

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), 50.54(hh), 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.

JUSTIFICATION

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, and one for standard design.

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.

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 whose application is submitted after October 16, 2003, shall include the analyses, and the descriptions of the equipment and systems required by § 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 there under shall be forfeited. However, if good cause can be shown by the applicant, the Commission may extend the completion date for a reasonable period of time. The Commission will recognize, among other things, developmental problems attributable to the experimental nature of the facility or fire, flood, explosion, strike, sabotage, domestic violence, enemy action, an act of the elements, and other acts beyond the control of the permit holder, as a basis for extending the completion date. No completion date extensions are expected during this clearance period. Thus, the relevant burden is zero.

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

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.

Procedures for aircraft impact and beyond-design basis threat

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

Section 50.54(hh)(1) requires licensees to develop, implement, and maintain procedures to address preparatory actions to be taken in the event of a potential aircraft threat to a nuclear power reactor facility.

Section 50.54(hh)(2) requires licensees to develop and implement guidance and strategies to address the loss of large areas of the plant due to explosions or fires from a beyond-design basis threat.

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 50% of the potential responses are filed electronically. .

4. Effort to Identify Duplication and Use Similar Information

No sources of similar information are available. There is no duplication of requirements. 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 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

Opportunity for public comment on the information collection requirements for this clearance package was published in the Federal Register on May 14, 2013 (78 FR 28244). 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 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 30 exemptions annually requiring approximately 400 licensee hours per exemption (360 hrs. reporting and 40 hrs. recordkeeping). The total estimated annual burden for exemptions is 12,000 hours (10,800 reporting; 1,200 recordkeeping) at a cost of \$3,288,000.

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 applications 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 132 hours (119 hrs reporting and 13 hrs recordkeeping) at a cost of \$36,168.

Non-Power Reactor Operating License

One non-power reactor applications for an operating license is expected during this OMB clearance period. This application is for a research reactor is expected to require 3,000 hours of license applicant resources per application 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 990 hours (891 hrs reporting and 99 hrs recordkeeping) at a cost of \$271,260.

Standard Design Certifications

For the duration of this clearance, the staff estimates that there will be 1 applicant 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 165 hours (148.5 hrs reporting and 16.5 hrs recordkeeping) at a cost of \$45,210.

Combined License

No power reactor or non-power reactor applications for a combined license are anticipated during the next 3 years.

10 CFR 50.34 Technical Information

Non-Power Reactor Operating License

No applications are expected during this OMB clearance period.

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 31, the number of permanently shutdown power plants will be 14, and the number of permanently shutdown non-power plants will be 11 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 \$3,425,000 per unit (12,500 hrs. x \$274/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 \$56,170 (205 hrs. x \$274/hr.) each. The total estimated annual burden for notifications is 225 hours (205 hrs reporting and 20 hrs recordkeeping) at a cost of \$61,650.

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 4 of these applications annually. Each application normally involves approximately 200 hours of effort by industry for a total of 800 hours (720 reporting; 80 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 5,800 hours (5,220 reporting; 580 recordkeeping) at a cost of \$1,589,200.

The overall burden estimates for this section is 414,433 hours with an overall cost of \$113,554,642. The total number of responses is 1,006.5 annually.

10 CFR 50.54(hh)(1)&(2)

Licensees at 65 sites will spend 40 hours each maintaining procedures associated with 50.54(hh)(1) for preparatory actions to be taken in the event of a potential aircraft threat to a nuclear power reactor facility. The overall burden estimate for this section is 2,600 hours (65 sites x 40 hours/site = 2,600 hours) with a cost of \$712,400.

Licensees have completed the one-time implementation requirements associated with 50.54(hh)(2), under which they developed and implemented guidance and strategies to address the loss of large areas of the plant due to explosions or fires from a beyond-design basis threat.

TOTAL

The total burden is 477,788 hours (431,816.5 hours reporting + 45,971.5 hours recordkeeping).

Annual Licensee Burden for License Amendments

FY	Custom TS (Unconverted)				TS Conversions		Standard TS (Converted)		Permanently 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)	
2013	26	93,600	31	18,600	1	12,500	77	277,200	14	8,400	11	4,400	414,700
2014	25	90,000	31	18,600	1	12,500	78	280,000	14	8,400	11	4,400	413,900
2015	24	86,400	31	18,600	1	12,500	79	284,400	14	8,400	11	4,400	414,700
Number of Responses Annually						1006.5		Estimated Total Burden (hrs)				1,243,300	
Annual Burden Hours / Response						1235.3		Estimated Annualized Burden (hrs)				414,433	

Notes:

1. 9 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. 9 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 @ \$274/hour is \$113,554,642 (414,433 x \$274)

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 \$5,038 (45,971.5 recordkeeping hours x \$274 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 30 exemptions per year requiring approximately 75 NRC staff hours per exemption (30 x 75 hrs. = 2,250 hrs. at a cost of \$616,500 [2,250 x \$274/hr.]).

