



South Texas Project Electric Generating Station P.O. Box 289 Wadsworth, Texas 77483

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U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

South Texas Project
Units 1 and 2
Docket Nos. STN 50-498; STN 50-499; 72-1041
Changes to South Texas Project Electric Generating Station Emergency Plan

In accordance with 10 CFR 50.4(b)(5) and 10 CFR 72.4, STP Nuclear Operating Company (STPNOC) hereby submits the enclosed change to the Emergency Plan. Contrary to the requirements of 10 CFR 50.54(q)(5), a letter was not submitted to the NRC regarding a change to the emergency plan by July 24, 2020 and has been captured in the South Texas Project Corrective Action Program. This letter fulfills the requirements of 10 CFR 50.54(q)(5) and 10 CFR 72.4.

These changes do not represent a reduction in effectiveness and do not require NRC approval prior to implementation in accordance with the provisions of 10 CFR 50.54(q).

There are no commitments contained within this letter.

A complete description of changes for the revised document and the summary of analysis are attached to this letter.

If there are any questions regarding this matter, please contact Ali Albaaj at (361) 972-8949 or me at (361) 972-8767.

Joseph D. Enoch
Manager, Emergency Response

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Attachment: Description of Changes / Summary of Analysis for Change to STPEGS EAL Technical Basis Manual

cc:

Director, Division of Fuel Management
Office of Nuclear Material Safety and
Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Regional Administrator, Region IV
U.S. Nuclear Regulatory Commission
1600 East Lamar Boulevard
Arlington, TX 76011-4511

Description of Changes / Summary of Analysis for Change to STPEGS EAL Technical Basis Manual

1. Description of Change

The South Texas Project Electric Generating Station (STPEGS) Emergency Action Level (EAL) Technical Basis Manual, Addendum 1, basis for EAL condition CU4 regarding Loss of DC Power, was revised to provide a simpler basis for users following discussions with operations personnel.

2. 10 CFR 50.54(q) Summary of Analysis Evaluation for Change

The previous set of examples lead to confusion, as the attempt to provide examples for different Modes results in examples that are correct for one mode but incorrect for another. The development of precise examples for the differing modes would add unnecessary complexity and is not warranted. In replacement of the examples, a statement identifying what is meant by a required Vital DC bus and (i.e., the purpose of Vital DC in these modes) and examples of what equipment types and monitoring instruments were added. The elimination of the examples and the clarification of “required Vital DC bus” avoids confusion. These changes were made in alignment with NEI 99-01, Revision 6 guidance. This change does not alter the intent of the Emergency Classification Levels (ECLs), Initiating Conditions (ICs), EALs, or the Classification process.

This change does not impact the ability of the Emergency Response Organization’s (ERO) ability to respond to an emergency. The organization’s ability for coping with radiological emergencies will not change. The ERO’s overall function for ensuring the health and safety of employees and the public during an accident are not altered with this change.

The changes made in Revision 2 of the STPEGS EAL Technical Basis Manual continue to meet the following conditions, regulations, or guidance to ensure that prior approval is not needed by the NRC for these changes.

Specifically, the change:

- Does not reduce the effectiveness of the emergency plan or its implementing procedures.
- Does not reduce the capability to perform an emergency planning function.
- Continues to comply with 10 CFR Part 50.47, Emergency plans, section (b) standards.
- Continues to comply with Appendix E to 10 CFR Part 50, Emergency Planning and Preparedness for Production and Utilization Facilities requirements.
- Continues to meet the elements in NUREG-0654/FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants.

3. Change

The following table displays the original text, the modified text, and the justification for the change.

Previous Revision 1, Effective Date – November 2015 Addendum 1, CU4 Loss of DC Power Basis	As Modified Revision 2 Addendum 1, CU4 Loss of DC Power Basis	Justification
<p>As used in this EAL, “required” means the Vital DC buses necessary to support operation of the in-service, or operable, train or trains of SAFETY SYSTEM equipment. If Vital DC power Train A and C are both lost, the ability to monitor and control cold shutdown or refueling parameters using QDPS is lost and a declaration of an UNUSUAL EVENT would be warranted.</p> <p>As another example, if Train A and C are out-of-service (inoperable) for scheduled outage maintenance work and Train B is in-service (operable), then a loss of Vital DC power to Train B for 15 minutes or longer would result in a loss of control of the operable SAFETY SYSTEM requiring the declaration of an UNUSUAL EVENT. In this scenario, a loss of Vital DC power to Train A and/or C for 15 minutes or longer while Vital DC power to Train B is available, would not warrant an emergency classification unless the loss of Train A and/or C Vital DC power would result in a loss of the ability to monitor or control the cold shutdown or refueling parameters necessary for Train B operation.</p> <p>As another example, if Train C is out-of-service (inoperable) for scheduled outage maintenance work, with Train A in standby (operable) and Train B in-service (operable), then a loss of Vital DC power to Train B would result in a loss of control of an operable SAFETY SYSTEM. However, if Train A is still operable, then declaration of an UNUSUAL EVENT is not required. In this scenario, a loss of Vital DC power to Train A for 15 minutes or longer while Vital DC power to Train B is available, would not warrant an emergency classification unless the loss of Train A would result in a loss of the ability to monitor or control the cold shutdown or refueling parameters necessary for Train B operation.</p>	<p>As used in this EAL, “required” Vital DC Buses would be the Vital DC buses that support operable trains of equipment required to maintain the plant in a safe shutdown condition.</p> <p>The loss of these required Vital DC buses would affect both remote equipment operation (e.g., breaker control power) as well as monitoring instrumentation (e.g. RHR cooling, reactivity control, RCS inventory control, RCS temperature indication, RVWL, Pzr level, nuclear instrumentation, etc.).</p>	<p>This basis was considered to be confusing for the user. Discussions with operations personnel (SROs, instructors, former SM) resulted in the determination that the examples will always be confusing and contradictory since both Modes 5 and 6 are part of the EAL, and requirements for Vital DC power vary. Decision was made to remove the STP examples, as is allowed by NEI 99-01, Rev 6 guidance, and replace with a statement identifying what is meant by a required Vital DC bus and (i.e., the purpose of Vital DC in these modes) and examples of what equipment types and monitoring instruments.</p> <p>(CR 18-9203)</p>