



POLICY ISSUE
(Notation Vote)

March 17, 1993

SECY-93-067

For: The Commissioners

From: James M. Taylor
Executive Director for Operations

Subject: FINAL POLICY STATEMENT ON TECHNICAL SPECIFICATIONS IMPROVEMENTS

Purpose: To obtain Commission approval to publish a draft Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors for public comment.

Summary: This paper discusses the content of a proposed draft Final Policy Statement on Technical Specifications Improvements for Nuclear Power Reactors. This discussion highlights the differences between the interim Commission Policy Statement published in February 1987, and the enclosed draft final Policy Statement. The major changes include: (1) a discussion of the public comments on the interim Policy Statement; (2) additional discussion of the three original criteria for defining the scope of Technical Specifications and addition of a fourth criterion; (3) a discussion of the application of the regulations on backfitting to the Technical Specification conversion process; (4) an allowance for licensees to adopt portions of the improved Standard Technical Specifications (STS); and (5) a discussion of the progress made with respect to 10 CFR 50.59 safety evaluation programs. The staff recommends that the Commission publish the enclosed draft final Policy Statement for a 90-day public comment period. The staff also recommends that the Commission consider whether a specific solicitation of comments on the codification of the criteria through rulemaking is necessary. Regardless of the final decision with respect to rulemaking, the staff believes that

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publication of the final Policy Statement, modified to reflect additional public comments, would be appropriate.

Background:

On February 6, 1987, the Commission published its Interim Policy Statement on Technical Specification Improvements for Nuclear Power Reactors in the Federal Register for public comment (52 FR 3788). When the interim Policy Statement was published, the Commission anticipated issuing a final Policy Statement shortly after resolving the public comments on the interim Policy Statement. On October 30, 1987, in SECY-87-269, "Final Policy Statement on Technical Specification Improvements," the staff requested a delay in issuance of the final Policy Statement to allow a period of trial use of the criteria in the interim Policy Statement. SECY-87-269 also transmitted a draft final Policy Statement to the Commission. Much of the enclosed draft final Policy Statement, particularly the discussion of public comments on the interim Policy Statement, was derived from SECY-87-269. The staff has enclosed an updated analysis of those comments which reflects current staff positions (Enclosure 3).

In late 1987, based on the interim Policy Statement, each of the four nuclear steam supply system (NSSS) owners groups submitted to the staff its proposals of which requirements in the existing STS could be relocated from the Technical Specifications to licensee-controlled documents. The staff reviewed these submittals and told the industry which current STS requirements must be retained in the new STS. On May 9, 1988, the staff published its conclusions in the report "NRC Staff Review of Nuclear Steam Supply System Vendor Owners Groups' Application of the Commission's interim Policy Statement Criteria to Standard Technical Specifications" ("split report").

Following the guidance of the split report, the owners groups proposed improved STS during the second quarter of 1989. From May 1989 to January 1991, the staff reviewed the owners groups' proposals and conducted numerous meetings with the owners groups to discuss their proposals and the staff review. In a memorandum to the Commissioners on August 30, 1989, the staff requested to extend issuance of the final Policy Statement until 6 weeks after the approval of the improved STS.

In January 1991, the staff issued five draft sets of the improved STS for public comment as the following draft NUREG reports:

- NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants"
- NUREG-1431, "Standard Technical Specifications, Westinghouse Plants"
- NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants"
- NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4"
- NUREG-1434, "Standard Technical Specifications, General Electric Plants, BWR/6"

In a memorandum to the Commissioners on May 23, 1991, the staff stated that it anticipated proposing a final Policy Statement after about 6 months of experience had been gained in implementing the improved STS on the lead plants.

After resolving the comments on the draft improved STS, in September 1992, the staff published Revision 0 of the improved STS as NUREG reports. The staff believes that the comment resolution process, while lengthy, enabled it to prepare improved STS of good quality that represent a high degree of consensus among the NRC staff and the industry. The staff also achieved an unprecedented level of consistency in Technical Specification requirements among the four nuclear steam supply system (NSSS) owners groups. The staff and the industry agreed on some long-standing technical issues while preparing the improved STS and corrected numerous weaknesses in current Technical Specification requirements. The staff believes that the time spent developing the improved STS has resulted in high quality documents that both the staff and the industry believe can improve operational safety and efficiency at those plants that implement the improved STS.

Discussion:

Since October 1992, the staff has been reviewing the conversion to the improved STS for the Crystal River Nuclear Plant, Unit 3. Crystal River 3 is the lead plant for the Babcock and Wilcox owners group. The staff is also reviewing the Technical Specifications submitted for an operating license for the Watts Bar Nuclear Plant. These Technical Specifications are based on the improved Westinghouse STS.

The enclosed draft final Policy Statement (Enclosure 1) is based on staff experience in preparing the improved STS,

reviewing license amendments, and reviewing the Crystal River 3 and Watts Bar Technical Specification submittals. Enclosure 2 highlights the changes from the interim Policy Statement in comparative text format. Some of the major changes are discussed below.

The staff updated the Policy Statement to reflect the publication of Revision 0 of the improved STS and to use terminology consistent with that in the improved STS. The staff has included a discussion of the public comments on the interim Policy Statement. The staff had included a similar discussion in SECY-87-269; the current discussion was modified to reflect staff experience since the earlier paper.

The staff added to the discussion of the three original criteria for defining the scope of Technical Specifications. Furthermore, the staff added a fourth criterion to capture requirements which operating experience or probabilistic safety assessment (PSA) show to be significant to public health and safety. The discussion of Criterion 4 was derived mainly from material already contained in the interim Policy Statement. The staff felt that because PSA and operating experience were used to justify retaining some requirements in the improved STS, it was appropriate to include these considerations as a separate criterion. With the added clarification, the criteria are appropriate to define the scope of Technical Specifications.

Upon reviewing its experience in applying the criteria, the staff believes that the criteria can be effectively used without rulemaking. The staff believes it is more appropriate to place the criteria in the Policy Statement to implement 10 CFR 50.36 as currently written. The Policy Statement provides a means to keep the criteria with the discussion of how the staff intends to implement the criteria. The staff notes that policy statements have a different legal status than regulations; while they are considered binding directives to the staff, they are not requirements and, therefore, not binding on licensees and have no limiting effect on license or technical specification amendment hearings. Thus, licensees would not be legally obligated to address and comply with the four criteria but could instead propose alternates. On the other hand, there is currently a common understanding between the NRC staff and the industry that the criteria provide a template to develop improved Technical Specifications and that the criteria will be used by a licensee to prepare a Technical Specification submittal to the NRC. If the NRC

staff does not believe the criteria have been appropriately applied, the staff will not issue the license amendment until the licensee has appropriately applied the criteria. The staff believes, however, that such disputes can be resolved during the review process. For these reasons, the staff believes codifying the criteria through rulemaking could be an unnecessary duplication of effort with little regulatory benefit. However, there remains the prospect for a few or possibly many contested proceedings on adoption of the new technical specifications. The Commission may wish to specifically solicit comments on the option to pursue rulemaking in addition to providing guidance in the Policy Statement.

The Nuclear Management and Resources Council (NUMARC), in a December 21, 1992 letter to the Chairman, made comments which relate to rulemaking which has other objectives. NUMARC stated that, because of the nature of the current licensing process, significant resources must be expended by licensees and the NRC to enable the improved STS to be adopted. NUMARC added that the industry intends to file a petition for rulemaking to add a subsection to 10 CFR 50.91 to facilitate adoption of the improved STS. The staff wants to highlight industry intentions to the Commission and suggest that this issue be handled separately from publication of a final Policy Statement. The lead plant conversions should provide insight into the need and feasibility of whatever approach is suggested by NUMARC.

While preparing the improved STS and holding discussions with representatives from the lead plants, the staff received questions about imposing new requirements on an individual licensee converting to the improved STS. For requirements that are not included in the licensee's current Technical Specifications and not voluntarily adopted by the licensee, the Policy Statement clarifies that the staff will follow the Commission's regulations on backfitting (10 CFR 50.109) unless the new requirements are needed to find the licensee's conversion submittal acceptable.

The enclosed final Policy Statement also allows for licensees to adopt portions of the improved STS without implementing all of the STS improvements. The portions adopted will need to include all requirements related to the items being changed and will normally be developed as line-item improvements. During its review, the Committee to Review Generic Requirements (CRGR) asked the Office of Nuclear Reactor Regulation (NRR) to inform the Commission of this proposed change and to justify the proposed policy

change. The staff believes that it has accomplished this in the enclosed draft final Policy Statement.

An additional change to the draft final Policy Statement is the discussion of the progress made in 10 CFR 50.59 safety evaluation programs. This includes a discussion of industry guidance, NSAC-125, "Guidelines for 10 CFR 50.59 Safety Evaluations." Although the NRC and the industry do not fully agree on all issues associated with 10 CFR 50.59, the increasing use of the NSAC-125 guidance by industry has improved the quality of reviews under 10 CFR 50.59. The staff does not believe, however, that the guidelines described in NSAC-125 are appropriate for endorsement as regulatory guidance.

The staff also discusses the recently published NRC Inspection Procedure 37001, "10 CFR 50.59 Safety Evaluation Program," in the Policy Statement. This inspection procedure gives inspectors updated guidance for evaluating utility performance in implementing the requirements of 10 CFR 50.59. Use of the latest inspection guidance by the NRC staff will provide added assurance that the NRC will appropriately monitor 10 CFR 50.59 safety evaluation programs for licensees converting to the improved STS.

The final section of the interim Policy Statement contained additional views from former Commissioner Asselstine. Commissioner Asselstine believed that the Policy Statement should have been modified in four respects. First, he thought that the policy should contain an explicit statement that the Commission would not entertain changes in testing and surveillance intervals and allowed outage times until licensees strengthened their maintenance programs. Since Commissioner Asselstine made these comments, the industry has made substantial progress in its maintenance programs largely because the Commission aggressively pursued the Maintenance Rule.

Commissioner Asselstine's second point was that the 10 CFR 50.59 review process should have been strengthened before licensees were given the flexibility afforded in the interim policy. This aspect is discussed above.

Commissioner Asselstine also stated that the interim policy weakened Commission enforcement options for some important safety requirements in the Technical Specifications. The staff believes that it has adequate enforcement flexibility to pursue significant safety issues whether or not violations of the Technical Specifications are involved.

Finally, Commissioner Asselstine was concerned that the interim Policy Statement indicated that ac and dc power sources would not be covered by Technical Specifications while the plant is in the decay heat removal mode. NRR is studying the electrical power requirements for the decay heat removal mode of operation as part of the study on shutdown and low-power operation. When the study is completed, any Technical Specifications changes approved for generic implementation will be incorporated into the improved STS.

The staff believes that the draft final Policy Statement reflects its experience and lessons learned while preparing the improved STS and holding discussions with the lead plant licensees. However, the staff recommends that the draft final Policy Statement be published for public comment to ensure that the proposed revision of the Policy Statement does not result in any unintended impacts or effects. The staff will submit a final Policy Statement to the Commission for approval after evaluating comments received during the comment period and after the CRGR and the Advisory Committee on Reactor Safeguards (ACRS) review the final Policy Statement.

OGC reviewed this paper and has no legal objection.

Recommendation: That the Commission

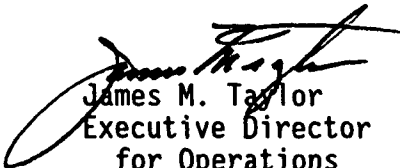
1. Approve the publication of the enclosed Final Commission Policy Statement for Technical Specification Improvements for Nuclear Power Reactors for a 90-day comment period.
2. Determine whether a specific solicitation of comments on the codification of the criteria through rulemaking is necessary.
3. Plan to publish the final Policy Statement after appropriate consideration of public comments, regardless of the decision to pursue rulemaking.

4. Note:

- a. The staff intends to use the improved STS as the basis for evaluating plant-specific requests for improved Technical Specifications.
- b. By adopting the enclosed draft final Policy Statement, the Commission would be encouraging licensees to use the improved STS as the basis for plant-specific requests for improved Technical Specifications.
- c. The staff will continue to place highest priority on complete conversions to the improved STS and high priority on line-item improvements to Technical Specifications.

Scheduling:

While no specific circumstances require Commission action by a particular date, the staff anticipates briefing the Commission in March 1993.


James M. Taylor
Executive Director
for Operations

Enclosures:

- 1. Draft Final Commission Policy Statement
- 2. Draft Final Commission Policy Statement in Comparative Text
- 3. Updated Analysis of Public Comments

cc: SECY
OGC

Commissioners' comments or consent should be provided directly to the Office of the Secretary by COB Monday, April 5, 1993.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Monday, March 29, 1993, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

DISTRIBUTION:

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ENCLOSURE 1

**Draft Final Policy Statement
on Technical Specifications Improvements
for Nuclear Power Reactors**

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

Proposed Final Policy Statement on
Technical Specifications Improvements
for Nuclear Power Reactors

AGENCY: Nuclear Regulatory Commission.

ACTION: Final Policy Statement

SUMMARY: This statement presents the policy of the Nuclear Regulatory Commission (NRC) with respect to the scope and purpose of Technical Specifications for nuclear power plants as required by 10 CFR 50.36. It establishes a specific set of objective criteria (see Section IV) as guidance for determining which regulatory requirements and operating restrictions should be included in Technical Specifications. It encourages licensees to implement a voluntary program to update their Technical Specifications to be consistent with improved vendor-specific Standard Technical Specifications (STS) issued by the NRC in September 1992. The improved STS were published as the following NRC Reports:

- NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants"
- NUREG-1431, "Standard Technical Specifications, Westinghouse Plants"
- NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants"
- NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4"
- NUREG-1434, "Standard Technical Specifications, General Electric Plants BWR/6"

These improved STS were the result of extensive technical meetings and discussions among the NRC staff, industry owners groups, vendors, and the Nuclear Management and Resources Council (NUMARC). The improved STS were developed based on the criteria in the interim Policy Statement published in February 1987. The Policy Statement now reflects modifications resulting from public comments on the interim Policy Statement and from the experience gained in developing the improved STS. Implementation of the Policy Statement through implementation of the improved STS is expected to produce an improvement in the safety of nuclear power plants through the use of more operator-oriented Technical Specifications, improved Technical Specification Bases, reduced action statement induced plant transients, and more efficient use of NRC and industry resources. The Policy Statement is not a regulation and does not establish binding requirements or limit the scope of safety issues for case-specific adjudication.

