



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

July 16, 2001
NOC-AE-01001140
STI: 31317309
FILE NO: Z18
ER 20010064
10CFR50.4(b)(5)
10CFR50 App E

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

STP NUCLEAR OPERATING COMPANY
Units 1 and 2
Docket Nos. STN 50-498; STN 50-499
Changes to Emergency Plan & Implementing Procedure

In accordance with 10CFR50.4(b)(5) and 10CFR50, Appendix E, Section V, the STP Nuclear Operating Company hereby submits the attached revision of the STPEGS Emergency Plan and six (6) Implementing Procedures and 1 Department Procedure.

If there are any questions regarding this matter, please contact either Mr. Morgan at (361) 972-7004 or myself at (361) 972-8053.

P. L. Serra
Manager, Plant Protection

AM/mk

Enclosure: Letter of Receipt
Summary of Changes
STPEGS Emergency Plan, Rev. ICN 19-3
0ERP01-ZV-EF15, Dose Assessment Specialist, Rev. 4
0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11
0PGP05-ZV-0013, Performance Indicator Tracking Guide, Rev. 1 (Dept. Procedure)
0PGP05-ZV-0001, Emergency Response Exercises and Drills, Rev. 5
0ERP01-ZV-EF28, Assistant Support Organization Director, Rev. 2
0ERP01-ZV-IN02, Notifications to Offsite Agencies, Rev. 11
0PGP05-ZV-0010, Emergency Plan Revision, Rev. 4

A045

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* The above copies distributed without Attachment except as noted by the asterisk. If copies are required, please contact us.

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Page 3

To: P. L. Serra
Manager, Emergency Response
STP Nuclear Operating Company
P. O. Box 289
Wadsworth, TX 77483

From: Tom Andrews
Region IV Office of the Regional Administrator
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Subject: **Receipt Acknowledgment for Changes to STP
Emergency Plan Implementing Procedure(s)**

I hereby acknowledge having received changes to the STP Nuclear Operating Company's STPEGS Emergency Plan, six Implementing Procedures and one Department Procedure transmitted by STP letter NOC-AE-01001140.

Signature

Date

**Summary of Changes
STPEGS Emergency Plan
Interim Change Notice 19-3**

This revision of the STPEGS Emergency Plan does not reduce the effectiveness or change the intent of the Emergency Response Program.

The content changes are:

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
1	Section B, Page 8, removed step e, step was duplicated on page 9.	Editorial Change.
2	Section G, Page 7, Step G.9, removed the Nuclear Regulatory Commission Region IV Site Team laboratory.	NRC Laboratory is no longer available.
3	Section H, Page 3, Step H.1.6, replaced "This data is displayed by the Emergency Response Facilities Data Acquisition and Display System, Control Room meteorological instruments, and the Radiation Monitoring System RM-21A." with "This data is displayed by the Integrated Computer System (ICS/ERFDADS) and the Control Room meteorological instruments."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
4	Section H, Page 6, Step H.3, replaced "Environmental radiological impact analysis is available on the Radiation Monitoring System RM-21A computer or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations." with "Environmental radiological impact analysis is available using computerized dose assessment models or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
5	Section I, Page 2, Step I.5, changed Frequency Modulation to FM.	Editorial Change.

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
6	Section J, Page 5, Step J.10.1, replaced “The RM-11 and RM-21A system provides real time site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release” with “The dose assessment models described in procedure 0ERP01-ZV-TP01, Offsite Dose Calculations, provides site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release”	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
7	Section L, Page 2, Step L.4, replaced “Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using of the RM-21A or other radiological dose assessment/projection models.” with “Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using radiological dose assessment/projection models as per procedure 0ERP01-ZV-TP01, Offsite Dose Calculations.”	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
8	Section M, Page 2, new Step M.2.3.1, Computer Based Training (CBT) is an acceptable equivalent method for classroom refresher training.	Addresses use of computer based training in addition to classroom based refresher training. Address CR 01-52-15.

**Summary of Changes for
Dose Assessment Specialist
0ERP01-ZV-EF15 Rev. 4**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Changes are designated by revision bars.
- Remove all references to RM-21A Dose Assessment System.
- Revised Data Sheet 1, Step 3.1.6 to add clarification for determining differences between measured dose rates and projected dose rates.
- Addendum 2, page 5, removed Cond. Vac. Pump Noble Gas Release Rate from Table.

**Summary of Changes for
Offsite Dose Calculations
0ERP01-ZV-TP01 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

Changes are designated by revision bars.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
1.	Changed procedure usage from In Hand to N/A.	To comply with procedure 0PGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide.
2.	Changed Addendum's 1,4, & 6 to In Hand.	These Addendum's shall be in hand to perform required calculations.
3.	Step 1.2, deleted RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
4.	Step 2.1, removed responsibilities and directions to section 4.0 & 5.0.	Entire step did not fit the definitions section.
5.	Old Step 2.3.1, Deleted Radiation Monitoring System (RM-21A).	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
6.	New Step 2.3.1, Deleted, This method may be used when manual data entry is necessary or a rapid evaluation of a hypothetical release scenario is desired.	This step is no longer applicable, STAMPEDE requires manual input of data, RM-21A has been removed, Change addresses CR-01-52-10.
7.	Step 3.1, Revised to state the following, For Steam Generator Tube Rupture (SGTR) events with 100% S/G water level, the steam flow reported on ICS will be high and result in an over conservative PAR. Use the default MSL flow rate specified by the dose assessment program.	Change addresses CR 00-6111-2.
8.	New Step 3.4, Deleted reference to the lapse rate being available from the National	The National Weather Service does not supply lapse rate, Sigma-Theta or the Default

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
	Weather Service.	"D" Stability Class should be used. Change addresses CR 00-1485-6.
9.	Added Step 3.9, If multiple release paths are indicated by elevated radiological monitor readings, then calculate each pathway and sum results. (Example: ...).	Clarify Addition of dose assessment results.
10.	Section 4.0, changed from one step to 4 steps.	Clarified responsibility for dose assessment.
11.	Added step 4.4, Offsite dose calculations are updated as requested by the Emergency Director, Radiological Manager, or Radiological Director.	Directions moved from Section 2.0
12.	New step 5.4, Changed to add parameters for increased dose assessment calculations.	Directions moved from Section 2.0
13.	Old step 5.6, deleted RM-21A directions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
14.	Deleted old step 7.6, Addendum 5, RM-21A Offsite Dose Calculations.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
15.	Form 1, Deleted RM-21A from method of projection.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
16.	Addendum 1, step 2.1.1, removed RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
17.	Addendum 1, Step 3.1, moved $4.72 \text{ E}+2$ from flow rate to conversion factor.	Addresses CR 00-1818-5, there is a typo where the equation in step 3.1 incorrectly has the conversion factor value listed under the flow rate entry.
18.	Addendum 1, Step 3.2.b. 1-4, deleted RM-21A instructions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
19.	Addendum 4, Page 15, provides example calculations using the containment leakage nomograph. Example 1 states that using the listed input values provided, the correct release rate should be 4.0 E+6 Vs 1.2 E+6 μ Ci/sec.	Change addresses CR 00-1818-6.
20.	Deleted old Addendum 5, RM-21A Offsite Dose Calculations	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
21.	New Addendum 5, Page 17, second paragraph, deleted the following, Additional options to allow editing of the data tables and editing of saved radiological assessments are available under the user identifications of HPS1 and HPS2.	Address CR 00-1818-2, The codes HPS1 and HPS2 refer to the RM-21A.
22.	New Addendum 5, step 4.0, Added directions to calculate Protective Action Recommendations beyond 10 miles	Change addresses CR 00-1818-4.
23.	New Addendum 6, step 4.0, added revision 6.3 to STAMPEDE.	Emergency Dose Rate Tables have been revised with 6.3.
24.	New Addendum 6, pages 2-8, revised dose rate tables.	Emergency Dose Rate Tables have been revised using STAMPEDE, Rev. 6.3.
25.	Addendum 7, revised flowchart to remove RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

