Section 1 Enclosure 2a

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

10 CFR 50.12, 50.30, 50.33, 50.33(a)-(d), 50.33(f)(1), 50.33(f)(2), 50.33(g), 50.34(a), 50.34(b), 50.34(c), 50.34(d), 50.34(f), 50.34(g), 50.34a, 50.34a(a), 50.34a(b), 50.54(bb), 50.55(b), 50.55(d), 50.59(c), 50.74, 50.80(b), 50.90, 50.91(a), 50.91(a)(1), 50.91(b), 50.91(b)(1), Appendix B and Appendix E

DESCRIPTION OF THE INFORMATION COLLECTION

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

The licensing processes defined in 10 CFR Part 50 describe a process whereby an applicant files for a construction permit and an operating licensing using a two-step process. Under this process, an applicant first applies for a construction permit and, then, as construction nears completion and design information becomes final, the applicant files for an operating license. The information collected during this process is divided into three major categories; general, safety and environmental. For those applicants that receive an operating license, Part 50 also defines information collection requirements regarding license amendments, exemptions, transfers, and other licensing activities that must be submitted to the NRC for review in order to ensure the health and safety of the public.

Alternatives to the two-step licensing process described above are given in 10 CFR Part 52 (see OMB clearance 3150-0151) which establishes the requirements for early site permits, standard design certifications, and combined licenses (licenses that combine construction permits and conditional operating licenses for commercial nuclear power reactors). However, Part 52 incorporates by reference some of the general information collection requirements set forth in 10 CFR Part 50 regarding construction permits and operating licenses. Therefore, the burden for non-technical information collection requirements for early site permits, standard design certifications and combined licenses appropriate to Part 50 is included in this estimate.

A. JUSTIFICATION

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

The U.S. Nuclear Regulatory Commission (NRC) is authorized by Congress to have responsibility and authority for the licensing and regulation of nuclear power plants, research/test facilities, fuel reprocessing plants and other utilization and production facilities licensed pursuant to the Act. To meet its responsibilities, the NRC conducts a detailed review of all applications for licenses to construct and operate such facilities. The purpose of the detailed review is to ensure that the proposed facilities can be built and operated safely at the proposed locations, and that all structures, systems and components important to safety will be

designed to withstand the effects of postulated accident conditions, without undue risk to the health and safety of the public.

Under 10 CFR Part 50, 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 the NRC as to whether to approve a company's application for a construction permit or an operating license is based largely on the NRC 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 the 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 and the environment. Information required by the NRC to be included in each application for a construction permit or an operating license is addressed in the specific 10 CFR Part 50 sections for which this Supporting Statement, including those contained in Sections 2 through 35, 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 (SAR) 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.

The specifics of the information collections and the reasons for them are as follows:

Specific Exemptions

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

Special circumstances exist when:

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

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

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

(4) The exemption would benefit public health and safety and compensates for any decrease in safety, or

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

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

Filing Application

10 CFR 50.30 This section provides for the filing of an application for a construction permit, operating license or combined license which includes both general and technical information. General information is covered under Section 50.33, and technical information is covered under Section 50.34. Provisions pertaining to technical information submitted in applications currently in Section 50.34 for early site permits, standard design certifications, and combined licenses are being amended to move these requirements to, and cover the burden in, Part 52. The general information required by Section 50.33 will remain in Part 50. Section 50.30(f) also requires that an Environmental Report (EP) be submitted pursuant to Part 51. The information collection burden associated with the EP is covered by a separate OMB clearance for Part 51 (3150-0021) and, therefore, no environmental burden is included for Section 50.30.

General Information - (Financial & Emergency Response Plans)

10 CFR 50.33. This section requires each application to identify the applicant and provide details about the applicant's financial qualifications and emergency response plans.

10 CFR 50.33 (a)-(d) These sub-sections require general information such as: applicant name, address, type of business (partnership or corporation), citizenship, and other miscellaneous information. The NRC needs this information to properly identify the applicant.

10 CFR 50.33(f)(1) This section requires applicants to submit financial information that demonstrates reasonable assurance that required funds are available. Financial information is necessary because the NRC must make a decision as to whether the applicant's financial resources are adequate to permit construction of the plant in a safe manner and to permit implementation of safety-related programs described elsewhere in the application. Sections I and II of Appendix C of 10 CFR Part 50 outline the information to be furnished by the applicant in the construction permit application to establish financial qualifications. The Commission requires the minimum amount of information necessary to determine an applicant's financial qualification. No special forms are prescribed for submitting the information. In

many cases, the financial information usually contained in current annual financial reports, including summary data of prior years, will be sufficient for the Commission's needs.

10 CFR 50.33(f)(2) This section of 10 CFR 50 requires applicants for operating licenses to submit financial information that demonstrates reasonable assurance that required funds are available. The applicant's financial qualifications must be detailed as they were for the construction permit application, but now the details must demonstrate that the applicant possesses or has reasonable assurance of obtaining the funds necessary to cover estimated operating costs for the period of the license, plus the estimated costs of permanently shutting down the facility and maintaining it in a safe condition. The applicant shall submit estimates of total annual operating costs for each of the first 5 years of facility operation and estimates of the costs to permanently shut down the facility and maintain it in a safe condition. The applicant shall also indicate the source(s) of funds to cover these costs. An application to renew or extend the term of an operating license must include the same financial information as is required in an application for an initial license. A separate OMB clearance package for license renewal is covered under 10 CFR Part 54.

10 CFR 50.33(g). This section of 10 CFR 50 requires that the applicant for an operating license submit state and local government radiological emergency response plans. The plans shall define the Emergency Planning Zone (EPZ) for the plume exposure pathway and the ingestion pathway. Generally, with the nuclear facility located at the center, the plume exposure pathway for the EPZ will cover an area with a radius of approximately 10 miles, and the ingestion pathway will cover an area with a radius of approximately 50 miles. The exact size and configuration of the EPZ will be determined in relation to the local emergency response needs and capabilities as they are affected by such conditions as demography, topography, access routes and jurisdictional boundaries. Over the next three years, the NRC estimates that it will receive one application for a test reactor, one for an early site permit, four for standard design, and 19 for a combined construction/operating license.

Information Requested by the Attorney General for Antitrust Review

Section 50.33a and Appendix L. Under the Act as well as other laws to protect trade and commerce against unlawful restraints and monopolies, the NRC is required to report promptly to the Attorney General any information it may have with respect to nuclear power generation which appears to violate or to tend toward violation of antitrust laws or to restrict competition in private enterprise. Furthermore, upon request of the Attorney General, the NRC must furnish or cause to be furnished such information as the Attorney General determines to be appropriate for his advice on antitrust aspects of license applications for a utilization or production facility under Section 103 of the Act. The Attorney General's request is the basis for the NRC's antitrust reporting requirements.

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

Technical Information

10 CFR 50.34(a), 50.34a, 50.34a(a), 50.34a(b), Appendix B, Appendix E These sections of Part 50 set forth the safety information required by the applicant at the construction permit stage in the Preliminary Safety Analysis Report (PSAR). Section 50.34(a) outlines the minimum information that is necessary in the PSAR to permit the NRC to perform a safety evaluation. The PSAR includes the design criteria and preliminary design information for the proposed reactor and comprehensive data on the proposed site. (For earthquake engineering criteria and geologic and seismic siting factors, see Appendix S of 10 CFR Part 50 (Section 32 Supporting Statement) or 10 CFR Part 100 (OMB Clearance 3150-0093), respectively.) The PSAR also discusses safety features designed to prevent accidents or, if they should occur, to mitigate their effects on both the public and the facility's employees.

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

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

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

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

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

(i) plant operations including organizational structure,

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

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

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

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

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

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

The final equipment design and procedures to be used by the applicant to control radiological effluents from the plant to permit the staff to determine whether such systems can control the release of radioactive wastes from the facility within the limits specified by NRC regulations. Information required by the NRC in the FSAR in this area of review is specified in Section 50.34(b)(3) and 50.34a(c).

10 CFR 50.34(c). This section describes the required physical security program needed to ensure 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. A separate OMB clearance package for Physical Protection of Plants and Materials is covered under 10 CFR Part 73 (OMB clearance 3150-0002). Also see section 4 of this 10 CFR Part 50 clearance submittal, “Physical Security and Safeguards Contingency Plans.”

10 CFR 50.34(d). The Safeguards Contingency Plan, as provided for in 10 CFR Part 50, provides a structured, orderly, and timely response to safeguards contingencies and is 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. A separate OMB clearance package for Physical Protection of Plants and Materials is covered under 10 CFR Part 73. Also see section 4 of this 10 CFR Part 50

clearance submittal, “Physical Security and Safeguards Contingency Plans.”

10 CFR 50.34(f) This section sets forth additional Three Mile Island-related requirements for applications that were pending on February 16, 1982. This section also applies to applications for design certification and combined licenses. 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 that accident. Because many of the requirements specified in this section are addressed under 10 CFR 50.34(g), no new burden is associated with this activity.

10 CFR 50.34(g). This section requires applicants for a reactor construction permit or operating license and all applicants for reactor design approvals, design certifications, or licenses under 10 CFR 52 to include analyses and the description of the equipment and systems required by 10 CFR 50.44 as a part of their application.

10 CFR 50.34(h). This section requires applicants for a construction permit (CP), operating license (OL), preliminary design approval (PDA), or final design approval (FDA) to provide, as part of the material currently required by 10 CFR 50.34, an evaluation of the facility against the Standard Review Plan (SRP) (NUREG-0800) acceptance criteria, for those applications docketed after May 17, 1982. The evaluation required shall include an identification of all differences in design features, analytical techniques, and procedural measures proposed for a facility and those corresponding features, techniques and measures given in the SRP acceptance criteria. Where differences exist, the evaluation shall discuss how the proposed alternative provides an acceptable method of complying with the Commission's regulations that underlie the corresponding SRP acceptance criteria. The SRP was issued to establish the criteria that the NRC staff uses in evaluating whether an applicant/licensee meets the Commission's regulations. The SRP is not a substitute for the regulations, and compliance is not a requirement. However, the objective of the requirement contained in 10 CFR 50.34(h) and of the implementing guidance of NUREG-0906 is to allow the limited NRC staff resources to quickly focus on those areas involving differences from the SRP acceptance criteria in order to make the most effective use of the staff's resources. Experience has shown that such differences usually involve issues of safety significance and require the greatest amount of time to resolve. Since the applicants are familiar with their plant's designs, they are in a better position to identify the differences from the SRP acceptance criteria during the normal course of preparing the technical supporting information for an application.

Decommissioned Plants

10 CFR 50.54(bb). This section requires that for operating nuclear power reactors, the licensee shall, within 2 years following permanent cessation of operation of the reactor or 5 years before expiration of the reactor operating license, whichever occurs first, submit written notification to the Commission for its review and preliminary approval of the program by which the licensee intends to manage and provide funding for the management of all irradiated fuel at the reactor following

permanent cessation of operation of the reactor until title to the irradiated fuel and possession of the fuel is transferred to the Secretary of Energy for its ultimate disposal in a repository. Final Commission review will be undertaken as part of any proceeding for continued licensing under 10 CFR 50 or 10 CFR 72. The licensee must demonstrate to the NRC that the elected actions will be consistent with NRC requirements for licensed possession of irradiated nuclear fuel and that the actions will be implemented on a timely basis. Where implementation of such actions require NRC authorizations, the licensee shall verify in the notification that submittals for such actions have been or will be made to the NRC and shall identify them. A copy of the notification shall be retained by the licensee as a record until expiration of the reactor operating license. The licensee shall notify the NRC of any significant changes in the proposed waste management program as described in the initial notification.

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

Construction Completion

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

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

Application for Amendment of License

10 CFR 50.59(c), 50.90, 50.91(a) and (b). These sections are applicable for amendment of licenses to operating nuclear power plants and non-power reactors, and amendment of licenses to permanently shutdown nuclear power and non-power reactors. 10 CFR 50.59(c) requires the holder of a license authorizing operation of a production or utilization facility who desires (1) to make a change in technical specifications (TS) or (2) to make a change in the facility or procedures described in the safety analysis report, or to conduct tests or experiments that involve an unreviewed safety question or a change in TS to submit an application for amendment of the license pursuant to 10 CFR 50.90. 10 CFR 50.90 requires the application for amendment of the license or construction permit to be filed with the Commission, fully describing the changes and following as far as applicable in

the form prescribed for original applications.

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

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

On July 19, 1995, the Commission published in the Federal Register (60 FR 36953) its final rule on TS for nuclear power reactors. The rule codified the criteria identified in the final policy statement for determining the content of TS. A major benefit of the rule involves the reduction in the number of safety functions controlled by TS (limiting conditions for operation) by applying the criteria. The rule ensures that any changes to the most safety significant features will require prior review and approval by NRC. The safety functions that do not satisfy the criteria can be relocated to licensee-controlled documents and changed pursuant to 10 CFR 50.59. The burden on licensees and the NRC can be reduced by relocating such provisions or, for power reactor licensees, completely converting the existing TS to the improved Standard Technical Specifications (STS). Record keeping and reporting requirements for revisions that do not require an amendment are covered in Section 17 of this clearance submittal.

Licensee Notification to NRC

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

Application for Transfer of Licenses

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

The requirements described above are needed to assure the transferee's financial capability to run the facility safely and to ensure the transferee's technical

capability to properly and safely operate the facility in a way that protects the health and safety of the public.

2. Agency Use of Information

Upon receipt of an application, the NRC staff performs a preliminary review to determine if the Safety Analysis Report (SAR) provides a reasonably complete presentation of the information that is needed to form a basis for the findings required before issuance of a permit or license in accordance with 10 CFR 2.101. The Standard Format will be used by the staff as a guideline to identify the type of information needed unless there is good reason for not doing so. If the SAR does not provide a reasonably complete presentation of the necessary information, further review of the application will not be initiated until a reasonably complete presentation is provided. The information provided in the SAR should be up to date with respect to the state of technology for nuclear power plants and should take into account recent changes in the NRC regulations and guides and in industry codes and standards, results of recent developments in nuclear reactor safety, and experience in the construction and operation of nuclear power plants. The Standard Format should be used for both Preliminary Safety Analysis Reports (PSARs) and Final Safety Analysis Reports (FSARs); however, any specific item that applies only to the FSAR will be indicated in the text by adding “(FSAR)” at the end of the guidance for that item. An entire section that is applicable only to the FSAR will be indicated by including “(FSAR)” following the heading.

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

The Standard Review Plan (SRP) reflects the NRC's detailed interpretations of the acceptable means to satisfy the applicable regulatory requirements, which ensure that the proposed facilities can be constructed and operated without any undue risk to the health and safety of the public. Because of limited resources, the NRC staff conducts audit reviews of the Safety Analysis Reports (SARs) submitted with an application, in accordance with the review procedures in the SRP. The material currently found in SARs does not lend itself to ready identification of the differences from the SRP acceptance criteria. These differences are often found in responses to staff questions or during meeting discussions. Differences from the SRP acceptance criteria do not necessarily imply nonconformance with regulatory requirements. However, they do reflect a departure from accepted practice that should be highlighted by the licensee to ensure a thorough staff review.

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 35% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections. The provisions of these regulations are not duplicated in other Federal regulations.

5. Effort to Reduce Small Business Burden

This information collection affects 33 operating and 16 permanently shutdown non-power reactor licensees. For certain provisions of 10 CFR 50, the burden for non-power reactor licensees is significantly less than that for power reactor licensees. It is not possible to reduce this burden without impairing NRC's mandated responsibilities.

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

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

7. Circumstances which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

These regulations do not involve sensitive questions.

12. Estimated Industry Burden and Burden Hour Cost

10 CFR 50.12 - Specific Exemptions
It is estimated that there will be an average of 1 exemption per unit per year requiring approximately 400 licensee hours per exemption (360 hrs. reporting and 40 hrs. recordkeeping). The total estimated annual burden for exemptions is 41,600 hours (37,440 hrs for reporting and 4,160 hrs for recordkeeping) at a cost of $9,027,200.

10 CFR 50.33 - General Information

Early Site Permits
No power reactor or non-power reactor applications for a construction permit are anticipated during the next 3 years. However, the staff anticipates that 1 Early Site Permit application will be submitted during the next 3 years. Because 10 CFR 52 incorporates by reference some of the information collection requirements set forth in 10 CFR Part 50 that are applicable to Early Site Permits, the burden to the industry to collect this general information under 10 CFR 50.33 excluding the emergency response plans is estimated to be 400 hours of license applicant resources per permit application (360 hrs. reporting and 40 hrs. recordkeeping). The total estimated annual burden for early site permits is 133 hours (120 hrs reporting and 13 hrs recordkeeping) at a cost of $28,861.

Non-Power Reactor Operating License
One non-power reactor application for an operating license is expected during this OMB clearance period. This application is for a research reactor and is expected to require 3,000 hours of license applicant resources over a 3-year period (2,700 hrs. reporting and 300 hrs. recordkeeping). The total estimated annual burden for non-power reactor operating licenses is 1,000 hours (900 hrs reporting and 100 hrs recordkeeping) at a cost of $217,000.

Standard Design Certifications
For the duration of this clearance, the staff estimates that there will be 4 applicants for standard design certifications in accordance with 10 CFR Part 52 during the period covered by this clearance. Because Part 52 requirements for standard design certifications incorporate by reference much of the information collection requirements set forth in 10 CFR Part 50, the burden to the industry to collect this information under 10 CFR 50.33 is included here and is estimated to be 500 hours of license applicant resources per application (450 hrs. reporting and 50 hrs. recordkeeping). The total estimated annual burden for standard design certifications is 667 hours (600 hrs reporting and 67 hrs recordkeeping) at a cost of $144,739.

Combined License

During this OMB clearance period, the staff estimates that there will be 19 applications for a combined license (COL) under 10 CFR Part 52. In accordance with §52.77, the application must contain the information required by §50.33. The burden on the industry to collect this general information for a COL is estimated to be 3,000 hours of applicant resources (2,700 hrs. reporting and 300 hrs. recordkeeping). The total estimated annual burden for combines licenses is 19,000 hours (17,100 hrs reporting and 1,900 hrs recordkeeping) at a cost of $4,123,000.

10 CFR 50.34 Technical Information

Non-Power Reactor Operating License
One non-power reactor application for an operating license is expected during this OMB clearance period. This application is for a research reactor and is expected to require 7,000 hours of license applicant resources (6,300 hrs. reporting and 700 hrs. recordkeeping). The total estimated annual burden for non-power reactor operating license technical information is 2,333 hours (2,100 hrs reporting and 233 hrs recordkeeping) at a cost of $506,261.

10 CFR 50.59(c), 50.90, 50.91(a) and (b)
For the purpose of assessing the reporting requirement burden for the NRC and the regulated industry, the NRC will assume that the number of operating nuclear power plants will be 104, the number of operating non-power reactors will be 33, the number of permanently shutdown power plants will be 15, and the number of permanently shutdown non-power plants will be 16 throughout the clearance period. These burden estimates also assume that, throughout the clearance period, the average level of effort remains constant (approximately 400 licensee hours/amendment). (See burden breakout in table on next page, “Annual Licensee Burden for License Amendments.”)

Each application for conversion to the Standard Technical Specifications (STS) is estimated to result in a burden of 12,500 hours at a cost of approximately $2,712,500 per unit (12,500 hrs. x $217/hr.).

10 CFR 50.74
It is estimated that there will be up to 205 notifications a year involving 1 hour each of industry effort. Thus, the estimated cost for industry is expected to be $44,485 (205 hrs. x $217/hr.) each. The total estimated annual burden for notifications is 225 hours (205 hrs reporting and 20 hrs recordkeeping) at a cost of $48,825.

10 CFR 50.80
Deregulation of the electric utility industry has resulted in a large number of license transfer applications involving mergers, restructurings or plant sells. The NRC estimates that there will be 12 of these applications annually. Each application normally involves approximately 200 hours of effort by industry for a total of 2,400 hours (2,160 hrs. reporting and 240 hrs. recordkeeping).

In addition, the NRC estimates that 5 licensees will submit applications annually for transfer of the license to new operating companies. The review of these applications is expected to be extensive. Therefore, the NRC staff estimates that

licensee preparation of the applications is expected to require approximately 1,000 hours each for a total of 5,000 hours (4,500 hrs. reporting and 500 hrs. recordkeeping).

The total estimated annual burden for license transfers is 7,400 hours (6,660 hrs reporting and 740 hrs recordkeeping) at a cost of $1,605,800.

The overall burden estimates for this section is 447,658 hours (402,895 hours reporting and 44,763 hours recordkeeping at an estimated overall cost of $97,141,786. The total number of responses is 1,243 annually.

Annual Licensee Burden for License Amendments

FY	Custom TS (Unconverted)				TS Conversions		Standard TS (Converted)		Permantly Shutdown Plants			
	Power Units	Burden[1] (hrs)	Non Power Units	Burden[2] (hrs)	Power Units	Burden[3] (hrs)	Power Units	Burden[4] (hrs)	Power Units	Burden[5] (hrs)	Non Power Units	Burden (hrs)
2007	29	121,800	33	19,800	1	12,500	74	207,200	15	9,000	16	6
2008	28	117,600	33	19,800	1	12,500	75	210,000	15	9,000	16	6
2009	27	113,400	33	19,800	1	12,500	76	212,800	15	9,000	16	6
Number of Responses Annually							908	Estimated Total Burden (hrs)				
Annual Burden Hours / Response						413	Estimated Annualized Burden (hrs)					

Notes:

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

Total annualized industry cost @ $217/hour is $81,440,100 (375,300 x $217).

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $3,885 (44,763 recordkeeping hours x $217 x .0004).

14. Estimated Annualized Cost to the Federal Government

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

10 CFR 50.12 - Specific Exemptions
It is estimated that there will be an average of 1 exemption per unit per year requiring approximately 75 NRC staff hours per exemption (104 units x 1 x 75 hrs. = 7,800 hrs. at a cost of $1,692,600 [7,800 x $217/hr.]).

10 CFR 50.33 - General Information

Early Site Permits
The staff anticipates that 1 Early Site Permit application will be submitted during the next 3 years. Because Part 52 incorporates by reference some of the information collection requirements set forth in 10 CFR Part 50 that are applicable to Early Site Permits, the burden to the Federal government to review this general information under Section 50.33, excluding the emergency response plans, is estimated to be 100 hours of NRC staff resources per permit application (1 x .33 x 100 hrs. = 33 hrs. at a cost of $7,161 [33 x $217/hr.]).

Non-Power Reactor Operating License
One non-power reactor application for an operating license is expected during this OMB clearance period. This application is for a research reactor and is expected to require 1,500 hours in NRC staff resources over a 3-year period (1 x 1,500/3 = 500 hrs. at a cost of $108,500 [500 x 217/hr.]).

Standard Design Certifications
For the duration of this clearance, the staff estimates that there will be 4 applicants for standard design certifications in accordance with 10 CFR Part 52 during the period covered by this clearance. Because Part 52 requirements for standard design certifications incorporate by reference much of the information collection requirements set forth in 10 CFR Part 50, the burden to the Federal government to review this information is estimated to be 100 hours in NRC staff resources per application (4 x 100 hrs./3 = 133 hrs. at a cost of $28,861 [133 x $217/hr.]).

Combined License
During this OMB clearance period, the staff estimates that there will be 19 applications for a combined license (COL) under 10 CFR Part 52. In accordance

with 10 CFR 52.77, the application must contain the information required by 10 CFR 50.33. The burden on the Federal government to review this general information for each COL is estimated to be 1,500 hours of NRC staff resources (19 x 1,500 hrs./3 = 9,500 hrs. at a cost of $2,061,500 [9,500 x $217/hr.]).

10 CFR 50.34 Technical Information

Non-Power Reactor Operating License
One non-power reactor application for an operating license is expected during this OMB clearance period. This application is for a research reactor and is expected to require 3,000 hours in NRC staff resources (1 x 3,000 hrs./3 = 1,000 hrs. at a cost of $217,000 [1,000 x $217/hr.]).

10 CFR 50.59(c), 50.90, 50.91(a) and (b)
For the purpose of assessing the reporting requirement burden, the NRC will assume that the number of operating nuclear power plants will be 104, the number of operating non-power reactors will be 33, the number of permanently shutdown power plants will be 15, and the number of permanently shutdown non-power plants will be 16 throughout the clearance period. These burden estimates also assume that, throughout the clearance period, the average level of effort remains constant. See Table, “Annual Burden for the Federal Government for License Amendments.” (92,150 hrs. x $217/hr. = $19,996,550 + $30,000 contractor assistance = $20,026,550).

10 CFR 50.74
It is estimated that there will be up to 205 notifications a year involving 1 hour each of NRC staff effort. Thus, the estimated cost for the Federal government is expected to be $44,485 (205 x 1 hr. x $217/hr.).

10 CFR 50.80
Deregulation of the electric utility industry has resulted in a large number of license transfer applications involving mergers, restructurings or plant sells. The NRC estimates that there will be 12 of these applications annually. Each application normally involves 100 hours by the NRC (12 x 100 = 1,200 hrs. at a cost of $260,400 [1,200 x $217/hr.]).

In addition, the NRC estimates that 5 licensees will submit applications annually for transfer of the license to new operating companies. The review of these applications is expected to be extensive. Therefore, the NRC estimates Federal government review effort will require approximately 500 hours each (5 x 500 hrs. = 2,500 hrs. at a cost of $542,500 [2,500 x $217/hr.]).

Total government burden is estimated to be 115,021 hours (7,800 + 33 + 500 + 133 + 9,500 + 1,000 + 92,150 + 205 + 1,200 + 2,500 hours) for a cost of $24,959,557 (115,021 hours x $217/hr.) + $30,000 contractor fees = $24,989,557.

15. Reasons for Changes in Burden or Cost

The overall burden for Section 1 has decreased by 170,933 hours, from 618,591 to 447,658 hours, compared with the last OMB clearance estimate. The primary reasons for the burden changes are indicated below:

Reductions:

The burden for technical application information for Early Site Permits, Standard Design Certifications, and Combined Licenses will be captured under 10 CFR 52 (3150-0151) instead of under 10 CFR 50, which results in a burden decrease of 173,667 hours.

It is estimated that there will be a reduction in the number of license amendments anticipated during the clearance period, resulting in a burden decrease of 15,500 hours.

Increases:

NRC estimates that there will be an increase in burden of 18,234 hours for the general information submitted under 10 CFR 50.33 for combined license applications because of an increase in the number of applications from 1 to 6.3 annually (19 COLs expected during the 3 year approval period) and because of a revised estimate of the burden per response.

Additionally, the cost estimate has increased based on a rate increase from $156 to $217 per hour.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Enclosures:
1) Summary Licensee Burden Table
2) Annual Burden to the Federal Government for License Amendments

Section 1
SUMMARY LICENSEE BURDEN TABLE
Application for Construction Permit, Early Site Permit, Design Certifications, Operating License, and Combined License

Subject	Annual Burden Hours Per Response	Number of Responses Annually	Annual Reporting Burden Hours	Annual Recordkeeping Burden Hours	Total Annual Burden Hours	Annual Cost to Industry (@$217/hr)	Annual Cost to Federal Government (@$217/hr)
50.12, Exemptions	360	104	37,440	4,160	41,600	$9,027,200	$1,692,600
50.30, 55.55(d) Filing Application	0	0	0	0	0	$0	$0
50.33 - Filing Application Content - General (CP, OL, ESP, SDC and COL) (Expect 1 ESP, 4 SDC and 19 COL during clearance period; Reference OMB Clearance 3150-0151)							
Early Site Permits 50.33(a)-(d),(g),(j)	360	0.33	120	13	133	$28,861	$7,161
Non-Power Operating License	2,700	0.33	900	100	1,000	$217,000	$108,500
Std. Design Certification 50.33(a)-(d)	450	1.33	600	67	667	$144,739	$28,861
Combined OL 50.33(a)-(d)	2,700	6.33	17,100	1,900	19,000	$4,123,000	$2,061,500
Antitrust Information 50.33a & Appendix L	0	0	0	0	0	$0	$0
50.34 Non-Power Operating License	6,300	0.33	2,100	233	2,333	$506,261	$217,000
Decommissioned Plants 50.54(bb)	0	0	0	0	0	$0	$0
License Amend. 50.59(c), 50.90, 50.91(a), (b)	372	908	337,770	37,530	375,300	$81,440,100	$20,026,550
NRC Notification, 50.74	1	205	205	20	225	$48,825	$44,485
License Trans. 50.80(b)	392	17	6,660	740	7,400	$1,605,800	$712,900
Totals		1,243	402,895	44,763	447,658	$97,141,786	$24,989,557

Annual Burden to the Federal Government for License Amendments

The licensing burden on the NRC includes the effort to process license amendments, and the effort to review applications to completely "convert" existing TS to the improved STS.

