

Sam Belcher  
Vice President- Nine Mile Point

P.O. Box 63  
Lycoming, New York 13093  
315.349.5200  
315.349.1321 Fax

# CENG

a joint venture of



NINE MILE POINT  
NUCLEAR STATION

March 18, 2010

U. S. Nuclear Regular Commission  
Washington, DC 20555 - 0001

ATTENTION: Document Control Desk

SUBJECT: Nine Mile Point Nuclear Station  
Unit No. 1; Docket No. 50-220

Application for Technical Specification Change to Remove Technical Specification 3/4.6.4, Snubbers, and add Limiting Condition for Operation (LCO) 3.0.8 on the Inoperability of Snubbers

In accordance with the provisions of 10 CFR 50.90, Nine Mile Point Nuclear Station, LLC (NMPNS) is submitting a request for an amendment to Renewed Facility Operating License DPR-63 for Nine Mile Point, Unit 1. The proposed amendment would modify Technical Specification (TS) requirements for inoperable snubbers by removing TS 3/4.6.4, Shock Suppressors (Snubbers), and adding a new LCO 3.0.8 related to snubbers. In addition, the TS Table of Contents would be revised to reflect these changes.

The enclosure provides a description of the proposed change, the requested confirmation of applicability, and plant specific verifications. Attachment 1 to the enclosure provides the existing TS pages marked up to show the proposed change. Attachment 2 to the enclosure provides a summary of the regulatory commitments made in this submittal. Attachment 3 to the enclosure provides a mark-up of proposed TS bases changes for information only.

NMPNS requests approval of the proposed License Amendment by March 18, 2011, with the amendment being implemented within 60 days.

Pursuant to 10 CFR 50.91(b)(1), NMPNS has provided a copy of this license amendment request, with enclosure, to the appropriate state representative.

If you should have any questions regarding the information in this submittal, please contact T. F. Syrell, Licensing Director, at (315) 349-5219.

Very Truly Yours,

A handwritten signature in black ink, appearing to be "T. F. Syrell".

ADD 1  
NRR



# **ENCLOSURE**

---

## **DESCRIPTION AND ASSESSMENT**

---

### **TABLE OF CONTENTS**

- 1.0 SUMMARY DESCRIPTION
- 2.0 DETAILED DESCRIPTION
- 3.0 TECHNICAL EVALUATION
- 4.0 REGULATORY EVALUATION
  - 4.1 Applicable Regulatory Requirements/Criteria
  - 4.2 Precedent
  - 4.3 Significant Hazards Consideration
  - 4.4 Conclusion
- 5.0 ENVIRONMENTAL CONSIDERATION
- 6.0 REFERENCES

- Attachment 1 - Proposed Technical Specification Changes (Mark-up)
- Attachment 2 - List of Regulatory Commitments
- Attachment 3 - Proposed Technical Specification Bases Changes (Mark-up)

**ENCLOSURE  
DESCRIPTION AND ASSESSMENT**

---

**1.0 SUMMARY DESCRIPTION**

In accordance with 10 CFR 50.90, Nine Mile Point Nuclear Station, LLC (NMPNS) requests the following amendment to Renewed Facility Operating License DPR-63 for Nine Mile Point Unit 1 (NMP1). The proposed change would revise the Operating License by relocating Technical Specification (TS) 3/4.6.4 requirements for snubbers to station procedures and adding a new Limiting Condition for Operation (LCO) 3.0.8 to the TSs. In addition, the TS table of contents would be revised to reflect these changes.

Relocating the snubber TS requirements to station procedures will allow NMPNS to revise snubber testing requirements in accordance with 10 CFR 50.59 and/or 10 CFR 50.55a. Although NMP1 has custom Technical Specifications, this proposed change is consistent with NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," Rev. 3.0 (Reference 1).

LCO 3.0.8 will provide a delay time for entering a supported system TS when the inoperability is due solely to an inoperable snubber, if risk is assessed and managed. The proposed addition of LCO 3.0.8 is consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) Standard Technical Specification (STS) change TSTF-372-A, 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) (Reference 3).

