

## Section 27

### FINAL SUPPORTING STATEMENT FOR PERIODIC UPDATE OF THE FINAL SAFETY ANALYSIS REPORT (FSAR)

10 CFR 50.71(e), 50.71(f), 50.71(e)(1), 50.71(e)(2), 50.71(e)(3), 50.71(e)(4),  
50.71(e)(5), 50.71(e)(6), and 10 CFR 50.68(b)(8)

#### DESCRIPTION OF THE INFORMATION COLLECTION

10 CFR 50.71(e) and 10 CFR 50.71(f) require each licensee of a nuclear power reactor to periodically update the Final Safety Analysis Report (FSAR) originally submitted as part of the application for the operating license, to assure that the information included in the FSAR contains the latest material developed. 10 CFR 50.71(e) is applicable to power reactors licensed to operate. 10 CFR 50.71(f) states that provisions of this section apply to power reactor licensees that have submitted the certification of permanent cessation of operations required under 10 CFR 50.82(a)(1)(i). This submittal must contain all of the changes necessary to reflect information and analyses submitted to the Commission by the licensee, or prepared by the licensee pursuant to Commission requirement, since the submission of the original FSAR or the last updated FSAR. The updated FSAR must be revised to include the effects of all changes made in the facility or to procedures as described in the FSAR; all safety analyses and evaluations performed by the licensee, either in support of approved license amendments or in support of conclusions that changes did not require a license amendment in accordance with Section 50.59(c)(2); and, all analyses of new safety issues performed by, or on behalf of, the licensee at Commission request.

10 CFR 50.71(e)(1) requires licensees to submit revisions containing the updated FSAR information on a replacement-page basis, accompanied by a list which identifies the current pages of the FSAR following page replacement.

10 CFR 50.71(e)(2) requires that FSAR-update submittals include a certification by a duly authorized official of the licensee that either the information accurately presents changes made since the previous submittal, necessary to reflect information and analyses submitted to or required by the Commission, or that no such changes were made; and an identification of changes made under the provisions of 10 CFR 50.59 but not previously submitted to the Commission.

10 CFR 50.71(e)(3) requires a revision of the original FSAR containing those original pages that are still applicable plus new replacement pages to be filed with 24 months of either July 22, 1980, or the date of issuance of the operating license, whichever is later, and shall bring the FSAR up to date as of a maximum of 6 months prior to the date of filing the revision.

10 CFR 50.71(e)(4) requires the filing of revisions annually or 6 months after each refueling outage provided the interval between successive updates to the FSAR does not exceed 24 months. The revisions must reflect all changes up to a maximum of 6 months prior to the date of filing. For nuclear power reactor facilities that have submitted 10 CFR 50.82(a)(1) certifications, subsequent revisions must be filed every 24 months.

10 CFR 50.71(e)(5) requires each replacement page to include both a change indicator for the area changed, e.g., a bold line vertically drawn in the margin adjacent to the portion actually changed, and a page change identification (date of change or change number or both).

10 CFR 50.71(e)(6) requires licensees to retain the updated FSAR until termination of the license.

10 CFR 50.68(b)(8) requires licensees to comply with eight specific criticality accident requirements as an alternative to maintaining a monitoring system capable of detecting a criticality as described in 10 CFR 70.24. Should licensees elect to comply with 10 CFR 50.68(b), they are required to indicate that it has chosen to comply with 10 CFR 50.68 in lieu of 10 CFR 50.74 as part of its FSAR update (in accordance with 10 CFR 50.71(e)).

## A. JUSTIFICATION

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

The volume of written information in the docket files of operating power reactors is large and is increasing at a rapid rate. By the time a power reactor has been in operation for a few years, much of the information in the original FSAR has been modified, supplemented or superseded. This comes about by the applicant's submittal of designs and analyses supporting requested license amendments or technical specification changes, replies to regulatory requests, incident reports, and reports describing design and procedural changes. Consequently, without an updated FSAR, it would be difficult for anyone, including an NRC staff member, the licensee, or the public, to be certain of the current status of a facility's design and supporting analyses.

To properly execute their respective responsibilities, the NRC staff and the licensee must work with accurate information. The updated FSAR is a reference document used in recurring safety analyses performed by the licensee, the Commission, and other interested parties. Thus, it is essential that supplements and amendments to the original information be appropriately incorporated into the original FSAR to create a single, complete, and integrated document. This document serves as the baseline for future changes.

In general, it is not difficult to identify correct information for newly-licensed facilities, but it would become a problem in a few years without this update requirement. In addition, as new staff members and licensee employees are assigned to plants with extensive licensing history and are involved in analyses and decisions affecting facility operation, the possibility of error and risk to the public would increase without an accurate, updated, reference document.

10 CFR 50.30(a)(3) recognizes the update need by requiring that the applicant for a construction permit update its application, which includes the Preliminary Safety Analysis Report, to eliminate superseded information and provide an index of the updated application when an Atomic Safety and Licensing Board is appointed prior to public hearing. If an operating license hearing is held, the application must be updated at that time. After the operating license is issued, various sections of 10 CFR 50 (10 CFR 50.59, for example) require that additional safety analyses be

performed for individual facility changes that affect facility safety. The present regulations reflected in 10 CFR 50.71(e) require that such changes be incorporated into the FSAR.

