



Serial: RNP-RA/12-0033

**AUG 06 2012**

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

H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2  
DOCKET NO. 50-261/RENEWED LICENSE NO. DPR-23

Subject: APPLICATION FOR TECHNICAL SPECIFICATION CHANGE TO ADD LCO 3.0.8  
ON THE INOPERABILITY OF SNUBBERS USING THE CONSOLIDATED LINE  
ITEM IMPROVEMENT PROCESS

Pursuant to 10 CFR 50.90, Carolina Power and Light Company, now doing business as Progress Energy is submitting a request for an amendment to the Technical Specifications (TS) for H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2.

The proposed change would modify the TS requirements for inoperable snubbers by adding Limiting Condition for Operation (LCO) 3.0.8. The change is consistent with NRC approved Revision 4 to Technical Specification Task Force (TSTF) Standard Technical Specification Change Traveler, TSTF-372, "Addition of LCO 3.0.8, Inoperability of Snubbers." The availability of this TS improvement was announced in the Federal Register on May 4, 2005 (70 FR 23252), as part of the consolidated line item improvement process.

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 the TS Bases pages marked up to show the proposed changes.

This letter contains one new Regulatory Commitment listed in Attachment 5. Any other actions discussed in this document should be considered intended or planned actions. They are included for informational purposes but are not considered Regulatory Commitments.

Progress Energy requests approval of the proposed License Amendment by August 8, 2013, with the amendment being implemented within 60 days.

In accordance with 10 CFR 50.91, a copy of this application is being provided to the State of South Carolina. If you should have any questions regarding this submittal, please contact Mr. R. Hightower at (843) 857-1329.

ADD  
NRR

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

August 4, 2012

Sincerely,



Sharon Wheeler  
Manager - Organizational Effectiveness

SAW/sjg

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

cc: Ms. S. E. Jenkins, Manager, Radioactive and Infectious Waste Management Section (SC)  
Mr. V. M. McCree, NRC, Region II  
Ms. A. T. Billoch-Colon, NRC Project Manager, NRR  
NRC Resident Inspectors, HBRSEP  
Attorney General (SC)

## ATTACHMENT 1

### DESCRIPTION AND ASSESSMENT

#### 1.0 DESCRIPTION

The proposed amendment would modify technical specifications (TS) requirements for inoperable snubbers by adding LCO 3.0.8.

The changes are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) STS change TSTF-372 Revision 4. The availability of this TS improvement was published in the Federal Register on May 4, 2005, (70FR 23252) as part of the consolidated line item improvement process (CLIIP).

#### 2.0 ASSESSMENT

##### 2.1 Applicability of Published Safety Evaluation

Progress Energy 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 support TSTF-372. Progress Energy has concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to H. B. Robinson Steam Electric Plant (HBRSEP) Unit No. 2 and justify this amendment for the incorporation of the changes to the HBRSEP Unit No. 2 TS.

##### 2.2 Optional Changes and Variations

Progress Energy is not proposing any variations or deviations from the TS changes described in the TSTF-372 Revision 4 or the NRC staff's model safety evaluation dated May 4, 2005.

#### 3.0 REGULATORY ANALYSIS

##### 3.1 No Significant Hazards Consideration Determination

Progress Energy has reviewed the proposed no significant hazards consideration determination (NSHCD) published in the *Federal Register* as part of the CLIIP. Progress Energy has concluded that the proposed NSHCD presented in the Federal Register notice is applicable to H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2 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 May 4, 2005 for this TS improvement, the following plant-specific verifications were performed.

