**TSTF STATUS as of June 13, 2000**

| TSTF # | Subject | Status |
|---|---|---|
| 016 R.3 | RA added for LCO 3.0.3 Entry on LOF | NRC reviewing |
| 207 R.5 | CT to Restore Excess Leak Rate | Approved |
| 231 R.0 | RPS Instrumentation Bases, B3.3.1.1 | Bases correction |
| 306 R.1 | 3.3.6.1 added Action | Modify; Bases lacking |
| 330 R.0 | UHS TS Changes | OG reviewing |
| 332 R.0 | ECCS RTT | NRC Tech Branch reviewing; note on Cascading not in topical |
| 334 R.0 | Excess Flow Check Valve SR Freq | Approved |
| 339 R.2 | W parameters to COLR | Approved |
| 342 R.1 | SR 3.3.1.5 on PR Cals | OG to provide justification |
| 343 R.0 | Containment Tendon SR & Program | Modify; Working Group to resolve |
| 349 R.1 | Note for deenergizing SDC pumps | Approved |
| 355 R.0 | RPS Instrumentation Bases, B3.3.3.1 | Insert 9 correction |
| 360 R.0 | Consolidated 3.8 Changes | Under NRC review (critical path item) |
| 361 R.0 | Note on TS Suspension during SR Perf | SRXB proposed Mod; discuss |
| 364 R.0 | Bases Control Program update, 50.59 | NRC reviewing, discuss |
| 365 R.0 (TSB-22) | LOP DG Instrumentation, SR 3.3.5.3 | WOG to submit revision |
| TSB-16 | RCP Related P/T Limits | NRC considering |
| TSB-17 | Pzr Level & S/G Level Limits | OG considering |

# Integrated Industry / NRC Priority List for Travelers to be Incorporated into Revision 2

**(Includes all Active Travelers that are not Approved, Withdrawn, or Rejected with Rejection Accepted)**

| Traveler # | Short Title | Traveler Status | Responsibility for Next Action/ Target Date | | NRC Contact/ Date Sent to NRC | Industry Contact |
|---|---|---|---|---|---|---|
| TSTF-16, Rev. 3 | Add Action to LCO 3.8.9 to require entry into LCO 3.0.3 when there is a loss of function | NRC Action Pending | NRC | Unassigned | Tomlinson, Ed 5/9/00 | Pontious, Harry |
| TSTF-207, Rev. 5 | Completion Time for Restoration of Various Excessive Leakage Rates | NRC Action Pending | NRC | Unassigned | Giardina, Bob 5/5/00 | Pontious, Harry |
| TSTF-306, Rev. 1 | Add Action to LCO 3.3.6.1 to give option to isolate the penetration | NRC Action Pending | NRC | Unassigned | Schulten, Carl 3/13/00 | Pontious, Harry |
| TSTF-332, Rev. 0 | ECCS Response Time Testing | NRC Action Pending | NRC | Unassigned | Schulten, Carl 4/30/99 | Pontious, Harry |
| TSTF-334, Rev. 1 | Relaxed Surveillance Frequency for Excess Flow Check Valve Testing | Under TSTF Consideration | TSTF | Unassigned | Giardina, Bob With TSTF | Pontious, Harry |
| TSTF-339, Rev. 2 | Relocate TS Parameters to COLR | NRC Action Pending | NRC | Unassigned | Tjader, Bob 5/26/00 | Wideman, Steve |
| TSTF-342, Rev. 1 | Revise SR 3.3.1.5, Calibration, and associated requirements for power range channels | NRC Action Pending | NRC | Unassigned | Schulten, Carl 3/13/00 | Clarkson, Noel |
| TSTF-349, Rev. 1 | Add Note to LCO 3.9.5 Allowing Shutdown Cooling Loops Removal from Operation | NRC Action Pending | NRC | Unassigned | Tjader, Bob 5/26/00 | Weber, Tom |
| TSTF-360, Rev. 0 | DC Electrical Rewrite | NRC Action Pending | NRC | Unassigned | Tomlinson, Ed 2/25/00 | Clarkson, Noel |
| TSTF-361, Rev. 1 | Allow standby SDC/RHR/DHR loop to inoperable to support testing | NRC Action Pending | NRC | Unassigned | Tjader, Bob 5/5/00 | Weber, Tom |
| TSTF-365, Rev. 0 | Add upper limits to the voltage and time delay setpoints of the loss of voltage relays | NRC Action Pending | NRC | Unassigned | Schulten, Carl 5/26/00 | Wideman, Steve |

ATTACHMENT 2

**Number: 11**

# Technical Specification Snubber Issue

## Introduction

During the past several years numerous plants have converted from their current or custom technical specifications (TS) to the improved standard technical specification (STS). Part of this conversion included the relocation of TS requirements (LCOs, SRs, and Bases) for snubbers to a 10CRF50.59 controlled document such as the TRM. After several of these relocations, the industry noted that the 72 hour AOT that was available when the snubber LCO was in the TS may be interpreted as not being available due to operability issues.