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

FY	Custom TS (Unconverted)				TS Conversions		Standard TS (Converted)		Permantly Shutdown Plants				TOTAL Burden (hrs)
	Power Units	Burden[1] (hrs)	Non Power Units	Burden[2] (hrs)	Power Units	Burden[3] (hrs)	Power Units	Burden[4] (hrs)	Power Units	Burden[5] (hrs)	Non Power Units	Burden[6] (hrs)	
2007	29	30,450	33	4,950	1	1,450	74	51,800	15	2,250	16	1,600	92,500
2008	28	29,400	33	4,950	1	1,450	75	52,500	15	2,250	16	1,600	92,150
2009	27	28,350	33	4,950	1	1,450	76	53,200	15	2,250	16	1,600	91,800
Estimated Total Burden (hrs)													276,450
Estimated Annualized Burden (hrs)													92,150

Notes:

1. 10.5 amendments per unit per year, 100 staff-hours per amendment.
2. 1.5 amendments per unit per year, 100 staff-hours per amendment.
3. 1,450 staff-hours per unit.
4. 7 amendments per unit per year, 100 staff-hours per amendment.
5. 1.5 amendments per unit per year, 100 staff-hours per amendment.
6. 1 amendment per unit per year, 100 staff-hours per amendment.

In addition to the Federal burden shown above for conversions to STS, each amendment for TS conversion is expected to require $30K for contractor assistance annually. Thus, the total annualized Federal cost is $20,026,550 (92,150 hours x $217/hour + $30,000 contractor cost).

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FINAL SUPPORTING STATEMENT FOR TECHNICAL SPECIFICATIONS CONTAINED IN LICENSES TO OPERATE NUCLEAR POWER PLANTS AND RESEARCH AND TEST REACTORS AND THEIR REPORTING AND RECORDKEEPING REQUIREMENTS

10 CFR 50.36(a), 10 CFR 50.36(b), 10 CFR 50.36(c), 10 CFR 50.36(c)(7), 10 CFR 50.36(c)(8) (excluding 10 CFR 50.73 information), 10 CFR 50.36a, 10 CFR 50.36a(a)(2), 10 CFR 50.36b, AND 10 CFR 50 APPENDIX I[1]

DESCRIPTION OF THE INFORMATION COLLECTION

The Section 2 Supporting Statement reflects the reporting and recordkeeping requirements for nuclear power plants, research and test reactors, and permanently shutdown reactors.

10 CFR 50.36 requires licensees to maintain technical specifications with administrative controls. Administrative controls are the provisions relating to organization and management, procedures, recordkeeping, review and audit, and reporting necessary to ensure operation of the facility in a safe manner. These reporting/recordkeeping requirements are set forth in Appendix A to the Technical Specifications (TS) for each facility license. Pursuant to 10 CFR 50.36b, environmental reporting and recordkeeping requirements are set forth in Appendix B to the TS or in each licensees environmental protection plans. (A few facilities have a single appendix that contains the combined aspects of both Appendices A and B.)

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

No applications for a license authorizing operation of a production or utilization facility are expected during this clearance period; hence, no initial TS filings described by 10 CFR 50.36(a) are anticipated.

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

10 CFR 50.36(c) requires TS to include:

□□ 50.36(c)(1) safety limits, limiting safety system settings, and limiting control settings;

□□ 50.36(c)(2) limiting conditions for operation;

[1] 10 CFR 50 Appendix I consists of numerical guides for design objectives and limiting conditions for plant operation to meet the criterion "as low as is reasonably achievable" for radioactive material in light-water-cooled reactor effluents.

□□ 50.36(c)(3) surveillance requirements;

□□ 50.36(c)(4) design features; and

□□ 50.36(c)(5) administrative controls, and also states that each licensee shall submit any reports to the Commission pursuant to approved technical specifications as specified in § 50.4.

10 CFR 50.36(c)(6), "Decommissioning," requires nuclear power reactor facilities that have submitted the certifications required by § 50.82(a)(1) and non-power reactor facilities which are not authorized to operate, to develop on a case-by-case basis technical specifications involving safety limits, limiting safety system settings, and limiting control system settings; limiting conditions for operation; surveillance requirements; design features; and administrative controls.

10 CFR 50.36(c)(7) "Initial notification," requires that initial notification for licensees with an installed Emergency Notification System (ENS) reports made to the Commission in response to the requirements of 10 CFR 50.36 shall be made to the NRC Operations Center in accordance with § 50.72, and all other licensees shall make the initial notification by telephone to the Administrator of the appropriate regional office. (See Section 29 of this submittal for more details).

10 CFR 50.36(c)(8) "Written Reports," requires that licensees for nuclear power reactors licensed under 10 CFR 50.21(b) and 10 CFR 50.22 to submit written reports to the Commission in accordance with 10 CFR 50.73 for events described in 10 CFR 50.36(c)(1) and (c)(2). The burden associated with 10 CFR 50.73 reporting requirements cleared separately under NRC Form 366, “Licensee Event Report” (OMB Clearance No. 3150-0104).

10 CFR 50.36(c)(8) "Written Reports," also require all licensees to submit any special reports required, as appropriate.

10 CFR 50.36(c) also requires that certain records be maintained as described in A.1.k of this Supporting Statement.

10 CFR 50.36a requires each nuclear power reactor license to include TS on effluents. 10 CFR 50.36a(a)(1) requires that operating procedures be established and maintained until the Commission terminates the license, with any superseded procedures retained for three years from the date they were superseded.

10 CFR 50.36a(a)(2) requires the licensee to submit to NRC an annual report of radionuclides released as liquid and gaseous effluents to unrestricted areas (see "Radioactive Effluent Report," below).

10 CFR 50.36b allows each license authorizing operation, and each license for a nuclear power reactor facility for which the certification of permanent cessation of operations required under § 50.82(a)(1) has been submitted, which is of a type described in §50.21(b) (2) or (3) or §50.22 or is a testing facility, to include conditions to protect the environment to be set out in an attachment to the license, which is incorporated in, and made a part of, the license. These conditions will be derived from information contained in the environmental report and the supplement to the environmental report submitted pursuant to §51.50 and §51.53 of this chapter as analyzed and evaluated in the NRC record of decision, and will identify the obligations of the licensee in the environmental area, including, as appropriate, requirements for reporting and recordkeeping of

environmental data, and any conditions and monitoring requirement for the protection of the nonaquatic environment. These conditions are derived from information contained in the environmental report and the supplement to the environmental report. (See Supporting Statement for 10 CFR Part 51, OMB Clearance 3150-0021.)

The recordkeeping discussed below refers to improved standard technical specifications (iSTS) and non-iSTS plants. Plants with iSTS typically have fewer reporting requirements than non-iSTS plants. The July 19, 1995, final rule on TS for nuclear power reactors (60 FR 36953) codified the criteria identified in the final policy statement for determining the content of TS. Each licensee covered by these regulations may voluntarily use the criteria as a basis to propose relocation of existing TS that do not meet any of the criteria from the facility license to licensee-controlled documents. The NRC encourages licensees to implement a program to upgrade their TS consistent with the final rule. One way is complete adoption of iSTS. Guidelines also exist for adopting significant portions of the ISTS, or for adopting specific items called Technical Specification Task Force (TSTF) Travelers (e.g. TSTF-369 discussed below). The adoptions typically reduce reporting burden. These guidelines are published as Generic Letters or Administrative Letters.

A. JUSTIFICATION

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

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

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

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

For research and test reactors, the American National Standards Institute (ANSI)/American Nuclear Society (ANS) Standard 15.1-1990 provides the guidance for technical specifications, including reporting and recordkeeping. Startup reports, annual operating reports, and special reports are typically in research and test reactor TS. Typically an annual operating report is included. Topics in the annual operating reports for research and test reactors are

determined by the individual licensee's TS; topics include: a summary of reactor operating experience and the hours the reactor was critical, unscheduled shutdowns and corrective actions, safety-significant preventive and corrective maintenance, major changes in the facility and procedures, reviews of experiments, a summary of the nature and amount of radioactive effluents released, a summary of environmental surveys performed outside the facility, and a summary of excessive radiation exposures.

a. Radioactive Effluent Reports

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

10 CFR 50.36a specifies that, to keep releases of radioactive materials to unrestricted areas as low as is reasonably achievable, each nuclear power reactor license must include TS. The NRC staff has developed "Radiological Effluent Technical Specifications (RETS) for PWRs" (NUREG-0472) and "Radiological Effluent Technical Specifications for BWRs" (NUREG-0473). Generic Letter 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications in the Administrative Controls Section of the Technical Specifications and the Relocation of the Procedural Details of RETS to the Offsite Dose Calculation Manual (ODCM) or to the Process Control Program (PCP)," permits relocation of the description of the radioactive effluent report content to the ODCM or the PCP. The contents of these three documents (as applicable) and the reporting requirements specified therein are being made part of the Appendix A TS for new operating licenses. These same requirements are also being added to existing operating licenses as license amendments. (Appendix A TS are approved by the NRC, incorporated in the facility operating license, and are conditions of the license.)

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

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

b. Startup Report

The Startup Report is not required to be submitted by plants that have converted to the ISTS or by permanently shutdown reactors. Plants that have not converted and all research and test reactors are required to submit this report if certain conditions are met. For example, research reactors submit the report if a major change the core (e.g. new fuel design) occurred.

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

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

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

c. Sealed Source Leakage Report

Custom-format, non-ISTS and test, research, and training reactors had a requirement that a report shall be prepared and submitted to the Commission on an annual basis if sealed source or fission detector leakage tests reveal the presence of ceratin levels of removable contamination. The Sealed Source Leakage Report is not required to be submitted by some of the more recent plant TS and by plants that have converted to the ISTS.

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

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

maintaining the integrity of sealed sources under various operating conditions could be unknowingly deficient.

d. Monthly Operating Reports (Now Quarterly Reports

The Monthly Operating Reports were applicable only to operating nuclear power plants, not to the research and test reactors, nor to permanently shutdown reactors. Since the last OMB clearance, the NRC provided a means to eliminate the monthly report, as described below.

The TS used to require licensees to a submit monthly report of operating statistics and shutdown experience. Information contained in the "Monthly Operating Report" includes (1) Average Daily Unit Power Level; (2) Operating Data; (3) Unit Shutdowns and Power Reductions; and (4) Spent Fuel Storage Capacity, and is used as performance indicators.

The NRC made a model license amendment available to remove the monthly reporting requirement from TS (see 69 FR 35067-35071, dated June 23, 2004; also Technical Specification Task Force (TSTF) 369, “Removal of Monthly Operating Report and Occupational Radiation Exposure Report”). Most power reactors have adopted this amendment. By adopting the amendment, the information will be provided quarterly instead of monthly (although the operating data will still be divided by month) and the form of the reporting will be from a consolidated database instead of in correspondence from individual licensees. The change of reporting frequency to quarterly has some advantages for both the NRC staff and licensees, since it will coincide with the collection and submission of the reactor oversight program (ROP) performance indicator (PI) data.

e. Non-Routine Environmental Reports

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

Examples of issues in non-routine environmental reports are: wild ducks were entrained in the intake cribs of a nuclear power plant as reported to US Fish and Wildlife Service (ADAMS ML# ML050330406), and a damaged fuel line for a regulated tank that caused oil-contaminated soil as reported to a state department of environmental protection (ML051190723).

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

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

f. Annual Environmental Operating Report

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

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

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

g. Annual Radiological Environmental Operating Report

Each reactor license includes a TS requiring submission of annual radiological environmental operating reports. This report covers the operation of the plant during the previous calendar year and shall be submitted by May 15 of each year for nuclear power plants and as required by TS for non-power reactors. The material in the report is outlined in the Offsite Dose Calculation Manual (ODCM), and in 10 CFR 50, Appendix I.

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

analysis of the problem and a planned course of action to alleviate the problem.

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

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

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

h. Occupational Radiation Exposure Report (ORER)

There are no 10 CFR regulations that explicitly required the submittal of the ORER data. Historically, TS required licensees to submit annual ORERs to the NRC. The reports, developed in the mid-1970s, supplement the reporting requirements currently defined in 10 CFR 20.2206, “Reports of Individual Monitoring,” by providing a tabulation of data by work areas and job functions. The data from the 10 CFR 20 reports are sufficient to support the NRC trending programs, radiation related studies, and preparation of reports such as NUREG-0713. Accordingly, the NRC’s limited use of the ORER submitted pursuant to the existing TS requirements no longer warrants the regulatory burden imposed on licensees. The NRC made a model license amendment available to remove the reporting requirement from TS (see 69 FR 35067-35071, dated June 23, 2004, also TSTF-369, “Removal of Monthly Operating Report and Occupational Radiation Exposure Report”). Most power reactors have adopted this amendment.

i. Special Reports

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

Special Reports may be required by TS for inspection, test, and maintenance activities. Special Reports shall be submitted in accordance with 10 CFR 50.4 within the time period specified for each report. These special reports are determined for each licensee individually, as specified in the TS.

Examples of Special Reports are:

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

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

(2) PAM Report for Nuclear Power Plants

When a special report is required by TS Limiting Condition for Operation, "Post Accident Monitoring (PAM) Instrumentation," a report shall be submitted within the following 14 days from the time the action is required. When required, this report is in lieu of a plant shutdown requirement and ensures that the NRC is notified that alternate actions are identified before loss of functional capability occurs with the potential to impact public health and safety.

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

Previously, plants had the following requirements: Following each in-service inspection of steam generator (SG) tubes, in accordance with the SG Tube Surveillance Program, the number of tubes plugged and tubes sleeved in each SG shall be reported to the NRC within 15 days. This report ensures that the NRC promptly responds to situations with the potential to seriously impact public health and safety. The complete results of the SG tube in-service inspection shall be submitted to the NRC within 12 months following the completion of the inspection. Results of SG tube inspections that fall below a prescribed standard shall be reported to the NRC prior to resumption of plant operation.

Currently, through NRC Generic Letter 2006-01 "Steam Generator Tube Integrity and Associated Technical Specifications," and TSTF-449, “Steam Generator Tube Integrity,” the NRC has issued model license amendments for plants to change the requirements to

eliminate the 15-day report. If there is serious SG tube degradation (i.e., tubing fails to meet the structural integrity or accident induced leakage criteria) then 10 CFR 50.72 or 50.73 requires reporting. In addition, TS 5.5.9 is revised to 180 days after the initial entry into MODE 4 after performing a SG inspection.

Most plants have submitted license amendments to adopt TSTF-449.

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

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

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

k. Recordkeeping Requirements

NRC regulations in 10 CFR 50.36 and 10 CFR 50.36a establish requirements for recording results of reviews of events reported to the Commission, including those reported in accordance with 10 CFR 50.36(c) (See below) and 10 CFR 50.72 and 10 CFR 50.73, and requirements for recordkeeping as part of administrative controls. These records are maintained primarily for the life of the plant. Certain records are only retained for 3 years or as specified in TS.

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

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

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

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

10 CFR 50.36(c)(2) requires recording the results of reviews of events in

nuclear reactors and fuel reprocessing plants in which a limiting condition for operation is not met. Each of the above records of review must include the cause of the condition and the basis for corrective action taken to preclude recurrence.

10 CFR 50.36(c)(5) requires that administrative controls, including recordkeeping, be included in the TS of a production or utilization facility as necessary to assure operation of the facility in a safe manner. Details of recordkeeping are delineated in Section 5.6 of Standard Technical Specification NUREG-1433 for General Electric BWR/4 and NUREG-1434 for BWR/6 reactors, NUREG-1432 for Combustion Engineering pressurized water reactors, NUREG-1430 for Babcock and Wilcox pressurized water reactors, and NUREG-1431 for Westinghouse pressurized water reactors. Recordkeeping requirements for non-power reactors are specified in their Technical Specifications. Guidance for the technical specifications is delineated in ANSI/ANS 15.1-1990 for non-power reactors.

The records required by 10 CFR 50.36(c)(5) include the following:

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

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

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

3. Records of radioactive shipments.

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

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

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

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

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

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

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

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

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

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

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

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

6. Records of reactor tests and experiments;

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

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

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

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

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

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

13. Records of secondary water sampling and water quality;

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

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

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

17. Records of steam generator tube surveillance.

These records are used by the licensees, the NRC, and other Federal, State and local government agencies, for the review of a variety of activities in the facility, many of which affect safety. The records are also historical in nature and provide data on which future activities can be based. NRC inspection and enforcement personnel can spot check the records required by 10 CFR 50.36 and 10 CFR 50.36a to determine, for example, if (1) plant modifications were performed satisfactorily, (2) the plant was operated within the TS, (3) personnel training has been kept current, (4) plant effluents have been kept within allowable values, and (5) operating procedures maintained. Because of the multiple-use nature of many of the records, the NRC has estimated only the incremental burden.

2. Agency Use of Information

The NRC uses this information to determine whether releases of radioactive materials to unrestricted areas during normal reactor operations, including expected operational occurrences, are as low as is reasonably achievable. The NRC also uses this information to ensure the protection of the non-radiological environment. The design objectives of the effluent systems are to be examined to assure that the licensee is not using the systems in a manner for which they were not intended.

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 50% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

There are only 33 operating and 16 permanently shutdown research and test reactors subject to the provisions of the TS regulations. The burden for research and test reactors cannot be further reduced without potentially affecting the health and safety of the public.

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

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

7. Circumstances which Justify Variation from OMB Guidelines

A few special reports, such as the Licensee Event Reports, required by 10 CFR 50.36(c), 10 CFR 50.72, and 10 CFR 50.73, the Post Accident Monitoring Report (when required), and the Steam Generator Tube Inspection Report, are required in fewer than 30 days to ensure that the NRC promptly responds to situations with the potential to seriously impact public health and safety (also see the Section 29 Supporting Statement). Many of the records involved with this information collection are retained longer than 3 years, some for the life of the plant, to establish patterns or base-line performance to anticipate and assess future trends. These variations are deemed necessary to ensure that the health and safety of the public will not be adversely affected by the operation of the plant.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential or proprietary information is protectled in accordance with NRC regulations at 10 CFR9.17(a) and 10 CFR 2.390(b).

11. Justification for Sensitive Questions

The subject regulations do not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Reporting Burden

Reporting burden is estimated below. The attached Tables reflect this burden applied to nuclear power plants that have converted to ISTS, to nuclear power plants that have not converted, to research and test reactors, and to permanently shutdown reactors. While a few plants will not have totally converted to the ISTS during the clearance period, most plants will have adopted the revised reporting and recordkeeping requirements in the ISTS through line item improvements (e.g. TSTF-369). For ease of burden calculation for the clearance period, the burden has been calculated based on an assumption of 100 converted and 4 unconverted operating power plants and 63 converted and 2 unconverted sites.

a. Radioactive Effluent Reports

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

2) Annual Effluent Reports for each operating nuclear power plant require 140 hours preparation/report. Therefore, the estimated burden is 140 hours/plant x 104 plants = 14,560 total burden hours.

These reports for each permanently shutdown nuclear power plant require 35 hours preparation/report for a total burden of 525 hours (35 hours/plant x 15 plants). The total number of reports is 118 (104 + 15 = 118).

Each research and test reactors licensee submits an Annual Operating Report. Part of the report includes information on radioactive effluents. It is estimated that 70 hours are required to prepare each of these 33 reports for operating research and test reactors and approximately 20 hours for 16 permanently shutdown research and test reactors for a total of 2,630 burden hours (70 hours x 33 = 2,310 hours + 20 hours x 16 = 320 hours). The total number of reports is 49 (33 + 16 = 49).

b. Startup Report

The requirements for Startup Reports have generally been removed from TS and been relocated to licensee-controlled documents (e.g., "Technical Requirements Manual"). Also, the reports are not required to be submitted by nuclear power plants that have ISTS.

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

Research and test reactors only submit a Startup Report if certain significant changes have occurred, as defined by their TS. For example, if a new core is installed that is different from pervious designs. One hundred (100) hours are estimated for preparation time. It is anticipated that one report per year total (not one per plant) will be submitted, based on past experience and known licensing and design changes being performed.

This is significantly lower than previous estimates of 36 reports per year because the estimate is more realistic and consistent with past actual reporting.

c. Sealed Source Report

Sealed Source Reports are not required to be submitted by plants that have converted to the ISTS.

Plants with specific TS requirements, research and test reactors, and permanently shutdown reactors, are required to submit this report. Plants are required to report only those sealed source test results which exceed the removable contamination limit.

It is estimated that the burden is 16 hours per plant. Of the 4 unconverted plants, none are estimated to submit a report.

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

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

d. Monthly Operating Report (MOR)

The protocol for electronic MOR reporting using this industry database is a combined (all nuclear plants) quarterly electronic submittal of monthly operating and shutdown history data.

It is assumed that all 104 plants have adopted TSTF-369. The burden for 104 converted or TSTF-369 plants is estimated to be 5 hrs/month data compilation, based on industry feedback and engineering judgement. Total burden is then 5 hr/month/plant x 104 plants x 12 months = 6,240 hrs.

The burden estimate is significantly reduced when contrasted with the previous estimate of 50 hours/month. Formerly, each plant sent a report to the NRC every month (e.g. ML061730210) that listed critical hours, generator on-line hours, shutdown hours, net power generation, plus any shutdowns and the reasons for the shutdowns. Now, the reports are taken from data complied for the reactor oversight program, and are no longer provided directly to the NRC, so the data compilation time and regulatory overhead associated with the reports are reduced.

Research and test reactors and permanently shutdown reactor licensees do not submit Monthly Operating Reports.

e. Non-Routine Environmental Report

Non-Routine Environmental Reports are not required to be submitted by licensees who have converted to the ISTS. Only some sites that have not converted to ISTS are required to submit this report.

A text search through the NRC's ADAMS records system showed five reports during 2005; some of the plants who reported have since removed the reporting requirement during a conversion to improved standard technical specifications. It is estimated that two unconverted plants will submit a report and each report will require up to 50 hours preparation time.

The ADAMS search revealed no reported events from permanently shutdown reactors during 2005. If there was a report, it is estimated that 5 hours of preparation time would be needed.

Thus, the estimated burden is 50 hours x 2 unconverted sites and 5 hours x 0 permanently shutdown sites = 100 burden hours. The total number of reports is estimated at 2.

The estimated number of reports is reduced when contrasted with the previous estimates based on past experience (*i.e.* the number of reports in the ADAMS system.)

The research and test reactors do not submit Non-Routine Environmental Reports.

f. Annual Radiological Environmental Operating Report

Operating nuclear power plant licensees will submit this report for an estimated 65 sites in response to this requirement. The burden is estimated to be 1,400 hours/report x 65 sites = 91,000 burden hours. Permanently shutdown nuclear power plant licensees also submit this report for approximately 15 sites at an estimated burden of 700 hours/report = 10,500 hours. The total number of reports is 78 (65 + 13 = 78).

The estimate annual radiological environmental operating report is based

on discussions with a licensee on the actual number of hours spent gathering data and preparing the report.

Each research and test reactors licensee submits an Annual Operating Report. Part of the report includes information on radiological environmental monitoring. It is estimated that the preparation time for each operating research and test reactor is 200 hours/report and approximately 100 hours/report for each permanently shutdown research and test reactor. Therefore, the estimated burden for research and test reactors = 8,200 hours (33 x 200 hours + 16 x 100). The total number of reports is 49 (33 + 16 = 49).

g. Annual Non-Rad Environmental Operating Report

Licensees for 65 operating and 15 permanently shutdown nuclear power plant sites are required to submit this report. Each report could require approximately 60 hours to prepare for each operating plant site and approximately 60 hours to prepare for each permanently shutdown plant site for a total estimated burden of 4,800 hours (65 sites x 60 hours/operating site + 15 sites x 60 hours/permanently shutdown site). The total number of reports is 80 (65 + 15 = 80).

The estimate annual non-radiological environmental operating report is based on discussions with a licensee on the actual number of hours spent gathering data and preparing the report.

This reporting burden is significantly reduced from the previous estimate of 1400 hours. The reduction is due to using a better estimate based on licensee feedback.

The research and test reactor licensees do not submit Annual Non-Radiological Environmental Operating Reports, nor is it part of the Annual Operating Reports.

h. Occupational Radiation Exposure Report

Each operating and permanently shutdown nuclear power plant licensee that has not eliminated the report from TS is required to prepare one ORER report per year.

The NRC made a model license amendment available to remove the reporting requirement from TS (see 69 FR 35067-35071, dated June 23, 2004, also TSTF-369, “Removal of Monthly Operating Report and Occupational Radiation Exposure Report”). It is assumed that all power licensees have adopted the change to TS, so no reports are anticipated.

For the 15 plants being decommissioned, the preparation time is estimated to be 20 hours per report The total annual burden is thus estimated to be 300 hours (20 hours/plant x 15 plants). The total number of reports is 15.

The estimated burden for operating non-power reactors is 10 hours

preparation for each facility and for each permanently shutdown research and test reactor the preparation time is estimated at 5 hours (10 hours preparation x 33 operating non-power reactors + 5 hours x 16 permanently shutdown research and test reactors = 410 total burden hours). The total number of reports is 49 (33 + 16 = 49).

i. Special Reports

Operating research and test reactors and permanently shutdown reactors are required to submit special reports on abnormal occurrences. Special reports are, by their nature, somewhat unpredictable.

A search of the NRC's ADAMS official agency records system for the phrase "special report" from 01/01/2005 to 12/31/2005 showed 71 reports. Twenty-one of these reports involved steam generators. Since most licensees are adopting TSTF-449, as discussed in Section A.1.i above, and will no longer make special reports on steam generators, it is reasonable to subtract 21 special reports from the 71 submitted in 2005, for an estimate of 50 special reports/year for all reactors, operating or shutdown.

It is estimated that 300 hours is the required preparation time for each report (50 reports x 300 hours = 15,000 burden hours). The total number of reports is 50.

The burden is significantly higher than previous estimate of 4 special reports per year. The increase is based on performing a review of the number of special reports in the NRC's ADAMS agency record system to provide a better estimate.

j. Core Operating Limits Report (COLR)

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

The research and test reactors and permanently shutdown reactors do not submit this report.

Industry Reporting Burden and Cost

The data above are summarized in Table 1. The total industry reporting burden for nuclear power plants and research and test reactors is 154,815 hours for a total of approximately 505 reports (monthly operational reports submitted to industry for incorporation into the NRC quarterly report are not counted -- instead it is treated as four total reports to the NRC). At an hourly rate of $217, the total cost is

$33,594,855.

The number of reports is significantly reduced from 1,899 reports to 505 reports when contrasted with the last estimate. Amendments to the plants' licenses reduced the number of required reports -- in particular, the removal of monthly operating reports reduced the burden by 1,248. Also, the historical reporting rate was used to improve the estimate.

The number of hours is significantly reduced from 302,750 hours to 154,815 hours when contrasted with the previous estimates. The reduction in the number of hours is primarily due to two areas. First, licensee feedback that changed the estimate for the annual environmental report from 1400 hours to 60 hours (almost 90,000 hours "saved" when multiplied by 65 sites). This savings is not real, since it is a correction of the estimate. Second, the removal of monthly operating reports saved an estimated 62,400 hours. There is actual savings associated with the monthly operating report because the NRC approved licensing changes that permitted licensees to cease sending this report. In addition, the reporting burden hours is reduced because better estimates are used based on industry feedback and review of the scope and content of previous reports.

Recordkeeping Burden and Cost

The recordkeeping requirements called for under 10 CFR 50.36(c) impact 104 operating power plants and 33 research and test reactors, and 15 permanently shutdown power plants and 16 permanently shutdown research and test reactors. The burden annually for an operating power reactor is estimated to be approximately 2,080 hours. One hundred four (104) operating power plants x 2,080 hours totals 216,320 hours.

The burden annually for an operating research and test reactor is estimated to be approximately 80 hours. Thirty-three (33) research and test reactors x 80 hours totals 2,640 hours.

The annual burden for each permanently shutdown power reactor is estimated to be about 208 hours and for each research and test reactor is estimated to be 8 hours for a total of 3,248 hours (15 plants x 208 hours + 16 plants x 8 hours).

The total recordkeeping burden of all licensees is 222,208 hours for a total cost of $48,219,136 ($217 x 222,208).

Total Industry Burden and Cost

Total annual burden for all reporting/recordkeeping requirements for TS is expected to be 377,023 (154,815 reporting + 222,208 recordkeeping) hours. The total annual cost to industry at $217 per hour would be $81,813,991.

