the license or involve an unreviewed safety question, that licensee shall maintain records and furnish reports as specified in 10 CFR 50.59(b). In those cases in which conversion to LEU changes the technical specifications incorporated in the license or involves an unreviewed safety question, the licensee shall file an amendment in accordance with 10 CFR 50.90.

B. Practical Utility of the Collection of Information

A respondent will submit a request with supporting information pursuant to 10 CFR 50-64(d)(1) to the Director of the Office of Nuclear Reactor Regulation. The Director will use the information to make a determination that the nuclear non-power reactor has a unique purpose as defined in 10 CFR 50.64(b)(3).

A respondent will develop and submit to the Director of the Office of Nuclear Reactor Regulation pursuant to 10 CFR 50.64(d)(2) a proposed

schedule for meeting the requirements of 10 CFR 50.64(c)(2) or (3). 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. The director 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.

C. Duplication of Other Collections of Information

A rulemaking is under consideration on 10 CFR 73.67, addressing the problem of improving physical security provisions at non-power reactors using HEU, as an interim measure, until such time as those non-power reactors are converted to LEU. However, information collected under §50.64 will not duplicate information collected under §73.67.

D. Consultations Outside the NRC

The development of the proposed rule has considered extensive comments from the U.S. State Department, the Department of Energy, and the non-power reactor owners. Implementation of the rule as proposed will require extensive coordination between NRC, DOE, and the affected licensees.

2. Description of the Information Collection

A. Number and Type of Respondent

The NRC anticipates 31 respondents on a one-time basis during the 1-year time period following the effective date of the rule. Each of these non-power reactor owners will also have the option of applying for an exemption from converting to LEU fuel based on the unique purpose of the non-power reactor. It is anticipated that between 2 to 6 respondents will request a unique purpose determination [§50.64(d)(1)] and all of the 31 respondents will submit a proposed schedule for conversion to LEU fuel or for use of HEU fuel of enrichment as close to 20% as is available and acceptable to the Commission [§50.64(d)(2)].

B. Reasonableness of the Schedule for Collecting Information

Request for unique purpose under 10 CFR 50.64(d)(1) will require an evaluation of facility purpose against the definitions in 10 CFR 50.64(b)(3). Six months is believed to be a reasonable schedule for comparing existing facility "purpose" against 10 CFR 50.64(b)(3) provisions.

The proposed schedule for meeting the requirements of 10 CFR 50.64(c)(2) or (3) 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. Twelve months is considered a reasonable time for development of the proposed schedule.

C. Method of Collecting the Information

Submission of a letter with supporting documentation or a proposed schedule is the only perceived method of transmitting the required information that will allow careful and complete review.

D. Format of Information to be Maintained or Submitted

The information will be submitted in letter form.

E. Records Retention Period

The records referenced in §50.64(d)(3) have a retention period that is specified in 10 CFR 50.59(b) for the holder of a license authorizing operation of a utilization facility.

F. Reporting Period

These requests and proposed schedules will be submitted once during the facility operating lifetime prior to meeting the requirements in 10 CFR 50.64(c)(2) or (3).

G. Copies Required to be Submitted

The NRC will accept one original copy to allow the Director to make the determinations in 10 CFR 50.64(d)(1) and (2) of the rule.

3. Estimate of Burden

A. Section 50.64(d)(1). Approximately 200 hours per response for each of between two and six respondents will be required to develop the request with supporting documentation for a "unique purpose" determination to be submitted to the Director of the Office of Nuclear Reactor Regulation. This is a one-time response within 6 months of the effective date of the rule, so the total burden for the respondents is between 400 and 1,200 hours. Total cost at $60 per hour is between $24,000 and $72,000.

B. Section 50.64(d)(2). Approximately 120 hours per response for each of approximately 31 respondents will be required to develop the proposed schedule and submit the proposed schedule to NRC. This is a one-time response within 12 months of the effective date of the rule, so the total burden is approximately 3720 hours. Total cost at $60 per hours is $223,200.

C. Section 50.64(d)(3). This section references information collection requirements (recordkeeping and reporting requirements in 10 CFR 50.59(b) or application for an operating license amendment pursuant to 10 CFR 50.59(c) and 10 CFR 50.90) that have been approved by the Office of Management and Budget under approval number 3150-0011. The approval covers information collection burdens for all holders of licenses authorizing operation of a utilization facility.

D. Burden estimates based on discussions with NRR staff who have been through the licensing process with these reactors previously.

4. Estimate of Cost to the Federal Government

A. Section 50.64(d)(1). NRC staff time for making a determination for each of the two to six "unique purpose" reactor requests will require approximately 600 hours. The total staff time for the (estimated) two to six requests would be between 1,200 and 3,600 hours. Total cost at $60 per hours would be between $72,000 and $216,000.

B. Section 50.64(d)(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 140 hours for each of approximately 31 licensees for a total of 4,340 hours. Total cost at $60 per hour is $260,400.

C. Section 50.64(d)(3). This section references information collections for which costs to the Federal government (review of applications for an operating license amendment) have been approved by the Office of Management and Budget under approval number 3150-0011.

REFERENCE PUBLICATIONS

Document Number	Document Title
Un-numbered Lists	Regulatory Guides
NUREG-0642 Revision 1	A Review of NRC Regulatory Processes and Functions
Regulatory Guide 1.70 Rev. 3	Standard Format and Safety Analysis Report for Nuclear Power Plants (LWR Edition)
NRC Form 366	Licensee Event Report
Regulatory Guide 1.28 Revision 2, and Revision 3 (Proposed)	Quality Assurance Program Requirements (Design and Construction)
Regulatory Guide 1.88 Revision 2	Collection, Storage, and Maintenance of Nuclear Power Plant Quality Assurance Records
NUREG-0660, Volumes 1 and 2, Revision 1	NRC Action Plan Developed as a Result of the TMI 2 Accident
NUREG-0737, and Supplement 1	Clarification of TMI Action Plan Requirements
NUREG-0546	Technical Specifications
Regulatory Guide 1.16 Revision 4	Reporting of Operating Information Appendix A, Technical Specifications
Regulatory Guide 1.21 Revision 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
Regulatory Guide 4.1 Revision 1	Programs for Monitoring Radioactivity in the Environs of Nuclear Power Plants
NUREG-0472 Revision 3	Draft Radiological Effluent Technical Specifications for PWR's
NUREG-0473 Revision 2	Draft Radiological Effluent Technical Specifications for BWR's

REFERENCE PUBLICATIONS (Continued)