DATE: The public is invited to submit comments on this final Policy Statement by _____, 1993. Comments received after this date will be considered if it

is practical to do so, but assurance of consideration cannot be given except as to comments received on or before this date. On the basis of the submitted comments, the Commission will determine whether to modify the draft Policy Statement before issuing it in final form.

ADDRESSES: Submit comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Attention: Docketing and Service Branch.

Copies of NUREGs-1430, 1431, 1432, 1433, and 1434 may be purchased from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, D.C. 20013-7082. Copies are also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. A copy is also available for public inspection and/or copying at the NRC Public Document Room, 2120 L Street NW., Lower Level of the Gelman Building, Washington, D.C. The NUREGs can also be accessed through the NRC electronic bulletin board system. Details of how to use this system were published in the Federal Register on November 25, 1992 (57 FR 55602).

FOR FURTHER INFORMATION CONTACT: Nanette V. Gilles, Technical Specifications Branch, Division of Operating Reactor Support, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, telephone (301) 492-7000.

SUPPLEMENTARY INFORMATION:

I. BACKGROUND

Section 182a. of the Atomic Energy Act of 1954 (Act), as amended (42 U.S.C. 2232), mandates the inclusion of Technical Specifications in licenses for the operation of production and utilization facilities. The Act requires that Technical Specifications include information of the amount, kind, and source of special nuclear material, the place of use, and the specific characteristics of the facility. That section also indicates that Technical Specifications should contain such information as the Commission may by rule deem necessary to enable it to find that the utilization of special nuclear material will be in accord with the common defense and security and will provide adequate protection of public health and safety. Finally, that section requires Technical Specifications to be made a part of any license issued to operate production or utilization facilities.

Section 50.36, "Technical Specifications," which implements Section 182a. of the Atomic Energy Act, was promulgated by the Commission on December 17, 1968 (33 FR 18610). This rule delineates requirements for determining the contents of Technical Specifications. Technical Specifications 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. Specifically, 10 CFR 50.36 requires that:

Each license authorizing operation of a production or utilization facility of a type described in §50.21 or §50.22 will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to §50.34. The Commission may include such additional technical specifications as the Commission finds appropriate.

Technical Specifications cannot be changed by licensees without prior NRC approval. However, since 1969, there has been a trend towards including in Technical Specifications not only those requirements derived from the analyses and evaluation included in the safety analysis report but also essentially all other Commission requirements governing the operation of nuclear power reactors. This extensive use of Technical Specifications is due in part to a lack of well-defined criteria (in either the body of the rule or in some other regulatory document) for what should be included in Technical Specifications. This has contributed to the volume of Technical Specifications and to the several-fold increase, since 1969, in the number of license amendment applications to effect changes to the Technical Specifications. It has diverted both staff and licensee attention from the more important requirements in these documents to the extent that it has resulted in an adverse but unquantifiable impact on safety.

On March 30, 1982, the NRC published in the Federal Register (47 FR 13369) a proposed amendment to its regulations, 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." The proposed amendment would have revised §50.36, "Technical Specifications," to establish a new system of specifications divided into two general categories. Only those specifications contained in the first general category as Technical Specifications would have become part of the operating license and would have required prior NRC approval for any changes. Those specifications contained in the second general category would have become supplemental specifications and would not have required prior NRC approval for most changes. The NRC review of the first general category of specifications would have been the same as currently performed for Technical Specification changes, which are amendments to the operating license. For the second category, supplemental specifications, the licensee would have been allowed to make changes within specified conditions without prior NRC approval. The NRC would have reviewed these changes when they were made and would have done so in a manner similar to that currently used for reviewing design changes, tests, and experiments performed under the provisions of 10 CFR 50.59. Because of difficulties with defining the criteria for dividing the Technical Specifications into the two categories of the proposed rule and because of other higher priority licensing work, the rule change was deferred.

In the early 1980s, the nuclear industry and the NRC staff began studying the question of whether improvement to the existing system of establishing Technical Specification requirements for nuclear power plants was needed. During this time frame, two studies of this issue were performed by an NRC task group known as the Technical Specifications Improvement Project (TSIP) and a Subcommittee of the Atomic Industrial Forum's (AIF) Committee on Reactor

Licensing and Safety.¹ The overall conclusion of these studies was that many improvements in the scope and content of Technical Specifications were needed, and that a joint NRC and industry program should be initiated to implement these improvements. Both of these groups made specific recommendations which are summarized as follows:

- 1) The NRC should adopt the criteria for defining the scope of Technical Specifications proposed in the AIF and TSIP reports. Those criteria should then be used by the NRC and each of the nuclear steam supply system vendor owners groups to completely rewrite and streamline the existing STS. This process would result in many requirements being transferred from control by Technical Specifications requirements to control by other mechanisms [e.g., the Final Safety Analysis Report (FSAR), Operating Procedures, Quality Assurance (QA) Plan] which would not require a license amendment or prior NRC approval when changes are needed. The new STS should include greater emphasis on human factors principles in order to add clarity and understanding to the text of the STS. The new STS should also provide improvements to the Bases Section of Technical Specifications which provides the purpose for each requirement in the specification.
- 2) A parallel program of short-term improvements in both the scope and substance of the existing Technical Specifications should be initiated in addition to developing a new STS as identified in paragraph (1) above.

On February 6, 1987, the NRC published in the Federal Register for public comment (52 FR 3788) an interim Policy Statement on Technical Specification Improvements for Nuclear Power Reactors containing proposed criteria in response to item (1). These criteria were generally derived from the criteria proposed in the AIF and TSIP reports and were modified slightly based on discussions between the NRC staff and the industry. The public comment period expired on March 23, 1987.

The NRC has developed a program for short-term improvements as described in item (2.) These are known as "line-item" improvements and are generic improvements developed and promulgated by the NRC staff for voluntary adoption by licensees.

Subsequently, improved vendor-specific STS were developed and issued by the NRC in September 1992. The improved STS were published as the following NRC Reports:

- NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants"
- NUREG-1431, "Standard Technical Specifications, Westinghouse Plants"

¹SECY-86-10, "Recommendations for Improving Technical Specifications," dated January 13, 1986, contains both "Recommendations for Improving Technical Specifications," NRC Technical Specifications Improvement Project, September 30, 1985, and "Technical Specifications Improvements," AIF Subcommittee on Technical Specifications Improvements, October 1, 1985.

- NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants"
- NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4"
- NUREG-1434, "Standard Technical Specifications, General Electric Plants BWR/6"

These improved STS were the result of extensive technical meetings and discussions among the NRC staff, industry owners groups, vendors, and NUMARC .

II. SUMMARY OF PUBLIC COMMENTS ON THE INTERIM POLICY STATEMENT AND NRC RESPONSES

In early 1987, the Commission received 29 letters with comments on the Interim Policy Statement on Technical Specification Improvements. A list of the commenters and a detailed analysis of public comments are available for public inspection in the NRC Public Document Room at 2120 L Street NW., Lower Level of the Gelman Building, Washington, D.C. 20555.

Twenty-five of the 29 commenters were generally supportive of the Commission Policy Statement and the overall Technical Specifications Improvement Program; 3 commenters were generally not supportive; and 1 commenter was neutral. Of the 29 commenters, 23 can be categorized as representing industry views, 3 are government agencies, and 3 are interested members of the public. The industry group stated strong support for the Policy Statement and its criteria. The comments included extensive support for the overall Commission objectives of improving Technical Specifications so they are clearer and less ambiguous. The three commenters opposed to the Policy Statement were primarily concerned that moving any requirements to other documents might make them "less enforceable" than Technical Specifications or might weaken the inspection process.

Based on the criteria in this Policy Statement that define requirements that should be controlled by Technical Specifications, the Commission concludes that some requirements previously contained in Technical Specifications should be relocated to other documents that do not have the direct enforceability of Technical Specifications and do not require NRC staff approval before changes are made. Many of the requirements will be relocated to the FSAR and will be controlled through 10 CFR 50.59. Other requirements will be relocated to more appropriate documents (e.g., Security Plan, QA Plan) and controlled by the applicable regulatory requirements. The adequacy of controls for relocated requirements which do not fit in the above categories will be reviewed and approved by the NRC staff on a case-by-case basis to determine, among other things, whether an enforceable control method will need to be established. NRC approval would still be required for any changes to requirements covered by 10 CFR 50.59 that involved an unreviewed safety question and for changes which exceed the threshold criteria in the regulations for other controlled documents. The Commission believes that this control and enforcement posture is commensurate with the safety importance of the relocated requirements.

Many of the commenters addressed specific issues discussed in the Policy Statement. The following paragraphs discuss issues addressed by a significant portion of the commenters or that are of particular interest.

A slight majority of the industry commenters stated that they agreed with the Policy Statement that improvements should be voluntary. In addition, four of the commenters stated that if licensees elect to implement the Policy Statement, they should not be required to convert to STS. The Commission has concluded that where STS requirements are generally applicable, the STS should be adopted unless adequate justification for acceptance of a plant-specific Technical Specification is provided. Cases may arise where there is a question concerning the NRC staff proposed addition of requirements in the improved STS that are not in a licensee's current Technical Specifications. In such cases, the Commission intends to control the process by evaluating the imposition of additional requirements in accordance with the Commission regulations on backfitting (10 CFR 50.109).

The interim Policy Statement identified three criteria to be used to define which of the current Technical Specification requirements should be retained or included in Technical Specifications and which requirements could be relocated to licensee-controlled documents. Half of the industry commenters stated that licensees should be allowed to selectively apply the criteria without fully adopting the improvement process (e.g., not improving Bases and not applying accepted human factors principles to Technical Specifications). In this regard, it is the Commission policy that licensees may adopt portions of the improved STS without fully implementing all STS improvements. The Commission will, however, place the highest priority on the review and approval of Technical Specifications related submittals for complete conversions to the improved STS. For licensees who adopt portions of the improved STS, these portions shall include all related requirements and will normally be developed as line-item improvements by the NRC staff. In all cases, the Commission expects improved Bases to accompany requests for improved Technical Specifications. The Commission realizes, however, that it may not always be practical for licensees to apply all of the human factors principles used in the improved STS. The Commission believes that the above approach will result in safety improvements as well as consistency in Technical Specifications requirements and will allow the most efficient use of NRC and industry resources.

When the interim Policy Statement was issued, the Commission believed that it was only the overall package of improvements which, if adopted, would produce an improvement in safety. However, experience in the development of the improved STS and in the review of license amendment requests has led the Commission to conclude that safety benefits can be realized from adopting portions of the improved STS without fully implementing all STS improvements. The NRC staff has developed several line-item improvements since the publication of the interim Policy Statement. These improvements have been reviewed by the Committee to Review Generic Requirements and have been made available for voluntary implementation through generic letters. While the Commission continues to believe that the greatest improvement to safety can be realized by implementing all of the improvements in the improved STS, it also believes there is considerable merit in allowing licensees to improve portions of their Technical Specifications that could result in a safety benefit.

Fifteen industry respondents strongly supported the use of the criteria to determine which future requirements (e.g., from generic issues) would be included in Technical Specifications. This has been the Commission intent and the Policy Statement has been modified accordingly.

Ten commenters stated that the proposed criteria were acceptable as is, and several recommended prompt rulemaking to codify the criteria. Five other commenters indicated that the criteria were inadequate or that additional discussion of the criteria scope and intent was needed. After studying comments and use of the criteria, the Commission determined that further discussion of the criteria was needed and this is included in Section IV. The Department of Nuclear Safety, State of Illinois, recommended adding a fourth criterion and delaying implementation of the Policy Statement until rule changes necessary for implementation are promulgated. The criterion suggested would expand on Criterion 3 to cover all anticipated operational sequences. The Commission believes that safety significant operational sequences are adequately addressed by Criteria 2 and 3. The Commission has added a fourth criterion (different from that proposed by the State of Illinois) to capture requirements which operating experience or probabilistic safety assessment (PSA) show to be significant to public health and safety.

In considering the specific comments on the criteria and based on experience in applying the criteria, the Commission concluded that the criteria do not need to be codified through rulemaking. Rather, this policy statement will identify the criteria to be used to implement 10 CFR 50.36 as currently written. The Policy Statement provides a means to keep the criteria with the discussion of the application of each criterion. The Commission believes this is important for a clear understanding of how the criteria are implemented. There is a common understanding between the NRC staff and the industry that the criteria provide a template to develop improved Technical Specifications. The criteria will be used by a licensee to prepare a Technical Specification submittal to the NRC. If the NRC staff does not believe the criteria have been appropriately applied, the staff will not issue a license amendment until the licensee has properly applied the criteria. For these reasons, the Commission believes codifying the criteria through rulemaking would be an unnecessary duplication of effort with little regulatory benefit.

In addition to the comments on the three original criteria, seven of the commenters were opposed to using PSA to define the contents of the Technical Specifications. They expressed concern that PSA has only limited applicability and that its use is not well defined. Moreover, these commenters noted that plant licensing is based primarily on Design Basis Accident analysis which lends itself to a deterministic process rather than a PSA-based process for identifying Technical Specification requirements. The Commission believes that plant- and design-specific PSAs have yielded valuable insight to unique plant vulnerabilities not fully recognized in the safety analysis report Design Basis Accident or Transient analyses.

Some commenters stated that if PSA is used to impose Technical Specifications for some high-risk items, it should also be used to remove some low-risk items. The Commission notes that this approach to Technical Specifications has been considered at length during the development of the Policy Statement. Since the first three criteria in the Policy Statement are derived from the

plant safety analysis report which is deterministic in nature, (but which itself incorporates qualitative risk insights) the Commission believes that a broad application of PSA to remove individual requirements from Technical Specifications is generally counter to the philosophy of the first three criteria. However, risk insights were used to determine the values of some completion times and surveillance frequencies for items retained in the improved STS.

The extension of the use of PSA to remove individual requirements from technical specifications would need to be founded in a broader policy of risk-based regulation which the Commission is currently pursuing at a level more inclusive than Technical Specifications improvements. Specifically, the Commission believes that it would be inappropriate at this time to allow requirements which meet one or more of the first three criteria to be deleted from Technical Specifications based solely on PSA (Criterion 4). If a requirement meets any one of the four criteria, it should be retained or included in Technical Specifications.

