Section 1

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

10 CFR 50.30, 50.33, 50.34, 50.54(bb),
50.55(b), 50.55(d), 50.59(c), 50.74, 50.80, 50.90, 50.91(a) and (b)
50.68

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.

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

Additionally, 10 CFR Part 52 (see OMB Clearance 3150-0151) provides for issuance of early site permits, standard design certifications, and licenses which combine construction permits and conditional operating licenses for commercial nuclear power reactors. These licensing procedures are options to the two-step licensing process in 10 CFR 50, which provides for a construction permit and an operating license. Thus, Part 52 often incorporates by reference information collection requirements set forth in 10 CFR Part 50 for construction and operating license applicants.

The section of 10 CFR Part 50 that addresses each category of information for construction permit and operating license applications and NRC's detailed need within each category of information is outlined below. No power reactor applications for construction permits or operating licenses are anticipated during the next three years. No applications for design certification pursuant to Part 52 are anticipated during the next three years. One non-power reactor application for an operating license is placed within the next 3 years. Such applications are expected to require 10,000 hours of license applicant resources and 4,000 hours in NRR staff resources over a 2-year period. No construction permit applications are expected for non-power reactors.

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1. Construction Permit

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

Contents of Applications:

a. General information (Sections 50.33, 50.33(f) and Appendix C, Sections I and II).

This information identifies the applicant and provides details about the applicant's financial qualifications.

Section 50.33(f) 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 outlines 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.

Information required for antitrust review also must be included in the construction permit application. The need for such information is addressed in Item 3 below.

b. Safety information (Sections 50.34(a), 50.34a, 50.34a(a), 50.34a(b), Appendix B, Appendix E).

Safety information is provided by the applicant at the construction permit stage in the Preliminary Safety Analysis Report (PSAR). Section 50.34(a) outlines the minimum information that is necessary in the PSAR to permit the NRC to perform a safety evaluation. 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 (Part 33 Supporting Statement) or 10 CFR Part 100 (OMB Clearance 3150-0093), respectively.) The PSAR also discusses situations and the safety features which will be provided to prevent accidents or, if they should occur, to mitigate their effects on both the public and the facility's employees.

The principal features of the staff's safety review of the information provided in the PSAR by the applicant 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 (Apendix 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).

The NRC expects to complete reviewing safety analysis reports under 10 CFR 50.34 provisions for the Westinghouse AP600 design. No other design certification applications are either under review or anticipated.

c. Environmental Information

An Environmental Report, which provides a basis for the staff's evaluation of the environmental impact of the proposed plant, is specified as a requirement of the application for a construction permit in Section 50.30(f) and is justified in the OMB clearance for 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions" (3150-0021).

d. 50.55(b), Construction Completion

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 licensee will be required to meet the regulations specified in 50.55(b) over the next 3 years.

2. Operating License

Pursuant to 10 CFR 50.55(d), at or about the time of completion of the construction or modification of the facility, the applicant must file any additional information needed to bring the original application 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).

Section 50.30(d) provides for the filing of an application for an operating license. The information provided in this application is essentially an update of the information categories (i.e., general, safety, and environmental) previously submitted in the application for a construction permit.

a. General information (Section 50.33).

Section 50.33(f) also 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 safe condition. The applicant

shall also indicate the source(s) of funds to cover these costs. An application to renew or extend the term of an operating license must include the same financial information as is required in an application for an initial license.

b. Safety information (Sections 50.34(b), 50.34(c), 50.34(d), 50.34a(c), Appendix B, and Appendix E).

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

Pertinent details on the final design of the facility, including final containment design of the nuclear core and waste handling system; the applicant's latest plans for operation of the facility, as well as substantive procedures for coping with emergencies (Appendix E provides elements of emergency planning to be considered in the FSAR); the quality assurance program (Appendix B requires that information pertaining to managerial and administrative controls necessary to 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 50.34a(c).

c. Physical Security Plan (Section 50.34(c)).

This plan describes the physical program that will be provided in accordance with the requirements of Section 50.34(c) to assure that the plant will be sufficiently protected against acts of sabotage that could cause releases of radioactive materials in amounts sufficient to represent a hazard to the public health and safety. Also see Supporting Statement for 50.54(p), Part 4 to this 10 CFR 50 OMB package.

