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U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
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South Texas Project
Units 3 and 4
Docket Nos. 52-012 and 52-013

Implementation of Emergency Preparedness Rule Changes

As requested during a telephone conversation with members of the NRC staff, attached is the STP 3 & 4 approach regarding implementation of the Emergency Preparedness Rule changes to 10 CFR 50.47, Part 50.54(q) and Part 50 Appendix E.

Attachment 1 contains the STP 3 & 4 approach to implementation of the Emergency Preparedness Rule changes.

Commitments made in this submittal are documented in Attachment 2.

Changes to the COLA are shown in shaded text.

If you have any questions, please contact me at (361) 972-7136 or Bill Mookhoek at (361) 972-7274.

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D091
STI 33577356 NLL
MRD

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 7/31/12



Scott Head
Manager, Regulatory Affairs
South Texas Project Units 3 & 4

rhs

Attachments:

1. EP Rule Analysis
2. New Commitments

cc: w/o attachment except*
(paper copy)

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EP Rule Analysis for STP 3 & 4**Purpose:**

This document describes the STP 3 & 4 approach/method regarding implementation of the Emergency Preparedness Rule changes to 10 CFR 50.47, Part 50.54(q) and Part 50 Appendix E. The Rule changes became effective December 23, 2011, with varying implementation dates for each of the applicable Rule elements. The Rule changes also identified implementation dates with specific applicability to Combined License Applications (COLA) under Part 52.

The information below provides a description and implementation approach for each of the eleven applicable Rule elements. Each element contains the associated Rule section and a brief description of the requirement; the STP 3 & 4 approach to each of the elements with an associated justification; and, if necessary, a corresponding Emergency Plan change mark up.

Additionally, this analysis provides a summary of each of the Rule elements in a table format.

Analysis of Rule Elements:**1. On-Shift Staffing Analysis (Part 50 Appendix E Section IV.A.9)**

The rule requires sites to perform a detailed analysis of on-shift staffing and to add staff, if necessary, to bring current staff to analysis required levels.

STP Approach

STP 3 & 4 will validate the existing on-shift staffing submitted in COLA Part 5 'Emergency Plan,' Section C when a physical plant and plant procedures are available. STP will initiate a commitment to validate the on-shift staffing in accordance with the requirements of the Rule and submit the results to the NRC 180 days prior to fuel load.

Justification

The STP Emergency Plan (COLA Part 5) identifies the Unit 3 & 4 on-shift complement in Table C-1. The submitted staffing was based on the guidance provided in NUREG-0654. This Rule element requires a validation of the on-shift complement. The method to conduct this analysis will be by use of NEI 10-05 Rev. 0, "Assessment of On-Shift Emergency Response Organization Staffing and Capabilities." NEI 10-05 Rev 0 has been endorsed by the NRC as a process for performing the analysis.

The level of detail required for this analysis is not feasible for an applicant. NEI 10-05 requires the use of Job Task Analysis (JTA), existing procedures and program elements, simulator, time motion studies, and other elements. Because these identified analysis tools do not exist, it is not feasible for the analysis to be part of the application. Upon completion of the validation analysis, the staffing validation will be submitted to the NRC at least 180 days prior to fuel load. Should a subsequent Emergency Plan change be required, this change would be performed in accordance with station procedures, evaluated for prior NRC approval in accordance with 10CFR50.54q, and submitted to the NRC.

STP 3 & 4 makes the following commitment regarding this Rule element:

The existing on-shift staffing will be validated as required by 10 CFR 50 Appendix B Section IV.A.9 using NRC endorsed document (NEI 10-05 Rev. 0), and the results will be submitted to the NRC

2. Emergency Action Levels for Hostile Actions (Part 50 Appendix E Section IV.B)

The rule requires the EALs to address Hostile Action Based (HAB) events.

