

March 11, 2008

TSTF-08-07
PROJ0753U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

SUBJECT: Proposed Model Application for TSTF-500, Revision 0, "DC Electrical Rewrite - Update to TSTF-360"

TSTF-500, Revision 0, "DC Electrical Rewrite - Update to TSTF-360," was submitted to the NRC for review on August 31, 2007. The TSTF requested that the Traveler be processed under the Consolidated Line Item Improvement Process (CLIP). In subsequent discussions, the NRC requested that the TSTF provide a proposed model application to be published with the TSTF-500 CLIP Notice for Comment and Notice of Availability. The proposed model application is enclosed.

Should you have any questions, please do not hesitate to contact us.



Bert Yates (PWROG/W)



John Messina (BWROG)



David Bice (PWROG/CE)



Reene' Gambrell (PWROG/B&W)

Enclosure

cc: Gerald Waig, Technical Specifications Branch, NRC
Matthew Hamm, Technical Specifications Branch, NRC

**Proposed Model Application for the CLIIP Notice for Comment for TSTF-500,
"DC Electrical Rewrite - Update to TSTF-360"**

[DATE]

U. S. Nuclear Regular Commission
Document Control Desk
Washington, DC 20555

SUBJECT: PLANT NAME
DOCKET NO. 50-[xxx]
APPLICATION TO REVISE TECHNICAL SPECIFICATIONS
REGARDING D C ELECTRICAL SYSTEMS TSTF-500, REVISION 0,
"DC ELECTRICAL REWRITE – UPDATE TO TSTF-360," USING THE
CONSOLIDATED LINE ITEM IMPROVEMENT PROCESS

Dear Sir or Madam:

In accordance with the provisions of 10 CFR 50.90, [LICENSEE] is submitting a request for an amendment to the technical specifications (TS) for [PLANT NAME, UNIT NOS.].

The proposed amendment would modify TS requirements related to direct current (DC) electrical systems in accordance with TSTF-500, Revision 0, "DC Electrical Rewrite - Update to TSTF-360."

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

[LICENSEE] requests approval of the proposed license amendment by [DATE], with the amendment being implemented [BY DATE OR WITHIN X DAYS].

In accordance with 10 CFR 50.91, a copy of this application, with attachments, is being provided to the designated [STATE] Official.

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[In accordance with 10 CFR 50.30(b), a license amendment request must be executed in a signed original under oath or affirmation. This can be accomplished by attaching a notarized affidavit confirming the signature authority of the signatory, or by including the following statement in the cover letter: "I declare under penalty of perjury that the foregoing is true and correct. Executed on (date)." The alternative statement is pursuant to 28 USC 1746. It does not require notarization.]

If you should have any questions regarding this submittal, please contact [NAME, TELEPHONE NUMBER].

Sincerely,

[Name, Title]

Attachments: 1. Description and Assessment
2. Proposed Technical Specification Changes (Mark-Up)
[3. Revised Technical Specification Pages]
[4].Regulatory Commitments
[5].Proposed Technical Specification Bases Changes (Mark-Up)

Enclosures: 1. Letters from Battery Manufacturers Verifying the Acceptability of Using Float Current Monitoring
[2. Evaluation of an Extended Completion Time for Specification[s] [3.8.4, Required Action A.3 and 3.8.5, Required Action A.3]
[3. Evaluation of an Extended Completion Time for Specification[s] [3.8.4, Required Actions B.1 and C.1]

cc: NRC Project Manager
NRC Regional Office
NRC Resident Inspector
State Contact

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ATTACHMENT 1 - DESCRIPTION AND ASSESSMENT

1.0 DESCRIPTION

The proposed amendment would modify technical specification (TS) requirements related to direct current (DC) electrical systems in LCO 3.8.[4], ["DC Sources - Operating,"] LCO 3.8.[5], ["DC Sources - Shutdown,"] and LCO 3.8.[6], ["Battery Parameters."] A new "Battery Monitoring and Maintenance Program" is being proposed for Section 5.5 ["Administrative Controls - Programs and Manuals."]

The changes are consistent with Nuclear Regulatory Commission (NRC) approved Industry/Technical Specification Task Force (TSTF) change TSTF-500, Revision 0. The availability of this TS improvement was published in the Federal Register on [DATE] as part of the consolidated line item improvement process (CLIIP).

2.0 ASSESSMENT

2.1 Applicability of Published Safety Evaluation

[LICENSEE] has reviewed the model safety evaluation dated [DATE] as part of the CLIIP Federal Register Notice for Comment. This review included a review of the NRC staff's evaluation, as well as the supporting information provided to support TSTF-500. [As described in the subsequent paragraphs,][LICENSEE] has concluded that the justifications presented in the TSTF-500 proposal and the model safety evaluation prepared by the NRC staff are applicable to [PLANT, UNIT NOS.] and justify this amendment for the incorporation of the changes to the [PLANT] TS.