Document Number	Document Title
Issued by letter dated November 27, 1979 from W. Gammill, NRC, to All Power Reactor Licensees	Branch Technical Position, Revision 1, dated November 1979 (Radiological Assessment)
NUREG-0161	Instructions for Preparation of Data Entry Sheets for Licensee Event Report (LER) File
Regulatory Guide 4.8	Environmental Technical Specifications for Nuclear Power Plants
NUREG-0713 Volume 1	Occupational Radiation Exposure at Commerical Nuclear Power Reactors 1979
NUREG-0654 Revision 1	Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants
NUREG-0452 Revision 4	Standard Technical Specifications for Westinghouse Pressurized Water Reactors
NUREG-0212 Revision 2	Standard Technical Specification (STS) for Combustion Engineering Pressurized Water Reactors (PWR)
NUREG-0103 Revision 4	STS for Babcock and Wilcox PWR
NUREG-0123 Revision 3	STS for Boiling Water Reactors (BWR/5)
NUREG-0799 For Comment	Draft Criteria for Preparation of Emergency Operating Procedures
NUREG-0800	Standard Review Plan
NUREG-0906	Guidance for Implementation of Standard Review Plan Rule 50.34(g)
Regulatory Guide 1.99 Revision 1	Effects of Residual Elements on Predicted Radiation Damage to Reactor Vessel Materials
	CRGR Charter
NUREG-1070 (unpublished)	Severe Accident Policy

REFERENCE PUBLICATIONS (Continued)

Document Number	Document Title
NUREG-0588 Revision 1	Interim Staff Position on Environmental Qualification (EQ) of Safety-Related Electrical Equipment.
Regulatory Guide 1.89 Revision 1	EQ of Safety-Related Electrical Equipment
Regulatory Guide X.XX (proposed)	Guidance and Acceptance Criteria regarding the Pressurized Thermal Shock Rule, 10 CFR 50.61
NUREG-1055 (proposed)	Improving Quality and the Assurance of Quality in the design and Construction of Nuclear Power Plants
NUREG-0844 (Draft)	NRC Integrated Program for the Resolution of Unresolved Safety issues A-3, A-4, and A-5 Regarding Steam Generator Tube Integrity
NUREG/CR-3137 (unpublished)	Guidelines for Seismic and Dynamic Qualification of Safety related Electrical and Mechanical Equipment.
NUREG-1061 Volumes 1-5	Report of the U.S. Nuclear Regulatory Commission Piping Review Committee

Enclosure 4

Proposed 10 CFR 50.4

The Commission's ultimate goal is the approval of essentially complete standard plant designs. However, advanced reactor designers and prospective construction permit applicants are encouraged not to wait until detailed designs are complete, but to submit technical information on their proposed conceptual designs as far in advance of application as practicable, so that NRC staff may evaluate fundamental safety characteristics in a timely manner.

To enhance Commission participation and continuity in the review of advanced reactors, and advanced reactors group has been established in the Office of Nuclear Reactor Regulation. This group will be the focal point for NRC interaction with the Department of Energy, designers (domestic and foreign) and potential applicants and will prepare a plan for the development of regulatory criteria for licensing proposed advanced reactors. In addition, the group will provide guidance on an NRC-funded advanced reactor research program to ensure that it supports, and is consistent with, the Commission's advanced reactor policy. The Advisory Committee on Reactor Safeguards (ACRS) will play a significant role in reviewing proposed advanced reactor design concepts and supporting activities.

The Commission would also like to be informed as early as possible of new design concepts under construction by the nuclear industry so that the staff can review and comment on their safety and, if necessary, support confirmatory research on them. While the NRC itself does not develop new designs, the Commission intends to develop the capability for timely, appropriate assessment and response to innovative and advanced designs that might be presented for NRC review. Prior experience has shown that new reactor designs—even variations of established design—may involve technical problems that must be identified and solved in order to assure adequate protection of the public health and safety. The earlier such design problems are identified, the earlier satisfactory resolution can be achieved. When informing the NRC of new concepts under consideration, prospective applicants should understand that they are responsible for all research necessary to support any specific license application. NRC research is conducted only to provide the technical bases for rulemaking and regulatory decisions; to support licensing and inspection activities; to assess the feasibility and effectiveness of safety improvements; and to increase our understanding of phenomena for which analytical methods are needed in regulatory activities.

Questions

A number of basic issues were identified in development of this policy statement. The Commission requests comments from all interested parties on the following questions, as well as on any other aspects of the policy statement:

1. Should NRC's regulatory approach be revised to reduce dependence on prescriptive regulations and, instead, establish less prescriptive design objectives, such as performance standards? If so, in what aspects of nuclear power plant design (for example, reactor core power density, reactor core heat removal, containment, and siting) might the performance standards approach be applied most effectively? How could implementation of these performance standards be verified?

2. Should the regulations for advanced reactors require more inherent safety margin in their design? If so, should the emphasis be on providing features that permit more time for operator response to off-normal conditions, or should the emphasis be on providing systems that are capable of functioning under conditions that exceed the design basis?

3. Should licensing regulations for advanced reactors mandate simplified designs which require the fewest operator actions, and the minimum number of components needed for achieving and maintaining safe shutdown conditions, thereby facilitating operator comprehension and reliable system function for off-normal conditions?

4. Should the NRC develop general design criteria for advanced reactors by modifying the existing regulations, which were developed for the current generation of light water reactors, or by developing a new set of general design criteria applicable to specific concepts which are brought before the Commission?

5. Should the NRC favor advanced reactor designs that concentrate the primary safety functions in very few large systems (rather than in multiple subsystems), thereby minimizing the need for complex benefit and cost balancing in the engineering of safe reactors?

6. What degree of proof would be sufficient for the NRC to find that a new design is based on technology which is either proven or can be demonstrated by a satisfactory technology development program? For example, is it necessary or advisable to require a prototypical demonstration of an advanced reactor concept prior to final licensing of a commercial facility?

Dated at Washington, D.C., this 21st day of March 1985.

For the Nuclear Regulatory Commission.

John C. Hoyle,

Acting Secretary of the Commission.

[FR Doc. 85-7136 Filed 3-25-85; 8:45 am]

BILLING CODE 7590-01-M

---

10 CFR Part 50

Communications Procedures Amendments

AGENCY: Nuclear Regulatory Commission.

ACTION: Proposed rule.

