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April 22, 2006
BVY 06-028

ATTN: Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: Vermont Yankee Nuclear Power Station
License No. DPR-28 (Docket No. 50-271)
Technical Specifications Proposed Change No. 272, Relocation of
LCO 3.6.I and SR 4.6.I and Addition of LCO 3.0.8 Regarding Snubbers

Pursuant to 10 CFR 50.90, Entergy Nuclear Operations, Inc. and Entergy Nuclear Vermont Yankee, LLC (Entergy) hereby request approval to amend the Vermont Yankee Nuclear Power Station (VYNPS) Facility Operating License, DPR-28, by incorporating the attached proposed changes into the VYNPS Technical Specifications (TS).

The proposed license amendment will modify TS requirements for inoperable snubbers by relocating the current TS requirements (Limiting Conditions for Operation [LCO] 3.6.I and Surveillance Requirements [SR] 4.6.I) to the VYNPS Technical Requirements Manual and adding LCO 3.0.8 to the TS. The associated TS Bases section would also be relocated. This change is consistent with changes previously approved by the NRC for other reactor licensees and Standard Technical Specifications.

The Enclosure provides a description of the proposed changes, the requested confirmation of applicability, and plant-specific verifications. Attachment 1 provides the existing TS pages and the associated Bases pages, marked up to show the proposed changes. Attachment 2 provides retyped (proposed) TS and associated Bases pages. A summary of regulatory commitments is appended to this cover letter.

Entergy has reviewed the proposed changes to the current license basis in accordance with 10 CFR 50.92 and concludes that the proposed change does not involve a significant hazards consideration.

Entergy requests approval of the proposed License Amendment by December 31, 2006 for implementation within 60 days from the date of approval. Approval by this date is necessary to prepare for the scheduled refueling outage during Spring, 2007.

A001

If you have any questions or require additional information regarding this submittal, please contact Mr. James DeVincents at (802) 258-4236.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on the 22 day of April, 2006.

Sincerely,



Jay K. Thayer
Site Vice President
Vermont Yankee Nuclear Power Station

Enclosure: Evaluation of the Proposed Changes

Attachments:

1. Proposed Technical Specifications and Associated Bases Changes (Mark-up)
2. Revised Technical Specifications and Associated Bases Pages (Retyped)

cc:

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Regulatory Commitments Table

This table identifies actions discussed in this letter for which Entergy commits to perform. Any other actions discussed in this submittal are described for the NRC's information and are not commitments.

Letter Number/Title: BVY 06-028, Technical Specifications Proposed Change 272

COMMITMENT	TYPE (Check one)		SCHEDULED COMPLETION DATE (If Required)
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
Use of LCO 3.0.8 will be considered with respect to other plant maintenance activities, and integrated into the existing Maintenance Rule process to the extent possible so that maintenance on any unaffected train or sub-system is properly controlled, and emergent issues are properly addressed.	X		December 31, 2006

Enclosure

Vermont Yankee Nuclear Power Station

License No. DPR-28 (Docket No. 50-271)

Proposed Technical Specification Change No. 272

**Relocation of LCO 3.6.I and SR 4.6.I and
Addition of LCO 3.0.8 Regarding Snubbers**

Evaluation of the Proposed Change

Evaluation of the Proposed Changes

1.0 DESCRIPTION

Entergy Nuclear Operations, Inc. and Entergy Nuclear Vermont Yankee, LLC (Entergy) hereby request approval to amend the Vermont Yankee Nuclear Power Station (VYNPS) Facility Operating License, DPR-28, by incorporating the attached proposed changes into the VYNPS Technical Specifications (TS).

The proposed changes would revise the Operating License by relocating the TS requirements for shock suppressors (snubbers) from the VYNPS TS to the Technical Requirements Manual (TRM) and adding a new Limiting Condition of Operation (LCO), LCO 3.0.8, to the TS. The proposed changes would allow Entergy to revise snubber surveillance requirements in accordance with 10 CFR 50.59 without requiring a License Amendment. LCO 3.0.8 allows Entergy to delay entering TS action statements for equipment supported by snubbers that are unable to perform their associated support functions, when risk is assessed and managed.

Entergy requests approval of the proposed amendment by December 31, 2006 to support plans for snubber inspections in the upcoming VYNPS refueling outage (scheduled in the Spring of 2007).

2.0 PROPOSED CHANGE

TS Section 3/4.6.I provides actions for functionality and surveillance requirements to verify the operability of safety-related snubbers. It is proposed that the current requirements of "Shock Suppressors (Snubbers)", TS 3/4.6.I and their associated Bases be removed from the TS and relocated to the TRM.

This proposed change would relocate snubber operability and surveillance requirements contained in TS 3/4.6.I and the associated Bases from the TS to the TRM. This proposed change would allow Entergy to revise snubber surveillance requirements in accordance with 10 CFR 50.59 without requiring a License Amendment. This change is consistent with Standard TS, General Electric Plants, BWR/4, NUREG-1433 (Reference 1) and changes previously approved by the NRC for other reactor licensees, including Entergy's Pilgrim and FitzPatrick stations.

The proposed license amendment would also add a new LCO, LCO 3.0.8, Inoperability of Snubbers, to the TS. LCO 3.0.8 allows Entergy to delay entering the TS action statements for equipment supported by snubbers that are unable to perform their associated support functions, when risk is assessed and managed. This new LCO states:

"When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

- a. the snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or

- b. the snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met."