**2.0 DETAILED DESCRIPTION**

TS 3/4.6.4, "Shock Suppressors (Snubbers)," would be removed from the TS and relocated to the NMP1 station procedures. In addition, the NMP1 Updated Final Safety Analysis Report (UFSAR), Section XVI.D.1.2, Pipe Supports, would be revised to state that snubber inservice testing and examination will be performed in accordance with Subsection ISTD of the American Society of Mechanical Engineers (ASME) Operations and Maintenance (OM) Code, except where relief/alternatives have been approved in accordance with 10 CFR 50.55a.

The proposed change would also add a new LCO 3.0.8 to the TS. 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.

**ENCLOSURE  
DESCRIPTION AND ASSESSMENT**

---

In addition, the TS Table of Contents will be revised to reflect the deletion of TS 3/4.6.4.

Marked-up TS pages are provided in Attachment 1. A List of Regulatory Commitments is provided as Attachment 2, and Marked-up TS Bases pages are provided in Attachment 3. The Bases pages are being submitted for information only and do not require issuance by the NRC. NMPNS will implement the TS Bases changes in accordance with TS 6.5.6, "Technical Specification (TS) Bases Control Program."

Snubbers are devices that provide restraint to a component or system during the sudden application of forces, but allow essentially free motion during thermal movement. Snubbers function to ensure that the structural integrity of the reactor coolant system and other safety related systems is maintained during and following a seismic or other event initiating dynamic loads.

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.

TS 3/4.6.4 currently contains requirements for snubber operability and surveillance testing. With one or more snubbers inoperable, the required TS Action is to replace or restore the inoperable snubber(s) to operable status or perform an engineering evaluation of the supported component within 72 hours. Otherwise, the supported system is required to be declared inoperable.

As discussed below, requirements for snubber operability and surveillance testing are not required by 10 CFR 50.36(c)(2)(ii) to be included in the TS. Relocating TS 3/4.6.4 to station procedures would permit snubber requirements to be revised in accordance with 10 CFR 50.59 and or 10 CFR 50.55a without requiring a license amendment. Station procedures are controlled as described in the Updated Final Safety Analysis Report (UFSAR). Changes to station procedures are subject to review in accordance with 10 CFR 50.59.

The NRC has taken the position that relocating snubber requirements to a licensee controlled document effectively eliminates the 72 hour delay to enter the TS actions for supported equipment when snubbers are unable to perform their required support function. TSTF-372-A Revision 4 resolves this discrepancy by adding LCO 3.0.8. 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 TECHNICAL EVALUATION**

#### Relocation of TS 3/4.6.4 to Station Procedures

The proposed change would remove TS 3/4.6.4, "Shock Suppressors (Snubbers)," from the TSs and relocate it to the NMP1 station procedures. As discussed below, the snubber TS requirements do not meet any of the four criteria in 10 CFR 50.36(c)(2)(ii) for inclusion in the TSs.

**ENCLOSURE  
DESCRIPTION AND ASSESSMENT**

---

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

Snubbers are not installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the reactor coolant pressure boundary. Therefore, the NMP1 snubbers do not satisfy Criterion 1.

**Criterion 2:** *A process variable, design feature, or operating restriction that is an initial condition of a design basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.*

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 will be controlled by the Technical Specification requirements of the supported system. Availability of the snubbers is assured based on the performance of periodic inspections and testing. Therefore, the NMP1 snubbers do not satisfy Criterion 2.

**Criterion 3:** *A structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier.*

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 NMP1 snubbers do not satisfy Criterion 3.

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

Operational experience or probabilistic risk assessment have not shown snubber performance to be significant to the public health and safety. Therefore, the NMP1 snubbers do not satisfy Criterion 4.

Removal of TS 3/4.6.4, "Shock Suppressors (Snubbers)," from the TSs and relocation to the NMP1 station procedures is consistent with NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," Rev. 3.0. Changes to the station procedures are subject to review in accordance with 10 CFR 50.59. In addition, snubber inservice testing and examination will be performed in accordance with Subsection ISTD of the ASME OM Code except where reliefs/alternatives have been approved in accordance with 10 CFR 50.55a. Therefore, the functionality and testing of snubbers will continue to be adequately assured.

