UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

March 10, 1987

MEMORANDUM FOR: James H. Sniezek, Deputy Executive Director for Regional Operations & Generic Requirements

FROM: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

SUBJECT: PROPOSED GENERIC LETTER FOR SHORT-TERM TECHNICAL SPECIFICATION IMPROVEMENTS

Enclosed is an update of a CRGR package for a proposed Generic Letter on Technical Specification Improvements. The original package had previously been forwarded to CRGR on November 21, 1986. Although we had consulted with various individuals in the other cognizant offices when we prepared the original package, we had not sought or obtained formal comments or concurrence. At the request of CRGR staff we have subsequently circulated the package to AEOD, IE, OGC and RES for concurrence. Comments were received from AEOD, IE and OGC and have been either incorporated in the enclosed undated package or otherwise resolved. RES concurred without specific comment.

The staff positions in the Generic Letter have not been changed substantially from those provided in our November 21, 1986 memorandum. The changes that have been made are primarily editorial in nature and serve only to clarify the information provided.

It is requested that a CRGR review of this proposal be scheduled at the earliest opportunity.

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:
1. Proposed Generic Letter
2. CRGR Package
3. Staff Response to Office Comments

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ENCLOSURE 1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

TO ALL LIGHT WATER REACTOR LICENSEES AND APPLICANTS

Gentlemen:

SUBJECT: SECTIONS 3.0 AND 4.0 OF THE STANDARD TECHNICAL SPECIFICATIONS (STS) ON THE APPLICABILITY OF LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS (Generic Letter 87 -)

As a part of recent initiatives to improve Technical Specifications (TS), the NRC, in cooperation with the Atomic Industrial Forum (AIF), has developed a program for TS improvements. One of the elements of this program is the implementation of short-term improvements to resolve immediate concerns that have been identified in investigations of TS problems by both NRC and AIF. The guidance provided in this generic letter addresses three specific problems that have been encountered with the general requirements on the applicability of Limiting Conditions for Operation (LCO) and Surveillance Requirements in Sections 3.0 and 4.0 of the STS.

There are five enclosures to this Generic Letter. Enclosure 1 applies to both PWR and BWR STS and provides a complete discussion of the three problems and the staff's position on acceptable modifications of the TS to resolve them. These modifications should result in improved TS for all plants and are consistent with the recommendations of NUREG-1024, "Technical Specifications -- Enhancing the Safety Impact" and the Commission Policy Statement on Technical Specification Improvements. Enclosures 2 and 4 provide Sections 3.0 and 4.0 of the PWR and BWR STS, respectively, which incorporate the modifications being made by this Generic Letter. Enclosures 3 and 5: (a) provide the staff's update of the bases for the PWR and BWR STS, respectively; (b) reflect the modifications of Sections 3.0 and 4.0 of the STS; and (c) include improved bases for the unchanged requirements in these sections.

The staff concludes that these modifications will result in improved TS for all plants. Licensees and applicants are encouraged to propose changes to their TS that are consistent with the guidance provided in the enclosures.

The staff would like to point out three important points connected with the present TS effort. First, it is aware that the TS can be clarified, simplified, and streamlined both as a whole and with respect to the specifications that are the subject of this Generic Letter. Nonetheless, in keeping with its short-term and purposefully narrow focus, it decided to keep its proposed modifications: (a) focused on the three problems; (b) relatively simple; and (c) consistent with the phrasing of existing TS. Second, after the resolution of these and other identified TS problems, the staff will notify licensees and applicants of its conclusions and resulting proposals for additional short-term TS improvements. Finally, the staff is not proposing to formally amend the STS at this time. However, these changes to the STS will

become the standard for Sections 3.0. and 4.0 of the TS issued for new operating licenses after the date of this Generic Letter. The changes are also applicable to the new STS anticipated as a part of the implementation of the Commission's Policy Statement on Technical Specification Improvements.

The following is a summary of the three problems covered by the enclosures. The first problem involves unnecessary restrictions on mode changes by Specification 3.0.4 and inconsistent application of exceptions to it. The practical solution is to change this specification to define the conditions under which its requirements apply. With respect to unnecessary mode changes, Specification 3.0.4 unduly restricts facility operation when conformance with Action Requirements provides an acceptable level of safety for continued operation. For an LCO that has Action Requirements permitting continued operation for an unlimited period of time, entry into an operation mode or other specified condition of operation should be permitted in accordance with the Action Requirements. The solution also resolves the problem of inconsistent application of exceptions to Specification 3.0.4: (a) which delays startup under conditions in which conformance to the Action Requirements establishes an acceptable level of safety for unlimited continued operation of the facility; and (b) which delays a return to power operation when the facility is required to be in a lower mode of operation as a consequence of other Action Requirements.

The second problem involves unnecessary shutdowns caused by Specification 4.0.3 when surveillance intervals are inadvertently exceeded. The solution is to clarify the applicability of the Action Requirements, to specify a specific acceptable time limit for completing a missed surveillance in certain circumstances, and to clarify when a missed surveillance constitutes a violation of the Operability Requirements of an LCO. It is overly conservative to assume that systems or components are inoperable when a surveillance has not been performed because the vast majority of surveillances do in fact demonstrate that systems or components are operable. When a surveillance is missed, it is primarily a question of operability that has not been verified by the performance of a Surveillance Requirement. Because the allowable outage time limits of some Action Requirements do not provide an appropriate time for performing a missed surveillance before Shutdown Requirements apply, the TS should include a time limit that allows a delay of required actions to permit the performance of the missed surveillance based on consideration of plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and, of course, the safety significance of the delay in completing the surveillance. The staff has concluded that 24 hours is an acceptable time limit for completing a missed surveillance when the allowable outage times of the Action Requirements are less than this limit, when Shutdown Requirements apply, or when time is needed to obtain a temporary waiver of the Surveillance Requirement.

The third problem involves two possible conflicts between Specifications 4.0.3 and 4.0.4. The first conflict arises because Specification 4.0.4 prohibits entry into an operational mode or other specified condition when Surveillance Requirements have not been performed within the specified surveillance interval. A conflict with this requirement exists when a mode change is required as a consequence of Action Requirements and when the Surveillance

Requirements that become applicable have not been performed within the specified surveillance interval. Specification 4.0.4 should not be used to prevent passage through or to operational modes as required to comply with Action Requirements because to do so: (a) would increase the potential for a plant upset; and (b) would challenge safety systems. Also, certain surveillances should be allowed to be performed during a shutdown to comply with Action Requirements. Along with the modification of Specification 4.0.3 to permit a delay of up to 24 hours in the applicability of Action Requirements, Specification 4.0.4 has been clarified to allow passage through or to operational modes as required to comply with Action Requirements.

A second conflict could arise because, when Surveillance Requirements can only be completed after entry into a mode or specified condition for which the Surveillance Requirements apply, an exception to the requirements of Specification 4.0.3 is allowed. However, upon entry into this mode or condition, the requirements of Specification 4.0.3 may not be met because the Surveillance Requirements may not have been performed within the allowed surveillance interval. Therefore, to avoid any conflict between Specifications 4.0.3 and 4.0.4, the staff wants to make clear: (a) that it is not the intent of Specification 4.0.3 that the Action Requirements preclude the performance of surveillances allowed under any exception to Specification 4.0.4; and (b) that the delay of up to 24 hours in Specification 4.0.3 for the applicability of Action Requirements now provides an appropriate time limit for the completion of those Surveillance Requirements that become applicable as a consequence of allowance of any exception to Specification 4.0.4.

If you have any questions on this matter, please contact your project manager.

Sincerely,

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosures:
As stated

ALTERNATIVES TO THE STS REQUIREMENTS TO RESOLVE THREE SPECIFIC PROBLEMS WITH LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

INTRODUCTION

Generic Letter 87- discusses three problems regarding the general requirements of Sections 3.0 and 4.0 of the STS on the applicability of Limiting Conditions for Operation (LCO) and Surveillance Requirements. The guidance provided in this enclosure addresses alternatives to the Standard Technical Specifications (STS) to resolve these problems.

Problem #1 -- UNNECESSARY RESTRICTIONS ON MODE CHANGES (Specification 3.0.4)

0 BACKGROUND

The definition of an LCO is given in 10 CFR 50.36 as the lowest functional capability or performance level of equipment required for safe operation of the facility. Further, it is stated that when an LCO of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the TS until the condition can be met.

Consistent with NRC's regulatory requirements for an LCO, the TS include two basic types of Action Requirements that are applicable when the LCO is not met. The first specifies the remedial actions that permit continued operation of the facility not restricted by the time limits of Action Requirements. In this case, conformance to the Action Requirements provides an acceptable level of safety for continued operation of the facility, and operation may proceed indefinitely as long as the remedial Action Requirements are met. The second type of Action Requirement specifies a time limit in which the LCO must be met. This time limit is the time allowed to restore an inoperable system or component to operable status or to restore parameters within specified limits. If these actions are not completed within the allowable outage time limits, action must be taken to shut down the facility by placing it in a mode or condition of operation in which the LCO does not apply.

Specification 3.0.4 of the STS states that entry into an operational mode[1] or other specified condition shall not be made unless the LCO is met without reliance on the provisions of the Action Requirements. Its intent is to ensure that a higher mode of operation is not entered when equipment is inoperable or when parameters exceed their specified limits. This precludes a plant startup when actions are being taken to satisfy an LCO, which -- if not completed within the time limits of the Action Requirements -- would result in a plant shutdown to comply with the Action Requirements.

