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W3F1-2008-0059

September 18, 2008

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

SUBJECT: License Amendment Request NPF-38-279
Relocation of TS 3.7.8 and Addition of LCO 3.0.8 Regarding the Inoperability of Snubbers
Waterford Steam Electric Station, Unit 3
Docket No. 50-382
License No. NPF-38

REFERENCE: 1. Entergy letter dated May 29, 2008, "Inservice Inspection (ISI) Program Third 10-Year Interval, Revision 0" (W3F1-2008-0045)

Dear Sir or Madam:

In accordance with the provisions of 10 CFR 50.90, Entergy Operations, Inc. (Entergy) hereby requests an amendment to Waterford Steam Electric Station, Unit 3 (Waterford 3) Technical Specification (TS). The proposed amendment would modify TS requirements for inoperable snubbers by relocating the current TS 3.7.8, Snubbers, to the Technical Requirements Manual (TRM) and adding Limiting Condition for Operation (LCO) 3.0.8. In conjunction with the proposed changes, the TS Bases for LCO 3.0.8 will be added, consistent with Bases Control Program, as described in Section 6.16 of the TS. The proposed amendment is based, in part, on the NRC approved Industry / Technical Specification Task Force (TSTF) change to the Improved Standard Technical Specifications TSTF-372-A, Rev. 4, entitled *Addition of LCO 3.0.8, Inoperability of Snubbers* and is consistent with changes previously approved by the NRC for other reactor licensees, as well as a recent License Amendment Request from Arkansas Nuclear One, Unit 2.

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

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The proposed change has been evaluated in accordance with 10 CFR 50.91(a)(1) using criteria in 10 CFR 50.92(c), and it has been determined that this change involves no significant hazards consideration. The bases for these determinations are included in the attached submittal.

Entergy requests approval of the proposed amendment by September 10, 2009, in order to support the Fall 2009 refueling outage. Once approved, the amendment shall be implemented within 60 days. Although this request is neither exigent nor emergency, your prompt review is requested.

If you have any questions or require additional information, please contact Robert Murillo, Manager, Licensing at (504) 739-6715.

I declare under penalty of perjury that the foregoing is true and correct. Executed on September 18, 2008.

Sincerely,

KTW/DBB/RLW/ssf

Attachments:
1. Description and Assessment
2. Proposed Technical Specification Changes
3. Revised Technical Specification Pages
4. List of Regulatory Commitments
5. Proposed Technical Specification Bases Changes (for information only)

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Attachment 1
To
W3F1-2008-0059

Description and Assessment

1.0 DESCRIPTION

The proposed amendment would modify Waterford Steam Electric Station, Unit 3 (Waterford 3) Technical Specification (TS) requirements for inoperable snubbers by relocating the current TS 3.7.8, Snubbers, to the Technical Requirements Manual (TRM) and adding Limiting Condition for Operation (LCO) 3.0.8. In conjunction with the proposed changes, TS Bases for LCO 3.0.8 will be added, consistent with the Bases Control Program as described in Section 6.16 of the TS.

The changes relating to the addition of LCO 3.0.8 are consistent with the Nuclear Regulatory Commission (NRC) approved Industry / Technical Specification Task Force (TSTF) change to the Improved Standard Technical Specifications TSTF-372-A, Rev. 4, entitled *Addition of LCO 3.0.8, Inoperability of Snubbers*. The availability of this TS improvement was published in the *Federal Register* on April 27, 2005 as part of the consolidated line item improvement process (CLIIP). The change which relocates TS 3.7.8 to the TRM is consistent with the Improved Standard Technical Specification (STS), which does not contain a specification for snubbers.

2.0 ASSESSMENT

2.1 Applicability of Published Safety Evaluation

With regard to application of TSTF-372 (adoption of LCO 3.0.8), Entergy Operations, Inc. (Entergy) has reviewed the safety evaluation dated April 27, 2005 as part of the CLIIP. This review included a review of the NRC staff's evaluation, as well as the information provided to support TSTF-372. Entergy has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to Waterford 3 and justify this amendment for the incorporation of the changes to the Waterford 3 TS.

The relocation of the snubber-related requirements of TS 3.7.8 to the TRM is consistent with the original (and current) version of the STS. The NRC's Final Policy Statement states that LCOs and associated requirements that do not satisfy or fall within any of the four specified criteria presently contained in 10 CFR 50.36, may be relocated from existing TS (an NRC-controlled document) to appropriate licensee-controlled documents. Relocation of these requirements to the TRM is acceptable, in that, changes to the TRM will be adequately controlled by 10 CFR 50.59. These provisions will continue to be implemented by appropriate station procedures (i.e., operating procedures, maintenance procedures, surveillance and testing procedures, and work control procedures).