Safeguards Contingency Plan (Section 50.34(d)).

The Safeguards Contingency Plan, as provided for in 10 CFR 50, will provide a structured, orderly, and timely response to safeguards contingencies and will be an important segment of NRC's contingency planning programs. Licensee safeguards contingency plans will result in organizing licensees' safeguard resources in such a way that, in the unlikely event of a safeguards contingency, the responding participants will be identified, their several responsibilities specified, and their responses coordinated.

d. Environmental Information

Justified in the Supporting Statement for 10 CFR Part 51, OMB Clearance No. 3150-0021.

Section 50.54(bb) 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.

Oyster Creek is projected to become a permanently shutdown power reactor during the FY01-03 period. Therefore, there is some likelihood that this facility will have to provide information required by 50.54(bb) during the clearance period.

3. 50.33a and Appendix L Information Requested by the Attorney General for Antitrust Review

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 atomic energy which appears to violate or to tend toward violation of antitrust laws or to restrict competition in private

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

4. 50.34(f) TMI Requirements

Requires that applications for operating licenses contain the Three Mile Island related requirements relative to the way the requirements will be implemented or satisfied prior to issuance of an operating license. These requirements include operational safety features, siting and design, and emergency preparedness, and are intended to provide substantial, additional protection in the operation of nuclear facilities based on experience from the accident at Three Mile Island and the various studies and investigations of the accident. Estimated burden for this requirement is zero because the NRC does not anticipate any submittal of an application for an operating license during the duration of this clearance nor does it anticipate submittal of further applications for design certification during the clearance period.

5. 50.59(c), 50.90, 50.91(a) and (b), Application for Amendment of License

The 10 CFR Parts 50.59(c), 50.90, 50.91(a) and (b) 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).

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 37, the number of permanently shutdown power plants will be 19, 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**, **75 NRC hours/amendment** and **$141/staff hour**, respectively), and the average number of license amendments are: **10.5/unit/year** for "unconverted" power reactor licenses, **7/unit/year** for "converted" 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 **$1.75M per unit**, which is comparable to 12,500 hours at a cost of $141 per hour.

The number of plants converted to the improved STS are expected to increase from 56 units at the beginning of FY 2001 to 86 units in FY 2003, as summarized on the tables below.

6. 50.68

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	Unconverted Licenses		Non-Power Licenses		Conversions		Converted Licenses		Permantly Shutdown				TOTAL Burden
	Units	Burden[1] (hrs)	Units	Burden[2] (hrs)	Units	Burden[3] (hrs)	Units	Burden[4] (hrs)	Power Units	Burden[5] (hrs)	Non-power Units	Burden[7] (hrs)	
2001	48	37,800	37	4,163	14	20,300	56	29,400	19	2,138	15	1125	94,926
2002	34	26,775	37	4,163	9	13,050	70	36,750	19	2,138	15	1125	84,001
2003	25	19,688	37	4,163	7	10,150	79	41,475	19	2,138	15	1125	78,739
												Total Burden	257,666
												Annualized Burden	85,889

1. 10.5 amendments per unit per year, 75 staff-hours per amendment.
2. 1.5 amendments per unit per year, 75 staff-hours per amendment.
3. 1450 staff-hours per unit.
4. 7 amendments per unit per year, 75 staff-hours per amendment.
5. 1.5 amendments per unit per year, 75 staff-hours per amendment.
6. 1 amendment per unit per year, 75 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 (14 units x $30K + 9 units x $30K + 7 units x $30K = $900,000 ÷ 3), this cost is $300,000. Thus, the total annualized Federal cost is $12,410,349 (85,889 hours x $141/hour + $300,000 contractor cost).