Bases describing the new LCO 3.0.8 are also added. See attachments for details.

The proposed addition of LCO 3.0.8 is consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) STS change TSTF-372 Revision 4 (Reference 2). The availability of this TS improvement was published in the Federal Register on May 4, 2005 as part of the Consolidated Line Item Improvement Process (CLIIP).

3.0 BACKGROUND

Snubbers are devices used to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient. The restraining action of the snubbers ensures that the initiating event does not propagate to other parts of the affected system or to other safety systems. Snubbers also allow normal thermal expansion of piping to eliminate excessive thermal stresses during startup and shutdown.

Snubbers are chosen in lieu of rigid supports in areas where restricting thermal growth during normal operation would induce excessive stresses in the piping nozzles or other equipment. Although they are classified as component standard supports, they are not designed to provide any transmission of force during normal plant operations. However, in the presence of dynamic transient loadings, which are induced by seismic events as well as by plant accidents and transients, a snubber functions as a rigid support. The location and size of the snubbers are determined by stress analysis based on different combinations of load conditions, depending on the design classification of the particular piping.

The consequence of an inoperable snubber is an increase in the probability of structural damage to piping as a result of a seismic or other event initiating dynamic loads. It is therefore required that all snubbers required to protect the primary coolant system and all other safety-related systems or components be operable during reactor operation.

Requirements of VY's current TS provide actions for functionality and surveillance requirements to verify the operability of safety-related snubbers. The current action for an inoperable snubber is to replace or return the snubber to operable status within 72 hours and perform an engineering evaluation of the supported component. The supported system is declared inoperable if the 72 hours expires or the evaluation indicates that the system is inoperable. The current surveillances provide requirements for an inspection program including visual and functional tests and associated acceptance criteria.

The current TS Bases discussion contain the basis for requiring snubbers, the basis for the visual and functional inspection frequencies, and clarifications regarding the application of the snubber surveillance requirements.

Relocating TS 3/4.6.I to the TRM will allow revisions to the snubber requirements in accordance with 10 CFR 50.59 without requiring a license amendment. Any change to the relocated specifications in the TRM will be strictly controlled in accordance with the provisions of 10 CFR 50.59. This relocation request is similar to those granted to other operating reactor licensees, including Entergy's Pilgrim and FitzPatrick stations.

This proposed license amendment would also add LCO 3.0.8. The proposed addition of LCO 3.0.8 is consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical specification Task Force (TSTF) STS change TSTF-372 Revision 4. The availability of this TS improvement was published in the Federal Register (70 FR 23252) on May 4, 2005 as part of the CLIP.

4.0 TECHNICAL ANALYSIS

Relocation of TS LCO 3.6.I and SR 4.6.I to the TRM

Section 182a of the Atomic Energy Act of 1954, as amended (the Act) requires applicants for nuclear power plant operating licenses to include the TS as part of the license. The Commission's regulatory requirements related to the content for the TS are set forth in 10 CFR 50.36. That regulation requires that the TS include items in eight specific categories. The categories are (1) safety limits, limiting safety system settings, and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; (5) administrative controls; (6) decommissioning; (7) initial notification; and (8) written reports. However, the regulation does not specify the particular requirements to be included in a plant's TS.

The Commission amended 10 CFR 50.36 (60 FR 36593, July 19, 1995), and codified four criteria to be used in determining whether a particular matter is required to be included in a limiting condition for operation (LCO), as follows: (1) Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of, or presents a challenge to, the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design-basis accident or transient that either assumes the failure of, or presents a challenge to, the integrity of a fission product barrier; or (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety. LCOs and related requirements that fall within or satisfy any of the criteria in the regulation must be retained in the TS, while those requirements that do not fall within or satisfy these criteria may be relocated to licensee-controlled documents. The VYNPS TRM is one such licensee-controlled document.

The proposed changes are consistent with the Standard TS for General Electric plants (NUREG-1433) and 10 CFR 50.36. NUREG-1433 does not include requirements for verification of snubber operability and the criteria in 10 CFR 50.36 for features required to be retained in TS do not apply to the snubbers at VYNPS as discussed below. The NRC's Final Policy Statement recommends that TS that do not meet the screening criteria for retention may be relocated to a licensee-controlled document. The four criteria of 10 CFR 50.36 are addressed below:

- (1) The snubbers are not installed instrumentation nor do they have the ability to detect abnormal degradation of the reactor coolant pressure boundary. Therefore, the VYNPS snubbers do not satisfy Criterion 1.
- (2) Snubbers are design features used to prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient. However, the snubbers are not explicitly considered in the accident analysis and are not considered a required initial condition for a design basis accident or transient to maintain the integrity of a fission product barrier. The effects of an inoperable snubber are controlled by the Technical Specification requirements of the supported system. The availability of the snubbers is assured based on the performance of periodic inspections and testing. Therefore, the VYNPS snubbers do not satisfy Criterion 2.
- (3) Safety-related snubbers are design features that function during accidents or severe transients to prevent the propagation of an event to systems that are part of the primary success path for accident mitigation. However, snubbers are not explicitly considered in the accident analysis, but are a structural design feature whose operation is assured by an inspection program. The snubbers are not part of the primary success path for accident mitigation; therefore the VYNPS snubbers do not satisfy Criterion 3.
- (4) Operating experience or probabilistic safety assessments have not shown snubber performance to be significant to public health and safety. Therefore, the VYNPS snubbers do not satisfy Criterion 4.