Specification 3.0.4 also precludes entering a mode or specified condition if an LCO is not met, even if the Action Requirements would permit continued operation of the facility for an unlimited period of time. Generally, the individual

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[1]The BWR STS use the term "operational condition" instead of the term "operational mode" that is used in PWR STS. As used here, "operational mode" means "operational condition" for BWRs.

specifications that have Action Requirements which allow continued operation note that Specification 3.0.4 does not apply. However, exceptions to Specification 3.0.4 have not been consistently applied and their bases are not well documented. For example, approximately two-thirds of the actions which permit continued operation in the Westinghouse STS are exempt from Specification 3.0.4. Although the staff encourages the maintenance of all plant systems and components in an operable condition as a good practice, the TS generally have not precluded entering a mode with inoperable equipment when the Action Requirements include remedial measures that provide an acceptable level of safety for continued operation.

0 STATEMENT OF THE PROBLEM

Inconsistent application of exceptions to Specification 3.0.4 impacts the operation of the facility in two ways. First, it delays startup under conditions in which conformance to the Action Requirements establishes an acceptable level of safety for unlimited continued operation of the facility. Second, it delays a return to power operation when the facility is required to be in a lower mode of operation as a consequence of other Action Requirements. In this case, the LCO must be met without reliance on the Action Requirements before returning the facility to that operational mode or other specified condition for which unlimited continued operation was previously permitted in accordance with the Action Requirements.

0 STAFF POSITION

Specification 3.0.4 unduly restricts facility operation when conformance to the Action Requirements provides an acceptable level of safety for continued operation. For an LCO that has Action Requirements permitting continued operation for an unlimited period of time, entry into an operational mode or other specified condition of operation should be permitted in accordance with those Action Requirements. This is consistent with NRC's regulatory requirements for an LCO. The restriction on a change in operational modes or other specified conditions should apply only where the Action Requirements establish a specified time interval in which the LCO must be met or a shutdown of the facility would be required. However, nothing in this staff position should be interpreted as endorsing or encouraging a plant startup with inoperable equipment. The staff believes that good practice should dictate that the plant startup should normally be initiated only when all required equipment is operable and that startup with inoperable equipment must be the exception rather than the rule.

0 CHANGE TO SPECIFICATION 3.0.4

The practical solution to this problem is not the modification of TS to note that Specification 3.0.4 does not apply, but rather a change to Specification 3.0.4 to define the conditions under which its requirements do apply. Therefore, Specification 3.0.4 will be revised to state:

> "Entry into an OPERATIONAL MODE or other specified condition shall not be made when the conditions for the Limiting Conditions for Operation are not met and the associated ACTION requires a shutdown if they are not met within a specified time interval. Entry into an OPERATIONAL MODE or specified condition may be made in accordance with ACTION requirements when

conformance to them permits continued operation of the facility for an unlimited period of time."

0 CHANGES TO INDIVIDUAL SPECIFICATIONS EXEMPT FROM SPECIFICATION 3.0.4

As a consequence of the modification described above to Specification 3.0.4, individual specifications with Action Requirements permitting continued operation no longer need to indicate that Specification 3.0.4 does not apply. They should be revised to delete the noted exception to avoid confusion about the applicability of Specification 3.0.4. However, exceptions to Specification 3.0.4 should not be deleted for individual specifications if a mode change would be precluded by Specification 3.0.4 as revised. For example, some specifications would not satisfy the provisions under which mode changes are permitted by the revision to Specification 3.0.4 and, therefore, the exception to Specification 3.0.4 need not be deleted. It is not the staff's intent that the revision of Specification 3.0.4 should result in more restrictive requirements for individual specifications.

Problem #2 -- UNNECESSARY SHUTDOWNS CAUSED BY INADVERTENT SURPASSING OF SURVEILLANCE INTERVALS (Specification 4.0.3)

0 BACKGROUND

Surveillance Requirements are defined in 10 CFR 50.36 as those requirements relating to test, calibration, or inspection to ensure that the necessary quality of systems and components is maintained, that the facility will be within the safety limits, and that the LCO will be met.

Consistent with the NRC's regulatory framework for Surveillance Requirements, Specification 4.0.3 states that the failure to perform a surveillance within the specified time interval shall constitute a failure to meet the LCO's Operability Requirements. Therefore, if a Surveillance Requirement is not met as a result of the failure to schedule the performance of the surveillance, the LCO would not be met. Consequently, the LCO's Action Requirements must be met as when a surveillance verifies that a system or component is inoperable.

Generally, the Action Requirements include a specified time interval (i.e., allowable outage time limit) that permits corrective action to be taken to satisfy the LCO. When such a specified time interval is included in the Action Requirements, the completion of a missed surveillance within this time interval satisfies Specification 4.0.3.

0 STATEMENT OF PROBLEM

Some Action Requirements have allowable outage time limits of only one or two hours and do not establish a practical time limit for the completion of a missed Surveillance Requirement. If surveillances cannot be completed within these time limits, a plant shutdown would usually be required. Even if the Action Requirements include remedial measures that would permit continued operation, they may be stated in such a way that they could prevent the performance of the required surveillance. A plant shutdown would also be required if the missed surveillance applies to more than the minimum number of systems or components required to be operable for limited operation under the allowable outage time

limits of the Action Requirements. In this case, the individual specification may require a shutdown or Specification 3.0.3 may apply.

If a plant shutdown is required before a missed surveillance is completed, it is likely that it would be conducted when the plant is being shut down because completion of a missed surveillance would terminate the shutdown requirement. This is undesirable since it increases the risk to the plant and public safety for two reasons. First, the plant would be in a transient state involving changing plant conditions that offer the potential for an upset that could lead to a demand for the system or component being tested. This would occur when the system or component is either out of service to allow performance of the surveillance test or there is a lower level of confidence in its operability because the normal surveillance interval was exceeded. If the surveillance did demonstrate that the system or component was inoperable, it usually would be preferable to restore it to operable status before making a major change in plant operating conditions. Second, a shutdown would increase the pressure on the plant staff to expeditiously complete the required surveillance so that the plant could be returned to power operation. This would further increase the potential for a plant upset when both the shutdown and surveillance activities place a demand on the plant operators.

0 STAFF POSITION

It is overly conservative to assume that systems or components are inoperable when a surveillance requirement has not been performed. The opposite is in fact the case; the vast majority of surveillances demonstrate that systems or components in fact are operable. When a surveillance is missed, it is primarily a question of operability that has not been verified by the performance of the required surveillance. Because the allowable outage time limits of some Action Requirements do not provide an appropriate time limit for performing a missed surveillance before shutdown requirements may apply, the TS should include a time limit that would allow a delay of the required actions to permit the performance of the missed surveillance.

This time limit should be based on considerations of plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, as well as the safety significance of the delay in completion of the surveillance. After reviewing possible limits, the staff has concluded that, based on these considerations, 24 hours would be an acceptable time limit for completing a missed surveillance when the allowable outage times of the Action Requirements are less than this time limit or when shutdown Action Requirements apply. The 24-hour time limit would balance the risks associated with an allowance for completing the surveillance within this period against the risks associated with the potential for a plant upset and challenge to safety systems when the alternative is a shutdown to comply with Action Requirements before the surveillance can be completed.

Although a missed surveillance would generally be completed in less time than this 24-hour limit allows, special circumstances may require additional time to ensure that the surveillance can be conducted in a safe manner. The time limits of Action Requirements for surveillances should start when it is determined that Surveillance Requirements have not been performed, except when the 24-hour delay is allowed in the implementation of the Action Requirements. Where the 24-hour time limit is allowed, the time limits of the Action Requirements are applicable

either at the end of the 24-hour limit if the surveillance has not been completed or at the time the surveillance is performed if the system or component is found to be inoperable. However, to preclude risks associated with both activities being conducted simultaneously, surveillances should not be conducted when major changes in facility operation occur as a result of a shutdown to comply with Action Requirements -- including Modes 1 through 3 for PWRs and Conditions 1 and 2 for BWRs, until the unit is in hot shutdown. Note, however, that this restriction on surveillance activities is not applicable to post-maintenance testing required to confirm that systems or components have been restored to operable status.

Several issues need to be clarified regarding the additional 24-hour time limit. First, this limit does not waive compliance with Specification 4.0.3. Under Specification 4.0.3, the failure to perform a Surveillance Requirement will continue to constitute noncompliance with the Operability Requirements of an LCO and to bring into play the applicable Action Requirements.

Second, Specifications 3.0.2 and 4.0.3 should not be misinterpreted. Specification 3.0.2 notes that a TS is being complied with when the Action Requirements are met within the specified time intervals. Although Specification 4.0.2 provides an allowance for extending the surveillance interval and allows for the completion of the surveillance within this time interval without violation of this Specification, under Specification 4.0.3 nonperformance of a Surveillance Requirement, within the allowed surveillance interval defined by Specification 4.0.2, constitutes a violation of the Operability Requirements of an LCO, as defined by Specification 4.0.3, and is subject to enforcement action.

To avoid any conflict among or misreading of Specifications 3.0.2, 4.0.3, and 4.0.2, the staff wishes to make clear (1) that Specification 3.0.2 shall not be construed to imply that the completion of a missed surveillance within the allowable outage time limits of the Action Requirements -- whether or not the additional 24-hour time limit is included -- negates the violation of Specification 4.0.3, and (2) that the failure to perform a surveillance within the allowable surveillance interval defined by Specification 4.0.2 constitutes a reportable event under 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plant's TS.