STP Approach

STP 3 & 4 COLA Part 5 ‘Emergency Plan,’ Section D contains the Emergency Action Levels (EAL) basic Initiating Conditions (IC) scheme including the HAB ICs. Therefore, STP Units 3 & 4 complies with this Rule element.

Justification

The STP 3 & 4 Emergency Plan, Section D ‘Emergency Classification System’ describes the Emergency Action Level scheme based on NEI-99-01 Rev. 5 in Section D.1 ‘Event Classifications’ (provided below) as the bases of the Emergency Action Level scheme. This scheme, which includes HAB EALs, is provided in Table D-2 ‘Initiating Conditions for Emergency Classification’ (HAB EAL portion of table provided below).

STP has an existing commitment identified in COLA Part 5.3 to submit a fully developed set of EALs 180 days prior to fuel load (commitment provided below).

D.1 Event Classifications

The spectrum of possible emergency events at the Station is categorized into the following four (4) emergency classifications, based on the recommendations of NUMARC/NESP-007, Methodology for Development of Emergency Action Levels, January, 1992, Rev. 2 and NEI-99-01 Rev. 5:

Table D-2

<i>UNUSUAL EVENT</i>	<i>ALERT</i>	<i>SITE AREA EMERGENCY</i>	<i>GENERAL EMERGENCY</i>
<i>HU4- Confirmed security condition or threat which indicates a potential degradation in the level of safety of the plant.</i>	<i>HA4- Hostile action within the Owner Controlled Area or Airborne attack threat.</i>	<i>HS4- Hostile action within the Protected Area.</i>	<i>HGI- Hostile action resulting in loss of physical control of the facility.</i>

COLA 5.3 Emergency Action Levels

STP Nuclear Operating Company shall submit a fully developed set of EALs to the NRC in accordance with NEI 99-01 Revision 5 endorsed EAL scheme. These fully developed EALs shall be submitted to the NRC for confirmation at least 180 days prior to initial fuel load.

No COLA changes are required.

3. Emergency Response Organization Augmentation at Alternate Facility (Part 50 Appendix E Section IV.E.8.d)

The rule requires alternate augmentation facilities during a HAB event. The capabilities of this alternate facility are also set forth.

STP Approach

STP 3 & 4 has designated the Alternate Emergency Operations Facility (AEOF) as the ERO Augmentation Alternate Facility. The STP 3 & 4 Emergency Plan, Section G, "Emergency Response Facilities" describes the AEOF in Section G.5. The AEOF complies with the requirements of Part 50 Appendix E, Section IV.E.8.d. This element will be included in the Emergency Plan implementing procedures

Justification

STP 3 & 4 makes the following commitment regarding this Rule element:

Designate the Alternate Emergency Operations Facility (AEOF) as the ERO Augmentation Alternate Facility in the Emergency Plan implementing procedures which shall be submitted to the NRC 180 days prior to fuel load. (STP COLA Part 9, ITAAC, Section 4.0, ITAAC #10)

No COLA changes are required.

4. Licensee Coordination with Offsite Response Organizations (Part 50 Appendix E Section IV.A.7)

The rule requires sites to identify and describe in the plan assistance expected from the Offsite Response Organization (ORO) during emergencies including HAB.

STP Approach

The STP 3 & 4 submitted COLA incorporates this Rule element

Justification

Letters of Agreement (LOA) with the ORO are included in COLA Part 5. These LOAs identify the assistance expected from the OROs.

STP Nuclear Operating Company (STPNOC) currently has in place the necessary LOAs identifying offsite agency support for an event at the South Texas Project Electric Generating Station (STPEGS). These LOAs also identify and acknowledge STP 3 & 4 (statement contained in all LOAs provided below). The LOAs are maintained current through an annual review required by STPNOC Emergency Plan procedural requirement.

Additional detail of ORO response capabilities and resources for a HAB event is maintained by STPNOC and may contain Safeguards Information. These same resources would be available to STP 3 & 4 during a HAB event as stated in the LOAs.