The snubber requirements will be relocated to the TRM. Any changes to these requirements will be strictly controlled under the provisions of 10 CFR 50.59. Therefore, the relocation of the snubber specifications from the TS to the TRM will continue to provide adequate confidence that functionality and testing of the snubbers will be assured.

In conclusion, the above relocated requirements are not required to be in the TS under 10 CFR 50.36 or section 182a of the Atomic Energy Act, and are not required to obviate the possibility of an abnormal situation or event giving rise to an immediate threat to the public health and safety. In addition, sufficient regulatory controls exist under 10 CFR 50.59 to assure continued protection of public health and safety.

Addition of TS LCO 3.0.8

The purpose of this change is to align the TS with the provisions of TSTF-372, Rev. 4 regarding establishment of the Completion Times described in LCO 3.0.8.a and 3.0.8.b for the return of inoperable snubbers to service prior to declaring the supported system(s) inoperable and entering the TS action statements for those system(s). Current VYNPS TS 3.6.I.2 includes a 72-hour delay for both single-train and multiple-train supported systems. This proposed change will bring the TS into agreement with the common industry approach while providing a more conservative Completion Time of 12 hours for snubbers supporting multiple trains and sub-systems. The 72-hour delay time currently allowed in TS 3.6.I.2 will be superseded by the allowable out-of-service periods specified in LCO 3.0.8. Adoption of LCO 3.0.8 will permit VYNPS to relocate the snubber requirements outside of the TS while retaining the degree of control provided by the proposed Completion Times and preserving the level of plant safety afforded by the snubber requirements prior to their relocation.

Under the requirements currently implemented at VYNPS, if one or more snubbers is inoperable, the TS action statements for snubbers are taken. The supported system is not considered inoperable while the snubber action statements are being taken. Only when the snubber action times have expired (or if directed by the snubber action statements) is the supported system considered inoperable and its supported system TS action statements entered. This interpretation of the snubber TS agrees with the May 27, 1986 NRC memorandum (Reference 3) which states, in part:

"Normally snubbers would only be removed from a system for testing/surveillance purposes at a time when the system is not required to be operable. If, however, a snubber is removed from service, for any purpose, for a system which is required to be operable, the action statement for snubbers would apply. The action statement requires that inoperable snubber(s), those removed for testing, be restored to operable service in 72 hours.

The action statement also requires that an engineering evaluation of the attached component be performed in accordance with specification 4.7.9.g or that the attached system be declared inoperable. This specification (4.7.9.g) notes that where snubbers are found inoperable, an engineering evaluation is to determine if the components to which inoperable snubbers are attached were adversely affected to assure that the component remains capable of meeting its designated service. The intent of this requirement is to assure that the system was not adversely affected by the inoperable snubber. This does not relate to the system or components capability to withstand a seismic event. Any degradation in seismic protection due to inoperable snubbers was taken into account in establishing the 72 hour allowed outage time.

'When a snubber is removed from service for testing, an engineering evaluation need not be performed. If the snubber is not returned to service in 72 hours, that system would be declared inoperable at this time since the snubber allowable out-of-service time limit would be exceeded.'

As discussed earlier, snubbers do not meet the 10 CFR 50.36(c)(2)(ii) criteria for retention in the TS and may be relocated to a licensee controlled document such as a Technical Requirements Manual (TRM). This relocation does not alter the requirements for the snubbers, but allows those requirements to be changed under the requirements of 10 CFR 50.59.

The plant safety analyses assume that the required safety systems are OPERABLE, except for a single failure. When relying on conditions and required actions, a single failure is not assumed. The purpose of TS Completion Times is to minimize the length of time that equipment can be out of service in order to minimize the probability that an accident could occur while equipment is unavailable. As a result, this change has no effect on the safety analyses. The inoperability of TS supported systems will continue to be limited by the delay time associated with the snubbers, other seismic restraints and the conditions and required actions of the supported system. These delay times are considered to be consistent with the safety analysis assumptions underlying the subject TS, and will continue to be consistent with the safety analysis upon relocation of the TS 3/4.6.I requirements to the TRM.

Since the industry's 10 CFR 50.65(a)(4) guidance, NUMARC 93-01, does not currently address seismic risk, the proposed use of LCO 3.0.8 will be considered with respect to other plant maintenance activities, and integrated into the existing Maintenance Rule process to the extent possible so that maintenance on any unaffected train or sub-system is properly controlled, and

emergent issues are properly addressed. This action will be completed on or before the requested amendment approval date of December 31, 2006.

Entergy has reviewed the safety evaluation (SE) published on May 4, 2005 (70 FR 23252) as part of the CLIIP Notice of Availability. This verification included a review of the NRC staff's safety evaluation, as well as the supporting information provided to support TSTF-372, Rev. 4.

Entergy has concluded that the justifications presented in the TSTF proposals and the SEs prepared by the NRC staff are applicable to VYNPS and justify this amendment for the incorporation of the changes to the VYNPS TS.

5.0 REGULATORY ANALYSIS

5.1 No Significant Hazards Consideration Determination

Entergy is proposing to relocate the Technical Specifications (TS) requirements for shock suppressors (snubbers) from the VYNPS TS to the Technical Requirements Manual (TRM) and add a new LCO, LCO 3.0.8, to the TS.