The Commission Policy in this regard is consistent with its Policy Statement on "Safety Goals for the Operation of Nuclear Power Plants," 51 FR 30028, Published on August 21, 1986. The Policy Statement on Safety Goals states in part, ". . . probabilistic results should also be reasonably balanced and supported through use of deterministic arguments. In this way, judgements can be made . . . about the degree of confidence to be given to these [probabilistic] estimates and assumptions. This is a key part of the process of determining the degree of regulatory conservatism that may be warranted for particular decisions. This defense-in-depth approach is expected to continue to ensure the protection of public health and safety." At its conclusion, the Policy Statement on Safety Goals adds, "Nor are the safety goals and these implementation guidelines in and of themselves meant to serve as a sole basis for licensing decisions. However, if pursuant to these guidelines, information is developed that is applicable to a particular licensing decision, it may be considered as one factor in the licensing decision."

The Commission will continue to use PSA, consistent with its policy on Safety Goals, as a tool in evaluating specific line-item improvements to Technical Specifications, new requirements, and industry proposals for risk-based Technical Specification changes.

About a third of the respondents stated that NRC should place a high priority on making available specific line-item improvements to current Technical Specifications. The Commission agrees with these comments but will continue to give the highest priority to complete conversions to the improved STS.

III. DISCUSSION

The Commission recognizes the advantages of improved Technical Specifications. Clarification of the scope and purpose of Technical Specifications has provided useful guidance to both the NRC and industry and has served as an important incentive for industry participation in a voluntary program to improve Technical Specifications. It has resulted in improved STS that are intended to focus licensee and plant operator attention on those plant

conditions most important to safety. This should also result in more efficient use of agency and industry resources.

The Policy Statement identifies four criteria for defining the scope of Technical Specifications. These criteria are intended to be consistent with the scope of Technical Specifications as stated in the Statement of Consideration accompanying the current rule, 10 CFR 50.36.

The Statement of Consideration for the final rule issuing 10 CFR 50.36 (33 FR 18610, December 17, 1968) discusses the scope of Technical Specifications as including the following:

In the revised system, emphasis is placed on two general classes of technical matters: (1) those related to prevention of accidents, and (2) those related to mitigation of the consequences of accidents. By systematic analysis and evaluation of a particular facility, each applicant is required to identify at the construction permit stage, those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity. Such items are expected to be the subjects of Technical Specifications in the operating license.

The first of these two general classes of technical matters to be included in Technical Specifications is captured by criteria (1), (4), and to some extent criterion (2) in that they address systems and process variables that alert the operator to a situation when accident initiation is more likely. The second general class of technical matters is explicitly addressed and captured by criteria (2), (3), and (4). By applying the four criteria contained in the Policy Statement a licensee should capture all of those specific characteristics of its facility and the conditions for its operation that are required to meet the principal operative standard in Section 182a. of the Atomic Energy Act, that is, that adequate protection is provided to the health and safety of the public.

The Commission recognizes that the four criteria carry a theme of focusing on the technical requirements for features of controlling importance to safety. Since many of the requirements are of immediate concern to the health and safety of the public, this Policy Statement adopts, for the purpose of relocating requirements from Technical Specifications to licensee-controlled documents, the subjective statement of the purpose of Technical Specifications expressed by the Atomic Safety and Licensing Appeal Board in Portland General Electric Company (Trojan Nuclear Plant), ALAB-531, 9 NRC 263 (1979). There, the Appeal Board interpreted Technical Specifications as being reserved for those conditions or limitations upon reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety.

The Commission wishes to emphasize that this Policy Statement is intended to be consistent with the language of Section 182a. of the Atomic Energy Act, 10 CFR 50.36, and previous interpretations of the regulations. The Policy Statement merely clarifies the scope and purpose of Technical Specifications by identifying criteria which can be used to establish, more clearly, the framework for Technical Specifications (i.e., identify those requirements

derived from the analyses and evaluation included in the safety analysis report and which are of immediate concern to the health and safety of the public). It identifies requirements which should be retained or included in Technical Specifications and also describes a mechanism whereby "additional" requirements can be identified and controlled through mechanisms other than Technical Specifications.

Over the past several years, the Commission has seen an improvement in industry development of effective maintenance programs. In addition, there has been an overall improvement in the industry in the conduct of 10 CFR 50.59 safety evaluations since the NUMARC publication of NSAC-125, "Guidelines for 10 CFR 50.59 Safety Evaluations," in June 1989. Furthermore, the ongoing NRC study on shutdown and low-power operation should provide some important insights for additional Technical Specification improvements in the areas of shutdown and low power operations. The Commission believes that these improvements, combined with improved Technical Specifications developed based on this Policy Statement, can lead to significant improvements in the operational safety of nuclear power facilities.

IV. THE COMMISSION POLICY

The purpose of Technical Specifications is to impose those conditions or limitations upon reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety by identifying those features that are of controlling importance to safety and establishing on them certain conditions of operation which cannot be changed without prior Commission approval.

Licensees are encouraged to implement a program to upgrade their Technical Specifications consistent with this purpose. The Commission will entertain requests based on the criteria below (as clarified by the supporting discussion) for individual license amendments that evaluate all of the Limiting Conditions for Operation (LCOs) for an individual plant to determine which LCOs should be included in the Technical Specifications. In addition, the Commission will also entertain requests to adopt portions of the improved STS, even if the licensee does not adopt all STS improvements. These portions shall include all related requirements and will normally be developed as line-item improvements by the NRC staff. The Commission encourages all licensees who submit Technical Specification related submittals based on this Policy Statement to emphasize human factors principles.

LCOs which do not meet any of the criteria below may be proposed for removal from the Technical Specifications and relocation to licensee-controlled documents, such as the FSAR. The criteria may be applied to either standard or custom Technical Specifications. The Commission will also consider the criteria in evaluating future generic requirements for inclusion in Technical Specifications.

In accordance with this Policy Statement, improved STS have been developed and will be maintained for each NSSS owners group. The Commission encourages licensees to use the improved STS as the basis for plant-specific Technical Specifications. During individual Technical Specification conversions, the

non-voluntary addition of new requirements from the improved STS to individual plant Technical Specifications will be evaluated in accordance with the Commission regulations on backfitting (10 CFR 50.109) unless the staff suggested additional changes are needed to make the licensee requested changes acceptable from the standpoint of adequate protection or compliance with NRC regulations, in which case §50.109 does not apply and the request may be denied without the additional items. However, in all other cases, it is the Commission intent that the wording and Bases of the improved STS be used in the Technical Specification related submittal to the extent practicable.

The NRC will place the highest priority in its Technical Specifications improvement efforts on the review and approval of plant-specific Technical Specification related submittals based on complete conversions to the improved STS. In addition, the Commission will also entertain requests to adopt portions of the improved STS, even if the licensee does not adopt all STS improvements. These portions shall include all related requirements and will normally be developed as line-item improvements by the NRC staff.

The following criteria delineate those constraints on design and operation of nuclear power plants that are derived from the plant safety analysis report or PSA information and that belong in Technical Specifications in accordance with 10 CFR 50.36 and the purpose of Technical Specifications stated above.

Criterion 1: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary:

Discussion of Criterion 1: A basic concept in the adequate protection of the public health and safety is the prevention of accidents. Instrumentation is installed to detect significant abnormal degradation of the reactor coolant pressure boundary so as to allow operator actions to either correct the condition or to shut down the plant safely, thus reducing the likelihood of a loss-of-coolant accident.

This criterion is intended to ensure that Technical Specifications control those instruments specifically installed to detect excessive reactor coolant system leakage. This criterion should not, however, be interpreted to include instrumentation to detect precursors to reactor coolant pressure boundary leakage or instrumentation to identify the source of actual leakage (e.g., loose parts monitor, seismic instrumentation, valve position indicators).

Criterion 2: A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier:

Discussion of Criterion 2: Another basic concept in the adequate protection of the public health and safety is that the plant shall be operated within the bounds of the initial conditions assumed in the existing Design Basis Accident and Transient analyses and that the plant will be operated to preclude unanalyzed transients and accidents. These analyses consist of postulated events, analyzed in the FSAR, for which a

structure, system, or component must meet specified functional goals. These analyses are contained in Chapters 6 and 15 of the FSAR (or equivalent chapters) and are identified as Condition II, III, or IV events (ANSI N 18.2) (or equivalent) that either assume the failure of or present a challenge to the integrity of a fission product barrier.

As used in Criterion 2, process variables are only those parameters for which specific values or ranges of values have been chosen as reference bounds in the Design Basis Accident or Transient analyses and which are monitored and controlled during power operation such that process values remain within the analysis bounds. Process variables captured by Criterion 2 are not, however, limited to only those directly monitored and controlled from the control room. These could also include other features or characteristics that are specifically assumed in Design Basis Accident and Transient analyses even if they cannot be directly observed in the control room (e.g., moderator temperature coefficient and hot channel factors).

The purpose of this criterion is to capture those process variables that have initial values assumed in the Design Basis Accident and Transient analyses, and which are monitored and controlled during power operation. As long as these variables are maintained within the established values, risk to the public safety is presumed to be acceptably low. This criterion also includes active design features (e.g., high pressure/low pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients.

Criterion 3: A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier:

Discussion of Criterion 3: A third concept in the adequate protection of the public health and safety is that in the event that a postulated Design Basis Accident or Transient should occur, structures, systems, and components are available to function or to actuate in order to mitigate the consequence of the Design Basis Accident or Transient. Safety sequence analyses or their equivalent have been performed in recent years and provide a method of presenting the plant response to an accident. These can be used to define the primary success paths.

A safety sequence analysis is a systematic examination of the actions required to mitigate the consequences of events considered in the plant's Design Basis Accident and Transient analyses, as presented in Chapters 6 and 15 of the plant's FSAR (or equivalent chapters). Such a safety sequence analysis considers all applicable events, whether explicitly or implicitly presented. The primary success path of a safety sequence analysis consists of the combination and sequences of equipment needed to operate (including consideration of the single failure criteria), so that the plant response to Design Basis Accidents and Transients limits the consequences of these events to within the appropriate acceptance criteria.

It is the intent of this criterion to capture into Technical Specifications only those structures, systems, and components that are part of the primary success path of a safety sequence analysis. Also captured by this criterion are those support and actuation systems that are necessary for items in the primary success path to successfully function. The primary success path for a particular mode of operation does not include backup and diverse equipment (e.g., rod withdrawal block which is a backup to the average power range monitor high flux trip in the startup mode, safety valves which are backup to low temperature overpressure relief valves during cold shutdown).

Criterion 4: A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety:

Discussion of Criterion 4: It is the Commission policy that licensees retain in their Technical Specifications LCOs, action statements and Surveillance Requirements for the following systems (as applicable), which operating experience and PSA have generally shown to be significant to public health and safety and any other structures, systems, or components that meet this criterion:

- ° Reactor Core Isolation Cooling/Isolation Condenser,
- ° Residual Heat Removal,
- ° Standby Liquid Control, and
- ° Recirculation Pump Trip.

The Commission recognizes that other structures, systems, or components may meet this criterion. Plant- and design-specific PSAs have yielded valuable insight to unique plant vulnerabilities not fully recognized in the safety analysis report Design Basis Accident or Transient analyses. It is the intent of this criterion that those requirements that PSA or operating experience exposes as significant to public health and safety, consistent with the Commission's Safety Goal and Severe Accident Policies, be retained or included in Technical Specifications.

The Commission expects that licensees, in preparing their Technical Specification related submittals, will utilize any plant-specific PSA or risk survey and any available literature on risk insights and PSAs. This material should be employed to strengthen the technical bases for those requirements that remain in Technical Specifications, when applicable, and to verify that none of the requirements to be relocated contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are commonly found to dominate risk. Similarly, the NRC staff will also employ risk insights and PSAs in evaluating Technical Specifications related submittals. Further, as a part of the Commission's ongoing program of improving Technical Specifications, it will continue to consider methods to make better use of risk and reliability information for defining future generic Technical Specification requirements.

Requirements which would be relocated from Technical Specifications to a licensee-controlled document (e.g., the FSAR, the Security Plan, the QA Plan,

or Fire Protection Plan) may be changed or deleted in conjunction with the filing of individual Technical Specifications related requests to implement this Policy Statement. The package containing the amendment request must contain a clear statement of the basis for the change or deletion, a safety evaluation, and a statement that the changes have been reviewed by a multidisciplinary group of responsible, technical supervisory personnel, including onsite operations personnel.

Appropriate Surveillance Requirements and Actions should be retained for each LCO which remains or is included in the Technical Specifications. Each LCO, Action, and Surveillance Requirement should have supporting Bases. The Bases should at a minimum address the following questions and cite references to appropriate licensing documentation (e.g., FSAR, Topical Report) to support the Bases.

1. What is the justification for the Technical Specification, i.e., which Policy Statement criterion requires it to be in the Technical Specifications?
2. What are the Bases for each LCO, i.e., why was it determined to be the lowest functional capability or performance level for the system or component in question necessary for safe operation of the facility and, what are the reasons for the Applicability of the LCO?
3. What are the Bases for each Action, i.e., why should this remedial action be taken if the associated LCO cannot be met; how does this Action relate to other Actions associated with the LCO; and what justifies continued operation of the system or component at the reduced state from the state specified in the LCO for the allowed time period?
4. What are the Bases for each Safety Limit?
5. What are the Bases for each Surveillance Requirement and Surveillance Frequency; i.e., what specific functional requirement is the surveillance designed to verify? Why is this surveillance necessary at the specified frequency to assure that the system or component function is maintained, that facility operation will be within the Safety Limits, and that the LCO will be met?

NOTE: In answering these questions the Bases for each number (e.g., Allowable Value, Response Time, Completion Time, Surveillance Frequency), state, condition, and definition (e.g., operability) should be clearly specified. As an example, a number might be based on engineering judgment, past experience, or PSA insights; but this should be clearly stated.

When licensees submit amendment requests based on this Policy Statement, they should identify the location of and controls for the technical and administrative requirements of the relocated requirements. The NRC staff will carefully review these submittals to ensure the accountability and the acceptability of controls for each relocated requirement. Many of the requirements will be relocated to the FSAR and will be enforceable through 10 CFR 50.59. Other requirements will be relocated to more appropriate

documents (e.g., Security Plan, QA Plan) and controlled by the applicable regulatory requirements. The adequacy of controls for relocated requirements which do not fit in the above categories will be reviewed and approved by the NRC staff on a case-by-case basis to determine, among other things, whether an enforceable control method will need to be established.