Industry

FY	Unconverted Licenses		Non-Power Licenses		Conversions		Converted Licenses		Permantly Shutdown				TOTAL Burden
	Units	Burden[1] (hrs)	Units	Burden[2] (hrs)	Units	Burden[3] (hrs)	Units	Burden[4] (hrs)	Power Units	Burden[5] (hrs)	Non-power Units	Burden[7] (hrs)	
2001	48	201,600	37	22,200	14	175,000	56	156,800	19	11,400	15	6,000	573,000
2002	34	142,800	37	22,200	9	112,500	70	196,000	19	11,400	15	6,000	490,900
2003	25	105,000	37	22,200	7	87,500	79	221,200	19	11,400	15	6,000	453,300
												Total Burden	1,517,200
												Annualized Burden	505,733

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

Total annualized industry cost @ $141/hour is $71,308,400 (505,733x$141).

8. 7 50.74, Licensee Notification to NRC

Section 50.74 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 $28,905 ($141 x 205) each. (Note that notifications involving 10 CFR 55.25 are cleared under OMB Clearance No. 3150-0024.)

7.8 50.80(b), Application for Transfer of Licenses

Section 50.80(b) 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 applications involving mergers and restructurings. 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.

Summary of Annual Burden and Cost, Section 50.80(b)

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 $141 = $521,700.

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 $141 = $1,043,400

A. JUSTIFICATION

1. Need for 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 and 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.

Before a company can build a nuclear power plant at a particular site, it must obtain a construction permit from the NRC. Subsequently, the company must obtain an operating license from the NRC before it can operate the plant. The decision by NRC as to whether to approve a company's application for a construction permit or an operating license is based largely on the staff's detailed review of the information provided by the company as part of its application. Information provided by the applicant as part of the application is crucial to the licensing process as it provides NRC with the information it needs to make a decision with regard to the proposed plant's impact on the public's health and safety. Information required by the NRC to be included in each application for a construction permit or an operating license is addressed in the specific 10 CFR Part 50 sections for which this Supporting Statement, including those contained in Parts 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, and there is a greater likelihood that the staff may regard the report as incomplete.

Section 50.12 requires.....

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.

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 is implementing it's "ADAMS" electronic documents system, 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 and to operate production or utilization facilities 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 44 operating and 11 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

Notice of opportunity for public comment on this information collections will be 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

None.

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 remains substantially the same. No construction permits are expected during this clearance period. Labor rates (hours/amendment) and number of expected amendments have been updated based on recent data. A slight downward trend in the number of licensing activities is expected as additional licensees convert to STS . Although STS conversions are occurring at a slower rate then previously estimated. The hourly rate for labor has increased. In the aggregate, all of these factors have combined to slightly decrease for the next 3 years.

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.

Enclosure:
Summary Table (Part 1)

Part 1
SUMMARY TABLE
Application for Construction Permit or Operating License

Subject	Annual Burden Hours Per Respondent	Number of Responses Annually	Annual Recordkeeping Burden Hours	Annual Reporting Burden Hours	Total Annual Burden Hours	Annual Cost to Industry	Annual Cost to Federal Government
50.30, 50.33, 50.34 50.54(bb), et al	5000	1	0	0	5000	$705,000	$282,000
50.55b, Const. permit ext.	0	0	0	0	0	0	0
50.33a and Appendix L	0	0	0	0	0	0	0
50.34(f), TMI	0	0	0	0	0	0	0
50.59(c), 50.90 and 50.91 (a) and (b), license amend. appl.	526	962	50,573	455,160	505,733	$71,308,400	$12,410,349
50.74, licensee notification to NRC	1	205	21	184	205	$28,905	$28,905
50.80(b) transfer of license	435	17	0	7,400	7,400	$1,043,400	$521,700
Totals:	437	1,185	50,594	462,744	518,338	$73,085,658	$13,242,954

From: Ram Subbaratnam
To: John Zwolinski
Date: Thu, Feb 18, 1999 12:30 PM
Subject: Disposition of a "gold-oldie" 70.24 exemption fro HB Robinson 2

John:
Please recall the dialogue my licensee i.e H.B.Robinson 2 had with you personally when they visited with us last Thursday (2-11-99). As you may recall, they briefly flagged their concerns in regards to compliance with the analysis required for showing subcriticality safety implied in the new 50.68 rule. The objective here is to see, if they could take advantage of the new 50.68 rule and withdraw the 70.24 request. Please also see additional information from my licensee(attachment) that gives practical examples of how the new rule 50.68 is difficult,, if not impossible to comply with, specifically for the incore storage of fresh fuel with 0 ppm Boron, as the revised rule stipulates.