Entergy has evaluated whether or not a significant hazards consideration is involved with the proposed amendment(s) by focusing on the three standards set forth in 10 CFR 50.92, "Issuance of amendment," as discussed below:

1. Does the proposed change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change to relocate TS 3/4.6.I to the TRM is administrative in nature and does not involve the modification of any plant equipment or affect basic plant operation. Snubber operability and surveillance requirements will be contained in the TRM to ensure design assumptions for accident mitigation are maintained.

The proposed change to add LCO 3.0.8 allows a delay time before declaring supported TS systems inoperable when the associated snubber(s) cannot perform the required safety function. Entrance into actions or delaying entrance into actions is not an initiator of any accident previously evaluated. Consequently, the probability of an accident previously evaluated is not significantly increased. The station design and safety analysis assumptions included provisions for redundancy to provide for periods when redundant systems are out-of-service per the TS. The proposed snubber LCO ensures that out-of-service time is minimized and risk is managed per 10 CFR 50.65(a)(4).

Therefore, the consequences of an accident previously evaluated are not significantly increased by this change.

2. Does the proposed change create the possibility of a new or different kind of accident from any accident previously evaluated?

Response: No.

The proposed change to relocate TS 3/4.6.I to the TRM is administrative and does not involve any physical alteration of plant equipment. The proposed change does not change the method by which any safety-related system performs its function. As such, no new or different types of equipment will be installed, and the basic operation of installed equipment is unchanged. The methods governing plant operation and testing remain consistent with current safety analysis assumptions.

Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

The proposed change to add LCO 3.0.8 allows a delay time before declaring supported TS systems inoperable when the associated snubber(s) cannot perform the required safety function. The proposed change does not involve a physical alteration of the plant (no new or different type of equipment will be installed) or a change in the methods governing normal plant operation.

Therefore, this change does not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. Does the proposed change involve a significant reduction in a margin of safety?

Response: No.

The proposed change to relocate TS 3/4.6.I to the TRM is administrative in nature, does not negate any existing requirement, and does not adversely affect existing plant safety margins or the reliability of the equipment assumed to operate in the safety analysis. As such, there are no changes being made to safety analysis assumptions, safety limits or safety system settings that would adversely affect plant safety as a result of the proposed change. Margins of safety are unaffected by requirements that are retained, but relocated from the TS to the TRM.

Therefore, the proposed change does not involve a significant reduction in a margin of safety.

The proposed change to add LCO 3.0.8 to TS allows a delay time before declaring supported TS systems inoperable when the associated snubber(s) cannot perform the required safety function. The proposed change retains an allowance in the current VYNPS TS while upgrading it to be more conservative for snubbers supporting multiple trains or sub-systems of an associated system. The updated TS will continue to provide an adequate margin of safety for plant operation upon incorporation of LCO 3.0.8. The station design and safety analysis assumptions provide margin in the form of redundancy to account for periods of time when system capability is reduced. This proposed change does not reduce that margin.

Therefore, this change does not involve a significant reduction in a margin of safety.

Based on the above, Entergy concludes that the proposed change presents no significant hazards consideration under the standards set forth in 10 CFR 50.92(c), and, accordingly, a finding of "no significant hazards consideration" is justified.

5.2 Applicable Regulatory Requirements/Criteria

This change does not alter compliance with any applicable regulatory requirements or criteria, but provides a delay time before declaring supported TS systems inoperable when the associated snubber(s) or other seismic restraint(s) cannot perform the required function. This delay time, similar to a Completion Time in the TS, does not alter the design or licensing basis of any system.

In conclusion, based on the considerations discussed above, (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner; (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the approval of the proposed change will not be inimical to the common defense and security or to the health and safety of the public.

6.0 ENVIRONMENTAL CONSIDERATION

A review has determined that the proposed change would change a requirement with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR 20, or would change an inspection or surveillance requirement. However, the proposed change does not involve (i) a significant hazards consideration, (ii) a significant change in the types or significant increase in the amounts of any effluent that may be released offsite, or (iii) a significant increase in individual or cumulative occupational radiation exposure. Accordingly, the proposed amendment meets the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed amendment.

7.0 REFERENCES

1. NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4."
2. Federal Register Notice, "Notice of Availability of Model Application Concerning Technical Specification Improvement To Modify Requirements Regarding the Addition of Limiting Condition for Operation 3.0.8 on the Inoperability of Snubbers Using the Consolidated Line Item Improvement Process," published May 4, 2005 (70 FR 23252).
3. NRC Memorandum dated May 27, 1986, from H. Denton to C. Norelius, "Technical Specification Interpretation on Snubbers."

Attachment 1

Vermont Yankee Nuclear Power Station

License No. DPR-28 (Docket No. 50-271)

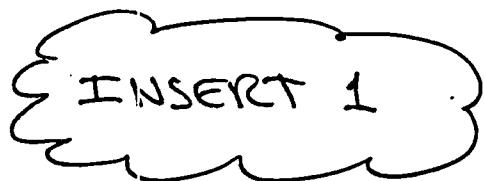
Proposed Technical Specification Change No. 272

**Relocation of LCO 3.6.I and SR 4.6.I and
Addition of LCO 3.0.8 Regarding Snubbers**

Proposed Technical Specifications Changes (Mark-up)

**3.0 LIMITING CONDITIONS FOR
OPERATION APPLICABILITY**

3.0.1 RESERVED



**4.0 SURVEILLANCE REQUIREMENT (SR)
APPLICABILITY**

SR 4.0.1

SRs shall be met during the modes or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified frequency shall be failure to meet the LCO except as provided in SR 4.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

SR 4.0.2

Unless otherwise stated in these specifications, periodic surveillance tests, checks, calibrations, and examinations shall be performed within the specified surveillance intervals. These intervals may be adjusted plus 25%. The operating cycle interval is considered to be 18 months and the tolerance stated above is applicable.