**Summary of Changes for
Performance Indicator Tracking Guide
OPGP05-ZV-0013 Rev 1
Department Procedure**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
1.	Page 3, Step 2.2.1.2, changed to complete Addendum 2, Attachment 7.B of procedure OPGP05-ZN-0007, obtain Manager, Plant Protection signature, and Forward completed form to Quality and Licensing.	Report requirements of procedure OPGP05-ZN-0007 became effective after this procedure.
2.	Page 4, Step 4.8, added reference to procedure OERP01-ZV-TP01, Offsite Dose Calculations.	Editorial Change.
3.	Page 4, Step 4.9, added reference to procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.	Editorial Change.
4.	Page 4, Step 5.4, Changed 3 years retention to 3 2 years. <i>B</i>	Changed to match requirements of procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.
5.	Page 6, Data Sheet 1, Step 1.4, added the steps that need to be complete for accurate Notification Form.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
6.	Page 7, Data Sheet 1, Step 1.5, added 15 minute time requirement for PAR.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
7.	Page 9, Data Sheet 1, Step 4.1.3, added use of OERP01-ZV-TP01, Offsite Dose Calculations, Form 1, Offsite Dose Calculations Transmittal Form or dose assessment computer printout.	Needed to document PAR generation.
8.	Page 9, Data Sheet 1, Step 4.1.5, added use of Form 2, Performance Indicator Quarterly Data Summary (Typical) is used to document each Quarter.	Editorial change, old form was not needed.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
9.	Page 9, Data Sheet 2, Step 4.1.1, 4.1.2, 4.1.3, clarified required documentation.	Editorial change.
10.	Page 10, Data Sheet 2, Step 1.2.1.1, changed to track all Control Room Shift Supervisor qualified personnel.	Changed IAW NEI 99-02, Revision 1, 4/23/2001, page 86, line 2 & 3.
11.	Page 14, Form 1, combined Form 1 and Form 3 data and removed old Form 3.	Editorial change, old form was not needed.
12.	Page 15, Form 2, revised from monthly to Quarterly and added 8 Quarter Data Table.	Editorial change, old format was not needed.

**Summary of Changes for
Emergency Response Exercises and Drills
OPGP05-ZV-0001, Rev. 5**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

NO.	CHANGE TO REV. 4	REASON
1	New Step 2.3, Added definition of DEP.	Editorial Correction
2	New Step 5.9, Added reference to NEI 99-02, Regulatory Assessment Performance Indicator Guideline	Editorial Correction
3	New Step 5.9, Added reference to OPGP05-ZV-0013, Performance Indicator Tracking Guide.	Editorial Correction
4	New Step 6.4, Added documentation required for LOR Training Drill	Change address CR 01-52-28, Quality Audit Report finding.
5	Addendum 1, Step 6.0, Added "Verify Drill/Exercise Performance Indicators in accordance with OPGP05-ZV-0013."	Step added to comply with guidance in NEI 99-02, Regulatory Assessment Performance Indicator Guideline

**Summary of Changes for
Assistant Support Organization Director
0ERP01-ZV-EF28 Rev. 2**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Editorial change
- Remove all reference to RM-21A Dose Assessment System.

**Summary of Changes for
Notifications to Offsite Agencies
0ERP01-ZV-IN02 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Added SA6 event description.
- Revised NRC Event Notification Worksheet (Form 361) with Revision 12-2000
- Change affecting new downwind sectors to affecting additional zones

**Summary of Changes for
Emergency Plan Revision
OPGP05-ZV-0010 Rev. 4**

This revision does not reduce the effectiveness or change the intent of the emergency response program.

The change is based on removal of the requirement to obtain NRC prior approval of Emergency Action Level (EAL) changes that do not decrease the effectiveness of the emergency response program.

Changes are designated by revision bars.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
1.	Removed Form 1, State of Texas/Matagorda County Acknowledgment Letter	This information is captured using procedure 0PAP01-ZA-0102, Review & Comment Form
2.	Page 3, step 2.2.3, & Page 7, step 4.11, changed procedure OPGP05-ZV-0002 to OPGP05-ZV-0014	Editorial Change.
3.	Note box, Old Page 4, changed into two steps (3.1.2.1 & 3.1.2.2) and moved EAL reference to Section 3.5.	Plan and EAL revised differently, all EAL changes do not need NRC prior approval. State & county do not approve Plan changes.
4.	Note box, Old Page 6, changed into two steps (3.2.1.1 & 3.2.1.2) and moved EAL reference to Section 3.3.	Plan and EAL revised differently, EAL changes that do not reduce the effectiveness of the emergency response program do not need NRC prior approval. State & county do not approve Plan changes.
5.	Removed old step 3.3 & 3.3.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
6.	Removed old step 3.4 & 3.4.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
7.	Removed old step 3.5.2, Page 6.	Plan changes shall be made concurrent with implementing procedures as necessary.
8.	Step 3.3.2, Page 6, requires all procedure revisions other than administrative	This ensures a 10CFR50.54(q) screening is performed on all implementing procedures.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
	clarification to include Form 3.	
9.	<p>Step 3.3.3, Page 7, Added Emergency Action Level Review shall be submitted to the following Officials for review and comment (this list may not be all inclusive):</p> <ul style="list-style-type: none"> • State of Texas, Division of Emergency Management, • State of Texas, Bureau of Radiation Control, • Matagorda County. 	Added state and county EAL change review and comment.
10.	Step 3.4, Page 6, added directions for NRC Transmittal.	Clarification.
11.	Step 3.4.2, Page 6, added directions for NRC prior approval.	Clarification.
12.	Step 3.4.3, Page 7, added directions for processing NRC prior approval changes.	Clarification.
13.	Step 4.8, added NUMARC Reference.	NUMARC was added to Form 3
14.	New Form 3, Note box, removed reference to Emergency Action Levels	This box is incorrect, NRC approval is only required for a decrease in effectiveness.
15.	New Form 3, Note box changed to form introduction.	Clarification.
16.	New Form 3, Step 1, added NRC Emergency Response Program Commitments	Clarification.
17.	New Form 3, Added step 3.1.1, If yes, does the proposed EAL changes differ from the requirements of NUMARC/NESP-007, Rev 2	Ensures NUMARC/NESP-007 is reviewed for EAL changes.

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To: P. L. Serra
Manager, Emergency Response
STP Nuclear Operating Company
P. O. Box 289
Wadsworth, TX 77483

From: Tom Andrews
Region IV Office of the Regional Administrator
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Subject: **Receipt Acknowledgment for Changes to STP
Emergency Plan Implementing Procedure(s)**

I hereby acknowledge having received changes to the STP Nuclear Operating Company's STPEGS Emergency Plan, six Implementing Procedures and one Department Procedure transmitted by STP letter NOC-AE-01001140.

Signature

Date

**Summary of Changes
STPEGS Emergency Plan
Interim Change Notice 19-3**

This revision of the STPEGS Emergency Plan does not reduce the effectiveness or change the intent of the Emergency Response Program.

The content changes are:

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
1	Section B, Page 8, removed step e, step was duplicated on page 9.	Editorial Change.
2	Section G, Page 7, Step G.9, removed the Nuclear Regulatory Commission Region IV Site Team laboratory.	NRC Laboratory is no longer available.
3	Section H, Page 3, Step H.1.6, replaced "This data is displayed by the Emergency Response Facilities Data Acquisition and Display System, Control Room meteorological instruments, and the Radiation Monitoring System RM-21A." with "This data is displayed by the Integrated Computer System (ICS/ERFDADS) and the Control Room meteorological instruments."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
4	Section H, Page 6, Step H.3, replaced "Environmental radiological impact analysis is available on the Radiation Monitoring System RM-21A computer or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations." with "Environmental radiological impact analysis is available using computerized dose assessment models or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
5	Section I, Page 2, Step I.5, changed Frequency Modulation to FM.	Editorial Change.

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
6	Section J, Page 5, Step J.10.1, replaced "The RM-11 and RM-21A system provides real time site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release" with "The dose assessment models described in procedure 0ERP01-ZV-TP01, Offsite Dose Calculations, provides site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release"	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
7	Section L, Page 2, Step L.4, replaced "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using of the RM-21A or other radiological dose assessment/projection models." with "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using radiological dose assessment/projection models as per procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
8	Section M, Page 2, new Step M.2.3.1, Computer Based Training (CBT) is an acceptable equivalent method for classroom refresher training.	Addresses use of computer based training in addition to classroom based refresher training. Address CR 01-52-15.

**Summary of Changes for
Dose Assessment Specialist
0ERP01-ZV-EF15 Rev. 4**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Changes are designated by revision bars.
- Remove all references to RM-21A Dose Assessment System.
- Revised Data Sheet 1, Step 3.1.6 to add clarification for determining differences between measured dose rates and projected dose rates.
- Addendum 2, page 5, removed Cond. Vac. Pump Noble Gas Release Rate from Table.