**Problem Statement:** Industry has indicated that it does not have clear guidance on how to deal with the relocated snubber TS. Without the LCO requirement in the TS, the industry feels that there are different and sometimes conflicting views on when (or if) the determination of operability is conducted. This issue should also be discussed in reference to the two train supported systems LCOs.

**Solutions/Options:**

Option 1. Suggest that the Owners group propose a change to the "motherhood" LCOs contained in section 3.0. This change would include a note explaining the supported systems operatility as it pertains to the 72 hour AOT. This change could outline specifics such that the licensee would know that they should do an evaluation (which according to GL 91-18 they should do anyway) determination prior to taking the snubber out of service.

**Pros**

**Cons**

**Solutions/Options:**

Option 2. TSB to develop a RIS to provide detailed information pertaining to the change in the TS relative to the requirements for snubbers.

**Pros**

**Cons**

**Solutions/Options:**

Option 3. Risk Informed track - TSB and TSTF to develop strategy for risk informed methodology that takes into account factors such as location of the snubber, mean time between failures, and likelihood of qualifying seismic event in a particular geographical area.

**Pros**

# REFUELING QUESTIONS

1) What percentage of time during a refueling outage is a plant in Special Operations/Refueling Technical Specification 3.10.6? (Comment: Reading the Refueling and Special Operations LCOs, it would appear that the natural refueling situation of preference would be for the plant to be in 3.10.6 most of the time.)

2) What is the purpose of the TSTF-225 change request? Why is it important?

3) Do plants foresee being in TS 3.9.1 and TS 3.10.6 simultaneously; is this considered acceptable?

4) Operationally, what is the significance of requiring that a Spiral Loading Sequence be used (not the safety significance, but the operational constraints it places on the plant)? What administrative controls/precautions do plants have that do not have the Spiral Reload requirement when they shuffle fuel?

5) Some plants that have a custom TS version of 3.10.6 have the allowance that the "one-rod-out interlock may be bypassed," rather than the ITS allowance that "the full in position indicators may be bypassed." It appears that these custom plants cannot refuel with any control rods withdrawn; is this so?

6) When the TS require, "Verify all control rods are fully inserted in core cells containing one or more fuel assemblies," how is this done?

7) Can the refueling crane operator visually see if a control rod is in the assembly in which he intends to place fuel?

8) What administrative checks do the plants have to ensure that: a) a control rod is in the assembly to be refueled; and b) that there is no fuel in the assembly from which a control rod is to be withdrawn?

9) Have Grand Gulf or River Bend been in a Refueling Outage since adopting TSTF-225? If so, have they entered into TS 3.9.1; why; how often?

CURRENT T.O. C



ATTACHMENT 5

OPT 1

# B 2.1 SAFETY LIMITS (SLs)

## B 2.1.1 Reactor Core SLs

BASES

BACKGROUND

GDC 10 (Ref. 1) requires that reactor core SLs ensure specified acceptable fuel design limits are not exceeded during steady state operation, normal operational transients, and anticipated operational occurrences (AOOs). This is accomplished by having a departure from nucleate boiling (DNB) design basis, which corresponds to a 95% probability at a 95% confidence level (95/95 DNB criterion) that DNB will not occur and by requiring that the fuel centerline temperature stays below the melting temperature.

The restrictions of this SL prevent overheating of the fuel and cladding and possible cladding perforation that would result in the release of fission products to the reactor coolant. Overheating of the fuel is prevented by maintaining the steady state peak linear heat rate (LHR) below the level at which fuel centerline melting occurs. Overheating of the fuel cladding is prevented by restricting fuel operation to within the nucleate boiling regime, where the heat transfer coefficient is large and the cladding surface temperature is slightly above the coolant saturation temperature.