Third, even though an additional 24-hour time limit may apply for missed surveillances, another consideration is the possibility that plant conditions may preclude the performance of the specified requirements. The provision of a 24-hour delay in the application of the Action Requirements for the completion of a missed surveillance would provide time to obtain a temporary waiver of a Surveillance Requirement that could not otherwise be completed because of current plant conditions. If a surveillance can be performed only when the plant is shut down, there are only two options available to licensees when a missed surveillance is discovered during power operation and continued operation is not allowed under the Action Requirements. The first is to shut down the plant and perform the required surveillance. The other option is to seek relief from the Surveillance Requirement. Such relief would result in the processing of a TS amendment. As a matter of NRC policy, the responsible Project Director in the Division of Licensing, with the concurrence of the Regional Division Director, may grant a temporary waiver of compliance with a TS that would unnecessarily require a shutdown or a delay startup in the absence of some

relief. Relief may be granted if the licensee has demonstrated, in a written submittal, that the plant can continue to operate safely without compliance during the time it will take to process an emergency TS amendment.

O CHANGE TO SPECIFICATION 4.0.3

Specification 4.0.3 will be revised as follows to clarify when a missed surveillance constitutes a violation of the Operability Requirements of an LCO and to clarify the applicability of the Action Requirements and the time during which the limits apply:

> "Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is determined that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION Requirements are less than 24 hours or when a shutdown is required to comply with them. Surveillances shall not be performed in OPERATIONAL MODES 1 through 3 (PWR STS) [in OPERATIONAL CONDITIONS 1 and 2 (BWR STS)] during a shutdown required to comply with ACTION requirements. This provision is not applicable to post-maintenance testing required to confirm that systems or components have been restored to OPERABLE status."

Specification 4.0.3 previously included the statement that exceptions to it are stated in individual specifications. This statement is deleted because Specification 4.0.3 is always applicable, i.e., the implied exceptions for individual specifications do not exist.

Problem #3 -- CONFLICTS BETWEEN SPECIFICATIONS 4.0.3 AND 4.0.4 RELATED TO MODE CHANGES (Specification 4.0.4)

There are two parts of the general problem of conflicts between Specifications 4.0.3 and 4.0.4 related to mode changes. Each of these parts is discussed separately below.

Part 1 -- SURVEILLANCE REQUIREMENTS THAT BECOME APPLICABLE DUE TO ACTION REQUIREMENTS

O STATEMENT OF THE PROBLEM

Specification 4.0.4 prohibits entry into an operational mode or other specified condition when Surveillance Requirements have not been performed within the specified surveillance interval. First, a conflict with this TS exists when a mode change is required as a consequence of shutdown Action Requirements and when the Surveillance Requirements that become applicable have not been performed within the specified surveillance interval. For instance, the plant could previously have been in a mode for which the Surveillance Requirements were not applicable and, therefore, the surveillance may not have been performed within the specified time interval. Consequently, the Action Requirements of the LCO associated with these Surveillance Requirements apply and the unit may have to be placed in a lower mode of operation than that required by the

original shutdown Action Requirements, or other remedial actions may have to be taken, if the surveillance can not be completed within the time limits for these actions. This is a second problem that may be encountered.

The first problem arises because conformance with Specification 4.0.4 would require the performance of these surveillances before entering a mode for which they apply. Source and intermediate range nuclear instrumentation and cold overpressure protection systems in PWRs are examples of systems for which Surveillance Requirements may become applicable as a consequence of mode changes to comply with shutdown Action Requirements. The second problem has been mitigated by the change in Specification 4.0.3 to permit a delay of up to 24 hours in the applicability of the Action Requirements, thereby placing an appropriate time limit on the completion of Surveillance Requirements that become applicable as a consequence of mode changes to comply with Action Requirements. However, the first problem can be further resolved by a change to Specification 4.0.4.

O STAFF POSITION

The potential for a plant upset and challenge to safety systems is heightened if surveillances are performed during a shutdown to comply with Action Requirements. It is not the intent of Specification 4.0.4 to prevent passage through or to operational modes to comply with Action Requirements and it should not apply when mode changes are imposed by Action Requirements. Accordingly, Specification, 4.0.4 should be modified to note that its provisions shall not prevent passage through or to operational modes as required to comply with Action Requirements. A similar provision is included in Specification 3.0.4.

O CHANGE TO SPECIFICATION 4.0.4

The following will clarify Specification 4.0.4 for mode changes as a consequence of Action Requirements:

> "This provision shall not prevent passage through or to OPERATIONAL MODES, as required to comply with ACTION Requirements."

Part 2 -- <u>SURVEILLANCE REQUIREMENTS FOR EXCEPTIONS TO SPECIFICATION 4.0.4</u>

O STATEMENT OF THE PROBLEM

An exception to Specification 4.0.4 is allowed when Surveillance Requirements can be completed only after entry into a mode or specified condition for which they apply. For example, the TS on power distribution limits are generally exempt from Specification 4.0.4. However, upon entry into the mode or specified condition, Specification 4.0.3 may not be met because the Surveillance Requirements may not have been performed within the allowed surveillance interval. Generally, these Surveillance Requirements apply to redundant systems, and Specification 3.0.3 would apply because they are treated as inoperable under Specification 4.0.3. Therefore, allowance of an exception to Specification 4.0.4 can create a conflict with Specification 4.0.3.

0 STAFF POSITION

It is not the intent of Specification 4.0.3 that the Action Requirements should preclude the performance of surveillances when an exception to Specification 4.0.4 is allowed. However, since Specification 4.0.3 has been changed to permit a delay of up to 24 hours in the applicability of the Action Requirements, an appropriate time limit now exists for the completion of those Surveillance Requirements that become applicable when an exception to Specification 4.0.4 is allowed.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

[NOTE: Only Sections 3.0.4, 4.0.3, and 4.0.4 are being modified, as shown in the underlined provisions. The other sections are shown for information only.]

LIMITING CONDITIONS FOR OPERATION

3.0.1 Compliance with the Limiting Conditions for Operation contained in the succeeding specifications is required during the OPERATIONAL MODES or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.

3.0.2 Noncompliance with a specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals. If the Limiting Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.

3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within 1 hour action shall be initiated to place it, as applicable, in:

a. At least HOT STANDBY within the next 6 hours,

b. At least HOT SHUTDOWN within the following 6 hours, and

c. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the action may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual specifications.

This specification is not applicable in MODES 5 or 6.

3.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made when the conditions for the Limiting Conditions for Operation are not met and the associated ACTION requires a shutdown if they are not met within a specified time interval. Entry into an OPERATIONAL MODE or specified condition may be made in accordance with ACTION requirements when conformance to them permits continued operation of the facility for an unlimited period of time. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual specifications.

APPLICABILITY

SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be met during the OPERATIONAL MODES or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with:

a. A maximum allowable extension not to exceed 25% of the surveillance interval, but

b. The combined time interval for any three consecutive surveillance intervals shall not exceed 3.25 times the specified surveillance interval.

4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is determined that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the Surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours or when a shutdown is required to comply with them. Surveillances shall not be performed in OPERATIONAL MODES 1 through 3 during a shutdown required to comply with ACTION requirements. This provision is not applicable to post-maintenance testing required to confirm that systems or components have been restored to OPERABLE status. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made unless the Surveillance Requirement(s) associated with a Limiting Condition of Operation has been performed within the stated surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

a. Inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).

b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and

Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice inspection and testing activities	Required frequencies for performing inservice inspection and testing activities
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days

c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice inspection and testing activities.

d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.

e. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
3/4.0 APPLICABILITY

[NOTE: This enclosure provides the bases for all specifications in Sections 3.0 and 4.0.]

BASES

Specifications 3.0.1 through 3.0.4 establish the general requirements applicable to Limiting Conditions for Operation. These requirements are based on the requirements for Limiting Conditions for Operation stated in the Code of Federal Regulations, 10 CFR 50.36(c)(2):

"Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification until the condition can be met."

Specification 3.0.1 establishes the Applicability statement within each individual specification as the requirement for when (i.e., in which OPERATIONAL MODES or other specified conditions) conformance to the Limiting Conditions for Operation is required for safe operation of the facility. The ACTION requirements establish those remedial measures that must be taken within specified time limits when the requirements of a Limiting Condition for Operation are not met.

There are two basic types of ACTION requirements. The first specifies the remedial measures that permit continued operation of the facility which is not further restricted by the time limits of the ACTION requirements. In this case, conformance to the ACTION requirements provides an acceptable level of safety for unlimited continued operation as long as the ACTION requirements continue to be met. The second type of ACTION requirement specifies a time limit in which conformance to the conditions of the Limiting Condition for Operation must be met. This time limit is the allowable outage time to restore an inoperable system or component to OPERABLE status or for restoring parameters within specified limits. If these actions are not completed within the allowable outage time limits, a shutdown is required to place the facility in a MODE or condition in which the specification no longer applies.

The specified time limits of the ACTION requirements are applicable from the point in time it is determined that a Limiting Condition for Operation is not met. The time limits of the ACTION requirements are also applicable when a system or component is removed from service for surveillance testing or investigation of operational problems. Individual specifications may include a specified time limit for the completion of a Surveillance Requirement when equipment is removed from service. In this case, the allowable outage time limits of the ACTION requirements are applicable when this limit expires if the surveillance has not been completed. When a shutdown is required to comply with ACTION requirements, the plant may have entered a MODE in which a new specification becomes applicable. In this case, the time limits of the ACTION requirements would apply from the point in time that the new specification becomes applicable if the requirements of the Limiting Condition for Operation are not met.

Specification 3.0.2 establishes that noncompliance with a specification exists when the requirements of the Limiting Condition for Operation are not met and the associated ACTION requirements have not been implemented within the specified time interval. The purpose of this specification is to clarify that (1) implementation of the ACTION requirements within the specified time interval constitutes compliance with a specification and (2) completion of the remedial measures of the ACTION requirements is not required when compliance with a Limiting Condition of Operation is restored within the time interval specified in the associated ACTION requirements.

