

Section 1

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

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

DESCRIPTION OF THE INFORMATION COLLECTION

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

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 is 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 much of the information collection requirements set forth in 10 CFR Part 50 regarding construction permits and operating licenses. Therefore, the burden for 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 NRC as to whether to approve a company's application for a construction permit or an operating license is based largely on the staff's detailed review of the information provided by the company as part of its application. Information provided by the applicant as part of the application is crucial to the licensing process as it provides NRC with the information it needs to make a decision with regard to the proposed plant's impact on the public's health and safety 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 33, is written.

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

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

#### Specific Exemptions

Section 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.

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

#### Industry

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

41,600 hours x \$156 = \$6,489,600

#### Federal Government

104 units x 1 exemption x 75 hours = 7800 hours

7800 hours x \$156 = \$1,216,800

#### Filing Application

Section 50.30 This section provides for the filing of an application for a construction permit, operating license or combined license which include both general and technical information. General information is covered under Section 50.33, and technical information is covered under Section 50.34. 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)**

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

Section 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.

Section 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.

Section 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.

Section 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.

## General Information - Burden Estimate

### 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 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 both the industry and the Federal government to collect this general information under Section 50.33 excluding the emergency response plans is estimated to be; 400 hours of license applicant resources per permit application and 100 hours of NRC staff resources per permit application.

#### Industry:

#### Annualized over 3 years

400 hrs/permit x 1 permit = 400 hrs  
400 hrs x \$156/hr = \$62,400

400 hrs/3yrs = 133.3 hrs/yr  
\$62,400/3yrs = \$20,800/yr

#### Federal government:

100 hrs/permit x 1 permit = 100 hrs  
100 hrs x \$156/hr = \$15,600

100 hrs/3yrs = 33.3 hrs/yr  
\$15,600/3yrs = \$5,200/yr

### 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 and 1500 hours in NRR staff resources over a 3-year period. The burden to collect this general information under Section 50.33 for both the industry and the Federal government is estimated to be:

#### Industry:

#### Annualized over 3 years

3,000 hrs/appl. x 1 appl. = 3,000 hrs  
3,000 hrs x \$156/hr = \$468,000

3,000 hrs/3yrs = 1,000 hrs/yr  
\$468,000/3yrs = \$156,000/yr

#### Federal government:

#### Annualized over 3 years

1,500 hrs/appl. x 1 appl. = 1,500 hrs  
1,500 hrs x \$156/hr = \$234,000

1,500 hrs/3yrs = 500 hrs/yr  
\$234,000/3yrs = \$78,000/yr

## Standard Design Certifications

For the duration of this clearance, the staff estimates that there will be 3 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 both the industry and the Federal government to collect this information under Section 50.33 is included here and is estimated to be 500 hours of license applicant resources per application and 100 hours in NRC staff resources per application.

<u>Industry:</u>	<u>Annualized over 3 years</u>
500 hrs/appl. x 3 appl. = 1500 hrs 1500 hrs x \$156/hr = \$234,000	1500 hrs/3yrs = 500 hrs/yr \$234,000/3yrs = \$78,000/yr
<u>Federal government:</u>	<u>Annualized over 3 years</u>
100 hrs/appl. x 3 appl. = 300 hrs 300 hrs x \$156/hr = \$46,800	300 hrs/3yrs = 100 hrs/yr \$46,800/3yrs = \$15,600/yr

## Combined License

During this OMB clearance period, the staff estimates that there will be 1 application 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 both the industry and the Federal government to collect this general information for a COL is included here and is estimated to be 3,000 hours of applicant resources and 1500 hours of NRC staff resources.

<u>Industry:</u>	<u>Annualized over 3 years</u>
3,000 hrs/appl. x 1 appl. = 3,000 hrs 3,000 hrs x \$156/hour = \$468,000	3,000 hrs/3 years = 1,000 hrs/year \$468,000/3 years = \$156,000/year
<u>Federal government:</u>	<u>Annualized over 3 years</u>
1,500 hrs/appl. x 1 appl. = 1,500 hrs 1,500 hrs x \$156/hr = \$234,000	1,500 hrs/3 years = 500 hrs/year \$234,000/3 years = \$78,000/year

## Technical Information

Sections 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).

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

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

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

Section 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 to this 10 CFR Part 50 clearance submittal, "Physical Security and Safeguards Contingency Plans."

Section 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 will be an important segment of NRC's contingency planning programs. Licensee safeguards contingency plans will result in organizing licensees' safeguard resources in such a way that, in the unlikely event of a safeguards contingency, the responding participants will be identified, their several responsibilities specified, and their responses coordinated. A separate OMB clearance package for Physical Protection of Plants and Materials is covered under 10 CFR Part 73. Also see section 4 to this 10 CFR Part 50 clearance submittal, "Physical Security and Safeguards Contingency Plans."