Addition of TS LCO 3.0.8 Applicability of Published Safety Evaluation

NMPNS has reviewed the safety evaluation dated May 4, 2005 as part of the CLIIP. This review included a review of the NRC staff's evaluation, as well as the supporting information provided to

**ENCLOSURE**  
**DESCRIPTION AND ASSESSMENT**

---

support TSTF-372-A. As discussed in the notice of availability published in the Federal Register on May 4, 2005 for this TS improvement, plant specific verifications were performed as follows:

In the model Safety Evaluation (SE), two conditions (the first of the two having five parts, 1(a) through 1(e)) for application of TSTF-372-A are specified. Each is discussed below.

**Condition 1(a)** - This condition assumes the availability of one Auxiliary Feedwater (AFW) train during application of LCO 3.0.8.a. This condition is only applicable to Pressurized Water Reactors (PWRs) and therefore not applicable to NMP1.

**Condition 1(b)** - This condition requires either one AFW train or similar core cooling method to be available when one or more snubbers are inoperable that affect two trains of a given system. This condition is only applicable to PWRs and therefore not applicable to NMP1.

**Condition 1(c)** - This condition is only applicable to West Coast PWRs and therefore not applicable to NMP1.

**Condition 1(d)** – *BWR plants must verify, every time the provisions of LCO 3.0.8 are used, that at least one success path, involving equipment not associated with the inoperable snubber(s), exists to provide make-up and core cooling needed to mitigate Loss of Offsite Power (LOOP) accident sequences.*

This is described in Section 3.1.2 of the Safety Evaluation, which states:

*For BWR plants, one of the following two means of heat removal must be available when LCO 3.0.8a is used:*

- *At least one high pressure makeup path (e.g., using high pressure coolant injection (HPCI) or reactor core isolation cooling (RCIC) or equivalent) and heat removal capability (e.g., suppression pool cooling), including a minimum set of supporting equipment required for success, not associated with the inoperable snubber(s), or*
- *At least one low pressure makeup path (e.g., low pressure coolant injection (LPCI) or core spray (CS)) and heat removal capability (e.g., suppression pool cooling or shutdown cooling), including a minimum set of supporting equipment required for success, not associated with the inoperable snubber(s).*

NMP1 will ensure appropriate plant procedures and administrative controls are revised to implement the above Tier 2 restrictions using the equivalent NMP1 plant specific systems which are:

**High pressure:**

- Makeup - High Pressure Coolant Injection
- Heat Removal - Electromagnetic Relief Valves with Containment Spray in Torus Cooling Mode, or Emergency Condensers

**Low Pressure:**

- Makeup – Core Spray

**ENCLOSURE**  
**DESCRIPTION AND ASSESSMENT**

---

- Heat Removal - Electromagnetic Relief Valves with Containment Spray in Torus Cooling Mode, or Emergency Condensers, or Shutdown Cooling.

**Condition 1(e)** – *Every time the provisions of LCO 3.0.8 are used licensees will be required to confirm that at least one train (or subsystem) of systems supported by the inoperable snubbers would remain capable of performing their required safety or support functions for postulated design loads other than seismic loads. LCO 3.0.8 does not apply to non-seismic snubbers. In addition, a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any applicable Tier 2 restrictions, and the associated plant configuration shall be available on a recoverable basis for staff inspection.*

NMP1 will ensure appropriate plant procedures and administrative controls are revised to implement the above Tier 2 restrictions.

**Condition 2** - *Should Licensees implement the provisions of LCO 3.0.8 for snubbers, which include delay times to enter the actions for the supported equipment when one or more snubbers are out of service for maintenance or testing, it must be done in accordance with an overall Comprehensive Risk Management Program (CRMP) to ensure that potentially risk-significant configurations resulting from maintenance and other operational activities are identified and avoided, as discussed in the proposed TS Bases. This objective is met by licensee programs to comply with the requirements of paragraph (a)(4) of the Maintenance Rule 10 CFR 50.65, to assess and manage risk resulting from maintenance activities or when this process is invoked by LCO 3.0.8 or other TS. These programs can support licensee decisionmaking regarding the appropriate actions to manage risk whenever a risk-informed TS is entered. Since the 10 CFR 50.65(a)(4) guidance, the revised (May 2000) Section 11 of NUMARC 93-01, does not currently address seismic risk, licensees adopting this change must ensure that the proposed LCO 3.0.8 is considered in conjunction with other plant maintenance activities and integrated into the existing 10 CFR 50.65(a)(4) process. In the absence of a detailed seismic PRA, a bounding risk assessment, such as utilized in this Safety Evaluation, shall be followed.*