SUMMARY: The Nuclear Regulatory Commission (NRC) proposes to amend its regulations that establish the procedures for submitting correspondence, reports, applications, or other written communications pertaining to the domestic licensing of production and utilization facilities. The proposed amendments indicate the correct mailing address for delivery of the communications and specify the number of copies required to facilitate action by the NRC. The proposed amendments, if adopted, are expected to resolve a number of problems that have developed during the past several years regarding the submittal of applications and reports. In addition to clarifying the procedures, these amendments will result in a reduction in reproduction and postage costs for the affected licensees.

DATE: Comment period expires May 28, 1985. Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given except for those comments received on or before this date.

ADDRESSES: Interested persons are invited to submit written comments and suggestions to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Services Branch.

FOR FURTHER INFORMATION CONTACT: Steve Scott, Document Management Branch, Division of Technical Information and Document Control, Office of Administration, Nuclear Regulatory Commission, Washington, DC 20555, Telephone: (301) 492-8585.

SUPPLEMENTARY INFORMATION: Because of recent revisions to the NRC's requirements for the submittal of information by applicants and licensees,

confusion has arisen with regard to copy requirements and proper submittal procedures. In an effort to clarify these matters, the NRC issued Regulatory Guide 10.1 (Revision 4) "Compilation of Reporting Requirements for Persons Subject to NRC Regulations," and on August 8, 1982 the Director, Division of Licensing, Office of Nuclear Reactor Regulation, issued Generic Letter 82-14 "Submittal of Documents to the Nuclear Regulatory Commission." While these efforts at clarification resolved much of the confusion, applicants and licensees continue to demonstrate concern and confusion as to specific requirements. Therefore, the NRC is issuing this rule to specify copy requirements and provide mailing instructions. The rule also clarifies the current requirement in § 50.30 for making an updated copy of the application available at an appropriate office near the site for inspection by the public.

This rule supersedes all existing requirements and guidance with respect to the number of copies and mailing procedures. This rule codifies NRC actions to reduce copy requirements. For example § 50.30 would be amended to reduce copy requirements for amendment applications from 60 to 40; copy requirements for licensee reports would be reduced to three. The proposed rule would reduce overall the number of copies transmitted to the Commission. These changes would result in reduced reproduction and postage costs for licensees.

The proposed rule would also remove from § 50.4, special submittal requirements for the Fort St. Vrain Nuclear Generating Station. The rule would not affect the authority and responsibility delegated to the Regional Administrator of Region IV for implementing selected parts of the nuclear reactor licensing program for the Fort St. Vrain Generating Station.

Undesignated paragraphs in the amended text have been designated and obsolete titles of NRC personnel have been updated to reflect current NRC titles.

Environmental Impact: Categorical Exclusion

The NRC has determined that this proposed rule is the type of action described in categorical exclusion 10 CFR 51.22(c)(3). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this proposed rule.

Paperwork Reduction Act Statement

This proposed rule amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq.). These requirements were approved by the Office of Management and Budget approval number 3150-0011.

Regulatory Analysis

The Commission has prepared a draft regulatory analysis on this proposed regulation. The analysis examines the costs and benefits of the alternatives considered by the Commission. The draft analysis is available for inspection in the NRC Public Document Room, 1717 H Street NW, Washington, DC 20555. Single copies of the analysis may be obtained from Steve Scott, Office of Administration, U.S. Nuclear Regulatory Commission, Washington, DC 20555; telephone 301-492-28585.

The Commission requests public comment on the draft regulatory analysis. Comments on the draft analysis may be submitted to the NRC as indicated under the **ADDRESSES** heading.

Regulatory Flexibility Certification Statement

Based upon the information available at this stage of the rulemaking proceeding and in accordance with the Regulatory Flexibility Act of 1980, 5 U.S.C. 605(b), the Commission hereby certifies that, if promulgated, this rule will not have a significant economic impact upon a substantial number of small entities. The proposed rule would amend 10 CFR 50 by specifying submittal procedures which facilitate NRC processing. The rule is expected to affect nuclear generating facilities by reducing the overall regulatory burden of reproducing and transmitting submittals to the Commission. Therefore, it is not expected to have a significant economic impact on any licensee. However, comments on the expected economic impact of this proposed rule on any small entity are welcome.

List of Subjects in 10 CFR Part 50

Antitrust, Classified information, Fire prevention, Incorporation by reference, Intergovernmental relations, Nuclear power plants and reactors, Penalty, Radiation protection, Reactor siting criteria, Reporting and recordkeeping requirements.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and 5 U.S.C. 553, the NRC is proposing to adopt the following amendments to 10 CFR Part 50.

PART 50—[AMENDED]

The authority citation for this document is:

(Sec. 161, Pub. L. 83-703, 68 Stat. 948, as amended (42 U.S.C. 2201), and Sec. 201, Pub. L. 93-438, 88 Stat. 1242 (42 U.S.C. 5841))

1. Section 50.4 is revised to read as follows:

§ 50.4 Written communications.

(a) *Address requirements.* The signed original of all correspondence, reports, applications, and other written communications from the applicant or licensee to the Nuclear Regulatory Commission concerning the regulations in this part or individual license conditions must be addressed to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555.

(b) *Distribution requirements.* Copies of all correspondence, reports, and other written communications concerning the regulations in this part or individual license conditions must be submitted to the Nuclear Regulatory Commission at the locations and in the quantities set forth below (addresses for the NRC Regional Offices are listed in Appendix D of Part 20 of this chapter).

(1) *Permits, licenses, and amendments.* Each licensee or applicant shall submit any written communications, as defined in paragraphs (b)(1) (i) through (xxi) of this section, which are required for an application for a construction permit, operating license, or amendment of these, as follows, except as otherwise specified in this section: the signed original and 37 copies to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, one copy to the appropriate Regional Office and one copy to the appropriate NRC Resident Inspector, if applicable;

(i) Application for exemption pursuant to § 50.12;

(ii) Application (including any applicable drawings, maps, photographs, models, or computer printouts) for an operating license, construction permit, or amendment pursuant to §§ 50.30 through 50.49, and any communications from the applicant to the Commission pertaining to an application except as otherwise specified in this section;

(iii) Additional TMI-related requirements pursuant to § 50.34(f);

(iv) Request for approval of design feature or specification pursuant to § 50.35(b);

(v) Analysis of hydrogen control system pursuant to § 50.44(c)(3)(vi)(A);

(vi) Proposed schedule for meeting the requirements for a hydrogen control system pursuant to § 50.44(c)(3)(vii)(A);

(vii) Analysis to ensure safe plant operation pending completion of equipment qualification pursuant to § 50.49(i);