SR 4.0.3

If it is discovered that a surveillance was not performed within its specified frequency, declaring applicable Limiting Conditions for Operation (LCOs) not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified frequency, 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.

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INSERT 1:

3.0.2 Reserved

3.0.3 Reserved

3.0.4 Reserved

3.0.5 Reserved

3.0.6 Reserved

3.0.7 Reserved

3.0.8 Inoperability of Snubbers

When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

- a. the snubbers not able to perform their associated support function(s) are associated with only one train or subsystem of a multiple train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or
- b. the snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period the required snubbers must be able to perform their associated support function(s), or the affected supported system LCO(s) shall be declared not met.

BASES:TS 3.0 Limiting Conditions for Operation Applicability

Reserved.

INSERT 2^ TS 4.0 Surveillance Requirement (SR) ApplicabilitySR 4.0.1 Bases

SR 4.0.1 establishes the requirement that SRs must be met during the modes or other specified conditions in the Applicability for which the requirements of the LCO apply, unless otherwise specified in the individual SRs. This Specification is to ensure that Surveillances are performed to verify the OPERABILITY of systems and components, and that variables are within specified limits. Failure to meet a Surveillance within the specified frequency, in accordance with SR 4.0.2, constitutes a failure to meet an LCO.

Systems and components are assumed to be OPERABLE when the associated SRs have been met. Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when either:

- a. The systems or components are known to be inoperable, although still meeting the SRs or
- b. The requirements of the Surveillance(s) are known to be not met between required Surveillance performances.

Surveillances do not have to be performed when the unit is in a mode or other specified condition for which the requirements of the associated LCO are not applicable, unless otherwise specified.

Unplanned events may satisfy the requirements (including applicable acceptance criteria) for a given SR. In this case, the unplanned event may be credited as fulfilling the performance of the SR. This allowance includes those SRs whose performance is normally precluded in a given mode or other specified condition.

Surveillances do not have to be performed on inoperable equipment because the LCOs define the remedial measures that apply. Surveillances have to be met and performed in accordance with SR 4.0.2, prior to returning equipment to OPERABLE status.

Upon completion of maintenance, appropriate post maintenance testing is required to declare equipment OPERABLE. This includes ensuring applicable Surveillances are not failed and their most recent performance is in accordance with SR 4.0.2. Post maintenance testing may not be possible in the current SR 4.0.1 mode or other specified conditions in the Applicability due to the necessary unit parameters not having been established. In these situations, the equipment may be considered OPERABLE provided testing has been satisfactorily completed to the extent possible and the equipment is not otherwise believed to be incapable of performing its function. This will allow operation to proceed to a mode or other specified condition where other necessary post maintenance tests can be completed.

An example of this process is:

- a. High pressure coolant injection (HPCI) maintenance during shutdown that requires system functional tests at a specified pressure. Provided other appropriate testing is satisfactorily completed, startup can proceed with HPCI considered OPERABLE. This allows operation to reach the specified pressure to complete the necessary post maintenance testing.

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INSERT 2

LCO 3.0.8 Bases

LCO 3.0.8 establishes conditions under which systems are considered to remain capable of performing their intended safety function when associated snubbers are not capable of providing their associated support function(s). This LCO states that the supported system is not considered to be inoperable solely due to one or more snubbers not being capable of performing their associated support function(s). This is appropriate because a limited length of time is allowed for maintenance, testing, or repair of one or more snubbers not capable of performing their associated support function(s) and appropriate compensatory measures are specified in the snubber requirements, which are located outside of the Technical Specifications (TS) under licensee control. The snubber requirements do not meet the criteria in 10 CFR 50.36(c)(2)(ii), and, as such, are appropriate for control by the licensee.

If the allowed time expires and the snubber(s) are unable to perform their associated support function(s), the affected supported system's LCO(s) must be declared not met and the conditions and required actions entered.

LCO 3.0.8.a applies when one or more snubbers are not capable of providing their associated support function(s) to a single train or subsystem of a multiple train or subsystem supported system or to a single train or subsystem supported system. LCO 3.0.8.a allows 72 hours to restore the snubber(s) before declaring the supported system inoperable. The 72 hour Completion Time is reasonable based on the low probability of a seismic event concurrent with an event that would require operation of the supported system occurring while the snubber(s) are not capable of performing their associated support function and due to the availability of the redundant train of the supported system.

LCO 3.0.8.b applies when one or more snubbers are not capable of providing their associated support function(s) to more than one train or subsystem of a multiple train or subsystem supported system. LCO 3.0.8.b allows 12 hours to restore the snubber(s) before declaring the supported system inoperable. The 12 hour Completion Time is reasonable based on the low probability of a seismic event concurrent with an event that would require operation of the supported system occurring while the snubber(s) are not capable of performing their associated support function.