Section 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 will be addressed under Section 50.34(g), no new burden is associated with this activity.

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

## **Technical Information - Burden Estimate**

### **Early Site Permits**

The staff anticipates that 1 Early Site Permit will be submitted during the next 3 years. Because Part 52 incorporates by reference much of the information collection requirements set forth in 10 CFR Part 50 that are applicable to Early Site Permits, the burden to both the industry and the Federal government to collect this technical information is expected to require 1,000 hours of license applicant resources per permit and 300 hours in NRR staff resources per permit. This estimate assumes that detailed technical information of the plant is not required.

<u>Industry:</u>	<u>Annualized over 3 years</u>
1,000 hrs/permit x 1 permit = 1,000 hrs	1,000 hrs/3yrs = 333.3 hrs/yr
1,000 hrs x \$156/hr = \$156,000	\$156,000/3yrs = \$52,000/yr

<u>Federal government:</u>	<u>Annualized over 3 years</u>
300 hrs/permit x 1 permit = 300 hrs	300 hrs/3yrs = 100 hrs/yr
300 hrs x \$156/hr = \$46,800	\$46,800/3yrs = \$15,600/yr

### **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 and 3,000 hours in NRR staff resources. The burden to collect this technical information under Section 50.34 for both the industry and the Federal government is estimated to be:

<u>Industry:</u>	<u>Annualized over 3 years</u>
7,000 hrs/appl. x 1 appl. = 7,000 hrs	7,000 hrs/3yrs = 2,333 hrs/yr
7,000 hrs x \$156/hr = \$1,092,000	\$1,092,000/3yrs = \$364,000/yr

<u>Federal government:</u>	<u>Annualized over 3 years</u>
3,000 hrs/appl. x 1 appl. = 3,000 hrs	3,000 hrs/3yrs = 1,000 hrs/yr
3,000 hrs x \$156/hr = \$468,000	\$468,000/3yrs = \$156,000/yr

### **Standard Design Certifications**

The staff estimates that there will be 3 applicants for standard design certifications in accordance with 10 CFR Part 52 during this clearance period. Because Part 52 incorporates by reference much of the information collection requirements set forth in 10 CFR Part 50 that are applicable to standard design certifications, the burden to both the industry and the Federal government to collect this technical information under Section 50.34 is included here and is estimated to be 130,000 hours of license applicant resources per application and 43,800 hours in NRC staff resources per application.

<u>Industry:</u>	<u>Annualized over 3 years</u>
130,000 hrs/appl. x 3 appl. = 390,000	390,000 hrs/3yrs = 130,000 hrs/yr
390,000 hrs x \$156/hr = \$60,840,000	\$60,840,000/3yrs = \$20,280,000/yr

Federal government:

Annualized over 3 years

43,800 hrs/appl. x 3 appl. = 131,400 hrs  
131,400 hrs x \$156/hr = \$20,498,400/yr

131,400 hrs/3yrs = 43,800 hrs/yr  
\$20,498,400/3yrs = \$6,832,800/yr

**Combined License**

During this OMB clearance period, the staff estimates that there will be 1 application for a combined license (COL) under 10 CFR Part 52. In accordance with § 52.79(b), the application must contain the information required by § 50.34. The burden on both the industry and the Federal government to collect this technical information for a COL is included here and is estimated to be 130,000 hours of applicant resources and 43,800 hours of NRC resources. This estimate assumes that the COL applicant does not reference a standard design certification.

Industry:

Annualized over 3 years

130,000 hrs/appl. x 1 appl. = 130,000 hrs  
130,000 hrs x \$156/hour = \$20,280,000

130,000 hrs/3 yrs = 43,334 hrs/yr  
\$20,280,000/3 yrs = \$6,760,000/yr

Federal government:

Annualized over 3 years

43,800 hrs/appl. x 1 appl. = 43,800 hrs  
43,800 hrs x \$156/hr = \$6,832,800

43,800 hrs/3 yrs = 14,600 hrs/yr  
\$6,832,800/3 yrs = \$2,277,600/yr

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

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

Decommissioned Plants

Section 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 Part 50 or Part 72. The licensee must demonstrate to NRC that the elected actions will be consistent with NRC requirements for licensed possession of irradiated nuclear fuel and that the actions will be implemented on a timely basis. Where implementation of such actions require NRC authorizations, the licensee shall verify in the notification that submittals for such actions have been or will be made to NRC and shall identify them. A copy of the notification shall be retained by the licensee as a record until expiration of the reactor operating license. The licensee shall notify the NRC of any significant changes in the proposed waste management program as described in the initial notification.