Since some of the requirements currently contained in the Technical Specifications will be relocated to licensee-controlled documents to which changes will be controlled by 10 CFR 50.59, the NRC has been giving increased attention to the 10 CFR 50.59 change process. In the interim Policy Statement the Commission encouraged industry to obtain the support of NUMARC in sponsoring activities to encourage the highest quality for utility review of changes made pursuant to 10 CFR 50.59. In June 1989, NUMARC published NSAC-125, "Guidelines for 10 CFR 50.59 Safety Evaluations." During the development of these guidelines, the NRC staff and NUMARC met on several occasions to discuss the content of NSAC-125. Since its publication, nearly all of the industry has been using NSAC-125 as guidance in performing 10 CFR 50.59 safety evaluations. While the NRC and the industry do not fully agree on all issues associated with 10 CFR 50.59, based on inspections and reviews since the issuance of NSAC-125, the NRC staff has seen an overall improvement in the conduct of 10 CFR 50.59 safety evaluations. However, the Commission does not believe that the guidelines described in NSAC-125 are appropriate for endorsement as regulatory guidance.

In addition, in December 1992, the Office of Nuclear Reactor Regulation issued Inspection Procedure 37001, "10 CFR 50.59 Safety Evaluation Program," to provide NRC inspectors with updated guidance for evaluating utility performance in implementing the requirements of 10 CFR 50.59. The Commission believes use of this inspection guidance will provide continued assurance that the NRC is appropriately monitoring 10 CFR 50.59 safety evaluation programs for licensees who convert to the improved STS.

The Commission emphasizes the importance of a well-planned transition for licensees who plan to convert to the improved STS. Such a transition should include careful consideration of procedure revisions and operator training to ensure safe operation during and following the conversion.

The NRC will, consistent with its mission, allocate resources as necessary to implement this Policy Statement.

V. ENFORCEMENT POLICY

Any changes to a licensee's Technical Specifications to apply this Policy Statement's criteria will be made by the license amendment process prior to implementation. Compliance with Technical Specifications is required by the Commission, and adherence to commitments contained in licensee-controlled documents is expected by the Commission. Violations and deviations will, as in the past, be handled in accordance with the NRC Enforcement Policy in 10 CFR Part 2, Appendix C (1992).

If a licensee elects to apply these criteria, the requirements of the removed specifications will be relocated to the FSAR or other licensee-controlled documents. Licensees are to operate their facilities in conformance with the descriptions of their facilities and procedures in their FSAR. Changes to the facility or to procedures described in the FSAR are to be made in accordance with 10 CFR 50.59. The Commission will take appropriate enforcement action to ensure that licensees comply with 10 CFR 50.59. Changes made in accordance with the provisions of other licensee-controlled documents (e.g., QA plan, Security Plan) are subject to the specific requirements for those documents. Nothing in this Policy Statement shall limit the authority of the NRC to conduct inspections as deemed necessary and to take appropriate enforcement action when regulatory requirements or commitments are not met.

This draft final Policy Statement amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq). This Policy Statement has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements.

The public reporting burden for this voluntary collection of information is estimated to average 4000 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington D.C. 20555, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0011), Office of Management and Budget, Washington, D.C. 20503.

Dated at Washington, D.C., this _____ day of _____, 1993.

For the Nuclear Regulatory Commission.

Samuel J. Chilk
Secretary of the Commission

**Draft Final Policy Statement
on Technical Specifications Improvements
for Nuclear Power Reactors
in Comparative Text Format**

Presented as a markup of the 1987 interim "Commission Policy Statement on Technical Specification Improvements for Nuclear Power Reactors," 52 FR 3788.

NUCLEAR REGULATORY COMMISSION

10 CFR Part 50

Proposed Final Policy Statement on
Technical Specifications Improvements
for Nuclear Power Reactors

AGENCY: Nuclear Regulatory Commission.

ACTION: Final Policy Statement

SUMMARY: This statement presents the policy of the Nuclear Regulatory Commission (NRC) with respect to the scope and purpose of Technical Specifications for nuclear power plants as required by 10 CFR 50.36. It establishes a specific set of objective criteria (see Section IV) as guidance for determining which regulatory requirements and operating restrictions should be included in Technical Specifications. It encourages licensees to implement a voluntary program to update their Technical Specifications to be consistent with revised improved vendor-specific Standard Technical Specifications (STS) ~~to be developed by the industry based on these criteria and subject to NRC Staff approval.~~ Issued by the NRC in September 1992. The improved STS were published as the following NRC Reports:

- NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants"
- NUREG-1431, "Standard Technical Specifications, Westinghouse Plants"
- NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants"
- NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4"
- NUREG-1434, "Standard Technical Specifications, General Electric Plants BWR/6"

These improved STS were the result of extensive technical meetings and discussions among the NRC staff, industry owners groups, vendors, and the Nuclear Management and Resources Council (NUMARC). The improved STS were developed based on the criteria in the interim Policy Statement published in February 1987. ~~The Policy Statement also identifies mechanisms to be used by the NRC and industry to control changes to those items removed from Technical Specifications.~~ The Policy Statement now reflects modifications resulting from public comments on the interim Policy Statement and from the experience gained in developing the improved STS. Implementation of the Policy Statement through implementation of the improved STS is expected to produce an improvement in the safety of nuclear power plants through the development use of more operator-oriented Technical Specifications, improved Technical Specification Bases, reduced action statement induced plant transients, and more efficient use of NRC and industry resources. The Policy Statement is not a regulation and does not establish binding requirements or limit the scope of safety issues for case-specific adjudication.

DATE: ~~This Interim Policy Statement is effective upon issuance. However, the public is invited to submit comments by March 23, 1987. The public is invited to submit comments on this Final Policy Statement by _____, 1993. Comments received after this date will be considered if it is practical to do so, but assurance of consideration cannot be given except as to comments received on or before this date. On the basis of the submitted comments, the Commission will determine whether to modify the draft Policy Statement before issuing it as final in final form.~~

ADDRESSES: Submit comments to: Secretary, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555. Attention: Docketing and Service Branch.

Copies of NUREGs-1430, 1431, 1432, 1433, and 1434 may be purchased from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 37082, Washington, D.C. 20013-7082. Copies are also available from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. A copy is also available for public inspection and/or copying at the NRC Public Document Room, 2120 L Street NW., Lower Level of the Gelman Building, Washington, D.C. The NUREGs can also be accessed through the NRC electronic bulletin board system. Details of how to use this system were published in the Federal Register on November 25, 1992 (57 FR 55602).

FOR FURTHER INFORMATION CONTACT: Nanette V. Gilles, Technical Specifications Branch, Division of Operating Reactor Support, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, telephone (301) 492-7000.

SUPPLEMENTARY INFORMATION:

I. BACKGROUND

Section 182a. of the Atomic Energy Act of 1954 (Act), as amended (42 U.S.C. 2232), mandates the inclusion of Technical Specifications in licenses for the operation of production and utilization facilities. The Act requires that Technical Specifications include information of the amount, kind, and source of special nuclear material, the place of use, and the specific characteristics of the facility. That section also indicates that Technical Specifications should contain such information as the Commission may by rule deem necessary to enable it to find that the utilization of special nuclear material will be in accord with the common defense and security and will provide adequate protection of public health and safety. Finally, that section requires Technical Specifications to be made a part of any license issued to operate production or utilization facilities.

Section 50.36, "Technical Specifications," which implements Section 182a. of the Atomic Energy Act, was promulgated by the Commission on December 17, 1968 (33 FR 18610). This rule delineates requirements for determining the contents of Technical Specifications. Technical

Specifications 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. Specifically, 10 CFR 50.36 requires that:

Each license authorizing operation of a production or utilization facility of a type described in §50.21 or §50.22 will include technical specifications. The technical specifications will be derived from the analyses and evaluation included in the safety analysis report, and amendments thereto, submitted pursuant to §50.34. The Commission may include such additional technical specifications as the Commission finds appropriate.

Technical Specifications cannot be changed by licensees without prior NRC approval. However, since 1969, there has been a trend towards including in Technical Specifications not only those requirements derived from the analyses and evaluation included in the safety analysis report but also essentially all other Commission requirements governing the operation of nuclear power reactors. This extensive use of Technical Specifications is due in part to a lack of well-defined criteria (in either the body of the rule or in some other regulatory document) for what should be included in Technical Specifications. This has contributed to the volume of Technical Specifications and to the several-fold increase, since 1969, in the number of license amendment applications to effect changes to the Technical Specifications. It has diverted both staff and licensee attention from the more important requirements in these documents to the extent that it has resulted in an adverse but unquantifiable impact on safety.

On March 30, 1982, the NRC published in the Federal Register (47 FR 13369) a proposed amendment to its regulations, 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities." The proposed amendment would have revised §50.36, "Technical Specifications," to establish a new system of specifications divided into two general categories. Only those specifications contained in the first general category as Technical Specifications would have become part of the operating license and would have required prior NRC approval for any changes. Those specifications contained in the second general category would have become supplemental specifications and would not have required prior NRC approval for most changes. The NRC review of the first general category of specifications would have been the same as currently performed for Technical Specification changes, which are amendments to the operating license. For the second category, supplemental specifications, the licensee would have been allowed to make changes within specified conditions without prior NRC approval. The NRC would have reviewed these changes when they were made and would have done so in a manner similar to that currently used for reviewing design changes, tests, and experiments performed under the provisions of 10 CFR 50.59. Because of difficulties with defining the criteria for dividing the Technical Specifications into the two categories of the proposed rule and because of other higher priority licensing work, the rule change was deferred.

~~In the past several years~~ In the early 1980s, the nuclear industry and the NRC staff began have been studying the question of whether improvement to the current existing system of establishing Technical Specification requirements

for nuclear power plants ~~is~~ was needed. During this time frame, The two most recent studies of this issue were performed by an NRC task group known as the Technical Specifications Improvement Project (TSIP) and a Subcommittee of the Atomic Industrial Forum's (AIF) Committee on Reactor Licensing and Safety.¹ The overall conclusion of these studies was that many improvements in the scope and content of Technical Specifications ~~are~~ were needed, and that a joint NRC and industry program should be initiated to implement these improvements. Both of these groups made specific recommendations which are summarized as follows:

- 1) The NRC should adopt the criteria for defining the scope of Technical Specifications proposed in the AIF and TSIP reports. Those criteria should then be used by the NRC and each of the nuclear steam supply system vendor owners groups to completely rewrite and streamline the existing STS. This process would result in many requirements being transferred from control by Technical Specifications requirements to control by other mechanisms [e.g., the Final Safety Analysis Report (FSAR), Operating Procedures, Quality Assurance (QA) Plan] which would not require a license amendment or prior NRC approval when changes are needed. The new STS should include greater emphasis on human factors principles in order to add clarity and understanding to the text of the STS. The new STS should also provide improvements to the Bases Section of Technical Specifications which provides the purpose for each requirement in the specification.
- 2) A parallel program of short-term improvements in both the scope and substance of the existing Technical Specifications should be initiated in addition to developing a new STS as identified in paragraph (1) above.

On February 6, 1987, the NRC published in the Federal Register for public comment (52 FR 3788) an Interim Policy Statement on Technical Specification Improvements for Nuclear Power Reactors containing proposed criteria in response to item (1). These criteria were generally derived from the criteria proposed in the AIF and TSIP reports and were modified slightly based on discussions between the NRC staff and the industry. The public comment period expired on March 23, 1987.

The NRC has developed a program for short-term improvements as described in item (2.) These are known as "line-item" improvements and are generic improvements developed and promulgated by the NRC staff for voluntary adoption by licensees.

Subsequently, improved vendor-specific STS were developed and issued by the NRC in September 1992. The improved STS were published as the following NRC Reports:

- NUREG-1430, "Standard Technical Specifications, Babcock and Wilcox Plants"

¹SECY-86-10, "Recommendations for Improving Technical Specifications," dated January 13, 1986, contains both "Recommendations for Improving Technical Specifications," NRC Technical Specifications Improvement Project,

September 30, 1985, and "Technical Specifications Improvements," AIF Subcommittee on Technical Specifications Improvements, October 1, 1985.

- NUREG-1431, "Standard Technical Specifications, Westinghouse Plants"
- NUREG-1432, "Standard Technical Specifications, Combustion Engineering Plants"
- NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4"
- NUREG-1434, "Standard Technical Specifications, General Electric Plants BWR/6"

These improved STS were the result of extensive technical meetings and discussions among the NRC staff, industry owners groups, vendors, and NUMARC.

II. SUMMARY OF PUBLIC COMMENTS ON THE INTERIM POLICY STATEMENT AND NRC RESPONSES

In early 1987, the Commission received 29 letters with comments on the interim Policy Statement on Technical Specification Improvements. A list of the commenters and a detailed analysis of public comments are available for public inspection in the NRC Public Document Room at 2120 L Street NW., Lower Level of the Gelman Building, Washington, D.C. 20555.

Twenty-five of the 29 commenters were generally supportive of the Commission Policy Statement and the overall Technical Specifications Improvement Program; 3 commenters were generally not supportive; and 1 commenter was neutral. Of the 29 commenters, 23 can be categorized as representing industry views, 3 are government agencies, and 3 are interested members of the public. The industry group stated strong support for the Policy Statement and its criteria. The comments included extensive support for the overall Commission objectives of improving Technical Specifications so they are clearer and less ambiguous. The three commenters opposed to the Policy Statement were primarily concerned that moving any requirements to other documents might make them "less enforceable" than Technical Specifications or might weaken the inspection process.

Based on the criteria in this Policy Statement that define requirements that should be controlled by Technical Specifications, the Commission concludes that some requirements previously contained in Technical Specifications should be relocated to other documents that do not have the direct enforceability of Technical Specifications and do not require NRC staff approval before changes are made. Many of the requirements will be relocated to the FSAR and will be controlled through 10 CFR 50.59. Most other requirements will be relocated to more appropriate documents (e.g., Security Plan, QA Plan) and controlled by the applicable regulatory requirements. The adequacy of controls for relocated requirements which do not fit in the above categories will be reviewed and approved by the NRC staff on a case-by-case basis to determine, among other things, whether an enforceable control method will need to be established. NRC approval would still be required for any changes to requirements covered by 10 CFR 50.59 that involved an unreviewed safety question and for changes which exceed the threshold criteria in the regulations for other controlled documents. The Commission believes that this control and enforcement posture is commensurate with the safety importance of the relocated requirements.

Many of the commenters addressed specific issues discussed in the Policy Statement. The following paragraphs discuss issues addressed by a significant portion of the commenters or that are of particular interest.