The total costs is significantly lower from the last burden estimates. The reason for the reduction is the reduction in the number of required reports combined with the use of better estimates for the industry burden based on industry feedback and

review of the scope and content of previous reports.

In these estimates, the NRC assumes that 104 operating (at 65 sites) and 15 permanently shutdown nuclear power reactors and 33 operating and 16 permanently shutdown research and test (non-power) reactors are affected by the provisions of the various reporting and recordkeeping requirements that NRC approves as part of the TS submitted pursuant to 10 CFR 50.36 and 10 CFR 50.36a.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $19,288 (222,208 x $217 x .0004).

14. Estimated Annualized Cost to the Federal Government

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

a. Radioactive Effluent Report

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

The research and test reactors do not submit a report under Exceeding Design Objectives but would include such under special reports.

2) Annual Effluent Reports - each operating and permanently shutdown nuclear power plant will submit one report per year. For operating plants, the Annual Radiological Effluent Release Report is reviewed during execution of Inspection Procedure 71122.01, Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems. The procedure calls for the Regional inspector to review this report as an in-office inspection. Eight (8) hours are estimated to review each report for operating plant. For shutdown plants, Inspection Procedure 84750, Radioactive Waste Treatment, and Effluent and Environmental Monitoring, is used, and, according to Manual Chapter 2561, Decommissioning Power Reactor Inspection Program, 2 hours per year are allocated per year for review of the effluent reports section of 84750. The total burden is then each report/permanently shutdown plant (8 hours/plant x 104 plants + 2 hours/plant x 15 plants = 862 total review hours).

This is significantly lower than the previous estimate of 40 hours for each operating plant and 10 hours for each shutdown plant The

reduction is due to better estimates that incorporated more engineering judgement, including noting that the estimated hours to complete all of IP 71122.01 (*i.e.* more than the report reviews) is 44 hours biennially, and considering how many hours are planned by the NRC.

Each operating and permanently shutdown research and test reactor submits an Annual Operating Report. Part of the report discusses effluents. The effluent report is reviewed during execution of routine inspection procedures, including Inspection Procedure 69004, Class I Research and Test Reactor Effluent and Environmental Monitoring. About one (1) hour staff time is required to review the effluent portion of this report for operating research and test reactors, and about one-halve (0.5) hours is required for each permanently shutdown research and test reactors (33 x 1 + 16 x 0.5 = 41 hours total review for all research and test reactors).

As compared to the previous estimates, the review time estimate for shutdown test and research reactors has been doubled from 15 minutes to 30 minutes to be more realistic.

b. Startup Reports

Startup Reports are not required to be submitted by nuclear power plants that have converted to the ISTS. Only nuclear power plants that have not converted and research and test reactors are required to submit this report. Of the 4 unconverted plants, approximately 2 are estimated to submit this report. The Federal staff review burden is estimated to be 8 hours/report x 2 reports = 16 burden hours.

Annually, the NRC anticipates that just one Startup Report for a research or test reactor will be submitted (*i.e.* not one for each reactor; just one). Eight (8) staff hours are required to review each report (8 hours x 1 report = 8 total review hours).

The number of startup reports for test reactors has been significantly reduced from 33 to 1 based on knowledge of what activities are on-going that would require submission of a report and past experience.

The review time for startup reports has been significantly reduced from 80 hours to 8 hours based on the scope and content of the reports, engineering judgement, and discussions with staff who perform the reviews.

c. Sealed Source Reports

Sealed Source Reports are not required to be submitted by plants that have converted to the ISTS. Plants that have not converted are required to submit this report. Research and test reactors submit about one report/year, as do permanently shutdown reactors.

Based on past experience, no reports from power reactors are anticipated

each year.

Combined, the research and test reactors submit about one report/year. The average staff review time is 1 hour.

Combined, the permanently shutdown reactors also submit about one report/year. The average staff review time is 1 hour.

When contrasted with previous estimates, the review burden has been substantially reduced from 10 hours for a test/research reactor and 8 hours for a permanently shutdown reactor to 1 hour. The reduction is based on engineering judgement and a review of scope and size of past sealed source contamination reports in ADAMS (*e.g.,* ML041210242, ML050600280).

d. Monthly Operating Report

The protocol for electronic MOR reporting using this industry database is a combined (all nuclear plants) quarterly electronic submittal of monthly operating and shutdown history data. The staff assesses each of these reports in approximately 32 hours (8 hours x 4 reports).

The operating research and test reactors and permanently shutdown reactors do not submit Monthly Operating Reports.

e. Non-routine Environmental Report

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

Of the unconverted sites, two reports with reportable events are anticipated. The staff's effort to assess these reports is estimated to be about 2 hours each.

No reports from permanently shutdown reactors are anticipated.

When contrasted with the last estimates, the review time for the two anticipated reports has been substantially reduced from 40 hours to 2 hours based on engineering judgement and review of the scope and content of reports sent to the NRC in calendar year 2005. Additionally, no review time is anticipated for permanently shutdown reactors because no reports are anticipated based on past experience.

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

f. Annual Radiological Environmental Operating Report

This report will be submitted for 65 operating nuclear power plant sites

and for 15 sites with permanently shutdown power plants. The Annual Radiological Environmental Monitoring Report is reviewed during execution of in Inspection Procedure 71122.03, Radiological Environmental Monitoring Program (REMP) and Radioactive Material Control Program. The procedure calls for the Regional inspector to review this report as an in-office inspection. It is estimated that approximately eight (8) hours will be needed to review this report for each of 65 sites. For shutdown plants, Inspection Procedure 84750, Radioactive Waste Treatment, and Effluent and Environmental Monitoring, is used, and, according to Manual Chapter 2561, Decommissioning Power Reactor Inspection Program, 2 hours per year are allocated per year for review of the licensee's Annual Environmental Monitoring Report and related topics. Therefore, the staff burden is estimated to be 550 total review hours (8 hours/site x 65 sites + 2 hours/site x 15 sites).

For operating and permanently shutdown research and test reactors, each of the 33 operating and 16 shutdown facilities submit a report. The environmental report is reviewed during execution of routine inspection procedures, including Inspection Procedure 69004, Class I Research and Test Reactor Effluent and Environmental Monitoring. About 4 hours staff review are required to review each of 33 reports and about 1 hour of staff review is required to review each of 16 reports (4 hours x 33 reports + 1 hour x 16 reports = 148 hours total review/year).

The estimated review time for operating reactors has been significantly reduced when contrasted with the previous estimate of 170 hrs/site. The reduction is due to using better engineering judgement, including noting that the estimated hours to complete all of IP 71122.03 (*i.e.* more than just the report reviews) is 32 hours biennially, and consideration of planned inspection effort defined in the inspection manual.

g. Annual Non-Rad. Environmental Operating Report

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

Research and test reactors do not submit Annual Environmental Operating Reports.

h. Occupation Radiation Exposure Report

The NRC made a model license amendment available to remove the reporting requirement from TS (see 69 FR 35067-35071, dated June 23, 2004, also TSTF-369, “Removal of Monthly Operating Report and Occupational Radiation Exposure Report”). It is assumed that all power licensees have adopted the change to TS, so no reports are anticipated.

It is estimated that the staff will expend 0 hours assessing each ORER for each operating nuclear power plant licensee, as it is assumed that all licensees have eliminated the report.

For permanently shutdown reactors, Inspection Procedure 83750 Occupational Radiation Exposure, includes review of required records and reports, and Manual Chapter 2561, Decommissioning Power Reactor Inspection Program, plans for no more than 10 hours of staff review per year in internal and external exposure control, including reports. Thus, the burden is expected to be no more than 150 hours (15 sites * 10 hrs/site)

The review burden estimate is significantly lower than the previous estimates of 15 hrs/site because better engineering judgement was used in the estimate, and planned NRC effort was considered.

For operating and permanently shutdown research and test reactors, about 1 hour per operating facility and one-half hour per shutdown facility are required to assess this report for a total of about 41 hours (1 hour/plant x 33 plants + .5 hour/plant x 16 plants).

i. Special Reports

It is estimated that approximately 50 reports for all licensees will be submitted annually by operating power plants based on calendar years 2005-2006 data.

The staff burden for special reports is estimated at 4 hours per report. Therefore, the staff burden is estimated to be 200 hours (50 reports x 40 hours/report).

The review burden estimate for special reports has been significantly decreased from 160 hrs to 4 hrs based on a sampling of the contents of the reports and engineering judgement. Due to the nature of special reports, there is a large variance associated with the review time for special reports, and 4 hours will usually be an over-estimate.

j. Core Operating Limits Report (COLR)

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

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

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

Thus, as reflected above and in Table 2, the total annual Federal burden for operating and permanently shutdown nuclear power plants and research and test reactors is 2174 hours. At an hourly rate of $217, the total cost to the Federal government is $471,758

The federal burden is significantly reduced when contrasted with the previous estimate of 40,341.25 hours and $6,293,235.

The reductions in federal burden from 40,341.25 hours to 2174 hours reflect the reduction in the number of reports anticipated to be submitted from approximately 1899 to 505. They also reflect significant reductions in the estimated review hours for most reports. The reductions were based on feedback from knowledgeable staff, engineering judgement, and review of the planned inspection hours, as detailed previously.

15. Reasons for Changes in Burden or Cost

The overall burden was reduced by 149,207 hours from 526,230 to 377,023 hours primarily because of the following:

1) more precise estimates have been made:

□□ Industry feedback on the burden to gather data and prepare the Annual Non-Radiological Report resulted in a decrease from 1,400 hrs to 60 hrs per licensee for operating reactors and a decrease from 140 to 60 hours for shutdown reactors. The net burden reduction for 78 licensees is 88,947 hours ((65 x - 1,340 hours = - 87,100 hours) + (13 x - 80 hours = - 1,040 hours) + (- 807 misc. hours));

□□ Industry feedback on the burden per response to prepare monthly operating and shutdown reports resulting in a decrease from 50 hours to 5 hours monthly, with a burden reduction of 56,160 hours (- 45 hrs x 104 plants x 12 months = - 56,160 hrs);

□□ Increase in number of special reports received for all licensees from 0 to 50 based on the actual number of reports received annually during the current clearance cycle. This results in an increase of 15,000 hours (50 X 300 = 15,000) for all licensees. Although 50 reports were received for all power reactors, none were received for the operating and research reactors which had an estimated burden of 11,440 hours. Therefore the net burden increase for this section was 3,560 hours.

2) the NRC has amended the reactor licenses and eliminated reports:

□□ Startup Reports for research and test reactors that have Improved Standard Technical Specifications (ISTS), have been removed and only require 1 report per year (not per plant) to be submitted, resulting in a decrease from 36 to 1 report and decrease in burden of 3,500 hours (- 35 x 100 = - 3,500);

□□ Adoption of model license amendment eliminating reporting requirement for Occupational Radiation Exposure Reports for all nuclear power licensees, reducing the number of reports from 104 to 0 reports, resulting in a 4,160 hour burden reduction (- 104 x 40 = - 4,160).

The hourly rates increased from $156 to $217.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Table 1
Industry Reporting Burden for Nuclear Power Plants
and Research and Test Reactors

	No. Plants/Sites Affected						Burden for Each Type						
Report	**All Power Types**	**Conv.**	**Non-Conv.**	**Research & Test Reactors**	**Shutdown Power**	**Shutdown Research & Test Reactors**	**All Power Types**	**Conv.**	**Non-Conv.**	**Research & Test Reactors**	**Shutdown Power**	**Shutdown Research & Test Reactors**	**Total Burden**
Exceed Design	3						50						150
Annual Effluent	104			33	15	16	140			70	35	20	17,715
Start-Up	0		2	1					140	100			380
Sealed Source	0		0	1	1	*				10	10	*	20
Monthly Operating	104						60						6,240
Non-Routine Environmental			2		0				50		5		100
Annual Radiological	65			33	15	16	1,400			200	700	100	109,700
Annual non-rad Environmental Operating	65				15		60				60		4,800
ORER	0			33	15	16	0			10	20	5	710
Special Report	50**						300**						15,000
Core Operating Limits	0	0	0	0	0	0							0
Total Burden													154,815
Recordkeeping													
Recordkeepers	104			33	15	16	2,080			80	208	8	222,208
Total Burden													377,023

* Included under Research and Test Reactors
** Includes all reactors' special reports

Table 2

Federal Burden for Nuclear Power Plants
and Research & Test Reactors

	No. Plants/Sites Affected						Burden for Each Type						
Report	**All Power Types**	**Conv.**	**Non-Conv.**	**Research & Test Reactors**	**Shutdown Power**	**Shutdown Research & Test Reactors**	**All Power Types**	**Conv.**	**Non-Conv.**	**Research & Test Reactors**	**Shutdown Power**	**Shutdown Research & Test Reactors**	**Total Burden**
Exceed Design	3						40						120
Annual Effluent	104			33	15	16	8			1	2	0.5	903
Start-Up			2	1					8	8			24
Sealed Source			0	1	1	*				1	1	*	2
Monthly Operating	Combined 104-plant report						8 hrs per quarter						32
Non-Routine Environmental			2		0				2		2		4
Annual Radiological	65			33	15	16	8			4	2	1	698
Annual non-rad Environmental Operating	65				15		0				0		0
ORER	0			33	15	16	0			1	10	0.5	191
Special Report	50**						4**						200
Core Operating Limits	0	0	0	0	0	0							0
Total Burden													2,174

* Included under Research & Test Reactors

** Includes all reactors' special reports

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Section 3

FINAL SUPPORTING STATEMENT
FOR
DECOMMISSIONING REQUIREMENTS

10 CFR 50.33, 50.33(k)(1), 50.33(k)(2), 50.75, 50.75(b), 50.75(d), 50.75(e), 50.75(e)(1)(i), 50.75(e)(1)(ii), 50.75(f)(1), 50.75(f)(2), 50.75(f)(3), 50.75(f)(4), 50.75(g), 50.75(h)(1), 50.75(h)(1)(i), 50.75(h)(1)(ii), 50.75(h)(1)(iii), 50.75(h)(1)(iv), 50.75(h)(2), 50.75(h)(3), 50.80, 50.82, 50.82(a)(1)(i), 50.82(a)(1)(ii), 50.82(a)(4)(i), 50.82(a)(7), 50.82(a)(8)(ii), 50.82(a)(8)(iii), 50.82(a)(8)(iv), 50.82(a)(9), 50.82(a)(9)(ii)(A)-(G), 50.82(b)(1), 50.82(b)(2) and 50.82(b)(4)

DESCRIPTION OF THE INFORMATION COLLECTION

The decommissioning regulations specify requirements for financial assurance, recordkeeping for decommissioning planning, and license transfer and termination procedures. These regulations ensure that decommissioning of production and utilization facilities will be handled by the licensee in a way that will result in minimal or negligible impact on public health and safety and the environment. These regulations affect 104 licensees for operating nuclear power plants and 33 licensees for operating research & test reactors. They also affect licensees for 15 power plants and 7 research & test reactors that are currently being decommissioned, and 9 research & test reactors that currently have possession-only licenses.

A. JUSTIFICATION

1. Need and Practical Utility for the Collection of Information

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

10 CFR 50.33 Contents of applications; general information.

10 CFR 50.33(k)(1) requires that an application for an operating license include information on how reasonable assurance will be provided that funds will be available to decommission the facility. (Although there are expected to be up to 19 potential combined construction and operation license (COL) applications during the clearance period, NRC staff believes that the financial qualifications requirements of a Part 50 or Part 52 license application will not be filed by an applicant until after the clearance period.)

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

10 CFR 50.75 Reporting and recordkeeping for decommissioning planning.

10 CFR 50.75 establishes detailed information on what the NRC will accept as reasonable assurance that decommissioning funds will be available when needed.

10 CFR 50.75(b) requires each power reactor applicant for, or holder of, an operating license to submit a decommissioning report, as required by 10 CFR 50.33(k), containing a cost estimate for decommissioning and a certification that financial assurance for decommissioning will be provided and adjusted annually. As part of the certification, a copy of the financial instrument must be submitted to NRC.

10 CFR 50.75(d) requires each research and test reactors applicant for, or holder of, an operating license to submit a decommissioning report as required by 10 CFR 50.33(k) containing a cost estimate for decommissioning, an indication of the method(s) to be used to provide decommissioning funds, and a description of the means of adjusting the cost estimate over the life of the facility.
10 CFR 50.75(e) specifies that a trust to ensure funds are available for decommissioning must be an external trust fund held in the United States, established under a written agreement and with an entity that is a State or Federal government agency or an entity whose operations are regulated by a State or Federal agency.

10 CFR 50.75(e)(1)(i) requires that the trust, escrow account, government fund, or other type of agreement shall be established in writing and maintained at all times in the United States with an entity that is an appropriate State or government agency or an entity whose operations in which the prepayment deposit is managed or regulated and examined by a Federal or State agency.

10 CFR 50.75(e)(1)(ii) requires the trust, escrow account, government fund, or other type of agreement shall be established in writing and maintained at all times in the United States with an entity that is an appropriate State or Federal governmental agency, or an entity whose operations in which the external sinking fund is managed and examined by a Federal or State agency.

10 CFR 50.75(f)(1) requires that each power reactor licensee shall report, on a calendar-year basis, to the NRC by March 31, 1999, and at least once every 2 years thereafter on the status of its decommissioning funding for each reactor or part of a reactor that it owns. The information in this report must include, at a minimum: the amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75(b) and (c); the amount accumulated to the end of the calendar year preceding the date of the report; a schedule of the annual amounts remaining to be collected; the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections; any contracts upon which the licensee is relying; any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report; and any material changes to trust agreements. Any licensee for a plant that is within 5 years of the projected end of its operation, or where conditions have changed such that it has or will close within 5 years (before the end of its licensed life), or for plants involved in mergers or acquisitions shall submit this report annually.

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

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

10 CFR 50.75(f)(4) requires, if necessary, the cost estimate for power and research and test reactors to include plans for adjusting funding levels to demonstrate that a reasonable level of assurance will be provided that funds will be available when needed to cover the cost of decommissioning.

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

10 CFR 50.75(h)(1), requires licensees that are not electric utilities as defined in 10 CFR 50.2 that use prepayment or an external sinking fund to provide financial assurance to include in the terms of the arrangements governing the trust, escrow account, or government fund, used to segregate and manage the funds, the following:

10 CFR 50.75(h)(1)(i) requires the trustee, manager, investment advisor, or other person directing investment of the funds: (A) is prohibited from investing the funds in securities or other obligations of the licensee or any other owner or operator of the power reactor of their affiliates, subsidiaries, successors or assigns or in a mutual fund in which at least 50 percent of the fund is invested in the securities of a licensee or parent company whose subsidiary is an owner of a foreign or domestic nuclear power plant. However, the funds may be invested in securities tied to market indices or other non-nuclear sector collective, commingled, or mutual funds, provided that this subsection shall not operate in such a way as to require the sale or transfer either in whole or in part, or other disposition of any such prohibited investment that was made before December 24, 2002, provided further that these restrictions do not apply to 10 percent or less of their trust assets in securities of any other entity owning one or more nuclear power plants.

10 CFR 50.75(h)(1)(ii) requires that the licensee, its affiliates, and its subsidiaries are prohibited from being engaged as investment manager for the funds or from giving day-to-day management direction of the funds' investments or direction on individual investments by the funds, except in the case of passive fund management of trust funds where management is limited to investments tracking market indices.

10 CFR 50.75(h)(1)(iii) requires the trust, escrow account, government fund, or other account used to segregate and manage the funds may not be amended in any material respect without written notification to the NRC Director, Office of Nuclear Reactor Regulation (NRR), or the NRC Director, Office of Nuclear Material Safety and Safeguards (NMSS), as applicable, at least 30 working days before the

proposed effective date of the amendment. The licensee shall provide the text of the proposed amendment and a statement of the reason for the proposed amendment. The trust, escrow account, government fund, or other account may not be amended if the person responsible for managing the trust, escrow account, government fund, or other account receives written notice of objection from the Director, NRR, or the Director, NMSS, as applicable, within the notice period.

10 CFR 50.75(h)(1)(iv) requires that, except for withdrawals being made under 10 CFR 50.82(a)(8), no disbursement or payment may be made from the trust, escrow account, government fund, or other account used to segregate and manage the funds until written notice of the intention to make a disbursement or payment has been given to the Director, NRR, or the Director, NMSS, as applicable, at least 30 working days before the date of the intended disbursement or payment. The disbursement or payment from the trust, escrow account, Government fund or other account may be made following the 30-working day notice period if the person responsible for managing the trust, account, or Government fund, does not receive written notice of objection from the Director, NRR, or the Director, NMSS, as applicable, within the notice period. Disbursements or payments from the trust, escrow account, government fund, or other account used to segregate and manage the funds, other than for payment of ordinary administrative costs (including taxes) and other incidental expenses of the fund (including legal, accounting, actuarial, and trustee expenses) in connection with the operation of the fund, are restricted to decommissioning expenses or transfer to another financial assurance method acceptable under paragraph (e) of this section until final decommissioning has been completed. After decommissioning has begun and withdrawals from the decommissioning fund are made under 10 CFR 50.82(a)(8), no further notification need be made to the NRC.

10 CFR 50.75(h)(2) requires licensees that are "electric utilities" under 10 CFR 50.2 that use prepayment or an external sinking fund to provide financial assurance shall provide in the terms of the trust, escrow account, government fund, or other account used to segregate and manage funds that, except for withdrawals being made under 10 CFR 50.82(a)(8), no disbursement or payment may be made from the trust, escrow account, government fund, or other account used to segregate and manage the funds until written notice of the intention to make a disbursement or payment has been given the Director, NRR, or the Director, NMSS, as applicable, at least 30 working days before the date of the intended disbursement or payment. The disbursement or payment from the trust, escrow account, government fund or other account may be made following the 30-working day notice period if the person responsible for managing the trust, escrow account, government fund, or other account does not receive written notice of objection from the Director, NRR or the Director, NMSS, as applicable, within the notice period. Disbursements or payments from the trust, escrow account, government fund, or other account used to segregate and manage the funds, other than for payment of ordinary administrative costs and other incidental expenses of the fund in connection with the operation of the fund, are restricted to decommissioning expenses or transfer to another financial assurance method acceptable under paragraph (e) of this section until final decommissioning has been completed. After decommissioning has begun and withdrawals from the decommissioning fund are made under 10 CFR 50.82(a)(8), no further notification need be made to the NRC.

10 CFR 50.75(h)(3) requires that a licensee that is not an "electric utility" under 10

CFR 50.2 and using a surety method, insurance, or other guarantee method to provide financial assurance shall provide that the trust established for decommissioning costs to which the surety or insurance is payable contains in its terms the requirements in paragraphs 10 CFR 50(h)(1)(i), (ii), (iii), and (iv) of this section.

10 CFR 50.80 Transfer of licenses.

10 CFR 50.80(b), transfer of licenses, shall include as much of the information described in 10 CFR 50.33 and 10 CFR 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. This would include information on decommissioning funding.

10 CFR 50.82 Termination of license.

10 CFR 50.82 defines the decommissioning process and information collection requirements for power and research and test reactors. Specifically:

10 CFR 50.82(a)(1)(i) and (ii) requires that a power reactor licensee submit written certification to the NRC after determination to permanently cease operation, in accordance with 10 CFR 50.4(b)(8), and once fuel has been permanently removed from the reactor vessel, in accordance with 10 CFR 50.4(b)(9).

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

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

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

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

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

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

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

10 CFR 50.82(b)(1) requires that a non-power reactor licensee that permanently ceases operations must make application for license termination within 2 years following permanent cessation of operations, and in no case later than 1 year prior to expiration of the operating license. Each application must be accompanied or preceded by a proposed decommissioning plan. The contents of the decommissioning plan are specified in 10 CFR 50.82(b)(4).

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

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

2. Agency Use of Information

The NRC's Office of Nuclear Reactor Regulation (NRR) is the recipient and reviewer of the biennial decommissioning funding status reports submitted by nuclear power reactor licensees. NRR reviews the submitted information to determine if licensees are accumulating sufficient funds for decommissioning. This is especially relevant in light of potential changes in the electric utility industry's regulatory environmental and the potential impact on the adequate assurance of decommissioning funds. NRR has received and reviewed three rounds of submittals of these reports to determine the adequacy of decommissioning funding.

Licensee requests for trust modification or disbursements from the trust are submitted to the Director of either NRR or the Office of Nuclear Material Safety and Safeguards (NMSS), as applicable, to give the NRC the opportunity to object to the licensee's proposed action.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. However, at the current time, no responses are submitted electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

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

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

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

7. Circumstances which Justify Variation from OMB Guidelines

None.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential submittals are not anticipated. However, confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b).

11. Justification for Sensitive Questions

The provisions of decommissioning regulations do not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

See the enclosed tables.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be .0004 percent of the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $861 (9,915.5 hours x $217 x .0004).

14. Estimated Annualized Cost to the Federal Government

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

15. Reasons for Changes in Burden or Cost

There is no change in burden. The increase in cost is due to the change in the rate from $156/hour to $217/hour.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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

Requirement	Reactor type	Licensee burden per response	Number of annual responses	Total annual licensee burden	NRC burden per response	Total NRC annual burden	(Notes)
50.33(k)(1)	Power	200 hrs.	0	0	24 hrs	0	note 1
50.33(k)(1)	Research	72 hrs.	0	0	32 hrs	0	note 2
50.33(k)(2)	Power	Complete					note 3
50.75(f)(1)	Power	5 hrs	69	345 hrs	1 hr	69 hrs	note 9
50.75(f)(2)&(4)	Power	250 hrs	0	0	16 hrs	0	note 4
50.75(f)(3)&(4)	Research	16 hrs	1/3	5.30 hrs	2 hrs	.66 hrs	note 5
50.75(h)(1)(iii)	Power	8	50	400 hrs	8 hrs	400 hrs	
50.75(h)(1)(iv)	Power	8	1	8 hrs	8 hrs	8 hrs	
50.82(a)(1-8)	Power	1,000 hrs	1	1,000 hrs	400 hrs	400 hrs	note 6
50.82(a)(9)	Power	500 hrs	1	500 hrs	200 hrs	200 hrs	note 7
50.82(b)(1)-(4)	Research	400 hrs	1	400 hrs	200 hrs	200 hrs	note 8
Totals:			123.3	2,658.3 hrs		1277.66 hrs	

note 1: Assumes no power reactor decommissioning financial qualifications required during 3-year period 2/2007 - 01/2010.
note 2: Assumes no new research reactor license applications.
note 3: Completed in 1990 for all power and research reactors.
note 4: Assumes no power reactor licenses will expire requiring preliminary decommissioning cost estimate in the 3-year period.
note 5: Assumes 1 research reactor license expires during 3-year period.
note 6: Assumes 3 power reactor PSDARs during the 3-year period.
note 7: Assumes 1 partial site license termination plan (i.e., reduction in the licensed site area) per year during the 3-year period.
note 8: Assumes 1 research reactor decommissioning plan per year during 3-year period.
note 9: Reporting decommissioning trust fund status every 2 years; assume 5 hrs for each licensee to prepare and 1 hr for NRC to review.

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

Requirement	Reactor type	Hours per recordkeeper	Number of recordkeepers	Licensee annual burden per recordkeeper	NRC burden per recordkeeper	Total NRC annual burden	(Notes)
50.75(b)	Power	20 hrs	104	2,080 hrs	0	0	note 1
50.75(d)	Research	2 hrs	37	74 hrs	0	0	note 2
50.75(e)(1)(i) and (ii)	Power	8 hrs 80 hrs	50 50	400 hrs 4,000 hrs	3 hrs	150 hrs	
50.75(g)	Power	23 hrs	123	2,829 hrs	0	0	
50.75(g)	Research	2.5 hrs	53	132.5 hrs	0	0	
50.75(h)(1)	Power	20 hrs	20	400 hrs			note 3
50.75(h)(3)	Power			Included in 50.75(h)(1) (iii-iv)			
Totals:			175	9,915.5 hrs		150 hrs	

Total Annual Burden:

Licensee: 12,573.8 hours (2,658.3 + 9,915.5 hours)
NRC: 1,427.7 hours (1,277.66 + 150 hours)

Total Annual Cost:

Licensee: $2,728,515 (12,573.8 x $217)
NRC: $309,811 (1,427.7 hours x $217)

note 1: Annual updating of decommissioning costs for all power reactors.
note 2: Annual updating of decommissioning costs for all research reactors.
note 3: Impact on 50.80(b)

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Section 4

FINAL SUPPORTING STATEMENT
FOR
PHYSICAL SECURITY AND SAFEGUARDS CONTINGENCY PLANS

10 CFR 50.34(c), 10 CFR 50.34(d), and 10 CFR 50.54(p)

DESCRIPTION OF THE INFORMATION COLLECTION

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

10 CFR 50.34(d) requires that each application for a license to operate a production or utilization facility that will be subject to 10 CFR 73.50, 10 CFR 73.55, or 10 CFR 73.60 must include a licensee safeguards contingency plan (SCP) in accordance with 10 CFR 73 Appendix C. The SCP shall include plans for dealing with threats, thefts, and radiological sabotage as defined in 10 CFR 73. Four categories of information must be included in the applicant's SCP. These categories are specified in 10 CFR 73 Appendix C. First, the "Background" must identify and define the perceived dangers and incidents with which the plan will deal and the general way it will handle them. Second, the "Generic Planning Base" must define the criteria for initiation and termination of responses to safeguards contingencies together with the specific decisions, actions, and supporting information needed to bring about such responses. Third, the "Licensee Planning Base" must include the factors affecting contingency planning that are specific to the facility. The fourth category relates to a "Responsibility Matrix" that must include a detailed identification of the organizational entities responsible for each decision and action associated with specific responses to safeguards contingencies.