- 1. Appropriate plant procedures and administrative controls will be used to implement the following Tier 2 Restrictions.*

- 1.(a) *At least one AFW train (including a minimum set of supporting equipment required for its successful operation) not associated with the inoperable snubber(s), must be available when LCO 3.0.8a is used at PWR plants.*
- 1.(b) *At least one AFW train (including a minimum set of supporting equipment required for its successful operation) not associated with the inoperable snubber(s), or some alternative means of core cooling (e.g., F&B, fire water system or "aggressive secondary cooldown" using the steam generators) must be available when LCO 3.0.8b is used at PWR plants.*
- 1.(c) *LCO 3.0.8b cannot be used by West Coast PWR plants with no F&B capability when a snubber, whose non-functionality would disable more than one train of AFW*
- 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 makeup and core cooling needed to mitigate LOOP accident sequences.*
- 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.*

*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 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 decision making 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.*

Regulatory Guide 1.177, "An Approach for Plant-Specific, Risk-Informed Decision making: Technical Specifications," August 1998, Section 2.3, "Evaluation of Risk Impact," describes a three tiered approach to evaluate the risk associated with proposed TS changes. Tier 2 is "Avoidance of Risk- Significant Plant Configurations." The Safety Evaluation conditions under Item 1 are associated with protecting the assumptions made in the generic risk assessment presented in TSTF-372. Failure to do so could result in plant risk exceeding the risk calculated in the generic risk assessment.

Condition 1(a) of the model safety evaluation applies to PWR plants and requires the availability of at least one train of AFW when LCO 3.0.8.a is used. The TS Bases for LCO 3.0.8 as presented in TSTF-372 do not describe this requirement.

AFW is only required to be Operable in MODES 1, 2, and 3, and in MODE 4 when steam generator is being used for heat removal. During shutdown modes, an AFW train cannot be used for core cooling.

Most snubbers are tested during shutdown. The random testing of snubbers requires expansion of the test sample when failures are discovered. This may occur at a point in the outage in which AFW is not available, effectively prohibiting the use of LCO 3.0.8.a.

Condition 1(b) of the model safety evaluation applies to PWR plants and placed conditions on the use of LCO 3.0.8.b that require the availability of at least one AFW train not associated with inoperable snubbers or some alternative means of core cooling such as feed and bleed, fire water system or “aggressive secondary cooldown”. The TS Bases for LCO 3.0.8 as presented in TSTF-372 do not describe the AFW or alternate core cooling source availability requirements of Item 1(b).

Progress Energy believes it is appropriate to modify the restriction of Condition 1(a) pertaining to the use of LCO 3.0.8.a such that the use of LCO 3.0.8.a when the AFW is not required to be operable has the same flexibility with regards to reliance on the availability of alternate core cooling sources as LCO 3.0.8.b and to include the modified restriction on the use of LCO 3.0.8.a and the restriction on the use of LCO 3.0.8.b in the proposed TS Bases for LCO 3.0.8. The proposed TS Bases for LCO 3.0.8 provides the following supplemental discussion and guidance for various modes of operation.

When applying LCO 3.0.8.a, at least one train of Auxiliary Feedwater (AFW) system must be OPERABLE during MODES when AFW is required to be OPERABLE. When applying LCO 3.0.8.a during MODES when AFW is not required to be OPERABLE, a core cooling method (such as Decay Heat Removal (DHR) system) must be available. When applying LCO 3.0.8.b, a means of core cooling must remain available (AFW, DHR, equipment necessary for feed and bleed operations, etc.). Reliance on availability of a core cooling source during modes where AFW is not required by TSs provides an equivalent safety margin for plant operations were LCO 3.0.8 not applied and meets the intent of Technical Specification Task Force Change Traveler TSTF-372, Revision 4, “Addition of LCO 3.0.8, Inoperability of Snubbers”

Condition 1(c) is applicable only to West Coast PWR plants and is therefore not applicable to HBRSEP Unit No. 2.

Condition 1(d) is applicable only to BWR plants and is therefore not applicable to HBRSEP Unit No. 2.

Condition 1(e) 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. It also states that LCO 3.0.8 does not apply to non-seismic snubbers and identifies specific information that shall be available on a recoverable basis for staff inspection.

The TS Bases for LCO 3.0.8 as presented in TSTF-372 do not include the requirements and restrictions of Condition 1(e). The proposed TS Bases for LCO 3.0.8 provides the following supplemental discussion and guidance reflecting the requirements and restrictions of Condition 1(e).

When a snubber is to be rendered incapable of performing its related support function (i.e., nonfunctional) for testing or maintenance or is discovered to not be functional, it must be determined whether any system(s) require the affected snubber(s) for system OPERABILITY, and whether the plant is in a MODE or specified condition in the Applicability that requires the supported system(s) to be OPERABLE.