A slight majority of the industry commenters stated that they agreed with the Policy Statement that improvements should be voluntary. In addition, four of the commenters stated that if licensees elect to implement the Policy Statement, they should not be required to convert to STS. The Commission has concluded that where STS requirements are generally applicable, the STS should be adopted unless adequate justification for acceptance of a plant-specific Technical Specification is provided. Cases may arise where there is a question concerning the NRC staff proposed addition of requirements in the improved STS that are not in a licensee's current Technical Specifications. In such cases, the Commission intends to control the process by evaluating the imposition of additional requirements in accordance with the Commission regulations on backfitting (10 CFR 50.109).

The interim Policy Statement identified three criteria to be used to define which of the current Technical Specification requirements should be retained or included in Technical Specifications and which requirements could be relocated to licensee-controlled documents. Half of the industry commenters stated that licensees should be allowed to selectively apply the criteria without fully adopting the improvement process (e.g., not improving Bases and not applying accepted human factors principles to Technical Specifications). In this regard, it is the Commission's policy that licensees may adopt portions of the improved STS without fully implementing all STS improvements. The Commission will, however, place the highest priority on the review and approval of Technical Specifications related submittals for complete conversions to the improved STS. For licensees who adopt portions of the improved STS, these portions shall include all related requirements and will normally be developed as line-item improvements by the NRC staff. In all cases, the Commission expects improved Bases to accompany requests for improved Technical Specifications. The Commission realizes, however, that it may not always be practical for licensees to apply all of the human factors principles used in the improved STS. The Commission believes that the above approach will result in safety improvements as well as consistency in Technical Specifications requirements and will allow the most efficient use of NRC and industry resources.

When the interim Policy Statement was issued, the Commission believed that it was only the overall package of improvements which, if adopted, would produce an improvement in safety. However, experience in the development of the improved STS and in the review of license amendment requests has led the Commission to conclude that safety benefits can be realized from adopting portions of the improved STS without fully implementing all STS improvements. The NRC staff has developed several line-item improvements since the publication of the interim Policy Statement. These improvements have been reviewed by the Committee to Review Generic Requirements and have been made available for voluntary implementation through generic letters. While the Commission continues to believe that the greatest improvement to safety can be realized by implementing all of the improvements in the improved STS, it also believes there is considerable merit in allowing licensees to improve portions

of their Technical Specifications that could result in a safety benefit.

Fifteen industry respondents strongly supported the use of the criteria to determine which future requirements (e.g., from generic issues) would be included in Technical Specifications. This has been the Commission's intent and the Policy Statement has been modified accordingly.

Ten commenters stated that the proposed criteria were acceptable as is, and several recommended prompt rulemaking to codify the criteria. Five other commenters indicated that the criteria were inadequate or that additional discussion of the criteria scope and intent was needed. After studying comments and use of the criteria, the Commission determined that further discussion of the criteria was needed and this is included in Section IV. The Department of Nuclear Safety, State of Illinois, recommended adding a fourth criterion and delaying implementation of the Policy Statement until rule changes necessary for implementation are promulgated. The criterion suggested would expand on Criterion 3 to cover all anticipated operational sequences. The Commission believes that safety significant operational sequences are adequately addressed by Criteria 2 and 3. The Commission has added a fourth criterion (different from that proposed by the State of Illinois) to capture requirements which operating experience or probabilistic safety assessment (PSA) show to be significant to public health and safety.

In considering the specific comments on the criteria and based on experience in applying the criteria, the Commission concluded that the criteria do not need to be codified through rulemaking. Rather, this policy statement will identify the criteria to be used to implement 10 CFR 50.36 as currently written. The Policy Statement provides a means to keep the criteria with the discussion of the application of each criterion. The Commission believes this is important for a clear understanding of how the criteria are implemented. There is a common understanding between the NRC staff and the industry that the criteria provide a template to develop improved Technical Specifications. The criteria will be used by a licensee to prepare a Technical Specification submittal to the NRC. If the NRC staff does not believe the criteria have been appropriately applied, the staff will not issue a license amendment until the licensee has properly applied the criteria. For these reasons, the Commission believes codifying the criteria through rulemaking would be an unnecessary duplication of effort with little regulatory benefit.

In addition to the comments on the three original criteria, seven of the commenters were opposed to using PSA to define the contents of the Technical Specifications. They expressed concern that PSA has only limited applicability and that its use is not well defined. Moreover, these commenters noted that plant licensing is based primarily on Design Basis Accident analysis which lends itself to a deterministic process rather than a PSA-based process for identifying Technical Specification requirements. The Commission believes that plant- and design-specific PSAs have yielded valuable insight to unique plant vulnerabilities not fully recognized in the safety analysis report Design Basis Accident or Transient analyses.

Some commenters stated that if PSA is used to impose Technical Specifications for some high-risk items, it should also be used to remove some low-risk items. The Commission notes that this approach to Technical Specifications

has been considered at length during the development of the Policy Statement. Since the first three criteria in the Policy Statement are derived from the plant safety analysis report which is deterministic in nature, (but which itself incorporates qualitative risk insights) the Commission believes that a broad application of PSA to remove individual requirements from Technical Specifications is generally counter to the philosophy of the first three criteria. However, risk insights were used to determine the values of some completion times and surveillance frequencies for items retained in the improved STS.

The extension of the use of PSA to remove individual requirements from technical specifications would need to be founded in a broader policy of risk-based regulation which the Commission is currently pursuing at a level more inclusive than Technical Specifications improvements. Specifically, the Commission believes that it would be inappropriate at this time to allow requirements which meet one or more of the first three criteria to be deleted from Technical Specifications based solely on PSA (Criterion 4). If a requirement meets any one of the four criteria, it should be retained or included in Technical Specifications.

The Commission Policy in this regard is consistent with its Policy Statement on "Safety Goals for the Operation of Nuclear Power Plants," 51 FR 30028, Published on August 21, 1986. The Policy Statement on Safety Goals states in part, "... probabilistic results should also be reasonably balanced and supported through use of deterministic arguments. In this way, judgements can be made ... about the degree of confidence to be given to these [probabilistic] estimates and assumptions. This is a key part of the process of determining the degree of regulatory conservatism that may be warranted for particular decisions. This defense-in-depth approach is expected to continue to ensure the protection of public health and safety." At its conclusion, the Policy Statement on Safety Goals adds, "Nor are the safety goals and these implementation guidelines in and of themselves meant to serve as a sole basis for licensing decisions. However, if pursuant to these guidelines, information is developed that is applicable to a particular licensing decision, it may be considered as one factor in the licensing decision."

The Commission will continue to use PSA, consistent with its policy on Safety Goals, as a tool in evaluating specific line-item improvements to Technical Specifications, new requirements, and industry proposals for risk-based Technical Specification changes.

About a third of the respondents stated that NRC should place a high priority on making available specific line-item improvements to current Technical Specifications. The Commission agrees with these comments but will continue to give the highest priority to complete conversions to the improved STS.

III. DISCUSSION

The Commission recognizes the advantages of improved Technical Specifications. Clarification of the scope and purpose of Technical Specifications will ~~provide~~ has provided useful guidance to both the NRC and industry and ~~should serve~~ has served as an important incentive for industry participation in a

voluntary program to improve Technical Specifications. It will result in Technical Specifications that have resulted in improved STS that are intended to focus licensee's and the plant operator's attention on those plant conditions most important to safety. and that This should also result in more efficient use of agency and industry resources.

The Policy Statement identifies ~~three objective~~ four criteria for defining the scope of Technical Specifications. These criteria are intended to be consistent with the scope of Technical Specifications as stated in the Statement of Consideration accompanying the current rule, 10 CFR 50.36.

The Statement of Consideration for the final rule issuing 10 CFR 50.36 (33 FR 18610, December 17, 1968) discusses the scope of Technical Specifications as including the following:

In the revised system, emphasis is placed on two general classes of technical matters: (1) those related to prevention of accidents, and (2) those related to mitigation of the consequences of accidents. By systematic analysis and evaluation of a particular facility, each applicant is required to identify at the construction permit stage, those items that are directly related to maintaining the integrity of the physical barriers designed to contain radioactivity. Such items are expected to be the subjects of Technical Specifications in the operating license.

The first of these two general classes of technical matters to be included in Technical Specifications is captured by criteria (1), (4), and to some extent criterion (2) in that they address systems and process variables that alert the operator to a situation when accident initiation is more likely. The second general class of technical matters is explicitly addressed and captured by criteria (2), and (3), and (4). By applying the ~~three~~ four criteria contained in the Policy Statement a licensee should capture all of those specific characteristics of its facility and the conditions for its operation that are required to meet the principal operative standard in Section 182a. of the Atomic Energy Act, that is, that adequate protection is provided to the health and safety of the public.

The Commission recognizes that the ~~three~~ four criteria carry with them a common theme of focusing on those ~~the technical~~ requirements related to technical matters dealing with those features of a facility that are for features of controlling importance to safety. Since many of the requirements are of immediate concern to the health and safety of the public, ~~the~~ this Policy Statement adopts, for the purpose of relocating requirements from Technical Specifications to other licensee-controlled documents, the subjective statement of the purpose of Technical Specifications expressed by ~~an~~ the Atomic Safety and Licensing Appeal Board in Portland General Electric Company (Trojan Nuclear Plant), ALAB-531, 9 NRC 263 (1979). There, the Appeal Board interpreted Technical Specifications as being reserved for those conditions or limitations upon reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety.

The Commission wishes to emphasize that this Policy Statement is intended to

be consistent with the language of Section 182a. of the Atomic Energy Act, 10 CFR 50.36, and previous interpretations of the regulations. ~~It~~ The Policy Statement merely clarifies the scope and purpose of Technical Specifications by identifying criteria which can be used to establish, more clearly, the framework for Technical Specifications (i.e., identify those requirements derived from the analyses and evaluation included in the safety analysis report and which are of immediate concern to the health and safety of the public). It identifies requirements which should be retained or included in Technical Specifications and also describes a mechanism whereby ~~other~~ "additional" requirements can be identified and controlled through mechanisms other than Technical Specifications.

Over the past several years, the Commission has seen an improvement in industry development of effective maintenance programs. In addition, there has been an overall improvement in the industry in the conduct of 10 CFR 50.59 safety evaluations since the NUMARC publication of NSAC-125, "Guidelines for 10 CFR 50.59 Safety Evaluations," in June 1989. Furthermore, the ongoing NRC study on shutdown and low-power operation should provide some important insights for additional Technical Specification improvements in the areas of shutdown and low power operations. The Commission believes that these improvements, combined with improved Technical Specifications developed based on this Policy Statement, can lead to significant improvements in the operational safety of nuclear power facilities.

IV. THE COMMISSION'S POLICY

The purpose of Technical Specifications is to impose those conditions or limitations upon reactor operation necessary to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety by ~~establishing those conditions of operation which cannot be changed without prior Commission approval and by identifying those features which are of controlling importance to safety.~~ identifying those features that are of controlling importance to safety and establishing on them certain conditions of operation which cannot be changed without prior Commission approval.

Licensees are encouraged to implement a program to upgrade their Technical Specifications consistent with this purpose. The Commission will entertain requests based on the criteria below (as clarified by the supporting discussion) for individual license amendments that evaluate all of the Limiting Conditions for Operation (LCOs) for an individual plant to determine which LCOs should be included in the Technical Specifications. In addition, the Commission will also entertain requests to adopt portions of the improved STS, even if the licensee does not adopt all STS improvements. These portions shall include all related requirements and will normally be developed as line-item improvements by the NRC staff. The Commission encourages all licensees who submit Technical Specification related submittals based on this Policy Statement to emphasize human factors principles.

~~The Commission does not intend that these criteria be used as the basis for relocation of individual LCOs. LCOs which fail to do not meet one or more any of the criteria below may be removed~~ proposed for removal from the Technical

Specifications and ~~relocated relocation to other licensee-controlled documents, such as the FSAR or licensee procedures.~~ The criteria may be applied to either standard or custom Technical Specifications. The Commission will also consider the criteria in evaluating future generic requirements for inclusion in Technical Specifications.

In accordance with this Policy Statement, improved STS have been developed and will be maintained for each NSSS owners group. ~~However, it is expected that each of the nuclear steam supply system vendor owners groups will undertake the development of revised STS based on this Policy Statement, and we~~ The Commission encourages licensees to use the revised improved STS as the basis for their individual plant-specific Technical Specifications. During individual Technical Specification conversions, the non-voluntary addition of new requirements from the improved STS to individual plant Technical Specifications will be evaluated in accordance with the Commission regulations on backfitting (10 CFR 50.109) unless the staff suggested additional changes are needed to make the licensee requested changes acceptable from the standpoint of adequate protection or compliance with NRC regulations, in which case §50.109 does not apply and the request may be denied without the additional items. However, in all other cases, it is the Commission intent that the wording and Bases of the improved STS be used in the Technical Specification related submittal to the extent practicable.

The NRC will ~~give first place the highest priority in its Technical Specifications improvement efforts to on the review and approval of the revised STS and the plant-specific license amendment applications~~ Technical Specification related submittals based on them complete conversions to the improved STS. In addition, the Commission will also entertain requests to adopt portions of the improved STS, even if the licensee does not adopt all STS improvements. These portions shall include all related requirements and will normally be developed as line-item improvements by the NRC staff.

~~Approved short term Technical Specifications improvements will be included in the revised STS. The revised STS and individual license amendment requests that are submitted based on this Policy Statement should incorporate all terms and provisions of the Policy Statement.~~

The following criteria delineate those constraints on design and operation of nuclear power plants that are derived from the plant safety analysis report or PSA information and that belong in Technical Specifications in accordance with 10 CFR 50.36 and the purpose of Technical Specifications stated above.

Criterion 1: Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary:

Discussion of Criterion 1: A basic concept in the adequate protection of the public health and safety is the prevention of accidents. Instrumentation is installed to detect significant abnormal degradation of the reactor coolant pressure boundary so as to allow operator actions to either correct the condition or to shut down the plant safely, thus reducing the likelihood of a loss-of-coolant accident.

This criterion is intended to ensure that Technical Specifications control those instruments specifically installed to detect excessive reactor coolant system leakage. This criterion should not, however, be interpreted to include instrumentation to detect precursors to reactor coolant pressure boundary leakage or instrumentation to identify the source of actual leakage (e.g., loose parts monitor, seismic instrumentation, valve position indicators).