NMPNS will establish TS Bases for LCO 3.0.8 which provide guidance and details on how to implement the new requirements. LCO 3.0.8 requires that risk be managed and assessed. The Bases will also state that while the industry and NRC guidance on implementation of 10 CFR 50.65(a)(4), the Maintenance Rule, does not address seismic risk, 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 assessment of the vulnerability of systems and components when one or more snubbers are not able to perform their associated support function. The Bases for TS 3.0.8 will be established and maintained in accordance with TS 6.5.6, “Technical Specification (TS) Bases Control Program.”

Based upon the above, NMPNS has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to NMP1 and justify this amendment for the incorporation of the changes to the NMP1 TSs.

**Addition of TS LCO 3.0.8 Optional Changes and Variations**

TSTF-372-A, Revision 4, includes a change to LCO 3.0.1 to include reference to LCO 3.0.8 as an exception to LCO 3.0.1. NMP1 custom TSs do not include a requirement equivalent to LCO 3.0.1 in Standard Technical Specifications. Therefore, this change is not included in this request.



**ENCLOSURE  
DESCRIPTION AND ASSESSMENT**

---

Revision of TS Table of Contents to reflect deletion of TS 3/4.6.4 and Addition of LCO 3.0.8

Revision of TS Table of Contents to reflect deletion of TS 3/4.6.4 is administrative in nature and has no impact on nuclear safety.

#### **4.0 REGULATORY EVALUATION**

##### **4.1 Applicable Regulatory Requirements/Criteria**

10 CFR 50.36 requires that the TSs include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls and states also that the Commission may include additional TSs as it finds to be appropriate. However, the regulation does not specify the particular TSs to be included in a plant's license.

The regulation sets forth four criteria to be used in determining whether a LCO is required to be included in the TS, 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 risk assessment has shown to be significant to public health and safety.

Existing LCOs and related surveillances included as TS requirements which fall within or satisfy any of the criteria must be retained in the TSs, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other licensee controlled documents.

##### **4.2 Precedent**

The proposed change is similar to the following previous license amendments approved by the Nuclear Regulatory Commission (NRC):

- Vermont Yankee Nuclear Power Station - Issuance of Amendment Re: Adoption of Technical Specification Task Force (TSTF) Change TSTF-372, "The Addition of Limiting Condition for Operation (LCO) 3.0.8 on the Inoperability of Snubbers" (TAC No. MD1664) Accession No. ML070530159 (Reference 4)

**ENCLOSURE**  
**DESCRIPTION AND ASSESSMENT**

---

- Hope Creek Generating Station – Issuance of Amendment Re: Technical Specification Requirements Related to Snubbers” (TAC No. MD9337) Accession No. ML091600683 (Reference 5)

#### **4.3 Significant Hazards Consideration**

In accordance with 10 CFR 50.90, Nine Mile Point Nuclear Station, LLC (NMPNS) requests an amendment to Renewed Facility Operating License DPR-63 for Nine Mile Point Unit 1 (NMP1). The proposed change would revise the Operating License by relocating Technical Specification (TS) 3/4.6.4 requirements for snubbers to station procedures and adding a new Limiting Condition for Operation (LCO) 3.0.8 to the TSs. In addition, the TS Table of Contents would be revised to reflect these changes.

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

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

Response: No.

The proposed change to relocate TS 3/4.6.4 to station procedures 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 station procedures to ensure design assumptions for accident mitigation are maintained.

The proposed change to add LCO 3.0.8 allows a delay time for entering a supported system TS when the inoperability is due solely to an inoperable snubber if risk is assessed and managed. Entrance into TS 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 consequences of an accident while relying on allowance provided by proposed LCO 3.0.8 are no different than the consequences of an accident while relying on the current TS required actions in effect without the allowance provided by proposed LCO 3.0.8.

Revision of TS Table of Contents to reflect deletion of TS 3/4.6.4 is administrative in nature and therefore does not involve a significant increase in the probability or consequences of an accident previously evaluated.