10 CFR 50.54(p)(1) requires that each licensee prepare and maintain SCP procedures in accordance with 10 CFR 73 Appendix C. Procedures must be established in order to aid execution of the detailed plan as developed in the "Responsibility Matrix" section of the SCP. The procedures must detail the actions to be taken and decisions to be made by each member or unit of the organization as planned in the "Responsibility Matrix." The procedures need not be submitted to the Commission for approval, but are inspected by NRC staff on a periodic basis. The burden for maintaining the procedures is covered in the 10 CFR 73 clearance (3156-0002).

10 CFR 50.54(p)(1) also specifies that the licensee may make no change which would decrease the effectiveness of a security plan, or guard training and qualification plan (required by 10 CFR 73.55) prepared pursuant to 10 CFR 50.34(c) or 10 CFR 73 or to the first four categories of information contained in the SCP prepared pursuant to 10 CFR 50.34(d) or 10 CFR 73, as applicable, without prior approval of the Commission. A licensee desiring to make such a change must submit an application for an amendment to the licensee's license pursuant 10 CFR

50.90. This burden is captured in Section 1 of this submittal.

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

10 CFR 50.54(p)(3) requires the licensee to provide for the development, revision, implementation, and maintenance of its safeguards contingency plan. To this end, the licensee shall provide for a review at least every 12 months of the safeguards contingency plan by individuals independent of both security program management and personnel who have direct responsibility for implementation of the security program. Pursuant to 10 CFR 50.54(p)(4), the review must include a review and audit of safeguards contingency procedures and practices, an audit of the security system testing and maintenance program, and a test of the safeguards systems along with commitments established for response by local law enforcement authorities. The results of the review and audit, along with recommendations for improvements, must be documented, reported to the licensee's corporate and plant management, and kept available at the plant for inspection for a period of three years. The burden for these requirements is covered under 10 CFR 73 Appendix C (3150-0002).

A. JUSTIFICATION

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

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

2. Agency Use of Information

Physical security regulations include general performance requirements which recognize explicitly the need to provide protection from potential threats originating externally, from within a licensed facility, or both. The NRC staff continually reviews licensee security plan changes and amendments to ensure that there is a comprehensive physical protection system that is capable of protecting against the design basis threat established in 10 CFR 73.1.

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 50% of the potential responses are filed electronically, mostly on CD-ROM. However, when the agency is unable to

successfully generate an accurate paper copy from the CD-ROM, the NRC may require the submitter, on a case-by-case basis, to produce a paper copy. The security plans are safeguards information (SGI) and must be protected in accordance with Section 10 CFR 73.21. SGI is an exception to electronic submission using the Electronic Information Exchange.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

This information collection does not affect small business.

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

This information collection is required when an application for a license to operate a production or utilization facility is filed with NRC and continues until fully decommissioned. There are no applications scheduled at this time. Several applications for combined licenses in accordance with 10 CFR 52 are expected to be received by the NRC in the last quarter of calendar year 2007, and will not be subject to 10 CFR 50.54(p) reporting in the immediate future. New requests for changes to current security and safeguards contingency plans are submitted on an as-needed basis. Additionally, 10 CFR 50.54(p)(2) reports, required within two months after making changes to the plan, and 10 CFR 50.54(p)(3) annual reviews are required so that the Commission and a licensee may evaluate the continued effectiveness of the plan. Less frequent notification and review could result in failure to adequately protect nuclear facilities from malevolent acts.

7. Circumstances which Justify Variation from OMB Guidelines

This information collection does not vary from OMB guidelines.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

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

12. Estimated Industry Burden and Burden Hour Cost

The burden for Sections 50.34(c) and 50.34(d) is collected under the requirements of 10 CFR Part 52, OMB Clearance Number 3150-0152.

A total of 120 power and non-power reactor sites are subject to the information collection requirements of Section 10 CFR 50.54(p).

Currently, there are sixty-five **(**65**)** power reactor sites (with 104 reactors licensed to operate). In addition, there are fourteen (14) other sites with fifteen (15) permanently shutdown reactors. Two of the fourteen sites, Pathfinder and Fort St. Vrain (two reactors) have been fully decommissioned. As a result, only 12 of the 14 additional sites (with 13 shutdown reactors) would be subject to reporting under 10 CFR 50.54(p).

For non-power reactors licensed by the NRC, there are thirty-two (32) non-power reactor sites with thirty-three (33) operating reactors. In addition, there are eleven (11) sites with sixteen (16) permanently shutdown non-power reactors. None of these reactors have been fully decommissioned.

Based on NRC staff experience and the number of reports previously submitted, the NRC estimates that approximately 271 changes or notifications under Section 10 CFR 50.54(p) will be made annually. The estimated total industry burden is 53,400 hours per year. At $217 per hour, the total annual industry cost is expected to be $11,587,800. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule. See table for details on Page 4-7 for details.

Additional information is expected to be collected from approximately 19 new combined construction and operating license applications (COLs) under 10 CFR 52 (3150-0151).

13. Estimate of Other Additional Costs

Additional costs associated with the recordkeeping burden are captured under 10 CFR 73, OMB Clearance 3150-0002.

14. Estimate of the Cost to the Federal Government

The annual cost to the government is associated with analyzing and assessing the 10 CFR 50.54(p)(2) changes reports and reviews. As stated above, approximately 241 changes are expected annually from the nuclear power industry for operating power reactors, 22 changes for permanently shutdown power reactors, 7 changes for operating non-power reactors, and 1 change for permanently shutdown non-power reactors. The NRC has determined that accomplishing these activities require 8 to 40 hours each depending on the complexity of the issues raised. On

the average, approximately 30 hours per power plant site and 15 hours per non-power reactor are required. Therefore, the estimated Federal burden is expected to be as follows:

Power Reactors

241 changes (operating sites) + 22 changes (shutdown sites) = 263 changes x an average of 30 hours per change = 7,890 hours.

The Federal burden is 7,890 hours x $217/hour = $1,712,130.

Non-Power Reactors

7 changes (operating sites) + 1 change (shutdown site) = 8 changes x an average of 15 hours per change = 120 hours.

Therefore, the total government burden is 8,010 hours at a cost of $1,738,170 (7,890 + 120 hours x $217/hr).

The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule. Where applicable, this cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR 170. Licensees that are non-profit education institutions or Government agencies are exempt from fee recovery under Section 10 CFR 170.11.

15. Reasons for Changes in Burden or Cost

The burden has decreased by 3,550 hours because of a reduction in the number of operating non-power reactor sites and a reduction in the number of permanently shutdown power and non-power reactor sites (i.e., decommissioned). The industry and Federal cost increased due to an increase in rates from $156 to $217 per hour. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

ANNUAL REPORTING REQUIREMENTS
(Recurring Information Collection Requirements)

POWER REACTORS

Section	Number of Respondents	Responses per Respondent	Number of Responses	Burden per Response	Total Annual Burden Hours	Cost @ $217/Hour
50.34(c) (Burden captured under 10 CFR 52 [3150-0151])	0	0	0	0	0	$0
50.34(d) (Burden captured under 10 CFR 52 [3150-0151])	0	0	0	0	0	$0
50.54(p)(1)	This burden is captured under Section 1 of this submittal.					
50.54(p)(2) - Operating Power Reactor Sites	65	3.7	241	200	48,200	$10,459,4000
50.54(p)(2) - Permanently shutdown Power Reactor Sites	12	1.8	22	200	4,400	$954,800
TOTALS FOR POWER REACTORS			263		52,600	$11,414,200

NON-POWER REACTORS

Section	Number of Respondents	Responses per Respondent	Number of Responses	Burden per Response	Total Annual Burden Hours	Cost @ $217/Hour
50.34(c) (Burden captured under 10 CFR 52 [3150-0151])	0	0	0	0	0	$0
50.34(d) (Burden captured under 10 CFR 52 [3150-0151])	0	0	0	0	0	$0
50.54(p)(1)	This burden is captured under Section 1 of this submittal.					
50.54(p)(2) - Operating Non-Power Reactor Sites	33	.2	7	100	700	$151,900
50.54(p)(2) - Permanently shutdown Non-Power Reactors Sites	11	.1	1	100	100	$21,700
TOTALS FOR RESEARCH AND TEST REACTORS			8		800	$173,600
TOTALS FOR POWER REACTORS			263		52,600	$11,414,200
GRAND TOTAL FOR RECURRING INFO COLLECTIONS			271		53,400	$11,587,800

ANNUAL RECORDKEEPING REQUIREMENTS

Power and Non-Power Reactors

Section	Number of Recordkeepers	Hours per Recordkeeper	Total Annual Burden Hours	Cost @ $217/hour
50.54 (p)(2) & 50.54(p)(4)	This burden is captured under 10 CFR 73 - OMB Clearance 3150-0002			

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Section 5

FINAL SUPPORTING STATEMENT
FOR
PERIODIC RESEARCH AND DEVELOPMENT REPORTS

10 CFR 50.35(b)

DESCRIPTION OF THE INFORMATION COLLECTION

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

A. JUSTIFICATION

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

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

2. Agency Use of Information

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

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 0% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

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

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

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

7. Circumstances which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential or proprietary information is protected in accordance with 10 CFR 2.390(b) of the NRC regulations.

11. Justification for Sensitive Questions

This provision does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

There is no anticipated response from industry during the next 3 years. However, if a report was submitted, the total anticipated burden would consist of 100 hours per response.)

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $0.

14. Estimated Annualized Cost to the Federal Government

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

15. Reasons for Changes in Burden or Cost

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

16. Publication for Statistical Use

The collected information is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 6

FINAL SUPPORTING STATEMENT
FOR
HYDROGEN CONTROL REQUIREMENTS

10 CFR 50.44

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.44, “Combustible Gas Control for Nuclear Power Reactors,” contains requirements for controlling combustible gases that may be generated by accidents inside the containments of nuclear power reactors. Separate sections of the regulation cover (1) 10 CFR 50.44(b), currently-licensed reactors; (2) 10 CFR 50.44(c), future water-cooled reactor applicants and licensees (of reactor types similar to currently-licensed reactors); and (3) 10 CFR 50.44(d), future non-water-cooled reactor applicants and licensees and certain future water-cooled reactor applicants and licensees not covered by (2). As used in the regulation, “future” means after October 16, 2003.

On September 16, 2003, the NRC issued a revised final rule to amend regulations for combustible gas control in power reactors applicable to current licensees and is consolidating combustible gas control regulations for future reactor applicants and licensees (68 FR 54123, “Combustible Gas Control in Containment”). This major revision of the regulation became effective October 16, 2003. The revision eliminated or modified many requirements and consolidated combustible gas control regulations for future reactor applicants and licensees. The revised rule eliminated the requirements for hydrogen recombiners and hydrogen purge systems, and relaxed the requirements for hydrogen and oxygen monitoring equipment to make them commensurate with their risk significance. This action stemmed from the NRC’s ongoing effort to risk-inform its regulations, and reduce the regulatory burden on present and future reactor licensees.

The old rule had several information collection requirements which, at the time of the last OMB clearance review, had been completed for all currently-licensed reactors. The revised rule was particularly written so that no new requirements, including new information collection requirements, would be imposed on currently-licensed reactors. The NRC has received no new applications for reactor construction permits or licenses since the last OMB clearance review.

The revised regulations contains the following information collection requirements:

10 CFR 50.44(b)(1), (2), (3), and (4) contain requirements for a mixed atmosphere, combustible gas control, equipment survivability, and monitoring of hydrogen and oxygen concentrations during an accident, for currently-licensed reactors. Further, 10 CFR 50.44(b)(5) requires each current holder of an operating license for a boiling water reactor (BWR) with a Mark III-type of containment or for a pressurized water reactor (PWR) with an ice condenser-type of containment to perform certain detailed analyses regarding hydrogen control, structural capability, and equipment survivability. However, as noted above, all of the requirements have already been met for currently-licensed reactors.

10 CFR 50.44(c) requires future water-cooled reactor applicants and licensees to:

(1) *Mixed Atmosphere*: Have a mixed atmosphere during accidents;

(2) *Combustible Gas Control*: Either have an inerted atmosphere or limit hydrogen concentrations in containment during and following an accident that releases an equivalent amount of hydrogen as would be generated from a 100 percent fuel clad-

coolant reaction, uniformly distributed, to less than 10 percent (by volume) and maintain containment structural integrity and appropriate accident mitigating features.

(3) *Equipment Survivability*: Containments that do not rely upon an inerted atmosphere to control combustible gases must be able to establish and maintain safe shutdown and containment structural integrity with systems and components capable of performing their functions during and after exposure to the environmental conditions created by the burning of hydrogen. Environmental conditions caused by local detonations of hydrogen must also be included, unless such detonations can be shown unlikely to occur. The amount of hydrogen to be considered must be equivalent to that generated from a fuel clad-coolant reaction involving 100 percent of the fuel cladding surrounding the active fuel region.

(4) *Monitoring*: Equipment must be provided for monitoring oxygen in containments that use an inerted atmosphere for combustible gas control, and for monitoring hydrogen in all containments. Equipment for monitoring oxygen and hydrogen must be functional, reliable, and capable of continuously measuring the concentration of the monitored gas in the containment atmosphere following a significant beyond-design-basis accident for combustible gas control and accident management, including emergency planning.

(5) *Structural Analysis*: An applicant must perform an analysis that demonstrates containment structural integrity. This demonstration must use an analytical technique that is accepted by the NRC and include sufficient supporting justification to show that the technique describes the containment response to the structural loads involved. The analysis must address an accident that releases hydrogen generated from 100 percent fuel clad-coolant reaction accompanied by hydrogen burning. Systems necessary to ensure containment integrity must also be demonstrated to perform their function under these conditions.

10 CFR 50.44(d) requires future non-water-cooled reactor applicants and licensees and certain future water-cooled reactor applicants and licensees to provide:

(1) Information addressing whether accidents involving combustible gases are technically relevant for their design; and,

(2) If accidents involving combustible gases are found to be technically relevant, information (including a design-specific probabilistic risk assessment) demonstrating that the safety impacts of combustible gases during design-basis and significant beyond-design-basis accidents have been addressed to ensure adequate protection of public health and safety and common defense and security.

A. JUSTIFICATION

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

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

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

With the issuance of the revised 10 CFR 50.44, future reactor license applicants will have a reduced burden associated with this analysis. The revised rule no longer defines a design-basis loss-of-coolant accident (LOCA) hydrogen release and eliminates requirements for hydrogen control systems to mitigate such a release. The revised rule reduces the regulatory burden by eliminating the requirements for hydrogen recombiners and hydrogen purge systems and relaxing the requirements for oxygen monitoring equipment to make them commensurate with their safety significance. Thus, the revised rule decreases the burden on new applicants to complete the hydrogen control analysis.

2. Agency Use of Information

The information contained in the analyses is necessary to permit the NRC staff to evaluate whether the requirements are met for hydrogen control and safety equipment functioning during a hydrogen burn. Without this information, the NRC staff cannot evaluate the design of the hydrogen control systems selected, or determine whether or not needed safety equipment could indeed function during a hydrogen burn.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 100% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

The requirements do not affect small businesses.

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

This effort is complete for currently-licensed reactors.

The revised requirement for future reactor licenses is at the minimum frequency that will ensure the health and safety of the public.

7. Circumstances which Justify Variation from OMB Guidelines

This information collection does not vary from OMB guidelines.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

No sensitive information was requested for currently licensed reactors and no sensitive information will be requested under 10 CFR 50.44 for future license applicants.

12. Estimated Industry Burden and Burden Hour Cost

This effort is complete for currently-licensed reactors.

The revised rule will decrease the burden on new applicants to complete the hydrogen control analysis by approximately 720 hours per request from the estimated 923 hours per reactor which were required to complete the requirements for currently-licensed reactors, before the rule revision. This results in a burden of approximately 203 hours per request. At a rate of $217 per hour, this equals $44,051 per request.

The NRC anticipates that several combined-license applications will be submitted during the clearance period, all of which will be standard plants based on design certifications. For 10 CFR 50.44, the burden will be borne by the standard plant design certifications reviews. The NRC estimates that there will be two design certification reviews (ESBWR - Economic Simplified Boiling Water Reactor, and EPR - Evolutionary Pressurized-water Reactor) referenced during the clearance period. This results in a total burden for new applicants of 406 hours (2 applications x 203 hours per application), or annualized over the three years at 135 hours (406 hours ÷ 3 yrs. = 135.3 hrs.) at an annual cost of $29,367 (135.3 hrs. x $217).

The recordkeeping burden for existing plants is estimated to be one hour or less per year per plant or 104 hours annually at a cost of $22,568 (104 hrs x $217/hr). The overall estimated burden for this collection is 239 hours (135 hrs for reporting and 104 hrs for recordkeeping) at an annual cost of $51,863 (239 x $217/hr).

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost or $9.03 (104 hrs x $217 x .0004). Therefore, the storage cost for this clearance is insignificant.

14. Estimated Annualized Cost to the Federal Government

None, for currently-licensed reactors.

40 hours of NRC staff review time is estimated for the ESBWR and 80 hours of NRC staff review time is estimated for the EPR. The total of 120 hours at $217 per hour equals $26,040.

For future license applicants, the cost of NRC's evaluation of the applicant's reports will be fully recovered through fee assessments to NRC applicants pursuant to 10 CFR 170 and/or 10 CFR 171.

15. Reasons for Changes in Burden or Cost

No hydrogen control analyses were submitted during the previous clearance period. Therefore, the overall burden has increased by 239 hours (135 hours for reporting and 104 hours for recordkeeping) because the NRC anticipates several combined license applications during this clearance cycle. The hourly rate has increased from $156 to $217.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 7

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

10 CFR 50.46, 10 CFR 50.46(a)(3)(i), 10 CFR 50.46(a)(3)(ii) and 10 CFR 50 Appendix K

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.46 provides an alternate method of meeting the 10 CFR 50 Appendix K requirements for Emergency Core Cooling Systems (ECCS). It permits licensees or applicants to analyze ECCS performance using realistic calculations. This method of calculation may remove some operating restrictions and, thus, motivate licensees to submit realistic analyses for review. This aspect of the rule represents a voluntary information collection burden to the industry. Realistic analyses are not required of licensees not electing this option.

10 CFR 50.46(a)(3)(i) requires that each applicant for, or holder of, an operating license or construction permit, other than a holder of a license for a reactor facility for which the certifications required under 10 CFR 50.82(a)(1) have been submitted, shall estimate the effect of any change to, or error in, an acceptable evaluation model, or in the application of such a model, to determine if the change or error is significant. For this purpose, a significant change or error is one which results in a calculated peak fuel cladding temperature differing by more than 50^0F from the temperature calculated for the limiting transient using the last acceptable model, or is a cumulation of changes and errors, such that the sum of the absolute magnitudes of the respective temperature changes is greater than 50^0F.

10 CFR 50.46(a)(3)(ii) requires that, for each change to, or error discovered in, an acceptable evaluation model or in the application of such a model that affects the temperature calculation, the applicant or licensee shall report the nature of the change or error, and its estimated effect on the limiting ECCS analysis, to the Commission at least annually. If the change or error is significant, the applicant or licensee shall provide this report within 30 days and include with the report a proposed schedule for providing a re-analysis or taking other action as may be needed to show compliance with 10 CFR 50.46 requirements. This schedule may be developed using an integrated scheduling system previously approved for the facility by the NRC. For those facilities not using an NRC-approved integrated scheduling system, a schedule will be established by the NRC staff within 60 days of receipt of the proposed schedule. Any change or error correction that results in a calculated ECCS performance that does not conform to the criteria set forth in 10 CFR 50.46(b) is a reportable event as described in 10 CFR 50.55(e), 10 CFR 50.72 and 10 CFR 50.73. The affected applicant or licensee shall propose immediate steps to demonstrate compliance or bring plant design or operation into compliance with 10 CFR 50.46 requirements.

The effort associated with the reports required by 10 CFR 50.46 will vary, depending upon the nature of the ECCS model change or error being addressed. Most of the annual reports disclose that no changes were made to the ECCS evaluation or convey information about minor changes. These reports will require little effort to prepare. Other annual reports may be based on extensive re-analysis of ECCS performance, resulting in a greater expenditure of effort. To arrive at its estimate of the burden associated with the annual reports, the staff used its understanding of the types of reports typically submitted and its experience in the level of effort required to conduct ECCS evaluations.

10 CFR 50, Appendix K.I.A., offers licensees the option to use a reduced power level margin for ECCS evaluation or maintain the current margin of 2% power. To use this option and apply a lower assumed power level, licensees would be required to demonstrate the uncertainties associated with measuring reactor thermal power. The resulting change to ECCS evaluation results must be reported per 10 CFR 50.46(a)(3) and filed as a license amendment. The burden for license amendments is included in Section 1 of the Part 50 supporting statement.

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

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

A. JUSTIFICATION

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

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

2. Agency Use of Information

The information identified will be used to determine licensee compliance with the requirements of 10 CFR 50 Appendix K and 10 CFR 50.46(b) and, thus, ensure that the reactor operates within the limits required to protect public health and safety. If not in compliance, the information will allow NRC to assess how and when compliance to the applicable requirements will be achieved.

Without the information required in 10 CFR 50, Appendix K.II., the NRC staff would be unable to determine the adequacy of the calculation methods used to evaluate ECCS performance.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. However, because of the types of information, the reports do not readily lend themselves to the use of information technology collection techniques for submission.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

The provisions of this regulation do not affect small businesses.

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

The frequency with which this information is collected is determined by how often the accepted ECCS EM is modified and whether these changes significantly affect the calculated peak clad temperature. Less frequent collection could adversely affect public health and safety.

7. Circumstances which Justify Variation From OMB Guidelines

A licensee must submit a report under 10 CFR 50.46(a)(3)(ii) within 30 days of discovering any significant change or error so that NRC is apprised of significant safety issues requiring immediate resolution.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

The NRC will protect classified, proprietary and sensitive information according to the guidelines provided in 10 CFR 2.390(b) of its regulations.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Based on staff experience, the annual burden to industry for modified EM submittals, realistic generic model submittals, and schedule and computer printout submittals is estimated at 3,575 burden hours. Attachment A provides a breakdown of this burden.

This is based on an estimate that the average annual cost to industry for performing an analysis of ECCS performance is 2,500 person hours, a modified EM will involve 1,050 hours, and that preparation and submittal of an average of 1.6 schedules would involve about 25 person hours (16 hours per schedule). An EM printout, if submitted, is expected to involve approximately one hour. Based on an estimate of an average of 1.6 submittals annually (one generic realistic model submittal and 0.6 modified EM submittals annually: 1,750 X 0.6 = 1,050), the total burden to industry is estimated at 3,575 person hours annually (2,500 + 1,050 + 25 = 3,575).

One annual report required by 10 CFR 50.46(a)(3)(ii) will be submitted by each of

the 104 licensees. Based on the staff's experience, the effort involved to prepare these reports is dependent upon the nature of the change to the ECCS evaluation. The staff estimates that, on average, it will take a licensee approximately 20 hours to prepare an annual report. Therefore, the staff expects that the requirement for an annual report will result in approximately 2,080 hours annually (104 x 20 = 2,080).

Therefore, the total annual burden for industry is estimated to be 5,655 hours (3,575 + 2,080), at an estimated annual cost of $1,227,135 (5,655 hours x $217). The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

13. Estimate of Other Additional Costs

Ten percent of the annual burden, or 566 hours, is estimated to be attributable to recordkeeping. The quantity of records to be maintained is roughly proportional to the recordkeeping burden. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 percent of the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $48 (.0004 x 566 hours x $217) and therefore is insignificant.

14. Estimated Annualized Cost to the Federal Government

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

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

The annualized cost to the NRC would be $451,360 (2,080 hours x $217) for the generic analyses and $135,408 (624 hours x $217) for modified EM submittals. The total annualized cost to the NRC for both generic and modified submittals is estimated as $586,768.

The regulation requires that a schedule for completing the actions needed to comply with applicable 10 CFR 50 Appendix K and 10 CFR 50.46(b) requirements be submitted to NRC with each analysis. Schedule review would require 4 hours of staff time per submittal. At $217 per hour and an average of 1.6 submittals per year, the annualized cost to the NRC would be $1,389 (1.6 x 4 hours x $217).

The annual reports required by the provisions of 10 CFR 50.46(a)(3)(ii) will result in a total burden of 26 hours. One report is expected to be submitted by each of 104 licensees. It is estimated that it would take approximately 15 minutes on average for the staff to peruse these reports. At $217 per hour, the annual cost to NRC would be $5,642 (104 reports x .25 hour x $217).

Listings of computer programs as required by 10 CFR 50 Appendix K.II.1.b. are not expected during this clearance period.

The total cost to the NRC is therefore $593,799 ($586,768 + $1,389 + $5,642) annually.

The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule. This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 10 CFR 171.

15. Reasons for Changes in Burden or Cost

The burden for a modified EM submittal has been re-estimated based on experience (from 1,500 to 1,750 hours), and the total burden for 0.6 submittals has increased 150 hours (from 900 to 1,050 hours). In addition, the total burden for preparation and submittal of an average of 1.6 schedules increased by 12 hours (from 13 to 25 hours). Therefore, the total annual burden has decreased by 387 hours (from 6,042 to 5,655 hours). The cost per hour has increased from $156 to $217 since the last renewal. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

16. Publication for Statistical Use

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

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Enclosure:
Attachment A

ATTACHMENT A

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

		Annual Number of Responses	Burden Hours per Response	Total Annual Burden Hours	Annual Industry Cost @$217/hour
1.	10 CFR 50.46 Requirements -Realistic EM Submittals -Modified EM Submittals -Schedule Submittals -EM Printout Submittal	 1 0.6 1.6 0	 2,500 1,750 16 0	 2,500 1,050 25 0	 $ 542,500 $ 227,850 $ 5,425 0
2.	10 CFR 50 Appendix K.II.1.	0	0	0	0
	Subtotals	3.2		3,575	$ 775,775
3.	10 CFR 50 Appendix K.I.A.	Burden included in Section 1 for license amendments.			
4.	Reports under 10 CFR 50.46(a)(3)(ii)	104	20	2,080	$ 451,360
	TOTALS	107.2		5,655	$1,227,135

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Section 8

FINAL SUPPORTING STATEMENT
FOR
EMERGENCY PLANNING

10 CFR 50.47, 10 CFR 50.54(q), 10 CFR 50.54(t)
and 10 CFR 50 Appendix E[3]

DESCRIPTION OF THE INFORMATION COLLECTION

The Nuclear Regulatory Commission (NRC) 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 in a continual state of readiness until the Commission terminates the license. Emergency plans are required to be submitted as part of the Preliminary Safety Analysis Report (PSAR) [10 CFR 50.34(a)(10)] and the Final Safety Analysis Report (FSAR) [10 CFR 50.34(b)(6)(v)] to address the emergency planning requirements of 10 CFR 50.47, 10 CFR 50.54, and 10 CFR 50, Appendix E. Copies of state and local government radiological emergency response plans for the emergency planning zones around the site are also required to be submitted by each applicant for an operating license [10 CFR 50.33(g)].

10 CFR 50.47 contains emergency planning standards that must be met in the onsite and offsite emergency plans for a nuclear power reactor. 10 CFR 50, Appendix E, specifies the content of emergency plans for production and utilization facilities and establishes the minimum requirements for emergency plans for achieving an acceptable state of emergency preparedness.