10 CFR 50.33 - General Information

Early Site Permits

The staff anticipates that 1 Early Site Permit applications 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 at a cost of \$9,042 [33 x \$274/hr.]).

Non-Power Reactor Operating License

One non-power reactor application for an operating license is expected during this OMB clearance period. This application for research reactor is expected to require 1,500 hours in NRC staff resources over a 3-year period (1,500/3 = 500 hrs. at a cost of \$137,000 [500 x \$274/hr.]).

Standard Design Certifications

For the duration of this clearance, the staff estimates that there will be 1 applicant 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 (100 hrs at a cost of \$9,042 [33 x \$274/hr.]).

Combined License

During this OMB clearance period, the staff estimates that there will be no applications for a combined license (COL) under 10 CFR Part 52.

10 CFR 50.34 Technical Information

Non-Power Reactor Operating License

No applications are expected during this OMB clearance period.

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 31, the number of permanently shutdown power plants will be 14, and the number of permanently shutdown non-power plants will be 11 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." 102,900 hrs. x \$274/hr. = \$28,194,600.

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 \$56,170 (205 x 1 hr. x \$274/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 4 of these applications annually. Each application normally involves 100 hours by the NRC (4 x 100 = 400 hrs. at a cost of \$109,600 [400 x \$274/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 \$685,000 [2,500 x \$274/hr.]).

Total government burden is estimated to be 108,821 hours (2,250 + 33 + 500 + 33 + 102,900 + 205 + 400 + 2,500 hours) for a cost of \$29,816,954 (108,821 hours x \$274/hr.) + \$30,000 contractor fees = \$29,846,954.

15. Reasons for Changes in Burden or Cost

The overall burden has decreased by 8,205 hours, from 485,993 to 477,788. Reporting decreased from 442,160 hours to 431,816.5 hours, a decrease of 10,373.5 hours. Recordkeeping decreased from 43,833 hours to 43,371.5 hours, a decrease of 461.5 hours. The primary reasons for the burden changes are indicated below:

Increases:

The expectation of Specific Exemptions under 10 CFR 50.12 increased by 30 responses annually, overall 5,200 hours, this significant increase is due in large part to the expected number of anticipated requests as a result of the issuance of the combined operating license for Vogtle in February and V.C. Summer in March, 2012. Thus, as a result of the issuance of these two COLs, the agency is expecting exemption request during this clearance cycle from the Vogtle and V.C. Summer licensees related to construction of the AP1000.

The recordkeeping associated with 50.54(hh)(1) was added to this section, totaling 2,600 hours. Previously, this burden was associated with 10 CFR Part 73 (3150-0002) because it was included in the Power Reactor Security Requirements Final Rule, which primarily affected Part 73. In September of 2012, these hours were transferred from Part 73 to Part 50 via nonsubstantive change request. The hours have been associated with Section 1 for this renewal.

Decreases:

The industry submittals for a Combined License application estimate has been reduced by 3,000 hours due primarily to the number of new reactor applications expected from industry during the clearance period. During the previous term (2010-2013), the NRC anticipated receiving 3 combined license applications. However, for this clearance period (2013-2016), the NRC is not expecting to receive any combined license applications, this will also affect other related industry requests; there has also been a reduction in the number of early site permits, reduction of 268 hours, and non-power operating licenses request expected, reduction of 990 hours; anticipated request for license amendments have been reduced resulting in a decrease of 3,814 hours, along with request for license transfers, reducing the burden by 1,600 hours.

Further, no construction permit applications for a power or non-power reactor are anticipated during the clearance period, reducing the possibility for a Limited Work Authorization, resulting in a 6,333 hours reduction.

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

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 (@\$274/hr)	Annual Cost to Federal Govt (@\$274/hr)
Decommissioned Plants 50.54(bb)	0	0	0	0	0	\$0	\$0
License Amend. 50.59(c), 50.90, 50.91(a), (b)	409	1013	414,443	41,443	455,886	\$124,912,764	\$28,224,600
NRC Notification, 50.74	1	205	205	20	225	\$61,650	\$56,170
License Trans. 50.80(b)	392	4	5,220	580	5,800	\$1,589,200	\$109,600
50.54(hh)(1)	40	65	0	2600	2,600	\$712,400	\$0
Totals		1,222	431,816.5	45,971.5	477,788	\$130,916,652	\$29,161,954

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)		Permanently 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)	
2010	26	23,400	31	4,650	1	1,450	78	70,200	14	2,100	11	1,100	102,900
2011	25	22,500	31	4,650	1	1,450	79	71,100	14	2,100	11	1,100	102,900
2012	24	21,600	31	4,650	1	1,450	80	72,000	14	2,100	11	1,100	102,900
Estimated Total Burden (hrs)												308,700	
Estimated Annualized Burden (hrs)												102,900	

Notes:

1. 9 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. 9 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 \$28,194,600 (102,900 hours x \$274/hour + \$30,000 contractor cost).