

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

Periodic Updating of Final Safety Analysis Reports

AGENCY: U.S. Nuclear Regulatory Commission

ACTION: Final rule

SUMMARY: The Nuclear Regulatory Commission is amending its regulations to require each person licensed to operate a nuclear power reactor to submit periodically to the Commission revised pages for its Final Safety Analysis Report (FSAR). These revised pages will indicate changes which have been made to reflect information and analyses submitted to the Commission or prepared as a result of Commission requirement. The amendment is being made to provide an updated reference document to be used in recurring safety analyses performed by the licensee, the Commission, and other interested parties.

EFFECTIVE DATE: **JUL 22 1980**

NOTE: The Nuclear Regulatory Commission has submitted this rule to the Comptroller General for such review as may be appropriate under the Federal Reports Act, as amended, 44 U.S.C. 3512. The date on which the reporting requirement of this rule becomes effective, unless advised to the contrary, accordingly, reflects inclusion of the 45-day period which that statute allows for such review (44 U.S.C. 3512(c)(2)).

FOR FURTHER INFORMATION CONTACT: Mr. Morton R. Fleishman, Office of Standards Development, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, telephone 301-443-5921.

SUPPLEMENTARY INFORMATION: On November 8, 1976, the Nuclear Regulatory Commission published in the FEDERAL REGISTER (41 FR 49123) a notice of proposed rule making inviting written suggestions or comments on the proposed rule by December 23, 1976. A notice of correction and extension of comment period was published in the FEDERAL REGISTER on December 27, 1976 (41 FR 56204) in which the comment period was extended to January 26, 1977. The notices concerned proposed amendments to 10 CFR Part 50, "Licensing of Production and Utilization Facilities," to require each applicant for, or holder of, a power reactor operating license which would be or was issued after January 1, 1963 to submit periodically to the Commission revised pages for its Final Safety Analysis Report (FSAR). These revised pages would indicate changes made in the facility or the procedures for its operation and any analyses affected by these changes. Thirty-one persons submitted comments regarding the proposed amendments. The commenters could be roughly divided into three groups with seventeen supporting the rule with comments, eleven opposed to the rule, and three neutral. Copies of the comments received may be examined in the Commission's Public Document Room at 1717 H Street, NW., Washington, D.C.

The substantive areas of comment can be categorized generally as follows:

1. Clarification of Rule
2. Applicability of Rule
3. Content of FSAR

4. Scope of Rule
5. Timing of Submittals
6. Relation of Rule to Other Rules and Reports
7. Legal Status of Updated FSAR
8. Cost/Benefit of Rule

In response to the comments received, the Commission is modifying the rule to (a) extend its applicability to all power reactors licensed to operate, (b) exclude applicants for operating licenses, (c) clarify the wording of the rule, (d) reduce its impact on power reactor licensees by relaxing some of the time requirements, and (e) require the initial revision to be a complete FSAR.

When the proposed rule was published for public comment, its applicability was limited to those plants licensed after January 1, 1963 in order to exempt five (5) older facilities. The Commission believed that it would not be feasible for these licensees to implement the rule because there is no integrated document comparable to an FSAR for their facilities. Since publication of the proposed rule, the Commission has initiated a program in which the NRC staff is making a systematic safety evaluation of eleven (11) nuclear power facilities licensed for operation before 1972. The purpose of this systematic evaluation program (SEP) is to determine and document the degree to which the eleven (11) facilities meet current licensing requirements for new plants. Of the five (5) plants licensed prior to January 1, 1963 that are still licensed to operate, three (3) are included in the SEP. The remaining two (2) plants,\* which presently are shut down, will be subject to the provisions of the rule as long as their licenses authorize operation.

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\*The two facilities are Indian Point Unit No. 1 and Humboldt Bay Unit No. 3.

The licensees participating in the SEP probably will be requested to supply a considerable amount of information during the program. Requiring them, in addition, to update their FSARs could prove to be excessively burdensome and could result in duplication of reports. The information generated during the program and the manner in which it is collated will result in a completed FSAR at the conclusion of the program. For these reasons licensees of facilities being subjected by the NRC to a systematic evaluation program will not be required to comply with the provisions of this rule until they are notified by letter by the NRC's Director of the Office of Nuclear Reactor Regulation that, for their particular facility, the program has been completed. Because of the considerations just mentioned, that part of the proposed rule which limited the applicability to facilities licensed after January 1, 1963 has been deleted and the rule will apply to all power reactors licensed to operate.