Therefore, the proposed change does not involve a significant increase in the probability or consequences of an accident previously evaluated.

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

Response: No.

**ENCLOSURE  
DESCRIPTION AND ASSESSMENT**

---

The proposed change to relocate TS 3/4.6.4 to station procedures 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 does not involve a physical alteration of the plant (no new or different type of equipment will be installed). Allowing delay times for entering supported system TSs when inoperability is due solely to inoperable snubbers, if risk is assessed and managed, will not introduce new failure modes or effects.

Revision of TS Table of Contents to reflect deletion of TS 3/4.6.4 is administrative in nature and therefore does not create the possibility of a new or different kind of accident from any previously evaluated.

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

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

Response: No.

The proposed change to relocate TS 3/4.6.4 to station procedures 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 TSs to station procedures.

The proposed change to add LCO 3.0.8 to TSs 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 NMP1 TSs 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.

Revision of TS Table of Contents to reflect deletion of TS 3/4.6.4 is administrative in nature and therefore does not involve a significant reduction in a margin of safety.

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

Based on the above, NMPNS concludes that the proposed amendment 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.

**ENCLOSURE  
DESCRIPTION AND ASSESSMENT**

---

#### **4.4 Conclusion**

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 issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

#### **5.0 ENVIRONMENTAL CONSIDERATION**

NMPNS has reviewed the environmental evaluation included in the model safety evaluation dated May 4, 2005 as part of the CLIIP. NMPNS has concluded that the staff's findings presented in that evaluation are applicable to NMP1 and the evaluation is hereby incorporated by reference for this application related to the addition of LCO 3.0.8.

A review has determined that the proposed amendment 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 amendment 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.

#### **6.0 REFERENCES**

1. NUREG-1433, "Standard Technical Specifications, General Electric Plants, BWR/4," Rev. 3.0.
2. TSTF-372-A, Revision 4, "Addition of LCO 3.0.8, Inoperability of Snubbers."
3. 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).
4. Vermont Yankee Nuclear Power Station – "Issuance of Amendment Re: Adoption of Technical Specification Task Force (TSTF) Change TSTF-372, The Addition of Limiting Condition for Operation (LCO) 3.0.8 on the Inoperability of Snubbers" (TAC No. MD1664) Accession No. ML070530159
5. Hope Creek Generating Station – "Issuance of Amendment Re: Technical Specification Requirements Related to Snubbers" (TAC No. MD9337) Accession No. ML091600683

# ATTACHMENT 1

---

## **PROPOSED TECHNICAL SPECIFICATION CHANGES (MARK-UP)**

---

Technical Specification pages included in this mark-up:

iii  
27  
259  
260  
261  
262  
263  
263a

SECTION	DESCRIPTION	PAGE
3.3.4	Isolation Valves	143
3.3.5	Access Control	151
3.3.6	Vacuum Relief	153
3.3.7	Containment Spray	159
3.4.0	Secondary Containment	164
	<u>Limiting Condition for Operation</u>	
3.4.1	Leakage Rate	165
3.4.2	Isolation Valves	168
3.4.3	Access Control	170
3.4.4	Emergency Ventilation	173
3.4.5	Control Room Ventilation	178
3.5.0	Shutdown and Refueling	182
	<u>Limiting Condition for Operation</u>	
3.5.1	Source Range Monitoring	183
3.5.2	Refueling Platform Interlock	186
3.6.0	General Reactor Plant	191
	<u>Limiting Condition for Operation</u>	
3.6.1	Mechanical Vacuum Pump Isolation	192
3.6.2	Protective Instrumentation	194
3.6.3	Emergency Power Sources	255
3.6.4	<del>Check Suppressors (Snubbers)</del> (Deleted)	259
	<u>Surveillance Requirements</u>	
4.3.4	Isolation Valves	143
4.3.5	Access Control	151
4.3.6	Vacuum Relief	153
4.3.7	Containment Spray	159
4.4.1	Leakage Rate	165
4.4.2	Isolation Valves	168
4.4.3	Access Control	170
4.4.4	Emergency Ventilation	173
4.4.5	Control Room Ventilation	178
4.5.1	Source Range Monitoring	183
4.5.2	Refueling Platform Interlock	186
4.6.1	Mechanical Vacuum Pump Isolation	192
4.6.2	Protective Instrumentation	194
4.6.3	Emergency Power Sources	255
4.6.4	<del>Check Suppressors (Snubbers)</del> (Deleted)	259