Specification 3.0.3 establishes the shutdown ACTION requirements that must be implemented when a Limiting Condition for Operation is not met and the condition is not specifically addressed by the associated ACTION requirements. The purpose of this specification is to delineate the time limits for placing the unit in a safe shutdown MODE when plant operation cannot be maintained within the limits for safe operation defined by the Limiting Conditions for Operation and its ACTION requirements. One hour is allowed to prepare for an orderly shutdown before initiating a change in plant operation. This time permits the operator to coordinate the reduction in electrical generation with the load dispatcher to ensure the stability and availability of the electrical grid. The time limits specified to reach lower MODES of operation permit the shutdown to proceed in a controlled and orderly manner that is well within the specified maximum cooldown rate and within the cooldown capabilities of the facility assuming only the minimum required equipment is OPERABLE. This reduces thermal stresses on components of the primary coolant system and the potential for a plant upset that could challenge safety systems under conditions for which this specification applies.

If remedial measures permitting continued operation of the facility under the provisions of the ACTION requirements are completed, the shutdown may be terminated. The time limits of the ACTION requirements are applicable from the point in time there was a failure to meet a Limiting Condition for Operation. Therefore, the shutdown may be terminated if the ACTION requirements have been met or the time limits of the ACTION requirements have not expired, thus providing an allowance for the completion of the required actions.

The time limits of Specification 3.0.3 allow 37 hours for the plant to be in the COLD SHUTDOWN MODE when a shutdown is required during the POWER MODE of operation. If the plant is in a lower MODE of operation when a shutdown is required, the time limit for reaching the next lower MODE of operation applies. However, if a lower MODE of operation is reached in less time than allowed, the total allowable time to reach COLD SHUTDOWN, or other applicable MODE, is not reduced. For example, if HOT STANDBY is reached in 2 hours, the time allowed to reach HOT SHUTDOWN is the next 11 hours because the total time to reach HOT SHUTDOWN is not reduced from the allowable limit of 13 hours. Therefore, if remedial measures are completed that would permit a return to POWER operation, a penalty is not incurred by having to reach a lower MODE of operation in less than the total time allowed.

The same principle applies with regard to the allowable outage time limits of the ACTION requirements, if compliance with the ACTION requirements for one specification results in entry into a MODE or condition of operation for another specification in which the requirements of the Limiting Condition for

Operation are not met. If the new specification becomes applicable in less time than specified, the difference may be added to the allowable outage time limits of the second specification. However, the allowable outage time limits of ACTION requirements for a higher MODE of operation may not be used to extend the allowable outage time that is applicable when a Limiting Condition for Operation is not met in a lower MODE of operation.

The shutdown requirements of Specification 3.0.3 do not apply in MODES 5 and 6, because the ACTION requirements of individual specifications define the remedial measures to be taken.

Specification 3.0.4 establishes limitations on MODE changes when a Limiting Condition for Operation is not met. It precludes placing the facility in a higher MODE of operation when the requirements for a Limiting Condition for Operation are not met and continued noncompliance to these conditions would result in a shutdown to comply with the ACTION requirements if a change in MODES were permitted. The purpose of this specification is to ensure that facility operation is not initiated or that higher MODES of operation are not entered when corrective action is being taken to obtain compliance with a specification by restoring equipment to OPERABLE status or parameters to specified limits. Compliance with ACTION requirements that permit continued operation of the facility for an unlimited period of time provides an acceptable level of safety for continued operation without regard to the status of the plant before or after a MODE change. Therefore, in this case, entry into an OPERATIONAL MODE or other specified condition may be made in accordance with the provisions of the ACTION requirements. The provisions of this specification should not, however, be interpreted as endorsing the failure to exercise good practice in restoring systems or components to OPERABLE status before plant startup.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 3.0.4 do not apply because they would delay placing the facility in a lower MODE of operation.

Specifications 4.0.1 through 4.0.5 establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.1 establishes the requirement that surveillances must be performed during the OPERATIONAL MODES or other conditions for which the requirements of the Limiting Conditions for Operation apply unless otherwise stated in an individual Surveillance Requirement. The purpose of this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in a MODE or other specified condition for which the associated Limiting Conditions for Operation are applicable. Surveillance Requirements do not have to be performed when the facility is in an OPERATIONAL MODE for which the

requirements of the associated Limiting Condition for Operation do not apply unless otherwise specified. The Surveillance Requirements associated with a Special Test Exception are only applicable when the Special Test Exception is used as an allowable exception to the requirements of a specification.

Specification 4.0.2 establishes the conditions under which the specified time interval for Surveillance Requirements may be extended. Item a. permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. Item b. limits the use of the provisions of item a. to ensure that it is not used repeatedly to extend the surveillance interval beyond that specified. The limits of Specification 4.0.2 are based on engineering judgment and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. These provisions are sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

Specification 4.0.3 establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, as a condition that constitutes a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be OPERABLE when Surveillance Requirements have been satisfactorily performed within the specified time interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is determined that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with the requirements of Specification 4.0.3. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, was a violation of the OPERABILITY requirements of a Limiting Condition for Operation that is subject to enforcement action. Further, the failure to perform a surveillance within the provisions of Specification 4.0.2 is a violation of a Technical Specification requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plants Technical Specifications.

If the allowable outage time limits of the ACTION requirements are less than 24 hours or a shutdown is required to comply with ACTION requirements, a 24-hour allowance is provided to permit a delay in implementing the ACTION requirements. This provides an adequate time limit to complete Surveillance Requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before a shutdown is required to comply with ACTION requirements or before other remedial measures would be required that may preclude completion of a surveillance. The basis for this

allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. This provision also provides a time limit for the completion of Surveillance Requirements that become applicable as a consequence of MODE changes imposed by ACTION requirements and for completing Surveillance Requirements that are applicable when an exception to the requirements of Specification 4.0.4 is allowed. If a surveillance is not completed within the 24-hour allowance, the time limits of the ACTION requirements are applicable at that time. When a surveillance is performed within the 24-hour allowance and the Surveillance Requirements are not met, the time limits of the ACTION requirements are applicable at the time that the surveillance is terminated.

When a surveillance is not completed within the allowable outage time limits of the ACTION requirements, including situations in which a delay in the ACTION requirements is allowed, the surveillance may not be performed during a shutdown when in MODES 1 through 3. Surveillances may be performed when the facility is in MODE 3 if the shutdown ACTION requirement has been completed when the plant is in this MODE. This provision precludes the risks associated with the performance of the Surveillance Requirements while the plant is undergoing a major change in operating conditions. However, this restriction on surveillance activities in MODES 1 through 3 is not applicable to post-maintenance testing required to confirm that systems or components have been restored to OPERABLE status.

Surveillance Requirements do not have to be performed on inoperable equipment because the ACTION requirements define the remedial measures that apply. However, the Surveillance Requirements have to be met to demonstrate that inoperable equipment has been restored to OPERABLE status.

Specification 4.0.4 establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL MODE or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into a MODE or condition for which these systems and components ensure safe operation of the facility. This provision applies to changes in OPERATIONAL MODES or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to assure that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 4.0.4 do not apply because this would delay placing the facility in a lower MODE of operation.

Specification 4.0.5 establishes the requirement that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. These requirements apply except when relief has been provided in writing by the Commission.

BASES (Cont.)

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout the Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. The requirements of Specification 4.0.4 to perform surveillance activities before entry into an OPERATIONAL MODE or other specified condition takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows pumps and valves to be tested up to one week after return to normal operation. The Technical Specification definition of OPERABLE does not allow a grace period before a component, that is not capable of performing its specified function, is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision which allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

[NOTE: Only Sections 3.0.4, 4.0.3, and 4.0.4 are being modified, as shown in the underlined provisions. The other sections are shown for information only.]

LIMITING CONDITIONS FOR OPERATION

3.0.1 Compliance with the Limiting Conditions for Operation contained in the succeeding Specifications is required during the OPERATIONAL CONDITIONS or other conditions specified therein; except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.

3.0.2 Noncompliance with a Specification shall exist when the requirements of the Limiting Condition for Operation and associated ACTION requirements are not met within the specified time intervals. If the Limitating Condition for Operation is restored prior to expiration of the specified time intervals, completion of the ACTION requirements is not required.

3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within one hour action shall be initiated to place the unit in an OPERATIONAL CONDITION in which the Specification does not apply by placing it, as applicable, in:

1. At least STARTUP within the next 6 hours,

2. At least HOT SHUTDOWN within the following 6 hours, and

3. At least COLD SHUTDOWN within the subsequent 24 hours.

Where corrective measures are completed that permit operation under the ACTION requirements, the action may be taken in accordance with the specified time limits as measured from the time of failure to meet the Limiting Condition for Operation. Exceptions to these requirements are stated in the individual Specifications.

This specification is not applicable in OPERATIONAL CONDITION 4 or 5.

3.0.4 Entry into an OPERATIONAL CONDITION or other specified condition shall not be made when the conditions for the Limiting Conditions for Operation are not met and the associated ACTION requires a shutdown if they are not met within a specified time interval. Entry into an OPERATIONAL CONDITION or other specified condition may be made in accordance the ACTION requirements when conformance to them permits continued operation of the facility for an unlimited period of time. This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements. Exceptions to these requirements are stated in the individual Specifications.

APPLICABILITY

SURVEILLANCE REQUIREMENTS

4.0.1 Surveillance Requirements shall be met during the OPERATIONAL CONDITIONS or other conditions specified for individual Limiting Conditions for Operation unless otherwise stated in an individual Surveillance Requirement.

