Kewaunee Nuclear Power Plant
N490 Highway 42
Kewaunee, WI 54216-9511
920.388.2560

Point Beach Nuclear Plant
6610 Nuclear Road
Two Rivers, WI 54241
920.755.2321

NMC
Committed to Nuclear Excellence

Kewaunee / Point Beach Nuclear
Operated by Nuclear Management Company, LLC

NRC-02-040

10 CFR 50.90

May 7, 2002

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Ladies/Gentlemen:

Docket 50-305
Operating License DPR-43
Kewaunee Nuclear Power Plant
Proposed Amendment 180 Application For Technical Specification Change Regarding Missed Surveillance (and Adoption of a Technical Specifications Bases Control Program) Using The Consolidated Line Item Improvement Process

In accordance with the provisions of 10 CFR 50.90, Nuclear Management Company, LLC (NMC) is submitting a request for an amendment to the Technical Specifications (TS) for the Kewaunee Nuclear Power Plant.

The proposed amendment would modify TS requirements for meeting surveillances in TS 4.0.a, TS requirements for missed surveillances in TS 4.0.c, and TS requirements for a Bases control program consistent with TS Bases Control Program described in Section 5.5 of NUREG-1431, Standard Technical Specifications for Westinghouse Plants, Revision 2.

Attachment 1 provides a description of the proposed changes, the requested confirmation of applicability, and plant-specific verifications. Attachment 2 provides the existing TS pages marked up to show the proposed changes. Attachment 3 provides revised (clean) TS pages. Attachment 4 provides a summary of the regulatory commitments made in this submittal. Attachment 5 provides the existing TS Bases pages marked up to show the proposed change (for information only).

NMC requests approval of the proposed License Amendment by August 2002, with the amendment being implemented within 45 days. The approval date was administratively selected to allow for NRC review but the plant does not require this amendment to allow continued safe full power operation.

A001

To the best of my knowledge and belief, the statements contained in this document are true and correct. In some respects, these statements are not based entirely on my personal knowledge, but on information furnished by cognizant NMC employees and consultants. Such information has been reviewed in accordance with company practice and I believe it to be reliable.

I declare under penalty that the foregoing is true and correct.
Executed on May 7, 2002.

Mark E. Warner
Site Vice President

RS

Attachments:
1 - Description and Assessment
2 - Proposed Technical Specification Changes
3 - Revised Technical Specification Pages
4 - Regulatory Commitments
5 - Proposed Technical Specification Bases Changes

cc: US NRC Region III
US NRC Senior Resident Inspector
Electric Division, PSCW

ATTACHMENT 1

To

Letter from M. E. Warner (NMC)

to

Document Control Desk (NRC)

Dated

May 7, 2002

Proposed Amendment 180

Introduction

Description of Proposed Changes

Assessment

Regulatory Analysis

Environmental Evaluation

1.0 INTRODUCTION

This proposed License Amendment Request (LAR) is made pursuant to 10 CFR 50.90 to modify Technical Specifications (TS) requirements for surveillances in TS 4.0.a, TS requirements for missed surveillances in TS 4.0.c, and provide TS requirements for a Bases Control Program in TS 6.21.

2.0 DESCRIPTION

2.1 Consolidated Line Item Improvement

The proposed changes to TS 4.0.c regarding missed surveillances, are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specifications (STS) change TSTF-358 Revision 5, as modified by Federal Register Notice 66FR32400, of June 14, 2001, and in response to public comments. The availability of this TS improvement was published in the Federal Register on September 28, 2001, as part of the consolidated line item improvement process (CLIIP).