STP 3 & 4 Emergency Plan implementing procedures will identify the ORO resources available and their integration into site activities during an emergency event at STP. STP COLA Part 9, ITAAC, Section 4.0, ITAAC #10 includes an existing requirement to submit Emergency Plan implementing procedures to the NRC 180 days prior to fuel load.

Statement contained in LOAs with ORO:

“We acknowledge the intent of the STP Nuclear Operating Company to construct two additional units at the existing STP site. The proposed Emergency Plans for STP Units 3 and 4 are based upon the existing Emergency Plans for STP Units 1 and 2 and are practicable. Our agency is committed to participate in any further development of the current Emergency Plans, including any field demonstrations, and to execute our responsibilities under these Plans in the event of an emergency.”

STP 3 & 4 makes the following commitment regarding this Rule element:

STP 3 & 4 Emergency Plan implementing procedures will identify the ORO resources available and their integration into site activities during an emergency event at STP.

No COLA changes are required.

5. Protective Actions for Onsite Personnel (Part 50 Appendix E Section IV.I)

The rule requires that sites protect onsite emergency responders from HAB and other events.

STP Approach

STP 3 & 4 already incorporates this Rule element as identified in the submitted COLA Part 5, 'Emergency Plan' Sections F and I.

Justification

The STP 3 & 4 Emergency Plan, Section F.6 'Onsite Shelter,' Section I.2 'Assembly and Accountability,' Section I.3 'Site Evacuation,' and Section I.4 'Onsite Shelter' provides adequate information to implement the criteria of this Rule element. Additional detail related to onsite protective actions for site personnel will be contained in site specific Emergency Plan implementing procedures.

STP 3 & 4 makes the following commitment regarding this Rule element:

Details related to onsite protective actions for site personnel will be contained in site specific Emergency Plan implementing procedures.

STP COLA Part 9, ITAAC, Section 4.0, ITAAC #10 already includes the requirement to submit Emergency Plan implementing procedures to the NRC 180 days prior to fuel load.

No COLA changes are required.

6. Challenging Drills and Exercises (Part 50 Appendix E Section IV.F.2.b, F.2.d, F.2.j)

The rule adds several requirements for exercises including a HAB Exercise, 8-year exercise cycle and NRC review of Exercise scenarios.

STP Approach

STP plans to revise the Emergency Plan in the next revision of the COLA as shown in the corrected text below to include the exercise cycle as every eight (8) years. Emergency Plan implementing procedures will include detailed requirements to implement this element.

Justification

Compliance will be achieved with the revision to the Emergency Plan reflecting the eight (8) year exercise cycle and Emergency Plan implementing procedure requirements.

Emergency Plan implementing procedures will require submittal of the Exercise Scenario to the NRC and conformance with the eight year cycle scenario requirement. STP COLA Part 9, ITAAC, Section 4.0, ITAAC #10 already includes the requirement to submit Emergency Plan implementing procedures to the NRC 180 days prior to fuel load.

COLA changes required to Emergency Plan Section N.1.4 and Addendum N-1:

N.1.4 Annual Drills

*The ingestion exposure pathway measures shall be exercised by the state emergency response organization as a minimum every ~~six (6)~~ **eight (8)** years. An off hours and an unannounced drill/exercise shall be performed at least once every ~~six (6)~~ **eight (8)** years. Federal Emergency Management Agency objectives for the state and county emergency management organizations shall be exercised as required.*

Addendum N-1

8.0 Terrorist Event Hostile Action Based Integrated Response Drill and Exercise

8.1 Once every ~~six~~ **eight (8)** years the Emergency Response Organization shall integrate with security and demonstrate emergency responses to a range of hostile actions. The elements include activities applicable to security-based scenarios, such as accident detection and assessment, emergency classification, notification of onsite and offsite emergency responders, protective action recommendations, use of security personnel to provide prompt access for emergency equipment and support, evacuation of emergency response facilities and relocation to backup facilities, assembly and accountability, and use of fire control teams, first aid/rescue teams, and medical support personnel.