4.0.2 Each Surveillance Requirement shall be performed within the specified time interval with:

a. A maximum allowable extension not to exceed 25% of the surveillance interval, but

b. The combined time interval for any 3 consecutive surveillance intervals shall not exceed 3.25 times the specified surveillance interval.

4.0.3 Failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, shall constitute noncompliance with the OPERABILITY requirements for a Limiting Condition for Operation. The time limits of the ACTION requirements are applicable at the time it is recognized that a Surveillance Requirement has not been performed. The ACTION requirements may be delayed for up to 24 hours to permit the completion of the surveillance when the allowable outage time limits of the ACTION requirements are less than 24 hours or when a shutdown is required to comply with them. Surveillances shall not be performed in OPERATIONAL CONDITIONS 1 AND 2 during a shutdown required to comply with ACTION requirements. This provision is not applicable to post-maintenance testing required to confirm that systems or components have been restored to OPERABLE status. Surveillance Requirements do not have to be performed on inoperable equipment.

4.0.4 Entry into an OPERATIONAL CONDITION or other specified applicable condition shall not be made unless the Surveillance Requirement(s) associated with the Limiting Condition for Operation have been performed within the applicable surveillance interval or as otherwise specified. This provision shall not prevent passage through or to OPERATIONAL CONDITIONS as required to comply with ACTION requirements.

4.0.5 Surveillance Requirements for inservice inspection and testing of ASME Code Class 1, 2, and 3 components shall be applicable as follows:

a. Inservice inspection of ASME Code Class 1, 2, an 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda as required by 10 CFR 50, Section 50.55a(g), except where specific written relief has been granted by the Commission pursuant to 10 CFR 50, Section 50.55a(g)(6)(i).

b. Surveillance intervals specified in Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda for the inservice inspection and testing activities required by the ASME Boiler and

Pressure Vessel Code and applicable Addenda shall be applicable as follows in these Technical Specifications:

ASME Boiler and Pressure Vessel Code and applicable Addenda terminology for inservice inspection and testing activities	Required frequencies for performing inservice inspection and testing activities
Weekly	At least once per 7 days
Monthly	At least once per 31 days
Quarterly or every 3 months	At least once per 92 days
Semiannually or every 6 months	At least once per 184 days
Every 9 months	At least once per 276 days
Yearly or annually	At least once per 366 days

c. The provisions of Specification 4.0.2 are applicable to the above required frequencies for performing inservice inspection and testing activities.

d. Performance of the above inservice inspection and testing activities shall be in addition to other specified Surveillance Requirements.

e. Nothing in the ASME Boiler and Pressure Vessel Code shall be construed to supersede the requirements of any Technical Specification.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS
3/4.0 APPLICABILITY

[NOTE: This enclosure provides the bases for all specifications in Sections 3.0 and 4.0.]

BASES

Specifications 3.0.1 through 3.0.4 establish the general requirements applicable to Limiting Conditions for Operation. These requirements are based on the requirements for Limiting Conditions for Operation stated in the Code of Federal Regulations, 10 CFR 50.36(c)(2):

"Limiting conditions for operation are the lowest functional capability or performance levels of equipment required for safe operation of the facility. When a limiting condition for operation of a nuclear reactor is not met, the licensee shall shut down the reactor or follow any remedial action permitted by the technical specification until the condition can be met."

Specification 3.0.1 establishes the Applicability statement within each individual specification as the requirement for when (i.e., in which OPERATIONAL CONDITIONS or other specified conditions) conformance to the Limiting Conditions for Operation is required for safe operation of the facility. The ACTION requirements establish those remedial measures that must be taken within specified time limits when the requirements of a Limiting Condition for Operation are not met.

There are two basic types of ACTION requirements. The first specifies the remedial measures that permit continued operation of the facility which is not further restricted by the time limits of the ACTION requirements. In this case, conformance to the ACTION requirements provides an acceptable level of safety for unlimited continued operation as long as the ACTION requirements continue to be met. The second type of ACTION requirement specifies a time limit in which conformance to the conditions of the Limiting Condition for Operation must be met. This time limit is the allowable outage time to restore an inoperable system or component to OPERABLE status or for restoring parameters within specified limits. If these actions are not completed within the allowable outage time limits, a shutdown is required to place the facility in an OPERATIONAL CONDITION or other specified condition in which the specification no longer applies.

The specified time limits of the ACTION requirements are applicable from the point in time it is determined that a Limiting Condition for Operation is not met. The time limits of the ACTION requirements are also applicable when a system or component is removed from service for surveillance testing or investigation of operational problems. Individual specifications may include a specified time limit for the completion of a Surveillance Requirement when equipment is removed from service. In this case, the allowable outage time limits of the ACTION requirements are applicable when this limit expires if the surveillance has not been completed. When a shutdown is required to comply with ACTION requirements, the plant may have entered an OPERATIONAL CONDITION in which a new specification becomes applicable. In this case, the time limits of the ACTION requirements would apply from the point in time that the new specification becomes applicable if the requirements of the Limiting Condition for Operation are not met.

Specification 3.0.2 establishes that noncompliance with a specification exists when the requirements of the Limiting Condition for Operation are not met and the associated ACTION requirements have not been implemented within the specified time interval. The purpose of this specification is to clarify that (1) implementation of the ACTION requirements within the specified time interval constitutes compliance with a specification and (2) completion of the remedial measures of the ACTION requirements is not required when compliance with a Limiting Condition of Operation is restored within the time interval specified in the associated ACTION requirements.

Specification 3.0.3 establishes the shutdown ACTION requirements that must be implemented when a Limiting Condition for Operation is not met and the condition is not specifically addressed by the associated ACTION requirements. The purpose of this specification is to delineate the time limits for placing the unit in a safe shutdown CONDITION when plant operation cannot be maintained within the limits for safe operation defined by the Limiting Conditions for Operation and its ACTION requirements. One hour is allowed to prepare for an orderly shutdown before initiating a change in plant operation. This time permits the operator to coordinate the reduction in electrical generation with the load dispatcher to ensure the stability and availability of the electrical grid. The time limits specified to reach lower CONDITIONS of operation permit the shutdown to proceed in a controlled and orderly manner that is well within the specified maximum cooldown rate and within the cooldown capabilities of the facility assuming only the minimum required equipment is OPERABLE. This reduces thermal stresses on components of the primary coolant system and the potential for a plant upset that could challenge safety systems under conditions for which this specification applies.

If remedial measures permitting continued operation of the facility under the provisions of the ACTION requirements are completed, the shutdown may be terminated. The time limits of the ACTION requirements are applicable from the point in time there was a failure to meet a Limiting Condition for Operation. Therefore, the shutdown may be terminated if the ACTION requirements have been met or the time limits of the ACTION requirements have not expired, thus providing an allowance for the completion of the required actions.

The time limits of Specification 3.0.3 allow 37 hours for the plant to be in COLD SHUTDOWN when a shutdown is required during POWER operation. If the plant is in a lower CONDITION of operation when a shutdown is required, the time limit for reaching the next lower CONDITION of operation applies. However, if a lower CONDITION of operation is reached in less time than allowed, the total allowable time to reach COLD SHUTDOWN, or other OPERATIONAL CONDITION, is not reduced. For example, if STARTUP is reached in 2 hours, the time allowed to reach HOT SHUTDOWN is the next 11 hours because the total time to reach HOT SHUTDOWN is not reduced from the allowable limit of 13 hours. Therefore, if remedial measures are completed that would permit a return to POWER operation, a penalty is not incurred by having to reach a lower CONDITION of operation in less than the total time allowed.

The same principle applies with regard to the allowable outage time limits of the ACTION requirements, if compliance with the ACTION requirements for one specification results in entry into an OPERATIONAL CONDITION or condition of operation for another specification in which the requirements of the Limiting Condition for Operation are not met. If the new specification becomes applicable in less time than specified, the difference may be added to the allowable outage time limits of the second specification. However, the allowable outage time limits of ACTION requirements for a higher CONDITION of operation may not be used to extend the allowable outage time that is applicable when a Limiting Condition for Operation is not met in a lower CONDITION of operation.

The shutdown requirements of Specification 3.0.3 do not apply in CONDITIONS 5 and 6, because the ACTION requirements of individual specifications define the remedial measures to be taken.

Specification 3.0.4 establishes limitations on a change in OPERATIONAL CONDITIONS when a Limiting Condition for Operation is not met. It precludes placing the facility in a higher CONDITION of operation when the requirements for a Limiting Condition for Operation are not met and continued noncompliance to these conditions would result in a shutdown to comply with the ACTION requirements if a change in CONDITIONS were permitted. The purpose of this specification is to ensure that facility operation is not initiated or that higher CONDITIONS of operation are not entered when corrective action is being taken to obtain compliance with a specification by restoring equipment to OPERABLE status or parameters to specified limits. Compliance with ACTION requirements that permit continued operation of the facility for an unlimited period of time provides an acceptable level of safety for continued operation without regard to the status of the plant before or after a change in OPERATIONAL CONDITIONS. Therefore, in this case, entry into an OPERATIONAL CONDITION or other specified condition may be made in accordance with the provisions of the ACTION requirements. The provisions of this specification should not, however, be interpreted as endorsing the failure to exercise good practice in restoring systems or components to OPERABLE status before plant startup.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 3.0.4 do not apply because they would delay placing the facility in a lower CONDITION of operation.

Specifications 4.0.1 through 4.0.5 establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

"Surveillance requirements are requirements relating to test, calibration, or inspection to assure that the necessary quality of systems and components is maintained, that facility operation will be within safety limits, and that the limiting conditions of operation will be met."