(viii) Application for amendment of technical specifications pursuant to § 50.55a(g)(5)(ii);

(ix) Information demonstrating compliance with requirements for reduction of risk from anticipated transients without scram (ATWS) events pursuant to § 50.62 (c)(6) and (d);

(x) Application for exemption pursuant to § 50.73(f);

(xi) Application for transfer of license pursuant to § 50.80(b);

(xii) Application for termination of license pursuant to § 50.82(a);

(xiii) Application for amendment of license or construction permit pursuant to § 50.90, except as provided in paragraph (b)(4) of this section relating to safeguards information;

(xiv) Analysis of no significant hazards consideration pursuant to § 50.91;

(xv) Information concerning the modification of structures, systems or components of a facility pursuant to § 50.109;

(xvi) Evaluation of the potential for effects from long-term buildup of radioactive material in the environment pursuant to Appendix I "Concluding Statement of Position of the Regulatory Staff," A.3.a of this part;

(xvii) Complete listing of each computer program used in emergency core cooling system (ECCS) evaluation model pursuant to Appendix K.II.1.c of this part;

(xviii) Application for a manufacturing license pursuant to Appendix M of this part;

(xix) Application for license to construct and operate nuclear power reactors of the same design pursuant to Appendix N of this part;

(xx) Preliminary or final standard design for a nuclear power reactor pursuant to Appendix O of this part; and

(xxi) Application for early site suitability review pursuant to Appendix Q of this part.

(2) *Reports and other communications.* Written communications, as defined in paragraphs (b)(2) (i) through (xxvi) of this section, that are required of holders of operating license or construction permits, must be submitted as follows: the signed original to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, one copy to the appropriate Regional Office, and one copy to the appropriate NRC Resident Inspector, if applicable:

(i) Periodic report of the progress and results of research and development programs pursuant to § 50.35(b);

(ii) Notification of exceeding any safety limit for nuclear reactors pursuant to § 50.36(c)(1)(i)(A);

(iii) Notification of exceeding any safety limit for a fuel reprocessing plant pursuant to § 50.36(c)(1)(i)(B);

(iv) Notification of failure of an automatic safety system to function as required for nuclear reactors pursuant to § 50.36(c)(1)(ii)(A);

(v) Notification of failure of an automatic alarm or protective device to function as required for a fuel reprocessing plant pursuant to § 50.36(c)(1)(ii)(B);

(vi) Notification of failure to meet limiting conditions for operating (Licensee Event Report) pursuant to § 50.36(c)(2);

(vii) Reports required by approved technical specifications pursuant to § 50.36(c)(5). These reports include but are not limited to the following: startup reports, periodic operating reports, source leakage reports, annual environmental reports (Parts A and B), and nonroutine environmental operating reports;

(viii) Semiannual effluent release report pursuant to § 50.36a(a)(2);

(ix) Schedule for qualification of electrical equipment important to safety pursuant to § 50.49(g);

(x) Reguest for extension of submittal deadline pursuant to § 50.49(g);

(xi) Notification of a significant problem requiring extension of completion date pursuant to § 50.49(h);

(xii) Change to the Safety Analysis Report quality assurance program description pursuant to § 50.54(a)(3) or § 50.55(f)(3);

(xiii) Statement to enable the Commission to determine whether a license should be modified, suspended, or revoked pursuant to § 50.54(f);

(xiv) Report of levels of insurance or financial protection pursuant to § 50.54(w)(4);

(xv) Construction deficiency report and interim deficiency report pursuant to § 50.55(e)(3);

(xvi) Notification of impracticality of conforming with code requirements pursuant to § 50.55a(g)(5)(iii);

(xvii) Annual report of changes, tests and experiments pursuant to § 50.59(b);

(xviii) Reports required by the Nuclear Regulatory Commission pursuant to § 50.71(a), e.g., responses to Bulletins issued by the Nuclear Regulatory Commission;

(xix) Annual financial report pursuant to § 50.71(b);

(xx) Licensee Event Report (LER) and supplemental information pursuant to § 50.73 (c) and (d);

(xxi) Information regarding modification of structures, systems, or components of a facility pursuant to § 50.109(c);

(xxii) Information regarding reactor vessel beltline material inservice program pursuant to Appendix G.V.E. of this part;

(xxiii) Proposed withdrawal schedule for surveillance capsules pursuant to Appendix H.II.B.3 of this part;

(xxiv) Report of capsule withdrawal and fracture toughness tests pursuant to Appendix H.III.A of this part;

(xxv) Report of release in excess of design objectives pursuant to Appendix I.IV.A.3 of this part;

(xxvi) Reactor containment building integrated leak rate test pursuant to Appendix J.V.B of this part.

(3) *Acceptance review application.* Written communications required for an application for determination of suitability for docketing pursuant to § 50.30(a)(6) must be submitted as follows: the signed original and 13 copies to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555 and one copy to the appropriate Regional Office.

(4) *Security plan and related submittals.* Written communications, as defined in paragraphs (b)(4) (i) through (iv) of this section must be submitted as follows: the signed original and three copies to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, and two copies to the appropriate Regional Office:

(i) Physical security plan pursuant to § 50.34;

(ii) Safeguards contingency plan pursuant to § 50.34;

(iii) Change to security plan or safeguards contingency plan made without prior Commission approval pursuant to § 50.54(p);

(iv) Safeguards information contained in an application for amendment pursuant to § 50.90.

(5) *Emergency plan and related submittals.* Written communications as defined in paragraphs (b)(5) (i) through (iii) in this section, must be submitted as follows: "the signed original to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, two copies to the appropriate Regional Office, and one copy to the appropriate NRC Resident Inspector:

(i) Emergency plan pursuant to § 50.34;

(ii) Change to an emergency plan pursuant to § 50.54(q);

(iii) Emergency implementing procedures pursuant to Appendix E.V of this part.

(6) *Updated FSAR.* An updated Final Safety Analysis Report (FSAR) or replacement pages, pursuant to § 50.71(e) must be submitted as follows: the signed original and 10 copies to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555 one copy to the appropriate Regional Office, and one copy to the appropriate NRC Resident Inspector.

(7) *Quality assurance topical report changes.* A change to an NRC-accepted quality assurance topical report description pursuant to § 50.54(a)(3) or § 50.55(f)(3) must be submitted as follows: one signed original to the Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555.