**Summary of Changes for
Offsite Dose Calculations
0ERP01-ZV-TP01 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

Changes are designated by revision bars.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
1.	Changed procedure usage from In Hand to N/A.	To comply with procedure OPGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide.
2.	Changed Addendum's 1,4, & 6 to In Hand.	These Addendum's shall be in hand to perform required calculations.
3.	Step 1.2, deleted RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
4.	Step 2.1, removed responsibilities and directions to section 4.0 & 5.0.	Entire step did not fit the definitions section.
5.	Old Step 2.3.1, Deleted Radiation Monitoring System (RM-21A).	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
6.	New Step 2.3.1, Deleted, This method may be used when manual data entry is necessary or a rapid evaluation of a hypothetical release scenario is desired.	This step is no longer applicable, STAMPEDE requires manual input of data, RM-21A has been removed, Change addresses CR-01-52-10.
7.	Step 3.1, Revised to state the following, For Steam Generator Tube Rupture (SGTR) events with 100% S/G water level, the steam flow reported on ICS will be high and result in an over conservative PAR. Use the default MSL flow rate specified by the dose assessment program.	Change addresses CR 00-6111-2.
8.	New Step 3.4, Deleted reference to the lapse rate being available from the National	The National Weather Service does not supply lapse rate, Sigma-Theta or the Default

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
	Weather Service.	“D” Stability Class should be used. Change addresses CR 00-1485-6.
9.	Added Step 3.9, If multiple release paths are indicated by elevated radiological monitor readings, then calculate each pathway and sum results. (Example: ...).	Clarify Addition of dose assessment results.
10.	Section 4.0, changed from one step to 4 steps.	Clarified responsibility for dose assessment.
11.	Added step 4.4, Offsite dose calculations are updated as requested by the Emergency Director, Radiological Manager, or Radiological Director.	Directions moved from Section 2.0
12.	New step 5.4, Changed to add parameters for increased dose assessment calculations.	Directions moved from Section 2.0
13.	Old step 5.6, deleted RM-21A directions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
14.	Deleted old step 7.6, Addendum 5, RM-21A Offsite Dose Calculations.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
15.	Form 1, Deleted RM-21A from method of projection.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
16.	Addendum 1, step 2.1.1, removed RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
17.	Addendum 1, Step 3.1, moved $4.72 \text{ E}+2$ from flow rate to conversion factor.	Addresses CR 00-1818-5, there is a typo where the equation in step 3.1 incorrectly has the conversion factor value listed under the flow rate entry.
18.	Addendum 1, Step 3.2.b. 1-4, deleted RM-21A instructions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
19.	Addendum 4, Page 15, provides example calculations using the containment leakage nomograph. Example 1 states that using the listed input values provided, the correct release rate should be 4.0 E+6 Vs 1.2 E+6 μ Ci/sec.	Change addresses CR 00-1818-6.
20.	Deleted old Addendum 5, RM-21A Offsite Dose Calculations	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
21.	New Addendum 5, Page 17, second paragraph, deleted the following, Additional options to allow editing of the data tables and editing of saved radiological assessments are available under the user identifications of HPS1 and HPS2.	Address CR 00-1818-2, The codes HPS1 and HPS2 refer to the RM-21A.
22.	New Addendum 5, step 4.0, Added directions to calculate Protective Action Recommendations beyond 10 miles	Change addresses CR 00-1818-4.
23.	New Addendum 6, step 4.0, added revision 6.3 to STAMPEDE.	Emergency Dose Rate Tables have been revised with 6.3.
24.	New Addendum 6, pages 2-8, revised dose rate tables.	Emergency Dose Rate Tables have been revised using STAMPEDE, Rev. 6.3.
25.	Addendum 7, revised flowchart to remove RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

**Summary of Changes for
Performance Indicator Tracking Guide
0PGP05-ZV-0013 Rev 1
Department Procedure**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

0PGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
1.	Page 3, Step 2.2.1.2, changed to complete Addendum 2, Attachment 7.B of procedure 0PGP05-ZN-0007, obtain Manager, Plant Protection signature, and Forward completed form to Quality and Licensing.	Report requirements of procedure 0PGP05-ZN-0007 became effective after this procedure.
2.	Page 4, Step 4.8, added reference to procedure 0ERP01-ZV-TP01, Offsite Dose Calculations.	Editorial Change.
3.	Page 4, Step 4.9, added reference to procedure 0PGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.	Editorial Change.
4.	Page 4, Step 5.4, Changed 3 years retention to 3 2 years.	Changed to match requirements of procedure 0PGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.
5.	Page 6, Data Sheet 1, Step 1.4, added the steps that need to be complete for accurate Notification Form.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
6.	Page 7, Data Sheet 1, Step 1.5, added 15 minute time requirement for PAR.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
7.	Page 9, Data Sheet 1, Step 4.1.3, added use of 0ERP01-ZV-TP01, Offsite Dose Calculations, Form 1, Offsite Dose Calculations Transmittal Form or dose assessment computer printout.	Needed to document PAR generation.
8.	Page 9, Data Sheet 1, Step 4.1.5, added use of Form 2, Performance Indicator Quarterly Data Summary (Typical) is used to document each Quarter.	Editorial change, old form was not needed.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
9.	Page 9, Data Sheet 2, Step 4.1.1, 4.1.2, 4.1.3, clarified required documentation.	Editorial change.
10.	Page 10, Data Sheet 2, Step 1.2.1.1, changed to track all Control Room Shift Supervisor qualified personnel.	Changed IAW NEI 99-02, Revision 1, 4/23/2001, page 86, line 2 & 3.
11.	Page 14, Form 1, combined Form 1 and Form 3 data and removed old Form 3.	Editorial change, old form was not needed.
12.	Page 15, Form 2, revised from monthly to Quarterly and added 8 Quarter Data Table.	Editorial change, old format was not needed.

**Summary of Changes for
Emergency Response Exercises and Drills
OPGP05-ZV-0001, Rev. 5**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

NO.	CHANGE TO REV. 4	REASON
1	New Step 2.3, Added definition of DEP.	Editorial Correction
2	New Step 5.9, Added reference to NEI 99-02, Regulatory Assessment Performance Indicator Guideline	Editorial Correction
3	New Step 5.9, Added reference to OPGP05-ZV-0013, Performance Indicator Tracking Guide.	Editorial Correction
4	New Step 6.4, Added documentation required for LOR Training Drill	Change address CR 01-52-28, Quality Audit Report finding.
5	Addendum 1, Step 6.0, Added "Verify Drill/Exercise Performance Indicators in accordance with OPGP05-ZV-0013."	Step added to comply with guidance in NEI 99-02, Regulatory Assessment Performance Indicator Guideline

**Summary of Changes for
Assistant Support Organization Director
OERP01-ZV-EF28 Rev. 2**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Editorial change
- Remove all reference to RM-21A Dose Assessment System.

**Summary of Changes for
Notifications to Offsite Agencies
0ERP01-ZV-IN02 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Added SA6 event description.
- Revised NRC Event Notification Worksheet (Form 361) with Revision 12-2000
- Change affecting new downwind sectors to affecting additional zones

**Summary of Changes for
Emergency Plan Revision
OPGP05-ZV-0010 Rev. 4**

This revision does not reduce the effectiveness or change the intent of the emergency response program.

The change is based on removal of the requirement to obtain NRC prior approval of Emergency Action Level (EAL) changes that do not decrease the effectiveness of the emergency response program.

