



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

May 4, 2022  
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File.: Z18  
10 CFR 50.4(b)(5)  
10 CFR 50.54(q)(5)  
10 CFR 72.4  
10 CFR 72.44(f)  
STI: 35312109

ATTN: Document Control Desk  
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  
Change to South Texas Project Electric Generating Station (STPEGS) Emergency Plan

In accordance with 10 CFR 50.4(b)(5), 10 CFR 50.54(q)(5), 10 CFR 72.4, and 10 CFR 72.44(f), STP Nuclear Operating Company (STPNOC) hereby submits the attached change to the STPEGS Emergency Plan.

STPNOC has evaluated this change in accordance with 10 CFR 50.54(q) and determined that it does not represent a reduction in the effectiveness of the Emergency Plan and that the Plan, as changed, continues to meet the standards of 10 CFR 50.47(b) and the requirements of 10 CFR 50, Appendix E. A complete description of changes and a 10 CFR 50.54(q)(5) summary conclusion for the changes is included as Attachment 1. All enclosed changes were made effective on April 6, 2022.

There are no commitments in this letter.

If there are any questions regarding this matter, please contact Zachary Dibbern at (361) 972-4336 or me at (361) 972-4283.

Gregory Cramer  
Manager, Emergency Response

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Attachment: Summary of Analysis and Description of Changes to the STPEGS Emergency Plan

cc:

Regional Administrator, Region IV  
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1600 E. Lamar Boulevard  
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## Summary of Analysis and Description of Changes to the STPEGS Emergency Plan

## 1. EP-0001.000 STPEGS Emergency Plan

STPNOC submitted a License Amendment Request (LAR) on March 30, 2020 to revise the STPEGS Emergency Plan. This LAR was approved by the NRC on April 7, 2021 and implemented on April 6, 2022. Necessary changes to the STPEGS Emergency Plan, that were not included in the March 30, 2020 LAR, were identified between the LAR submittal and the approved Emergency Plan to:

- Address NRC acceptance review questions,
- Address NRC Request for Additional Information (RAI),
- Align with the NRC Safety Evaluation, and
- Address editorial items during implementation.

The 10 CFR 50.54(q) Screen Evaluation concluded that the changes made to the Emergency Plan were non-intent, non-technical changes for clarification only, and do not conflict with the NRC Safety Evaluation. The Emergency Plan continues to meet the requirements in 10 CFR 50 Appendix E and the planning standards of 10 CFR 50.47(b).

Additionally, a change was made to the STPEGS Emergency Plan to remove an erroneous statement regarding field use of a single channel analyzer (SCA) as a SCA was never in use at STPEGS for Emergency Plan field monitoring purposes. The removal of the reference to field use of a SCA does not change the capability nor timeliness of evaluating radioiodine concentrations in the field. The 10 CFR 50.54(q) Effectiveness Evaluation concluded there is no reduction in effectiveness related to removal of this content.

The Emergency Plan continues to meet the requirements in 10 CFR 50 Appendix E and the planning standards of 10 CFR 50.47(b).

A line-by-line comparison and evaluation of the differences between the Emergency Plan initially submitted to the NRC on March 30, 2020 and the STPEGS Emergency Plan, implemented on April 6, 2022, are included in the 10 CFR 50.54(q) Screen Evaluation retained in the Emergency Plan Change Evaluation Package.

## 2. EP-0002.000 STPEGS On-Shift Staffing Analysis (OSA)

The on-shift staffing analysis was re-performed based on the emergency response organization (ERO) on-shift and augmentation staffing as approved for STPEGS as implemented on April 6, 2022.

In addition to the On-Shift ERO naming convention changes to comply with the authorized revision of the STPEGS Emergency Plan, two events were removed from the OSA:

- Fuel Handling Accident (FHA) event removed based on NRC response to FAQ 2013-008.
- Station Blackout (SBO) event removed based on an SBO coping study, which resulted in an augmentation time of 4 hours. Since the OSA augmentation time for the ERO is 120 minutes, there is no reason to include this event in the analysis.