[The [PLANT] TS utilize different [numbering][and][titles] than the Standard Technical Specifications on which TSTF-500 was based. Specifically, [describe differences between the plant-specific TS numbering and/or titles (including Required Actions and Surveillances) and the TSTF-500 numbering and titles.] [In addition, TSTF-500 deletes certain Surveillances and renumbers the subsequent Surveillances. [LICENSEE] has chosen to retain the deleted Surveillance numbers, mark them "Deleted," and to not renumber the subsequent Surveillances. These differences are administrative and do not affect the applicability of TSTF-500 to the [PLANT] TS.]

[The [PLANT] DC system design differs from the design assumed for the standard plant described in the Standard Technical Specifications Bases and TSTF-500. [Describe significant differences between the plant-specific DC system design and the reference design described in the STS Bases. For each difference, justify why the published Safety Evaluation continues to be applicable to the plant-specific design.]

[The [PLANT] Technical Specifications differ from the Standard Technical Specifications which were the basis for TSTF-500. [Describe any non-administrative differences between the changes proposed in the plant-specific amendment and changes proposed in TSTF-500,

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such as Required Actions or Surveillances that are affected by TSTF-500 that do not exist in the plant-specific TS or features in the plant-specific TS that are affected by the proposed amendment that do not appear in the TSTF-500. For each difference, justify why the published safety evaluation continues to be applicable to the plant-specific amendment.]

2.2 Verifications and Regulatory Commitments

As described in Section 4.7.1, "Verifications," in TSTF-500, [LICENSEE] provides the following verifications.

1. In Enclosure 1, [LICENSEE] has provided letter(s) from the manufactures of the batteries used at [PLANT] verifying the acceptability of using float current monitoring instead of specific gravity monitoring as a reliable and accurate indication of the state-of-charge of the battery and that this will hold true over the life of the battery.
2. [LICENSEE] verifies that battery room temperature is routinely monitored such that a room temperature excursion could reasonably expect to be detected and corrected prior to the average battery electrolyte temperature dropping below the minimum electrolyte temperature.
3. [LICENSEE] verifies that the equipment that will be used to monitor float current under SR [3.8.6.1] will have the necessary accuracy and capability to measure electrical currents in the expected range.
4. [LICENSEE] verifies that there is an appropriate basis for the relocated cell connection resistance limit ([150] μ Ohm or a revised monitoring value) which are relocated to the Battery Monitoring and Maintenance Program. [Provide a brief description of the basis for the relocated cell connection resistance limit.]
5. [LICENSEE] is proposing to delete the [SR 3.8.4.7 (now SR 3.8.4.3)] Note "once per 60 months" restriction on performing the modified performance discharge test instead of the service test. [LICENSEE] has confirmed that the modified performance discharge test completely encompasses the load profile of the battery service test and that it adequately confirms the intent of the service test to verify the battery capacity to supply the design basis load profile.

As described in Section 4.7.2, "Commitments," in TSTF-500, [LICENSEE] makes the following regulatory commitments.

1. [LICENSEE] commits to include in a licensee-controlled program that is controlled under 10 CFR 50.59 a requirement to maintain a [5] percent design margin for the batteries which corresponds to a [2] amp float current value that is an indication that the battery is [95] percent charged.

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2. [LICENSEE] commits to relocate the limits on cell voltage and electrolyte level to a licensee-controlled program, required and described in TS Section 5.5, "Programs and Manuals," and titled the "Battery Monitoring and Maintenance Program." [LICENSEE] commits to control changes to the values under 10 CFR 50.59. The licensee-controlled program will include a requirement to implement actions if the battery parameter values are not met.
3. [LICENSEE] commits that the licensee-controlled program, required and described in TS Section 5.5, "Programs and Manuals," and titled the "Battery Monitoring and Maintenance Program," will require obtaining specific gravity readings of all cells at each discharge test, consistent with manufacturer recommendations.
4. [LICENSEE] commits to a licensee-controlled program that will require the availability of a means to charge the batteries that is capable of being supplied power from a power source that is independent of the offsite power supply.] (Applicable to plants which use this justification for an extended Completion Time for Specification[s] [3.8.4, Required Actions A.3 and/or B.1, and 3.8.5, Required Action A.3].)

2.3 Optional Changes and Variations

[LICENSEE is not proposing any variations or deviations from the TS changes described in the TSTF-500, Revision 0, or the applicable parts of the NRC staff's model safety evaluation dated [DATE].] [LICENSEE is proposing the following variations from the TS changes described in the TSTF-500, Revision 0, or the applicable parts of the NRC staff's model safety evaluation dated [DATE]. These options were recognized as acceptable variations in TSTF-500 and the NRC staff's model safety evaluation.]

[[Specification [3.8.4], Required Action A.2, applies when one [or two] battery charger[s] on one train [being changed to subsystem] are inoperable. The Required Actions return the battery to the fully charged state and restore a fully qualified battery charger to Operable status in a reasonable time period. Required Action A.2 states that the battery float current must be verified to be \leq [2] amps once per [12] hours. Consistent with the Reviewer's Note in the Bases, [LICENSEE] has determined that [PLANT] cannot meet the 12 hour Completion Time proposed in TSTF-500 due to an inherent battery charging characteristic. [Describe the inherent battery charging characteristics that prevents charging within 12 hours]. [LICENSEE] proposes a Completion Time for Required Action A.2 of [XX] hours, which is equal to 2 hours plus the time experienced to accomplish the exponential charging current portion of the battery charge profile following the service test.]