Criterion 2: A process variable, design feature, or operating restriction that is an initial condition of a Design Basis Accident (DBA) or Transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier:

Discussion of Criterion 2: Another basic concept in the adequate protection of the public health and safety is that the plant shall be operated within the bounds of the initial conditions assumed in the existing Design Basis Accident and Transient analyses and that the plant will be operated to preclude unanalyzed transients and accidents. These analyses consist of postulated events, analyzed in the ~~Final Safety Analysis Report (FSAR)~~, for which a structure, system, or component must meet specified functional goals. These analyses are contained in Chapters 6 and 15 of the FSAR (or equivalent chapters) and are identified as Condition II, III, or IV events (ANSI N 18.2) (or equivalent) that either assume the failure of or present a challenge to the integrity of a fission product barrier.

As used in Criterion 2, process variables are only those parameters for which specific values or ranges of values have been chosen as reference bounds in the Design Basis Accident or Transient analyses and which are monitored and controlled during power operation such that process values remain within the analysis bounds. Process variables captured by Criterion 2 are not, however, limited to only those directly monitored and controlled from the control room. These could also include other features or characteristics that are specifically assumed in Design Basis Accident and Transient analyses even if they cannot be directly observed in the control room (e.g., moderator temperature coefficient and hot channel factors).

The purpose of this criterion is to capture those process variables that have initial values assumed in the Design Basis Accident and Transient analyses, and which are monitored and controlled during power operation. As long as these variables are maintained within the established values, risk to the public safety is presumed to be acceptably low. This criterion also includes active design features (e.g., high pressure/low pressure system valves and interlocks) and operating restrictions (pressure/temperature limits) needed to preclude unanalyzed accidents and transients.

Criterion 3: A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a Design Basis

Accident or Transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier:

Discussion of Criterion 3: A third concept in the adequate protection of the public health and safety is that in the event that a postulated Design Basis Accident or Transient should occur, structures, systems, and components are available to function or to actuate in order to mitigate the consequence of the Design Basis Accident or Transient. Safety sequence analyses or their equivalent have been performed in recent years and provide a method of presenting the plant response to an accident. These can be used to define the primary success paths.

A safety sequence analysis is a systematic examination of the actions required to mitigate the consequences of events considered in the plant's Design Basis Accident and Transient analyses, as presented in Chapters 6 and 15 of the plant's ~~Final Safety Analysis Report~~ FSAR (or equivalent chapters). Such a safety sequence analysis considers all applicable events, whether explicitly or implicitly presented. The primary success path of a safety sequence analysis consists of the combination and sequences of equipment needed to operate (including consideration of the single failure criteria), so that the plant response to Design Basis Accidents and Transients limits the consequences of these events to within the appropriate acceptance criteria.

It is the intent of this criterion to capture into Technical Specifications only those structures, systems, and components that are part of the primary success path of a safety sequence analysis. Also captured by this criterion are those support and actuation systems that are necessary for items in the primary success path to successfully function. The primary success path for a particular mode of operation does not include backup and diverse equipment (e.g., rod withdrawal block which is a backup to the average power range monitor high flux trip in the startup mode, safety valves which are backup to low temperature overpressure relief valves during cold shutdown).

Criterion 4: A structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety:

Discussion of Criterion 4: ~~In addition to those structures, systems, and components captured by the above criteria,~~ It is the Commission's policy that licensees retain in their Technical Specifications LCOs, action statements and Surveillance Requirements for the following systems (as applicable), which operating experience and PSA have generally shown to be significant to public health and safety ~~and any other structures, systems, or components that meet this criterion:~~

- ° Reactor Core Isolation Cooling (RCIC)/Isolation Condenser,
- ° Residual Heat Removal (RHR),
- ° Standby Liquid Control (SBLC), and
- ° Recirculation Pump Trip (RPT).

~~The Commission recognizes that features of plant design and operation not addressed in the safety analysis report's Design Basis Accidents or Transient Analyses can, in some cases, be significant contributors to the plant's overall core melt probability and risk. As stated in 10 CFR 50.36, the Commission may include such additional Technical Specifications as the Commission finds appropriate. Based on this, and consistent with the Commission's Safety Goal and Severe Accident Policy Statements, the Commission finds that risk evaluations are an appropriate tool for defining requirements that should be retained or included in Technical Specifications where including such requirements is consistent with the purpose of Technical Specifications as defined above.~~

The Commission recognizes that other structures, systems, or components may meet this criterion. Plant- and design-specific PSAs have yielded valuable insight to unique plant vulnerabilities not fully recognized in the safety analysis report Design Basis Accident or Transient analyses. It is the intent of this criterion that those requirements that PSA or operating experience exposes as significant to public health and safety, consistent with the Commission Safety Goal and Severe Accident Policies, be retained or included in Technical Specifications.

The Commission expects that ~~owners groups~~ licensees, in preparing their proposals to streamline the STS Technical Specification related submittals, will utilize the any plant-specific PSA or risk survey and any available literature on risk insights and PSAs. This material should be employed to strengthen the technical bases for those requirements that remain in Technical Specifications, when applicable, and to verify that none of the requirements to be relocated contain constraints of prime importance in limiting the likelihood or severity of the accident sequences that are commonly found to dominate risk. Similarly, the NRC staff will also employ risk insights and PSAs in evaluating the revised STS Technical Specifications related submittals.

~~In some cases, plant specific PSAs or risk surveys conducted, for example, pursuant to the Commission's Severe Accident Policy, may be available to licensees as they prepare license amendments to adopt the revised STS to their plant, or to streamline custom Technical Specifications under this Policy Statement. Where such PSAs or surveys are available, they should be used to strengthen the Bases and screen those Technical Specifications to be relocated, as suggested above. Where such plant specific risk surveys are unavailable, licensees should utilize the available literature on risk insights and PSAs, as described above. However, licensees need not await the performance of plant specific PSA studies before availing themselves of this policy. As in the case of the revised STS discussed above, the Staff will also utilize risk insights and PSAs in evaluating the plant specific submittals. Further, as a part of the Commission's ongoing program of improving Technical Specifications, it will continue research in to consider methods to make better use of risk and reliability considerations Information for defining future generic Technical Specification requirements.~~

Requirements which would be relocated from Technical Specifications to another licensee-controlled document (e.g., the FSAR and 10 CFR 50.59, Operating

~~Procedures, the Security Plan, the QA Plan, or Fire Protection Plan~~ may be changed or deleted in conjunction with the filing of ~~the revised STS or of individual license amendment~~ Technical Specifications related requests to implement this Policy Statement. The package containing ~~the revised STS or the amendment request~~ must contain a clear statement of the basis ~~for of the requirements to be changed or deleted~~ change or deletion, a safety evaluation, and a statement that the changes have been reviewed by a multidisciplinary group of responsible, technical supervisory personnel, including onsite operations personnel.

Appropriate Surveillance Requirements and Actions ~~statements~~ should be retained for each LCO which remains or is included in the Technical Specifications. Each LCO, Action ~~Statement~~, and Surveillance Requirement should have supporting Bases. The Bases should at a minimum address the following questions and cite references to appropriate licensing documentation (e.g., FSAR, Topical Report) to support the Bases.

1. What is the justification for the Technical Specification, i.e., which ~~Policy Statement~~ criterion requires it to be in the Technical Specifications?
2. What are the Bases for each LCO, i.e., why was it determined to be the lowest functional capability or performance level for the system or component in question necessary for safe operation of the facility and, what are the reasons for the ~~Applicable Operational Modes(s) for Applicability of the LCO?~~
3. What are the Bases for each Action ~~Statement~~, i.e., why should this remedial action be taken if the associated LCO cannot be met; how does this Action relate to other Actions ~~Statements~~ associated with the LCO; and what justifies continued operation of the system or component at the reduced state from the state specified in the LCO for the allowed time period?
4. What are the Bases for each ~~Limiting Safety System Setting~~ ~~Safety Limit?~~
5. What are the Bases for each Surveillance Requirement and Surveillance ~~interval frequency~~; i.e., what specific functional requirement is the surveillance designed to verify? ~~and Why is this surveillance necessary at the specified frequency to assure that the system or component function is maintained, that facility operation will be within the Safety Limits, and that the LCO will be met?~~

NOTE: In answering these questions the Bases for each number (e.g., ~~Trip Set point Allowable Value, Response Time, Allowed Outage Completion Time, Surveillance Test Interval Frequency~~), state, condition, and definition (e.g., operability) should be clearly specified. As an example, a number might be based on engineering judgment, past experience, and/or PSA insights; but this should be clearly stated.

~~The Commission recognizes that certain amendments to the regulations² may be necessary before the content of Technical Specifications can be limited entirely to the purpose defined above as embodied in the associated criteria~~

~~(e.g., §50.36a on Radiological Environmental Technical Specifications would have to be amended before radiological effluent controls can be transferred from the Technical Specifications to other documents). The Staff will initiate in parallel with issuance of this Policy Statement the rule changes necessary to fully implement this Policy Statement.~~

~~To give added assurance that the conditions and limitations currently contained in Technical Specifications that will be removed are adequately controlled, the NRC will give increased attention to changes made pursuant to §50.59 and to the administrative control requirements of the Technical Specifications. The NRC is paying closer attention to FSAR updates, and will specifically look for changes which potentially violate §50.59. The Staff is encouraging industry to get the help of the Institute of Nuclear Power Operations (INPO) and the support of the Nuclear Utility Management Resource Committee (NUMARC), in sponsoring activities to encourage the highest quality for utility review of changes including those made pursuant to §50.59. The NRC will work with industry to develop a standard for the conduct of §50.59 reviews. This standard will then be afforded regulatory status (e.g., by a separate policy statement, regulatory guide, or generic letter). In the interim, utilities that choose to file an application to amend their Technical~~

~~2Ibid, Enclosure 1, Table 3.1.~~

~~Specifications in accordance with this Policy Statement must have in place administrative controls to ensure that changes made pursuant to §50.59 are made only after the bases for the requirement have been clearly established and after review by a multidisciplinary review group made up of responsible technical supervisory personnel, including onsite operations personnel. In addition, if Technical Specification requirements are relocated to plant procedures, then the revised Technical Specifications must contain administrative controls to ensure that they are appropriately maintained and implemented. The Staff will issue guidance on the appropriate control mechanisms for requirements removed from Technical Specifications (e.g., FSAR amendments, procedures, or other licensee-controlled documents) in time for use when the Policy Statement is issued in final form.~~

When licensees submit amendment requests based on this Policy Statement, they should identify the location of and controls for the technical and administrative requirements of the removed Technical Specifications relocated requirements. The NRC staff will carefully review these submittals to ensure the accountability and the acceptability of controls for of each relocated requirement. Many of the requirements will be relocated to the FSAR and will be enforceable through 10 CFR 50.59. Other requirements will be relocated to more appropriate documents (e.g., Security Plan, QA Plan) and controlled by the applicable regulatory requirements. The adequacy of controls for relocated requirements which do not fit in the above categories will be reviewed and approved by the NRC staff on a case-by-case basis to determine, among other things, whether an enforceable control method will need to be established.

Since some of the requirements currently contained in the Technical Specifications will be relocated to licensee-controlled documents to which changes will be controlled by 10 CFR 50.59, the NRC has been giving increased attention to the 10 CFR 50.59 change process. In the interim Policy Statement

the Commission encouraged industry to obtain the support of NUMARC in sponsoring activities to encourage the highest quality for utility review of changes made pursuant to 10 CFR 50.59. In June 1989, NUMARC published NSAC-125, "Guidelines for 10 CFR 50.59 Safety Evaluations." During the development of these guidelines, the NRC staff and NUMARC met on several occasions to discuss the content of NSAC-125. Since its publication, nearly all of the industry has been using NSAC-125 as guidance in performing 10 CFR 50.59 safety evaluations. While the NRC and the industry do not fully agree on all issues associated with 10 CFR 50.59, based on inspections and reviews since the issuance of NSAC-125, the NRC staff has seen an overall improvement in the conduct of 10 CFR 50.59 safety evaluations. However, the Commission does not believe that the guidelines described in NSAC-125 are appropriate for endorsement as regulatory guidance.

In addition, in December 1992, the Office of Nuclear Reactor Regulation issued Inspection Procedure 37001, "10 CFR 50.59 Safety Evaluation Program," to provide NRC inspectors with updated guidance for evaluating utility performance in implementing the requirements of 10 CFR 50.59. The Commission believes use of this inspection guidance will provide continued assurance that the NRC is appropriately monitoring 10 CFR 50.59 safety evaluation programs for licensees who convert to the improved STS.

The Commission emphasizes the importance of a well-planned transition for licensees who plan to convert to the improved STS. Such a transition should include careful consideration of procedure revisions and operator training to ensure safe operation during and following the conversion.

The NRC will, consistent with its mission, allocate resources as necessary to implement this Policy Statement.

V. ENFORCEMENT POLICY

Any changes to a licensee's Technical Specifications to apply this Policy Statement's criteria will be made by the license amendment process prior to implementation. Continued Compliance with Technical Specifications is required by the Commission, and with the adherence to commitments contained in other licensee-controlled documents is required expected by the Commission. Violations and deviations will, as in the past, be subject to handled in accordance with the NRC Enforcement Policy in 10 CFR Part 2, Appendix C (1986) (1992).

If a licensee elects to apply these criteria, the requirements of the removed specifications will be relocated to the Final Safety Analysis Report (FSAR) or other licensee-controlled documents. Licensees must are to operate their facilities in conformance with the descriptions of their facilities and procedures in their FSAR. unless the change is reviewed and approved Changes to the facility or to procedures described in the FSAR are to be made in accordance with 10 CFR 50.59. The Commission will take appropriate enforcement action to ensure that licensees comply with FSAR commitments and 10 CFR 50.59. Changes to made in accordance with the provisions of other licensee-controlled documents (e.g., QA plan, Security Plan or plant procedures) are subject to the specific requirements for those documents.

Nothing in this Policy Statement shall limit the authority of the NRC to conduct inspections as deemed necessary and to take appropriate enforcement action when regulatory requirements or commitments are not met.