### 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

3.0.1 When a system, subsystem, train, component or device is determined to be inoperable solely because its emergency power source is inoperable, or solely because its normal power source is inoperable, it may be considered operable for the purpose of satisfying the requirements of its applicable LCO, provided: (1) its corresponding normal or emergency power source is operable; and (2) all of its redundant system(s), subsystem(s), train(s), component(s) and device(s) are operable, or likewise satisfy the requirements of this specification. Unless both conditions (1) and (2) are satisfied, the unit shall be placed in a condition stated in the individual specification.

In the event LCO requirements cannot be satisfied because of circumstances in excess of those addressed in the specification, the unit shall be placed in a condition consistent with the individual specification unless corrective measures are completed that permit operation for the specified time interval as measured from initial discovery or until the reactor is placed in an operational condition in which the specification is not applicable.

### 4.0 SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

4.0.1 SRs shall be met during the applicable reactor operating or other specified conditions 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 Specification 4.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits.

4.0.2 Each SR shall be performed within the specified surveillance interval with a maximum allowable extension not to exceed 25 percent of the specified surveillance interval.

[ 3.0.2 through 3.0.7 - Reserved for Future Use  
3.0.8 (See INSERT 1)

INSERT 1

3.0.8 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.



*Deleted*

LIMITING CONDITION FOR OPERATION

3.6.4 SHOCK SUPPRESSORS (SNUBBERS)

Applicability

Applies to the operational status of shock suppressors (snubbers)

Objective

To assure the capability of the snubbers to:

Prevent unrestrained pipe motion under dynamic loads as might occur during an earthquake or severe transient, and

Allow normal thermal motion during startup and shutdown

*Deleted*

SURVEILLANCE REQUIREMENT

4.6.4 SHOCK SUPPRESSORS (SNUBBERS)

Applicability

Applies to periodic inspection and testing requirements for shock suppressors (snubbers).

Objective

To assure the operability of the snubbers to perform their intended functions.

Center on page: "Pages 261 through 264 Deleted"

LIMITING CONDITION FOR OPERATION	SURVEILLANCE REQUIREMENT
<p><u>Specification</u></p> <p>a. During all reactor operating conditions, except cold shutdown, snubbers shall be operable on those systems required to be operable during that particular operating condition except as noted in 3.6.4.b, c and d below.</p> <p>Snubbers excluded from this inspection program are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety-related system.</p> <p>b. With one or more snubbers inoperable, within 72 hours replace or restore the inoperable snubber(s) to the operable status or perform an engineering evaluation to determine that the components supported by the snubber(s) were not adversely affected by the inoperability of the snubber(s), i.e. the snubber(s) is (are) not required for system operability.</p> <p>c. If after 72 hours the actions as described in Section 3.6.4b have not been completed, the supported system shall be declared inoperable and the appropriate action statement for that system will be followed.</p>	<p><u>Specification</u></p> <p>Each snubber shall be demonstrated operable by the performance of the following augmented inservice inspection and testing programs. Snubbers excluded from these programs are those installed on nonsafety-related systems and then only if their failure or failure of the system on which they are installed, would have no adverse effect on any safety-related system.</p> <p>a. <u>Visual Inspection</u></p> <p>(i) <u>Visual Inspection Frequency</u></p> <p>Snubbers are categorized as inaccessible or accessible during reactor operation. Each of these categories (inaccessible and accessible) may be inspected independently according to the schedule determined by Table 4.6.4-1. The visual inspection interval for each type of snubber (snubbers of the same design and manufacturer, irrespective of capacity) shall be determined based upon the criteria provided in Table 4.6.4-1.</p>

**LIMITING CONDITION FOR OPERATION**

d. If the actions described in 3.6.4.b or c resulted in replacement or restoration to the operable status of the affected snubber(s), perform an engineering evaluation to determine if the components supported by the snubber(s) were adversely affected by the inoperability of the snubber.