2.2 Additional Changes

In addition to the above proposed changes to TS 4.0.c, TS 4.0.a will be revised to retain requirements that currently exist in TS 4.0.c. One requirement being moved from TS 4.0.c to TS 4.0.a establishes that failure to perform a surveillance requirement within the allowed interval, as defined by TS 4.0.b, constitutes a failure to meet the OPERABILITY requirements for a limiting condition for operation (LCO). The other requirement establishes that surveillance requirements do not have to be performed on inoperable equipment. This relocation of requirements from TS 4.0.c to TS 4.0.a does not result in a change to the requirements, and is being proposed to make the Kewaunee Nuclear Power Plant (KNPP) TS's more consistent with the STS. This will also enable the complete replacement of TS 4.0.c with the verbiage of STS SR 3.0.3.

Additionally, TS 4.0.a will be revised by adopting an STS requirement whereby failure to meet a surveillance, either during performance of the surveillance or between performances of the surveillances, shall be failure to meet the OPERABILITY requirements of the LCO. This change will provide clarification as to when surveillance requirements are required to be met, and the actions that are required when a surveillance requirement is known to not be met.

Because Kewaunee Nuclear Power Plant has Custom Technical Specifications (CTS) additional clarification must be added to the STS LCO wording. In KNPP CTS LCO is defined as including the OPERABILITY requirement, the conditions, the required action, and the associated Allowed Outage Time (AOT). In STS the LCO includes only the OPERABILITY requirements. To show this distinction between KNPP CTS and STS the term "LCO" is modified to show that it is only the OPERABILITY requirements of KNPP's CTS LCO is what is considered not being met.

Also, the term interval is being modified by adding the word surveillance to clarify that the interval of concern is the surveillance interval. This clarification is requested due to operator feedback questioning the term interval.

3.0 ASSESSMENT

3.1 Applicability of Published Safety Evaluation

NMC has reviewed the safety evaluation dated June 8, 2001, as part of the CLIIP. This review included a review of the NRC staff's evaluation, as well as the supporting information provided to support TSTF-358. NMC has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to KNPP and justify this amendment for the incorporation of the changes to the KNPP TS.

3.2 Additional Changes

KNPP TS 4.0.c differs from STS SR 3.0.3. KNPP TS 4.0.c states, "Failure to perform the surveillance requirement within the allowed surveillance interval, defined by TS 4.0.b. 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 identified 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." Therefore, the OPERABILITY requirement of the LCO is declared not met and the action requirements are applicable at the time of discovery for a missed surveillance. Additionally, although the action requirements may be delayed for up to 24 hours when the allowed outage time limits of the action requirements are less than 24 hours, no delay in the action requirements is provided when the allowable outage time limits of the action requirements are equal to or greater than 24 hours.

A proposed change to KNPP TS 4.0.a will require that failure to meet a surveillance, either during performance of the surveillance or between performances of the surveillances, shall be failure to meet the OPERABILITY requirement of the LCO. This change clarifies that surveillances are required to be met at all times during the applicable MODES or specified conditions of the LCO. If it is known that a surveillance requirement cannot be met, the OPERABILITY requirement of the LCO shall be declared not met.

A proposed change to TS 4.0.c will allow equipment to be considered OPERABLE until a missed surveillance is performed (with risk management applied). However, the proposed change will not allow equipment known to be inoperable to be considered OPERABLE until the missed surveillance is performed. If it is known that the missed surveillance could not be met, TS 4.0.a will require the OPERABILITY requirement of the LCO to be declared not met. This change is acceptable, because the most likely outcome of any surveillance is verification that the OPERABILITY requirement of the LCO is met. Furthermore, failure to perform a surveillance within the allowed interval does not cause equipment to become inoperable.

Finally, TS 4.0.c is proposed to be changed such that the application of a delay period in which a missed surveillance is allowed to be performed is associated with the allowed surveillance interval, rather than the allowed outage time limit of the associated action. This change will also result in extending the application of a delay period for performing the missed surveillance to surveillances with associated actions that have allowed outage time limits greater than or equal to 24 hours.

