Compression

NUCLEAR REGULATORY COMMISSION [10 CFR Part 50]

DOMESTIC LICENSING OF PRODUCTION AND UTILIZATION FACILITIES

Technical Specifications for Nuclear Power Reactors

AGENCY: Nuclear Regulatory Commission.

ACTION: Advance Notice of Proposed Rulemaking.

SUMMARY: The Nuclear Regulatory Commission (NRC) is considering the adoption of changes to its regulations pertaining to technical specifications for nuclear power reactors. The changes would (1) establish a standard for deciding which items derived from the safety analysis report must be incorporated into technical specifications, (2) modify the definitions of categories of technical specifications to focus more directly on reactor operation, (3) define a new category of requirements that would be of lesser immediate significance to safety than technical specifications, and (4) establish appropriate conditions that must be met by licensees to make changes to the requirements in the new category without prior NRC approval. The Commission seeks written public comment on the changes to the regulation.

DATES: Comment period expires September 8, 1980.

ADDRESSES: Interested persons are invited to submit written comments and suggestions to the Secretary of the Commission, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Docketing and Service Branch.

Copies of comments received by the Commission may be examined in the Commission's Public Document Room at 1717 H Street, N. W., Washington, D. C.

FOR FURTHER INFORMATION CONTACT: Mr. J. Wetmore, Office of Nuclear Reactor Regulation, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, phone 301-492-7306.

SUPPLEMENTARY INFORMATION: Each license for operation of a nuclear power reactor, issued by the NRC, contains technical specifications which set forth the specific characteristics of the facility and the conditions for its operation that are required to provide adequate protection to the health and safety of the public.

Technical specifications cannot be changed by licensees without prior NRC approval.

Historical Background: Before 1968, 10 CFR Part 50, \$50.36, *Technical Specifications", required technical specifications to include "those significant design features, operating procedures, and operating limitations which were considered important in providing reasonable assurance that the facility would be constructed and operated without undue hazard to public health and safety." Technical specifications that were formulated in accordance with this regulation, as it was then written, generally contained more detailed design information than was considered to be necessary to assure safe reactor operation. These technical specifications proved to be difficult to organize, unduly restricted flexibility of reactor operation, and necessitated the processing of many changes that were not significantly related to safety.

In 1968 the Atomic Energy Commission (AEC), predecessor of the NRC, amended its regulations in §§50.36 and 50.59 (33 FR - 18610, December 17, 1968). \$50.36 was amended to include a more precise definition of those categories of technical specifications that must be included in an application for an operating license. The amended regulation narrowed the scope of the material contained in technical specifications by defining five specific categories of technical specifications. The five categories defined for nuclear reactors are: (1) safety limits and limiting safety system settings, (2) limiting conditions for operation, (3) surveillance requirements, (4) design features, and (5) administrative controls. The design information that was required to be retained included only those items which, if altered, would have a significant effect on safety. Amendments to \$50.59, among other things, clarified requirements for keeping records of design changes and defined more adequately the term "unreviewed safety question." The latter change established criteria for allowing licensees to make certain kinds of design changes (i.e., those not involving an unreviewed safety question or a change to technical specifications) without prior NRC approval. These amendments to §\$50.36 and 50.59 (1) eliminated detailed design information from technical specifications, which, in turn, reduced the need for a large number of change requests, and (2) resulted in a system of technical specifications and regulations that more effectively directed the attention of both licensees' management and the NRC to matters important to safety.

As knowledge in the field of reactor safety increased, the level of complexity and detail in technical specifications also increased, and a divergence in content of technical specifications from one facility to another began to emerge. In addition, an increasing diversity of opinion among applicants and the staff as to what should be included as technical specifications resulted in protracted negotiations during the licensing process, and misapplication and misinterpretation of requirements by plant operating staffs after a license was issued.

In recognition of these difficulties, in 1972, the AEC instituted the Standard Technical Specifications (STS) program. The first set of STS was applicable to reactors designed by the Westinghouse Electric Corporation. Other sets of STS were later developed for reactor types designed by other vendors. For the latest revisions of these documents see: NUREG-0452, Rev. 2, July 1979; NUREG-0123, Rev. 2, August 1979; NUREG-0212, Rev. 1, August 1970; and NUREG-0103, Rev. 3, July 1979 for Westinghouse, General Electric, Combustion Engineering and Babcock and Wilcox, respectively. The STS provide applicants with model specifications to be used in formulating plant-specific technical specifications. They served to make technical specifications for facilities licensed since 1974 more consistent with one another, and they tended to reduce the number of disagreements between applicants and the NRC staff regarding items to be included as technical specifications.