**SURVEILLANCE REQUIREMENT**

(ii) Visual Inspection Acceptance Criteria

Visual inspections shall verify that (1) the snubber has no visible indications of damage or impaired operability, (2) attachments to the foundation or supporting structure are functional, and (3) fasteners for the attachment of the snubber to the component and to the snubber anchorage are functional. Snubbers which appear inoperable as a result of visual inspections shall be classified as unacceptable and may be reclassified acceptable for the purpose of establishing the next visual inspection interval, provided that (1) the cause of the rejection is clearly established and remedied for that particular snubber and for other snubbers irrespective of type that may be generically susceptible; and (2) the affected snubber is functionally tested in the as-found condition and determined operable per Specification 4.6.4.b. All snubbers found connected to an inoperable common hydraulic fluid reservoir shall be counted as unacceptable for determining the next inspection interval. A review and evaluation shall be performed and documented to justify continued operation with an unacceptable snubber. If continued operation cannot be justified, the snubber shall be declared inoperable and the action requirements of TS 3.6.4 shall be met.

**LIMITING CONDITION FOR OPERATION**

**SURVEILLANCE REQUIREMENT**

**b. Functional Testing**

**(i) Functional Test Frequency**

At least once each refueling cycle, 10% of the total of each type (mechanical or hydraulic, accessible or inaccessible) of snubber 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 4.6.4b(ii) an additional 10% of that type of snubber shall be functionally tested.

**(ii) Functional Test Acceptance Requirement**

Hydraulic snubber functional test shall verify that:

1. Activation (restraining action) is achieved within the specified range of velocity.
2. Freedom of movement exists in both tension and compression.

Mechanical snubber functional test shall verify that:

1. The force that initiates free movement of the snubber rod in either tension or compression is less than the specified maximum drag force.

**LIMITING CONDITION FOR OPERATION**

**SURVEILLANCE REQUIREMENT**

2. Activation (restraining action) is achieved within the specified range of velocity or acceleration in both tension and compression.

SNUBBER VISUAL INSPECTION INTERVAL

Population or Category (Notes 1 and 2)	NUMBER OF UNACCEPTABLE SNUBBERS		
	Column A Extend Interval (Notes 3 and 6)	Column B Repeat Interval (Notes 4 and 6)	Column C Reduce Interval (Notes 5 and 6)
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13

- Note 1: The next visual inspection interval for a snubber population or category size shall be determined based upon the previous inspection interval and the number of unacceptable snubbers found during that interval. Snubbers may be categorized, based upon their accessibility during power operation, as accessible or inaccessible. These categories may be examined separately or jointly. However, that decision shall be made and documented before any inspection and shall serve as the basis upon which the next inspection interval for that category is determined.
- Note 2: Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use the next lower integer for the value of the limit for Columns A, B, or C if that integer includes a fractional value of unacceptable snubbers as determined by interpolation.
- Note 3: If the number of unacceptable snubbers is equal to or less than the number in Column A, the next inspection interval may be twice the previous interval, but not greater than 48 months.
- Note 4: If the number of unacceptable snubbers is equal to or less than the number in Column B, but greater than the number in Column A, the next inspection interval shall be the same as the previous interval.
- Note 5: If the number of unacceptable snubbers is equal to or greater than the number in Column C, the next inspection interval shall be two-thirds of the previous interval. However, if the number of unacceptable snubbers is less than the number in Column C, but greater than the number in Column B, the next interval shall be reduced proportionally by interpolation, that is, the previous interval shall be reduced by a factor that is one-third of the ratio of the difference between the number of unacceptable snubbers found during the previous interval and the number in Column B to the difference in the numbers in Columns B and C.
- Note 6: The provisions of Specification 4.0.2 are applicable for all inspection intervals up to and including 48 months.

**ATTACHMENT 2**

---

**LIST OF REGULATORY COMMITMENTS**

---

**ATTACHMENT 2**  
**LIST OF REGULATORY COMMITMENTS**

---

The following table identifies those actions committed to by Nine Mile Point Nuclear Station, LLC in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments. Please direct questions regarding these commitments to T. F. Syrell, Licensing Director, at (315) 349-5219.