Fuel centerline melting occurs when the local LHR, or power peaking, in a region of the fuel is high enough to cause the fuel centerline temperature to reach the melting point of the fuel. Expansion of the pellet upon centerline melting may cause the pellet to stress the cladding to the point of failure, allowing an uncontrolled release of activity to the reactor coolant.

Operation above the boundary of the nucleate boiling regime could result in excessive cladding temperature because of the onset of DNB and the resultant sharp reduction in heat transfer coefficient. Inside the steam film, high cladding temperatures are reached, and a cladding water (zirconium water) reaction may take place. This chemical reaction results in oxidation of the fuel cladding to a structurally weaker form. This weaker form may lose its integrity, resulting in an uncontrolled release of activity to the reactor coolant.

The proper functioning of the Reactor Protection System (RPS) and main steam safety valves (MSSVs) prevents violation of the reactor core SLs.

PROPOSED

CURRENT → LCO Applicability 3.0.1

# 3.0 LIMITING CONDITION FOR OPERATION (LCO) AND SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

## 3.0.1 LCO Applicability

CONSISTENT

| | |
|---|---|
| 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 3.0.2 | 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.<br><br>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. |
| 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:<br><br>a. MODE 3 within 7 hours,<br><br>b. MODE 4 within 13 hours, and<br><br>c. MODE 5 within 37 hours.<br><br>Exceptions to this Specification are stated in the individual Specifications.<br><br>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.<br><br>LCO 3.0.3 is only applicable in MODES 1, 2, 3, and 4. |
| LCO 3.0.4 | When an LCO is not met, entry into a MODE or other specified condition in the Applicability shall not be made except 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. 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.<br><br>Exceptions to this Specification are stated in the individual Specifications. |

BASES IS SIMILAR W/ B PREFIX i.e. B 3.0 B 3.0.1

PROPOSED

CURRENT →

# 3.0 LIMITING CONDITION FOR OPERATION (LCO) AND SURVEILLANCE REQUIREMENT (SR) APPLICABILITY

CONSISTENT

## 3.0.2 SR Applicability

| | |
|---|---|
| SR 3.0.1 | SRs shall be met during the MODES or other specified conditions in the Applicability for individual LCOs, unless otherwise stated in the SR. Failure to meet a Surveillance, whether such failure is experienced during the performance of the Surveillance or between performances of the Surveillance, shall be failure to meet the LCO. Failure to perform a Surveillance within the specified Frequency shall be failure to meet the LCO except as provided in SR 3.0.3. Surveillances do not have to be performed on inoperable equipment or variables outside specified limits. |
| SR 3.0.2 | The specified Frequency for each SR is met if the Surveillance is performed within 1.25 times the interval specified in the Frequency, as measured from the previous performance or as measured from the time a specified condition of the Frequency is met.<br><br>For Frequencies specified as "once," the above interval extension does not apply.<br><br>If a Completion Time requires periodic performance on a "once per . . ." basis, the above Frequency extension applies to each performance after the initial performance.<br><br>Exceptions to this Specification are stated in the individual Specifications. |
| SR 3.0.3 | If it is discovered that a Surveillance was not performed within its specified Frequency, then compliance with the requirement to declare the LCO not met may be delayed, from the time of discovery, up to 24 hours or up to the limit of the specified Frequency, whichever is less. This delay period is permitted to allow performance of the Surveillance.<br><br>If the Surveillance is not performed within the delay period, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered.<br><br>When the Surveillance is performed within the delay period and the Surveillance is not met, the LCO must immediately be declared not met, and the applicable Condition(s) must be entered. |
| SR 3.0.4 | Entry into a MODE or other specified condition in the Applicability of an LCO shall not be made unless the LCO's Surveillances have been met within their specified Frequency. This provision shall not prevent entry |

BASES IS SIMILAR

# B 3.1 REACTIVITY CONTROL SYSTEMS

## B 3.1.1 SHUTDOWN MARGIN (SDM)

BASES

Current Bases

BACKGROUND

The reactivity control systems must be redundant and capable of holding the reactor core subcritical when shut down under cold conditions GDC 26 (Ref. 1). SDM requirements provide sufficient reactivity margin to ensure that acceptable fuel design limits will not be exceeded for normal shutdown and anticipated operational occurrences (AOOs). In MODES 3, 4, and 5, the SDM defines the degree of subcriticality that would be obtained immediately following the insertion of all safety and regulating rods, assuming the single CONTROL ROD assembly of highest reactivity worth is fully withdrawn.

