

July 25, 2007

Technical Specifications Task Force (TSTF)  
11921 Rockville Pike  
Suite 100  
Rockville, MD 20852

SUBJECT: TSTF TRAVELER 493, REVISION 2, "CLARIFY APPLICATION  
OF SETPOINT METHODOLOGY FOR LSSS FUNCTIONS."  
DOCKET NO: PROJ0753; TAC MD5249

Dear Members of the TSTF:

By letter (Agencywide Document and Management Systems (ADAMS) Accession Number ML071070421), dated April 16, 2007, you requested the Nuclear Regulatory Commission (NRC) review and make available under the Consolidated Line Item Improvement Process (CLIIP), TSTF Traveler 493, Revision 2, "Clarify Application of Setpoint Methodology for LSSS Functions." By letter (ADAMS Accession Number ML071440183), dated May 24, 2007, the NRC staff determined the TSTF was sufficiently complete to initiate a more comprehensive review consistent with your request.

The NRC staff comprehensive review is complete and the results of this review identified a number of issues (Enclosure 1) in addition to text revisions to the Traveler (Enclosures 2 - 6), that need to be resolved in order for the Traveler to be approved and made available as a CLIIP TSTF. The following sections of the Traveler are affected: Description (Section 1.0); Proposed Change (Section 2.0); Background (Section 3.0); Technical Analysis (Section 4.0) References (Section 7.0); and the Traveler Bases for each of the vendor NUREGs (NUREGs 1430-1434). To assist you in responding to the scope of comments included in the comprehensive review, Enclosures 2 through 6 contain the NRC staff comments using the MS-Word Reviewer format for text additions and deletions. The changes in these enclosures emphasize consistent use and application of terminology and content of the Bases to ensure the regulatory requirements in the application of the setpoint methodology for LSSS are clarified in each of the NUREGs.

The TSTF must notify the NRC, in writing, if it requires longer than 90 days to respond to this request. If the TSTF does not respond in 90 days, and does not request an extension, the NRC staff may terminate review of TSTF-493.

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If you have any questions related to this issue or action please contact Carl Schulten at (301) 415-1192 or e-mail [css1@nrc.gov](mailto:css1@nrc.gov).

Sincerely,

***/RA/***

Timothy J. Kobetz, Chief  
Technical Specifications Branch  
Division of Inspection and Regional Support  
Office of Nuclear Reactor Regulation

cc: See next page

Enclosures:  
As stated

TSTF

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If you have any questions related to this issue or action please contact Carl Schulten at (301) 415-1192 or e-mail [css1@nrc.gov](mailto:css1@nrc.gov).

Sincerely,

**/RA/**

Timothy J. Kobetz, Chief  
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cc: See Next Page

Enclosures:  
As stated

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## TSTF-493 Traveler Requests for Information

1. Identify the screening criteria used by the TSTF for deciding whether a BWR Technical Specifications (TS) Instrumentation Function is a Safety Limit related (SL-related) or non-Safety Limit (non-SL) related Limiting Safety System Settings (LSSS). For example, BWR/4 and BWR/6 instrument functions for Drywell Pressure High, Suppression Pool Water Level High and Reactor Vessel Water Level –Low Low Low are not denoted as SL-related LSSS and no justification is included in the TSTF for this determination.
2. For each instrument function not labeled as a SL-LSSS, revise the Bases for the instrument function to include the justification for the determination. For setpoint verification surveillance tests conducted on these functions, also revise these surveillance test Bases to include performance-based acceptance criteria (similar to the Notes 1 & 2 for SL LSSS) to ensure the agreement concepts for TS non-SL LSSS safety-related instrument setpoints and allowable values are addressed. The agreement concepts referred to are those in the Nuclear Energy Institute (NEI) letter to Mr. James Lyons (NRC) from Alexander Marion (NEI) dated May 18, 2005 and the NRC letter response to Mr. Alexander Marion (NEI) from Mr. Bruce Boger, dated August 23, 2005.
3. Correct the TSTF definition of SL-LSSS by deleting the word “directly” to be consistent with the requirements of 10 CFR 50.36 which specify SL LSSS as variables “on which a SL has been placed.” The TSTF definition must be consistent with regulatory requirements. The TSTF justification states that Notes 1 and 2 are applied to Functions which are Safety Limit Limiting Safety System Settings (SL-LSSS), considering the following definition of SL-LSSS:

“Trip Setpoints for Functions which provide automatic trips that directly (emphasis added) protect against violating the Reactor core and the Reactor Coolant System (RCS) pressure boundary Safety Limits during anticipated operational occurrences (AOOs) are Safety Limit Limiting Safety System Settings (SL-LSSS).”
4. Revise the TSTF Bases Reviewers Note 3 as (changes shown in comparative text format) follows:

“Notes [1] and [2] ~~are not applied~~ may not apply to SL-LSSS Functions and Surveillances which test only digital components. For purely digital components, (such as actuation logic and associated relays) there is no expected change in result between surveillance performances other than measurement and test errors (M&TE) ~~and therefore, justification is needed to confirm that~~ comparison of Surveillance results does not provide an indication of channel or component performance.”

The NRC staff has issued license amendments that include modified versions of Notes 1 and 2 for Surveillances which test digital components. Similarly, the

TSTF guidance should not categorically exclude applying the notes to digital components.

5. Include a second version (Option B) to TSTF-493, Revision 2. The format and content of Option B should be modeled after the Section 3.3 Instrumentation TS in ESBWR Design Control Document, Tier 2, Chapter 16, Technical Specifications and Bases dated 12/15/2006, ADAMS Accession Numbers ML070110098 and ML070110101, respectfully.

For this option, the TS instrument table Allowable Values are replaced with Analytical Limits for Safety Limit (SL) Limiting Safety System Settings (LSSS) and with Design Limits for non-SL LSSS. Also for this option, a Setpoint Control Program (SCP) is added to the programmatic requirements in Section 5.0, Administrative Controls. The SCP contains the TSTF Table notes 1 and 2, references to the NRC staff SE containing the approved setpoint methodology, identifies the licensee controlled document that contains the SL-LSSSs, Limiting Trip Setpoint, Nominal Trip Setpoint, Allowable Values, As-found tolerance band, and As-left setting tolerance. Each instrument surveillance requirement which verifies a LSSS (both SL and non-SL LSSSs) contains a requirement to perform the surveillance test in accordance with the SCP.

6. Incorporate the comments on the TSTF Justification provided in Enclosure 2.
7. Incorporate the comments of the TSTF Bases provided in Enclosures 3 through 6.
8. Delete Appendix A, "TSTF 493 History" in its entirety. TSTF Appendix A contains references to non-NRC staff (i.e., TSTF) meeting notes and summaries related to the development of industry and NRC staff agreements that resulted in TSTF-493, Rev. 2.

Enclosure 2

TSTF-493 Justification

ADAMS ACCESSION NUMBER:

ML072070251

Enclosure 3

TSTF-493 BWOOG Bases

ADAMS ACCESSION NUMBERS:

3a- ML0702070260

3b - ML0702070269



Enclosure 4

TSTF-493 BWROG Bases

ADAMS ACCESSION NUMBERS:

4a - ML072070355  
4b - ML072070358  
4c - ML072120059  
4d - ML072120076  
4e - ML072120083  
4f - ML072120091  
4g - ML072120096  
4h - ML072120100  
4i - ML072120105  
4j - ML0721210111  
4k - ML072120119

Enclosure 5

TSTF-493 CEOG Bases

ADAMS ACCESSION NUMBERS:

5a - ML072120145

5b - ML072120153

5c - ML072120162

5d - ML072120164

Enclosure 6

TSTF-493 WOG Bases

ADAMS ACCESSION NUMBERS:

6a - ML072120165

6b - ML072120168