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Entergy Nuclear Operations, Inc. – Vermont Yankee
Docket No. 50-271, DPR No. 28

INSERT 2 (continued)

LCO 3.0.8 Bases (Continued)

LCO 3.0.8 requires that risk be assessed and managed. Industry and NRC guidance on the implementation of 10 CFR 50.65(a)(4) (the Maintenance Rule) does not address seismic risk. However, use of LCO 3.0.8 should be considered with respect to other plant maintenance activities, and integrated into the existing Maintenance Rule process to the extent possible so that maintenance on any unaffected train or subsystem is properly controlled, and emergent issues are properly addressed. The risk assessment need not be quantified, but may be a qualitative awareness of the vulnerability of systems and components when one or more snubbers are not able to perform their associated support function.

**3.6 LIMITING CONDITIONS FOR
OPERATION**

I. Shock Suppressors (Snubbers)

1. Except as noted in 3.6.I.2 and 3.6.I.3 below, all required safety-related snubbers shall be operable whenever its supported system is required to be operable.
2. With one or more required snubbers inoperable, within 72 hours, replace or restore the snubber to operable status and perform an engineering evaluation per Specification 4.6.I.1b and c, on the supported component. In all cases, the required snubbers shall be made operable or replaced prior to reactor startup.
3. If the requirements of 3.6.I.1 and 3.6.I.2 cannot be met, the supported system shall be declared inoperable and the appropriate action statement for that system shall be followed.

4.6 SURVEILLANCE REQUIREMENTS

I. Shock Suppressors (Snubbers)

1. Each snubber shall be demonstrated operable by performance of the following inspection program.

a. Visual Inspections

Visual inspections shall be performed in accordance with the following schedule:

No. Inoperable Snubbers Per Inspection Period	Next Required Inspection Intervals
0	18 months ±25%
1	12 months ±25%
2	6 months ±25%
3, 4	124 days ±25%
5, 6, 7	62 days ±25%
8 or more	31 days ±25%

The snubbers may be categorized into two groups: the accessible and those inaccessible during reactor operation. Each group may be inspected independently in accordance with the above schedule.

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Pages 129 through 133 have been deleted.

**3.6 LIMITING CONDITIONS FOR
OPERATION**

4.6 SURVEILLANCE REQUIREMENTS

The inspection interval shall not be lengthened more than one step at a time. Inaccessible snubbers are required to be inspected only if the period of time in which they become accessible is greater than 48 hours.

b. Visual Inspection Acceptance Criteria

Visual inspections shall verify (1) that there are no visible indications of damage or impaired operability, and (2) that the snubber installation exhibits no visual indications of detachment from foundations or supporting structures. Snubbers which appear inoperable as a result of visual inspections may be determined operable for the purpose of establishing the next visual inspection interval, providing that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined operable per Specification 4.6.I.c, as applicable.

**3.6 LIMITING CONDITIONS FOR
OPERATION**

4.6 SURVEILLANCE REQUIREMENTS

When the fluid port of a hydraulic snubber is found to be uncovered, the snubber shall be determined inoperable unless it can be determined operable via functional testing for the purpose of establishing the next visual inspection interval. The functional test, in this case, shall be started with the piston in the as-found condition, extending the piston rod in the tension mode direction.

c. Functional Tests

At least once per 18 months during shutdown, a representative sample of 10% of the snubbers in use in the plant shall be functionally tested either in place or in a bench test. For each snubber that does not meet the functional test acceptance criteria of Specification 4.6.I.1.d, an additional 10% of the snubbers shall be functionally tested until no more failures are found or until all snubbers have been functionally tested.

3.6 LIMITING CONDITIONS FOR OPERATION

4.6 SURVEILLANCE REQUIREMENTS

Snubbers of a rated capacity greater than the capability of the testing machine shall be functionally tested as follows: (1) the lock up and bleed velocity of the snubber valve shall be verified by testing it on a cylinder that is within the capability of the testing machine, (2) the free stroke of the cylinder shall be checked, and (3) the pressure retaining capability of the cylinder shall be checked.

Snubbers identified as especially difficult to remove or in high radiation areas shall also be included in the representative sample.

In addition to the regular sample, snubbers which failed the previous functional test shall be retested during the next test period unless the root cause for the problem has been determined and corrective actions implemented. If a spare snubber has been installed in place of a failed snubber, then both the failed snubber (if it is repaired and installed in another position) and the spare snubber shall be retested during the next test period.

3.6 LIMITING CONDITIONS FOR
OPERATION4.6 SURVEILLANCE REQUIREMENTS

Failure of these snubbers shall not entail functional testing of additional snubbers.

If any snubber selected for functional testing either fails to lock up or fails to move, i.e., frozen in place, the cause will be evaluated and if caused by manufacturer or design deficiency, all generically susceptible snubbers of the same design subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated above for snubbers not meeting the functional test acceptance criteria.

For the snubber(s) found inoperable, a documented engineering evaluation shall be performed on the component(s) which are supported by the snubber(s). The scope of the evaluation shall be based on engineering judgement and may be limited to a visual inspection of the supported component(s). The purpose of this engineering evaluation shall be to determine if the component(s) supported by the

**3.6 LIMITING CONDITIONS FOR
OPERATION**

4.6 SURVEILLANCE REQUIREMENTS

snubber(s) were adversely affected by the inoperability of the snubber(s) in order to ensure that the supported component remains capable of meeting the designed service.

d. Hydraulic Snubbers Functional Test Acceptance Criteria

The hydraulic snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.
2. Snubber bleed, or release rate, where required, is within the specified range in compression or tension. For snubbers specifically required to not displace under continuous load, the ability of the snubber to withstand load without displacement shall be verified.