All changes to the technical specifications are treated as license amendments and it is appropriate to have an updated FSAR available at all times. Additionally, safety evaluations, after operation of the facility has been initiated, required by proposed license amendments, technical specification changes and other reasons, warrant at least the same supporting documentation as does the hearing process.

## 2. Agency Use of Information

In addition to the needs discussed above, updated FSARs are used for a variety of other reasons such as:

- a. To evaluate proposed changes, tests or experiments made pursuant to 10 CFR 50.59.
- b. To support NRC staff reviews of license amendments.
- c. For operator training by licensees.
- d. For project manager training and orientation.
- e. A reference document for management and for safety review committees.
- f. By NRC staff to assist in inspections to ensure that licensees are maintaining the basis upon which their plants are licensed.
- g. By licensing examiners to prepare exams for facility operators.
- a. In planning emergency responses.
- i. To evaluate operating data by NRC staff.

The NRC staff utilizes the updated information supplied by licensees in response to the reporting required by 10 CFR 50.71(e) as a primary reference source to be employed during the numerous safety studies undertaken by licensees, the Commission, and other interested parties.

## 3. Reduction of Burden Through Information Technology

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

1. Effort to Identify Duplication and Use Similar Information

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

1. Effort to Reduce Small Business Burden

This information collection only involves licensees of nuclear power reactors and, therefore, does not affect small business.

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

If the collection is not conducted or is conducted less frequently, NRC staff members and licensee employees would not have a single, organized up-to-date reference document for the plant. The NRC would be unable to effectively carry out its regulatory responsibilities.

1. Circumstances Which Justify Variation from OMB Guidelines

The updated FSAR must be retained until the operating license is terminated because, in order for the NRC to ensure the health and safety of the public at all times, the staff must be certain of the current status of a facility's design and supporting analysis.

8. Consultations Outside the NRC

Opportunity for public comment on the information collection requirements for this clearance package was published in the Federal Register on May 14, 2013 (78 FR 28244). No comments were received.

9. Payment or Gift to Respondents

Not applicable.

10. Confidentiality of Information

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

11. Justification for Sensitive Questions

This information collection does not require sensitive information.

12. Estimate of Annualized Burden and Burden Hour Cost

Since operating nuclear power reactors may submit updated FSARs annually or 6 months after each refueling outage, approximately 69 of 104 licensees (or respondents) will be affected by this reporting requirement annually. It is estimated that there will be one response per respondent. The average burden per licensee for the updating is estimated to be 1,000 hours. Therefore, the annual burden for licensees of operating plants is 69,000 hours (69 x 1000).

Since updated FSARs for nuclear power reactors that have ceased operation must be filed every 24 months, approximately 7 of 14 licensees (or respondents) will be affected by this reporting requirement annually. It is estimated that there will be one response per respondent. The average burden per licensee of these reactor facilities is estimated to be 250 hours. Therefore, the annual burden for licensees of permanently shutdown plants is 1,750 hours (7 x 250).

A total estimated 76 responses (76 respondents x 1 response per respondent) yields a total estimated annual burden to licensees of 70,750 hours (69,000 + 1,750 hours) at a cost of \$19,385,500 (70,750 hours x \$274). Staff estimates that of this burden, 63,675 hours are attributable to reporting (approximately 90 percent of the total burden) and 7,075 hours are attributable to recordkeeping (approximately 10 percent of the total burden).

TOTAL BURDEN/COST: 70,750 hours (63,675 hrs reporting plus 7,075 hrs recordkeeping)/ \$19,385,500

TOTAL RESPONDENTS: 76

TOTAL RESPONSES: 152 (76 responses + 76 recordkeepers)

13. Estimate of Other Additional Costs

The NRC has determined that 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 0.0004 times the recordkeeping burden cost. Because the recordkeeping burden is estimated to be 7,075 hours, the storage cost for this clearance is \$775 (7,075 hours x 0.0004 x \$274/hour).

14. Estimated Annualized Cost to the Federal Government

The NRC anticipates that approximately 10 staff hours per submittal will be involved annually in the handling and document control/filing systems of the updated FSAR for each operating nuclear power reactors. Thus, annual estimated cost to the Federal Government for these facilities is expected to be \$189,060 (10 staff hrs x 69 plants = 690 staff hours; \$274/hr x 690 staff hours = \$189,060). The estimated Federal burden for permanently shutdown reactors is 2 staff hours per plant. The annual estimated cost for these facilities is thus \$3,836 (2 hours x 7 plants = 14 hours; \$274/hr x 14 = \$3,836). The total annual cost to the Federal government is therefore \$192,896 (\$189,060 + \$3,836).

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

15. Reasons for Changes in Burden or Cost

The overall burden has remained the same. There was a change in cost because the hourly rate increased from \$257/hr to \$274/hr.

16. Publication for Statistical Use

The information is not published for statistical purposes.

17. Reason for Not Displaying the Expiration Date

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

18. Exceptions to the Certification Statement

None.

B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

Not applicable.