~~ADDITIONAL VIEWS OF COMMISSIONER ASSELSTINE~~

~~Commissioner Asselstine adds the following: I disapprove this interim policy statement. Although I support an effort to bring about improvements in plant Technical Specifications, I believe that this policy statement must be modified in four respects: First, any such policy should contain an explicit statement that the Commission will not entertain changes in testing and surveillance intervals and allowed outage times until licensee maintenance programs are strengthened. Second, I believe that 10 CFR 50.59 review process should be strengthened before licensees are given the flexibility afforded this interim policy. Third, this interim policy weakens the Commission's enforcement options for some important safety requirements now contained in the Technical Specifications. For example, plants licensed since January 1, 1979 (33 full power licenses thus far) are not covered by the requirements of the commission's fire protection regulations (10 CFR Part 50, Appendix R). Instead, the Technical Specifications and license condition have been used as the vehicle for establishing enforceable fire protection requirements for the plants licensed since 1978. It appears that this policy statement would allow removing the enforceable fire protection requirements from the Technical Specifications and placing them in a far less enforceable document—the Final Safety Analysis Report. The February 7, 1986 memorandum from the Acting Director for Operations to the Commissioners (Subject: Test Application of TSIP Technical Specification Selection Criteria) indicates that fire detection instrumentation, fire suppression systems and fire barriers would no longer be covered by the Technical Specifications. As the NRC staff admits, "(T)he NRC's ability to fine a licensee or to seek escalated enforcement action against a licensee who fails to comply with some relocated Technical Specifications is somewhat diminished." This is unacceptable. At a minimum, the commission should treat failures to meet safety provisions in the Final Safety Analysis Report and other such controlled documents in the same manner as failures to comply with Technical Specifications.~~

~~Finally, the February 7, 1986 memorandum indicates that AC and DC power sources would not be covered by Technical Specifications while the plant is in the decay heat removal mode. These power sources are not deemed vital because events in this mode or operation are not "design basis accidents." I find this argument troubling. The significance of the decay heat removal function is described in, for example, the NRC's Office of Analysis and Evaluation of Operation Data report "Decay Heat Removal Problems at U.S. Pressurized Water Reactors" AEOD/C503, December, 1985. I fail to see the wisdom of not addressing power sources in the Technical Specifications while the plant is in the decay heat removal mode. Therefore, I must question the adequacy of the selection criteria for what is and is not to remain in the Technical Specifications.~~

~~I would appreciate receiving comments on the above.~~

This draft final Policy Statement amends information collection requirements that are subject to the Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq). This Policy Statement has been submitted to the Office of Management and Budget for review and approval of the paperwork requirements.

The public reporting burden for this voluntary collection of information is estimated to average 4000 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Information and Records Management Branch (MNBB-7714), U.S. Nuclear Regulatory Commission, Washington D.C. 20555, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-3019, (3150-0011), Office of Management and Budget, Washington, D.C. 20503.

Dated at Washington, D.C., this _____ day of _____, 1987 1993.

For the Nuclear Regulatory Commission.

Samuel J. Chilk
Secretary of the Commission

**Updated Analysis of Public Comments
on the Commissions's
Interim Policy Statement on
Technical Specifications Improvements**

Presented with changes from the analysis of public comments contained in SECY-87-269, as indicated by revision bars in the right margin of the Staff Response.

<u>Comment</u>	<u>Commenter(s)</u>	<u>Commenter(s) with Opposing View</u>	<u>Staff Response</u>
1. <u>General Comments</u>			
a. Commenter states general support for the Policy Statement and overall Technical Specification Improvement Program.	1, 2, 3, 6, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29	4, 5, 18	None.
b. The need for the Policy Statement and improving TS is apparent.	17	4, 19	None.
c. The NRC should issue the final Policy Statement promptly.	10, 14, 15, 17, 25, 26, 29	4, 23	The Staff believes that issuance of the final Policy Statement at this [1987] time is not in the best interest of safety. Although the staff has experienced trial usage of the criteria and has confidence in the foundation of the Policy Statement, the statement has not had the test of time. The staff believes that an additional few months' use will be ample to allow it to make a reasoned judgement on the effectiveness of the statement. In the meantime, the industry can expect stability in the criteria and their application.
d. The Policy Statement will tend to improve safety.	1, 7, 9, 19	4, 18	The staff agrees.
e. The Policy Statement should be voluntary.	1, 6, 9, 10, 15, 16, 17, 19, 20, 24, 25, 26, 29	None	The staff agrees.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
1. <u>General Comments</u> (continued)			
f. The TS screening criteria should be used in qualifying future generic items for inclusion in TS.	1, 2, 3, 6, 7, 8, 10, 12, 14, 15, 16, 17, 19, 21, 29	None	The staff agrees.
g. The NRC should use these criteria now in day-to-day licensing activities dealing with plant-specific TS.	11, 16, 24	None	TS improvements based on the policy statement may be proposed by licensees, provided they appropriately reflect the substance of a complete portion of the improved STS, including Bases. Such proposals will be used to develop line-item improvements that the NRC staff will submit for generic approval by the Committee to Review Generic Requirements.
h. Past generic TS requirements that are still not implemented should be reassessed using the selection criteria.	16, 19	None	License amendments implementing existing generic requirements will be evaluated against the improved STS with regard to the scope of the requirements and, as such, will be reassessed to the criteria in the Policy Statement.
i. Implementing the Policy Statement could increase (not decrease) the administrative burden on the NRC.	4	2, 3, 9	Implementing the Policy Statement will result in a significant reduction in the size (approximately 40 percent less) and complexity of TS. There will be a short-term administrative burden, (to review the new STS and licensees amendments based on them), but the cumulative longer term burden will be significantly reduced (because of the need for fewer TS amendment requests and the need for fewer TS interpretations).

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
1. <u>General Comments</u> (continued)			
j. The NRC should dedicate the resources necessary to ensure that new STS/TS submittals from owners groups and licensees are reviewed in a timely manner. (In some cases, the commenter approved of the statement in the interim Policy Statement that the NRC would allocate the necessary resources).	8, 9, 10, 14, 16, 19	None	The Commission agrees that the new STS/TS submittals should be reviewed in a timely manner and is giving this work high priority.
k. Licensees should be permitted to adopt short-term improvements to their TS without committing to the other improvements identified in the Policy Statement.	12	None	See response to comment 1.g.
1. The Proposed Rule [Policy Statement] does not seem to contain any criteria for invoking or ignoring the Backfit Rule.	18	None	TS improvements resulting from the interim Policy Statement will not be the result of "new or amended provision in the Commission or the <u>imposition</u> of a regulatory staff position interpreting the Commission rules that is either new or different from a previously applicable staff position [emphasis added]." While the Policy Statement provides for voluntary implementation, the staff will use 10 CFR 50.109 if a licensee adopting the improved STS does not volunteer to implement specific requirements more restrictive than its current Technical Specifications.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
1. <u>General Comments</u> (continued)			
m. The Proposed Rule would inappropriately allow avoiding unresolved safety issues (USIs) by reclassifying them into the FSAR, QA, or using other means that would not require a license amendment or prior NRC approval.	18	None	The Policy Statement has no bearing on USIs or their technical resolutions.
n. The Proposed Rule weakens the inadequate inspection even further by allowing licensees to reclassify any embarrassing or deficient actions out of the sight of the NRC, Federal Emergency Management Agency, local and state authorities, and anybody else that they want to avoid.	18	None	In the past the decision as to what should be a TS was made on the basis of very general guidance. As a result, staff positions of little importance were allowed to become TS. The attention given these staff positions -- simply because they were TS -- was out of balance with the safety need. As a result, both staff and licensee resources were not efficiently used in changing, enforcing, inspecting, auditing, and monitoring activities associated with them. The Policy Statement criteria allow the less important staff positions to be relocated to documents that may be changed by other change processes approved by the NRC. If a change to the relocated staff positions is covered by 10 CFR 50.59 and involves an unreviewed safety question, the licensee must get prior NRC approval. This will allow better use of NRC resources.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
2. <u>Comments Related to the Technical Specification Screening Criteria</u>			
a. The TS screening criteria are adequate.	1, 10, 12, 15, 16, 17, 19, 20, 25	2*, 3*, 4, 18, 23	<p>The majority of commenters supported the three criteria in the interim policy statement. The staff has added a fourth criterion for operational experience and risk significance to more explicitly address matters previously included in the discussion of the criteria. Based on the experience gained during development of the improved STS and initial lead-plant conversions, the staff concludes that the criteria, as modified, are adequate.</p> <p>Two commenters are opposed to any action by NRC that would remove items from the previous standard TS or existing licenses. This view fails to recognize that the criteria serve to define what provisions need to be controlled by TS.</p>
<p>* Commenter stated that Criterion 2 should address parameter determined by core design, not continuously monitored by the operator, and controlled by other parameters (e.g., moderator temperature coefficient). Criterion 3 should clarify the point at which an event no longer poses an immediate threat.</p>			
b. There should be a 4th criterion "Process variable, structures, systems, or components that are elements of a primary success path of a safety sequence (including support and actuation systems) that are necessary during any anticipated operational sequence."	23		<p>The staff believes that expansion to this degree embraces too many less important features that would unnecessarily burden both industry and the staff. Requirements related to safety significant anticipated operational sequences are captured as elements of the "Design Basis ... transient analysis" discussed in Criterion 2 and Criterion 3.</p>

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
2. <u>Comments Related to the Technical Specification Screening Criteria</u> (continued)			
c. Rulemaking to codify the TS screening criteria should begin immediately (or in parallel with implementing the final Policy Statement).	8, 10, 14, 21, 24	None	The interim Policy Statement contemplated rulemaking. However, the staff now believes that rulemaking is unnecessary. The Final Policy Statement can be adequately applied under the existing language of 10 CFR 50.36.
3. <u>Comments Related to the Use of PRA</u>			
a. The statement that licensees should not have to await the performance of plant-specific PRAs before availing themselves of the policy should be clarified.	1, 9, 10	None	The Policy Statement states that licensees need not await plant-specific PRAs to avail themselves of this policy. This statement, in conjunction with the statement that owners groups and licensees make use of the "available" literature on risk insights and PRA when implementing the Policy Statement, make it abundantly clear that new PRAs (by either the licensees or owners groups) are not required as a result of this policy.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
3. <u>Comments Related to the Use of PRA</u> (continued)			
b. Because the Policy Statement recognizes PRA as an appropriate tool for deciding not to relocate certain requirements out of TS, PRA should also be recognized as an appropriate tool for removing TS of low risk that would otherwise be retained by the criteria.	2, 3, 10, 12, 25	None	The staff appreciates the logic of this comment, but notes that this approach to TS has been considered at length during the development of the Policy Statement. Since the objective criteria in the Policy Statement are derived from the plant safety analysis report, which is deterministic in nature, the staff believes that a broad application of this approach is generally counter to the philosophy of these criteria. Specifically, staff believes that it would be inappropriate at this time to allow requirements which meet one or more of the objective criteria to be deleted from Technical Specifications based solely on PRA. However, PRA analyses have been used as a basis for extending surveillance intervals required for reactor protection system testing by TS. The staff will consider requests for TS changes based on PRA and other applicable considerations.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
3. <u>Comments Related to the Use of PRA</u> (continued)			
c. PRA should not be used to define the <u>content</u> of TS (or PRA use should be kept to a minimum).	10, 11, 12, 16, 20, 24	None	The Policy Statement is in general agreement with this comment. The content of TS should be consistent with the regulations and with the guidance contained in the Policy Statement. Three of the criteria define objective safety requirements, and a fourth criterion is included to make explicit that PRA insights are to be appropriately used to supplement the objective criteria to the extent that requirements are found to be of prime importance in limiting risk consistent with the purpose of TS.
d. The Policy Statement should be clearer on how PRA is to be used (e.g., by owners groups). Perhaps the statement should indicate that, based on risk, requirements for four systems that did not meet the criteria must remain in TS, and that absent significant new risk insights, few additional systems are expected to fall into this category.	8, 11, 16	None	Adoption of this comment would essentially eliminate the use of PRA for evaluating the need for future requirements. The staff believes that the Policy Statement discussion on the use of PRA is appropriate. The four systems identified in the Policy Statement are not intended to be exhaustive. It is incumbent upon each owners group and licensee to use risk insights and PRA to ensure that requirements needed to limit risk in specific plant designs are appropriately included in the TS.
e. The NRC's continued research in methods to make better use of risk and reliability should be coordinated with industry.	19	None	The staff agrees with this comment.

<u>Comment</u>	<u>Commenter(s)</u>	<u>Commenter(s) with Opposing View</u>	<u>Staff Response</u>
3. <u>Comments Related to the Use of PRA (continued)</u>			
f. The Commission should not, and arguably may not, impose a requirement or presumption on licensees that PRAs are to be used in making improvements to TS pursuant to the Policy Statement.	24	None	The Policy Statement outlines a voluntary program of Technical Specification Improvements.
4. <u>Comments Related to Upgrading Bases</u>			
a. The Policy Statement should clarify whether reference can be made in the Bases section of TS to the FSAR, topical reports, etc., as opposed to including the specific details in the Bases.	10	None	10 CFR 50.36 states that "A summary statement of the bases or reasons for such specifications... shall also be included in the application..." This wording implies that the details may be elsewhere. Thus, references are intended and often needed to supplement the summary statements of the Bases for requirements.
b. Lack of improved Bases on a plant-specific basis should not prevent issuance of a plant license amendment containing the improved TS.	16	None	Licensees that volunteer to convert to the improved STS are expected to conform to the improved Bases, consistent with the licensing basis for the facility. Licensees that propose line-item improvements based on the improved STS are expected to submit associated Bases in the license amendment application that are derived from the improved STS but consistent with the form of the existing Bases.

<u>Comment</u>	<u>Commenter(s)</u>	<u>Commenter(s) with Opposing View</u>	<u>Staff Response</u>
4. <u>Comments Related to Upgrading Bases</u> (continued)			
c. TS Bases should be deleted from the operating license and controlled under the provisions of 10 CFR 50.59.	16	None	10 CFR 50.36 clearly states that the Bases are not part of the TS. 10 CFR 50.59 applies to the FSAR but arguably does not apply to the Bases. Accordingly, an administrative control has been included in the improved STS to ensure that the content of the Bases is appropriately maintained by a process like that required by 10 CFR 50.59.
d. To the extent previously approved TS remain unchanged following application of the interim Policy Statement, licensees should not have to address seriatim of each of the questions posed (related to Bases upgrade).	24	None	The Policy Statement provides a voluntary TS improvement program under which licensees may propose complete conversions or line-item improvements that appropriately include the substance of the safety requirements consistent with each licensee's current Technical Specifications. For line-item improvements, the staff expects licensees to adopt the improved Bases to the extent that they are consistent with the existing plant licensing basis.
5. <u>Comments Related to Implementation of the Policy Statement</u>			
a. The Policy Statement should better address its implementation by the NRC staff.	2, 8, 10, 12	None	The Commission has given priority status to implementation of this Policy Statement. The staff believes that the Commission need not (and should not) include the details of implementing the Policy Statement in the Policy Statement itself. The staff will work with the Commission and industry, as appropriate, to develop methods to implement the policy.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
5. <u>Comments Related to Implementation of the Policy Statement</u> (continued)			
b. The NRC should discuss plant-specific implementation with industry to ensure that implementation will be attractive and encouraged.	7, 15, 16, 17, 19, 20	None	The staff will work with industry to develop appropriate methods to implement the Policy. The staff recognizes that implementation of the Policy Statement is voluntary.
c. The Policy Statement should include guidance with regard to the no-significant-hazard consideration determination required by 10 CFR 50.91.	2, 3, 7, 10, 12, 14, 20	None	The staff will work with industry to determine the extent to which significant hazards determinations can be done on a generic basis.
d. The Commission should set goals for the staff relative to implementation of the Policy Statement.	2, 3, 10	None	Detailed schedules for implementing the Policy Statement need not (and should not) be included in the Policy Statement. The Commission has indicated that TS improvement is important and a priority task. Moreover, the Commission has stated that, consistent with its mission, it will allocate resources as necessary to implement the Policy. Detailed schedules for implementing the Policy will in large part be dependent on the timeliness and quality of industry submittals which implement the Policy.