The FSAR required to be updated by the rule is the original FSAR submitted as part of the application for the operating license. It would not include the subsequent supplements and amendments to the FSAR or the license that may have been submitted either in response to NRC questions or on the applicant's or licensee's own initiative following the original submittal. These various supplements and amendments must be appropriately incorporated into the original FSAR to create a single, complete and integral document. The initial revision to be filed should contain those pages from the originally submitted FSAR that are still applicable plus new replacement pages that appropriately incorporate the effects of supplements, amendments and other changes that have been made. This will result in a single, complete document being filed, that can then serve as the baseline for future changes.

Commenters have asked about the proper format to be used when making the FSAR submittal. Since the format of the FSAR is not covered by regulation, the rule does not specify a particular format. The NRC staff has provided guidance for the preparation of FSARs in Regulatory Guide 1.70, Revision 2, "Standard Format and Content of Safety Analysis Reports for Nuclear Power Plants." However, many FSARs were developed prior to any specific guidance on format. The format to be used for the FSAR revisions is the option of the licensee, but the Commission expects that the format will probably be the same as the format of the original FSAR. No analyses other than those already prepared or submitted pursuant to NRC requirements (either originally with the application, or as part of the operating license review process, or as required by § 50.59 or other NRC requirement, or to support license amendments) are required to be performed by the licensee because of this rule. However, analyses existing in the FSAR which are known to be inaccurate or in error as a result of new analyses performed by the licensee pursuant to NRC requirements, would have to be revised. Specialized studies provided in the FSAR, such as on volcanic hazards or quality assurance, should include the latest information that has been developed in response to NRC requirements. New analyses (i.e., analyses not previously included in FSAR) which were required during consideration of unreviewed safety questions,\* technical specification

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\* As defined in § 50.59(a)(2), "A proposed change, test, or experiment shall be deemed to involve an unreviewed safety question (i) if the probability of occurrence or the consequence of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report may be increased; or (ii) if a possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report may be created; or (iii) if the margin of safety as defined in the basis for any technical specification is reduced."

changes, or other licensing questions, may be incorporated as appendices or otherwise appropriately inserted within the FSAR.

Program type material that is referenced by the FSAR, such as the Quality Assurance Program or the Emergency Plan, should be referenced accurately. If such material has been revised or amended, the latest revision should be referenced. A description of physical changes to the facility should be included in the update after the changes have been approved for use and are operable. The level of detail to be maintained in the updated FSAR should be at least the same as originally provided. Minor differences between actual and projected population figures or other such changes in the site environment need not be reported unless the conclusions of safety analyses relative to public health and safety are affected and the licensee has prepared new analyses as a result of NRC requirements.

Commenters have questioned the relation of the proposed FSAR updating requirements to other reporting requirements such as the Annual Operating Report and § 50.59(b) reporting. It is not the Commission's intention to require submittal of duplicative reports. The Commission is eliminating the requirement for the Annual Operating Report. This will reduce significantly the reporting burden of licensees. There has been no requirement that § 50.59(b) reporting be part of the licensee's Annual Operating Report. This information generally has been included in the Annual Operating Report as a convenience, but it could have been submitted separately and the licensee still would have complied with § 50.59(b) which merely requires reporting "annually or at such shorter intervals as may be specified in the license." Furthermore, the report required under § 50.59(b) is only "a brief description of such changes,

tests, and experiments, including a summary of the safety evaluation of each." The § 50.59(b) reporting may not be detailed sufficiently to be considered adequate to fulfill the FSAR updating requirement. The degree of detail required for updating the FSAR will be generally greater than a "brief description" and a "summary of the safety evaluation." However, there is nothing that precludes submitting the § 50.59(b) report along with the FSAR update submittal and thus satisfy § 50.59(b) along with § 50.71(e). Parts of the FSAR submittal may be referenced by the § 50.59(b) report.