Snubbers are used on piping systems or equipment to limit displacement from dynamic loads such as earthquake or thermal-hydraulic transient, while allowing displacement from thermal expansion. Snubbers are not active components, but are a type of support like springs, baseplates, or struts with the same potential for impact on operability as any support. The majority of snubbers at Waterford 3 are installed on Seismic Class I piping, which include all of the safety systems. Snubber testing is required by 10 CFR 50.55a to be performed in accordance with ASME/American Nuclear Standards Institute (ANSI) OM Part 4, "Examination and Performance Testing of Nuclear Power Plant Dynamic Restraints" or ASME OM Code, Subsection ISTD, "Preservice and Inservice Examination and Testing of Dynamic Restraints (Snubbers) in Light-Water Reactor Nuclear Power Plants." Thus, specifying such testing in the

TS is unnecessary. Snubbers are not a design feature that is an initial condition of a DBA or transient. Thus, TS requirements for snubbers do not meet the criteria of 10 CFR 50.36 for retention in the TS. In addition, snubber degradation does not necessarily render the associated safety system inoperable. Rather, it is appropriate to evaluate issues with a snubber using existing guidance for degraded or nonconforming conditions within the corrective action program. If a problem with one or more snubbers did make a system or component inoperable, the TS for the affected system will define the appropriate remedial actions. Testing will be adequately controlled in accordance with 10 CFR 50.55a and 10 CFR 50.59. Based on the above, it is acceptable to relocate the snubber specification to the TRM.

2.2 Optional Changes and Variations

The relocation of TS 3.7.8 to the TRM is not included in the CLIIP associated with TSTF-372. However, this relocation is necessary to support application of the new LCO 3.0.8 and the intent of TSTF-372. Furthermore, this relocation is consistent with the STS.

Because Waterford 3 is a non-STS plant and because Entergy proposes to relocate TS 3.7.8 to support the adoption of LCO 3.0.8, these changes are not proposed to be approved under the normal 6-month CLIIP review process. Notwithstanding the additional review and time the NRC may require to issue the requested amendment, Entergy has confirmed that all other requirements of the CLIIP, as stated in Section 2.1 above, are met for Waterford 3. Given the necessity of TS 3.7.8 relocation in order to adopt TSTF-372, Entergy believes this deviation is minor.

Other than discussed above, the only remaining minor deviation is the maintenance of Waterford 3 custom TS wording and usage rules in the adoption of TSTF-372. Specifically:

1. TSTF-372 adds LCO 3.0.8 reference to LCO 3.0.1. Currently, the STS has reference to LCO 3.0.2 and 3.0.7 within LCO 3.0.1. Waterford 3 TS does not contain LCO 3.0.7 (associated with Special Test Exceptions); therefore, reference to LCO 3.0.7 is not included in the Waterford 3 LCO 3.0.1. However, reference to LCO 3.0.2 should be included and, therefore, Entergy is adding this reference to the Waterford 3 LCO 3.0.1 to gain consistency with the STS.

2. As discussed in Item 1 above, Waterford 3 does not have an LCO 3.0.7. However, to maintain consistent numbering (where possible) with the STS, Waterford 3 proposes to add an LCO 3.0.6 and LCO 3.0.7 placeholder which will permit using the LCO 3.0.8 designation for snubbers, consistent with TSTF-372 and the STS.

3. Item 1(e) of the model Safety Evaluation (SE), Section 3.2, contains the statement "LCO 3.0.8 does not apply to non-seismic snubbers." This does not appear to be captured in the implementation process of the TSTF. Therefore, Entergy proposes to include this statement in the LCO 3.0.8 Bases (see Attachment 5 of this submittal). Further guidance associated with the intent of this statement, as discussed in Section 3.0 of the model SE and in TSTF-IG-05-03, Implementation Guidance for TSTF-372, Revision 4, "Addition of LCO 3.0.8, Inoperability of Snubbers," is also included in the Bases. In addition, the TSTF use of "10 CFR 50.36(c)(2)(ii)" is modified to simply state 10 CFR 50.36. This is due to the recent rule change that inadvertently re-designated Part 50.36(c) as Part 50.36(d).