Extending the performance of surveillances requires planning, personnel, preparation, and appropriate plant conditions. Some surveillances, when discovered missed, may require a change in the MODE of the facility to perform the surveillance. When faced with a missed surveillance that may require a change in MODE, operations personnel would have to either: 1) declare the OPERABILITY requirement of the LCO not met and enter the actions which could ultimately require a plant shutdown, 2) determine a method to perform the surveillance requirement in the current MODE, or 3) request a Notice of Enforcement Discretion - all potentially in the space of 24 hours. Adopting this change will reduce the need to apply for regulatory relief for the performance of these missed surveillances.

4.0 REGULATORY ANALYSIS

4.1 No Significant Hazards Determination

NMC has reviewed the proposed no significant hazards consideration determination (NSHCD) published in the Federal Register as part of the CLIIP. NMC has concluded that the proposed NSHCD presented in the Federal Register notice is applicable to Kewaunee Nuclear Power Plant and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

4.2 Verification and Commitments

As discussed in the notice of availability published in the Federal Register on September 28, 2001, for the missed surveillance TS improvement, plant-specific verifications were performed as follows:

NMC has established TS Bases for TS 4.0.c, which state that use of the delay period established by TS 4.0.c is a flexibility, which is not intended to be used as an operational convenience to extend surveillance intervals, but only for the performance of missed surveillances.

The modification will also include changes to the Bases for TS 4.0.c that provide details on how to implement the new requirements. The Bases changes provide guidance for surveillance intervals that are not based on time intervals but are based on specified unit conditions, OPERATING situations, or requirements of regulations. In addition, the Bases changes state that NMC is expected to perform a missed surveillance test at the first reasonable opportunity, taking into account appropriate considerations, such as the impact on plant risk and accident analysis assumptions, consideration of unit conditions, planning, availability of personnel, and the time required to perform the surveillance. The Bases also state that the risk impact should be managed through the program in place to implement 10 CFR 50.65(a)(4) and its implementation guidance, NRC Regulatory Guide 1.182, "Assessing and Managing Risks Before Maintenance Activities at Nuclear Power Plants," and that the missed surveillance should be treated as an emergent condition, as discussed in Regulatory Guide 1.182. In addition, the Bases state that the degree of depth and rigor of the evaluation should be commensurate with the importance of the component and that missed surveillances for important components should be analyzed quantitatively. The Bases also state that the results of the risk evaluation determine the safest course of action. In addition, the Bases state that all missed surveillances will be placed in the licensee's Corrective Action Program. Finally, NMC has a Bases Control Program consistent with Section 5.5 of the STS.

5.0 ENVIRONMENTAL EVALUATION

NMC has reviewed the environmental evaluation included in the model safety evaluation dated June 8, 2001, as part of the CLIIP. NMC has determined that the staff's findings presented in that evaluation are applicable to Kewaunee and the evaluation is hereby incorporated by reference for this application.

Additionally, with respect to the proposed changes to TS 4.0.a, TS 4.0.c and TS 6.21, the NMC has determined that the proposed amendment involves no significant hazards considerations and no significant change in the types of any effluents that may be released off-site and that there is no significant increase in the individual or cumulative occupational radiation exposure. Accordingly, this proposed amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with this proposed amendment.

ATTACHMENT 2

To

Letter from M. E. Warner (NMC)

To

Document Control Desk (NRC)

Dated

May 7, 2002

Proposed Amendment 180

Affected TS Pages:

Table of Contents, Page TS iv
TS 4.0-1
TS B4.0-1 through TS B4.0-3
TS 6.21-1

4.0 SURVEILLANCE REQUIREMENTS

APPLICABILITY

a. Surveillance requirements shall be met during the operational MODES or other conditions specified for individual LIMITING CONDITIONS FOR OPERATION (LCO) unless otherwise stated in an individual surveillance requirement. Failure to meet a surveillance requirement, whether such failure is experienced during the performance of the surveillance or between performances of the surveillances, shall be failure to meet the OPERABILITY requirements for the LCO. Failure to perform a surveillance within the allowed surveillance interval, defined by TS 4.0.b, shall be a failure to meet the OPERABILITY requirements for the LCO except as provided in TS 4.0.c. Surveillance requirements do not have to be performed on inoperable equipment.