(c) *Form of communications.* All copies submitted to meet the requirements set forth in paragraph (b) of this section must be typewritten, printed or otherwise reproduced in permanent form on unglazed paper. Exceptions to these requirements may be granted for the submittal of micrographic, photographic, or electronic forms. Prior to making any submittal in other than paper form, the applicant or licensee must contact the Division of Technical Information and Document Control, Nuclear Regulatory Commission, Washington, DC 20555, Telephone (301) 492–8585, to obtain specifications, copy requirements, and prior approval.

(d) *Delivery of communications.* Written communications may be delivered to the Document Control Desk at 7920 Norfolk Avenue, Bethesda, MD, between the hours of 8:15 a.m. and 4:00 p.m. Eastern Time.

(e) *Citation of regulatory requirement.* All correspondence, reports, and other written communications submitted to the Nuclear Regulatory Commission pursuant to the regulations of this part must cite in the upper right corner of the first page of the submittal the specific regulaton requiring submission.

(f) *Conflicting requirements.* If there is a conflict between the Commission's regulations in this part, a license condition or technical specification, or other written Commission approval or authorization pertaining to the submittal requirements for the same type of application or report, the submittal requirements specified in the regulations in this part for the applications and reports apply unless the Commission, pursuant to § 50.12 grants a specific exemption from the submittal requirements specified in the regulations in this part.

2. In § 50.12, the introductory language of paragraph (b) is revised to read as follows:

§ 50.12 Specific exemptions.

* * * * *

(b) Any person may request an exemption permitting the conduct of activities prior to the issuance of a construction permit prohibited by § 50.10. The request must be submitted as specified in § 50.4. The Commission may grant such an exemption upon considering and balancing the following factors:

* * * * *

3. In § 50.30, paragraphs (a) and (b) are revised to read as follows and pragraph (c) is removed.

§ 50.30 Filing of application for licenses; oath or affirmation.

(a) *Serving of applications.* (1) Each filing of an application for a license to construct and/or operate a production or utilization facility (including amendments to the applications) must be submitted to the U.S. Nuclear Regulatory Commission in accordance with § 50.4.

(2) An additional 10 copies of the general information and 30 copies of the safety analysis report, or part thereof or amendment thereto, must be retained by the applicant for distribution in accordance with the written instructions of the Director, Office of Nuclear Reactor Regulation, or the Director, Office of Nuclear Material Safety and Safeguards, as appropriate.

(3) Each applicant shall, upon notification by the Atomic safety and Licensing Board appointed to conduct the public hearing required by the Atomic Energy Act for the issuance of a construction permit, update the application and serve the updated copies of the application or parts of it, eliminating all superseded information, together with an index of the updated application, as directed by the Atomic Safety and Licensing Board. In addition, at that time the applicant shall serve a copy of the updated application on the Atomic Safety and Licensing Appeal Panel. Any subsequent amendment to the application must be served on those served copies of the application and must be submitted to the U.S. Nuclear Regulatory Commission as specified in § 50.4.

(4) The applicant must make a copy of the updated application available at the public hearing for the use of any other parties to the proceeding, and shall certify that the updated copies of the application contain the current contents of the application submitted in accordance with the requirements of this part.

(5) At the time of filing an application, the Commission will establish a Local Public Document Room near the site of the proposed facility, for the use of the public, where a copy of the application, subsequent amendments, and other records pertinent to the facility will be available for public inspection and copying.

(6) The serving of copies required by this section must not occur until the application has been docketed pursuant to § 2.101(a) of this chapter. Copies must be submitted to the Commission, as specified in § 50.4, to enable the Director, Office of Nuclear Reactor Regulation, or Director, Office of Nuclear Material Safety and Safeguards, as appropriate, to determine whether the application is sufficiently complete to permit docketing.

(b) *Oath or affirmation.* Each application for a license, including whenever appropriate a construction permit, or amendment of it, and each amendment of each application must be executed in a signed original by the applicant or duly authorized officer thereof under oath or affirmation.

* * * * *

4. In § 50.36 paragraph (c)(5) is revised to read as follows:

§ 50.36 Technical specifications:

* * * * *

(c) * * *

(5) *Administrative controls.* Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to assure operation of the facility in a safe manner. Each licensee shall submit any reports to the Commission pursuant to approved technical specifications as specified in § 50.4.

* * * * *

5. In 50.36a, paragraph (a)(2) is revised to read as follows:

§ 50.36a Technical specifications on effluents from nuclear power reactors.

(a) * * *

(2) Each licensee shall submit a report to the Commission within 60 days after January 1 and July 1 of each year, that specifies the quantity of each of the principal radionuclides released to unrestricted areas in liquid and in gaseous effluents during the previous six months of operation, including any other information as may be required by the Commission to estimate maximum potential annual radiation doses to the public resulting from effluent releases.

The report must be submitted as specified in § 50.4. If quantities of radioactive materials released during the reporting period are significantly above design objectives, the report must cover this specifically. On the basis of these reports and any additional information the Commission may obtain from the licensee or others, the Commission may require the licensee to take action as the Commission deems appropriate.

* * * * *

6. In § 50.44, paragraphs (c)(3)(vi)(A) and (c)(3)(vii)(A) are revised to read as follows:

§ 50.44 Standards for combustible gas control system in light water cooled power reactors.

* * * * *

(c) * * *

(3) * * *

(vi)(A) Each applicant for or holder of an operating license for a boiling light-water nuclear power reactor with a Mark III type of containment or for a pressurized light-water nuclear power reactor with an ice condenser type of containment issued a construction permit before March 28, 1979, shall submit an analysis to the Commission as specified in § 50.4.

* * * * *

(vii)(A) By June 25, 1985, each applicant for or holder of an operating license subject to the requirements of paragraphs (c)(3) (iv), (v) and (vi) of this section shall develop and submit to the Commission, as specified in § 50.4, a proposed schedule for meeting these requirements. The schedule may be developed using integrated scheduling systems previously approved for the facility by the NRC.

* * * * *

7. In § 50.49, paragraph (h) and the introductory language of paragraph (i) are revised to read as follows:

§ 50.49 Environmental qualification of electric equipment important to safety for nuclear power plants.

* * * * *

(h) Each licensee shall notify the Commission as specified in § 50.4 of any significant equipment qualification problem that may require extension of the completion date provided in accordance with paragraph (g) of this section within 60 days of its discovery.

(i) Applicants for operating licenses granted after February 22, 1983, but prior to November 30, 1985, shall perform an analysis to ensure that the plant can be safely operated pending completion of equipment qualification required by this section. This analysis must be submitted, as specified in § 50.4, for consideration prior to the granting of an operating license and must include, where appropriate, consideration of:

* * * * *

8. In 50.54, the introductory language of paragraph (a)(3), (a)(3)(i), (f), the introductory language of (p), (q), and (w)(4) are revised to read as follows:

§ 50.54 Conditions of licenses.