4. The footer of TS Page 3/4 7-20 is revised to account for the pages being deleted by the relocation of TS 3.7.8. This is administrative in nature.

These variations are few and insignificant with regard to ensuring proper application of TSTF-372 intent. Note that TS Page 3/4 7-20 is tied to the August 16, 2007 Entergy letter to adopt TSTF-448, which is currently under review by the NRC. The proposed changes contained within the TSTF-448 submittal are not shown on the attached mark-up or clean page for TS Page 3/4 7-20.

3.0 REGULATORY ANALYSIS

3.1 No Significant Hazards Consideration Determination

Entergy Operations, Inc. (Entergy) has reviewed the proposed no significant hazards consideration determination (NSHCD) published in the *Federal Register* as part of the CLIIP. Entergy has concluded that the proposed NSHCD presented in the *Federal Register* notice is applicable to Waterford 3 and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

3.2 Verification and Commitments

As discussed in the notice of availability published in the *Federal Register* on April 27, 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 are specified. Each is discussed below.

Condition 1

Appropriate plant procedures and administrative controls will be used to implement the following Tier 2 restrictions. Tier 2 restrictions (Conditions) involve the identification of potentially high-risk configurations that could exist if equipment in addition to that associated with the change were to be taken out of service simultaneously, or other risk significant operational factors such as concurrent equipment testing were also involved.

1. Condition 1(a) assumes the availability of one Emergency Feedwater (EFW) train during application of LCO 3.0.8.a. The TSTF-372 and the model SE specify the application of LCO 3.0.8.a is contingent on the assumption that the redundant train remains available. Even though Waterford 3 has a unique EFW system design, the plant TS LCO and ACTION statements will ensure the system remains capable of performing its safety function with various combinations of pumps and flow paths OPERABLE. Although the TS implementation process at Waterford 3 may include this restriction in other procedures or administrative processes upon approval of this amendment, Entergy does not believe further action is required to ensure compliance with Condition 1(a) since the TS inherently prevents application of LCO 3.0.8.a due to a snubber-related condition which could render the entire EFW system inoperable.

2. Condition 1(b) requires either one EFW train or some alternative means of core cooling must be available when one or more snubbers are inoperable that affect both trains of a

given system. As described in Condition 1(a) above, there are no instances where the EFW system or both trains of any system being relied upon as the only core cooling method would be removed from service or any work permitting both at the same time during its associated Modes of Applicability that require these systems. Again, such a plant configuration would result in LCO 3.0.3 entry or plant shutdown, which prevents the utilization of the 12-hour allowance of LCO 3.0.8.b. Although the TS implementation process at Waterford 3 may include this restriction in other procedure or administrative processes upon approval of this amendment, Entergy believes the TS LCO and ACTION statements will ensure the system remains capable of performing its safety function with no further action required to ensure compliance with Condition 1(b).

3. Conditions 1(c) and 1(d) are only applicable to west coast plants and boiling water reactors, respectively, and therefore, are not applicable to Waterford 3.

4. Condition 1(e), first part, relates to Conditions 1(a) and 1(b) discussed above. The statement "LCO 3.0.8 does not apply to non-seismic snubbers" is added to the TS Bases (see markup in Attachment 5 of this submittal). This is a minor deviation from TSTF-372 and is discussed in Section 2.2 above. The second part of Condition 1(e) requires that the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any Tier 2 restrictions during the use of LCO 3.0.8, and the associated plant configuration are recoverable (e.g. can be produced) for staff inspection. Entergy will ensure, during the relocation of the TS 3.7.8 snubber requirements to the TRM, that the TRM Actions are modified, in accordance with 10 CFR 50.59, to require a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any Tier 2 restrictions each time a required snubber is rendered inoperable and the associated plant configuration are available for NRC staff inspection. This commitment is included in Attachment 4 of this submittal.

Condition 2

Implementation of the provisions of LCO 3.0.8 must be performed in accordance with an overall Continuous Risk Management Program (CRMP). Waterford 3 has and continues to maintain a CRMP and associated risk-related tools to meet the intent of 10 CFR 50.65(a)(4) of the Maintenance Rule. Entergy will revise plant procedures or administrative process to ensure seismic risks are considered in conjunction with other plant maintenance activities and integrated into the existing 10 CFR 50.65(a)(4) process during application of the LCO 3.0.8 delay period when one or more snubbers are inoperable. This commitment is included in Attachment 4 of this submittal.