b. Each surveillance requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25% of the specified surveillance interval.

c. If it is discovered that a surveillance was not performed within its allowed surveillance interval, then compliance with the requirement to declare the OPERABILITY requirements for the LCO not met may be delayed from the time of discovery up to 24 hours, or up to the limit of the allowed surveillance interval, whichever is greater. This delay period is permitted to allow performance of the surveillance. A risk evaluation shall be performed for any surveillance delayed greater than 24 hours and the risk impact shall be managed.

   If the surveillance is not performed within the delay period, the OPERABILITY requirements for the LCO must immediately be declared not met, and the applicable conditions(s) must be entered.

   When the surveillance is performed within the delay period and the surveillance is not met, the OPERABILITY requirements for the LCO must immediately be declared not met, and the applicable conditions(s) must be entered. ~~Failure to perform the surveillance requirement within the allowed surveillance interval, defined by TS 4.0.b, 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 identified 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. Surveillance requirements do not have to be performed on inoperable equipment.~~

d. Entry into an operational MODE or other specified condition shall not be made unless the surveillance requirement(s) associated with a LIMITING CONDITION FOR OPERATION have 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 ~~AaCcTtiOoNn~~ requirements.

   Exceptions to these requirements are stated in the individual Technical Specifications.

BASIS - Surveillance Requirements (TS 4.0)

TS 4.0.a establishes the requirements that surveillances must be performed during the operational MODES or other conditions for which the requirements of the LIMITING CONDITIONS FOR OPERATION (LCO) apply unless otherwise stated in an individual surveillance requirement. The purpose of this TS is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits. This ensures safe operation of the facility when the plant is in a MODE or other specified condition for which the associated LCOs 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 LCO do not apply unless otherwise specified. 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.

TS 4.0.b establishes the limit for which the specified time interval for surveillance requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operation conditions that may not be suitable for conducting the surveillance (e.g., transient conditions or other ongoing surveillance or maintenance activities). It also provides flexibility to accommodate the length of a fuel cycle for surveillances that are performed at each refueling outage and are specified with an 18-month surveillance interval. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillances that are not performed during refueling outages. The limitation of TS 4.0.b is based on engineering judgement and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the surveillance requirements. This provision is sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

TS 4.0.c establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a surveillance has not been completed within the allowed surveillance interval. A delay period of up to 24 hours or up to the limit of the allowed surveillance interval, whichever is greater, applies from the point in time that it is discovered that the surveillance has not been performed in accordance with TS 4.0.b, and not at the time that the allowed surveillance interval was not met.

This delay period provides adequate time to complete surveillances that have been missed. This delay period permits the completion of a surveillance before complying with required actions or other remedial measures that might preclude completion of the surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the surveillance, the safety significance of the delay in completing the required surveillance, and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the requirements. When a surveillance with an allowed interval based not on time intervals, but upon specified unit conditions, OPERATING situations, or requirements of regulations (e.g., prior to entering OPERATING MODE after each fuel loading, or in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions, etc.) is discovered to not have been performed when specified, TS 4.0.c allows for the full delay period of up to the allowed surveillance interval to perform the surveillance. However, since there is not a time interval specified, the missed surveillance should be performed at the first reasonable opportunity.

TS 4.0.c provides a time limit for, and allowances for the performance of, surveillances that become applicable as a consequence of MODE changes imposed by required actions.

Failure to comply with allowed surveillance intervals for SRs is expected to be an infrequent occurrence. Use of the delay period established by TS 4.0.c is flexibility which is not intended to be used as an operational convenience to extend surveillance intervals.