* * * * *

(a) * * *

(3) After March 11, 1983, each licensee described in paragraph (a)(1) of this section may make a change to a previously accepted quality assurance program description included or referenced in the Safety Analysis Report, provided the change does not reduce the commitments in the program description previously accepted by the NRC. Changes to the quality assurance program description that do not reduce the commitments must be submitted to the NRC at least annually in accordance with the requirements of § 50.71. Changes to the quality assurance program description that do reduce the commitments must be submitted to NRC and receive NRC approval prior to implementation, as follows:

(i) Changes made to the Safety Analysis Report must be submitted, as specified in § 50.4. Changes made to NRC-accepted quality assurance topical report descriptions must be submitted, as specified in § 50.4.

* * * * *

(f) The licensee shall at any time before expiration of the license, upon request of the Commission submit, as specified in § 50.4, written statements, signed under oath or affirmation, to enable the Commission to determine whether or not the license should be modified, suspended, or revoked.

* * * * *

(p) The licensee shall prepare and maintain safeguards contingency plan procedures in accordance with Appendix C of Part 73 of this chapter for making decisions and the actions contained in the Responsibility Matrix of the safeguards contingency plan. The licensee may make no change which would decrease the effectiveness of a security plan prepared pursuant to § 50.34(c) or Part 73 of this chapter, or of the first four categories of information (Background, Generic Planning Base, Licensee Planning Base, Responsibility Matrix) contained in a licensee safeguards contingency plan prepared pursuant to § 50.34(d) or Part 73 of this chapter without prior approval of the Commission. A licensee desiring to make such a change shall submit an application for an amendment to a license pursuant to § 50.90. The licensee may make changes to the security plan or to the safeguards contingency plan without prior Commission approval if the changes do not decrease the safeguards effectiveness of the plan. The licensee shall maintain records of changes to the plans made without prior Commission approval for a period of two years from the date of the change, and shall submit, as specified in § 50.4, a report containing a description of each change within two months after the change is made. Prior to the safeguards contingency plan being put into effect, the licensee shall have:

* * * * *

(q) A licensee authorized to possess and/or operate a nuclear power reactor shall follow and maintain in effect emergency plans which meet the standards in § 50.47(b) and the requirements in Appendix E to this part. A licensee authorized to possess and/or operate a research reactor or a fuel facility shall follow and maintain in effect emergency plans which meet the requirements in Appendix E of this part. The nuclear power reactor licensee may make changes to these plans without Commission approval only if the changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standard of § 50.47(b) and the requirements of Appendix E of this part. The research reactor licensee and/or the fuel facility licensee may make changes to these plans without Commission approval, only if these changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the requirements of Appendix E of this part. Proposed changes that decrease the effectiveness of the approved emergency plans shall not be implemented without application to and approval by the Commission. The licensee shall submit, as specified in § 50.4, a report of each proposed change for approval. If a change is made without approval, the licensee shall submit, as specified in § 50.4, a report of each change within 30 days after the change is made.

* * * * *

(w) * * *

(4) The licensee shall report, as specified in § 50.4, on April 1 of each year, the present levels of insurance or financial protection it maintains and the sources of the insurance or protection.

* * * * *

9. In § 50.55, paragraphs (e)(3), (f)(3), and (f)(3)(i) are revised to read as follows:

§ 50.55 Conditions of construction permits.

* * * * *

(e) * * *

(3)(i) The holder of a construction permit shall also submit, as specified in § 50.4, a written report on a reportable deficiency within 30 days.

(ii) The report must include a description of the deficiency, an analysis of the safety implications and the corrective action taken, and sufficient information to permit analysis and evaluation of the deficiency and of the corrective action. If sufficient information is not available for a definitive report to be submitted within 30 days, an interim report containing all available information shall be filed, as specified in § 50.4, together with a statement that indicates when a complete report will be filed.

* * * * *

(f) * * *

(3) After March 11, 1983, each construction permit holder described in paragraph (f)(1) of this section may make a change to a previously accepted quality assurance program description included or referenced in the Safety Analysis Report, provided the change does not reduce the commitments in the program description previously accepted by the NRC. Changes to the quality assurance program description that do not reduce the commitments must be submitted to NRC within 90 days. Changes to the quality assurance program description that do reduce the commitments must be submitted to NRC and receive NRC approval before implementation, as follows:

(i) Changes to the Safety Analysis Report must be submitted for review as specified in § 50.4. Changes made to NRC-accepted quality assurance topical report descriptions must be submitted as specified in § 50.4

* * * * *

10. In § 50.55a, paragraphs (g)(5)(ii) and (g)(5)(iii) are revised to read as follows:

§ 50.55a Codes and standards.

* * * * *

(g) *Inservice inspection requirements.*

* * * * *

(5) * * *

(ii) If a revised inservice inspection program for a facility conflicts with the technical specification for the facility, the licensee shall apply to the Commission for amendment of the technical specifications to conform the technical specification to the revised program. The licensee shall submit this application, as specified in § 50.4, at least six months before the start of the period during which the provisions become applicable, as determined by paragraph (g)(4) of this section.

(iii) If the licensee has determined that conformance with certain code requirements is impractical for its facility, the licensee shall notify the Commission and submit, as specified in § 50.4, information to support the determinations.

* * * * *

11. In § 50.59, paragraph (b) is revised to read as follows:

§ 50.59 Changes, tests, and experiments.

* * * * *

(b)(1) The licensee shall maintain records of changes in the facility and of changes in procedures made pursuant to this section, to the extent that these changes constitute changes in the facility as described in the safety analysis report or to the extent that they constitute changes in procedures as described in the safety analysis report. The licensee shall also maintain records of tests and experiments carried out pursuant to paragraph (a) of this section. These records must include a written safety evaluation which provides the bases for the determination that the change, test, or experiment does not involve an unreviewed safety question.

(2) The licensee shall submit, as specified in § 50.4, a report containing a brief description of any changes, tests, and experiments, including a summary of the safety evaluation of each. The report must be submitted annually or at such shorter intervals as may be specified in the license.

(3) 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 five years.

* * * * *

12. In § 50.62 paragraph (c)(6) and (d) are revised to read as follows:

§ 50.62 Requirements for reduction of risk from anticipated transients without scram (ATWS) events for light-water-cooled nuclear powerplants.