7. Alert and Notification System Backup Means (Part 50 Appendix E Section IV.D.3)

The rule requires a back-up method to alert populations when the primary method (sirens) is down. The Rule also requires a backup method of notification when the primary notification method (EAS message) is down.

STP Approach

STP 3 & 4 currently meets this rule requirement

Justification

Attachment 4 “Route Alerting” of Matagorda County Emergency Management Plan Procedure 22, “Warning and Evacuation/Traffic and Access Control” provides guidance regarding route alerting the general public when the ANS and EAS systems are unavailable.

No COLA changes are required.

8. Emergency Declaration Timeliness (Part 50 Appendix E Section IV. C.2)

The rule requires an emergency declaration to be made within 15 minutes of the existence of the condition.

STP Approach

STP will implement this element of the Rule in the Emergency Plan implementing procedures.

Justification

The Rule requirement for this element is procedural and performance based. STP COLA Part 9, ITAAC, Section 4.0, ITAAC #10 already includes the requirement to submit Emergency Plan implementing procedures to the NRC 180 days prior to fuel load.

STP 3 & 4 makes the following commitment regarding this Rule element:

The requirement to make an emergency declaration within 15 minutes of the existence of the condition will be included in the Emergency Plan implementing procedures.

No COLA changes are required.

9. Emergency Operations Facility - Performance-Based Approach Part 50 Appendix E Section IV.E.8.c.3)

The rule addresses the location of off-site EOF's, specifically for those sited some distance from the reactor.

STP Approach

This Rule element is not applicable to STP 3 & 4.

Justification

The identified Emergency Operations Facility is designed for single site operation.

No COLA changes are required.

10. Evacuation Time Estimate Updating (10 CFR 50.47(b)(10) and Part 50 Appendix E Section IV.1)

The rule requires rule-based site specific determination of evacuation times for populations based on roads, intersections and populations by subzones.

STP Approach

STP 3 & 4 complies with this Rule element as documented in COLA Part 5.4 'Evacuation Time Estimate' (ETE).

Justification

STPNOC is currently processing an ETE to comply with this Rule element. This ETE is not expected to reach different conclusions than the current ETE for STP 3 &4. STPNOC will inform STP 3 & 4 if any differences are identified. Emergency Plan implementing procedures will address Protective Action Recommendations and be consistent with the conclusions of the ETE.

STP 3 & 4 makes the following commitment regarding this Rule element:

The Emergency Plan implementing procedures will address Protective Action Recommendations and will be consistent with the conclusions of the STPNOC Evacuation Time Estimate.

STP COLA Part 9, ITAAC, Section 4.0, ITAAC #10 already includes the requirement to submit Emergency Plan implementing procedures to the NRC 180 days prior to fuel load.

No COLA changes are required.

11. Amended Emergency Plan Changes Process (10 CFR 50.54(q))

The rule requires a process for site use to make changes to its EP Plan and related documents.

STP Approach

STP will implement this element of the Rule in the Emergency Plan implementing procedures.

Justification

STP 3 & 4 makes the following commitment regarding this Rule element:

A process for site use to make changes to its EP Plan and related documents will be included in the Emergency Plan implementing procedures.

STP COLA Part 9, ITAAC, Section 4.0, ITAAC #10 already includes the requirement to submit Emergency Plan implementing procedures to the NRC 180 days prior to fuel load.

No COLA changes are required.

STP COLA Part 9, ITAAC, Section 4.0, ITAAC #10 includes the requirement to submit Emergency Plan implementing procedures to the NRC 180 days prior to fuel load.

To ensure that the commitments made in this submittal are included in the Emergency Plan implementing procedures, STP 3 & 4 will include the following commitment in the next revision to the COLA.

13.3 Emergency Planning

The information in this section of the reference ABWR DCD, including all subsections and tables, is incorporated by reference with the following supplement.

13.3.1 COL License Information

The following site-specific supplemental information addresses COL License Information Item 13.2.