Changes are designated by revision bars.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
1.	Removed Form 1, State of Texas/Matagorda County Acknowledgment Letter	This information is captured using procedure 0PAP01-ZA-0102, Review & Comment Form
2.	Page 3, step 2.2.3, & Page 7, step 4.11, changed procedure OPGP05-ZV-0002 to OPGP05-ZV-0014	Editorial Change.
3.	Note box, Old Page 4, changed into two steps (3.1.2.1 & 3.1.2.2) and moved EAL reference to Section 3.5.	Plan and EAL revised differently, all EAL changes do not need NRC prior approval. State & county do not approve Plan changes.
4.	Note box, Old Page 6, changed into two steps (3.2.1.1 & 3.2.1.2) and moved EAL reference to Section 3.3.	Plan and EAL revised differently, EAL changes that do not reduce the effectiveness of the emergency response program do not need NRC prior approval. State & county do not approve Plan changes.
5.	Removed old step 3.3 & 3.3.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
6.	Removed old step 3.4 & 3.4.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
7.	Removed old step 3.5.2, Page 6.	Plan changes shall be made concurrent with implementing procedures as necessary.
8.	Step 3.3.2, Page 6, requires all procedure revisions other than administrative	This ensures a 10CFR50.54(q) screening is performed on all implementing procedures.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
	clarification to include Form 3.	
9.	<p>Step 3.3.3, Page 7, Added Emergency Action Level Review shall be submitted to the following Officials for review and comment (this list may not be all inclusive):</p> <ul style="list-style-type: none"> • State of Texas, Division of Emergency Management, • State of Texas, Bureau of Radiation Control, • Matagorda County. 	Added state and county EAL change review and comment.
10.	Step 3.4, Page 6, added directions for NRC Transmittal.	Clarification.
11.	Step 3.4.2, Page 6, added directions for NRC prior approval.	Clarification.
12.	Step 3.4.3, Page 7, added directions for processing NRC prior approval changes.	Clarification.
13.	Step 4.8, added NUMARC Reference.	NUMARC was added to Form 3
14.	New Form 3, Note box, removed reference to Emergency Action Levels	This box is incorrect, NRC approval is only required for a decrease in effectiveness.
15.	New Form 3, Note box changed to form introduction.	Clarification.
16.	New Form 3, Step 1, added NRC Emergency Response Program Commitments	Clarification.
17.	New Form 3, Added step 3.1.1, If yes, does the proposed EAL changes differ from the requirements of NUMARC/NESP-007, Rev 2	Ensures NUMARC/NESP-007 is reviewed for EAL changes.

To: P. L. Serra
Manager, Emergency Response
STP Nuclear Operating Company
P. O. Box 289
Wadsworth, TX 77483

From: Tom Andrews
Region IV Office of the Regional Administrator
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Subject: **Receipt Acknowledgment for Changes to STP
Emergency Plan Implementing Procedure(s)**

I hereby acknowledge having received changes to the STP Nuclear Operating Company's STPEGS Emergency Plan, six Implementing Procedures and one Department Procedure transmitted by STP letter NOC-AE-01001140.

Signature

Date

**Summary of Changes
STPEGS Emergency Plan
Interim Change Notice 19-3**

This revision of the STPEGS Emergency Plan does not reduce the effectiveness or change the intent of the Emergency Response Program.

The content changes are:

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
1	Section B, Page 8, removed step e, step was duplicated on page 9.	Editorial Change.
2	Section G, Page 7, Step G.9, removed the Nuclear Regulatory Commission Region IV Site Team laboratory.	NRC Laboratory is no longer available.
3	Section H, Page 3, Step H.1.6, replaced "This data is displayed by the Emergency Response Facilities Data Acquisition and Display System, Control Room meteorological instruments, and the Radiation Monitoring System RM-21A." with "This data is displayed by the Integrated Computer System (ICS/ERFDADS) and the Control Room meteorological instruments."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
4	Section H, Page 6, Step H.3, replaced "Environmental radiological impact analysis is available on the Radiation Monitoring System RM-21A computer or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations." with "Environmental radiological impact analysis is available using computerized dose assessment models or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
5	Section I, Page 2, Step I.5, changed Frequency Modulation to FM.	Editorial Change.

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
6	Section J, Page 5, Step J.10.1, replaced "The RM-11 and RM-21A system provides real time site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release" with "The dose assessment models described in procedure 0ERP01-ZV-TP01, Offsite Dose Calculations, provides site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release"	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
7	Section L, Page 2, Step L.4, replaced "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using of the RM-21A or other radiological dose assessment/projection models." with "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using radiological dose assessment/projection models as per procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
8	Section M, Page 2, new Step M.2.3.1, Computer Based Training (CBT) is an acceptable equivalent method for classroom refresher training.	Addresses use of computer based training in addition to classroom based refresher training. Address CR 01-52-15.

**Summary of Changes for
Dose Assessment Specialist
0ERP01-ZV-EF15 Rev. 4**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Changes are designated by revision bars.
- Remove all references to RM-21A Dose Assessment System.
- Revised Data Sheet 1, Step 3.1.6 to add clarification for determining differences between measured dose rates and projected dose rates.
- Addendum 2, page 5, removed Cond. Vac. Pump Noble Gas Release Rate from Table.

**Summary of Changes for
Offsite Dose Calculations
0ERP01-ZV-TP01 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

Changes are designated by revision bars.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
1.	Changed procedure usage from In Hand to N/A.	To comply with procedure 0PGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide.
2.	Changed Addendum's 1,4, & 6 to In Hand.	These Addendum's shall be in hand to perform required calculations.
3.	Step 1.2, deleted RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
4.	Step 2.1, removed responsibilities and directions to section 4.0 & 5.0.	Entire step did not fit the definitions section.
5.	Old Step 2.3.1, Deleted Radiation Monitoring System (RM-21A).	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
6.	New Step 2.3.1, Deleted, This method may be used when manual data entry is necessary or a rapid evaluation of a hypothetical release scenario is desired.	This step is no longer applicable, STAMPEDE requires manual input of data, RM-21A has been removed, Change addresses CR-01-52-10.
7.	Step 3.1, Revised to state the following, For Steam Generator Tube Rupture (SGTR) events with 100% S/G water level, the steam flow reported on ICS will be high and result in an over conservative PAR. Use the default MSL flow rate specified by the dose assessment program.	Change addresses CR 00-6111-2.
8.	New Step 3.4, Deleted reference to the lapse rate being available from the National	The National Weather Service does not supply lapse rate, Sigma-Theta or the Default

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
	Weather Service.	"D" Stability Class should be used. Change addresses CR 00-1485-6.
9.	Added Step 3.9, If multiple release paths are indicated by elevated radiological monitor readings, then calculate each pathway and sum results. (Example: ...).	Clarify Addition of dose assessment results.
10.	Section 4.0, changed from one step to 4 steps.	Clarified responsibility for dose assessment.
11.	Added step 4.4, Offsite dose calculations are updated as requested by the Emergency Director, Radiological Manager, or Radiological Director.	Directions moved from Section 2.0
12.	New step 5.4, Changed to add parameters for increased dose assessment calculations.	Directions moved from Section 2.0
13.	Old step 5.6, deleted RM-21A directions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
14.	Deleted old step 7.6, Addendum 5, RM-21A Offsite Dose Calculations.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
15.	Form 1, Deleted RM-21A from method of projection.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
16.	Addendum 1, step 2.1.1, removed RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
17.	Addendum 1, Step 3.1, moved 4.72 E+2 from flow rate to conversion factor.	Addresses CR 00-1818-5, there is a typo where the equation in step 3.1 incorrectly has the conversion factor value listed under the flow rate entry.
18.	Addendum 1, Step 3.2.b. 1-4, deleted RM-21A instructions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
19.	Addendum 4, Page 15, provides example calculations using the containment leakage nomograph. Example 1 states that using the listed input values provided, the correct release rate should be 4.0 E+6 Vs 1.2 E+6 μ Ci/sec.	Change addresses CR 00-1818-6.
20.	Deleted old Addendum 5, RM-21A Offsite Dose Calculations	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
21.	New Addendum 5, Page 17, second paragraph, deleted the following, Additional options to allow editing of the data tables and editing of saved radiological assessments are available under the user identifications of HPS1 and HPS2.	Address CR 00-1818-2, The codes HPS1 and HPS2 refer to the RM-21A.
22.	New Addendum 5, step 4.0, Added directions to calculate Protective Action Recommendations beyond 10 miles	Change addresses CR 00-1818-4.
23.	New Addendum 6, step 4.0, added revision 6.3 to STAMPEDE.	Emergency Dose Rate Tables have been revised with 6.3.
24.	New Addendum 6, pages 2-8, revised dose rate tables.	Emergency Dose Rate Tables have been revised using STAMPEDE, Rev. 6.3.
25.	Addendum 7, revised flowchart to remove RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