BASES: 3.6 and 4.6 (Cont'd)

I. Shock Suppressors (Snubbers)

All snubbers are required operable to ensure that the structural integrity of the Reactor Coolant System and all other safety-related systems is maintained during and following a seismic or other event initiating dynamic loads.

The visual inspection frequency is based upon maintaining a constant level of snubber protection to systems. Therefore, the required inspection interval varies inversely with the observed snubber failures and is determined by the number of inoperable snubbers found during an inspection. Inspections performed before that interval has elapsed may be used as a new reference point to determine the next inspection. However, the results of such early inspections performed before the original required time interval has elapsed (nominal time less 25%) may not be used to lengthen the required inspection interval. Any inspection whose results require a shorter inspection interval will override the previous schedule.

When the cause of the rejection of a snubber is clearly established and remedied for that snubber and for any other snubbers that may be generically susceptible, and verified by functional testing, that snubber may be exempted from being counted as inoperable.

Generically susceptible snubbers are those which are (1) of a specific make or model, (2) of the same design, and (3) similarly located or exposed to the same environmental conditions such as temperature, radiation, and vibration. These characteristics of the snubber installation shall be evaluated to determine if further functional testing of similar snubber installations is warranted.

When a snubber is found inoperable, an engineering evaluation is performed, in addition to the determination of the snubber mode of failure, in order to determine if any safety-related component or system has been adversely affected by the inoperability of the snubber. The engineering evaluation shall determine whether or not the snubber mode of failure has imparted a significant effect or degradation on the supported component or system.

To provide assurance of snubber functional reliability, a representative sample of the installed snubbers will be functionally tested once each operating cycle. Observed failures of these sample snubbers shall require functional testing of additional units.

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Attachment 2

Vermont Yankee Nuclear Power Station

License No. DPR-28 (Docket No. 50-271)

Proposed Technical Specification Change No. 272

**Relocation of LCO 3.6.I and SR 4.6.I and
Addition of LCO 3.0.8 Regarding Snubbers**

Revised Technical Specifications Pages (Retyped)

**3.0 LIMITING CONDITIONS FOR
OPERATION APPLICABILITY**

3.0.1 RESERVED

3.0.2 RESERVED

3.0.3 RESERVED

3.0.4 RESERVED

3.0.5 RESERVED

3.0.6. RESERVED

3.0.7. RESERVED

3.0.8 Inoperability of Snubbers

When one or more required snubbers are unable to perform their associated support function(s), any affected supported LCO(s) are not required to be declared not met solely for this reason if risk is assessed and managed, and:

- a. the snubbers not able to perform their associated support function(s) are associated with only one train or subsystem supported system or are associated with a single train or subsystem supported system and are able to perform their associated support function within 72 hours; or
- b. the snubbers not able to perform their associated support function(s) are associated with more than one train or subsystem of a multiple train or subsystem supported system and are able to perform their associated support function within 12 hours.

At the end of the specified period the required snubbers must be able to perform their associated support function(s) or the affected supported system LCO(s) shall be declared not met.

**4.0 SURVEILLANCE REQUIREMENT (SR)
APPLICABILITY**

SR 4.0.1

SRs shall be met during the modes or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified frequency shall be failure to meet the LCO except as provided in SR 4.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

SR 4.0.2

Unless otherwise stated in these specifications, periodic surveillance tests, checks, calibrations, and examinations shall be performed within the specified surveillance intervals. These intervals may be adjusted plus 25%. The operating cycle interval is considered to be 18 months and the tolerance stated above is applicable.

SR 4.0.3

If it is discovered that a surveillance was not performed within its specified frequency, declaring applicable Limiting Conditions for Operation (LCOs) not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified frequency, 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.

BASES:TS 3.0 Limiting Conditions for Operation ApplicabilityLCO 3.0.8 Bases

LCO 3.0.8 establishes conditions under which systems are considered to remain capable of performing their intended safety function when associated snubbers are not capable of providing their associated support function(s). This LCO states that the supported system is not considered to be inoperable solely due to one or more snubbers not capable of performing their associated support function(s). This is appropriate because a limited length of time is allowed for maintenance, testing, or repair of one or more snubbers not capable of performing their associated support function(s) and appropriate compensatory measures are specified in the snubber requirements, which are located outside of the Technical Specifications (TS) under licensee control. The snubber requirements do not meet the criteria in 10CFR50.36(c)(2)(ii), and as such, are appropriate for control by the licensee.

If the allowed time expires and the snubber(s) are unable to perform their associated support function(s), the affected supported system's LCO(s) must be declared not met and the conditions and required actions entered.

LCO 3.0.8.a applies when one or more snubbers are not capable of providing their associated support function(s) to a single train or subsystem of a multiple train or subsystem supported system or to a single train or subsystem supported system. LCO 3.0.8.a allows 72 hours to restore the snubber(s) before declaring the supported system inoperable. The 72 hour Completion Time is reasonable based on the low probability of a seismic event concurrent with an event that would require operation of the supported system occurring while the snubber(s) are not capable of performing their associated support function and due to the availability of the redundant train of the supported system.

LCO 3.0.8.b applies when one or more snubbers are not capable of providing their associated support function(s) to more than one train or subsystem of a multiple train or subsystem supported system. LCO 3.0.8.b allows 12 hours to restore the snubber(s) before declaring the supported system inoperable. The 12 hour Completion Time is reasonable based on the low probability of a seismic event concurrent with an event that would require operation of the supported system occurring while the snubber(s) are not capable of performing their associated support function.