10 CFR 50.54 establishes license conditions for licenses issued by the NRC. 10 CFR 50.54(q) requires nuclear power, research reactor and/or fuel facility licensees to follow and maintain in effect emergency plans which meet the applicable standards in 10 CFR 50.47 and requirements in 10 CFR 50, Appendix E. 10 CFR 50.54(q) also establishes the record keeping and reporting requirements for changes to the emergency plans. 10 CFR 50.54(t) requires licensees to provide for the development, revision, implementation, and maintenance of its emergency preparedness program, and specifies that all program elements must be periodically reviewed by persons who have no direct responsibility for the implementation of the program.

Changes to the emergency plans and implementing procedures must be submitted within 30 days in order to allow the NRC to review the changes in a timely manner. Without a timely review, changes to personnel, procedures, equipment, or facilities that could adversely affect emergency preparedness, including failure to maintain an effective emergency plan, could exist without being identified by the NRC. The NRC would be unaware, for extended periods of time, whether the revised plans are still adequate to protect the health and safety of the public and the environment.

Inspection Reporting Requirements for Emergency Preparedness

[3]See Supporting Statement for 10 CFR 50.72(a), Section 29, for Emergency Response Data System.

Inspections are an important element of NRC's reactor oversight process (ROP) to ensure that licensees meet NRC's regulatory requirements. The NRC evaluates plant performance by analyzing two distinct inputs: inspection findings resulting from NRC's inspection program and performance indicators (PIs) reported by the licensee. The data which make up the PIs are generated by the licensees and reported to the NRC on a quarterly basis. There are three emergency preparedness PIs: drill and exercise performance, emergency response organization drill and exercise participation, and alert and notification system reliability.

10 CFR 50.4(b)(5) (Emergency plan and related submittals)

Written communications as defined in 10 CFR 50.4(b)(5) - the emergency plan pursuant to 10 CFR 50.34, a change to an emergency plan pursuant to 10 CFR 50.54(q), and emergency implementing procedures pursuant to 10 CFR 50 Appendix E.V - must be submitted as follows: the signed original (if on paper) 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 one has been assigned to the site of the facility.

A. JUSTIFICATION

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

Emergency plans and preparedness are needed to provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency to protect public health and safety, emergency workers, and the environment.

10 CFR 50.47 (power reactors)

10 CFR 50.47(b) sets forth sixteen standards that must be met in the onsite and offsite emergency plans for a nuclear power reactor. These standards establish (1) primary responsibilities for emergency response by the licensee and offsite emergency response organizations, (2) on-shift facility responsibilities, staffing, and augmentation, (3) arrangements for requesting assistance resources, (4) a standard emergency classification and action level scheme, (5) notification procedures, (6) provisions for prompt communications, (7) periodic information for the public on how they will be notified and what their initial actions should be in an emergency, (8) emergency response facilities, (9) methods, systems, and equipment for assessing the offsite consequences of a radiological release, (10) a range of protective actions for emergency workers and the public including evacuation, sheltering, and the use of potassium iodide, (11) means for controlling radiological exposures for emergency workers, (12) arrangements for medical services for contaminated injured individuals, (13) plans for recovery and reentry, (15) the conduct of periodic drills and exercises, (15) training for emergency radiological response, and (16) responsibilities for plan development and review.

10 CFR 50.54(q) (power and non-power reactors and fuel facilities)

A licensee authorized to possess and operate a nuclear power reactor must follow and maintain in effect emergency plans which meet the standards in 10 CFR 50.47(b) and the requirements in 10 CFR 50, Appendix E. A licensee authorized to possess and/or operate

a research reactor or a fuel facility must follow and maintain in effect emergency plans which meet the requirements in 10 CFR 50 Appendix E to this part. Licensees 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 applicable standards and requirements. The licensee must retain the emergency plan and each change that decreases the effectiveness of the plan as a record until the Commission terminates the license for the nuclear power reactor.

The nuclear power reactor, research reactor, or fuel facility licensee must retain a record of each change to the emergency plan made without prior Commission approval for a period of three years from the date of the change. Proposed changes that decrease the effectiveness of the approved emergency plans may not be implemented without application to and approval by the Commission. If a change is made without approval, the licensee must submit, as specified in 10 CFR 50.4, a report of each change within 30 days after the change is made.

10 CFR 50.54(t) (power reactors)

The licensee must provide for the development, revision, implementation, and maintenance of its emergency preparedness program. The licensee must ensure that all program elements are reviewed by persons who have no direct responsibility for the implementation of the emergency preparedness program either: (I) at intervals not to exceed 12 months or, (ii) as necessary, based on an assessment by the licensee against performance indicators, and as soon as reasonably practicable after a change occurs in personnel, procedures, equipment, or facilities that potentially could adversely affect emergency preparedness, but no longer than 12 months after the change. In any case, all elements of the emergency preparedness program must be reviewed at least once every 24 months.

The review must include an evaluation for adequacy of interfaces with State and local governments and of licensee drills, exercises, capabilities, and procedures. The results of the review, along with recommendations for improvements, must be documented, reported to the licensee's corporate and plant management, and retained for a period of 5 years. The part of the review involving the evaluation for adequacy of interface with State and local governments must be available to the appropriate State and local governments.

10 CFR Part 50, Appendix E (production and utilization facilities)

10 CFR 50, Appendix E, specifies the content of emergency plans for production and utilization facilities and establishes the minimum requirements for emergency plans for achieving an acceptable state of emergency preparedness. The emergency plans must contain, but not necessarily be limited to, information needed to demonstrate compliance with the elements set forth in 10 CFR 50, Appendix E.IV, i.e., the organization for coping with radiation emergencies, assessment action, activation of the emergency organization, notification procedures, emergency facilities and equipment, training (drills and exercises), maintaining emergency preparedness, and recovery. In addition, the emergency response plans must contain information needed to demonstrate compliance with the planning standards of 10 CFR 50.47(b).

Pursuant to 10 CFR 50 Appendix E.V, Implementing Procedures, the applicant's detailed implementing procedures for its emergency plan shall be submitted to the Commission as

specified in 10 CFR 50.4 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, Licensees who are authorized to operate a nuclear power facility shall submit any changes to the emergency plan or procedures to the Commission within 30 days of such changes.

Inspection Reporting Requirements for Emergency Preparedness (power reactors)

Inspections are an important element of NRC's reactor oversight process (ROP) to ensure that licensees meet NRC's regulatory requirements. The NRC evaluates plant performance by analyzing two distinct inputs: inspection findings resulting from NRC's inspection program and performance indicators (PIs) reported by the licensee. The data which make up the PIs are generated by the licensees and reported to the NRC on a quarterly basis. There are three emergency preparedness PIs: drill/exercise performance (DEP), emergency response organization (ERO) drill participation, and alert and notification system (ANS) reliability.

The drill/exercise performance indicator monitors timely and accurate licensee performance in drills and exercises when presented with opportunities for classification of emergencies, notification of offsite authorities, and development of protective action recommendations (PARs). Licensees are required to calculate and report on a quarterly basis the number of drill, exercise, and actual event opportunities during the previous quarter and the number of drill, exercise, and actual event opportunities performed timely and accurately during the previous quarter.

The ERO drill participation indicator tracks the participation of key members of the ERO in performance enhancing experiences that involves the risk significant activities of classification, notification, and PAR development. This indicator measures the percentage of key ERO members who have participated recently in drills, exercises, and actual events. Licensees are required to calculate and report quarterly the total number of key ERO members and their participation in a drill, exercise, or actual event in the previous eight quarters.

The alert and notification system reliability indicator monitors the reliability of the offsite alert and notification system (ANS). It provides the percentage of the sirens that are capable of performing their safety function based on regularly scheduled tests. The licensee is required to report quarterly the total number of ANS siren tests during the previous quarter and the number of successful ANS siren tests during the previous quarter.

2. Agency Use of Information

The NRC must find that the emergency plans conform to the applicable requirements of 10 CFR 50, and that the plans and state of emergency preparedness provide reasonable assurance that, in the event of an emergency, appropriate measures can and will be taken to protect public health and safety and the environment. The information allows the NRC to determine the effectiveness of the emergency planning regulations, the extent to which licensees comply, and whether additional regulatory scrutiny and oversight is needed for any licensee. The information is further used to update information in the NRC Emergency Operations Center, and to oversee licensees' responses during drills, exercises, and in actual emergencies.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 5% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

The provisions of these regulations affect both power reactors and non-power reactors (*e.g.*, research and test reactors operated by colleges and universities). 10 CFR 50 Appendix E indicates that Regulatory Guide 2.6[4] will be used as guidance for the acceptability of research and test reactor emergency response plans. Regulatory Guide 2.6 endorses ANSI/ANS-15.16-1982.[5] In addition, NUREG-0849[6] addresses emergency plans for research and test reactors. Together, these documents present the non-power reactor emergency planning and preparedness requirements, which are less burdensome than the requirements for power reactors.

The emergency planning record keeping and reporting burden for non-power reactors is less than for power reactors, because it is based on the potential risk associated with the specific reactor, and the corresponding need to protect the health and safety of the public and the environment. Non-power reactors are much smaller than power reactors, and, as such, create a lesser risk from credible accidents.

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

If the information were not collected, or collected less frequently, the NRC could be unaware for extended periods of time whether the existing or revised emergency plans are adequate to protect the health and safety of the public, and the environment. Without a timely review of information, changes to personnel, procedures, equipment, or facilities, or failing to maintain an effective emergency plan could adversely affect emergency preparedness and response, without NRC imposing required corrective measures.

7. Circumstances which Justify Variations from OMB Guidelines

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[4]Regulatory Guide 2.6, Emergency Planning for Research and Test Reactors, Rev. 1, March 1983.
[5]ANSI/ANS-15.16-1982, American National Standard for Emergency Planning for Research Reactors, October 11, 1982.
[6]NUREG-0849, Standard Review Plan for the Review and Evaluation of Emergency Plans for Research and Test Reactors, October 1983.

10 CFR 50.4(b)(5) requires that for changes to the emergency plan and implementing procedures, the signed original of written communications must be sent to the NRC Document Control Desk, with one copy to the appropriate Regional Office, and one copy to the appropriate NRC Resident Inspector (if one has been assigned to the site of the facility). This is required because the NRC has both a headquarters and regional office, and an NRC Resident Inspector is also located onsite.

10 CFR 50.54(q) requires that the licensee retain the emergency plan, and each change that decreases the effectiveness of the plan, as a record until the Commission terminates the reactor license, which is initially issued for 40 years. 10 CFR 50.54(t) requires that the results and recommendations from emergency plan and preparedness reviews be retained for five years. This is required to ensure that the plans are maintained, such that they provide for the protection of the health and safety of the public and the environment in case of an emergency. Further, this provides documentation of the adequacy of the licensees' emergency preparedness program, and enables an appropriate level of review by the NRC.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

Questions of a sensitive nature and other matters that are commonly considered private, such as personal telephone numbers, are needed in the event of a nuclear emergency. This information is protected from public disclosure under the *Privacy Act of 1974*, as amended, and in accordance with 10 CFR 2.390.

12. Estimate of Annualized Burden and Burden Hour Cost

The total annual burden and cost to licensees to comply with the information collection requirements for emergency planning and preparedness in 10 CFR Part 50 are shown in Table 1, Annual Reporting Requirements, and Table 2, Annual Recordkeeping Requirements. Based on staff's best estimate, the industry burden to generate, maintain, retain, disclose, and provide information related to radiological emergency planning, including annual program reviews and distribution of emergency planning information, is estimated to be 275,738 hours for reporting and recordkeeping with an annualized cost estimate to the industry of $59,835,146. The results are summarized below:

Total Burden 275,738 hours (137,995 hours reporting plus 137,743 hours recordkeeping)

Total Cost: $59,835,146

Total Respondents: 203

Total Responses: 2,150 responses

Included in the results above are operating power reactors, power reactors being decommissioned, operating non-power reactors, and non-power reactors being decommissioned or in a possession only status.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 x the record keeping burden cost. Therefore, the records storage cost for the emergency planning records is estimated to be $11,956 (.0004 x 137,743 hours x $217).

14. Estimated Annualized Cost to the Federal Government

The estimated annualized cost to the federal government is summarized in the table shown below. This total annual cost is fully recovered by fee assessments to NRC licensees, pursuant to 10 CFR 170 and 10 CFR 171.

Summary of Federal Government's - Estimated Annual Burden/Costs

	Hours/Reactor	Total Hours	Total Cost ($217/Hour)
Power Reactors			
Operating power reactor sites (65)	80	5,200	$1,128,400
Power reactor sites being decommissioned (12)	20	240	52,080
Non-Power Reactors			
Operating non-power reactors (33)	8	264	57,288
Permanently shutdown non-power reactors (16)	2	32	6,944
TOTALS		5,796	$1,257,732

15. Reasons for Changes in Burden or Cost

The burden decreased for the emergency planning requirements in 10 CFR 50.47, 10 CFR 50.54, and Appendix E to 10 CFR 50, by 567,601 hours, from 843,339 hours to 275,738 hours. The decrease in burden for emergency planning requirements is a result of analysis by NRC staff with prior industry experience determining that the impact of burden industry was substantially over estimated. Tables 1, 2, and 3 show the re-estimated burden based on industry experience.

16. Publication for Statistical Use

This information will not be published for statistical use.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

There are no exceptions.

B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS

Statistical methods are not used in this collection of information.

Table 1 - ANNUAL REPORTING REQUIREMENTS

Section	Number of Respondents	Responses per Respondent	Total Responses	Burden per Response Hours	Total Annual Burden Hours	Cost @ $217/Hr
Operating Power Reactor Sites						
50.47(b)(1) - 50.47(b)(16) App E.IV App E.V, VI	65	10	650	130	84,500	18,336,500
50.54(q)	65	1	65	160	10,400	2,256,800
50.54(t)	65	1	65	80	5,200	1,128,400
ROP PI DEP	65	4	260	30	7,800	1,692,600
ROP PI ERO	65	4	260	30	7,800	1,692,600
ROP PI ANS	65	4	260	60	15,600	3,385,200
Operating Non-Power Reactors						
App E.IV App E.V	33	5	165	1.5	248	53,816
50.54(q)	33	5	165	1.5	247	53,599
Power Reactor Sites Being Decommissioned						
50.47(b)(1) - 50.47(b)(16) App E.!V App E.V	12	10	120	17.5	2,100	455,700
50.54(q)	12	5	60	67	4,020	872,340
Non-Power Reactors Being Decommissioned						
App E.IV 50.54(q)	16	5	80	1	80	17,360
TOTALS			2,150		137,995	$29,944,915

Table 2 - ANNUAL RECORDKEEPING REQUIREMENTS

Section	Number of Recordkeepers	Burden Hours per Recordkeeper	Total Annual Burden Hours	Cost @ $217/Hr
Operating Power Reactor Sites				
50.47(b)(1)- 50.47(b)(16) App E.IV App E.V, VI	130	648	84, 240	18,280,080
50.54(q)	130	80	10,400	2,256,800
50.54(t)	130	40	5,200	1,128,400
ROP PI DEP	130	60	7,800	1,692,600
ROP PI ERO	130	60	7,800	1,692,600
ROP PI ANS	130	120	15,600	3,385,200
Operating Non-Power Reactors				
App E.IV App E.V	33	7.5	248	53,816
50.54(q)	33	7.5	247	53,599
Power Reactor Sites Being Decommissioned				
50.47(b)(1) - 50.47(b)(16) App E.IV App E.V	24	88	2,112	458,304
50.54(q)	24	168	4,032	874,944
Non-Power Reactors Being Decommissioned				
App E.IV 50.54(q)	16	4	64	13,888
TOTALS	203		137,743	$29,890,231

Table 3 - SUMMARY - TOTAL BURDEN/COST

Total Burden: 275,738 Hours (137,995 hours reporting plus 137,743 hours recordkeeping)
Total Cost: $59,835,146
Total Respondents: 203
Total Responses: 2,150 responses

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Section 9

FINAL SUPPORTING STATEMENT
FOR
FIRE PROTECTION

10 CFR 50.48, 10 CFR 50.48(a), 10 CFR 50.48(c), 10 CFR 50.48(f),
10 CFR 50.48(f)(2),10 CFR 50.48(f)(3) and 10 CFR 50 Appendix R

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.48 requires certain provisions for fire protection in operating and permanently shutdown nuclear power plants. This regulation upgrades fire protection at nuclear power plants licensed to operate prior to January 1, 1979, by requiring resolution of certain contested generic issues in fire protection safety evaluation reports. The program on which this part is dependent is 10 CFR 50 Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979," which makes requirements of certain items of fire protection guidance that have been used by the staff since the Browns Ferry fire on March 22, 1975, to evaluate the adequacy of fire protection programs at operating nuclear power plants.

A. JUSTIFICATION

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

10 CFR 50.48(a) requires that each operating nuclear power plant have a fire protection plan that satisfies Criterion 3 of 10 CFR 50 Appendix A. This fire protection plan must describe the overall fire protection program for the facility, identify the various positions within the licensee's organization that are responsible for the program, state the authorities that are delegated to each of these positions to implement those responsibilities, and outline the plans for fire protection, fire detection and suppression capability, and limitation of fire damage. The plan must also describe specific features necessary to implement the program described above, such as administrative controls and personnel requirements for fire prevention and manual fire suppression activities, automatic and manually operated fire detection and suppression systems, and the means to limit damage to structures, systems, and components important to safety so that the capability to safely shut down the plant is ensured. Licensees shall retain the fire protection plan and each change to the plan as a record until the Commission terminates the reactor license and shall retain each superseded revision of the procedures for three years from the date it was superseded. These requirements do not affect nuclear power plants that were licensed to operate prior to January 1, 1979, and that already have the 10 CFR 50 Appendix R requirements identified in their safety evaluation reports.

A new 10 CFR 50.48(c) was implemented in 2004 to provide licensees with the option to transition their fire protection programs to ones based on National Fire Protection Association Standard NFPA 805, “Performance-Based Standard for Fire Protection for Light Water Electric Generating Plants, 2001 Edition” [69 FRN 33536, June 16, 2004]. By May 2006, licensees covering 40 separate nuclear units have submitted letters of intent to transition their traditional fire protection programs to NFPA 805, and licensees might reasonably be expected to submit similar letters for an additional 20 separate units in the foreseeable future. Therefore, the ultimate expectation is that 60 nuclear units will adopt and need to maintain performance-based fire protection programs under 10 CFR 50.48(c).

10 CFR 50.48(f) requires licensees that have submitted 10 CFR 50.82(a)(1) certifications to maintain a fire protection program to address the potential for fires which could cause the release or spread of radioactive materials.

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

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

10 CFR 50 Appendix R, "Fire Protection Program for Nuclear Power Facilities Operating Prior to January 1, 1979," requires manual fire fighting capability at each plant. It states that a fire brigade of at least five persons on each shift shall be maintained at each nuclear power plant unit. In addition, 10 CFR 50 Appendix R requires certain minimum levels of training for each brigade member, and training and drills for each brigade as a team. 10 CFR 50 Appendix R also requires maintaining certain records of the training and drills provided for the brigades and brigade members. The recordkeeping requirements were agreed to by licensees as part of the license amendments that resulted from the staff's fire protection review of each plant. The two specific recordkeeping requirements, as committed to by licensees, are:

B. Section III.I.3.d

At one-year intervals, a randomly-selected, unannounced, drill must be critiqued by qualified individuals independent of the licensee's staff. A copy of the written report from such individuals shall be available for NRC review and shall be retained as a record as specified in Section III.I.4 of 10 CFR 50 Appendix R.

B. Section III.I.4

Individual records of training provided to each fire brigade member, including drill critiques, shall be maintained for at least 3 years to ensure that each member receives training in all parts of the training program. These records of training shall be available for NRC review. Retraining or broadened training for fire fighting within buildings shall be scheduled for all those brigade members whose performance records show deficiencies. Requirements to establish procedures and controls contained in 10 CFR 50 Appendix R, Sections II.C.7 and III.K, have been completed by all affected licensees.

Overall, sixty nuclear units are expected to transition to performance-based fire protection programs under 10 CFR 50.48(c). These will comply with requirements under 10 CFR 50 Appendix R, Section III.G, as part of their new fire protection programs. However, of the remaining 44 units, only two are assumed that will need to produce an enhanced response to GL 2006-03, *Potentially Nonconforming Hemyc and MT Fire Barrier Configurations*; RIS 2005-30, *Clarification of Post-Fire Safe-Shutdown Circuit Regulatory Requirements*. (Responses on the part of the NFPA 805 licensees can be assumed to be incorporated into their reporting requirements under Section 50.48(c).)

2. Agency Use of Information

These records are required to enable the NRC staff to evaluate the effectiveness of each licensee's fire protection plan, and specifically, each fire brigade training program and issues related to the generic communications.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 33% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

This regulation does not affect small business.

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

This information is required so that the NRC can determine that licensee fire protection programs are adequate in the event there is a fire emergency. Information related to fire brigade training and drills are collected only at the time of training and when drills are conducted. Other information is collected according to the dictates of the licensees' approved fire protection programs and response requirements as stipulated in the generic communications. The frequency cannot be further reduced. The health and safety of the public could be affected adversely if this information is not available as specified.

7. Circumstances Which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

There is no reporting burden.

Recordkeeping:

Industry Burden Estimates	No. of Plants Affected (Not Annualized)	Records Transition		Maintenance and Update	
		Hours/ Plant/Yr	Recordkeeping Burden (hr/yr)	Hours/ Plant/Yr	Recordkeeping Burden (hr/yr)
Appendix R: Section III.I.3.d + Section III.I.4	104	0	0	144	14,976
Appendix R: Section III.G -- GL 2006-03	2[a]	0	0	400[b]	800
10 CFR 50.48: Section 50.48(c)	60	640[c]	38,400	80[d]	4,800
10 CFR 50.48: Section 50.48(f)	20	0	0	72	1,440
Total Burden			38,400		22,016

a. Only two of the 15 plants known to have Hemyc/MT are not planning to adopt NFPA 805.

b. Assumption that plants will continue at current level of maintenance and update. No increase as a result of GL.

c. Based on maximum estimates for McGuire units over three years (3,840 hours ÷ 2 units ÷ 3 years = 640 hours/unit-yr) from EPRI TR-1010981, *Transition Process Pilot Report: NEI 04-02 Guidance for Implementing a Risk-Informed, Performance Based Fire Protection Program Under 10 CFR 50.48(c)*.

d. Since NFPA 805 grants licensees the ability to perform plant changes without special approval or submittal to the NRC, except where these changes may involve significant increases in risk, and few, if any, such risk-significant changes are anticipated, a maintenance and update burden per plant of 20 hrs/change for 4 changes/yr is assumed.

The estimated burden of 60,416 hours (38,400 + 22,016) is based on the NRC staff's experience. The total estimated cost to industry is $13,110,272 ($217/hour x 60,416 hours).

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $5,244 (60,416 x $217 x .0004).

14. Estimated Annualized Cost to the Federal Government

a. Records Transition
The NRC staff will expend time to review the information captured by the licensees for the 60 units adopting NFPA 805, pursuant to 50.48(c), and the 2 units with enhanced responses to GL 2006-03, as estimated in the table below.

b. Maintenance and Update
The NRC staff will expend time to review the information captured by the licensees for: (1) the 60 units adopting NFPA 805, pursuant to 10 CFR 50.48(c); (2) the two units with enhanced responses to GL 2006-03; (3) the fire brigade drill and training records at all 104 units, pursuant to 10 CFR 50.48(f); and, (4) records maintained by the 20 permanently shutdown plants, pursuant to 10 CFR 50.48(f), as estimated in the table below. Thus, the total cost to the Government is $14,565,040 ([58,500 + 8,620 hours] x $217/hour). This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 10 CFR 171.

Staff Review Cost Estimates	No. of Plants Affected (Not Annualized)	Records Transition		Maintenance and Update	
		Hours/ Plant/Yr	Burden (hr/yr)	Hours/ Plant/Yr	Burden (hr/yr)
Appendix R: Section III.I.3.d + Section III.I.4	104	0	0	5	520
Appendix R: Section III.G -- GL 2006-03	2[e]	0	0	40	80
10 CFR 50.48: Section 50.48©	60	975[f]	58,500	133[g]	8,000
10 CFR 50.48: Section 50.48(f)	20	0	0	1	20
Total Cost			58,500		8,620

e. Only two of the 15 plants known to have Hemyc/MT are not planning to adopt NFPA 805. These two are assumed to provide maximal responses, requiring 40 staff hours/plant annually for review.

f. Based on estimate from July 2004 Briefing by John Hannon, Chief, Plant Systems Branch, to NRC Executive Team regarding NFPA 805.

g. Based on assuming 400 staff hours/plant every three years, including Regional triennial inspections, i.e., 400/3 = 133.33 staff-hours/plant-year, shown as 133 in table above. Note that 133.33 is used in the burden calculation.

15. Reasons for Changes in Burden or Cost

The estimated burden has decreased by 4,388 hours from 64,804 to 60,416 hours to reflect the number of plants which are expected to transition to NFPA 805 and the remainder responding to the issuance of NRC GL 2006-03 (see Item 12 and the footnotes for numerical assumptions). In addition, the hourly rate has increased from $156 to $217.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

display information that, in an annual publication, could become obsolete would be unduly burdensome and too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 10

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

10 CFR 50.49, 50.49(a), 50.49(d), 50.49(f), 50.49(h), 50.49(j) and 50.49(l)

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.49(a) requires applicants and licensees of nuclear power plants, other than a nuclear power plant for which 10 CFR 50.82(a)(1) certifications have been submitted, to establish a program for qualifying the electric equipment important to safety as defined in 10 CFR 50.49. The current licensees have completed this requirement. Additional information is expected to be collected from approximately 19 new combined operating license (COL) applications for construction and operation under 10 CFR 52 (3150-0151).

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

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

10 CFR 50.49(h) requires each licensee to notify the NRC of any significant equipment qualification problem that may require extension of the completion date, provided pursuant to 10 CFR 50.49(g), within 60 days of its discovery. Since this requirement has been completed by all licensees, no further collection of information is required under this section of the regulation. This requirement would not apply to COL's because the activity would be completed as part of the initial design.

10 CFR 50.49(j) requires that a record of the qualification, including documentation required by 10 CFR 50.49(d), be maintained in an auditable form for the entire period during which the covered item is installed or stored for future use in the nuclear power plant. This is required to permit verification that each item of electric equipment important to safety is qualified for its application and meets its specified performance requirements when it is subjected to the conditions predicted to be present when it must perform its safety function, up to the end of its qualified life. This requirement would not apply to COL's because the plants would be in the initial design phase.

10 CFR 50.49(l) requires replacement equipment to be qualified in accordance with the provisions of 10 CFR 50.49 unless there are sound reasons to the contrary. Therefore, unless there is suitable justification for some alternate course of action, new equipment installations and replacement equipment that fall under the scope of 10 CFR 50.49 must be qualified in accordance with 10 CFR 50.49 requirements, including the documentation requirements of 10 CFR 50.49(d), CFR 50.49(f) and CFR 50.49(j). The licensee must maintain any justification for an alternative course of action on site, and the justification must be available for inspection as part of the inspection procedure. This requirement would not apply to COL's because the plants would be in the initial design phase.

A. JUSTIFICATION

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

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

2. Agency Use of Information

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 20% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

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

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

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

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

7. Circumstances which Justify Variation from OMB Guidelines

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

8. Consultation Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Future information collection that is required to be conducted under this regulation is relatively minor and situational dependent, pertaining primarily to the maintenance and upkeep of existing equipment qualification records, as equipment ages, with some effort required for establishing new records, as equipment is replaced, and for new equipment

installations. Section 10 CFR 50.49(h) requires licensees to notify NRC of any significant equipment qualification problem, but since this requirement has been completed by all licensees, no burden is expected for this section. Any new licensee (i.e., COL's) would complete this activity as part of their initial design submission. Those sections of the regulation that are active for current licensees in this regard are 10 CFR 50.49(d), 10 CFR 50.49(f), 10 CFR 50.49(j), and 10 CFR 50.49(l). On the average, staff estimates that collection and maintenance of information as required under this regulation will require about 2,080 hours per year per licensee, for a total industry burden of 216,320 hours (2,080 hrs x 104). Using a cost of $217/hour, this amounts to $451,360 per year per licensee. This results in a cost of about $46,941,440 for the operating reactors in the regulated nuclear industry (i.e., 104 power plants). The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

The sections of the regulation that are applicable to new COL's in this regard are 10 CFR 50.49(a), 10 CFR 50.49(d), and 10 CFR 50.49(f) and are covered under 10 CFR Part 52 (3150-0151).