In addition to the above Conditions, Entergy will establish TS Bases for LCO 3.0.8 which provide guidance and details on how to implement the new requirements. This commitment is included in Attachment 4 of this submittal. LCO 3.0.8 requires that risk be managed and assessed. The Bases 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. Finally, Waterford 3 has a Bases Control Program consistent with Section 5.5 of the STS and is contained in Waterford 3 TS Section 6.16.

4.0 ENVIRONMENTAL EVALUATION

Entergy has reviewed the environmental evaluation included in the model safety evaluation dated April 27, 2005 as part of the CLIIP. Entergy has concluded that the staff's findings presented in that evaluation are applicable to Waterford 3, and the evaluation is hereby incorporated by reference for this application.

Attachment 2
To
W3F1-2008-0059

Proposed Technical Specification Changes

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

LIMITING CONDITION FOR OPERATION

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

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

INSERT 1
except as provided in LCO 3.0.2 or 3.0.8; or

3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within 1 hour, action shall be initiated to place the unit in a MODE in which the specification does not apply by placing it, as applicable, in:

1. At least HOT STANDBY within the next 6 hours,
2. At least HOT SHUTDOWN within the following 6 hours, and
3. At least COLD SHUTDOWN within the subsequent 24 hours.

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

This specification is not applicable in MODE 5 or 6.

3.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made when the conditions for the Limiting Conditions for Operation are not met and the ACTION requires a shutdown if they are not met within a specified interval. Entry into an OPERATIONAL MODE or specified condition may be made in accordance with ACTION requirements when conformance to them permits continued operation of the facility for an unlimited period of time. Applying this exception shall be subject to review and approval as described in plant administrative controls unless the individual specification contains an exception to these requirements. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION statements.

3.0.5 Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY (continued)

LIMITING CONDITION FOR OPERATION

INSERT 2

3.0.6 To be used later.

3.0.7 To be used later.

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.

c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration less than 0.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 70%.

d. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 7.8 inches water gauge while operating the system at a flow rate of 3000 cfm ± 10%.

2. Verifying that the system starts on a Safety Injection Actuation Test Signal and achieves and maintains a negative pressure of ≥ 0.25 inch water gauge within 45 seconds.

3. Verifying that the filter cooling bypass valves can be manually cycled.

4. Verifying that the heaters dissipate 20 + 2.0, -2.0 kW when tested in accordance with ANSI N510-1975.

e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 3000 cfm ± 10%.

f. After each complete or partial replacement of a charcoal absorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 3000 cfm ± 10%.

PLANT SYSTEMS

3/4.7.8 SNUBBERS

LIMITING CONDITION FOR OPERATION

3.7.8 All hydraulic and mechanical snubbers shall be OPERABLE.

APPLICABILITY: MODES 1, 2, 3, and 4. MODES 5 and 6 for snubbers located on systems required OPERABLE in those OPERATIONAL MODES.

ACTION:

With one or more snubbers inoperable on any system, within 72 hours replace or restore the inoperable snubber(s) to OPERABLE status and perform an engineering evaluation per Specification 4.7.8g. on the attached component or declare the attached system inoperable and follow the appropriate ACTION statement for that system.

SURVEILLIANCE REQUIREMENTS

4.7.8 Each snubber shall be demonstrated OPERABLE by performance of the following augmented inservice inspection program.

a. Inspection Types

As used in this specification, "type of snubber" shall mean snubbers of the same design and manufacturer, irrespective of capacity.

b. Visual Inspections

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 4.7-2. The visual inspection interval for each type of snubber shall be determined based upon the criteria provided in Table 4.7-2 and the first inspection interval determined using this criteria shall be based upon the previous inspection interval as established by the requirements in effect before amendment 73

TABLE 4.7-2
SNUBBER VISUAL INSPECTION INTERVAL

Population or Category (Notes 1 & 2)	NUMBER OF UNACCEPTABLE SNUBBERS Column A Extend Interval (Notes 3 & 6)	Column B Repeat Interval (Notes 4 & 6)	Column C Reduce Interval (Notes 5 & 6)
1	0	0	1
80	0	0	2
100	0	1	4
150	0	3	8
200	2	5	13
300	5	12	25
400	8	18	36
500	12	24	48
750	20	40	78
1000 or greater	29	56	109

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, the licensee must make and document that decision before any inspection and shall use that decision as the basis upon which to determine the next inspection interval for that category.

Note 2: Interpolation between population or category sizes and the number of unacceptable snubbers is permissible. Use 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.