If an analysis determines that the supported system(s) do not require the snubber(s) to be functional in order to support the OPERABILITY of the system(s), LCO 3.0.8 is not needed. If the LCO(S) associated with any supported system(s) are not currently applicable (i.e., the plant is not in a MODE or other specified condition in the Applicability of the LCO), LCO 3.0.8 is not needed. If the supported system(s) are inoperable for reasons other than snubbers, LCO 3.0.8 cannot be used. LCO 3.0.8 is an allowance, not a requirement. When a snubber is nonfunctional, any supported system(s) may be declared inoperable instead of using LCO 3.0.8.

Every time the provisions of LCO 3.0.8 are used, HBRSEP Unit No. 2 will confirm that at least one train (or subsystem) of systems supported by the inoperable snubbers will remain capable of performing their required safety or support functions for postulated design loads other than seismic loads.

A record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic) and the associated plant configuration will be available on a recoverable basis for NRC staff inspection.

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 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.

Condition 2 directs that decision making must ensure that the proposed LCO 3.0.8 and seismic risk is considered in conjunction with maintenance activities.

Progress Energy 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. Finally, HBRSEP Unit No. 2 has a Bases Control Program (TS 5.5.14) consistent with Section 5.5 of the applicable vendor's standard TS.

#### **4.0 ENVIRONMENTAL CONSIDERATION**

Progress Energy has reviewed the environmental evaluation included in the model safety evaluation dated May 4, 2005, as part of the CLIIP. Progress Energy has concluded that the staff's findings presented in that evaluation are applicable to H. B. Robinson Steam Electric Plant (HBRSEP), Unit No. 2 and the evaluation is hereby incorporated by reference for this application.

Attachment 2 Serial: RNP-RA/12-003333  
5 Pages (including cover page)

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2**

**ATTACHMENT 2**

**PROPOSED TECHNICAL SPECIFICATIONS CHANGES (MARK-UP)**



3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

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LCO 3.0.1 LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2 and 3.0.7, LCO 3.0.7, and LCO 3.0.8.

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LCO 3.0.2 Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required unless otherwise stated.

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LCO 3.0.3 When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:

- a. MODE 3 within 7 hours;
- b. MODE 4 within 13 hours; and
- c. MODE 5 within 37 hours.

Exceptions to this Specification are stated in the individual Specifications.

Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, 3, and 4.

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LCO 3.0.4 When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

(continued)

No Changes on This Page

3.0 LCO APPLICABILITY

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LCO 3.0.4  
(continued)

- a. When the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time, or
- b. After performance of a risk assessment addressing inoperable systems and components, consideration of the results, determination of the acceptability of entering the MODE or other specified condition in the Applicability, and establishment of risk management actions, if appropriate; exceptions to this Specification are stated in the individual Specifications, or
- c. When an allowance is stated in the individual value, parameter, or other Specification.

This Specification shall not prevent changes in MODES or other specified conditions in the Applicability that are required to comply with ACTIONS or that are part of a shutdown of the unit.

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LCO 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.

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LCO 3.0.6

When a supported system LCO is not met solely due to a support system LCO not being met, the Conditions and Required Actions associated with this supported system are not required to be entered. Only the support system LCO ACTIONS are required to be entered. This is an exception to LCO 3.0.2 for the supported system. In this event, additional evaluations and limitations may be required in accordance with Specification 5.5.15, "Safety Function Determination Program (SFDP)." If a loss of safety function is determined to exist by this program, the appropriate Conditions and Required Actions of the LCO in which

(continued)

3.0 LCO APPLICABILITY

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LCO 3.0.6 the loss of safety function exists are required to be entered.  
(continued)

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

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LCO 3.0.7

Test Exception LCO 3.1.8 allows specified Technical Specification (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Test Exception LCOs is optional. When a Test Exception LCO is desired to be met but is not met, the ACTIONS of the Test Exception LCO shall be met. When a Test Exception LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall be made in accordance with the other applicable Specifications.