**Summary of Changes for
Performance Indicator Tracking Guide
OPGP05-ZV-0013 Rev 1
Department Procedure**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
1.	Page 3, Step 2.2.1.2, changed to complete Addendum 2, Attachment 7.B of procedure OPGP05-ZN-0007, obtain Manager, Plant Protection signature, and Forward completed form to Quality and Licensing.	Report requirements of procedure OPGP05-ZN-0007 became effective after this procedure.
2.	Page 4, Step 4.8, added reference to procedure 0ERP01-ZV-TP01, Offsite Dose Calculations.	Editorial Change.
3.	Page 4, Step 4.9, added reference to procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.	Editorial Change.
4.	Page 4, Step 5.4, Changed 3 years retention to 3 2 years.	Changed to match requirements of procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.
5.	Page 6, Data Sheet 1, Step 1.4, added the steps that need to be complete for accurate Notification Form.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
6.	Page 7, Data Sheet 1, Step 1.5, added 15 minute time requirement for PAR.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
7.	Page 9, Data Sheet 1, Step 4.1.3, added use of 0ERP01-ZV-TP01, Offsite Dose Calculations, Form 1, Offsite Dose Calculations Transmittal Form or dose assessment computer printout.	Needed to document PAR generation.
8.	Page 9, Data Sheet 1, Step 4.1.5, added use of Form 2, Performance Indicator Quarterly Data Summary (Typical) is used to document each Quarter.	Editorial change, old form was not needed.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
9.	Page 9, Data Sheet 2, Step 4.1.1, 4.1.2, 4.1.3, clarified required documentation.	Editorial change.
10.	Page 10, Data Sheet 2, Step 1.2.1.1, changed to track all Control Room Shift Supervisor qualified personnel.	Changed IAW NEI 99-02, Revision 1, 4/23/2001, page 86, line 2 & 3.
11.	Page 14, Form 1, combined Form 1 and Form 3 data and removed old Form 3.	Editorial change, old form was not needed.
12.	Page 15, Form 2, revised from monthly to Quarterly and added 8 Quarter Data Table.	Editorial change, old format was not needed.

**Summary of Changes for
Emergency Response Exercises and Drills
OPGP05-ZV-0001, Rev. 5**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

NO.	CHANGE TO REV. 4	REASON
1	New Step 2.3, Added definition of DEP.	Editorial Correction
2	New Step 5.9, Added reference to NEI 99-02, Regulatory Assessment Performance Indicator Guideline	Editorial Correction
3	New Step 5.9, Added reference to OPGP05-ZV-0013, Performance Indicator Tracking Guide.	Editorial Correction
4	New Step 6.4, Added documentation required for LOR Training Drill	Change address CR 01-52-28, Quality Audit Report finding.
5	Addendum 1, Step 6.0, Added "Verify Drill/Exercise Performance Indicators in accordance with OPGP05-ZV-0013."	Step added to comply with guidance in NEI 99-02, Regulatory Assessment Performance Indicator Guideline

**Summary of Changes for
Assistant Support Organization Director
OERP01-ZV-EF28 Rev. 2**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Editorial change
- Remove all reference to RM-21A Dose Assessment System.

**Summary of Changes for
Notifications to Offsite Agencies
0ERP01-ZV-IN02 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Added SA6 event description.
- Revised NRC Event Notification Worksheet (Form 361) with Revision 12-2000
- Change affecting new downwind sectors to affecting additional zones

**Summary of Changes for
Emergency Plan Revision
OPGP05-ZV-0010 Rev. 4**

This revision does not reduce the effectiveness or change the intent of the emergency response program.

The change is based on removal of the requirement to obtain NRC prior approval of Emergency Action Level (EAL) changes that do not decrease the effectiveness of the emergency response program.

Changes are designated by revision bars.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
1.	Removed Form 1, State of Texas/Matagorda County Acknowledgment Letter	This information is captured using procedure OPAP01-ZA-0102, Review & Comment Form
2.	Page 3, step 2.2.3, & Page 7, step 4.11, changed procedure OPGP05-ZV-0002 to OPGP05-ZV-0014	Editorial Change.
3.	Note box, Old Page 4, changed into two steps (3.1.2.1 & 3.1.2.2) and moved EAL reference to Section 3.5.	Plan and EAL revised differently, all EAL changes do not need NRC prior approval. State & county do not approve Plan changes.
4.	Note box, Old Page 6, changed into two steps (3.2.1.1 & 3.2.1.2) and moved EAL reference to Section 3.3.	Plan and EAL revised differently, EAL changes that do not reduce the effectiveness of the emergency response program do not need NRC prior approval. State & county do not approve Plan changes.
5.	Removed old step 3.3 & 3.3.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
6.	Removed old step 3.4 & 3.4.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
7.	Removed old step 3.5.2, Page 6.	Plan changes shall be made concurrent with implementing procedures as necessary.
8.	Step 3.3.2, Page 6, requires all procedure revisions other than administrative	This ensures a 10CFR50.54(q) screening is performed on all implementing procedures.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
	clarification to include Form 3.	
9.	<p>Step 3.3.3, Page 7, Added Emergency Action Level Review shall be submitted to the following Officials for review and comment (this list may not be all inclusive):</p> <ul style="list-style-type: none"> • State of Texas, Division of Emergency Management, • State of Texas, Bureau of Radiation Control, • Matagorda County. 	Added state and county EAL change review and comment.
10.	Step 3.4, Page 6, added directions for NRC Transmittal.	Clarification.
11.	Step 3.4.2, Page 6, added directions for NRC prior approval.	Clarification.
12.	Step 3.4.3, Page 7, added directions for processing NRC prior approval changes.	Clarification.
13.	Step 4.8, added NUMARC Reference.	NUMARC was added to Form 3
14.	New Form 3, Note box, removed reference to Emergency Action Levels	This box is incorrect, NRC approval is only required for a decrease in effectiveness.
15.	New Form 3, Note box changed to form introduction.	Clarification.
16.	New Form 3, Step 1, added NRC Emergency Response Program Commitments	Clarification.
17.	New Form 3, Added step 3.1.1, If yes, does the proposed EAL changes differ from the requirements of NUMARC/NESP-007, Rev 2	Ensures NUMARC/NESP-007 is reviewed for EAL changes.

NOC-AE-01001140
STI: 31317309
FILE NO: Z18
ER 20010064
Page 3

To: P. L. Serra
Manager, Emergency Response
STP Nuclear Operating Company
P. O. Box 289
Wadsworth, TX 77483

From: Tom Andrews
Region IV Office of the Regional Administrator
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Subject: **Receipt Acknowledgment for Changes to STP
Emergency Plan Implementing Procedure(s)**

I hereby acknowledge having received changes to the STP Nuclear Operating Company's STPEGS Emergency Plan, six Implementing Procedures and one Department Procedure transmitted by STP letter NOC-AE-01001140.

Signature

Date

**Summary of Changes
STPEGS Emergency Plan
Interim Change Notice 19-3**

This revision of the STPEGS Emergency Plan does not reduce the effectiveness or change the intent of the Emergency Response Program.

The content changes are:

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
1	Section B, Page 8, removed step e, step was duplicated on page 9.	Editorial Change.
2	Section G, Page 7, Step G.9, removed the Nuclear Regulatory Commission Region IV Site Team laboratory.	NRC Laboratory is no longer available.
3	Section H, Page 3, Step H.1.6, replaced "This data is displayed by the Emergency Response Facilities Data Acquisition and Display System, Control Room meteorological instruments, and the Radiation Monitoring System RM-21A." with "This data is displayed by the Integrated Computer System (ICS/ERFDADS) and the Control Room meteorological instruments."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
4	Section H, Page 6, Step H.3, replaced "Environmental radiological impact analysis is available on the Radiation Monitoring System RM-21A computer or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations." with "Environmental radiological impact analysis is available using computerized dose assessment models or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
5	Section I, Page 2, Step I.5, changed Frequency Modulation to FM.	Editorial Change.

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
6	Section J, Page 5, Step J.10.1, replaced "The RM-11 and RM-21A system provides real time site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release" with "The dose assessment models described in procedure 0ERP01-ZV-TP01, Offsite Dose Calculations, provides site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release"	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
7	Section L, Page 2, Step L.4, replaced "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using of the RM-21A or other radiological dose assessment/projection models." with "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using radiological dose assessment/projection models as per procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
8	Section M, Page 2, new Step M.2.3.1, Computer Based Training (CBT) is an acceptable equivalent method for classroom refresher training.	Addresses use of computer based training in addition to classroom based refresher training. Address CR 01-52-15.

**Summary of Changes for
Dose Assessment Specialist
0ERP01-ZV-EF15 Rev. 4**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Changes are designated by revision bars.
- Remove all references to RM-21A Dose Assessment System.
- Revised Data Sheet 1, Step 3.1.6 to add clarification for determining differences between measured dose rates and projected dose rates.
- Addendum 2, page 5, removed Cond. Vac. Pump Noble Gas Release Rate from Table.