TABLE 4.7-2 (Continued)
SNUBBER VISUAL INSPECTION INTERVAL

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.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

c. 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 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 4.7.8f. 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 shall be met.

d. Transient Event Inspection

An inspection shall be performed of all hydraulic and mechanical snubbers attached to sections of systems that have experienced unexpected, potentially damaging transients as determined from a review of operational data and a visual inspection of the systems within 6 months following such an event. In addition to satisfying the visual inspection acceptance criteria, freedom-of-motion of mechanical snubbers shall be verified using at least one of the following: (1) manually induced snubber movement; or (2) evaluation of in-place snubber piston setting; or (3) stroking the mechanical snubber through its full range of travel.

PLANT SYSTEMS

SURVEILLANCE REQUIREMENTS (Continued)

e. Functional Tests

During the first refueling shutdown and at least once per 18 months thereafter during shutdown, a representative sample of snubbers shall be tested using one of the following sample plans. The sample plan shall be selected prior to the test period and cannot be changed during the test period. The NRC Regional Administrator shall be notified in writing of the sample plan selected prior to the test period or the sample plan used in the prior test period shall be implemented:

1) At least 10% of the total of each type of snubber shall be functionally tested either in-place or in a bench test. For each snubber of a type that does not meet the functional test acceptance criteria of Specification 4.7.8f., an additional 10% of that type of snubber shall be functionally tested until no more failures are found or until all snubbers of that type have been functionally tested; or

2) A representative sample of each type of snubber shall be functionally tested in accordance with Figure 4.7-1. "C" is the total number of snubbers of a type found not meeting the acceptance requirements of Specification 4.7.8f. The cumulative number of snubbers of a type tested is denoted by "N". At the end of each day's testing, the new values of "N" and "C" (previous day's total plus current day's increments) shall be plotted on Figure 4.7-1. If at any time the point plotted falls in the "Reject" region all snubbers of that type shall be functionally tested. If at any time the point plotted falls in the "Accept" region, testing of snubbers of that type may be terminated. When the point plotted lies in the "Continue Testing" region, additional snubbers of that type shall be tested until the point falls in the "Accept" region or the "Reject" region, or all the snubbers of that type have been tested. Testing equipment failure during functional testing may invalidate that day's testing and allow that day's testing to resume anew at a later time, providing all snubbers tested with the failed equipment during the day of equipment failure are retested; or

3) An initial representative sample of 55 snubbers shall be functionally tested. For each snubber type which does not meet the functional test acceptance criteria, another sample of at least one-half the size of the initial sample shall be tested until the total number tested is equal to the initial sample size multiplied by the factor, 1 + C/2, where "C" is the number of snubbers found which do not meet the functional test acceptance criteria. The results from this sample plan shall be plotted using an "Accept" line which follows the equation $N = 55(1 + C/2)$. Each snubber point should be plotted as soon as the snubber is tested. If the point plotted falls on or below the "Accept" line, testing of that type of snubber may be terminated. If the point plotted falls above the "Accept" line, testing must continue until the point falls in the "Accept" region or all the snubbers of that type have been tested.

SURVEILLANCE REQUIREMENTS (Continued)

The representative sample selected for the functional test sample plans shall be randomly selected from the snubbers of each type and reviewed before beginning the testing. The review shall ensure as far as practical that they are representative of the various configurations, operating environments, range of size, and capacity of snubbers of each type. Snubbers placed in the same locations as snubbers which failed the previous functional test shall be retested at the time of the next functional test but shall not be included in the sample plan. If during the functional testing, additional sampling is required due to failure of only one type of snubber, the functional testing results shall be reviewed at the time to determine if additional samples should be limited to the type of snubber which has failed the functional testing.

f. Functional Test Acceptance Criteria

The snubber functional test shall verify that:

1) Activation (restraining action) is achieved within the specified range in both tension and compression;

2) Snubber bleed, or release rate where required, is present in both tension and compression, within the specified range;

3) Where required, the force required to initiate or maintain motion of the snubber is within the specified range in both directions of travel; and

4) For snubbers specifically required not to displace under continuous load, the ability of the snubber to withstand load without displacement.

Testing methods may be used to measure parameters indirectly or parameters other than those specified if those results can be correlated to the specified parameters through established methods.

g. Functional Test Failure Analysis

An engineering evaluation shall be made of each failure to meet the functional test acceptance criteria to determine the cause of the failure. The results of this evaluation shall be used, if applicable, in selecting snubbers to be tested in an effort to determine the OPERABILITY of other snubbers irrespective of type which may be subject to the same failure mode.