13. Estimate of Other Additional Costs

Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 percent of the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $18,777 (216,320 hours x $217 x.0004). The estimated cost per hour ($217) is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

14. Estimated Annualized Cost to the Federal Government

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

15. Reasons for Changes in Burden or Cost

There was no burden change for this section. However, the cost per licensee increased from $324,480 to $451,360 per year due to an increase of the burden cost from $156.00 per hour to $217 per hour. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

16. Publication for Statistical Use

This information collection is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 11

FINAL SUPPORTING STATEMENT
FOR
COLLECTION OF INFORMATION UNDER OATH OR AFFIRMATION

10 CFR 50.54(f)

DESCRIPTION OF THE INFORMATION COLLECTION

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

A. JUSTIFICATION

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

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

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

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

2. Agency Use of Information

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

Based on the information obtained from licensees or applicants and the NRC 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 permit or license (see 10 CFR 50.109, Backfitting). In addition, the NRC could issue a Regulatory Guide which would describe the nature of the problem and the method or methods found adequate by the regulatory staff for its resolution.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. The NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via EIE, CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 25% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. The NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

The provisions of 10 CFR 50.54(f) affect approximately 33 universities (research/test reactors). However, a review of NRC records indicate that bulletins, and generic letters rarely encompass research/test reactors.

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

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

7. Circumstances which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

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

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

This regulation does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

The number of bulletins and generic letters vary and so does the number of respondents and the level of effort required to prepare the different responses. The NRC staff estimates that there will be approximately 3 bulletins/generic letters issued per year requesting information pursuant to 10 CFR 50.54(f).

The 3 bulletins/generic letters could involve up to 137 operating reactors (33 research and test reactors and 104 nuclear power reactors). Although unlikely, bulletins/generic letters could also involve 15 permanently shutdown nuclear power reactors and 16 shutdown research and test reactors. The burden to respond could be between 200 and 1,000 hours per letter for each reactor. However, a realistic upper bound can be computed by using all 137 operating nuclear power reactors/research and test reactors and the historic average of 459 hours per reactor for each bulletin/generic letter. Therefore, 137 operating reactors times 3 responses equals 411 responses at an average of 459 hours each equals 188,649 hours (411 responses x 459 hours = 188,649 hours).

The Total Estimated Industry Burden for generic 10 CFR 50.54(f) letters would, therefore, be 188,649 hours, and the cost would be $40,936,833 (188,649 hours x $217). Of this, the NRC staff estimates that 90 percent of the burden is attributable to reporting (169,784 hours) and 10 percent to recordkeeping (18,865 hours).

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $1,637 (18,865 x $217 x .0004).

14. Estimated Annualized Cost to the Federal Government

Prior to requesting information from the respondents, the NRC staff assesses the potential problem and identifies the needed information and how the information is to be used. Based on staff experience, the overall burden estimate for the preparation of information requests and analysis of responses is estimated to take 2,500 hours for each bulletin or generic letter since each bulletin or generic letter request for information is carefully justified prior to review by the NRC Committee to Review Generic Requirements. Thus, 3 bulletins/generic letters will involve approximately 7,500 hours (2,500 hours x 3 bulletins/generic letters). At

$217 per hour the cost is $1,627,500.

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

15. Reasons for Change in Burden

Burden decreased by 24,471 hours from 213,120 to 188,649 hours due to the removal of Commission Order burden that was erroneously included in the previous submittal. In addition, requests to 2 specific plants requesting information are exempt from PRA requirements and should not have been included in the previous clearance renewal. Also, the number of responses to bulletins/generic letters is now assumed to be 3 per year versus 2 per year in the previous submittal. Overall, the number of responses has decreased by 151, from 562 to 411. There has also been an increase to the hourly cost rate from $156 to $217.

16. Publication for Statistical Use

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

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 12

FINAL SUPPORTING STATEMENT
FOR
PROPERTY DAMAGE/ACCIDENT RECOVERY INSURANCE

10 CFR 50.54(w), 50.54(w)(3), 50.54(w)(4)(i) and 50.54(w)(4)(ii)

DESCRIPTION OF THE INFORMATION COLLECTION

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

Under 10 CFR 50.54(w)(3), lead reactor licensees (approximately 53) are required to report annually on the amount and sources of this required insurance.

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

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

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

A. JUSTIFICATION

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

Licensees of commercial nuclear power plants are required to submit proof annually that they carry onsite property damage/accident recovery insurance available from private sources. A licensee suffering an accident is also required to submit a cleanup plan within 30 days after the reactor is stabilized. This cleanup plan also explicitly includes costs of performing each cleanup operation. This information is required to demonstrate that licensees are complying with NRC's requirement to carry adequate accident recovery insurance and, in the event of a reactor accident, to provide the NRC with sufficient information to monitor cleanup and to allow insurance proceeds to be released from the decontamination priority and to be used for non-cleanup purposes.

2. Agency Use of Information

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 0% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

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

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

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

7. Circumstances which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

The NRC does not anticipate the receipt of confidential information. However, if confidential information is submitted, it would be protected in accordance with 10 CFR 3.790(b) of its regulations.

11. Justification for Sensitive Questions

These regulations do not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Average reporting burden to each licensee for the annual report is a letter to NRC of usually no more than one paragraph indicating both the amount of onsite property damage insurance being carried by the licensee and the insurer(s) from whom the insurance was obtained. Time to complete this is estimated to be no greater than 4 hours per licensee per site. No significant variation in burden among licensees is expected. There are currently 53 licensees who are lead operators of single or multiple unit sites affected by the reporting requirements. (This includes 42 lead licensees of operating plants and 11 licensees of plants that are shutdown but who continue to maintain insurance.) Thus, the current annual reporting burden is no more than 212 hours (53 X 4 hours). The estimated industry cost is, therefore, $46,004 (212 hours x $217). The recordkeeping burden is essentially none. Because an accident requiring a licensee to submit notification and a cleanup plan is unlikely, no burden for this requirement is projected. It is estimated that a licensee required to prepare and submit notification and a cleanup plan after an accident (if there is such an accident of the severity that is specified in 10 CFR 50.54(w)(4)) could face a burden of 2,000 hours at a cost of $434,000 (2,000 hours x $217).

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $0 (number of recordkeeping hours x $217 X.0004).

14. Estimated Annualized Cost to the Federal Government

Total staff review time per year for the annual report is 15 minutes/licensee x 53 licensees = 13.3 staff hours. At a cost of $217 per hour, the total dollar cost to the Federal government is expected to be $2,886 (13.3 hours x $217). The cleanup plan required to be submitted by a licensee suffering an accident is expected to require approximately 1,000 staff hours, or $217,000 per review (1,000 hours x $217). However, it is unlikely that there will be an accident of the severity addressed in 10 CFR 50.54(w). Thus, the NRC estimates no burden for this potential reporting requirement. This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Parts 170 and/or 171.

15. Reasons for Changes in Burden or Cost

There is no change in burden. However, the cost estimates have changed since the last clearance renewal, resulting in an increase in the fee per hour from $156 to $217/hour.

16. Publication for Statistical Use

The collected information is not used for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 13

FINAL SUPPORTING STATEMENT
FOR
BANKRUPTCY FILING; NOTIFICATION REQUIREMENTS

10 CFR 50.54(cc)

DESCRIPTION OF THE INFORMATION COLLECTION

Under 10 CFR 50.54(cc), licensees are required to notify the appropriate NRC regional office immediately in writing in the event of the commencement of a bankruptcy proceeding involving the licensee, indicating the bankruptcy court in which the petition was filed and the date of the filing. There is no action required of a licensee unless and until a bankruptcy petition is filed.

A. JUSTIFICATION

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

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

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

2. Agency Use of Information

Notification to NRC in cases of bankruptcy would alert the NRC so that it may deal with potential hazards to public health and safety posed by a licensee that does not have the resources to properly secure the licensed material or to clean up possible contamination. The information provided by the required notification would be used by the regional inspection and licensing staff, in consultation with headquarters legal and program staff, to initiate a determination of the need for prompt NRC response or regulatory action. NRC actions may include orders to modify or amend a license or other necessary action and could include limitations on licensed activity which would only permit the storage of licensed material. The NRC has taken these actions in the past in similar circumstances. In addition, prompt notification to NRC would allow it to take timely and appropriate action in a bankruptcy proceeding to seek to have available assets of the licensee applied to cover costs of site cleanup before funds are disbursed and become unavailable for cleanup.

3. Reduction of Burden Through Information Technology

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

be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 75% of the potential responses would be filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

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

5. Effort to Reduce Small Business Burden

All affected licensees are owners of operating commercial nuclear power reactors or universities operating research and test reactors. No notifications are expected to be received from universities.

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

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

7. Circumstances which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential or proprietary information will be protected in accordance with the provisions of 10 CFR 3.790(b) of its regulations.

11. Justification for Sensitive Questions

This regulation does not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

It is estimated that 129 licensees would need approximately 1 hour each to notify the NRC about a bankruptcy filing. However, no industry burden is expected during the clearance period because no bankruptcy notifications are anticipated at this time.

13. Estimate of Other Additional Costs

None.

14. Estimated Annualized Cost to the Federal Government

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

15. Reasons for Changes in Burden or Cost

There is no change in burden. However, the cost estimates have changed since the last clearance renewal, resulting in an increase in the fee per hour from $156 to $217/hour.

16. Publication for Statistical Use

The collected information is not used for statistical purpose.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 14

FINAL SUPPORTING STATEMENT
FOR
REPORTING SIGNIFICANT DESIGN AND CONSTRUCTION DEFICIENCIES

10 CFR 50.55(e)

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.55(e) requires that construction permit (CP) holders promptly identify and report deficiencies constituting a substantial safety hazard to the Commission via telephone or facsimile within 2 days of receipt of such information by a director or responsible officer. A written report is to follow within 30 days. The provisions of 10 CFR 50.55(e) also apply to applicants under 10 CFR 52 for holders of early site permits, design certifications, and combined operating licenses.

A. JUSTIFICATION

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

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

10 CFR 50.55(e)(1)(i) requires each CP holder to adopt appropriate procedures to evaluate deviations and failures to comply to identify defects and failures to comply associated with substantial safety hazards as soon as practicable, and, except as provided in 10 CFR 50.55(e)(1)(ii), in all cases within 60 days of discovery, in order to identify a reportable defect or failure to comply that could create a substantial safety hazard.

10 CFR 50.55(e)(1)(ii) requires that if the evaluation required by 50.55(e)(1)(i) cannot be completed within 60 days of discovery, an interim report is prepared and submitted to the Commission. The interim report should describe the deviation or failure to comply that is being evaluated and should also state when the evaluation will be completed. The interim report must be submitted in writing within 60 days of discovery of the deviation or failure to comply.

10 CFR 50.55(e)(1)(iii) requires that a director or responsible officer of a CP holder is informed within 5 working days after completion of the evaluation described above, if the construction of a facility or activity, or a basic component supplied for such facility or activity fails to comply with the Atomic Energy Act of 1954, as amended (the Act), or any applicable rule, regulation, order, or license of the Commission relating to a substantial safety hazard; contains a defect; or undergoes any significant breakdown in any portion of the quality assurance program required by 10 CFR 50 Appendix B that could have produced a defect in a basic component. Such breakdowns in the QA program are reportable whether or not the breakdown actually resulted in a defect in a design approved and released for construction

or installation.

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

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

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

10 CFR 50.55(e)(6)(i) requires notifications, as required by paragraphs (e)(2), (3) and (4) above, to be made initially by facsimile or by telephone within 2 days following receipt of information by the director or responsible corporate officer. This does not apply to interim reports described in 10 CFR 50.55(e)(1)(ii). Verification that the facsimile has been received should be made by telephone.

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

10 CFR 50.55(e)(8) requires that the notification, required by 10 CFR 50.55(e)(6)(ii), clearly indicate that it is being submitted under 10 CFR 50.55(e) and includes, to the extent known, the name and address of the individual(s) informing the Commission; identification of the facility, the activity or the basic component supplied for the facility or the activity within the U.S. which contains a defect or fails to comply; identification of the firm constructing the facility or supplying the basic component which fails to comply or contains a defect; nature of the defect or failure to comply and the safety hazard which is created or could be created by such defect or failure to comply; the date on which the information of such defect or failure to comply was obtained; in the case of a basic component which contains a defect or fails to comply, the number and location of all the components in use at the facility; the corrective action which has been, is being, or will be taken, the name of the individual or organization responsible for the action, and the length of time that has been or will be taken to complete the action; and any advice related to the defect or failure to comply about the facility, activity, or basic component that has been, is being, or will be given to other entities.

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

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

10 CFR 50.55(e)(10) specifies that the reporting requirements of 10 CFR 50.55(e) are satisfied when the defect or failure to comply associated with a substantial safety hazard has been previously reported under 10 CFR 21, 10 CFR 50.55(e), 10 CFR 50.71 or 10 CFR

73.73. For holders of construction permits issued prior to October 29, 1991, evaluation, reporting, and recordkeeping requirements of 10 CFR 50.55(e) may be met by complying with the comparable requirements of 10 CFR 21. The burden is included in 10 CFR 21 (3150-0035) or NRC Form 366 (3150-0104).

2. Agency Use of Information

Specific uses made of the data reported under 10 CFR 50.55(e) include evaluation of the impact of the deficiency on the quality of construction and of the adequacy of planned corrective action, identification of generic problems, planning of actions by inspection and enforcement personnel, and identification of problems in management or implementation of the QA program.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 90% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

These provisions do not affect small businesses.

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

Reporting of defects or failures to comply at the reporting period specified by the regulations is necessary for the Commission to make timely determinations on the potential safety consequences of the deficiency and whether regulatory action is required.

7. Circumstances Which Justify Variation from OMB Guidelines

Records are required to be retained longer than the OMB established 3-year retention period because operating experience has demonstrated that a 5-year retention period is necessary in order to evaluate the adequacy of the evaluation and correction of recurring defects. Procurement documents are retained for the lifetime of the components, a standard industry practice. Review of documented component characteristics and performance history must be available for review as needed. The two-day initial notification required by 10 CFR 50.55(e)(6)(i) provides the NRC with advance notice of potentially generic defects, substantial safety hazards, or significant breakdowns in QA programs, which could affect operating facilities.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

Sensitive information is not requested by these regulations.

12. Estimated Industry Burden and Burden Hour Cost

The regulations at 10 CFR 50.55(e)(6)(i), 10 CFR 50.55(e)(1)(ii), and 10 CFR 50.55(e)(6)(ii) define the substantive reporting requirements. The regulations at 10 CFR 50.55(e)(2), (3), and (4) are descriptive of the type of deficiencies to be reported. The regulation at 10 CFR 50.55(e)(8) describes specific information to be included in the reports and has no associated burden. The regulation was amended in 1991 to add 10 CFR 50.55(e)(10) as a burden-reduction measure to reduce duplication of evaluation and reporting and is, therefore, not identified as a burden.

ANNUAL REPORTING BURDEN					
Section 50.55(e)	No. Respondents	Responses per Respondent	Total Responses	Burden Hours per Report	Total Hours
Initial notification: 50.55(e)(6)(i)	6	2	12	10	120
Interim report: 50.55(e)(1)(ii)	6	0	0	20	0
Follow-up report: 50.55(e)(6)(ii)	6	2	12	70	840
TOTAL			24		960

Total Reporting Burden Hours: 960 hours
Total Reporting Burden Hour Cost: $208,320 [@ $217/hr]

The following table provides estimates of the annual recordkeeping burden associated with the regulation at 10 CFR 50.55(e)(9)(ii). Procedures, addressed under 10 CFR 50.55(e)(1)(i), are developed and retained as part of the application by holders of permits, certifications, and licenses and are not included in the recordkeeping burden associated with 10 CFR 50.55(e). As discussed under item 7 above, procurement documents addressed under 10 CFR 50.55(e)(9)(i), are retained in accordance with standard industry practice and, therefore, are not included in the recordkeeping burden associated with 10 CFR 50.55(e).

ANNUAL RECORDKEEPING BURDEN				
	Number of Recordkeepers*	Burden Hours per Recordkeeper	Total Annual Burden Hours	Retention Period
Retention of evaluations: 50.55(e)(9)(ii)	12	2	24	5 years

*6 in year 1 + 12 in year 2 + 18 in year 3 = 36; 36/3 = 12 annually

Total Responses: 24
Total Annual Respondents: 6
Total Recordkeeping Burden Hours: 24 hours
Total Recordkeeping Burden Hour Cost: $5,208 [@ $217/hr]
Total Burden: 984 hours (960 + 24 hours)

The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $2.08 (24 hours x $217 x .0004) and is insignificant. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

14. Estimated Annualized Cost to the Federal Government

ANNUAL REVIEW BURDEN					
Section 50.55(e)	No. Respondents	Responses per Respondent	Total Responses	Burden Hours per Report	Total Hours
Initial notification: 50.55(e)(6)(i)	6	2	12	10	120
Interim report: 50.55(e)(1)(ii)	6	0	0	10	0
Follow-up report: 50.55(e)(6)(ii)	6	2	12	20	240
TOTAL			24		360

Total Review Burden Hours: 360 hours
Total Review Burden Hour Cost: $78,120 [@ $217/hr]

The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

15. Reasons for Changes in Burden or Cost

During the previous reporting period, there were no active construction permits. The increase in burden of 984 hours reflects reports expected to be filed by 10 CFR 52 applicants associated with design and construction of new nuclear power plants. The cost estimates reflect an increase in base burden rates from $156 to $217/hour. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement
None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 15

FINAL SUPPORTING STATEMENT
FOR
QUALITY ASSURANCE RECORDS

10 CFR 50.54(a), 10 CFR 50.55(f), 10 CFR 50 Appendix A (Criteria 1),
and 10 CFR 50 Appendix B

DESCRIPTION OF THE INFORMATION COLLECTION

All nuclear power plant licensees are required to establish and maintain quality assurance (QA) records. 10 CFR 50.54(a) establishes conditions of the license for nuclear facilities. 10 CFR 50.55(f) addresses quality assurance program requirements for holders of construction permits. The NRC anticipates that 19 applications for new reactors will be received within the reporting period. (10 CFR 52.83, applicable to new reactor applications, invokes the provisions of 10 CFR 50, including 10 CFR 50.55(f).) 10 CFR 50 Appendix A, General Design Criteria for Nuclear Plants, Criteria 1, requires maintenance of records of the design, fabrication, erection, and testing of structures, systems, and components important to safety throughout the life of the unit. Each nuclear power plant subject to the criteria in 10 CFR 50 Appendix B shall implement the quality assurance program described or referenced in the Safety Analysis Report for the facility. 10 CFR 50 Appendix B requires that sufficient records be maintained to furnish evidence of activities affecting quality. Items 1-14 below identify records that shall be maintained in accordance with the above regulations.

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

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

1. Management: QA plan, procedures, and instructions
2. Qualification and training of personnel
3. Design
4. Procurement, items identification/control, acceptance status
5. Special processes
6. Manufacture, installation/testing
7. Calibration
8. Handling, storage and shipping
9. Inspection, test, and operating status
10. Non-conformance, corrective action
11. Audits
12. Modification, maintenance, and repair
13. Operation
14. QA plans in support of Part 52 applications

A. JUSTIFICATION

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

Licensee burden hours are spent on development and maintenance of QA records for the items required by the regulations cited under the parts identified above. Appendix B requires that records be maintained for activities affecting structures, systems, and components designated as “safety-related.” Appendix A requires records to be maintained for structures, systems, and components designated as “important-to-safety.” These records provide evidence that activities affecting quality have been accomplished in accordance with NRC regulations and are available for NRC inspection and audit. Estimated burden hours are inclusive of Appendix A and B records.

Guidance for the types of records to be maintained for the design and construction phase of nuclear power plants is provided by Regulatory Guide 1.28 (Rev. 3), "Quality Assurance Program Requirements (Design and Construction)." Guidance for the types of records to be maintained for the operating phase is provided by Guide 1.33 (Rev 2), “Quality Assurance Program Requirements (Operation),” which includes records such as operating logs, maintenance and modification procedures, and related inspection results.

Maintenance of a QA program description is a license condition for both the construction and operation phases of a nuclear power plant. Like other license conditions, the description must be maintained current after it has been accepted by the NRC. It is estimated that a licensee/applicant will make one change to the QA program description per year. The burden for Current Licensing Basis (CLB) changes, including changes to the QA program description, are included in the total license amendment requests in Section 1. In addition, during the period of this clearance, the NRC expects to receive 19 applications within the scope of Part 52 (combined construction and operating license - COL), which incorporates by reference the subject Part 50 regulations for quality assurance records.

2. Agency Use of Information

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 40% of the potential responses will be filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary

information collections.

5. Effort to Reduce Small Business Burden

These provisions do not affect small businesses.

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

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

7. Circumstances which Justify Variation from OMB Guidelines

Some records must be retained for the life of the plant in order to support review and confirmation of quality-related activities.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of the Information

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

11. Justification for Sensitive Questions

No sensitive questions are involved.

12. Estimated Industry Burden and Burden Hour Cost

The burden estimate for this collection of information is based upon actual past reporting and recordkeeping figures. It is estimated that each of the 104 current licensees will make one change to the Quality Assurance program per year. Licensee reporting burden for the 19 anticipated Part 52 applications will incorporate by reference the subject Part 50 QA regulations. Appropriate records of the design, fabrication, and testing of structures, systems, and components important to the safety of the plant shall be maintained by the licensee throughout the life of the plant.

a. Estimated Annual Reporting Burden

Each of 104 licensees expend 160 burden hours per report, reporting changes to the QA Programs (104 x 1 x 160) 16,640 hrs/yr

Licensee burden for 19 anticipated

Part 52 applications is 2,000 hours

(6.334[7] x 2,000) 12,670 hrs/yr

Total Reporting Hours: 29,310 hrs/yr

b. Estimated Recordkeeping Burden

Licensee burden for 104 operating reactors is 10,000 hours (104 x 10,000) 1,040,000 hrs/yr

Licensee burden for 20 permanently shutdown reactors is 2,500 hours (20 x 2,500) 50,000 hrs/yr

Total Recordkeeping Hours: 1,090,000 hrs/yr

C. Total Burden and Cost

1,119,310 hrs/yr (29,310 + 1,090,000 hours) @ $217/hr = $242,890,270

The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $94,612 (1,090,000 hours x $217 X .0004). The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

14. Estimated Annualized Cost to the Federal Government

QA records are generated and maintained by licensees. The incremental cost to the NRC of auditing and inspecting QA records is small with respect to the NRC inspection program, which includes resident inspections, regional inspections, and special inspections. Based on NRC staff experience, the hours associated with NRC review of records is estimated as 333 hours/operating reactor and 83 hours/permanently shutdown reactor, for a total of 36,292 hours (333 hrs x 104 + 83 hrs x 20). The NRC staff burden to review changes to licensee QA plans is estimated as 3,120 hours (30 hrs x 104). The NRC staff burden to review licensee QA plans associated with 19 Part 52 applications is estimated as 13,110 hours (690 x 19).

Therefore, the estimated total Federal cost is $11,397,274 ($217/hr x 52,522 hours).

[7]During the period of this clearance, it is anticipated that 19 Part 52 applications will be submitted. For the burden estimate, applications are assumed to be submitted uniformly over the three year period of the clearance, so that an average of 6.334 applications is used.

The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule. This cost is fully recovered by fee assessments to NRC licensees pursuant to 10 CFR Part 170 and/or 10 CFR 171.

15. Reasons for Changes in Burden or Cost

Reporting burden has increased by 9,670 hours (from 1,109,640 to 1,119,310 hours) due to a decrease in the number of Early Site Permits and an increase in the annual average number of COL's expected (from zero to 6.334 annually) during this renewal period. The burden increase reflects 10 CFR 52 applications associated with construction of new nuclear power plants. In addition, the increase in cost reflects an increase in base burden cost from $156/hr. to $217/hr. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 16

FINAL SUPPORTING STATEMENT
FOR
CODES AND STANDARDS

10 CFR 50.55a

DESCRIPTION OF THE INFORMATION COLLECTION

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

The information collection requirements imposed by 10 CFR 50.55a through incorporation by reference of the ASME Codes apply to activities associated with the construction and operation of nuclear power plants. The actual number of plants affected by the various ASME Code editions and addenda incorporated by this regulation, and thereby affected by the information collection requirements, is dependent on a variety of factors. These factors include whether the application is for construction, operation, the class and type of components involved; the date of the construction permit application; the schedule of the inservice inspection (ISI) and inservice testing (IST) programs; and whether the plant licensee voluntarily elects to implement updated editions and addenda of the ASME Code. Section III of the ASME B&PV Code applies to the construction of new plants, and, through reference by Section XI of the ASME B&PV Code, the repair and replacement activities in operating plants. Section XI of the ASME B&PV Code and the ASME OM Code apply solely to operating plants. At present, there are no nuclear power plants under construction, and 104 that are licensed to operate. The following analysis of information collection requirements determines the ASME B&PV Code, Section XI, and the ASME OM Code burden for 104 operating plants, including the burden associated with repair and replacement activities. At the present time, no new plants have been approved and none are expected to begin construction during the clearance period. However, as many as 19 applications may be received during the timeframe. An evaluation has not been made, at this time, to determine the estimate of the information collection burden. The staff will be in a better position to provide this estimate in the future when construction schedules become more certain.

Section 50.55a specifies that the ASME Code edition and addenda to be applied to reactor coolant pressure boundary, and Quality Group B and Quality Group C components must be determined by the provisions of paragraph NCA-1140 of Subsection NCA of Section III of the ASME B&PV Code. NCA-1140 specifies that the Owner (or his designee) shall establish the ASME Code edition and addenda to be included in the Design Specifications, but that in no case shall the Code edition and addenda dates established in the Design Specifications be earlier than three years prior to the date that the nuclear power plant construction permit application is docketed. NCA-1140 further states that later ASME Code editions and addenda may be used by mutual consent of the Owner (or his designee) and Certificate Holder. It is permissible for individual operating plants to implement improved rules in later editions and addenda on a voluntary basis, but unless they make that choice,

there is no additional paperwork burden associated with incorporating later Section III editions and addenda than that to which they are committed. New plants would be required to construct the facility in accordance with applicable Section III edition and addenda.

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

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

Recordkeeping Requirements

Section III

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

- Prepare and submit to the ASME necessary forms to obtain an Owner's Certificate of Authorization, and to obtain a written agreement with an Authorized Inspection Agency (AIA), prior to application, to provide inspection and auditing services (NCA-3230). This activity by the Owner occurs after receipt of notification from the NRC that an application for a Construction Permit has been docketed. The information to be supplied by the Owner when making an application is identified in the forms issued by the ASME. It is estimated that completion of these information forms takes 80 person-hours per plant (p-hours/plant). No construction permits are expected to be docketed during this clearance period. (one-time recordkeeping)

- Prepare and file ASME Form N-3, "Owner's Data Report for Nuclear Power Plant Components" (NCA-3270). Information to be included on this form identifies the Owner and location of the plant, and the nuclear vessels, piping, and pumps and valves installed within the plant. Information required to identify each component includes certificate holder and serial number, system identification, state number, national board number, and year built (NCA-3270). Form N-3, which is provided by the ASME, expedites the documentation of this information. It is estimated that the time to obtain the necessary information and to document that information on Form N-3 is 400 p-hours/plant. None are anticipated. (one-time recordkeeping)

- Document that a review of the Design Report has been performed to verify that all Design and Service Loadings have been evaluated and meet the acceptance criteria (NCA-3260). It is estimated that review of the Design Report, with documentation of any areas that need to be revised, takes 2,000 p-hours/plant. No reviews are expected. (one-time recordkeeping)

- Provide and file the Overpressure Protection Report required for the nuclear protection

system (NCA-3220 (m) and (n)). This report includes the overpressure protection requirements for each component or system, including location of the overpressure protection devices, identification of the edition and addenda, system drawings, range of operating conditions, and an analysis of the conditions that give rise to the maximum pressure relieving requirements (NB/NC/ND-7200). It is estimated that the time associated with preparing the Overpressure Protection Report is 2,000 p-hrs, which is comprised of 1,600 p-hours associated with obtaining and developing the necessary information and 400 p-hrs for collating the information into the necessary report. No reports will be prepared in this clearance period. (one-time recordkeeping)

- Document a Quality Assurance Program, and file copies of the Quality Assurance Manual with the Authorized Inspection Agency (NCA-8140). This documentation includes programs for surveying, qualifying, and auditing suppliers of subcontracted services (e.g., nondestructive examination contractors, material suppliers, and material manufacturers). Although Section III identifies the need for a documented Quality Assurance (QA) program, the primary NRC requirement for an overall QA program is contained in 10 CFR 50, Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." (See Section 15 supporting statement.) Therefore, no additional information collection burden is imposed on Owners by the quality assurance provisions of Section III which are incorporated by reference into Section 50.55a.