INSERT 1



### INSERT 1

LCO 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.

Attachment 3 Serial: RNP-RA/12-0033  
3 Pages (including cover page)

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2**

**ATTACHMENT 3**

**REVISED AND RETYPED TECHNICAL SPECIFICATIONS PAGES**

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

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LCO 3.0.1 LCOs shall be met during the MODES or other specified conditions in the Applicability, except as provided in LCO 3.0.2, 3.0.7, and 3.0.8.

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LCO 3.0.2 Upon discovery of a failure to meet an LCO, the Required Actions of the associated Conditions shall be met, except as provided in LCO 3.0.5 and LCO 3.0.6.

If the LCO is met or is no longer applicable prior to expiration of the specified Completion Time(s), completion of the Required Action(s) is not required unless otherwise stated.

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LCO 3.0.3 When an LCO is not met and the associated ACTIONS are not met, an associated ACTION is not provided, or if directed by the associated ACTIONS, the unit shall be placed in a MODE or other specified condition in which the LCO is not applicable. Action shall be initiated within 1 hour to place the unit, as applicable, in:

- a. MODE 3 within 7 hours;
- b. MODE 4 within 13 hours; and
- c. MODE 5 within 37 hours.

Exceptions to this Specification are stated in the individual Specifications.

Where corrective measures are completed that permit operation in accordance with the LCO or ACTIONS, completion of the actions required by LCO 3.0.3 is not required.

LCO 3.0.3 is only applicable in MODES 1, 2, 3, and 4.

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LCO 3.0.4 When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall only be made:

(continued)

**3.0 LCO APPLICABILITY**

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LCO 3.0.6  
(continued)

the loss of safety function exists are required to be entered.

When a support system's Required Action directs a supported system to be declared inoperable or directs entry into Conditions and Required Actions for a supported system, the applicable Conditions and Required Actions shall be entered in accordance with LCO 3.0.2.

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LCO 3.0.7

Test Exception LCO 3.1.8 allows specified Technical Specification (TS) requirements to be changed to permit performance of special tests and operations. Unless otherwise specified, all other TS requirements remain unchanged. Compliance with Test Exception LCOs is optional. When a Test Exception LCO is desired to be met but is not met, the ACTIONS of the Test Exception LCO shall be met. When a Test Exception LCO is not desired to be met, entry into a MODE or other specified condition in the Applicability shall be made in accordance with the other applicable Specifications.

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LCO 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

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Attachment 4 Serial: RNP-RA/12-0033  
6 Pages (including cover page)

**H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2**

**ATTACHMENT 4**

**PROPOSED CHANGES TO TECHNICAL SPECIFICATION BASES**



B 3.0 LIMITING CONDITION FOR OPERATION (LCO) APPLICABILITY

BASES

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LCOs LCO 3.0.1 through LCO 3.0.6 establish the general requirements applicable to all Specifications and apply at all times, unless otherwise stated.

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LCO 3.0.1 LCO 3.0.1 establishes the Applicability statement within each individual Specification as the requirement for when the LCO is required to be met (i.e., when the unit is in the MODES or other specified conditions of the Applicability statement of each Specification).

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LCO 3.0.2 LCO 3.0.2 establishes that upon discovery of a failure to meet an LCO, the associated ACTIONS shall be met. The Completion Time of each Required Action for an ACTIONS Condition is applicable from the point in time that an ACTIONS Condition is entered. The Required Actions establish those remedial measures that must be taken within specified Completion Times when the requirements of an LCO are not met. This Specification establishes that:

- a. Completion of the Required Actions within the specified Completion Times constitutes compliance with a Specification; and
- b. Completion of the Required Actions is not required when an LCO is met within the specified Completion Time, unless otherwise specified.

There are two basic types of Required Actions. The first type of Required Action specifies a time limit in which the LCO must be met. This time limit is the Completion Time to restore an inoperable system or component to OPERABLE status or to restore variables to within specified limits. If this type of Required Action is not completed within the specified Completion Time, a shutdown may be required to place the unit in a MODE or condition in which the Specification is not applicable. (Whether stated as a Required Action or not, correction of the entered Condition is an action that may always be considered upon entering ACTIONS.)

