Section 2

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

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

DESCRIPTION OF THE INFORMATION COLLECTION

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

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

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

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

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

10 CFR 50.36(c) requires TS to include:

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

---

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

- 50.36(c)(2) limiting conditions for operation;
- 50.36(c)(3) surveillance requirements;
- 50.36(c)(4) design features; and
- 50.36(c)(5) administrative controls, and also states that each licensee shall submit any reports to the Commission pursuant to approved technical specifications as specified in § 50.4.

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

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

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

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

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

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

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

10 CFR 50.36b allows each license authorizing operation, and each license for a nuclear power reactor facility for which the certification of permanent cessation of operations required under § 50.82(a)(1) has been submitted, which is of a type described in §50.21(b) (2) or (3) or §50.22 or is a testing facility, to include conditions to protect the environment to be set out in an attachment to the license, which is incorporated in, and made a part of, the license. These

conditions will be derived from information contained in the environmental report and the supplement to the environmental report submitted pursuant to §51.50 and §51.53 of this chapter as analyzed and evaluated in the NRC record of decision, and will identify the obligations of the licensee in the environmental area, including, as appropriate, requirements for reporting and recordkeeping of environmental data, and any conditions and monitoring requirement for the protection of the nonaquatic environment. These conditions are derived from information contained in the environmental report and the supplement to the environmental report. (See Supporting Statement for 10 CFR Part 51, OMB Clearance 3150-0021.)

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

A. JUSTIFICATION

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

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

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

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

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

annual operating reports, and special reports are typically in research and test reactor TS. Typically an annual operating report is included. Topics in the annual operating reports for research and test reactors are determined by the individual licensee's TS; topics include: a summary of reactor operating experience and the hours the reactor was critical, unscheduled shutdowns and corrective actions, safety-significant preventive and corrective maintenance, major changes in the facility and procedures, reviews of experiments, a summary of the nature and amount of radioactive effluents released, a summary of environmental surveys performed outside the facility, and a summary of excessive radiation exposures.

a. Radioactive Effluent Reports

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

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

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

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

b. Startup Report

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

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

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

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

c. Sealed Source Leakage Report

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

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

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

conditions could be unknowingly deficient.

d. Monthly Operating Reports (Now Quarterly Reports

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

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

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

e. Non-Routine Environmental Reports

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

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

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

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

f. Annual Environmental Operating Report

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

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

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

g. Annual Radiological Environmental Operating Report

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

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

irreversible damage are detected by the monitoring, the report provides an analysis of the problem and a planned course of action to alleviate the problem.

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

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

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

h. Occupational Radiation Exposure Report (ORER)

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

i. Special Reports

---

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

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

Examples of Special Reports are:

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

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

(2) PAM Report for Nuclear Power Plants

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

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

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

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

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

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

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

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

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

k. Recordkeeping Requirements

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

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

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

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

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

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

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

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

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

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

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

3. Records of radioactive shipments.

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

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

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

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

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

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

The following records are generally required to be retained for the duration

of a typical operating license:

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

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

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

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

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

6. Records of reactor tests and experiments;

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

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

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

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

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

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

13. Records of secondary water sampling and water quality;

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

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

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

17. Records of steam generator tube surveillance.

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

2. Agency Use of Information

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

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

3. Reduction of Burden Through Information Technology

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

4. Effort to Identify Duplication and Use Similar Information

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

5. Effort to Reduce Small Business Burden

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

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

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

7. Circumstances which Justify Variation from OMB Guidelines

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

8. Consultations Outside the NRC

The 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 protectled in accordance with NRC regulations at 10 CFR9.17(a) and 10 CFR 2.390(b).

11. Justification for Sensitive Questions

The subject regulations do not request sensitive information.

12. Estimated Industry Burden and Burden Hour Cost

Reporting Burden

Reporting burden is estimated below. The attached Tables reflect this burden applied to nuclear power plants that have converted to ISTS, to nuclear power plants that have not converted, to research and test reactors, and to permanently

shutdown reactors. While a few plants will not have totally converted to the ISTS during the clearance period, most plants will have adopted the revised reporting and recordkeeping requirements in the ISTS through line item improvements (e.g. TSTF-369). For ease of burden calculation for the clearance period, the burden has been calculated based on an assumption of 100 converted and 4 unconverted operating power plants and 63 converted and 2 unconverted sites.

a. Radioactive Effluent Reports

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

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

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

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

b. Startup Report

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

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

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

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

c. Sealed Source Report

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

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

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

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

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

d. Monthly Operating Report (MOR)

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

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

The burden estimate is significantly reduced when contrasted with the previous estimate of 50 hours/month. Formerly, each plant sent a report to the NRC every month (e.g. ML061730210) that listed critical hours, generator on-line hours, shutdown hours, net power generation, plus any

shutdowns and the reasons for the shutdowns. Now, the reports are taken from data complied for the reactor oversight program, and are no longer provided directly to the NRC, so the data compilation time and regulatory overhead associated with the reports are reduced.