For the snubbers found inoperable, an engineering evaluation shall be performed on the components to which the inoperable snubbers are attached. The purpose of this engineering evaluation shall be to determine if the components to which the inoperable snubbers are attached were adversely affected by the inoperability of the snubbers in order to ensure that the component remains capable of meeting the designed service.

SURVEILLANCE REQUIREMENTS (Continued)

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 snubbers of the same type subject to the same defect shall be functionally tested. This testing requirement shall be independent of the requirements stated in Specification 4.7.8e. for snubbers not meeting the functional test acceptance criteria.

h. Functional Testing of Repaired and Replaced Snubbers

Snubbers which fail the visual inspection or the functional test acceptance criteria shall be repaired or replaced. Replacement snubbers and snubbers which have repairs which might affect the functional test result shall be tested to meet the functional test criteria before installation in the unit. Mechanical snubbers shall have met the acceptance criteria subsequent to their most recent service, and the freedom-of-motion test must have been performed within 12 months before being installed in the unit.

i. Snubber Seal Replacement Program

The service life of hydraulic and mechanical snubbers shall be monitored to ensure that the service life is not exceeded between surveillance inspections. The maximum expected service life for various seals, springs, and other critical parts shall be determined and established based on engineering information and shall be extended or shortened based on monitored test results and failure history. Critical parts shall be replaced so that the maximum service life will not be exceeded during a period when the snubber is required to be OPERABLE. The parts replacements shall be documented and the documentation shall be retained in accordance with Specification 6.10.3.