* * * * *

(c) * * *

(6) Information sufficient to demonstrate to the Commission the adequacy of items in paragraphs (c)(1) through (c)(5) of this section shall be submitted to the Commission as specified in § 50.4.

(d) *Implementation.* By 180 days after the issuance of the QA guidance for non-safety related components each licensee shall develop and submit to the Commission, as specified in § 50.4, a proposed schedule for meeting the requirements of paragraphs (c)(1) through (c)(5) of this section. Each shall include an explanation of the schedule along with a justification if the schedule calls for final implementation later than the second refueling outage after July 26, 1984, or the date of issuance of a license authorizing operation above 5 percent of full power. A final schedule shall then be mutually agreed upon by the Commission and licensee.

13. In § 50.71, paragraphs (a), (b) and (e)(1) are revised to read as follows:

§ 50.71 Maintenance of records, making of reports.

(a) Each licensee and each holder of a construction permit shall maintain all records and make all reports, in connection with the 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 Act, including section 105 of the Act. Reports must be submitted in accordance with § 50.4.

(b) With respect to any production or utilization facility of a type described in §§ 50.21(b) or 50.22, or a testing facility, each licensee and each holder of a construction permit shall submit its annual financial report, including the certified financial statements, to the Commission as specified in § 50.4 upon issuance of the report.

* * * * *

(e) * * *

(1) The licensee shall submit revisions containing updated information to the Commission as specified in § 50.4 on a replacement-page basis that is accompanied by a list which identifies the current pages of the FSAR following page replacement.

* * * * *

14. In § 50.73, paragraphs (c), (d), and (f) are revised to read as follows:

§ 50.73 Licensee event report system.

* * * * *

(c) *Supplemental information.* The Commission may require the licensee to submit specific additional information beyond that required by paragraph (b) of this section if the Commission finds that supplemental material is necessary for complete understanding of an unusually complex or significant event. These requests for supplemental information will be made in writing and the licensee shall submit, as specified in § 50.4, the requested information as a supplement to the initial LER.

(d) *Submission of reports.* Licensee Event Reports must be prepared on Form NRC 366 and submitted within 30

days of discovery of a reportable event or situation to the U.S. Nuclear Regulatory Commission, as specified in § 50.4.

* * * * *

(f) *Exemptions.* Requests for exemptions to the reporting requirements under this section must include adequate justification and be submitted as specified in § 50.4. Upon a request or at the initiation of the NRC staff, the NRC Executive Director for Operations may, by a letter to the licensee, grant exemptions to the reporting requirements under this section.

* * * * *

15. In § 50.82, paragraph (a) is revised to read as follows:

§ 50.82 Applications for termination of licenses.

(a) Any licensee may submit an application to the Commission as specified in § 50.4 for authority to surrender a license voluntarily and to dismantle the facility and dispose of its component parts. The Commission may require information, including information as to proposed procedures for the disposal of radioactive material, decontamination of the site, and other procedures, to provide reasonable assurance that the dismantling of the facility and disposal of the component parts will be performed in accordance with the regulations in this chapter and will not be inimical to the common defense and security or to the health and safety of the public.

* * * * *

16. Section 50.90 is revised to read as follows:

§ 50.90 Application for amendment of license or construction permit.

Whenever a holder of a license or construction permit desires to amend the license or permit, application for an amendment must be filed, as specified in § 50.4 with the Commission, fully describing the changes desired, and following as far as applicable the form prescribed for original applications.

17. In § 50.91, paragraph (a)(1) is revised to read as follows:

§ 50.91 Notice for public comment; State consultation.

* * * * *

(a) *Notice for public comment.* (1) At the time a licensee requests an amendment, it must provide, as specified in § 50.4, to the Commission its analysis, using the standards in § 50.92, about the issue of no significant hazards consideration.

* * * * *

18. In § 50.109, paragraph (c) is revised to read as follows:

§ 50.109 Backfitting.

* * * * *

(c) The Commission may at any time require a holder of a construction permit or a license to submit, as specified in § 50.4, any information concerning the addition or proposed addition, the elimination or poposed elimination, or the modification or proposed modification of structures, systems, or components of a facility that it deems appropriate.

19. In Appendix E, section V is revised to read as follows:

Appendix E—Emergency Planning and Preparedness for Production and Utilization Facilities [1]

* * * * *

V. Implementing Procedures

No less than 180 days prior to the scheduled issuance of an operating license for a nuclear power reactor or a license to possess nuclear material the applicant's detailed implementing procedures for its emergency plan shall be submitted to the Commission as specified in § 50.4. Licensees who are authorized to operate a nuclear power facility shall submit any changes to the emergency plan or procedures to the Commission, as specified in § 50.4, within 30 days of such changes.

20. In Appendix G, section V, paragraph E is revised to read as follows:

Appendix G—Fracture Toughness Requirements

* * * * *

V. Inservice Requirements—Reactor Vessel Beltline Material

* * * * *

E. The proposed programs for satisfying the requirements of sections V.C. and V.D. of this appendix must be submitted as specified in § 50.4, for review and approval on an individual case basis at least three years prior to the date when the predicted fracture toughness levels will no longer satisfy the requirements of section V.B. of this appendix.

---

[1] NRC staff has developed two regulatory guides: 2.8 "Emergency Planning for Research Reactors," and 3.42 "Emergency Planning in Fuel Cycle Facilities and Plants Licensed Under 10 CFR Parts 50 and 70," and a joint NRC/FEMA report, NUREG-0654; FEMA-REP-1 "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants for Interim Use and Comment," January 1980, to provide guidance in developing plans for coping with emergencies. Copies of these documents are available at the Commission's Public Document Room 1717 H Streets, NW, Washington, DC 20555. Copies of these documents may be purchased from the Government Printing Office. Information on current prices may be obtained by writing the U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Publications Sales Manager.

21. In Appendix H, section II, paragraph B.3 and section III, paragraph A are revised to read as follows:

Appendix H—Reactor Vessel Material Surveillance Program Requirements

* * * * *

II. Surveillance Program Criteria

B. * * *

3. A proposed withdrawal schedule must be submitted with a technical justification as specified in § 50.4. The proposed schedule must be approved prior to implementation.

* * * * *

III. Report of Test Results

A. Each capsule withdrawal and the test results must be the subject of a summary technical report to be submitted as specified in § 50.4 within one year after capsule withdrawal unless an extension is granted by the Director, Office of Nuclear Reactor Regulation.