[[LICENSEE] is proposing a Completion Time longer than 72 hours for Specification[s] [3.8.4, Required Action A.3, and 3.8.5, Required Action A.3]. As described in TSTF-500 and the Bases Reviewer's Notes, an evaluation supporting the longer Completion Time is included as Enclosure 2. The evaluation confirms the availability of a spare battery charger that is appropriately sized. [This evaluation is performed in accordance with the guidance

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provided in Regulatory Guide (RG) 1.177, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," and RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis." [The Completion Time is justified by a regulatory commitment that a means to charge the batteries will be available that is capable of being supplied power from a power source that is independent of the offsite power supply. [Describe the power source.]]

[[LICENSEE] is proposing a Completion Time longer than 2 hours for Specification [3.8.4, Required Action B.1 and C.1]. As described in TSTF-500 and the Bases Reviewer's Notes, a risk evaluation supporting the longer Completion Time is included as Enclosure 3. This evaluation is in accordance with the guidance provided in Regulatory Guide (RG) 1.177, "An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications," and RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis."]

[LICENSEE] is proposing to adopt Specification [3.8.4], Condition B. Condition B is included because Required Action B.1 (battery inoperable) and Required Action C.1 (DC electrical power subsystem inoperable) should have different Completion Times. [Describe why there should be different Completion Times.]

3.0 REGULATORY ANALYSIS

3.0 No Significant Hazards Consideration Determination

[LICENSEE] has reviewed the proposed no significant hazards consideration determination (NSHCD) published in the Federal Register as part of the CLIIP. [LICENSEE] has concluded that the proposed NSHCD presented in the Federal Register notice is applicable to [PLANT] and is hereby incorporated by reference to satisfy the requirements of 10 CFR 50.91(a).

4.0 ENVIRONMENTAL EVALUATION

[LICENSEE] has reviewed the environmental evaluation included in the model safety evaluation dated [DATE] as part of the CLIIP. [LICENSEE] has concluded that the staff's findings presented in that evaluation are applicable to [PLANT] and the evaluation is hereby incorporated by reference for this application.

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**ATTACHMENT 2 - PROPOSED TECHNICAL SPECIFICATION CHANGES
(MARK-UP)**

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[ATTACHMENT 3 - REVISED TECHNICAL SPECIFICATION PAGES]

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ATTACHMENT [4] - REGULATORY COMMITMENTS

The following table identifies those actions committed to by [LICENSEE] 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 [CONTACT NAME].

REGULATORY COMMITMENTS	DUE DATE / EVENT
[LICENSEE] commits to include in a licensee-controlled program that is controlled under 10 CFR 50.59 a requirement to maintain a [5] percent design margin for the batteries which corresponds to a [2] amp float current value that is an indication that the battery is [95] percent charged.	Upon implementation of the approved TS amendment
[LICENSEE] commits to relocate the limits on cell voltage and electrolyte level to a licensee-controlled program, required and described in TS Section 5.5, "Programs and Manuals," and titled the "Battery Monitoring and Maintenance Program." [LICENSEE] commits to control changes to the values under 10 CFR 50.59. The licensee-controlled program will include a requirement to implement actions if the battery parameter values are not met.	Upon implementation of the approved TS amendment
[LICENSEE] commits that the licensee-controlled program, required and described in TS Section 5.5, "Programs and Manuals," and titled the "Battery Monitoring and Maintenance Program," will require obtaining specific gravity readings of all cells at each discharge test, consistent with manufacturer recommendations.	Upon implementation of the approved TS amendment
[[LICENSEE] commits to a licensee-controlled program that will require the availability of a means to charge the batteries that is capable of being supplied power from a power source that is independent of the offsite power supply.] (Applicable to plants which use this justification for an extended Completion Time for Specification[s] [3.8.4, Required Action(s) A.3 and/or B.1, and 3.8.5, Required Action A.3]).]	Upon implementation of the approved TS amendment
[LICENSEE] commits to implement Technical Bases changes consistent with the Bases in TSTF-500 in accordance with the Technical Specifications Bases Control Program.	Upon implementation of the approved TS amendment

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**ATTACHMENT [5] - PROPOSED CHANGES TO TECHNICAL SPECIFICATION
BASES CHANGES (MARK-UP)PAGES**

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**ENCLOSURE 1 - LETTER(S) FROM BATTERY MANUFACTURERS VERIFYING
THE ACCEPTABILITY OF USING FLOAT CURRENT MONITORING**

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**[ENCLOSURE 2 - EVALUATION OF AN EXTENDED COMPLETION TIME FOR
SPECIFICATION[S] [3.8.4, REQUIRED ACTION A.3 AND 3.8.5, REQUIRED
ACTION A.3]**

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**[ENCLOSURE 3 - EVALUATION OF AN EXTENDED COMPLETION TIME FOR
SPECIFICATION[S] [3.8.4, REQUIRED ACTIONS B.1 AND C.1]**