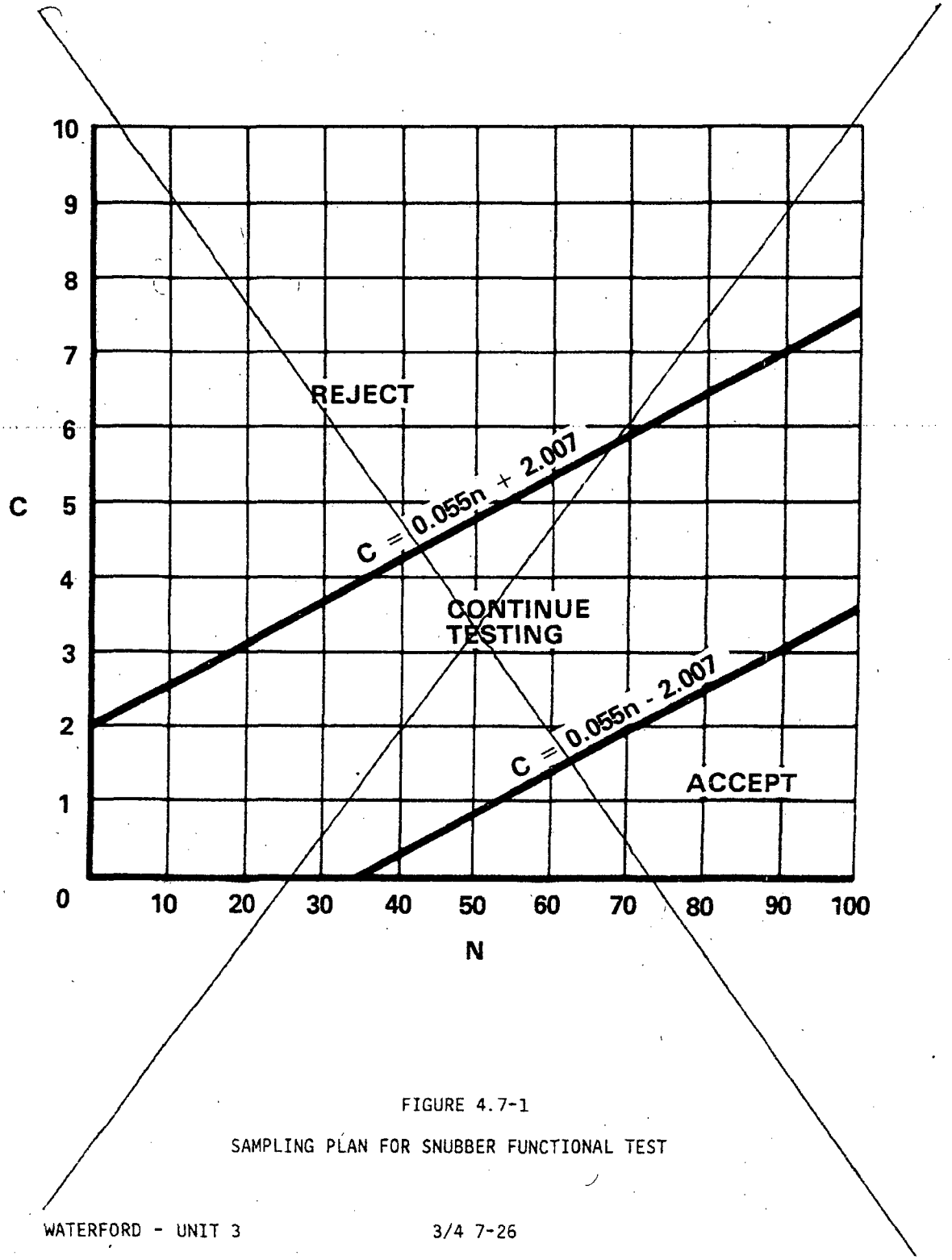

FIGURE 4.7-1

SAMPLING PLAN FOR SNUBBER FUNCTIONAL TEST

Attachment 3
To
W3F1-2008-0059

Revised Technical Specification Pages

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY

LIMITING CONDITION FOR OPERATION

3.0.1 Compliance with the Limiting Conditions for Operation (LCO) contained in the succeeding specifications is required during the OPERATIONAL MODES or other conditions specified therein except as provided in LCO 3.0.2 or 3.0.8; or except that upon failure to meet the Limiting Conditions for Operation, the associated ACTION requirements shall be met.

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

3.0.3 When a Limiting Condition for Operation is not met, except as provided in the associated ACTION requirements, within 1 hour, action shall be initiated to place the unit in a MODE in which the specification does not apply by placing it, as applicable, in:

1. At least HOT STANDBY within the next 6 hours,
2. At least HOT SHUTDOWN within the following 6 hours, and
3. At least COLD SHUTDOWN within the subsequent 24 hours.

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

This specification is not applicable in MODE 5 or 6.

3.0.4 Entry into an OPERATIONAL MODE or other specified condition shall not be made when the conditions for the Limiting Conditions for Operation are not met and the ACTION requires a shutdown if they are not met within a specified interval. Entry into an OPERATIONAL MODE or specified condition may be made in accordance with ACTION requirements when conformance to them permits continued operation of the facility for an unlimited period of time. Applying this exception shall be subject to review and approval as described in plant administrative controls unless the individual specification contains an exception to these requirements. This provision shall not prevent passage through or to OPERATIONAL MODES as required to comply with ACTION statements.

3.0.5 Equipment removed from service or declared inoperable to comply with ACTIONS may be returned to service under administrative control solely to perform testing required to demonstrate its OPERABILITY or the OPERABILITY of other equipment. This is an exception to LCO 3.0.2 for the system returned to service under administrative control to perform the testing required to demonstrate OPERABILITY.

3/4 LIMITING CONDITIONS FOR OPERATION AND SURVEILLANCE REQUIREMENTS

3/4.0 APPLICABILITY (continued)

LIMITING CONDITION FOR OPERATION

3.0.6 To be used later.

3.0.7 To be used later.

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.

PLANT SYSTEMS

SURVELLIANCE REQUIREMENTS

c. After every 720 hours of charcoal adsorber operation by verifying within 31 days after removal that a laboratory analysis of a representative carbon sample obtained in accordance with Regulatory Position C.6.b of Regulatory Guide 1.52, Revision 2, March 1978, shows the methyl iodide penetration less than 0.5% when tested in accordance with ASTM D3803-1989 at a temperature of 30°C and a relative humidity of 70%.

d. At least once per 18 months by:

1. Verifying that the pressure drop across the combined HEPA filters and charcoal adsorber banks is less than 7.8 inches water gauge while operating the system at a flow rate of 3000 cfm ± 10%.

2. Verifying that the system starts on a Safety Injection Actuation Test Signal and achieves and maintains a negative pressure of ≥ 0.25 inch water gauge within 45 seconds.