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

#### Construction Completion

Section 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 50.30(d).

#### Application for Amendment of License

Sections 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. Section 50.59(c) requires the holder of a license authorizing operation of a production or utilization facility who desires (1) to make a change in technical specifications (TS) or (2) to make a change in the facility or procedures described in the safety analysis report, or to conduct tests or

experiments that involve an unreviewed safety question or a change in TS to submit an application for amendment of the license pursuant to 50.90. Section 50.90 requires the application for amendment of the license or construction permit to be filed with the Commission, fully describing the changes and following as far as applicable in the form prescribed for original applications.

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

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

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

For the purpose of assessing the reporting requirement burden for the NRC and the regulated industry, the NRC will assume that the number of operating nuclear power plants will be 104, the number of operating non-power reactors will be 36, the number of permanently shutdown power plants will be 20, and the number of permanently shutdown non-power plants will be 15 throughout the clearance period. These burden estimates also assume that, throughout the clearance period, the average level of effort remains constant (400 licensee hours/amendment, 100 NRC hours/amendment and \$156/staff hour, respectively), and the average number of license amendments are: 10.5/unit/year for "unconverted" (custom TS) power reactor licenses, 7/unit/year for "converted" (standard TS) power reactor licenses, 1.5/unit/year for permanently shutdown power reactor licenses, 1.5/unit/year for operating non-power reactors, and 1/unit/year for a permanently shutdown non-power reactors.

Each application for conversion to the STS is estimated to cost the industry approximately \$1.95M per unit, which is comparable to 12,500 hours at a cost of \$156 per hour.

Industry

FY	Custom TS (Unconverted)				TS Conversions		Standard TS (Converted)		Permanently Shutdown Plants				TOTAL Burden (hrs)
	Power Units	Burden <sup>1</sup> (hrs)	Non Power Units	Burden <sup>2</sup> (hrs)	Power Units	Burden <sup>3</sup> (hrs)	Power Units	Burden <sup>4</sup> (hrs)	Power Units	Burden <sup>5</sup> (hrs)	Non Power Units	Burden <sup>6</sup> (hrs)	
2004	30	126,000	36	21,600	4	50,000	70	196,000	20	12,000	15	6,000	411,600
2005	29	121,800	36	21,600	1	12,500	74	207,200	20	12,000	15	6,000	381,100
2006	28	117,600	36	21,600	1	12,500	75	210,000	20	12,000	15	6,000	379,700
Number of Responses Annually						917		Estimated Total Burden (hrs)				1,172,400	
Annual Burden Hours / Response						426		Estimated Annualized Burden (hrs)				390,800	

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 @ \$156/hour is \$60,964,800 (390,800 x \$156).

Federal Government

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

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

FY	Custom TS (Unconverted)				TS Conversions		Standard TS (Converted)		Permanently Shutdown Plants				TOTAL Burden (hrs)
	Power Units	Burden <sup>1</sup> (hrs)	Non Power Units	Burden <sup>2</sup> (hrs)	Power Units	Burden <sup>3</sup> (hrs)	Power Units	Burden <sup>4</sup> (hrs)	Power Units	Burden <sup>5</sup> (hrs)	Non Power Units	Burden <sup>6</sup> (hrs)	
2004	30	31,500	36	5,400	4	5,800	70	49,000	20	3,000	15	1,500	96,200
2005	29	30,450	36	5,400	1	1,450	74	51,800	20	3,000	15	1,500	93,600
2006	28	29,400	36	5,400	1	1,450	75	52,500	20	3,000	15	1,500	93,250
Estimated Total Burden (hrs)												283,050	
Estimated Annualized Burden (hrs)												94,350	

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. 1450 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 is expected to require \$30K for contractor assistance. Annualized (4 units x \$30K + 1 unit x \$30K + 1 unit x \$30K = \$180,000 ÷ 3), this cost is \$60,000. Thus, the total annualized Federal cost is \$14,778,600 (94,350 hours x \$156/hour + \$60,000 contractor cost).

### Licensee Notification to NRC

Section 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. It is estimated that there will be up to 205 notifications a year involving 1 hour each of industry and NRC staff effort. Thus, the estimated cost for industry and the Federal government is expected to be \$31,980 (\$156 x 205) each. (Note that notifications involving 10 CFR 55.25 are cleared under OMB Clearance No. 3150-0024.)

### Application for Transfer of Licenses

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

The requirements described above are needed to assure the transferee's financial capability to run the facility safely and to ensure the transferee's technical capability to properly and safely operate the facility in a way that protects the health and safety of the public.