LCO 3.0.8 requires that risk be assessed and managed. Industry and NRC guidance on the implementation of 10CFR50.65(a)(4) (the Maintenance Rule) does not address seismic risk. However, use of LCO 3.0.8 should be considered with respect to other plant maintenance activities, and integrated into the existing Maintenance Rule process to the extent possible so that maintenance on any unaffected train or subsystem is properly controlled, and emergent issues are properly addressed. The risk assessment need not be quantified, but may be a qualitative awareness of the vulnerability of systems and components when one or more snubbers are not able to perform their associated support function.

TS 4.0 Surveillance Requirement (SR) ApplicabilitySR 4.0.1 Bases

SR 4.0.1 establishes the requirement that SRs must be met during the modes or other specified conditions in the Applicability for which the requirements of the LCO apply, unless otherwise specified in the individual SRs. This Specification is to ensure that Surveillances are performed to verify the OPERABILITY of systems and components, and that variables are within specified limits. Failure to meet a Surveillance within the specified frequency, in accordance with SR 4.0.2, constitutes a failure to meet an LCO.

Systems and components are assumed to be OPERABLE when the associated SRs have been met. Nothing in this Specification, however, is to be construed as implying that systems or components are OPERABLE when either:

- a. The systems or components are known to be inoperable, although still meeting the SRs or
- b. The requirements of the Surveillance(s) are known to be not met between required Surveillance performances.

Surveillances do not have to be performed when the unit is in a mode or other specified condition for which the requirements of the associated LCO are not applicable, unless otherwise specified.

Unplanned events may satisfy the requirements (including applicable acceptance criteria) for a given SR. In this case, the unplanned event may be credited as fulfilling the performance of the SR. This allowance includes those SRs whose performance is normally precluded in a given mode or other specified condition.

Surveillances do not have to be performed on inoperable equipment because the LCOs define the remedial measures that apply. Surveillances have to be met and performed in accordance with SR 4.0.2, prior to returning equipment to OPERABLE status.

Upon completion of maintenance, appropriate post maintenance testing is required to declare equipment OPERABLE. This includes ensuring applicable Surveillances are not failed and their most recent performance is in accordance with SR 4.0.2. Post maintenance testing may not be possible in the current SR 4.0.1 mode or other specified conditions in the Applicability due to the necessary unit parameters not having been established. In these situations, the equipment may be considered OPERABLE provided testing has been satisfactorily completed to the extent possible and the equipment is not otherwise believed to be incapable of performing its function. This will allow operation to proceed to a mode or other specified condition where other necessary post maintenance tests can be completed.

An example of this process is:

- a. High pressure coolant injection (HPCI) maintenance during shutdown that requires system functional tests at a specified pressure. Provided other appropriate testing is satisfactorily completed, startup can proceed with HPCI considered OPERABLE. This allows operation to reach the specified pressure to complete the necessary post maintenance testing.

SR 4.0.2 Bases

SR 4.0.2 permits a 25% extension of the interval specified in the Frequency. This extension facilitates Surveillance scheduling and considers plant operating conditions that may not be suitable for conducting the Surveillance (e.g., transient conditions or other ongoing Surveillance or maintenance activities).

The 25% extension does not significantly degrade the reliability that results from performing the surveillance at its specified frequency. This is based on the recognition that the most probable result of any particular surveillance being performed is the verification of conformance with the SRs. The exceptions to SR 4.0.2 are those Surveillances for which the 25% extension of the interval specified in the frequency does not apply. These exceptions are stated in the individual Specifications. The requirements of regulations take precedence over the TS. An example of where SR 4.0.2 does not apply is in the Primary Containment Leakage Rate Testing Program. This program establishes testing requirements and frequencies in accordance with the requirements of regulations. The TS cannot in and of themselves extend a test interval specified in the regulations.

The provisions of SR 4.0.2 are not intended to be used repeatedly merely as an operational convenience to extend surveillance intervals (other than those consistent with refueling intervals).

SR 4.0.3 Bases

SR 4.0.3 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 specified frequency. A delay period of up to 24 hours or up to the limit of the specified frequency, whichever is greater, applies from the point in time that it is discovered that the surveillance has not been performed in accordance with SR 4.0.2, and not at the time that the specified Frequency 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 action statements 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 a frequency based not on time intervals, but upon specified unit conditions, operating situations, or requirements of regulations (e.g., prior to entering Run Mode after each fuel loading, or in accordance with 10CFR50, Appendix J, as modified by approved exemptions, etc.) is discovered to not have been performed when specified, SR 4.0.3 allows for the full delay period of up to the specified frequency to perform the surveillance. However, since there is not a time interval specified, the missed Surveillance should be performed at the first reasonable opportunity. SR 4.0.3 provides a time limit for, and allowances for the performance of, surveillances that become applicable as a consequence of Mode changes imposed by Action Statements.

SR 4.0.3 Bases (Continued)

Failure to comply with specified surveillance frequencies is expected to be an infrequent occurrence. Use of the delay period established by SR 4.0.3 is a 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 specified frequency 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 vigor 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 Action Statements 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 Action Statements for the applicable LCO Conditions begin immediately upon the 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 SR 4.0.1.

3.6 LIMITING CONDITIONS FOR
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4.6 SURVEILLANCE REQUIREMENTS

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