Specification 4.0.1 establishes the requirement that surveillances must be performed during the OPERATIONAL CONDITIONS or other conditions for which the requirements of the Limiting Conditions for Operation apply unless otherwise

stated in an individual Surveillance Requirement. The purpose of this specification is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits to ensure safe operation of the facility when the plant is in an OPERATIONAL CONDITION or other specified condition for which the individual Limiting Conditions for Operation are applicable. Surveillance Requirements do not have to be performed when the facility is in an OPERATIONAL CONDITION for which the requirements of the associated Limiting Condition for Operation do not apply unless otherwise specified. The Surveillance Requirements associated with a Special Test Exception are only applicable when the Special Test Exception is used as an allowable exception to the requirements of a specification.

Specification 4.0.2 establishes the conditions under which the specified time interval for Surveillance Requirements may be extended. Item a. permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operating conditions that may not be suitable for conducting the surveillance; e.g., transient conditions or other ongoing surveillance or maintenance activities. Item b. limits the use of the provisions of item a. to ensure that it is not used repeatedly to extend the surveillance interval beyond that specified. The limits of Specification 4.0.2 are based on engineering judgment and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the Surveillance Requirements. These provisions are sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

Specification 4.0.3 establishes the failure to perform a Surveillance Requirement within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, as a condition that constitutes a failure to meet the OPERABILITY requirements for a Limiting Condition for Operation. Under the provisions of this specification, systems and components are assumed to be OPERABLE when Surveillance Requirements have been satisfactorily performed within the specified time interval. However, nothing in this provision is to be construed as implying that systems or components are OPERABLE when they are found or known to be inoperable although still meeting the Surveillance Requirements. This specification also clarifies that the ACTION requirements are applicable when Surveillance Requirements have not been completed within the allowed surveillance interval and that the time limits of the ACTION requirements apply from the point in time it is determined that a surveillance has not been performed and not at the time that the allowed surveillance interval was exceeded. Completion of the Surveillance Requirement within the allowable outage time limits of the ACTION requirements restores compliance with the requirements of Specification 4.0.3. However, this does not negate the fact that the failure to have performed the surveillance within the allowed surveillance interval, defined by the provisions of Specification 4.0.2, was a violation of the OPERABILITY requirements of a Limiting Condition for Operation that is subject to enforcement action. Further, the failure to perform a surveillance within the provisions of Specification 4.0.2 is a violation of a Technical Specification

requirement and is, therefore, a reportable event under the requirements of 10 CFR 50.73(a)(2)(i)(B) because it is a condition prohibited by the plants Technical Specifications.

If the allowable outage time limits of the ACTION requirements are less than 24 hours or a shutdown is required to comply with ACTION requirements, a 24-hour allowance is provided to permit a delay in implementing the ACTION requirements. This provides an adequate time limit to complete Surveillance Requirements that have not been performed. The purpose of this allowance is to permit the completion of a surveillance before a shutdown would be required to comply with ACTION requirements or before other remedial measures would be required that may preclude the completion of a surveillance. The basis for this allowance includes consideration for plant conditions, adequate planning, availability of personnel, the time required to perform the surveillance, and the safety significance of the delay in completing the required surveillance. This provision also provides a time limit for the completion of Surveillance Requirements that become applicable as a consequence of CONDITION changes imposed by ACTION requirements and for completing Surveillance Requirements that are applicable when an exception to the requirements of Specification 4.0.4 is allowed. If a surveillance is not completed within the 24-hour allowance, the time limits of the ACTION requirements are applicable at that time. When a surveillance is performed within the 24-hour allowance and the Surveillance Requirements are not met, the time limits of the ACTION requirements are applicable at the time that the surveillance is terminated.

When a surveillance is not completed within the allowable outage time limits of the ACTION requirements, including situations in which a delay in the ACTION requirements is allowed, the surveillance may not be performed during a shutdown when in CONDITIONS 1 and 2. Surveillances may be performed when the facility is in CONDITION 2 if the shutdown ACTION requirement has been completed when the plant is in this CONDITION. This provision precludes the risks associated with the performance of the Surveillance Requirements while the plant is undergoing a major change in operating conditions. However, this restriction on surveillance activities in CONDITIONS 1 AND 2 is not applicable to post-maintenance testing required to confirm that systems or components have been restored to OPERABLE status.

Surveillance Requirements do not have to be performed on inoperable equipment because the ACTION requirements define the remedial measures that apply. However, the Surveillance Requirements have to be met to demonstrate that inoperable equipment has been restored to OPERABLE status.

Specification 4.0.4 establishes the requirement that all applicable surveillances must be met before entry into an OPERATIONAL CONDITION or other condition of operation specified in the Applicability statement. The purpose of this specification is to ensure that system and component OPERABILITY requirements or parameter limits are met before entry into an OPERATIONAL CONDITION or other specified condition for which these systems and components assure safe operation of the facility. This provision applies to changes in OPERATIONAL CONDITIONS or other specified conditions associated with plant shutdown as well as startup.

Under the provisions of this specification, the applicable Surveillance Requirements must be performed within the specified surveillance interval to assume that the Limiting Conditions for Operation are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ACTION requirements, the provisions of Specification 4.0.4 do not apply because this would delay placing the facility in a lower CONDITION of operation.

Specification 4.0.5 establishes the requirement that inservice inspection of ASME Code Class 1, 2, and 3 components and inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with a periodically updated version of Section XI of the ASME Boiler and Pressure Vessel Code and Addenda as required by 10 CFR 50.55a. These requirements apply except when relief has been provided in writing by the Commission.

This specification includes a clarification of the frequencies for performing the inservice inspection and testing activities required by Section XI of the ASME Boiler and Pressure Vessel Code and applicable Addenda. This clarification is provided to ensure consistency in surveillance intervals throughout the Technical Specifications and to remove any ambiguities relative to the frequencies for performing the required inservice inspection and testing activities.

Under the terms of this specification, the more restrictive requirements of the Technical Specifications take precedence over the ASME Boiler and Pressure Vessel Code and applicable Addenda. The requirements of Specification 4.0.4 to perform surveillance activities before entry into an OPERATIONAL CONDITION or other specified condition takes precedence over the ASME Boiler and Pressure Vessel Code provision that allows pumps and valves to be tested up to one week after return to normal operation. The Technical Specification definition of OPERABLE does not allow a grace period before a component, which is not capable of performing its specified function, is declared inoperable and takes precedence over the ASME Boiler and Pressure Vessel Code provision that allows a valve to be incapable of performing its specified function for up to 24 hours before being declared inoperable.

CRGR REVIEW PACKAGE

PROPOSED ACTION: GENERIC LETTER ON SHORT TERM TECHNICAL SPECIFICATION IMPROVEMENTS

CATEGORY: 2

RESPONSE TO REQUIREMENTS FOR CONTENT OF PACKAGE SUBMITTED FOR CRGR REVIEW:

(i) The proposed generic requirement or staff position as it is proposed to be sent out to licensees.

Enclosure 1 is the proposed Generic Letter to be sent to all light water reactor licensees and applicants.

(ii) Draft staff papers or other underlying staff documents supporting the requirements or staff position.

NUREG 1024 - TECHNICAL SPECIFICATIONS -- ENHANCING THE SAFETY IMPACT

Recommendation 3: "The action statements should be reviewed to assure that they are designed to direct the plants to a safe plant operational mode such that public risk is minimized and that unnecessary transients and shutdowns are precluded."

Recommendation 5: "The preparation and organization of the Standard Technical Specifications should be reviewed to assure that they are consistent with 10 CFR 50.36 and only contain requirements that have a sound safety basis."

SECY 86-10 - RECOMMENDATIONS FOR IMPROVING TECHNICAL SPECIFICATIONS

Enclosure 1 to SECY 86-10 provided the report of the Technical Specification Improvement Project: RECOMMENDATIONS FOR IMPROVING TECHNICAL SPECIFICATIONS, dated September 30, 1985.

Enclosure 2 to SECY 86-10 provided the report of the AIF Subcommittee of the Committee on Reactor Licensing and Safety: TECHNICAL SPECIFICATION IMPROVEMENTS, dated October 1, 1985.

SECY 86-310 - PROPOSED COMMISSION POLICY STATEMENT ON TECHNICAL SPECIFICATION IMPROVEMENTS FOR NUCLEAR POWER REACTORS

Addresses the need for both short and long term improvements in Technical Specifications.

FRN 52 FR 3788 - INTERIM COMMISSION POLICY STATEMENT ON TECHNICAL SPECIFICATION IMPROVEMENTS

Policy Statement issued for use and public comment.

MEMORANDA:

1. Harold R. Denton, Director, NRR to Victor Stello, Jr., EDO: TECHNICAL SPECIFICATION IMPROVEMENT PROGRAM PLAN - EXECUTIVE SUMMARY, dated April 1, 1986.

Section 3.0 of the Program Plan addresses Short Term Technical Specification Improvements.

2. Harold R. Denton, Director, NRR and James M. Taylor. Director, IE to Regional Administrators: RELIEF FROM TECHNICAL SPECIFICATION LCO'S, dated November 21, 1986, EGM 85-05A.

Established procedures for granting relief from Technical Specifications that may cause unnecessary plant shutdowns or delays in plant startup. The alternative Technical Specifications offered in the Generic Letter should reduce the need, on an ad hoc basis, for plant-specific relief from Technical Specification requirements.

(iii) Each proposed requirement or staff position shall contain the sponsoring office's position as to whether the proposal would increase requirements or staff positions, implement existing requirements or staff positions, or would relax or reduce existing requirements or staff positions.