**Summary of Changes for
Offsite Dose Calculations
0ERP01-ZV-TP01 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

Changes are designated by revision bars.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
1.	Changed procedure usage from In Hand to N/A.	To comply with procedure 0PGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide.
2.	Changed Addendum's 1,4, & 6 to In Hand.	These Addendum's shall be in hand to perform required calculations.
3.	Step 1.2, deleted RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
4.	Step 2.1, removed responsibilities and directions to section 4.0 & 5.0.	Entire step did not fit the definitions section.
5.	Old Step 2.3.1, Deleted Radiation Monitoring System (RM-21A).	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
6.	New Step 2.3.1, Deleted, This method may be used when manual data entry is necessary or a rapid evaluation of a hypothetical release scenario is desired.	This step is no longer applicable, STAMPEDE requires manual input of data, RM-21A has been removed, Change addresses CR-01-52-10.
7.	Step 3.1, Revised to state the following, For Steam Generator Tube Rupture (SGTR) events with 100% S/G water level, the steam flow reported on ICS will be high and result in an over conservative PAR. Use the default MSL flow rate specified by the dose assessment program.	Change addresses CR 00-6111-2.
8.	New Step 3.4, Deleted reference to the lapse rate being available from the National	The National Weather Service does not supply lapse rate, Sigma-Theta or the Default

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
	Weather Service.	“D” Stability Class should be used. Change addresses CR 00-1485-6.
9.	Added Step 3.9, If multiple release paths are indicated by elevated radiological monitor readings, then calculate each pathway and sum results. (Example: ...).	Clarify Addition of dose assessment results.
10.	Section 4.0, changed from one step to 4 steps.	Clarified responsibility for dose assessment.
11.	Added step 4.4, Offsite dose calculations are updated as requested by the Emergency Director, Radiological Manager, or Radiological Director.	Directions moved from Section 2.0
12.	New step 5.4, Changed to add parameters for increased dose assessment calculations.	Directions moved from Section 2.0
13.	Old step 5.6, deleted RM-21A directions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
14.	Deleted old step 7.6, Addendum 5, RM-21A Offsite Dose Calculations.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
15.	Form 1, Deleted RM-21A from method of projection.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
16.	Addendum 1, step 2.1.1, removed RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
17.	Addendum 1, Step 3.1, moved 4.72 E+2 from flow rate to conversion factor.	Addresses CR 00-1818-5, there is a typo where the equation in step 3.1 incorrectly has the conversion factor value listed under the flow rate entry.
18.	Addendum 1, Step 3.2.b. 1-4, deleted RM-21A instructions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
19.	Addendum 4, Page 15, provides example calculations using the containment leakage nomograph. Example 1 states that using the listed input values provided, the correct release rate should be 4.0 E+6 Vs 1.2 E+6 μ Ci/sec.	Change addresses CR 00-1818-6.
20.	Deleted old Addendum 5, RM-21A Offsite Dose Calculations	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
21.	New Addendum 5, Page 17, second paragraph, deleted the following, Additional options to allow editing of the data tables and editing of saved radiological assessments are available under the user identifications of HPS1 and HPS2.	Address CR 00-1818-2, The codes HPS1 and HPS2 refer to the RM-21A.
22.	New Addendum 5, step 4.0, Added directions to calculate Protective Action Recommendations beyond 10 miles	Change addresses CR 00-1818-4.
23.	New Addendum 6, step 4.0, added revision 6.3 to STAMPEDE.	Emergency Dose Rate Tables have been revised with 6.3.
24.	New Addendum 6, pages 2-8, revised dose rate tables.	Emergency Dose Rate Tables have been revised using STAMPEDE, Rev. 6.3.
25.	Addendum 7, revised flowchart to remove RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

**Summary of Changes for
Performance Indicator Tracking Guide
OPGP05-ZV-0013 Rev 1
Department Procedure**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
1.	Page 3, Step 2.2.1.2, changed to complete Addendum 2, Attachment 7.B of procedure OPGP05-ZN-0007, obtain Manager, Plant Protection signature, and Forward completed form to Quality and Licensing.	Report requirements of procedure OPGP05-ZN-0007 became effective after this procedure.
2.	Page 4, Step 4.8, added reference to procedure OERP01-ZV-TP01, Offsite Dose Calculations.	Editorial Change.
3.	Page 4, Step 4.9, added reference to procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.	Editorial Change.
4.	Page 4, Step 5.4, Changed 3 years retention to 2 years.	Changed to match requirements of procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.
5.	Page 6, Data Sheet 1, Step 1.4, added the steps that need to be complete for accurate Notification Form.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
6.	Page 7, Data Sheet 1, Step 1.5, added 15 minute time requirement for PAR.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
7.	Page 9, Data Sheet 1, Step 4.1.3, added use of OERP01-ZV-TP01, Offsite Dose Calculations, Form 1, Offsite Dose Calculations Transmittal Form or dose assessment computer printout.	Needed to document PAR generation.
8.	Page 9, Data Sheet 1, Step 4.1.5, added use of Form 2, Performance Indicator Quarterly Data Summary (Typical) is used to document each Quarter.	Editorial change, old form was not needed.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
9.	Page 9, Data Sheet 2, Step 4.1.1, 4.1.2, 4.1.3, clarified required documentation.	Editorial change.
10.	Page 10, Data Sheet 2, Step 1.2.1.1, changed to track all Control Room Shift Supervisor qualified personnel.	Changed IAW NEI 99-02, Revision 1, 4/23/2001, page 86, line 2 & 3.
11.	Page 14, Form 1, combined Form 1 and Form 3 data and removed old Form 3.	Editorial change, old form was not needed.
12.	Page 15, Form 2, revised from monthly to Quarterly and added 8 Quarter Data Table.	Editorial change, old format was not needed.

**Summary of Changes for
Emergency Response Exercises and Drills
OPGP05-ZV-0001, Rev. 5**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

NO.	CHANGE TO REV. 4	REASON
1	New Step 2.3, Added definition of DEP.	Editorial Correction
2	New Step 5.9, Added reference to NEI 99-02, Regulatory Assessment Performance Indicator Guideline	Editorial Correction
3	New Step 5.9, Added reference to OPGP05-ZV-0013, Performance Indicator Tracking Guide.	Editorial Correction
4	New Step 6.4, Added documentation required for LOR Training Drill	Change address CR 01-52-28, Quality Audit Report finding.
5	Addendum 1, Step 6.0, Added "Verify Drill/Exercise Performance Indicators in accordance with OPGP05-ZV-0013."	Step added to comply with guidance in NEI 99-02, Regulatory Assessment Performance Indicator Guideline

**Summary of Changes for
Assistant Support Organization Director
0ERP01-ZV-EF28 Rev. 2**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Editorial change
- Remove all reference to RM-21A Dose Assessment System.

**Summary of Changes for
Notifications to Offsite Agencies
0ERP01-ZV-IN02 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Added SA6 event description.
- Revised NRC Event Notification Worksheet (Form 361) with Revision 12-2000
- Change affecting new downwind sectors to affecting additional zones

**Summary of Changes for
Emergency Plan Revision
0PGP05-ZV-0010 Rev. 4**

This revision does not reduce the effectiveness or change the intent of the emergency response program.

The change is based on removal of the requirement to obtain NRC prior approval of Emergency Action Level (EAL) changes that do not decrease the effectiveness of the emergency response program.

Changes are designated by revision bars.

0PGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
1.	Removed Form 1, State of Texas/Matagorda County Acknowledgment Letter	This information is captured using procedure 0PAP01-ZA-0102, Review & Comment Form
2.	Page 3, step 2.2.3, & Page 7, step 4.11, changed procedure 0PGP05-ZV-0002 to 0PGP05-ZV-0014	Editorial Change.
3.	Note box, Old Page 4, changed into two steps (3.1.2.1 & 3.1.2.2) and moved EAL reference to Section 3.5.	Plan and EAL revised differently, all EAL changes do not need NRC prior approval. State & county do not approve Plan changes.
4.	Note box, Old Page 6, changed into two steps (3.2.1.1 & 3.2.1.2) and moved EAL reference to Section 3.3.	Plan and EAL revised differently, EAL changes that do not reduce the effectiveness of the emergency response program do not need NRC prior approval. State & county do not approve Plan changes.
5.	Removed old step 3.3 & 3.3.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
6.	Removed old step 3.4 & 3.4.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
7.	Removed old step 3.5.2, Page 6.	Plan changes shall be made concurrent with implementing procedures as necessary.
8.	Step 3.3.2, Page 6, requires all procedure revisions other than administrative	This ensures a 10CFR50.54(q) screening is performed on all implementing procedures.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
	clarification to include Form 3.	
9.	<p>Step 3.3.3, Page 7, Added Emergency Action Level Review shall be submitted to the following Officials for review and comment (this list may not be all inclusive):</p> <ul style="list-style-type: none"> • State of Texas, Division of Emergency Management, • State of Texas, Bureau of Radiation Control, • Matagorda County. 	Added state and county EAL change review and comment.
10.	Step 3.4, Page 6, added directions for NRC Transmittal.	Clarification.
11.	Step 3.4.2, Page 6, added directions for NRC prior approval.	Clarification.
12.	Step 3.4.3, Page 7, added directions for processing NRC prior approval changes.	Clarification.
13.	Step 4.8, added NUMARC Reference.	NUMARC was added to Form 3
14.	New Form 3, Note box, removed reference to Emergency Action Levels	This box is incorrect, NRC approval is only required for a decrease in effectiveness.
15.	New Form 3, Note box changed to form introduction.	Clarification.
16.	New Form 3, Step 1, added NRC Emergency Response Program Commitments	Clarification.
17.	New Form 3, Added step 3.1.1, If yes, does the proposed EAL changes differ from the requirements of NUMARC/NESP-007, Rev 2	Ensures NUMARC/NESP-007 is reviewed for EAL changes.

To: P. L. Serra
Manager, Emergency Response
STP Nuclear Operating Company
P. O. Box 289
Wadsworth, TX 77483

From: Tom Andrews
Region IV Office of the Regional Administrator
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Subject: Receipt Acknowledgment for Changes to STP
Emergency Plan Implementing Procedure(s)

I hereby acknowledge having received changes to the STP Nuclear Operating Company's STPEGS Emergency Plan, six Implementing Procedures and one Department Procedure transmitted by STP letter NOC-AE-01001140.

Signature

Date

**Summary of Changes
STPEGS Emergency Plan
Interim Change Notice 19-3**

This revision of the STPEGS Emergency Plan does not reduce the effectiveness or change the intent of the Emergency Response Program.

The content changes are:

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
1	Section B, Page 8, removed step e, step was duplicated on page 9.	Editorial Change.
2	Section G, Page 7, Step G.9, removed the Nuclear Regulatory Commission Region IV Site Team laboratory.	NRC Laboratory is no longer available.
3	Section H, Page 3, Step H.1.6, replaced "This data is displayed by the Emergency Response Facilities Data Acquisition and Display System, Control Room meteorological instruments, and the Radiation Monitoring System RM-21A." with "This data is displayed by the Integrated Computer System (ICS/ERFDADS) and the Control Room meteorological instruments."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
4	Section H, Page 6, Step H.3, replaced "Environmental radiological impact analysis is available on the Radiation Monitoring System RM-21A computer or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations." with "Environmental radiological impact analysis is available using computerized dose assessment models or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
5	Section I, Page 2, Step I.5, changed Frequency Modulation to FM.	Editorial Change.

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
6	Section J, Page 5, Step J.10.1, replaced "The RM-11 and RM-21A system provides real time site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release" with "The dose assessment models described in procedure 0ERP01-ZV-TP01, Offsite Dose Calculations, provides site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release"	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
7	Section L, Page 2, Step L.4, replaced "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using of the RM-21A or other radiological dose assessment/projection models." with "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using radiological dose assessment/projection models as per procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
8	Section M, Page 2, new Step M.2.3.1, Computer Based Training (CBT) is an acceptable equivalent method for classroom refresher training.	Addresses use of computer based training in addition to classroom based refresher training. Address CR 01-52-15.

**Summary of Changes for
Dose Assessment Specialist
0ERP01-ZV-EF15 Rev. 4**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Changes are designated by revision bars.
- Remove all references to RM-21A Dose Assessment System.
- Revised Data Sheet 1, Step 3.1.6 to add clarification for determining differences between measured dose rates and projected dose rates.
- Addendum 2, page 5, removed Cond. Vac. Pump Noble Gas Release Rate from Table.

**Summary of Changes for
Offsite Dose Calculations
0ERP01-ZV-TP01 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

Changes are designated by revision bars.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
1.	Changed procedure usage from In Hand to N/A.	To comply with procedure OPGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide.
2.	Changed Addendum's 1,4, & 6 to In Hand.	These Addendum's shall be in hand to perform required calculations.
3.	Step 1.2, deleted RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
4.	Step 2.1, removed responsibilities and directions to section 4.0 & 5.0.	Entire step did not fit the definitions section.
5.	Old Step 2.3.1, Deleted Radiation Monitoring System (RM-21A).	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
6.	New Step 2.3.1, Deleted, This method may be used when manual data entry is necessary or a rapid evaluation of a hypothetical release scenario is desired.	This step is no longer applicable, STAMPEDE requires manual input of data, RM-21A has been removed, Change addresses CR-01-52-10.
7.	Step 3.1, Revised to state the following, For Steam Generator Tube Rupture (SGTR) events with 100% S/G water level, the steam flow reported on ICS will be high and result in an over conservative PAR. Use the default MSL flow rate specified by the dose assessment program.	Change addresses CR 00-6111-2.
8.	New Step 3.4, Deleted reference to the lapse rate being available from the National	The National Weather Service does not supply lapse rate, Sigma-Theta or the Default

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
	Weather Service.	"D" Stability Class should be used. Change addresses CR 00-1485-6.
9.	Added Step 3.9, If multiple release paths are indicated by elevated radiological monitor readings, then calculate each pathway and sum results. (Example: ...).	Clarify Addition of dose assessment results.
10.	Section 4.0, changed from one step to 4 steps.	Clarified responsibility for dose assessment.
11.	Added step 4.4, Offsite dose calculations are updated as requested by the Emergency Director, Radiological Manager, or Radiological Director.	Directions moved from Section 2.0
12.	New step 5.4, Changed to add parameters for increased dose assessment calculations.	Directions moved from Section 2.0
13.	Old step 5.6, deleted RM-21A directions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
14.	Deleted old step 7.6, Addendum 5, RM-21A Offsite Dose Calculations.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
15.	Form 1, Deleted RM-21A from method of projection.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
16.	Addendum 1, step 2.1.1, removed RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
17.	Addendum 1, Step 3.1, moved $4.72 \text{ E}+2$ from flow rate to conversion factor.	Addresses CR 00-1818-5, there is a typo where the equation in step 3.1 incorrectly has the conversion factor value listed under the flow rate entry.
18.	Addendum 1, Step 3.2.b. 1-4, deleted RM-21A instructions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
19.	Addendum 4, Page 15, provides example calculations using the containment leakage nomograph. Example 1 states that using the listed input values provided, the correct release rate should be 4.0 E+6 Vs 1.2 E+6 $\mu\text{Ci/sec}$.	Change addresses CR 00-1818-6.
20.	Deleted old Addendum 5, RM-21A Offsite Dose Calculations	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
21.	New Addendum 5, Page 17, second paragraph, deleted the following, Additional options to allow editing of the data tables and editing of saved radiological assessments are available under the user identifications of HPS1 and HPS2.	Address CR 00-1818-2, The codes HPS1 and HPS2 refer to the RM-21A.
22.	New Addendum 5, step 4.0, Added directions to calculate Protective Action Recommendations beyond 10 miles	Change addresses CR 00-1818-4.
23.	New Addendum 6, step 4.0, added revision 6.3 to STAMPEDE.	Emergency Dose Rate Tables have been revised with 6.3.
24.	New Addendum 6, pages 2-8, revised dose rate tables.	Emergency Dose Rate Tables have been revised using STAMPEDE, Rev. 6.3.
25.	Addendum 7, revised flowchart to remove RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