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

- Designate records to be maintained and provide for their maintenance (NCA-3280). Although Section III identifies the need for specific record retention, the primary NRC requirement for record retention is specified in 10 CFR 50, Appendix B, Criterion XVI (Quality Assurance Records). (See Section 15 supporting statement.) Therefore, no additional information collection burden is imposed on Owners by the record retention provisions of Section III which are incorporated by reference into Section 50.55a.

Section XI

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

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

Section XI examinations are performed on the basis of a 10-year interval (i.e., all components

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

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

Form NIS-2 expedites documentation of the required information. For the purpose of this burden calculation, it has been estimated that, on the average, 50 components are repaired each year by each plant in accordance with Section XI rules. It is estimated that it takes 2 hours to document the repair of an individual component on Form NIS-2. This results in a recordkeeping burden associated with this documentation of 100 p-hours/year/plant, or a total industry recordkeeping burden of 10,400 p-hrs/year (104 plants X 100 p-hrs/year/plant).

● Prepare plans and schedules for preservice and inservice examination and tests (IWA-6210). It is estimated that the preparation of the plans and schedules for preservice and inservice examination requires 1,600 p-hours, and the plans and schedules for preservice and inservice testing requires 400 p-hours. Assuming that, on average, 10% of the plants prepared plans and schedules for examination and testing (plans and schedules are established for 10 year intervals), this would result in an industry recordkeeping burden of 20,800 p-hrs/year [(1,600 + 400) p-hrs/plant x (0.10) (104) plants/year].

● Record the results of preservice and inservice examinations of components performed in accordance with Section XI, IWB/IWC/IWD-2000. Specific requirements for examinations are tabulated in IWB/IWC/IWD-2500-1 for components such as vessels and piping. A record of each examination includes the component identification, date of examination, specific Section XI requirement, type of examination (e.g., volumetric, surface, visual), equipment settings, and record of any indications. The examinations are distributed over a 10-year examination interval (three 40-month periods) with examinations being performed at, on average, 18-month refueling outages (i.e., two per clearance period). Therefore, on average, approximately 1/10 of the components are examined/year. The recordkeeping burden associated with these examinations is estimated at 1 hour/component. Based on an estimate of 4,000 components/plant, it takes 400 p-hrs/year/plant (4000 components/10 x 1 p-hour/component) to document the testing of these components for each plant, which results in a total industry recordkeeping burden of 41,600 p-hours/year (400 p-hrs/year/plant x 104 plants).

- The 1996 incorporation by reference of Subsections IWE and IWL into 10 CFR 50.55a requires licensees to develop an inservice inspection (ISI) plan for these subsections, implement that ISI plan, and then develop and implement 10-year updates to that ISI plan. The development of the initial ISI plan is estimated to average 4000 p-hrs for a new licensee. All 104 licensees have completed the development of the ISI plan. (one-time recordkeeping)

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

  Every 10 years each licensee must update the ISI plan. Update of the plan is estimated to average 180 p-hrs per plant. Assuming that 10 plants per year update their containment ISI plans, this results in an industry burden of 1,800 p-hrs/yr. The total recordkeeping burden is estimated to be 7,800 p-hrs/yr (6,000 p-hrs/yr + 1,800 p-hrs/yr).

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

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

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

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

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

● IWA-2322 (1991 Addenda) requires that, before the near-distance test chart is used for the first time, an optical comparator or other suitable instrument be used to verify the height of a representative lower case character. It is estimated that the records associated with this change result in an average of 2 p-hrs at each plant once a licensee updates its ISI program to the 1991 Addenda or later edition and addenda. It is estimated that 20 plants will implement this new requirement during the 3-year clearance period. The industry recordkeeping burden is estimated to be 13 p-hrs/year (i.e., 2 p-hrs/plant x 20 plants/3 years).

● IWA-4130 (1989 Addenda) requires more detail to be documented in repair plans. It is estimated that the records associated with this change results in an average of 1 p-hr for each repair operation, and an average of 100 repair plans per plant per year is assumed. Therefore, the industry recordkeeping burden is estimated to be 10,400 p-hrs/yr (100 p-hrs/plant/yr x 104 plants).

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

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

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

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

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

● IWD-2420 (1991 Addenda) adds successive examination requirements for Class 3 components. Recordkeeping increases about 8 p-hrs per plant per year. The industry recordkeeping burden is estimated to be 832 p-hrs/yr (8 p-hrs/plant-yr x 104 plants).

● IWA-5221, Table IWB-2500-1, IWB-5200, Table IWC-2500-1, IWC-5200, and IWD-5240 (1993 Addenda) have all been revised to stipulate a "system leakage test" in lieu of a system hydrostatic test during each 10-year interval. Recordkeeping burden decreases about 16 p-hours per boiling-water reactor (BWR) plant per 10-year interval through the elimination of the need for a relief request. (Note, the decrease applies only to BWR plants which encounter problems with obtaining the Code-required pressure for hydrostatic testing of Class 2 portions of

the main steam system.) The industry decrease in recordkeeping burden is estimated to be 56 p-hrs/yr (16 p-hrs/10 yrs x 35 BWR plants).

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

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

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

● Subsubarticle IWA-2420 (1999) Addenda added items for which records must be kept. Records associated with inspection plans must include (1) inspection period and interval dates; (2) identification of the components selected for examination and testing, including successive exams for prior periods; (3) identification of drawings showing items which require examination; (4) list of examination procedures; (5) description of alternative examinations and identification of components to be examined using alternative procedures; and (6) identification of calibration blocks used for ultrasonic examination of components. These records should not significantly change after being initially added to the inspection plans; therefore, it is estimated that average increase in recordkeeping is approximately 1 p-hour per plant during the 10-year interval because of the additional recordkeeping requirements. It is estimated that 20 plants will implement this new requirement during the clearance period. This increase in recordkeeping burden is estimated to be 7 p-hours/year (1 p-hour x 20 plants/3yr).

● Subsubarticle IWA-6340 (1999 Addenda) added items for which records must be kept. Records associated with (1) flaw acceptance by analytical evaluation; (2) regions in ferritic Class 1 standards with modified acceptance standards; (3) Class MC bolt torque or tension tests; (4) tendon force and elongation measurements; (5) tendon wire and strand sample test results; (6) free water documentation; and (7) corrosion protection medium analysis results must now be kept, if applicable. The added recordkeeping burden is estimated at 3 p-hours per plant because of the additional recordkeeping requirements. It is estimated that 20 plants will implement this new requirement during the clearance period. This increase in industry recordkeeping burden is estimated to be 20 p-hours/yr (3 p-hours x 20 plants/3 years).

● The 1998 Edition deleted the torque test of bolted connections which was contained in editions and addenda earlier than the 1998 Edition (Table IWE-2500-1, Category E-G, Item E8.20). It is estimated that the recordkeeping burden decreases approximately 2 p-hours per plant because testing has been eliminated. It is estimated that 20 plants will implement this new requirement during the clearance period. The decrease in industry recordkeeping burden is estimated to be 13 p-hours/yr (2 p-hours x 20 plants/3 years).

● Code Case N-513, Evaluation Criteria for Temporary Acceptance of Flaws in Class 3 Piping, permits licensees to voluntarily adopt provisions for temporary acceptance of a flaw in certain piping. Licensees are required to perform a flaw evaluation and a flaw growth analysis to establish the allowable time for temporary operation. Periodic examinations of no more than 90-day intervals shall be conducted to verify the analysis. It is estimated that each licensee applies the provisions of Code Case N-513 twenty times each year. The increase in industry recordkeeping burden is estimated to be 2,080 p-hrs/yr (20 occurrences x 1 p-hr/flaw evaluation-flaw growth analysis x 104 plants).

● Code Case N-523-1, Mechanical Clamping Devices for Class 2 and 3 Piping, allows the use of mechanical clamping devices for Class 2 and Class 3 piping. Licensees are required to prepare a plan for monitoring defect growth, and perform periodic examinations of no more than 90-day intervals to verify the analysis. It is estimated that each licensee applies these provisions 20 times each year. The increase in industry recordkeeping burden is estimated to be 2080 p-hrs/yr (20 occurrences x 1 p-hr/flaw evaluation-flaw growth analysis x 104 plants).

● Code Case N-532, Alternative Requirements to Repair and Replacement Documentation Requirements and Inservice Summary Report Preparation and Submission as required by IWA-4000 and IWA-6000, provides a less burdensome recordkeeping alternative. These records must be prepared following activities conducted during a refueling outage (approximately once every 18 months). Assuming 18 month intervals for these reports, each licensee provides two reports in the 3-year period. Therefore, there are 104 plants X 2 reports per period ÷ 3 years = 69 reports annually. It is estimated that the alternative recordkeeping associated with Code Case N-532 reduces burden by 16 p-hours per licensee every 18 months. Thus, the reduction in industry recordkeeping burden associated with the Code Case N-532 is 1,104 p-hours/yr (69 reports X 16 p-hours).

● Code Case N-573, Transfer of Procedure Qualification Records Between Owners, provides a less burdensome recordkeeping alternative. It is assumed that the recordkeeping associated with the current ASME Code requirement is that each licensee performs procedure qualifications 6 times in each 3-year clearance period, and that the recordkeeping associated with each procedure qualification is 8 p-hours. Therefore, there are 104 reactors X 6 procedure qualifications ÷ 3 years = 208 procedure qualifications performed each year. The industry recordkeeping burden for the current ASME Code requirement is 208 procedure qualifications/year X 8 p-hours per procedure qualification = 1,664 p-hours/year. It is estimated that the alternative recordkeeping associated with Code Case N-573 reduces the number of

procedure qualifications performed each year by half. Thus, the industry decrease in recordkeeping burden is 832 p-hrs/yr (1,664 p-hours/2).

OM Code

- Record the results of the preservice and inservice pump tests in accordance with OM Code Subsection ISTB, which provides rules for the preservice and inservice testing of pumps to assess the operational readiness of certain centrifugal and positive displacement pumps. The inservice tests, like the inservice examinations, are established for a 10-year interval, but the testing is performed on a quarterly basis. A record of each test includes the pump identification, date of test, reason for test, values of measured parameters, identification of instruments used, comparisons with allowable ranges of test values, and requirements for corrective action. It is estimated that it takes 80 p-hrs to document the testing of the quarterly pump tests for each plant, which results in a yearly burden for each plant of 320 p-hrs. This results in a total industry recordkeeping burden of 33,280 p-hrs (320 p-hrs/yr x 104 plants).

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

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

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

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

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

- The requirements in ISTA 1.4, ISTA 1.5, and ISTA 2.1 requiring the use of an Authorized Inspection Agency for inspection services were deleted in the 1997 Addenda. It is estimated that the recordkeeping burden decreases approximately 4 p-hrs per plant a year because of the elimination of the use of an Authorized Inspection Agency. The decrease in industry recordkeeping burden is estimated to be 416 p-hrs/yr (4 p-hrs/yr x 104 plants).

- In ISTB-1200 and ISTC-1200 (1998 Edition), skid mounted pumps and valves were excluded from the requirements of the Code provided they are tested as part of the major component and are justified by the Owner as being adequately tested. It is estimated that recordkeeping decreases approximately 2 p-hours per plant a year because testing has been reduced. The decrease in industry recordkeeping burden is estimated to be 208 p-hours a year (2 p-hrs/yr x 104 plants).

- Code Case OMN-1, Alternative Rules for Preservice and Inservice Testing of Certain Electric Motor-Operated Valve Assemblies in Light Water Reactor Power Plants, requires that the adequacy of the initial test interval for certain electric operated valve assemblies be evaluated between 5 and 6 years after implementation of Code Case OMN-1. The Code Case is a voluntary alternative, and this is a one-time burden. Assuming that half of the plants choose to implement the Code Case, the estimated increase in industry recordkeeping burden is 5,200 p-hrs/yr (1 p-hr/evaluation x 100 motor-operated valves x 52 plants) (one-time recordkeeping starting approximately November 22, 2004).

10 CFR 50.55a

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

- 10 CFR 50.55a(b)(2)(xxi)(B) reinstates the requirement to examine control rod drive (CRD) bolting whenever the CRD housing is disassembled in accordance with the provisions in Table IWB-2500-1, Category B-G-2, Item B7.80 of the 1995 Edition. It is estimated that recordkeeping increases approximately 1 p-hour a year for 104 units because of the examination of CRD bolting. The increase in industry recordkeeping burden is estimated to be 104 p-hours a year (1 p-hour x 104 units).

- 10 CFR 50.55a(b)(3)(iv)(B) requires trending and evaluation of test data to support changes in the check valve test frequency. This one-time evaluation is to be performed at a maximum of 3 years after implementation of Appendix II. Appendix II provides alternative requirements that licensees may implement as an option to OM Code requirements. On average, there are 260 safety-related check valves per plant. The time required for trending and evaluation of test data is estimated at 1 p-hr/valve. Assuming that 12 plants implement the optional appendix, the recordkeeping burden is estimated at an annualized 1,040 p-hrs/yr (260 check valves x 1 p-hr/evaluation x 12 plants/3 years). One-time recordkeeping is complete.

- The reduction in the exercise frequency for manual valves in 10 CFR 50.55a(b)(3)(vi) results in a reduction of recordkeeping. Manual valves are exercised every 2 years in lieu of every 3 months as required by ISTC-3510 of the 1998 Edition. It is estimated that the recordkeeping burden decreases approximately 3 p-hours per plant a year because of the reduction in the exercising frequency for manual valves. This decrease in industry recordkeeping burden is estimated to be 312 p-hours a year (3 p-hrs x 104 plants).

- Paragraph IWA-4132(e) (2001 Edition) eliminated the requirement to pressure test relief valves. It is estimated that 20 relief valves are tested during a refueling outage. There are 6 refueling outages in each 10 year ISI interval, and it takes 0.5 person-hours to complete the recordkeeping for each relief valve pressure test. The annual decrease in industry recordkeeping burden is estimated to be 624

p-hours (20 tests/outage x 6 outages/interval x 104 units x 0.5 p-hours/pressure test ÷ 10

years).

- Paragraph IWL-5210 (2002 Addenda) eliminated the requirement to perform a containment pressure test. It is estimated that a total of 2 containment pressure tests are eliminated in a 10-year period (total for industry), and it takes 100 p-hours to complete the recordkeeping for each containment pressure test. The annual decrease in industry recordkeeping burden is estimated to be 20 p-hours

  (2 pressure tests x 100 p-hours/pressure test ÷ 10 years).

- Paragraph IWA-5242 of Section XI of the ASME BPV Code (2003 Addenda) eliminated the requirement to remove insulation from bolted connections in borated systems when performing a system leakage test provided that the bolting is resistant to boric acid corrosion. This revision reduces recordkeeping because records for the installation/removal of insulation and the installation/removal of scaffolding to support the removal/installation of insulation are no longer required when bolting resistant to boric acid corrosion is installed in a borated system. It is estimated that this revision will eliminate the need to remove/install insulation and scaffolding for 10 bolted connections for each pressurized water reactor each

  10-year ISI interval, and that it takes 1 p-hour to complete the recordkeeping for each bolted connection. The annual decrease in industry recordkeeping burden is estimated to be 69 p-hours (10 bolted connections x 69 units x 1 p-hour/connection ÷ 10 years).

Reporting Requirements

Section III

The following reporting requirement is specified in Section III:

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

Section XI

The following reporting requirement is specified in Section XI:

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

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

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

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

- With respect to reporting, it is estimated that the alternative reporting burden associated with the implementation of Code Case N-532 is reduced by 8 p-hours per licensee every 18 months. The industry reporting burden for Code Case N-532 is reduced 368 p-hours per year (69 reports x 8 p-hours x .67).

OM Code

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

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

10 CFR 50.55a

- 10 CFR 50.55a(a)(3) allows applicants to use alternatives to the requirements of 10 CFR 50.55a paragraphs (c), (d), (e), (f), (g), and (h) when authorized by the NRC. It is estimated that all (104) of the plants will choose to use alternatives to the requirements of the 1998 Edition and 1999 and 2000 Addenda to the ASME Boiler and Pressure Vessel Code or the 1998 Edition and 1999 and 2000 Addenda to the ASME *Code for the Operation and Maintenance of Nuclear Power Plants*. The estimated burden to prepare and submit an alternative to the NRC for authorization is 20 p-hours per alternative. Assuming each plant submits an average of 6 alternatives per year (4 for ASME Section XI and 2 for the OM Code), the estimated increase in industry reporting burden is 12,480 p-hrs/year (6 alternatives/year/plant × 20 p-hrs/alternative × 104 plants).

- 10 CFR 50.55a(b)(3)(v) requires that a licensee voluntarily choosing to use Subsection ISTD for the examination of snubbers may do so after processing a one-time plant technical specification change. It is estimated that one-half of the plants will choose to implement Subsection ISTD. The estimated one-time reporting burden to prepare a technical specification change is 1,040 p-hrs/yr. All plants expected to use Subsection ISTD have submitted their technical specification changes. (one-time reporting)

- 10 CFR 50.55a(f)(5) and 10 CFR 50.55a(g)(5) allow applicants to request relief from Code requirements determined to be impractical. It is estimated that all (104) of the plants will need to request relief from some of the requirements of the ASME B&PV Code or the ASME OM Code.

The 1998 Edition deleted the requirement to perform a visual examination of paint and coatings reapplied to containment surfaces (1995 Edition, IWE-2200(g)), and, therefore, licensees will no longer request relief from this ISI provision. The implementation of the revised ISI provision reduces the number of relief requests.

Code Case N-605 was incorporated in IWE-2500(c) in the 1998 Edition and, therefore, licensees are no longer be required to request approval for its use. The implementation of the revised ISI provision reduces the number of relief requests.

The 1998 Edition deleted the requirement to visually examine containment seals and gaskets (1995 Edition Table IWE-2500-1, Category E-D, Items E5.10 and E5.20), and, therefore, licensees will no longer request relief from this ISI provision. The implementation of the revised ISI provision reduces the number of relief requests.

In ISTB-1200 and ISTC-1200 of the 1998 Edition of the ASME OM Code, skid mounted pumps and valves were excluded from the requirements of the Code provided they are tested as part of the major component and are justified by the Owner as being adequately tested. In the past, licensees have requested relief for skid mounted components from certain Code test requirements (for example, valves on the diesel generator skid). The implementation of the revised IST provision reduces the number of relief requests.

The 1998 Edition of the ASME OM Code, ISTC-5223, added a provision to allow operational testing of two check valves in series as a unit, provided certain conditions are met. Therefore, licensees will no longer request relief from this ISI provision. The implementation of the revised IST provision reduces the number of relief requests.

10 CFR 50.55a(b)(3)(iv) allows the exercise interval for manual valves to be extended from 3 months to 2 years when implementing the 1999 Addenda of the OM Code. Therefore, licensees implementing editions and addenda of the OM Code earlier than the 1999 Addenda will request relief to use the 2 year interval. This increases the number of relief requests.

The requirements in ISTA 1.4, ISTA 1.5, and ISTA 2.1 requiring the use of an Authorized Inspection Agency for inspection services were deleted in the 1997 Addenda. Therefore, licensees implementing editions and addenda of the OM Code earlier than the 1997 Addenda will request relief to use this new provision. This increases the number of relief requests.

The estimated burden to prepare and submit a request for relief from Code requirements is 20 p-hours per relief request. Assuming each plant submits an average of 4 relief requests per year (3 for ASME Section XI and 1 for the OM Code), the estimated industry reporting burden is 8,320 p-hrs/year (4 relief requests/year/plant × 20 p-hrs/relief request × 104 plants).

A. JUSTIFICATION

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

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

2. Agency Use of Information

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 15% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

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

5. Effort to Reduce Small Business Burden

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

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

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

7. Circumstances Which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

On January 7, 2004, (69 FR 879) the NRC published a proposed rule to incorporate by reference the 2001 Edition and 2002 and 2003 Addenda of Division 1 of Sections III and XI of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel (BPV) Code and the 2001 Edition and 2002 and 2003 Addenda of the ASME Operations and Maintenance (OM) Code. In response to industry comments on the codes, minor changes were made in the final rule published on October 1, 2004 (69 FR 58804) which reduced the burden by 7 hours per nuclear reactor. The rule was effective November 1, 2004.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b). However, no information normally considered confidential or proprietary is requested.

11. Justification for Sensitive Questions

No sensitive questions are involved.

12. Estimated Industry Burden and Burden Hour Cost

a. Number and Type of Respondents

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

b. Estimated Hours Required to Respond to the Collection

Tables 1 and 2, below, tabulate the estimated hours necessary to respond to the Section III, Section XI, OM Code, and 10 CFR 50.55a information collection requirements discussed above. The total continuing industry information collection burden is 253,380 p-hrs/year (225,838 p-hrs/yr for recordkeeping + 27,542 p-hrs/yr for reporting).

c. Estimated Cost Required to Respond to the Collection

Based upon an annual burden of 253,380 person-hrs and a rate of $217/hr, it is estimated that the cost to the industry for responding to the information collection is a total of $54,983,460/year (253,380 p-hrs x $217/hour).

The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $19,603 (225,838 hours x $217 x .0004). The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

Table 1

Annual Recordkeeping Burden

Recordkeeping Requirement	Number of Plants	Burden to Individual Plant (p-hrs/yr)	Total Annual Burden	Retention Period
III/NCA-3230: Owner’s Certificate; AIA Agreement*	0	80	0*	Life
III/NCA-3270: Owner's Data Report*	0	400	0*	Life
III/NCA-3260: Design Report*	0	2,000	0*	Life
III/NB/NC/ND-3220: Overpressure Protection Report*	0	2,000	0*	Life
XI/IWA-6220: Records of Exams: NIS-1 Forms	104	50	5,200	Life
XI/IWA-7520: Records of Repairs: NIS-2 Forms	104	100	10,400	Life
XI/IWA-6210: ISI and IST Plans and Schedules	10.4	2,000	20,800	Life
XI/IWB/IWC/IWD-2000: Records of Component Tests	104	400	41,600	Life
XI/Subsections IWE & IWL - develop ISI plan*	0	4,000	0*	Life
XI/Subsections IWE & IWL - implement ISI plan	10	780	7,800	Life
XI/IWB-2500: Reactor Vessel Exam	10.4	200	2,080	Life
XI/Appendix VII: Qualification of NDE personnel	104	65	6,760	Life
XI/Table IWA-1600-1: ASME N626 Specification	104	10	1,040	Life
XI/IWA-2210: Visual Examinations	104	1	104	Life
XI/IWA-2322: Near-distance Test Chart*	6.5	2	13	Life
XI/IWA-4130: Repair Plans	104	100	10,400	Life
XI/IWA-4340: Surface Examinations for Repair	104	-1.6	-166	Life
XI/Table IWB-2500-1: Pump and Valve Surface Exams.	10.4	2	21	Life
XI/IWB-4300: PWR Steam Generator Sleeving	20.7	4	83	Life
XI/IWB/C/D-1220: Inaccessible Integral Attachments	104	-1.6	-166	Life
XI/IWC-5222(e): Open-ended line hydrostatic tests	104	-1.6	-166	Life
XI/IWD-2420: Class 3 examinations	104	8	832	Life
Recordkeeping Requirement	Number of Plants	Burden to Individual Plant (p-hrs/yr)	Total Annual Burden	Retention Period
XI/IWA-5221: System Leakage Test	35	-1.6	-56	Life
XI/IWF-1230: Inaccessible supports	104	-1.6	-166	Life
XI/IWF-2430: Supports of multiple components	104	-4	-416	Life
XI/App. VIII: Qualification records*	0	260	0*	Life
XI/IWA-2420: Inspection Plans	7	1	7	Life
XI/IWA-6340: Miscellaneous Records	6.7	3	20	Life

XI/IWE-2500-1: Torque Test	6.7	-2	-13	Life
Code Case N-513: Flaws in Class 3 Piping	104	20	2,080	Life
Code Case N-523-1: Mechanical Clamping Devices	104	20	2,080	Life
XI/Code Case N-532: Alternative Recordkeeping	104	-69	-1,104	Life
XI/Code Case N-573: Transfer of Procedure Qualification	104	-8	-832	Life
OM/Subsection ISTB: Records of Pump Tests	104	320	33,280	Life
OM/Code Subsection ISTC: Records of Valve Tests	104	800	83,200	Life
OM/Table ISTB 4.7.1-1: Pump Pressure Instruments	104	3	312	Life
OM/ISTB 5.2.2(b): Standby Pump Vibrations	104	-20	-2,080	Life
OM/App. I: Containment Vacuum Breakers	69	-0.75	-52	Life
OM/App. I: Air or Nitrogen Alternate Test	104	-8	-832	Life
OM/ISTA 1.4: Authorized Inspection Agency	104	-4	-416	Life
OM/ISTB-1200 and ISTC-1200: Skid Mounted Pumps	104	-2	-208	Life
Code Case OMN-1: Alternative Rules for Testing Valves**	52	100	5,200**	Life
§ 50.55a(b)(2)(viii) and (ix): Subsections IWE/IWL	10	12	120	Life
§ 50.55a(b)(2)(xxi)(B): Control rod drive housing	104	1	104	Life
§ 50.55a(b)(3)(iv)(B): Appendix II Check Valve*	0	88	0	Life
Recordkeeping Requirement	Number of Plants	Burden to Individual Plant (p-hrs/yr)	Total Annual Burden	Retention Period
§ 50.55a(b)(3)(vi): Manual Valve Exercise Frequency	104	-3	-312	Life
Paragraph IWA-4132(e) (2001 Edition)	104	-6	-624	Life
Paragraph IWL-5210 (2002 Addenda)	.2	-100	-20	Life
Paragraph IWA-5242, Section XI, ASME BPV Code (2003 Addenda)	69	-1	-69	Life
TOTAL			225,838	

* One-time recordkeeping requirements (previous OMB clearance periods)

** One-time recordkeeping requirements (current OMB clearance period)

Table 2

Reporting Burden

Reporting Requirement	Number of Plants (Responses)	Burden to Individual Plant (p-hrs/yr)	Burden to Industry (p-hrs/yr)
III/NCA-5242: Providing Construction Documents to Inspector*	0	40	0*
XI/IWA-6000: ISI Summary Reports	69	160	11,040
XI/Subsections IWE & IWL	10	12	120
XI/Code Case N-532: Alternative Recordkeeping	69	-5.3	-368
OM/ISTA 3.2.1: Class 1&2 Tests	104	-40	-4,160
OM/ISTB 3.2 and 4.3: Bypass Loops	69	1.6	110
§ 50.55a(a)(3): Alternatives	104	120	12,480
§ 50.55a(b)(3)(v): Snubbers*	0	20	0*
§ 50.55a(f)(5) and (g)(5): Relief Requests	104	80	8,320
TOTAL	529		27,542

* One-time reporting burden (previous OMB clearance periods)

TOTAL BURDEN: 253,380 (225,838 hrs recordkeeping plus 27,542 hrs reporting)
TOTAL RESPONSES: 529
TOTAL NUMBER OF RECORDKEEPERS: 104

14. Estimated Annualized Cost to the Federal Government

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

In addition to records which are prepared but are maintained at the plant site, the licensee submits summary reports of the inservice inspection program directly to the NRC. These summary reports are overviewed by the staff for the purpose of identifying generic issues. A licensee submits a summary report about twice during each inspection period. On the average, this results in about 70 summary report submittals to the NRC each year. A summary report is reviewed on the average in about 2 hours, resulting in a burden to the NRC of 140 p-hrs/year for all plants. This results in an annual cost to the Federal government of $30,380 (140 hours x $217/hour).

The frequency for containment inservice inspection is once every 3⅓ years (corresponding to the ASME Code Section XI inspection interval for components addressed by Section XI). NRC inspection personnel who audit plant quality assurance records include in their audit verification that the above records are being properly prepared and maintained. The time associated with NRC inspectors verifying these records is very small when the activity is performed as part of a normal quality assurance audit. Additional staff time is required only for cases where containment degradation was reported by licensees. It is estimated that 80 hours of staff time is spent reviewing licensee documents in such cases. The costs for such reviews is $17,360 (80 hours x $217). The number of incidences reported on an annual basis where containment degradation has exceeded ASME Code limits is expected to be 4. Therefore, annual government burden is estimated to be 320 p-hrs/year (4 reports x 80 hours x $217), or $69,440.