<u>Comment</u>	<u>Commenter(s)</u>	<u>Commenter(s) with Opposing View</u>	<u>Staff Response</u>
5. <u>Comments Related to Implementation of the Policy Statement</u> (continued)			
e. Licensees should be able to apply the Policy Statement to related portions of their TS as opposed to all of their LCOs.	1, 6, 7, 9, 10, 12, 15, 17, 21	None	The Commission will entertain requests based on the criteria for individual license amendments that evaluate all of the Limiting Conditions for Operation (LCOs) for an individual plant to determine which LCOs should be included in the Technical Specifications. In addition, the Commission will also entertain requests to adopt portions of the improved STS, even if the licensee does not adopt all STS improvements. These portions shall include all related requirements and will normally be developed as line-item improvements by the NRC staff.
f. Licensees should be allowed to selectively apply the Policy Statement screening criteria to their TS without having to make the other improvements discussed in the Policy Statement (e.g., human factors, reformatting, and Bases upgrade).	1, 2, 3, 6, 12, 15, 17, 19, 20, 24, 28	None	Licensees that volunteer to completely convert to the improved STS are expected to conform to all of the improvements, consistent with the licensing basis for the facility. The interim Policy Statement has been revised to clarify that other licensees may propose line-item improvements to their existing TS based on the improved STS which are expected to be derived from the improved STS but consistent with the form of the existing TS.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
5. <u>Comments Related to Implementation of the Policy Statement</u> (continued)			
g. The Policy Statement can be applied to licensees with either Standard or custom TS. Therefore, licensees implementing the Policy Statement should not have to convert to the new STS.	1, 6, 11, 17	None	Complete conversion to the improved STS provides the maximum safety benefit through the combination of optimal scope of requirements, human factors enhancements, and improved Bases. However, experience in the development of the improved STS has demonstrated that safety benefits can also be achieved through line-item improvements. The Policy Statement allows licensees to voluntarily pursue either approach.
h. When developing plant-specific TS based on the Policy Statement and new TS, licensees should be able to pick (at their discretion) values for specific technical requirements from either their existing TS or from the new TS.	7	None	Licensees will be encouraged to adopt as much of the new STS as possible. However, where a licensee has a TS value different from the STS it will be allowed to retain that value in the revised TS if appropriate justification for that value is provided.
i. The Policy Statement should be modified to provide for timely consideration of plant-specific amendment requests (plants with custom TS) as well as plants that use or adopt the new STS.	10, 12, 24	20	The most efficient manner to deal with issues related to TS improvement is generally through the STS revision process. The Policy Statement provides that amendments adopting all of the STS will be given priority in recognition of the efficiencies of standardization. However, line-item improvements will also be given high priority.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
5. <u>Comments Related to Implementation of the Policy Statement</u> (continued)			
j. The Commission should entertain exemption requests (e.g., to 10 CFR 50.36a - RETS) to allow full implementation of the Policy Statement.	2, 3, 10, 19	None	The owners groups have discussed possible exemption requests to further enhance the achievements of the improved STS. The Commission will evaluate such requests against the criteria in 10 CFR 50.12 when they are formally submitted. Other initiatives for regulatory improvements may otherwise prompt rulemaking. Until then, the staff believes that the objectives of the Policy Statement can be achieved without the need for rulemaking.
k. The Policy Statement should be modified to clarify what is meant by "The Commission does not intend that these criteria be used as the basis for relocation of individual LCOs."	23	None	The Policy Statement has been modified to clarify this statement.
l. Before NRC implements the Policy Statement, NRC should develop and submit for public comment the standards it will use to evaluate amendment requests based on the stated criteria.	23	None	The staff has been developing guidelines for reviewing amendment requests to adopt all or portions of the improved STS for individual plants. These guidelines have been made public. The staff will continue to develop additional guidelines and make these available to the public.
m. NRC should abstain from implementing the Policy Statement until it has promulgated the rules necessary for implementation.	23	None	As discussed in SECY-86-310, rule changes are not necessary to implement the Commission Policy Statement.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
5. <u>Comments Related to Implementation of the Policy Statement</u> (continued)			
n. The NRC should make improvements to TS (like human factors, reformatting, and improved Bases) before it allows licensees to relocate requirements out of TS.	4	None	Studies of TS problems found no compelling safety concerns to justify a mandatory program of TS improvements. NRC's rules prohibit costly changes that cannot be justified on the basis of safety. Thus, staff elected to effect a program where licensees may voluntarily apply the TS criteria if they improve the human factors aspects of TS and write good Bases.
6. <u>Comments Related to the Content of the Policy Statement</u>			
a. The Policy Statement should be expanded to address other items that are unnecessarily included as part of the operating license (e.g., Environmental TS).	17	None	The scope of the Policy Statement is intentionally restricted to TS improvement. Staff believes that it would be impracticable to address broader regulatory concerns in this Policy Statement.
b. The Policy Statement should acknowledge that the new STS will be reviewed and handled like other topical reports.	10	None	The staff does not believe that this statement is needed.
c. The Policy Statement should include the appropriate control mechanism for all requirements in TS that will be relocated (not just that are relocated to plant procedures).	11, 16	None	The staff believes that the details of implementation need not (and should not) be included in the Policy Statement. However, the control mechanisms are further discussed.
d. The Policy Statement should identify specific short-term improvements under consideration and also specify a schedule to resolve these issues.	20	None	The staff believes that this level of detail for implementation is not needed in the Policy Statement.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
6. <u>Comments Related to the Content of the Policy Statement</u> (continued)			
e. The Policy Statement should identify specific rule changes that are under consideration and also specify a schedule to resolve these issues.	20	None	The staff has concluded that rulemaking is not necessary to achieve the objectives of the Policy Statement.
f. The Policy Statement should endorse the application of human factors engineering to the format to TS.	25	None	The Policy Statement has been revised to clarify this point.
7. <u>Miscellaneous Comments</u>			
a. The commenter endorses AIF comments (commenter 10).	1	N/A	None.
b. The commenter endorses BWROG comments (commenter 16).	22	N/A	None.
c. If the regulatory burden on licensees posed by TS is too great, the licensees should beef up their management and the NRC its enforcement, rather than reduce the regulatory burden.	4	None	The Policy Statement allows licensees to delete from TS those requirements that were inappropriately included in TS and to relocate them to a document with appropriate controls.
d. The Commission should abandon the Technical Specification Policy Statement in favor of more vigorous enforcement of the current system.	4	None	Many recent studies have identified the need to define TS and to improve their quality and that of Bases. To abandon this improvement effort would result in inefficient use of resources and in the loss of an opportunity to make some safety improvements.
e. The syntax of the Policy Statement should be improved.	5	None	The Policy Statement has been reviewed and revised to improve its clarity and syntax.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
7. <u>Miscellaneous Comments</u> (continued)			
f. The NRC should give higher priority to short-term TS improvements (see comment 6.d).	6, 9, 11, 12, 15, 16, 17, 20	None	The staff agrees that these TS improvements should receive high priority and is giving them that status.
g. The NRC should give priority to identifying and initiating the specific rule changes necessary to fully implement the Policy Statement (see comments 2.c and 6.e).	7, 15, 16, 17, 20	None	The staff has concluded that rulemaking is not necessary to achieve the objectives of the Policy Statement.
h. The NRC should issue the necessary guidance so that owners groups can effectively accommodate short-term improvements into the new STS.	6	None	The staff has been developing guidelines for reviewing amendment requests to adopt all or portions of the improved STS for individual plants. These guidelines have been made public. The staff will continue to develop additional guidelines and make these available to the public.
i. The NRC must be prepared to cope with four new STS (consistent format but different style and presentation).	7	None	The staff has worked with the owners groups and the Nuclear Management & Resources Council (NUMARC) to develop a "Writers' Guide" which is intended to standardize the format and style of TS requirements to the extent practical. NUMARC has agreed to disseminate these guidelines to the industry, and they are reflected in the five sets of improved STS issued for trial use in September 1992.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
7. <u>Miscellaneous Comments</u> (continued)			
j. The NRC should amend 10 CFR 50.36 to eliminate the requirements to include Design Features and Administrative Controls in TS (some of the requirements in Sections 5.0 and 6.0 are inconsistent with the purpose of TS articulated in the Policy Statement).	9, 22, 24	None	The staff does not believe that Sections 5.0 and 6.0 [of the old STS] are inconsistent with the purpose of TS. Design Features and Administrative Controls sections contain many elements essential for coping with abnormal situations or events giving rise to an immediate threat to the public. On the other hand, these sections contain some requirements that do little to aid this purpose. Total elimination of these sections, is inappropriate. These sections were reviewed to make the content of these sections consistent with the purpose of TS and the Atomic Energy Act.
k. The removal of RETS from TS should be carefully evaluated for potential adverse effects on the environment.	13	None	RETS have not been totally removed from the improved STS. The requirements for RETS are controlled by a program, "Radioactive Effluent Controls Program," in the Administrative Controls chapter (5.0) of the improved STS.
l. The interim Policy Statement should be re-issued for another (longer) comment period because a background document referenced in the original notice (SECY-86-10) was not published with the Policy Statement.	18	None	SECY-86-10 was available to the commenter. This document was made public on 01/21/86 when it was discussed at a Commission meeting with the staff.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
7. <u>Miscellaneous Comments</u> (continued)			
m. NRC should clarify the status of plant documents, such as FSARs, to which current TS would be relocated before implementing the Policy Statement.	23	None	The Commission will take appropriate enforcement action to ensure that licensees comply with 10 CFR 50.59. Changes made in accordance with the provisions of other licensee-controlled documents (e.g., QA plan, Security Plan) are subject to the specific requirements for those documents.
8. <u>Commissioner Asselstine's Additional Views</u>			
a. The commenter generally agreed with these additional views.	4, 5	8, 9, 10, 11, 14, 16, 19, 21, 24	None
b. The Commission should not entertain changes in testing and SIs and AOTs until maintenance programs are strengthened.	4, 5	8, 9, 10, 11, 16, 19, 24	Since this comment was made, the NRC and industry have developed more effective maintenance programs.
c. The 10 CFR 50.59 process should be strengthened before the Policy Statement is implemented.	5	8, 9, 11, 14, 16, 17, 19, 24	The industry through NUMARC and NSAC now has a program in place to strengthen the 10 CFR 50.59 process. Since NUMARC issued guidelines in NSAC-125 in June 1989, the staff has observed substantial improvements in the 10 CFR 50.59 safety evaluations. In addition, the NRC has recently issued Inspection Procedure 37001 to provide NRC inspectors with updated guidance for evaluating utility performance in this area. The staff believes use of this inspection guidance will provide assurance that licensees who convert to the improved STS have adequate 10 CFR 50.59 safety evaluation programs.

Comment	Commenter(s)	Commenter(s) with Opposing View	Staff Response
8. <u>Commissioner Asselstine's Additional Views</u> (continued)			
d. Former TS requirements should not be made less enforceable. The Commission should treat failures to meet FSAR (and other controlled document) provisions as failures to comply with TS.	4, 5, 18, 23	8, 9, 10, 11, 14, 16, 24, 25	The staff believes that the improvements in the 10 CFR 50.59 process will result in better reviews of changes, tests, and experiments and that better enforcement of FSAR commitments will result. To treat failures to meet FSAR provisions as failures to comply with TS would not allow licensees to make any changes to the facility described in the FSAR without prior Commission approval. The staff believes this approach would create an unnecessary and severe resource burden on licensees and the staff.
e. AC/DC sources (in the DHR mode) should be covered by TS; therefore, the commenter questioned the adequacy of the screening criteria.	5, 18	10, 11, 16, 19	The requirements in the improved STS include appropriate requirements for AC/DC power sources based on existing design basis accident and transient analyses. The need for normal and emergency power, as well as other safety functions, during low-power and shutdown conditions is being addressed in the Shutdown Risk Study (NUREG-1449). The new generic requirements resulting from that study will be appropriately included in the improved STS following public comment and approval for generic implementation.

LIST OF COMMENTERS

- | | |
|--|---|
| 1. Yankee Atomic Electric Company | 16. The B&W Owners Group |
| 2. Southern California Edison Company | 17. Carolina Power & Light Company |
| 3. Omaha Public Power District (CE Owners Group) | 18. Marvin Lewis |
| 4. Ohio Citizens for Responsible Energy, Inc. | 19. Westinghouse |
| 5. Ecology/Alert | 20. Virginia Electric and Power Company |
| 6. Combustion Engineering | 21. Pennsylvania Power & Light Company |
| 7. Stuart A. Webster | 22. System Energy Resource, Inc. |
| 8. Georgia Power Company | 23. Illinois Department of Nuclear Safety |
| 9. Northeast Utilities | 24. Bishop, Liberman, Cook, Purcell, and Reynolds |
| 10. Atomic Industrial Forum, Inc. | 25. Department of Energy |
| 11. Florida Power Corporation | 26. Maine Yankee |
| 12. Baltimore Gas & Electric Company | 27. Washington Public Power |
| 13. U.S. Department of the Interior (GS) | 28. New York Power Authority |
| 14. Southern Company Services | 29. BWR Owners Group |
| 15. Westinghouse Owners Group | |

Commenters 4, 5, and 18 are interested members of the public. Commenters 13, 23, and 25 are government agencies. Other commenters represent views of industry.