* * * * *

22. In Appendix I, section IV, paragraph A.3. and paragraph A.3.a of the "Concluding Statement on Position of the Regulatory Staff (Docket-RM-50-2)" are revised to read as follows:

Appendix I—Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion "As Low As Is Reasonably Achievable" for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents

* * * * *

Sec. IV. Guides on technical specifications for limiting conditions for operation for light-water-cooled nuclear power reactors licensed under 10 CFR Part 50.

* * * * *

A. * * *

3. Report these actions as specified in § 50.4, within 30 days from the end of the quarter during which the release occurred.

* * * * *

Concluding Statement on Positions of the Regulatory Staff (Docket-RM-50-2).

A. * * *

3. * * *

a. The applicant submits, as specified in § 50.4, an evaluation of the potential for effects from long-term buildup on the environment in the vicinity of the site of radioactive material, with a radioactive half-life greater than one year, to be released; and

* * * * *

23. In Appendix J, section V, paragraph B.1. is revised to read as follows:

Appendix J—Primary Reactor Containment Leakage Testing for Water-Cooled Power Reactors

* * * * *

V. Inspection and Reporting of Tests

* * * * *

B. *Report of test results.* 1. The preoperational and periodic tests must be the subject of a summary technical report submitted to the Commission as specified in § 50.4 approximately three months after the conduct of each test. The report must be titled "Reactor Containment Building Integrated Leak Rate Test."

* * * * *

24. In Appendix K, section II, paragraph 1.c. is revised to read as follows:

Appendix K—ECCS evaluation models

* * * * *

II. Required Documentation

1. * * *

C. The licensee shall submit to the Commission as specified in § 50.4, a complete listing of each computer program, in the same form as used in the evluation model.

* * * * *

25. In Appendix M, Paragraph 2 is revised to read as follows:

Appendix M—Standardization of Design: Manufacture of Nuclear Power Reactors: Construction and Operation of Nuclear Power Reactors Manufactured Pursuant to Commission License

* * * * *

2. An application for a manufacturing license pursuant to this Appendix M must be submitted as specified in § 50.4 and meet all the requirements of §§ 50.34(a)(1)–(9) and 50.34a (a) and (b), except that the preliminary safety analysis report shall be designated as a "design report" and any required information or analyses relating to site matters shall be predicated on postulated site parameters which must be specified in the application. The application must also include information pertaining to design features of the proposed reactor(s) that affect plans for coping with emergencies in the operation of the reactor(s).

* * * * *

26. In Appendix N, paragraph 2. is revised to read as follows:

Appendix N—Standardization of Nuclear Power Plant Designs: Licenses To Construct and Operate Nuclear Power Reactors of Duplicate Design at Multiple Sites

* * * * *

2. Applications for construction permits submitted pursuant to this Appendix must include the information required by §§ 50.33, 50.33a, 50.34(a) and 50.34a (a) and (b) and be submitted as specified in § 50.4. The applicant shall also submit the information required by § 51.50 of this chapter. * * *

* * * * *

27. In Appendix O, paragraph 2 is revised to read as follows:

Appendix O—Standardization of Design: Staff Review of Standard Designs

* * * * *

2. The submittal for review of the standard design must be made in the same manner and in the same number of copies as provided in §§ 50.4 and 50.30 for license applications.

* * * * *

28. In Appendix Q, paragraph 2 is revised to read as follows:

Appendix Q—Pre-Application Early Review of Site Suitability Issues

* * * * *

2. The submittal for early review of site suitability issue(s) must be made in the same manner and in the same number of copies as provided in §§ 50.4 and 50.30 for license applications. The submittal must include sufficent information concerning a range of postulated facility design and operation parameters to enable the Staff to perform the requested review of site suitability issues. The submittal must contain suggested conclusions on the issues on site suitability submitted for review and must be accompanied by a statement of the bases or the reasons for those conclusions. The submittal must also list, to the extent possible, any long-range objectives for ultimate development of the site, state whether any site selection process was used in preparing the submittal, describe any site selection process used, and explain what consideration, if any, was given to alternative sites.

* * * * *

Dated at Bethesda, Maryland, this 14th day of March 1985.

For the Nuclear Regulatory Commission.

William J. Dircks,

Executive Director for Operations.

[FR Doc. 85-7140 Filed 3-25-85; 8:45 am]

BILLING CODE 7590-01-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 84-NM-140-AD]

Airworthiness Directives; Lockheed Models 382 and 382B/E/F/G Series Airplanes

AGENCY: Federal Aviation Administration (FAA) DOT.

ACTION: Notice of Proposed Rulemaking (NPRM).

SUMMARY: This notice proposes to add an airworthiness directive (AD), that woud require inspection and/or removal, as necessary, of certain Holex fire extinguisher cartridges (squibs) used in the fire extinguishers installed on Lockheed Models 382 and 382B/E/F/G series airplanes. The proposed AD is necessary because some of the squibs may indicate electrical resistance beyond acceptable limits which could prevent the squib from discharging, when required, to extinguish an engine fire.

DATES: Comments must be received no later than May 20, 1985.

ADDRESSES: Send comments to the proposal in duplicate to FAA, Northwest Mountain Region, Office of the Regional Counsel, Attention: Airworthiness Rules Docket No. 84-NM-140-AD, 17900 Pacific Highway South, C-68966, Seattle, Washington 98168. The applicable service bulletin may be obtained from Lockheed-Georgia Company, Field Service Office, 86 South Cobb Drive, Marietta, Georgia 30063, or may be examined at FAA, Central Region, Atlanta Aircraft Certification Office, 1075 Inner Loop Road, College Park, Georgia 30337.

FOR FURTHER INFORMATION CONTACT: Arthur W. Nelson, ACE-140A, Atlanta Aircraft Certification Office, FAA, Central Region, 1075 Inner Loop Road, College Park, Georgia 30337; telephone (404) 763-7435.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interest persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments specified above will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this Notice may be changed in light of the comments received. All comments submitted will be available, both before and after the closing date for comments, in the Rules Dockets for examination by interested persons. A report summarizing each FAA/public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Availability of NPRM

Any person may obtain a copy of this Notice of Proposed Rulemaking (NPRM) by submitting a request to the FAA, Northwest Mountain Region, Office of the Regional Counsel, Attention: Airworthiness Rules Docket No. 84-NM-140-AD, 17900 Pacific Highway South, C-68966, Seattle, Washington, 98168.

Discussion

Certain models of the Lockheed Hercules Model 382 airplanes utilize fire extinguisher squibs manufactured by Holex, Inc., of Hollister, California.