The revised On-shift Staffing Analysis did not identify any non-validated tasks performed by the on-shift positions, did not identify potential task overlaps in the analyzed events, and an on-shift staffing time motion study was not required based on the results of the task analysis.

A comparison and evaluation of the differences between the On-Shift Staffing Analysis for the previous STPEGS Emergency Plan and EP-0002.000, STPEGS On-Shift Staffing Analysis is included in the 10 CFR 50.54(q) Screen Evaluation retained in the Change Evaluation Package.

The STPEGS On-shift Staffing Analysis continues to meet the requirements in 10 CFR 50 Appendix E and the planning standards of 10 CFR 50.47(b) and does not represent a reduction in effectiveness of the Emergency Plan.

### 3. EP-0003.000 STPEGS Emergency Action Level (EAL) Technical Basis Manual (TBM)

Several editorial changes were made to the STPEGS EAL TBM to:

- Adjust Independent Spent Fuel Storage Installation description from future to current tense,
- Correct typographical errors, and
- Update a reference document revision number

The 10 CFR 50.54(q) Screen Evaluation concluded the changes made to the STPEGS Emergency Action Level (EAL) Technical Basis Manual (TBM) were non-intent, non-technical changes for clarification only, and do not conflict with NRC approved Safety Evaluation. The Emergency Plan continues to meet the requirements in 10 CFR 50 Appendix E and the planning standards of 10 CFR 50.47(b).

Additionally, a change was made to the definition of defueled (operating modes table) to reflect the actual site-specific definition as given in the STPEGS Technical Requirements Manual. The change to the definition of defueled in the NRC approved EAL TBM is being made to correct an error present since submittal. The mode table is included in the NEI 99-01 Revision 6 template which is endorsed by the NRC. Inclusion of the mode table conforms to requirements; however, use of the generic definition of defueled is not appropriate for STPEGS. The 10 CFR 50.54(q) Effectiveness Evaluation concluded the correction of the defueled definition continues to comply with all regulatory requirements regarding EALs specified in 10 CFR 50.47(b)(4) and 10 CFR 50 Appendix E, and the associated NUREG-0654 elements and does not represent a reduction in effectiveness of the Emergency Plan.

A line-by-line comparison and evaluation of the changes to the EAL TBM are included in the 10 CFR 50.54(q) Screen Evaluation retained in the Change Evaluation Package.

### 4. EP-0005.000 STPEGS Protective Action Recommendation (PAR) Strategies

The PAR basis document, dated December 3, 2014, was reviewed and updated to EP0005.000. Changes include the following:

- Update of the Rapidly Progressing Severe Accident (RPSA) criteria to reflect NEI 99-01 Revision 6 based EAL radiation monitor thresholds and insights from Emergency Planning Frequently Asked Questions 2013-004.
- Update RPSA PAR to account for 0ERP01-ZV-IN07 Revision 7 previously made changes (the PAR technical basis document had not been kept current with the PAR procedure).
- Clarifies the action to be taken for the other Zones within the Emergency Planning Zone (EPZ).
- Correct a logic flaw in the original basis document. For a non-RPSA, the original basis recommends an evacuation of the 2-mile radius and sheltering 5-miles downwind. The

updated basis recommends evacuation of the 5-mile downwind zones along with the 2-mile radius.

- Added the criteria used to define the puff release and associated protective actions.
- The updated PAR basis specifically defines and includes a "Puff Release" as part of the puff release / impediments' interrogative box in the logic flow diagram.
- For impediments, the updated PAR basis clarifies zones that remain Sheltered in Place. For the puff release, the updated PAR basis recommends Shelter in Place, with the caveat that zones already being evacuated are not to be changed from evacuate to shelter.

The 10 CFR 50.54(q) Effectiveness Evaluation concluded the changes made to the STPEGS Protective Action Recommendation (PAR) Strategies document do not conflict with NRC approved Safety Evaluation. The document continues to meet the requirements in 10 CFR 50 Appendix E and the planning standards of 10 CFR 50.47(b) and does not represent a reduction in effectiveness of the Emergency Plan.

A detailed listing and evaluation of each specific change to the STPEGS Protective Action Recommendation (PAR) Strategies document are included in the Change Evaluation Package.