<b>REGULATORY COMMITMENTS</b>	<b>DUE DATE/EVENT</b>
Nine Mile Point Nuclear Station, LLC will establish the Technical Specification Bases for LCO 3.0.8 as adopted with the applicable license amendment.	Implemented with the approved amendment.
NMPI Updated Final Safety Analysis Report (UFSAR), Section XVI.D.1.2, Pipe Supports, will be revised to state that snubber inservice testing and examination will be performed in accordance with Subsection ISTD of the ASME OM Code except where relief/alternatives have been approved in accordance with 10 CFR 50.55a.	Implemented with the approved amendment.



## **ATTACHMENT 3**

---

### **PROPOSED TECHNICAL SPECIFICATION BASES CHANGES (MARK-UP)**

Note: Provided for information only.

---

Technical Specification Bases pages included in this mark-up:

27c  
264

## BASES FOR 3.0 LIMITING CONDITION FOR OPERATION AND 4.0 SURVEILLANCE REQUIREMENT APPLICABILITY

specified conditions are satisfied. In this case, this would mean that for one division the diesel generator power system must be operable (as must be the components supplied by the diesel generator power system) and the diesel generator must be running. In addition, all of the redundant systems, subsystems, trains, components, and devices in the other division must be operable, or likewise satisfy Specification 3.0.1 (i.e., be capable of performing their design functions and have the diesel generator power system operable, but with the diesel generator not running). In other words, both diesel generator power systems must be operable, with one diesel generator running, and all redundant systems, subsystems, trains, components, and devices in both divisions must also be operable. If these conditions are not satisfied, the plant is required to be placed in the condition stated in the applicable individual specification(s).

Additionally, Specification 3.0.1 delineates the action to be taken for circumstances not directly provided for in the specification condition statements, and whose occurrences would violate the intent of the specification. For example, certain specifications call for both subsystems in a two subsystem design to be operable and provide explicit action requirements if one (1) subsystem is inoperable. Under the terms of Specification 3.0.1, if both of the required subsystems are inoperable, the plant is required to take actions consistent with the specification. It is assumed that the plant is to be in at least the required operational condition within the required times by promptly initiating and carrying out the appropriate action statement.

### *INSERT 2 here*

Specifications 4.0.1 through 4.0.3 establish general requirements applicable to all specifications in Sections 4.1 through 4.7 and apply at all times, unless otherwise stated.

4.0.1 Specification 4.0.1 establishes the requirement that SRs must be met during the applicable reactor operating or other specified conditions 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 Specification 4.0.2, constitutes a failure to meet an LCO. Surveillances may be performed by means of any series of sequential, overlapping, or total steps provided the entire surveillance is performed within the specified frequency.

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.

## INSERT 2

LCO 3.0.8 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 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.

Each use of LCO 3.0.8 requires confirmation that at least one train (or subsystem) of systems supported by the inoperable snubbers would remain capable of performing their required safety or support functions for postulated design loads other than seismic loads. LCO 3.0.8 does not apply to non-seismic snubbers. In addition, a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any high risk configuration restrictions, and the associated plant configuration shall be available on a recoverable basis for inspection.

LCO 3.0.8 can only be used if one of the following two means of heat removal is available (high risk configuration restrictions):

- (1) At least one high pressure makeup path (e.g., High Pressure Coolant Injection) and heat removal capability (e.g., Electromagnetic Relief Valves with Containment Spray in Torus Cooling Mode, or Emergency Condensers), including a minimum set of supporting equipment required for success, not associated with the inoperable snubber(s),

OR

- (2) At least one low pressure makeup path (e.g., Core Spray) and heat removal capability (e.g., Electromagnetic Relief Valves with Containment Spray in Torus Cooling Mode, or Emergency Condensers, or shutdown cooling), including a minimum set of supporting equipment required for success, not associated with the inoperable snubber(s).

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

INSERT 2 (cont.)

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 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.

### BASES FOR 3.6.4 AND 4.6.4 SHOCK SUPPRESSORS (SNUBBERS)

Snubbers are required to be operable to ensure that the structural integrity of the reactor coolant system and 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 is based on the number of unacceptable snubbers found during the previous inspection in proportion to the population of the various snubber types and categories. The inspection schedule is based on the guidance provided in Generic Letter 90-09. 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.