Current Problem: Recent disagreements among parties to a proceeding (In the Matter of Portland General Electric Company, et al (Trojan Nuclear Plant), ALAB-531, 9 NRC 263 (1979)) have highlighted the need to establish a specific standard in the regulations for deciding which items derived from the safety analysis report must be incorporated into the technical specifications.

In addition, the substantial growth in both the number of items, and in the detail of the requirements contained in technical specifications that has taken place since the STS were instituted, indicates that more precise definitions of the existing categories of technical specifications contained in \$50.36 may need to be considered. The Commission is concerned that the increased volume of technical specifications may be decreasing the effectiveness of these specifications to focus the attention of licensees on matters of more immediate importance to safe operation of the facility.

While each of the requirements in today's technical specifications plays a role in protecting public health and safety, some requirements have greater immediate importance than others in that they relate more directly to facility operation. These are the requirements that pertain to items which the facility operator must be aware of and which he must control to operate the facility in a safe manner. To a large extent, the relative importance of these requirements, as distinguished from those related to long term effects or concerns, has been diminished by the increase in the total volume of technical specification requirements.

Moreover, the increased volume and detail of technical specifications and the resultant increase in the number of proposed change requests that must be processed, has increased the paperwork burden for both licensees and the NRC staff. This is because \$50.36 requires that technical specifications be included in each operating license; and thus, any proposed change, regardless of its importance to safety, must be processed as a license amendment. For changes involving matters of lesser importance to safety, the processing of a license amendment with the associated increased

paperwork has had no significant benefit with regard to protecting the public health and safety.

Proposed Solution: To resolve the difficulties associated with the current system of technical specifications for nuclear power reactors, the Commission is contemplating changes to \$\$50.36 and 50.59 of 10 CFR Part 50. The changes would: (1) establish a standard for deciding which items derived from the safety analysis report must be incorporated into the technical specifications for a facility; (2) modify the definitions of categories of technical specifications to focus more directly on the aspects of reactor operation that are important to the protection of the health and safety of the public; (3) define a new category of requirements that would be of lesser immediate importance to safety than technical specifications, thereby providing greater flexibility to both the NRC and licensees in processing proposed changes; and (4) establish appropriate conditions that must be met by licensees to make changes to the requirements in the new category without prior NRC approval.

Advice and recommendations on the proposed areas of revision to the regulation are invited from all interested persons. Specifically comments are requested on the following questions:

1. Would it be appropriate to establish a fixed standard for deciding which items derived from the safety analysis report must be incorporated into the technical specifications?

- 2. If so, what should the standard be based on?
- 3. Would a standard incorporating the concept of "immediate importance to safety" be appropriate?
- 4. Would it be appropriate to modify \$50.35 to require technical specifications to focus more directly on reactor operation?
- 5. Are surveillance requirements, as currently defined in \$50.36, appropriate subjects for technical specifications?
- 6. Should the current scope of surveillance requirements be reduced?
- 7. If so, would it be appropriate to change the scope to include only those requirements related to assuring that safety limits and limiting conditions for operation are being met, and not to include other requirements?
- 8. Would it be appropriate to define a new category of requirements, separate from technical specifications, that would have a different level of importance to safety?
- 9. What types of requirements currently included in technical specifications would be appropriately included in the new category?
- 10. Should the new category of requirements be physically attached to the license, or included in a separate document, for example. the FSAR?

- 11. How s' huld the enforceability of the requirements that are moved into the new category be maintained?
- 12. Would it be appropriate to allow licensees to make certain changes to the requirements in the new category without prior NRC approval?
- 13. If so, what conditions should be established to assure that such changes would not adversely effect safety?
- 14. What specific changes to the regulations should be included in response to the preceding questions?
- 15. What advantages and disadvantages could be expected from the system of requirements derived from the answers to the preceding questions, for:
 - a. license applicants?
 - b. operating licensees?
 - c. the NRC?
 - d. the public?

changes in the process for improving or changing license conditions relating to environmental and antitrust matters are beyond the scope of this rulemaking.

The Commission has concluded that the changes being considered would be insignificant from the standpoint of environmental impact and thus, pursuant to 10 CFR Part 51, §51.5(d)(3), will not require the preparation of an environmental impact statement, negative declaration, or environmental impact appraisal.

[5 U.S.C. 552; Sec. 161b and i, Pub. L. 83-703, 68 Stat. 948; Sec. 201, Pub. L. 93-438, 88 Stat. 1242 (42 U.S.C. 2201, 5841)].

Dated at Washington, D. C., this 30 day of June 1980.

FOR THE NUCLEAR REGULATORY COMMISSION

Samuel J. Chilk

Secretary of the dommission