A comprehensive site Emergency Plan for STP is provided in COLA Part 5.

Commitment:

Commitments to incorporate specific items in the Emergency Plan implementing procedures made in letter U7-C-NINA-NRC-120055 will be verified complete as part of ITAAC closure for the ITAAC listed in Part 9 Table 4.0-1 Item 10.0 closure.

EP Rule Detailed Analysis STP Units 3 & 4 Summary Table

Rule	Summary	Plan Change Required	Existing ITAAC	New Commitment	Existing COLA Commitment
1. Part 50 Appendix E, Section IV.A.9	On shift staffing analysis	No	No	Yes	No
2. Part 50 Appendix E, Section IV.B	EALs for hostile actions	No	No	No	Yes
3. Part 50 Appendix E, Section IV.E.8.f	Alternate Facility (Staging area-B.5.b)	No	Yes	Yes	No
4. Part 50 Appendix E, Section IV.A.7	Identify offsite agency support in E-Plan during HAB	No	Yes	Yes	No
5. Part 50 Appendix E, Section IV.A.2	Onsite Protective Actions during HAB	No	Yes	Yes	No
6. Part 50 Appendix E, Section IV.F.2.b, 2.d and 2.j.	2. b- scenario submittal to NRC 60 days prior to exercise. 2.d- Challenging Drills and	Yes	Yes	No	No

Rule	Summary	Plan Change Required	Existing ITAAC	New Commitment	Existing COLA Commitment
	Exercises cycle IPZ and HAB 2.j- 8 year cycle description				
7. Part 50 Appendix E, Section IV.D.3	Backup means for Alert Notification system (ANS)	No	No	No	No
8. Part 50 Appendix E, Section IV.C.1 and C.2	Timely declaration and maintenance of capability to assess, classify and declare	No	Yes	Yes	No
9. Part 50 Appendix E, section IV.E.8.c	EOF performance based approach	N/A	N/A	N/A	N/A
10. Part 50.47 (b)(10)	Evacuation Time Estimate updates.	No	Yes	Yes	No
11. Part 50.54(q)	Emergency Plan change process	No	Yes	Yes	No

New Commitments

Commitment ID	Commitment	Completion Date
12-24820-2	Commitments to incorporate specific items in the Emergency Plan implementing procedures made in letter U7-C-NINA-NRC-120055 will be verified complete as part of ITAAC closure for the ITAAC listed in Part 9 Table 4.0-1 Item 10.0 closure	180 days prior to fuel load
12-24820-3	The existing on-shift staffing will be validated as required by 10 CFR 50 Appendix B Section IV.A.9 using NRC endorsed document (NEI 10-05 Rev. 0), and the results will be submitted to the NRC	Submitted to the NRC 180 days prior to fuel load
12-24820-4	Designate the Alternate Emergency Operations Facility (AEOF) as the ERO Augmentation Alternate Facility in the Emergency Plan implementing procedures	Submitted to the NRC 180 days prior to fuel load
12-24820-5	STP 3 & 4 Emergency Plan implementing procedures will identify the ORO resources available and their integration into site activities during an emergency event at STP	Submitted to the NRC 180 days prior to fuel load
12-24820-6	Details related to onsite protective actions for site personnel will be contained in site specific Emergency Plan implementing procedures	Submitted to the NRC 180 days prior to fuel load
12-24820-7	The requirement to make an emergency declaration within 15 minutes of the existence of the condition will be included in the Emergency Plan implementing procedures	Submitted to the NRC 180 days prior to fuel load
12-24820-8	The Emergency Plan implementing procedures will address Protective Action Recommendations and will be consistent with the conclusions of the STPNOC Evacuation Time Estimate	Submitted to the NRC 180 days prior to fuel load
12-24820-9	A process for site use to make changes to its EP Plan and related documents will be included in the Emergency Plan implementing procedures	Submitted to the NRC 180 days prior to fuel load