While up to 24 hours or the limit of the allowed interval is provided to perform the missed surveillance, it is expected that the missed surveillance will be performed at the first reasonable opportunity. The determination of the first reasonable opportunity should include consideration of the impact on plant risk (from delaying the surveillance as well as any plant configuration changes required or shutting the plant down to perform the surveillance) and impact on any analysis assumptions, in addition to unit conditions, planning, availability of personnel, and the time required to perform the surveillance. This risk impact should be managed through the program in place to implement 10 CFR 50.65(a)(4) and its implementation guidance, NRC Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." This Regulatory Guide addresses consideration of temporary and aggregate risk impacts, determination of risk management action thresholds, and risk management action up to and including plant shutdown. The missed surveillance should be treated as an emergent condition as discussed in the Regulatory Guide. The risk evaluation may use quantitative, qualitative, or blended methods. The degree of depth and rigor of the evaluation should be commensurate with the importance of the component. Missed surveillances for important components should be analyzed quantitatively. If the results of the risk evaluation determine the risk increase is significant, this evaluation should be used to determine the safest course of action. All missed surveillances will be placed in the licensee's Corrective Action Program.

If a surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the completion times of the required actions for the applicable LCO conditions begin immediately upon expiration of the delay period. If a surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the completion times of the required actions for applicable LCO conditions begin immediately upon failure of the surveillance.

Completion of the surveillance within the delay period allowed by this Specification, or within the completion time of the actions, restores compliance with TS 4.0.a.

~~TS 4.0.c establishes the failure to perform a surveillance requirement within the allowed surveillance interval, defined by the provisions of TS 4.0.b, as a condition that constitutes a failure to meet the OPERABILITY requirements for a LCO. Under the provisions of this TS, 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 TS also clarifies that the ACTION requirements are applicable when surveillance requirements have not been completed within the allowed surveillance interval. The time limits of the ACTION requirements apply from the time it is identified 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 TS 4.0.c. 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 TS 4.0.b, was a violation of the OPERABILITY requirements of a LCO that is subject to enforcement action. Further, the failure to perform a surveillance within the provisions of TS 4.0.b is a violation of the Technical Specification requirement, and therefore is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B).~~

~~If the allowable outage time limits of the ACTION requirements are < 24 hours or a shutdown is required to comply with ACTION requirements (e.g., TS 3.0.c), a 24 hour allowance is provided. 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 and 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 TS 4.0.d 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.~~

~~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.~~

TS 4.0.d establishes the requirements that all applicable surveillance must be met before entry into an operational MODE or other condition of operation specified in the applicability statement. The purpose of the TS 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 the TS, the applicable surveillance requirements must be performed within the specified surveillance interval to ensure that the LCOs are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with ~~AaCcTtliOoNn~~ requirements, the provisions of TS 4.0.d do not apply because this would delay placing the facility in a lower MODE of operation.

6.21 TECHNICAL SPECIFICATIONS (TS) BASES CONTROL PROGRAM

The Bases Control Program shall be established, implemented and maintained. This program provides a means for processing changes to the bases of these Technical Specifications.

a. Changes to the bases of the TS shall be made under appropriate administrative controls and reviews.

b. Licensees may make changes to bases without prior NRC approval provided the changes do not involve either of the following:

   1. A change in the TS incorporated in the license

   2. A change to the updated USAR or bases that requires NRC approval pursuant to 10 CFR 50.59.

c. The Bases Control Program shall contain provisions to ensure that the bases are maintained consistent with the USAR.

d. Proposed changes that meet the criteria of Specification 6.5.b above shall be reviewed and approved by the NRC prior to implementation. Changes to the bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).