3. Verifying that the filter cooling bypass valves can be manually cycled.

4. Verifying that the heaters dissipate 20 + 2.0, -2.0 kW when tested in accordance with ANSI N510-1975.

e. After each complete or partial replacement of a HEPA filter bank by verifying that the HEPA filter banks remove greater than or equal to 99.95% of the DOP when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 3000 cfm ± 10%.

f. After each complete or partial replacement of a charcoal absorber bank by verifying that the charcoal adsorbers remove greater than or equal to 99.95% of a halogenated hydrocarbon refrigerant test gas when they are tested in-place in accordance with ANSI N510-1975 while operating the system at a flow rate of 3000 cfm ± 10%.

Attachment 4
To
W3F1-2008-0059

List of Regulatory Commitments

LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Entergy in this document. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

COMMITMENT	TYPE (Check one)		SCHEDULED COMPLETION DATE
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
Entergy will establish the Technical Specification (TS) Bases for Limiting Condition for Operation (LCO) 3.0.8 as adopted with the applicable license amendment.	✓		To be implemented in conjunction with the amendment
Entergy will ensure, during the relocation of the TS 3.7.8 snubber requirements to the Technical Requirements Manual, that the TRM Actions are modified, in accordance with 10 CFR 50.59, to require a record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic), implementation of any Tier 2 restrictions each time a required snubber is rendered inoperable and the associated plant configuration.	✓		To be implemented in conjunction with the amendment
Entergy will revise plant procedures or administrative process to ensure seismic risks are considered during application of the LCO 3.0.8 delay period when one or more snubbers are inoperable.	✓		Prior to or in conjunction with implementation of the amendment

Attachment 5
To
W3F1-2008-0059

Proposed Technical Specification Bases Changes
(for information only)

BASES

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

Specification 3.0.5 establishes the allowance for restoring equipment to service under administrative controls when it has been removed from service or declared inoperable to comply with ACTIONS. The sole purpose of this Specification is to provide an exception to Specification 3.0.2 (e.g., to not comply with the applicable Required Action(s)) to allow the performance of Surveillance Requirements to demonstrate:

a. The OPERABILITY of the equipment being returned to service; or

b. The OPERABILITY of other equipment.

The administrative controls ensure the time the equipment is returned to service in conflict with the requirements of the ACTIONS is limited to the time absolutely necessary to perform the allowed Surveillance Requirements. This Specification does not provide time to perform any other preventive or corrective maintenance.

An example of demonstrating the OPERABILITY of the equipment being returned to service is reopening a containment isolation valve that has been closed to comply with Required Actions and must be reopened to perform the Surveillance Requirements.

An example of demonstrating the OPERABILITY of other equipment is taking an inoperable channel or trip system out of the tripped condition to prevent the trip function from occurring during the performance of a Surveillance Requirement on another channel in the other trip system. A similar example of demonstrating the OPERABILITY of other equipment is taking an inoperable channel or trip system out of the tripped condition to permit the logic to function and indicate the appropriate response during the performance of a Surveillance Requirement on another channel in the same trip system.

Specification 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, 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 ACTIONS entered in accordance with LCO 3.0.2.

BASES

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 allowed outage time (AOT) 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 AOT 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.

LCO 3.0.8 does not apply to non-seismic snubbers. The provisions of LCO 3.0.8 are not to be applied to supported TS systems unless the supported systems would remain capable of performing their required safety or support functions for postulated design loads other than seismic loads.

The risk impact of dynamic loadings other than seismic loads was not assessed as part of the development of LCO 3.0.8. These shock-type loads include thrust loads, blowdown loads, water-hammer loads, steam-hammer loads, LOCA loads and pipe rupture loads. However, there are some important distinctions between non-seismic (shock-type) loads and seismic loads which indicate that, in general, the risk impact of the out-of-service snubbers is smaller for non-seismic loads than for seismic loads. First, while a seismic load affects the entire plant, the impact of a non-seismic load is localized to a certain system or area of the plant. Second, although non-seismic shock loads may be higher in total force and the impact could be as much or more than seismic loads, generally they are of much shorter duration than seismic loads. Third, the impact of non-seismic loads is more plant specific, and thus harder to analyze generically, than for seismic loads. For these reasons, every time LCO 3.0.8 is applied, at least one train (or subsystem) of each system that is supported by the inoperable snubber(s) should remain capable of performing their required safety or support functions for postulated design loads other than seismic loads.

BASES

→(DRN 03-1807, Ch. 30)

Specification 4.0.1 through 4.0.4 establish the general requirements applicable to Surveillance Requirements. These requirements are based on the Surveillance Requirements stated in the Code of Federal Regulations, 10 CFR 50.36(c)(3):

←(DRN 03-1807, Ch. 30)

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