Based on the above, the total estimated annual Federal burden is 460 hours at a cost of $99,820. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule. This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 10 CFR 171.

15. Reasons for Change in Burden

There is a reduction in burden of 6 hours for this section. It results primarily from the issuance of a rule to incorporate by reference the 2001 Edition and 2002 and 2003 Addenda of Division 1 of Section III and XI of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code and the 2001 Edition and 2002 and 2003 Addenda of the ASME Operations and Maintenace Code. Also, a modification was made to the burden estimate for Section XI/Code Case N-532: Alternative Recordkeeping.

In addition, there has been a change to the base burden cost from $156 to $217 per hour. The estimated cost per burden hour is based upon NRC's annual fee recovery rate, as published in NRC's annual fee recovery rule.

16. Publication for Statistical Use

The information will not be published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

too difficult to keep current.

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 17

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

10 CFR 50.59(c) and 10 CFR 50.59(d)

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.59(c) allows a holder of a license authorizing operation of a production or utilization facility or for a facility that has ceased operation to (i) make changes in the facility as described in the Final Safety Analysis Report (FSAR), (ii) make changes in procedures as described in the Final Safety Analysis Report, and (iii) conduct tests or experiments not described in the Final Safety Analysis Report, without prior Commission approval, unless the proposed change, test or experiment involves a change to the technical specifications incorporated in the license or meets one or more specified criteria, which would more than minimally decrease safety, in which case prior Commission approval is required prior to making the change.

10 CFR 50.59(d) requires the facility licensee (for 104 operating power reactors, 33 operating nonpower (research/test) reactors, 15 permanently shutdown power reactors being decommissioned, and 16 permanently shutdown nonpower reactors licenses) to maintain records of changes in the facility and of changes in procedures and records of tests and experiments and to submit a report containing a brief description of any changes, tests, and experiments, including a summary of the safety evaluation of each. The report must be submitted every 24 months and may be submitted annually or along with the FSAR updates as required by 10 CFR 50.71(e). This report generally consists of a few pages. The records of changes in the facility shall be maintained until the date of termination of the license, and records of changes in procedures and records of tests and experiments shall be maintained for a period of 5 years.

A. JUSTIFICATION

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

The records and reports required by 10 CFR 50.59 assist the NRC staff in evaluating the potential effects of changes made pursuant to 10 CFR 50.59 and in ensuring that the changes do not require NRC approval, or involve a change in the technical specifications. The ultimate value is received in the form of ensuring the health and safety of the public.

2. Agency Use of Information

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

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government

Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 25% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

The burden on small businesses affects 49 license holders for nonpower reactors. This burden only occurs when licensees choose to make changes, tests, or experiments and cannot be further reduced without endangering the health and safety of the public.

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

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

7. Circumstances which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

No confidential information is generally received. However, confidential and proprietary information is protected in accordance with NRC regulations at 10 CFR 9.17(a) and 10 CFR 2.390(b).

11. Justification for Sensitive Questions

This information collection does not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Estimation of Recordkeeping Requirements

Based on the staff's experience, and in light of the extensive records which have to be maintained on site to meet the requirements specified in 10 CFR 50.59, the staff estimates that licensees for 168 facility licenses (104 operating power reactors, 33 operating research and test reactors, 15 permanently shutdown power reactors being decommissioned, and 16 permanently shutdown test and research reactors) evaluate an average of approximately 95 changes a year for power reactors and 30 changes a year for test and research reactors). It is also estimated that approximately 16 hours of burden each is required for records associated with the analysis of the changes annually. Thus, recordkeeping burden encompassed within 10 CFR 50.59 is estimated to be 204,400 hours (16 hours x 95 changes x 119 power reactor licenses) + (16 hours x 30 changes x 49 test and research reactor licenses). Accordingly, annual recordkeeping cost to industry is estimated to be $44,354,800 ($217/hour x 204,400 hours).

Estimation of Respondent Reporting Burden

The report must be submitted no later than every two years, but may be done annually or with the FSAR update (refueling outage basis or about every 18 months). For purposes of the estimate of burden, the estimate is done on an annual basis. It is expected that approximately 4 hours each are required to summarize and prepare reports for approximately 95 changes per year for power reactor licenses and 30 changes per year for test and research reactor licenses . Thus, for 168 license holders filing a report of the changes on an annual basis, (i.e., 168 responses), the reporting burden for this provision of the regulation is expected to involve 51,100 hours annually (4 hours per change x 95 changes per year x 119 power reactor licenses) + (4 hours per change x 30 changes per year x 49 non-power reactor licenses). The annual cost to industry is, therefore, estimated to be $11,088,700 ($217/hour x 51,100 hours).

Total annual industry burden is estimated to be 255,500 hours and the total annual cost is estimated to be $55,443,500 ($217/hour x 255,500 hours).

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance is estimated to be $17,742 (204,400 hours x $217 x .0004).

14. Estimated Annualized Cost to the Federal Government

It is estimated that cost to the Federal government encompasses approximately 80 hours per facility license (104 operating and 15 permanently shutdown power reactors; 33 operating and 16 permanently shutdown nonpower reactors); 168 facility licenses x 80 = 13,440 staff hours. Therefore, the cost to the government is expected to be $2,916,480 ($217/hour x 13,440 hours). This cost is fully recovered through fee assessments to NRC licensees pursuant to 10 CFR 170 and/or 10 CFR 171.

15. Reasons for Changes in Burden or Cost

The burden for this section has decreased by 77,000 hours, from 332,500 to 255,500 hours,

because of a revised estimate of the number of changes for non-power reactors (test and research reactors) from 95 to 30, resulting in a burden decrease, and from a reduction in the number of licenses affected from 175 to 168. However, the cost has increased to reflect increased rates from $156/hour to $217/hour.

16. Publication for Statistical Use

    The information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

    None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 18

FINAL SUPPORTING STATEMENT
FOR
FRACTURE TOUGHNESS TESTS, SURVEILLANCE AND REPORTS

10 CFR 50.60, 10 CFR 50 Appendix G, and 10 CFR 50 Appendix H

DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 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 10 CFR 50.60(b), all light water nuclear power reactors, other than reactor facilities for which 10 CFR 50.82(a)(1) certifications have been submitted, must meet the fracture toughness and material surveillance program requirements for the reactor coolant pressure boundary set forth in 10 CFR 50 Appendix G and 10 CFR 50 Appendix H; and (b) proposed alternatives to the described requirements in 10 CFR 50 Appendix G and 10 CFR 50 Appendix H may be used when an exemption is granted by the Commission. In addition, the licensee must demonstrate that (1) compliance with the specified requirements would result in hardships or unusual difficulties without a compensating increase in the level of quality and safety, and (2) the proposed alternatives would provide an adequate level of quality and safety.

10 CFR 50 Appendix G specifies minimum fracture toughness requirements for ferritic materials of pressure-retaining components of the reactor coolant pressure boundary of light water nuclear power reactors. The Section I Note requires the adequacy of the fracture toughness of other ferritic materials not covered in Section I to be demonstrated on an individual basis. Section III.A requires supplemental information for a reactor vessel constructed to an American Society of Mechanical Engineers (ASME) Code earlier than the Summer 1972 Addenda of the 1971 Edition to demonstrate equivalence with the fracture toughness requirements of 10 CFR 50 Appendix G. Section III.B requires the submission and approval prior to testing of test methods for supplemental fracture toughness described in Section IV.A.1.b. Section III.C requires that records of the fracture toughness test program be retained until termination of the license to comply with ASME Code requirements. Section IV.A.1 requires licensees to maintain upper-shelf energy throughout the life of the reactor vessel of no less than 50 ft-lbs unless it is demonstrated that lower values of upper-shelf energy will provide margins of safety against fracture equivalent to those required by Appendix G of the ASME Code, “Fracture Toughness Criteria for Protection Against Failure.” The analysis for satisfying this section must be submitted for review and approval on an individual-case basis at least 3 years prior to the date when the predicted Charpy upper-shelf energy will no longer satisfy the requirements of Section IV.A.1, or on a schedule approved by the NRC. Section IV.A.2 requires licensees to provide pressure-temperature limits for the reactor vessel. Both upper-shelf energy and pressure-temperature limits are dependent upon the predicted radiation damage to the reactor vessel.

10 CFR 50 Appendix H requires a material surveillance program for each reactor vessel to monitor changes in the fracture toughness of the reactor vessel beltline materials resulting from their exposure to neutron irradiation and the thermal environment. Under the program, fracture toughness test data are obtained from material specimens exposed in surveillance capsules, which are withdrawn periodically from the reactor vessel. Section III.B.1 requires test procedures and reporting requirements that meet the requirements of American Society for Testing and Materials (ASTM) E 185-82, “Standard Practice for Conducting Surveillance Tests for Light-Water Cooled Nuclear Power Reactor Vessels,” to the extent practical for the configuration of the specimens in the capsule. Section III.B.3 requires a proposed withdrawal schedule and technical justification to be submitted to and approved by the NRC. Section III.C.1 requires integrated surveillance programs for reactors with similar design and operating features to be submitted to NRC for approval. Criteria for approval include, among other items, an adequate dosimetry program, a contingency plan to assure that

the surveillance program for each reactor will not be jeopardized by operation at reduced power level or by an extended outage of another reactor from which data are expected. Section III.C.3 requires that any reduction in the amount of testing must be authorized by NRC. Section IV requires: A.) a summary technical report, submitted to NRC, of test results obtained from each capsule withdrawal, within one year of the date of capsule withdrawal, unless an extension is granted by NRC; B.) that the report include the data specified in Section III.B.1 of 10 CFR 50 Appendix H and the results of all fracture toughness tests conducted on the beltline materials in the irradiated and unirradiated conditions; and C.) if a change in the Technical Specifications (TS) is required, either in the pressure-temperature limits or in the operating procedures required to meet the limits, the expected date for submittal of the revised TS must be provided with the report.

A. JUSTIFICATION

1. Need for the Collection of Information

The information in the report required by Appendix G will be used by the staff to perform a safety evaluation of the reactor vessel. This evaluation will be the basis for approval to continue operation for a specified time and approval of the additional procedures that will be required to continue operation beyond that time. The three-year lead time is needed to provide time to obtain supplemental fracture toughness data on archive material that has been subjected to accelerated irradiation, and to evaluate the fracture analyses that will be submitted which use that data.

10 CFR 50 Appendix G, Section III.A, contains the materials test requirements for the Charpy V-notch tests and drop weight tests. Section III.C specifies that records are to be kept on the test data, the qualification of test personnel, and the calibration of test equipment.

The records maintained by licensees for the life of the facility in response to the requirement are available for inspection by the staff to determine compliance with 10 CFR 50 Appendix G. There is a continuing requirement that certain pieces of the data will be needed to support a licensee's fracture control plan or fracture analysis for some component in an operating plant.

The records that must be retained per 10 CFR 50 Appendix G are of considerable value to the plant owner in the event of some sort of material deterioration problem or the discovery of a flaw that requires a fracture analysis. The frequency of occurrence of such situations for a given plant is difficult to estimate, but averages perhaps once every 10 years. The value to the plant owner lies in the ability to provide a sound basis for estimates of material toughness that are an essential part of the fracture analysis. In 1995 the NRC staff issued Generic Letter 92-01, Supplement 1, which requested all licensees and permittees to provide: (a) a description of actions taken or planned to locate all data relevant to the determination of reactor pressure vessel (RPV) integrity, (b) an assessment of any change in best-estimate chemistry based on consideration of all relevant data, (c) a determination of the need to use the ratio procedure in Regulatory Guide 1.99, Revision 2, "Radiation Embrittlement of Reactor Vessel Materials," for surveillance data, and (d) the need for a revision to existing RPV integrity evaluations.

The impact of not obtaining the information from records would be that the fracture analyses would have to be based on conservative estimates derived from the published data base of typical material properties. The impact of an overly-conservative analysis could be the removal of some unimportant defect found in inspection with considerable economic loss due to the power outage and unnecessary exposure of maintenance personnel to radiation, or possibly, shutdown of the plant prior to the end of its license.

Surveillance program withdrawal schedules which are required by Section III of 10 CFR 50 Appendix H, are periodically changed by licensees. The impact of not obtaining the information is that the program may not adequately monitor changes in the fracture toughness of reactor vessel beltline materials.

Surveillance reports required by 10 CFR 50 Appendix H provide the basis for approval of the pressure-temperature operating limits for the reactor. The impact of not obtaining the reports required by Section IV of 10 CFR 50 Appendix H would be that the pressure-temperature limits for the reactor would have to be checked against conservative estimates of radiation damage such as those given in Regulatory Guide 1.99, Revision 2. At the present time, there are too many uncertainties in the assessment of radiation damage to a reactor vessel to permit a licensee to forego monitoring radiation damage and reporting the surveillance test results to the NRC.

2. Agency Use of Information

This information is needed to ensure that the reactor vessel does not exceed radiation embrittlement limits and meets the requirements of General Design Criteria 31 and 32, as specified in 10 CFR 50 Appendix A.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 15% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

5. Effort to Reduce Small Business Burden

The subject regulations do not affect small business.

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

If this information were not collected or collected less frequently, the NRC would be unable to ensure that reactor vessels had not exceeded radiation embrittlement limits.

7. Circumstances Which Justify Variations from OMB Guidelines

The provisions of these regulations require that this information be maintained for the life of the plant in order to detect material deteriorations or flaws which might affect the health and safety of the public.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

These regulations do not require sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

10 CFR 50 Appendix G

Over the next three years, licensees are expected to file information for these sections of 10 CFR 50 Appendix G only:

Annual Reporting Burden

Section	Number of Licensees	Reports per Licensee	Burden per Report	Total Annual Burden	Cost @ $217/hr
Section III.B	0	0	200	0	0
Section IV.A.1	4	1	150	600	130,200
Section IV.A.2	20	1	100	2,000	434,000
Total App. G Reporting	24			2,600	564,200

10 CFR 50 Appendix H

Over the next three years, licensees are expected to file information for these sections of 10 CFR 50 Appendix H only:

Annual Reporting Burden

Section	Number of Licensees	Reports per Licensee	Burden per Report	Total Annual Burden	Cost @ $217/hr
Section III.B.1*					
Section III.B.3	5	1	40	200	43,400
Section III.C.1	0	0	80	0	0
Section III.C.3**					

Section IV.A-C	10	1	160	1,600	347,200
Total App. H Reporting	15			1,800	390,600

* Surveillance withdrawal schedules for operating reactors are in place. Subsequent changes to the withdrawal schedules are submitted under Section III.B.3.

** The burden for requesting exemptions from testing requirements is included in the overall burden for the 50.12 exemption requests in Section 1.

The total estimated annual burden for industry is 4,400 hours (Reporting 3,960 hours + Recordkeeping 440 hours) at a cost of $954,800 (4,400 hours x $217). The recordkeeping burden is estimated to be 10 percent of the reporting burden (Appendix G - 260 hours + Appendix H - 180 hours), which is included in the reporting burden estimate tables.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be equal to .0004 times the recordkeeping burden cost. Therefore, the storage cost for this clearance has been determined to be insignificant (440 hours x $217 x .0004 = $38.19).

14. Estimated Annualized Cost to the Federal Government

10 CFR 50 Appendix G

The NRC reviews annually the information described below on fracture toughness. Since 10 CFR 50 Appendix G reports affect the plant's licensing requirements, all of the reports must be reviewed by the NRC.

Section	Number of Reports	Burden per Report	Total Annual Gov't Burden	Cost @ $217/hr
Section III.B	0	0	0	0
Section IV.A.1	4	100	400	86,800
Section IV.A.2	20	80	1,600	347,200
Total Burden for App. G	29		2,000	434,000

10 CFR 50 Appendix H

Section	Number of Reports	Burden per Report	Total Annual Gov't Burden	Cost @ $217/hr
Section III.B.3	5	40	200	43,400
Section III.C.1	0	0	0	0
Section IV.A-C	10	25	250	54,250
Total Burden for App. H	15		450	97,650

Therefore, the total estimated Federal burden is 2,450 hours (2,000 + 450 hours) and the cost is expected to be $531,650 (2,450 x $217).

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

15. Reasons for Changes in Burden or Cost

The estimated annual burden under Appendix G has increased by 550 hours from 2,050 to 2,600 hours because of an increase in the number of responses from 1 to 4 for Section IV.A.1. However, the burden per report decreased by 100 hours from 250 to 150 hours because of generic evaluation standards used to complete the reports. The projections represents the NRC's staff estimates for the upcoming clearance period based on the reports received during this clearance cycle. Burden for Appendix H decreased by 1,680 hours from 3,480 to 1,800 hours because of a reduction in the number of surveillance capsules being tested due to the implementation of an integrated surveillance program for boiling water reactors. The number of licensees responding under Section IV.A-C decreased from 20 to 10 and the annualized number of responses decreased from 26 to 15.

Therefore, the overall estimated annual burden has decreased by 1,130 hours from 5,530 to 4,400 hours because the industry has developed generic evaluation standards (contained in topical reports), approved by the NRC, that licensees can cite, which results in simplified evaluations. There has been a change to the base burden cost from $156 to $217 per hour.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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Section 19

FINAL SUPPORTING STATEMENT
FOR
FRACTURE TOUGHNESS REQUIREMENTS FOR PROTECTION AGAINST
PRESSURIZED THERMAL SHOCK EVENTS

10 CFR 50.61, 10 CFR 50.61(b)(1), 10 CFR 50.61(b)(3), 10 CFR 50.61(b)(4),
10 CFR 50.61(b)(6) and 10 CFR 50.61(c)(3)

DESCRIPTION OF THE INFORMATION COLLECTION

Pressurized thermal shock (PTS) events are system transients in pressurized water reactors (PWRs) that can cause severe overcooling (thermal shock) concurrent with or followed by immediate repressurization to a high pressure. The thermal stresses caused by rapid cooling of the reactor vessel's inside surface combine with the pressure stresses to increase the potential for fracture if an initiating flaw is present in low-toughness material. Such material may exist in the reactor vessel beltline, adjacent to the core, where neutron radiation gradually embrittles the material during the plant lifetime. The toughness of reactor vessel materials is characterized by a "reference temperature for nil ductility transition" (RT_{NDT}). The value of RT_{NDT} at a given time in a vessel's life is used in fracture mechanics calculations to determine whether assumed pre-existing flaws would propagate as cracks when the vessel is stressed.

10 CFR 50.61 establishes a screening criterion, a limiting level of embrittlement beyond which operation cannot continue without further plant-specific evaluation. The screening criterion is given in terms of RT_{NDT}, calculated as a function of the copper and nickel contents of the material and the neutron fluence according to the procedure given in 10 CFR 50.61, and called RT_{PTS} to distinguish it from other procedures for calculating RT_{NDT}.

Effective January 1996, 10 CFR 50.61 was amended to change the procedure for calculating the amount of radiation embrittlement when surveillance data meet the credibility criteria of Regulatory Guide 1.99, Revision 2, "Radiation Embrittlement of Reactor Vessel Materials." The amended rule requires resubmittal of the RT_{PTS} analysis if there is a significant change in projected values of RT_{PTS}, or upon a request for a change in the expiration date for operation of the facility.

10 CFR 50.61(b)(1) requires each PWR licensee, other than a licensee for a PWR for which 10 CFR 50.82(a)(1) certifications have been submitted, to have projected values of RT_{PTS}, accepted by the NRC, for each reactor vessel beltline material for the expiration date of the operating license (EOL) fluence of the material. The assessment must use the calculation procedures given in 10 CFR 50.61 and must specify the bases for the projected value, including the assumptions regarding core loading patterns, and must specify the copper and nickel contents and the fluence value used in the calculation for each beltline material. This assessment must be updated whenever there is a significant change in projected values of RT_{PTS}, or upon a request for a change in the expiration date for operation of the facility.

10 CFR 50.61(b)(3) provides for submittal and anticipated approval by the NRC of detailed plant-specific analyses, submitted to demonstrate acceptable risk with RT_{PTS} above the screening limit due to plant modifications, new information, or new analysis techniques.

10 CFR 50.61(b)(4) requires licensees for PWRs for which the analysis required by 10 CFR 50.61(b)(3) indicates that no reasonably practical flux reduction program will prevent RT_{PTS} from exceeding the PTS screening criterion to submit a safety analysis to determine what, if any, modifications to equipment, systems,

and operation are necessary to prevent potential failure of the reactor vessel as a result of postulated PTS events if continued operation beyond the screening criterion is allowed. This analysis must be submitted at least three years before RT_{PTS} is projected to exceed the PTS screening criterion.

10 CFR 50.61(b)(6) states that if NRC concludes that operation of the facility with PT_{PTS} in excess of the PTS screening criterion cannot be approved on the basis of the licensee's analyses submitted in accordance with 10 CFR 50.61(b)(3) and (4), the licensee shall request and receive approval by NRC prior to any operation beyond the criterion.

10 CFR 50.61(c)(3) requires licensees to report to NRC any information believed to significantly improve the accuracy of the RT_{PTS} values. The burden is included in the estimates for RT_{PTS} assessment under Item 12 of this Supporting Statement.

In response to 10 CFR 50.61, the licensees of operating PWRs have submitted the fluence predictions and chemical composition data and these have now been accepted. A number of licensees have undertaken flux reduction programs for those plants having high values of RT_{PTS}. Some of these are still under review. Submittal of requests to operate beyond the screening criterion [per 10 CFR 50.61(b)(4)], is expected to be made during the years 2004-2007. The number of licensees affected by 50.61(b)(4) is estimated at 3 during this clearance period because some plants have instituted sufficient flux reduction to prevent them from reaching the screening criteria before end of life.

A. JUSTIFICATION

1. Need for the Collection of Information

Maintaining the structural integrity of the reactor pressure vessel of light-water-cooled reactors is a critical concern related to the safe operation of nuclear power plants. To assure the structural integrity of reactor vessels, the NRC has developed regulations, including 10 CFR 50.61, and regulatory guides, including Regulatory Guide 1.99, Revision 2, to provide analysis and measurement methods and procedures to establish that the reactor vessel has adequate safety margin for continued operation. The fracture toughness of the vessel materials varies with time. As the plant operates, neutrons escaping from the reactor core impact the vessel beltline materials causing embrittlement of those materials. The information collections in 10 CFR 50.61, as well as those in 10 CFR 50.60 and 10 CFR 50 Appendix G and 10 CFR 50 Appendix H, provide estimates of the extent of the embrittlement, and evaluations of the consequences of the embrittlement in terms of the structural integrity of the vessel.

2. Agency Use of the Information

The information and analyses required by 10 CFR 50.61 will be reported on the plant's docket pursuant to the provisions of 10 CFR 50.4 and reviewed by NRC to ensure the requirements of the regulation are met. There is a safety issue involved in the information collection requirement described above. By reviewing the submittals from the PWR licensees, the NRC can make certain that (a) all of them are aware of the potential threat to the integrity of their reactor vessel from pressurized thermal shock events, and (b) those that need to consider additional flux reduction in order to stay below the screening criterion will become aware of the need as early as possible, when flux reduction is most effective.

3. Reduction of Burden Through Information Technology

There are no legal obstacles to reducing the burden associated with this information collection. The NRC encourages respondents to use information technology when it would be beneficial to them. NRC issued a regulation on October 10, 2003 (68 FR 58791), consistent with the Government Paperwork Elimination Act, which allows its licensees, vendors, applicants, and members of the public the option to make submissions electronically via CD-ROM, e-mail, special Web-based interface or other means. It is estimated that approximately 15% of the potential responses are filed electronically.

4. Effort to Identify Duplication and Use Similar Information

There is no duplication of requirements. NRC has in place an ongoing program to examine all information collections with the goal of eliminating all duplication and/or unnecessary information collections.

There are no other NRC or Federal government requirements regarding analyses for flux reduction or plant PTS safety analyses. Materials information leading to calculation of an RT_{NDT} value for the reactor vessel is submitted in response to the requirements of 10 CFR 50 Appendix G and 10 CFR 50 Appendix H, (See Supporting Statement included in this submittal as Section 18). For new plants, it appears in the final safety analysis report. During the operating life, the information is updated by the individual plant submittals that support requests for changes in the pressure-temperature limits.

5. Effort to Reduce Small Business Burden

This information does not affect small business.

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

If this information were not collected, the NRC would be unable to establish that each reactor pressure vessel has an adequate safety margin for continued safe operation.

7. Circumstances Which Justify Variations from OMB Guidelines

There are no variations from OMB guidelines in this collection of information.

8. Consultations Outside the NRC

Notice of opportunity for comment was published in the Federal Register on November 24, 2006 (71 FR 67922). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

Proprietary or confidential information is protected in accordance with NRC regulations at 10 CFR 2.390(b).

11. Justification for Sensitive Questions

No sensitive information is requested under these regulations.

12. Estimated Industry Burden and Burden Hour Cost

The licensees of all 72 operating PWR plants are subject to the regulation. It is estimated that 30 plants would be affected by the RT_{PTS} assessment; approximately 6 plants would also be affected by the flux reduction analyses, and approximately 3 plants would be affected by the provisions of 10 CFR 50.61(b)(3) and (4).

1) RT_{PTS} assessment - 120 staff hours per plant (30 x 120 = 3,600 staff hours over the 3-year period, or annualized for the 3-year period results in 10 plants x 120 staff hours for a total annual burden of 1,200 staff hours).

2) Flux reduction analyses - 600 staff hours per plant (600 x 6 = 3,600 staff hours over 3 years, or annualized for the 3-year clearance period results in 2 plants x 600 staff hours for a total burden of 1,200 staff hours).

3) Provisions of 10 CFR 50.61(b)(3) and (4) - 120 staff hours per plant (3 x 120 = 360 staff hours over the 3-year period, or annualized for the 3-year period results in 1 plant x 120 staff hours for a total annual burden of 120 staff hours).

The total estimated annual industry burden = 2,520 hours (1,200+ 1,200 +120) at a cost of $546,840 (2,520 hours x $217 per hour). Although each information collection contained in section 50.61 requires that a report or notification be submitted to NRC, the primary burden for each requirement is the preparation of the analysis or assessment that forms the basis for the report. Therefore, staff estimates that 90 percent of the burden for the requirements in 10 CFR 50.61 are attributable to recordkeeping (2,268 hours), and 10 percent of the burden (252 hours) is associated with submitting the required reports or notifications.

The provisions of this regulation affect 30 recordkeepers. An annualized total of 13 responses are expected each year during this clearance period.

13. Estimate of Other Additional Costs

The quantity of records to be maintained is roughly proportional to the recordkeeping burden and therefore can be used to calculate approximate records storage costs. Based on the number of pages maintained for a typical clearance, the records storage cost has been determined to be .0004 times the recordkeeping burden cost. Therefore, the storage cost of this clearance is insignificant (2,268 recordkeeping hours x $217/hr. x .0004 = $197).

14. Estimated Annualized Cost to the Federal Government

Licensee submittals will be evaluated by the staff at the estimated cost given below:

1) RT_{PTS} Assessment: The staff estimates that reevaluations of RT_{PTS} values will be submitted by 15 PWR licensees within the 3-year clearance period. (Of the 30 licensees affected by the RT_{PTS} assessment, as stated above, only 15 licensees will find significant changes that require NRC review.) On the average, 40 hours are estimated for the review of each submittal. Total

review time is estimated at 600 staff hours at an estimated cost of $130,200 (15 x 40 hours x $217) over the 3-year clearance period. Thus, the estimated annualized burden is 200 hours at a cost of $43,400.

2) It is estimated that an analysis and schedule for implementation of a flux reduction program will be submitted by 6 licensees over 3 years. Further, it is estimated that 25 hours will be required to review each submittal. Total review time is estimated to be 150 staff hours at a cost of $32,550 (6 x 25 hours x $217) over 3 years, or annualized for the 3-year clearance period, a burden of 50 hours per year at a cost of $10,850.

3) It is estimated that evaluations of the requests under 10 CFR 50.61(b)(6) will be submitted by 3 licensees over 3 years. Further, it is estimated that 40 hours will be required to review each submittal. Total review time is estimated to be 120 staff hours at a cost of $26,040 (3 x 40 x $217) over 3 years, or annualized for the 3-year clearance period, a burden of 40 hours per year at a cost of $8,680.

Total annual Federal cost = $62,930 ($43,400 + $10,850 + $8,680).

15. Reasons for Changes in Burden or Cost

There has been no change in burden; however, there has been a change to the base burden cost from $156 to $217 per hour.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.