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

e. Non-Routine Environmental Report

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

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

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

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

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

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

f. Annual Radiological Environmental Operating Report

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

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

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

g. Annual Non-Rad Environmental Operating Report

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

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

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

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

h. Occupational Radiation Exposure Report

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

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

For the 15 plants being decommissioned, the preparation time is estimated to be 20 hours per report The total annual burden is thus estimated to be 300 hours (20 hours/plant x 15 plants). The total number of reports is 15.
The estimated burden for operating non-power reactors is 10 hours preparation for each facility and for each permanently shutdown research and test reactor the preparation time is estimated at 5 hours (10 hours

preparation x 33 operating non-power reactors + 5 hours x 16 permanently shutdown research and test reactors = 410 total burden hours). The total number of reports is 49 (33 + 16 = 49).

i. Special Reports

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

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

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

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

j. Core Operating Limits Report (COLR)

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

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

Industry Reporting Burden and Cost

The data above are summarized in Table 1. The total industry reporting burden for nuclear power plants and research and test reactors is 154,815 hours for a total of approximately 505 reports (monthly operational reports submitted to industry for incorporation into the NRC quarterly report are not counted -- instead it is treated as four total reports to the NRC). At an hourly rate of $217, the total cost is $33,594,855.

The number of reports is significantly reduced from 1,899 reports to 505 reports

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

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

Recordkeeping Burden and Cost

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

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

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

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

Total Industry Burden and Cost

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

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

In these estimates, the NRC assumes that 104 operating (at 65 sites) and 15

permanently shutdown nuclear power reactors and 33 operating and 16 permanently shutdown research and test (non-power) reactors are affected by the provisions of the various reporting and recordkeeping requirements that NRC approves as part of the TS submitted pursuant to 10 CFR 50.36 and 10 CFR 50.36a.

13. Estimate of Other Additional Costs

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

14. Estimated Annualized Cost to the Federal Government

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

a. Radioactive Effluent Report

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

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

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

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

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

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

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

b. Startup Reports

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

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

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

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

c. Sealed Source Reports

Sealed Source Reports are not required to be submitted by plants that have converted to the ISTS. Plants that have not converted are required to submit this report. Research and test reactors submit about one

report/year, as do permanently shutdown reactors.

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

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

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

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

d. Monthly Operating Report

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

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

e. Non-routine Environmental Report

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

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

No reports from permanently shutdown reactors are anticipated.

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

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

Radiological Environmental Operating Reports or special reports.

f. Annual Radiological Environmental Operating Report

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

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

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

g. Annual Non-Rad. Environmental Operating Report

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

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

h. Occupation Radiation Exposure Report

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

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

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

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

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

i. Special Reports

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

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

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

j. Core Operating Limits Report (COLR)

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

A reload analysis has to be done for each cycle and TS values, if they

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

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

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

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

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

15. Reasons for Changes in Burden or Cost

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

1) more precise estimates have been made:

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

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

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

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

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

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

The hourly rates increased from $156 to $217.

16. Publication for Statistical Use

The collected information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.

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

	No. Plants/Sites Affected						Burden for Each Type						
Report	**All Power Types**	**Conv.**	**Non-Conv.**	**Research & Test Reactors**	**Shutdown Power**	**Shutdown Research & Test Reactors**	**All Power Types**	**Conv.**	**Non-Conv.**	**Research & Test Reactors**	**Shutdown Power**	**Shutdown Research & Test Reactors**	**Total Burden**
Exceed Design	3						50						150
Annual Effluent	104			33	15	16	140			70	35	20	17,715
Start-Up	0		2	1					140	100			380
Sealed Source	0		0	1	1	*				10	10	*	20
Monthly Operating	104						60						6,240
Non-Routine Environmental			2		0				50		5		100
Annual Radiological	65			33	15	16	1,400			200	700	100	109,700
Annual non-rad Environmental Operating	65				15		60				60		4,800
ORER	0			33	15	16	0			10	20	5	710
Special Report	50**						300**						15,000
Core Operating Limits	0	0	0	0	0	0							0
Total Burden													154815
Recordkeeping													
Recordkeepers	104			33	15	16	2,080			80	208	8	222,208
Total Burden													377,023

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

Table 2
Federal Burden for Nuclear Power Plants
and Research & Test Reactors

	No. Plants/Sites Affected						Burden for Each Type						
Report	**All Power Types**	**Conv.**	**Non-Conv.**	**Research & Test Reactors**	**Shutdown Power**	**Shutdown Research & Test Reactors**	**All Power Types**	**Conv.**	**Non-Conv.**	**Research & Test Reactors**	**Shutdown Power**	**Shutdown Research & Test Reactors**	**Total Burden**
Exceed Design	3						40						120
Annual Effluent	104			33	15	16	8			1	2	0.5	903
Start-Up			2	1					8	8			24
Sealed Source			0	1	1	*				1	1	*	2
Monthly Operating	Combined 104-plant report						8 hrs per quarter						32
Non-Routine Environmental			2		0				2		2		4
Annual Radiological	65			33	15	16	8			4	2	1	698
Annual non-rad Environmental Operating	65				15		0				0		0
ORER	0			33	15	16	0			1	10	0.5	191
Special Report	50**						4**						200
Core Operating Limits	0	0	0	0	0	0							0
Total Burden													2174

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