ATTACHMENT 3

To

Letter from M. E. Warner (NMC)

To

Document Control Desk (NRC)

Dated

May 7, 2002

Proposed Amendment 180

Revised TS Pages:

Table of Contents, Page TS iv
TS 4.0-1
TS B4.0-1 through TS B4.0-3
TS 6.21-1

4.0 SURVEILLANCE REQUIREMENTS

APPLICABILITY

a. Surveillance requirements shall be met during the operational MODES or other conditions specified for individual LIMITING CONDITIONS FOR OPERATION (LCO) unless otherwise stated in an individual surveillance requirement. Failure to meet a surveillance requirement, whether such failure is experienced during the performance of the surveillance or between performances of the surveillances, shall be failure to meet the OPERABILITY requirements for the LCO. Failure to perform a surveillance within the allowed surveillance interval, defined by TS 4.0.b, shall be a failure to meet the OPERABILITY requirements for the LCO except as provided in TS 4.0.c. Surveillance requirements do not have to be performed on inoperable equipment.

b. Each surveillance requirement shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25% of the specified surveillance interval.

c. If it is discovered that a surveillance was not performed within its allowed surveillance interval, then compliance with the requirement to declare the OPERABILITY requirements for the LCO not met may be delayed from the time of discovery up to 24 hours, or up to the limit of the allowed surveillance interval, whichever is greater. This delay period is permitted to allow performance of the surveillance. A risk evaluation shall be performed for any surveillance delayed greater than 24 hours and the risk impact shall be managed.

   If the surveillance is not performed within the delay period, the OPERABILITY requirements for the LCO must immediately be declared not met, and the applicable conditions(s) must be entered.

   When the surveillance is performed within the delay period and the surveillance is not met, the OPERABILITY requirements for the LCO must immediately be declared not met, and the applicable conditions(s) must be entered.

d. Entry into an operational MODE or other specified condition shall not be made unless the surveillance requirement(s) associated with a LIMITING CONDITION FOR OPERATION have 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.

   Exceptions to these requirements are stated in the individual Technical Specifications.

BASIS - Surveillance Requirements (TS 4.0)

TS 4.0.a establishes the requirements that surveillances must be performed during the operational MODES or other conditions for which the requirements of the LIMITING CONDITIONS FOR OPERATION (LCO) apply unless otherwise stated in an individual surveillance requirement. The purpose of this TS is to ensure that surveillances are performed to verify the operational status of systems and components and that parameters are within specified limits. This ensures safe operation of the facility when the plant is in a MODE or other specified condition for which the associated LCOs 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 LCO do not apply unless otherwise specified. 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.

TS 4.0.b establishes the limit for which the specified time interval for surveillance requirements may be extended. It permits an allowable extension of the normal surveillance interval to facilitate surveillance scheduling and consideration of plant operation conditions that may not be suitable for conducting the surveillance (e.g., transient conditions or other ongoing surveillance or maintenance activities). It also provides flexibility to accommodate the length of a fuel cycle for surveillances that are performed at each refueling outage and are specified with an 18-month surveillance interval. It is not intended that this provision be used repeatedly as a convenience to extend surveillance intervals beyond that specified for surveillances that are not performed during refueling outages. The limitation of TS 4.0.b is based on engineering judgement and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the surveillance requirements. This provision is sufficient to ensure that the reliability ensured through surveillance activities is not significantly degraded beyond that obtained from the specified surveillance interval.

TS 4.0.c establishes the flexibility to defer declaring affected equipment inoperable or an affected variable outside the specified limits when a surveillance has not been completed within the allowed surveillance interval. A delay period of up to 24 hours or up to the limit of the allowed surveillance interval, whichever is greater, applies from the point in time that it is discovered that the surveillance has not been performed in accordance with TS 4.0.b, and not at the time that the allowed surveillance interval was not met.

This delay period provides adequate time to complete surveillances that have been missed. This delay period permits the completion of a surveillance before complying with required actions or other remedial measures that might preclude completion of the surveillance.