Several commenters have raised legal questions concerning the proposed rule including questions relative to the purpose of the rule, the implication concerning re-reviews, the status of completed hearings, and prior license approvals. The rule is only a reporting requirement to insure that an updated FSAR will be available. Submittal of updated FSAR pages does not constitute a licensing action but is only intended to provide information. It is not intended for the purpose of re-reviewing plants. Matters which have been considered previously during hearings will not be reconsidered as a result of the FSAR submittals. Thus, for example, approvals of license amendments and technical specification changes are independent of the FSAR updating process and once approved would not be subject to further consideration simply because the FSAR is updated. This, of course, does not preclude the reevaluation of previous positions based on new information or new considerations. The material submitted may be reviewed by the NRC staff but will not be formally approved. The new pages will be accepted as representing the licensee's position at the time of submittal and will be utilized in any subsequent reviews or NRC staff activities concerning that facility.

After consideration of the comments that were received and other factors, the Commission has adopted the amendment to Part 50 as set forth below.

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and section 553 of title 5 of the United States Code, the following amendment to 10 CFR Part 50 is published as a document subject to codification.

PART 50 - DOMESTIC LICENSING OF  
PRODUCTION AND UTILIZATION FACILITIES

Section 50.71 is amended by adding a new paragraph (e) to read as follows:

§ 50.71 Maintenance of records, making of reports.

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(e) Each person licensed to operate a nuclear power reactor pursuant to the provisions of § 50.21 or § 50.22 shall update periodically, as provided in paragraphs (e)(3) and (e)(4) of this section, 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. This submittal shall contain all 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, as appropriate, the last updated FSAR. The updated FSAR shall



be revised to include the effects of: all changes made in the facility or procedures as described in the FSAR; all safety evaluations performed by the licensee either in support of requested license amendments or in support of conclusions that changes did not involve an unreviewed safety question; and all analyses of new safety issues performed by or on behalf of the licensee at Commission request. The updated information shall be appropriately located within the FSAR.

(1) Revisions containing updated information shall be submitted on a replacement-page basis and shall be accompanied by a list which identifies the current pages of the FSAR following page replacement. One signed original and 12 additional copies of the required information shall be filed with the Director of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555.

(2) The submittal shall include (i) a certification by a duly authorized officer of the licensee that either the information accurately presents changes made since the previous submittal, necessary to reflect information and analyses submitted to the Commission or prepared pursuant to Commission requirement, or that no such changes were made; and (ii) an identification of changes made under the provisions of § 50.59 but not previously submitted to the Commission.

(3)(i) A revision of the original FSAR containing those original pages that are still applicable plus new replacement pages shall be filed within 24 months of either *JUL 22 1990* 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.

(3)(ii) Not less than 15 days before § 50.71(e) becomes effective, the Director of the Office of Nuclear Reactor Regulation shall notify by letter the licensees of those nuclear power plants initially subject to the NRC's systematic evaluation program that they need not comply with the provisions of this section while the program is being conducted at their plant. The Director of the Office of Nuclear Reactor Regulation will notify by letter the licensee of each nuclear power plant being evaluated when the systematic evaluation program has been completed. Within 24 months after receipt of this notification, the licensee shall file a complete FSAR which is up to date as of a maximum of 6 months prior to the date of filing the revision.

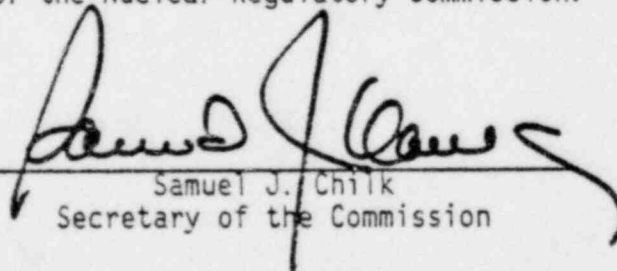
(4) Subsequent revisions shall be filed no less frequently than annually and shall reflect all changes up to a maximum of 6 months prior to the date of filing.

(5) Each replacement page shall 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).

(Sec. 161b., Pub. Law 83-703, 68 Stat. 948, Sec. 201, Pub. Law 93-438, 88 Stat. 1242 (42 U.S.C. 2201(b), 5841)).

Dated at Washington, DC this 1st day of May 1980.

For the Nuclear Regulatory Commission.

  
 Samuel J. Chilk  
 Secretary of the Commission