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

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

#### Industry:

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

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

2,400 hours + 5,000 hours = 7,400 hours; 7,400 x \$156 = \$1,154,400



Federal government:

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

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

1,200 hours + 2,500 hours = 3,700 hours; 3,700 hours x \$156 = \$577,200.

2. Agency Use of Information

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

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

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

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

3. Reduction of Burden Through Information Technology

There is no legal obstacle to the use of information technology. Moreover, NRC encourages its use. The NRC has implemented the electronic information exchange (EIE), which provides for electronic submission of reports from licensees, including these reports.

4. Effort to Identify Duplication and Use Similar Information

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

5. Effort to Reduce Small Business Burden

This information collection affects 36 operating and 15 permanently shutdown non-power reactor licensees. For certain provisions of 10 CFR 50, the burden for non-power reactor licensees is significantly less than that for power reactor licensees. It is not possible to reduce this burden without impairing NRC's mandated responsibilities.

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

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

7. Circumstances which Justify Variation from OMB Guidelines

These information collections do not vary from OMB guidelines.

8. Consultations Outside the NRC

On December 12, 2002, the NRC staff consulted with representatives from Westinghouse (via conference call) who participated in the development of Westinghouse's design certification applications for the AP-600 and the AP-1000. During the call, the staff's estimates for the industry and staff burden

associated with design certification applications was discussed, and it was concluded that the estimates of the burdens associated with these applications was reasonable.

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

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

These regulations do not involve sensitive questions.

12. Estimated Industry Burden and Burden Hour Cost

See the attached Summary Table.

13. Estimate of Other Additional Costs

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 records storage cost for this clearance is estimated to be \$3,860 (.0004 x 61,863 hours x \$156).

14. Estimated Annualized Cost to the Federal Government

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

15. Reasons for Changes in Burden or Cost

The overall burden for Section 1 has increased by approximately 61,301 hours compared with the last OMB clearance estimate (558,271). The primary reasons for the change in burden is because of the increase in the number of design certifications expected (+130,000), one combined license (+43,334) and a reduction due to the continuing conversion to STS (-114,933).

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

Enclosure:  
Summary Table (Part 1)

**Section 1  
SUMMARY TABLE**

**Application for Construction Permit, Early Site Permit, Design Certifications, Operating License, and Combined License**

<b>Subject</b>	<b>Annual Burden Hours Per Response</b>	<b>Number of Responses Annually</b>	<b>Annual Recordkeeping Burden Hours</b>	<b>Annual Reporting Burden Hours</b>	<b>Total Annual Burden Hours</b>	<b>Annual Cost to Industry</b>	<b>Annual Cost to Federal Government</b>
50.12, Exemptions	400	104	4,160	37,440	41,600	\$6,489,600	\$1,216,800
50.30, 55.55(d) & (d) Filing Application	0	0	0	0	0	\$0	\$0
50.33 - Filing Application Content - General (CP, OL, CL, ESP, and SDC)							
Non-Power Operating License	1,000	1	100	900	1,000	\$156,000	\$78,000
Early Site Permits 50.33(a)-(d),(g),(j)	133	1	13	120	133	\$20,800	\$5,200
Std. Design Certification 50.33(a)-(d)	167	3	50	450	500	\$78,000	\$15,600
Combined OL 50.33(a)-(d)	1,000	1	100	900	1,000	\$156,000	\$78,000
50.34 - Filing Application Content - Technical (CP, OL, CL, ESP, and SDC)							
Non-Power Operating License	2,333	1	233	2,100	2,333	\$364,000	\$156,000
Early Site Permits 50.34(a),(b)(6)(v),(b)(10)	333	1	33	300	333	\$52,000	\$15,600
Std. Design Certification 50.34(a),(b),(g)	43,333	3	13,000	117,000	130,000	\$20,280,000	\$6,832,800
Combined OL 50.34(a),(b),(g)	43,334	1	4,334	39,000	43,334	\$6,760,000	\$2,277,600
Decommissioned Plants 50.54(bb)	0	0	0	0	0	\$0	\$0
License Amend. 50.59(c), 50.90, 50.91(a), (b)	426	917	39,080	351,720	390,800	\$60,964,800	\$14,778,600
NRC Notification, 50.74	1	205	20	185	205	\$31,980	\$31,980
License Trans. 50.80(b)	435	17	740	6,660	7,400	\$1,154,400	\$577,200
<b>Totals</b>	<b>92,895</b>	<b>1,255</b>	<b>61,863</b>	<b>556,775</b>	<b>618,638</b>	<b>\$96,507,528</b>	<b>\$26,063,380</b>