(continued)

BASES

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LCO 3.0.7 There are certain special tests and operations required to be performed at various times over the life of the unit.

These special tests and operations are necessary to demonstrate select unit performance characteristics, to perform special maintenance activities, and to perform special evolutions. Test Exception LCO 3.1.8 allows specified Technical Specification (TS) requirements to be changed to permit performances of these special tests and operations, which otherwise could not be performed if required to comply with the requirements of these TS. Unless otherwise specified, all the other TS requirements remain unchanged. This will ensure all appropriate requirements of the MODE or other specified (continued) condition not directly associated with or required to be changed to perform the special test or operation will remain in effect.

The Applicability of a Test Exception LCO represents a condition not necessarily in compliance with the normal requirements of the TS. Compliance with Test Exception LCOs is optional. A special operation may be performed either under the provisions of the appropriate Test Exception LCO or under the other applicable TS requirements. If it is desired to perform the special operation under the provisions of the Test Exception LCO, the requirements of the Test Exception LCO shall be followed.

INSERT 2



## 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. LCO 3.0.8 applies to snubbers that have seismic function only. It does not apply to snubbers that also have design functions to mitigate steam/water hammer or other transient loads. 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.

When applying LCO 3.0.8.a, at least one train of Auxiliary Feedwater (AFW) system must be OPERABLE during MODES when AFW is required to be OPERABLE. When applying LCO 3.0.8.a during MODES when AFW is not required to be OPERABLE, a core cooling method (such as Decay Heat Removal (DHR) system) must be available. When applying LCO 3.0.8.b, a means of core cooling must remain available (AFW, DHR, equipment necessary for feed and bleed operations, etc.). Reliance on availability of a core cooling source during modes where AFW is not required by TSs provides an equivalent safety margin for plant operations were LCO 3.0.8 not applied and meets the intent of Technical Specification Task Force Change Traveler TSTF-372, Revision 4, "Addition of LCO 3.0.8, Inoperability of Snubbers"

When a snubber is to be rendered incapable of performing its related support function (i.e., nonfunctional) for testing or maintenance or is discovered to not be functional, it must be determined whether any system(s) require the affected snubber(s) for system OPERABILITY, and whether the plant is in a MODE or specified condition in the Applicability that requires the supported system(s) to be OPERABLE.

If an analysis determines that the supported system(s) do not require the snubber(s) to be functional in order to support the OPERABILITY of the system(s), LCO 3.0.8 is not needed. If the LCO(S) associated with any supported system(s) are not currently applicable (i.e., the plant is not in a MODE or other specified condition in the Applicability of the LCO), LCO 3.0.8 is not needed. If the supported system(s) are inoperable for reasons other than snubbers, LCO 3.0.8 cannot be used. LCO 3.0.8 is an allowance, not a requirement. When a snubber is nonfunctional, any supported system(s) may be declared inoperable instead of using LCO 3.0.8.

Every time the provisions of LCO 3.0.8 are used, HBRSEP Unit No. 2 will confirm that at least one train (or subsystem) of systems supported by the inoperable snubbers will remain capable of performing their required safety or support functions for postulated design loads other than seismic loads.

A record of the design function of the inoperable snubber (i.e., seismic vs. non-seismic) and the associated plant configuration will be available on a recoverable basis for NRC staff inspection.

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 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.

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 in accordance with LCO 3.0.2.

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

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

LCO 3.0.8 requires that risk be assessed and managed. Industry and NRC guidance on the implementation of 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.

## H. B. ROBINSON STEAM ELECTRIC PLANT, UNIT NO. 2

### ATTACHMENT 5

#### LIST OF REGULATORY COMMITMENTS

The following table identifies those actions committed to by Progress Energy 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 Mr. W. R. Hightower at (843) 857-1329.

<b>REGULATORY COMMITMENTS</b>	<b>DUE DATE/EVENT</b>
Progress Energy will establish the Technical Specification Bases for LCO 3.0.8 as adopted with the applicable license amendment.	Will be completed at the time of implementation of the approved amendment.