I had three rounds of conversations with George Wunder(who had flagged this concern earlier at the time of rule making and that it is going to create backlash), and with Michael Jamgochian & Laurence Kopp (Staff involved with Rule making) plus a round of conversation with case attorney Geary Mizuno from OGC (Ms. Janice Moore was not available this week). Staff's current view is that, it is obvious & common sense that 50.68 was written for out-of-core fuel storage, handling & movement situations and not meant for in core analysis. The rule does not say this explicitly. Th case attorney's view is that if the rule is not clear, the initiative to revise will fall to staff to do rectify it. In the meanwhile, I ought to process the exemption under 70.24 as requested by HB Robinson 2 currently - which really moots why 50.68 was written ?

I need some Management Direction how to proceeed ?

Ram Subbaratnam
Project Manager
HB Robinson 2
415-1478

CC: Cecil Thomas, Geary Mizuno, George Wunder, Jose...

From: "Chernoff, Harold" <harold.chernoff@cplc.com>
To: "'Ram Subbaratnam'" <rxs2@nrc.gov>
Date: Fri, Feb 12, 1999 4:38 PM
Subject: RE: 50.68 first paragraph - Need some explanation

10 CFR 50.68(b)(1) currently requires that procedures prohibit the handling and storage of more fuel assemblies than have been determined to be subcritical under the most adverse moderation conditions with unborated water. What this means is that for all conditions and locations where fuel is handled and stored the assemblies must be subcritical with unborated water. The best way to illustrate the problem that this presents is by giving some actual examples of existing situations.

First, fuel stored in the spent fuel pool is analyzed taking credit for 0 ppm boron. Therefore, we can comply with the rule for storage in the spent fuel pool without reanalyzing. However, for spent fuel pool handling 1000 ppm boron is assumed to be present in the pool. It is not likely that the handling condition cannot be successfully evaluated with 0 ppm boron (I do not know of anyone that has done an analysis for handling conditions with 0 ppm boron).

The second and probably clearest example is handling and storage of fuel in the reactor cavity and reactor vessel. The Core Operating Limits Report (COLR) requires 1950 ppm boron in the reactor vessel during refueling. With 0 ppm boron in the reactor vessel, criticality would be possible during fuel loading and with assemblies merely stored in the reactor vessel, even with control rods in the fuel assemblies. Typically, core criticality is established at approximately 1400 ppm boron with all control rods out. That is to say, the core is expected to be critical at about 1400 ppm boron with all control rods out (control rods are equivalent to roughly 300 ppm boron during refueling. As you can see, it would not be possible to have the core subcritical with 0 ppm boron.

I hope this gives you a couple of examples to discuss with the technical contact for the rule to clarify our situation. Let me know if you need more information.

Thanks

HKC

From: Ram Subbaratnam[SMTP:rxs2@nrc.gov]
Sent: Friday, February 12, 1999 11:29 AM
To: harold.chernoff@cplc.com
Subject: 50.68 first paragraph - Need some explanation

Harold:
I need some additional education for myself to be knowledgeable and talk to the lawyers on what specific objections that Robinson 2 has in regards to the existing exemption request under 70.24. The revised 50.68 rule says: " 1) Plant procedures shall prohibit the handling and storage at any one time of more fuel assemblies than have been determined to be safely subcritical under the most adverse moderation

conditions feasible by unborated water.". And we understood that the word "storage" is unreal in that, it would make storage of more than two fresh fuel bundels make the Rx critical, is It ? I could not quite catch the drift of what practical importance or situation that would make this difficult for Licensees . If you would arm me with a little explanation, I can talk to OGC on your behalf as to how best we can salvage or come up with directions for a new request or whatever ? Send me an E-mail reply.

I thought , yesterday's meeting was mutually very productive from scheduling point of view and I want your Management to know that.

Talk to you

Ram Subbaratnam
PM HB Robinson 2
US NRC,
(301)-415-1478