The basis for this delay period includes consideration of unit conditions, adequate planning, availability of personnel, the time required to perform the surveillance, the safety significance of the delay in completing the required surveillance, and the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the requirements. When a surveillance with an allowed interval based not on time intervals, but upon specified unit conditions, OPERATING situations, or requirements of regulations (e.g., prior to entering OPERATING MODE after each fuel loading, or in accordance with 10 CFR 50, Appendix J, as modified by approved exemptions, etc.) is discovered to not have been performed when specified, TS 4.0.c allows for the full delay period of up to the allowed surveillance interval to perform the surveillance. However, since there is not a time interval specified, the missed surveillance should be performed at the first reasonable opportunity.

TS 4.0.c provides a time limit for, and allowances for the performance of, surveillances that become applicable as a consequence of MODE changes imposed by required actions.

Failure to comply with allowed surveillance intervals for SRs is expected to be an infrequent occurrence. Use of the delay period established by TS 4.0.c is flexibility which is not intended to be used as an operational convenience to extend surveillance intervals.

While up to 24 hours or the limit of the allowed interval is provided to perform the missed surveillance, it is expected that the missed surveillance will be performed at the first reasonable opportunity. The determination of the first reasonable opportunity should include consideration of the impact on plant risk (from delaying the surveillance as well as any plant configuration changes required or shutting the plant down to perform the surveillance) and impact on any analysis assumptions, in addition to unit conditions, planning, availability of personnel, and the time required to perform the surveillance. This risk impact should be managed through the program in place to implement 10 CFR 50.65(a)(4) and its implementation guidance, NRC Regulatory Guide 1.182, "Assessing and Managing Risk Before Maintenance Activities at Nuclear Power Plants." This Regulatory Guide addresses consideration of temporary and aggregate risk impacts, determination of risk management action thresholds, and risk management action up to and including plant shutdown. The missed surveillance should be treated as an emergent condition as discussed in the Regulatory Guide. The risk evaluation may use quantitative, qualitative, or blended methods. The degree of depth and rigor of the evaluation should be commensurate with the importance of the component. Missed surveillances for important components should be analyzed quantitatively. If the results of the risk evaluation determine the risk increase is significant, this evaluation should be used to determine the safest course of action. All missed surveillances will be placed in the licensee's Corrective Action Program.

If a surveillance is not completed within the allowed delay period, then the equipment is considered inoperable or the variable is considered outside the specified limits and the completion times of the required actions for the applicable LCO conditions begin immediately upon expiration of the delay period. If a surveillance is failed within the delay period, then the equipment is inoperable, or the variable is outside the specified limits and the completion times of the required actions for applicable LCO conditions begin immediately upon failure of the surveillance.

Completion of the surveillance within the delay period allowed by this Specification, or within the completion time of the actions, restores compliance with TS 4.0.a.

TS 4.0.d establishes the requirements that all applicable surveillance must be met before entry into an operational MODE or other condition of operation specified in the applicability statement. The purpose of the TS 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 the TS, the applicable surveillance requirements must be performed within the specified surveillance interval to ensure that the LCOs are met during initial plant startup or following a plant outage.

When a shutdown is required to comply with action requirements, the provisions of TS 4.0.d do not apply because this would delay placing the facility in a lower MODE of operation.

6.21 TECHNICAL SPECIFICATIONS (TS) BASES CONTROL PROGRAM

The Bases Control Program shall be established, implemented and maintained. This program provides a means for processing changes to the bases of these Technical Specifications.

a. Changes to the bases of the TS shall be made under appropriate administrative controls and reviews.

b. Licensees may make changes to bases without prior NRC approval provided the changes do not involve either of the following:

   1. A change in the TS incorporated in the license

   2. A change to the updated USAR or bases that requires NRC approval pursuant to 10 CFR 50.59.

c. The Bases Control Program shall contain provisions to ensure that the bases are maintained consistent with the USAR.

d. Proposed changes that meet the criteria of Specification 6.5.b above shall be reviewed and approved by the NRC prior to implementation. Changes to the bases implemented without prior NRC approval shall be provided to the NRC on a frequency consistent with 10 CFR 50.71(e).