The Generic Letter presents acceptable alternatives to the existing Standard Technical Specification (STS) requirements for Section 3/4.0 on the general requirements applicable to Limiting Conditions for Operation and Surveillance Requirements. Enclosure 1 to the Generic Letter provides a discussion of the problems that are encountered under the existing STS requirements, as identified by both NRC and Industry studies, and the staff's position on acceptable alternatives. The alternatives to the existing STS requirements include changes that are not mandatory to assure an acceptable level of plant safety. Rather, the changes provide alternatives which are for the most part reductions in requirements that will facilitate plant operation, while maintaining an acceptable level of safety, and reduce the potential for situations that may necessitate requests for temporary relief from existing requirements. The impact of the alternatives is addressed in Enclosure 1 to the Generic Letter and under the Evaluation Summary below with regard to more or less restrictive limitations on plant operations.

(iv) The proposed method of implementation along with the concurrence (and any comments) of OELD on the method proposed.

The alternatives to the existing STS requirements are voluntary and plant-specific changes to Technical Specifications would be proposed by licensees in accordance to the regulatory

requirements for license amendments, including no significant hazards considerations. Extensive editorial comments were provided by OGC to clarify the information provided in the Generic Letter and Enclosure 1 hereto. The staff has incorporated the OGC comments and OGC concurrence was provided. Comments and concurrence with this proposal were also provided by the Offices of Inspection and Enforcement RES and AEOD. Office comments and their disposition are provided in Enclosure 3.

(v) Regulatory analysis generally conforming to the directives and guidance of NUREG/BR0058 and NUREG/CR3568.

A formal regulatory analysis is not applicable because the alternatives being offered are voluntary and are responsive to both NRC and Industry initiatives that are addressed in the Program Plan for Technical Specification Improvements. The benefits to safety of improved Technical Specifications are not readily quantifiable in terms of reduced exposure to the public from accidents, but they are recognized for their direct contribution to safety by their positive impact on plant operations. The alternatives offered remove unnecessary restrictions on changes in operational modes and reduce the potential for unnecessary shutdowns caused by inadvertently exceeding surveillance intervals. The alternatives also clarify the existing requirements and eliminate conflicts due to the applicability of multiple requirements in situations not intended or recognized when individual requirements were promulgated.

(vi) Identification of the category of reactor plants to which the generic requirement, or staff position, is to apply.

The alternatives to the STS requirements are applicable to all power reactors.

(vii) For each category of reactor plants, the evaluation should also demonstrate how the action should be prioritized and scheduled in light of other ongoing regulatory activities. The evaluation is to consider information available concerning any of the following factors as may be appropriate and any other information relevant and material to the proposed action:

(a) Statement of the specific objectives that the proposed action is designed to achieve.

Enclosure 1 to the Generic Letter includes a discussion of the problems and the staff position on acceptable alternatives to the existing STS requirements that clarify the intent of existing requirements and eliminate unnecessary restrictions on plant operation that can result in forced shutdowns and delays in plant startup.

(b) General description of the activity that would be required by the licensee or applicant in order to complete the action.

The Generic Letter encourages licensees and applicants to propose changes to their Technical Specification that are consistent with the guidance provided in the Enclosures. Enclosures 2 and 4 to the Generic Letter provide Section 3/4.0 of the STS with the changes that are applicable to PWR and BWR plants respectively. Consistent with the objectives of the Commission Policy Statement on Technical Specifications, SECY 86-310, enclosures 3 and 5 to the Generic Letter provide an improved BASES for Section 3/4.0 of the STS. Thus, with the discussion of problems with the current STS requirements and the staff position on acceptable alternatives, adequate guidance has been provided to allow licensees and applicants, including those plants which have custom Technical Specifications, to propose Technical Specification changes.

(c) Potential change is risk to the public from the accidental offsite release of radioactive material.

As addressed under the Evaluation Summary below, the overall impact of the alternatives is a reduction in risk. No significant impact on radiological exposure of the public is expected from this proposed action.

(d) Potential impact on radiological exposure of facility employees and other onsite workers.

As addressed under the Evaluation Summary below, the overall impact of the alternatives is a reduction in risk. No significant impact on radiological exposure of facility employees and other onsite workers is expected from this proposed action.

(e) Installation and continuing costs associated with the action, including the cost of facility downtime or cost of construction delay.

The alternatives offered remove unnecessary restrictions that could delay plant start up or result in forced plant shutdowns. Thus, due to the high cost associated with downtime, there is the potential for a significant cost savings even if the alternatives would only be applicable on rare occasions. This is addressed further under the Evaluation Summary below.

(f) The potential safety impact of changes in plant or operational complexity, including the relationship to proposed and existing regulatory requirements and staff positions.

The impact on operational complexity of the improved Technical Specification changes, including the relationship to existing regulatory requirements and staff positions, is addressed under the Evaluation Summary below. With regard to future changes that are likely to occur, it is anticipated that the STS will be

completely rewritten as a follow up to the Commission Policy Statement on Technical Specifications. Therefore, as noted in the Generic Letter, the staff is not proposing to formally amend the STS at this time.

(g) The estimated resource burden on the NRC associated with the proposed action and the availability of such resources.

The NRC resource burden should be minimal since a license amendment request would be in response to matters for which an acceptable format for the changes has been established by the guidance included in the Generic Letter. The processing of the license amendments would be carried out by Project Managers and should not require technical staff specialist input. Thus, the staff resource burden should be much less than the average 0.1 man-year resource expenditure for a multi-plant action that requires technical staff specialist input. The unnecessary plant shutdowns and emergency license amendments that can be avoided by these proposals justify, and to some extent will offset, the expenditure of resources needed to implement this action.

(h) The potential impact of differences in facility type, design or age on the relevancy and practicality of the proposed action.

The guidance on the alternatives included consideration of the difference in terminology between the STS for PWR and BWR plants. Although the format of requirements for plants with custom Technical Specifications may require plant-specific considerations, the impact should be minimal due to the inclusion of the discussion of problems and the staff position on alternatives.

(i) Whether the proposed action is interim or final, and if interim, the justification for imposing the proposed action on an interim basis.

As noted under item (f) above, it is anticipated that the STS will be completely written and that they will incorporate a broad range of improvements. This may lead to further improvements to Section 3/4.0 on the general requirements applicable to LCOs and surveillance requirements. However, with regard to the problems identified with the existing STS requirements, the alternatives are considered to be final in that there are not any further changes to these requirements currently under consideration. As work proceeds to address human factors considerations and other improvements, subsequent changes to Section 3/4.0 may occur as part of the effort to rewrite the STS to address these considerations.

(viii) For each evaluation conducted pursuant to 10 CFR 50.109, the proposing office director's determination, together with the rationale for the determination based on the considerations of paragraphs (i) through (vii) above, that

(a) there is a substantial increase in the overall protection of public health and safety or the common defense and security to be derived from the proposal; and

(b) the direct and indirect costs of implementation, for the facilities affected, are justified in view of this increased protection.

Since the alternatives to the current STS requirements being offered are voluntary, backfit considerations are not applicable.

(ix) For each evaluation conducted for proposed relaxations or decreases in current requirements or staff positions, the proposing office director's determination, together with the rationale for the determination based on the considerations of paragraphs (i) through (vii) above, that:

(a) the public health and safety and the common defense and security would be adequately protected if the proposed reduction in requirements or positions were implemented, and

(b) the cost savings attributed to the action would be substantial enough to justify taking the action.

Enclosure 1 to the Generic Letter provides the rationale for the alternatives that are being offered to address problems with the current STS requirements. The conclusion is that where the alternative results in a relaxation of a specific requirement, on the balance there is a net benefit to plant safety which adequately offsets the nominal cost to NRC [see item (vii) g above]. This is addressed further under the Evaluation Summary below.

EVALUATION SUMMARY:

Enclosure 1 to the Generic Letter addresses problems which are being encountered under the existing STS requirements on the applicability of Limiting Conditions for Operation and Surveillance Requirements, Section 3/4.0, and the staff position on acceptable alternatives. Therefore, the discussion presented in this evaluation summary addresses only those aspects of the content of CRGR Review Packages that are not specifically provided in Enclosure 1 to the Generic Letter and that can best be addressed in context together.

STS Specification 3.0.4:

This specification precludes entry into an operational mode or other specified conditions unless the conditions for the Limiting Condition for Operation are met without reliance on provisions contained in the action requirements. When the requirements for a Limiting Condition for Operation are not met, the action requirements generally provide a time limit in which conformance to the

specification must be restored or the unit must be shut down by placing it is a mode or condition for which the requirements no longer apply. However, for some specifications the remedial measures included in the action requirements provide an acceptable level of safety for unlimited continued plant operation. In this situation, the requirements of Specification 3.0.4 impact plant operation by requiring full conformance to the LCO prior to a change in operational modes or other specified conditions, without reliance on the provisions of the action requirements. Further, those specifications that have such action requirements are generally exempted from the requirements of Specification 3.0.4 on the basis that the specified remedial measures provide an acceptable level of safety to permit unlimited continued operation.

The fact that some Technical Specifications may unduly restrict plant operation and cause unnecessary delays in plant startup prompted the issuance of guidance to clarify conditions under which relief may be granted from such requirements [see memorandum #2 under item (i) above]. Hence, the alternative provided for this specification is consistent with current practice that would be used as the basis for allowing individual specifications to be exempt from the requirements of Specification 3.0.4. Further, the proposed alternative is consistent with the basis under which waivers may be granted for individual specifications when conformance to the requirements of Specification 3.0.4 would unnecessarily cause a delay in plant startup.