The system design requires that two independent reactivity control systems be provided, and that one of these systems be capable of maintaining the core subcritical under cold conditions. These requirements are provided by the use of movable control assemblies and soluble boric acid in the Reactor Coolant System (RCS). The CONTROL RODS can compensate for the reactivity effects of the fuel and water temperature changes accompanying power level changes over the range from full load to no load. In addition, the CONTROL RODS, together with the Chemical Addition and Makeup System, provide SDM during power operation and are capable of making the core subcritical rapidly enough to prevent exceeding acceptable fuel damage limits, assuming that the rod of highest reactivity worth remains fully withdrawn.

The Chemical Addition and Makeup System can compensate for fuel depletion, during operation and all xenon burnout reactivity changes, and maintain the reactor subcritical under cold conditions.

During power operation, SDM control is ensured by operating with the safety rods fully withdrawn (LCO 3.1.5, "Safety Rod Insertion Limits") and the regulating rods within the limits of LCO 3.2.1, "Regulating Rod Insertion Limits." When the unit is in the shutdown and refueling modes, the SDM requirements are met by means of adjustments to the RCS boron concentration. Adjusted SDM limits defined in the COLR preclude recriticality in the event of a main steam line break (MSLB) in MODE 3, 4, or 5 when high steam generator levels exist.

DRAFT

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

Docket No.50-

Dear Sirs:

Enclosed is an application for amendment to Facility Operating License Nos. [ ] pursuant to 10 CFR 50.90. This license amendment request (LAR) requests the incorporation of TSTF No. xxxx, "Elimination of Requirements for Post Accident Sampling (PASS)," into the technical specifications for [plant]. This availability of this technical specification improvement was announced in the Federal Register on [date] as part of the consolidated line item improvement process.

A description of the proposed TS change, and the requested confirmation of applicability and plant-specific verifications and commitments are provided in Enclosure A. The proposed TS change is noted on the marked-up copy of the current TS page provided in Enclosure B and the revised TS page provided in Enclosure C.

I am authorized to make this request on behalf [licensee], I am familiar with the content of this application, and that the facts stated herein are true and correct to the best of my knowledge, information, and belief.

Sincerely

Enclosure A

Applicability of Published Safety Evaluation

We have reviewed the safety evaluation published as part of the consolidated line item improvement process (CLIIP). This verification included a review of the NRC staff's evaluation as well as the supporting information provided to support the TSTF (i.e., Combustion Engineering Owner's Group (CEOG) topical report CE NPSD-1157, Revision 1, "Technical Justification for the Elimination of the Post-Accident Sampling System From the Plant Design and Licensing Bases for CEOG Utilities" submitted May 5, 1999 (as supplemented by letter dated April 14, 2000, OR Westinghouse Owners Group (WOG) topical report WCAP-14986, "Post Accident Sampling System Requirements: A Technical Basis," submitted October 26, 1998 (as supplemented by letters dated April 28, 1999, April 10, 2000, and May 22,2000). We have concluded that the justifications presented in the TSTF proposal and the safety evaluation prepared by the NRC staff are applicable to [] and justify this amendment for the incorporation of the changes to the technical specifications for [plant].

Verifications and Commitments

As recommended in the notice of availability for this technical specification improvement, we offer the following plant-specific verifications and commitments.

1. We have verified that we have and make a regulatory commitment to maintain contingency plans for obtaining and analyzing highly radioactive samples of reactor coolant, containment sump, and containment atmosphere. The plan is contained in our severe accident management guidelines. We have implemented the regulatory commitment.

4.2 We make a regulatory commitment to develop and maintain a capability for classifying fuel damage events at the Alert level threshold (typically this is 300 $\mu$Ci/ml dose equivalent iodine). This capability will be described in our emergency plan implementing procedures. We will implement the regulatory commitment on or before January 1, 2001.

4.3 We have verified that we have and and make a regulatory commitment to maintain the capability to monitor radioactive iodines that have been released to offsite environs. This capability is described in our emergency plan implementing procedures. We have implemented the regulatory commitment.

Proposed No Significant Hazards Consideration Determination

We have reviewed the proposed no significant hazards consideration determination published as part of the consolidated line item improvement process (CLIIP). We have concluded that the proposed determination presented in the notice is applicable to [plant] and we hereby incorporate, by reference, that determination to satisfy the requirements of 10 CFR 50.91(a).

Enclosure B

Redline/Strikeout version of TS Pages

Enclosure C

"Camera Ready" version of tech spec pages