For example, the specification on containment air locks permits continued operation with an inoperable air lock door when the door is locked in the closed position in accordance with the provisions of the action requirements. This specification notes that the provisions of Specification 3.0.4 are not applicable and, therefore, compliance with the stated action requirements does not restrict changes in operational modes with an inoperable air lock door so long as the action requirements are met. The specification on containment isolation valves also permits continued operation with an inoperable isolation valve when the valve is in the sealed closed position in accordance with the provisions of the action requirements. However, this specification is not exempt from the provisions of Specification 3.0.4 and, therefore, a change in operational modes is not permitted when an isolation valve is inoperable although compliance with the provisions of the action requirements provides an acceptable level of safety for continued operation.

Therefore, there is no impact on existing levels of risk for this alternative since it is consistent with current practice. The benefit is that a consistent set of requirements would exist. This eliminates the need for waivers of inconsistent requirements that would unduly limit changes in operational modes.

Specification 4.0.3:

This specification defines that the failure to perform a surveillance requirement within the specified interval shall constitute noncompliance with the operability requirements for a Limiting Condition for Operation. Noncompliance with the requirements of this specification may result from the inadvertent failure to schedule the performance of a surveillance requirement. Although the majority of surveillances are completed on schedule, if a surveillance is not completed within the provisions of Specification 4.0.2 for

extending the specified surveillance interval, the action requirements must be met since this is defined as a condition of noncompliance with the operability requirements of a Limiting Condition for Operation.

Compliance with the action requirements generally does not pose a significant problem since they usually permit a sufficient period of time for taking corrective action before a plant shut down would be required. For example, the specification for ECCS subsystems allows 72 hours for an inoperable ECCS subsystem to be restored to operable status before subsequent action would be required to shut down. In this case, the completion of the surveillance within the allowable outage time limits of the action requirements eliminates the conflict with the requirements with Specification 4.0.3. However, there are cases when the allowable outage time of the action requirements does not provide sufficient time to complete a missed surveillance and a shutdown would be required when the allowable outage time limit is exceeded. For example, the specification for accumulators allows 1 hour for an inoperable accumulator to be restored to operable status before subsequent action would be required to shut down. Also, the noncompliance with the operability requirements, due to a missed surveillance, may result in a shutdown as a consequence of the associated specification action requirements. For example, the specifications for reactor trip and engineered safety feature actuation system logic requires an immediate shutdown if one of the redundant trains of the logic is inoperable. Thus, the performance of a missed surveillance may occur simultaneously with a shutdown required to comply with action requirements. This has a negative impact on plant safety since it increases the potential for plant upsets and challenges to safety systems at a time that the plant is undergoing a major change in plant operation.

Because a missed surveillance primarily involves a question of operability that has not been confirmed by the performance of a surveillance and the majority of the surveillances do in fact confirm the operability of systems and components, conformance to shutdown actions during the performance of a missed surveillance introduces a greater risk to safety that the alternative of providing a reasonable period of time to allow the completion of the surveillance. Hence, the alternative, which permits a delay in the action requirements for up to 24 hours to complete a surveillance, on balance provides a net safety benefit over the existing requirements.

Commensurate with the basis for this alternative, surveillance requirements should not be conducted during a shutdown required to comply with action requirements. Although this is included as a condition with this alternative, it does not represent a more restrictive requirement that currently exists due to the 24-hour allowance which should permit a missed surveillance to be completed without encountering shutdown action requirements.

This provision does not, however, apply to surveillance activities that are required to confirm that systems are restored to operable status following maintenance. In this situation, if the maintenance or subsequent post maintenance testing is not completed within the allowable outage time limits and a shut down is required to comply with the action requirements, the surveillance activity required to demonstrate that the system or component has been restored to operable status may be performed during a shutdown required to comply with an action requirement.

There are two situations, other that a missed surveillance, that can lead to noncompliance with the operability requirements of Specification 4.0.3 when a surveillance has not been performed within the allowed surveillance interval. The first is with respect to the requirements of Specification 4.0.4 that requires that surveillance requirements must be performed within the applicable surveillance interval prior to entry into an operational mode or other specified condition associated with a Limiting Condition for Operation. Exceptions to the requirements of Specification 4.0.4 are, however, allowed when a surveillance can only be performed following entry into such modes or specified conditions. For example, the requirements to perform an incore-excore calibration of the power range neutron flux instrument channels above 75% power are exempt from the requirements of Specification 4.0.4. In this case, while it is not the intent that Specification 4.0.3 should restrict the completion of the required surveillance upon reaching that condition for which it is intended that it be performed, this specification is, none the less, the only applicable requirement that would establish a limit for when such surveillances must be completed. In this case, the allowable outage time limits or forced shutdown requirements of the action requirements would apply when the surveillance has not been previously performed within the specified surveillance interval.

The 24-hour allowance that permits a delay in the action requirements, when a surveillance has not been performed within the allowed surveillance interval, provides a more practical limit for the completion of the applicable surveillances when an exception to the requirements of Specification 4.0.4 applies.

The second situation is where surveillance may become applicable as a consequence of mode changes required to comply with shutdown action requirements. For example, the surveillance requirements associated with the low set point power range and intermediate range trips for Westinghouse plants are only applicable when operating below 10% power. This is a similar situation for which the 24-hour limit of Specification 4.0.3 will now define a practical limit for completing the applicable surveillance requirements. For both of these situations, the impact on risk is neutral, however, the benefit is that a bounding time limit is defined for completion of the surveillance requirements that become applicable in these situations.

The remaining changes to Specification 4.0.3 clarify that it is applicable when the allowed surveillance interval has been exceeded and to clarify the time at which the time limits of the action requirements are applicable.

Specification 4.0.4:

This specification precludes mode changes when surveillances have not been performed within the stated surveillance interval. However, it is not the intent of this specification that the completion of surveillances that become applicable as a consequence of mode changes imposed by action requirements should delay compliance with the shutdown requirements. Therefore, the alternative clarifies that the provisions of this specification shall not prevent passage through or to operational modes as required to comply with action requirements. This is consistent with similar provisions included in

Specification 3.0.4 with respect to limitations on changes in operational modes which are precluded when the conditions for a Limiting Condition for Operation are not met. Therefore, from a risk standpoint, this alternative only clarifies the intent of Specification 4.0.4 and is, therefore, risk neutral.

BASES for Section 3/4.0 of the STS:

Consistent with the intent of the proposed Commission Policy Statement on Technical Specifications (SECY 86-310), the BASES for Specification 3/4.0 was revised to clarify the basis and purpose of the applicable requirements. Improved BASES have a positive safety impact in that they clarify the intent of Technical Specifications. This reduces the potential for misapplication of the requirements and provides greater assurance that their objectives are uniformly applied.

CONCLUSIONS:

The alternatives to the STS requirements offered in the Generic Letter are consistent with the NRC and Industry efforts for Technical Specification improvements and the NRC Program Plan to effect such improvements. This action will demonstrate NRC's commitment to improved Technical Specification requirements that are responsive to concerns and problems with existing requirements which have been identified by both the NRC and the nuclear industry.

STAFF RESPONSE TO OFFICE COMMENTS
(Office comments attached)

AEOD COMMENTS

RESPONSE TO COMMENT 1:

While experience may not show that there have been a large number of plant transients occurring while the plant was shutting down, experience has shown that a large number of transients do occur as a consequence of surveillance testing. Therefore, the staff believes that it is appropriate that missed surveillances should not be conducted during a forced shutdown. Therefore, no action was taken on this comment.

RESPONSE TO COMMENT 2:

The staff believes that the referenced statements and conclusions are used in a manner that includes sufficient discussion such that an adequate basis is provided for this material. Therefore, no action was proposed nor taken on this comment.

RESPONSE TO COMMENT 3:

The staff believes that the review and comment by the Office of Inspection and Enforcement is sufficient to provide input on the proposal in lieu of comments and concurrence by the Regions. NRR processes thousands of Technical Specification changes without comment or concurrence as extensive as required for CRGR review packages and without Region input.

IE COMMENTS

RESPONSE TO COMMENT 1:

The Generic Letter was revised to note that although the staff is not proposing to formally amend the STS at this time, the changes will be the standard for the TS for new licenses and the new STS anticipated as a part of the implementation of the Commission's Policy Statement on Technical Specification Improvements. Since there are only a few plants that would use the STS as a guide for the preparation of TS for a new license, a complete update of the STS is not cost effective in light of ongoing activities by the industry to develop a new STS and the staff's resources involved with this effort.

RESPONSE TO COMMENT 2:

Enclosure 1 was revised to incorporate the intent of this comment.

RESPONSE TO COMMENT 3:

Enclosures 3 and 5 were revised to incorporate this comment.

RESPONSE TO COMMENT 4:

Enclosures 3 and 5 were revised to incorporate this comment.

RESPONSE TO COMMENT 5:

The intent of this comment was incorporated in Enclosures 3 and 5 with the exception that surveillances may be specified to be performed during a mode or condition of operation in which the associated LCO requirements are not applicable, e.g., surveillances performed during a shutdown.

RESPONSE TO COMMENT 6:

Enclosures 3 and 5 were revised to incorporate the intent of this comment.

RESPONSE TO COMMENT 7:

Corresponding changes were made to Enclosure 5, as noted above, consistent with this comment.

RESPONSE TO COMMENT 8:

The Generic Letter notes that the changes indicated are voluntary. Therefore, if the basic requirements did not exist, licenses would not have anything in their TS to change. Therefore, no action was taken in response to this comment.

RESPONSE TO COMMENT 9:

The referenced paragraph was revised to indicate that the changes do not result in any significant change in radiological exposure.

OGC COMMENTS

OGC comments were provided as a reorganization of the material in the Generic Letter and Enclosure 1 thereto in final form of the typewritten text. Thus, these comments were incorporated.

RES COMMENTS

The Office of RES concurred without comment.