**Summary of Changes for
Performance Indicator Tracking Guide
OPGP05-ZV-0013 Rev 1
Department Procedure**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
1.	Page 3, Step 2.2.1.2, changed to complete Addendum 2, Attachment 7.B of procedure OPGP05-ZN-0007, obtain Manager, Plant Protection signature, and Forward completed form to Quality and Licensing.	Report requirements of procedure OPGP05-ZN-0007 became effective after this procedure.
2.	Page 4, Step 4.8, added reference to procedure OERP01-ZV-TP01, Offsite Dose Calculations.	Editorial Change.
3.	Page 4, Step 4.9, added reference to procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.	Editorial Change.
4.	Page 4, Step 5.4, Changed 3 years retention to 3 2 years.	Changed to match requirements of procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.
5.	Page 6, Data Sheet 1, Step 1.4, added the steps that need to be complete for accurate Notification Form.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
6.	Page 7, Data Sheet 1, Step 1.5, added 15 minute time requirement for PAR.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
7.	Page 9, Data Sheet 1, Step 4.1.3, added use of OERP01-ZV-TP01, Offsite Dose Calculations, Form 1, Offsite Dose Calculations Transmittal Form or dose assessment computer printout.	Needed to document PAR generation.
8.	Page 9, Data Sheet 1, Step 4.1.5, added use of Form 2, Performance Indicator Quarterly Data Summary (Typical) is used to document each Quarter.	Editorial change, old form was not needed.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
9.	Page 9, Data Sheet 2, Step 4.1.1, 4.1.2, 4.1.3, clarified required documentation.	Editorial change.
10.	Page 10, Data Sheet 2, Step 1.2.1.1, changed to track all Control Room Shift Supervisor qualified personnel.	Changed IAW NEI 99-02, Revision 1, 4/23/2001, page 86, line 2 & 3.
11.	Page 14, Form 1, combined Form 1 and Form 3 data and removed old Form 3.	Editorial change, old form was not needed.
12.	Page 15, Form 2, revised from monthly to Quarterly and added 8 Quarter Data Table.	Editorial change, old format was not needed.

**Summary of Changes for
Emergency Response Exercises and Drills
OPGP05-ZV-0001, Rev. 5**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

NO.	CHANGE TO REV. 4	REASON
1	New Step 2.3, Added definition of DEP.	Editorial Correction
2	New Step 5.9, Added reference to NEI 99-02, Regulatory Assessment Performance Indicator Guideline	Editorial Correction
3	New Step 5.9, Added reference to OPGP05-ZV-0013, Performance Indicator Tracking Guide.	Editorial Correction
4	New Step 6.4, Added documentation required for LOR Training Drill	Change address CR 01-52-28, Quality Audit Report finding.
5	Addendum 1, Step 6.0, Added "Verify Drill/Exercise Performance Indicators in accordance with OPGP05-ZV-0013."	Step added to comply with guidance in NEI 99-02, Regulatory Assessment Performance Indicator Guideline

**Summary of Changes for
Assistant Support Organization Director
0ERP01-ZV-EF28 Rev. 2**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Editorial change
- Remove all reference to RM-21A Dose Assessment System.

**Summary of Changes for
Notifications to Offsite Agencies
0ERP01-ZV-IN02 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Added SA6 event description.
- Revised NRC Event Notification Worksheet (Form 361) with Revision 12-2000
- Change affecting new downwind sectors to affecting additional zones

**Summary of Changes for
Emergency Plan Revision
OPGP05-ZV-0010 Rev. 4**

This revision does not reduce the effectiveness or change the intent of the emergency response program.

The change is based on removal of the requirement to obtain NRC prior approval of Emergency Action Level (EAL) changes that do not decrease the effectiveness of the emergency response program.

Changes are designated by revision bars.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
1.	Removed Form 1, State of Texas/Matagorda County Acknowledgment Letter	This information is captured using procedure 0PAP01-ZA-0102, Review & Comment Form
2.	Page 3, step 2.2.3, & Page 7, step 4.11, changed procedure OPGP05-ZV-0002 to OPGP05-ZV-0014	Editorial Change.
3.	Note box, Old Page 4, changed into two steps (3.1.2.1 & 3.1.2.2) and moved EAL reference to Section 3.5.	Plan and EAL revised differently, all EAL changes do not need NRC prior approval. State & county do not approve Plan changes.
4.	Note box, Old Page 6, changed into two steps (3.2.1.1 & 3.2.1.2) and moved EAL reference to Section 3.3.	Plan and EAL revised differently, EAL changes that do not reduce the effectiveness of the emergency response program do not need NRC prior approval. State & county do not approve Plan changes.
5.	Removed old step 3.3 & 3.3.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
6.	Removed old step 3.4 & 3.4.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
7.	Removed old step 3.5.2, Page 6.	Plan changes shall be made concurrent with implementing procedures as necessary.
8.	Step 3.3.2, Page 6, requires all procedure revisions other than administrative	This ensures a 10CFR50.54(q) screening is performed on all implementing procedures.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
	clarification to include Form 3.	
9.	<p>Step 3.3.3, Page 7, Added Emergency Action Level Review shall be submitted to the following Officials for review and comment (this list may not be all inclusive):</p> <ul style="list-style-type: none"> • State of Texas, Division of Emergency Management, • State of Texas, Bureau of Radiation Control, • Matagorda County. 	Added state and county EAL change review and comment.
10.	Step 3.4, Page 6, added directions for NRC Transmittal.	Clarification.
11.	Step 3.4.2, Page 6, added directions for NRC prior approval.	Clarification.
12.	Step 3.4.3, Page 7, added directions for processing NRC prior approval changes.	Clarification.
13.	Step 4.8, added NUMARC Reference.	NUMARC was added to Form 3
14.	New Form 3, Note box, removed reference to Emergency Action Levels	This box is incorrect, NRC approval is only required for a decrease in effectiveness.
15.	New Form 3, Note box changed to form introduction.	Clarification.
16.	New Form 3, Step 1, added NRC Emergency Response Program Commitments	Clarification.
17.	New Form 3, Added step 3.1.1, If yes, does the proposed EAL changes differ from the requirements of NUMARC/NESP-007, Rev 2	Ensures NUMARC/NESP-007 is reviewed for EAL changes.

NOC-AE-01001140
STI: 31317309
FILE NO: Z18
ER 20010064
Page 3

To: P. L. Serra
Manager, Emergency Response
STP Nuclear Operating Company
P. O. Box 289
Wadsworth, TX 77483

From: Tom Andrews
Region IV Office of the Regional Administrator
U. S. Nuclear Regulatory Commission
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011-8064

Subject: **Receipt Acknowledgment for Changes to STP
Emergency Plan Implementing Procedure(s)**

I hereby acknowledge having received changes to the STP Nuclear Operating Company's STPEGS Emergency Plan, six Implementing Procedures and one Department Procedure transmitted by STP letter NOC-AE-01001140.

Signature

Date

**Summary of Changes
STPEGS Emergency Plan
Interim Change Notice 19-3**

This revision of the STPEGS Emergency Plan does not reduce the effectiveness or change the intent of the Emergency Response Program.

The content changes are:

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
1	Section B, Page 8, removed step e, step was duplicated on page 9.	Editorial Change.
2	Section G, Page 7, Step G.9, removed the Nuclear Regulatory Commission Region IV Site Team laboratory.	NRC Laboratory is no longer available.
3	Section H, Page 3, Step H.1.6, replaced "This data is displayed by the Emergency Response Facilities Data Acquisition and Display System, Control Room meteorological instruments, and the Radiation Monitoring System RM-21A." with "This data is displayed by the Integrated Computer System (ICS/ERFDADS) and the Control Room meteorological instruments."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
4	Section H, Page 6, Step H.3, replaced "Environmental radiological impact analysis is available on the Radiation Monitoring System RM-21A computer or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations." with "Environmental radiological impact analysis is available using computerized dose assessment models or equivalent. This is more adequately detailed in Emergency Response Procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
5	Section I, Page 2, Step I.5, changed Frequency Modulation to FM.	Editorial Change.

STPEGS Emergency Plan, ICN 19-3

NO.	CHANGE TO REV. ICN 19-2	REASON
6	Section J, Page 5, Step J.10.1, replaced "The RM-11 and RM-21A system provides real time site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release" with "The dose assessment models described in procedure 0ERP01-ZV-TP01, Offsite Dose Calculations, provides site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release"	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
7	Section L, Page 2, Step L.4, replaced "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using of the RM-21A or other radiological dose assessment/projection models." with "Offsite population dose will be calculated by processing thermoluminescent dosimeters located in the Station 10-mile Emergency Planning Zone and using radiological dose assessment/projection models as per procedure 0ERP01-ZV-TP01, Offsite Dose Calculations."	The RM-21A Dose Assessment System is being retired. Addresses CR 01-52-10.
8	Section M, Page 2, new Step M.2.3.1, Computer Based Training (CBT) is an acceptable equivalent method for classroom refresher training.	Addresses use of computer based training in addition to classroom based refresher training. Address CR 01-52-15.

**Summary of Changes for
Dose Assessment Specialist
0ERP01-ZV-EF15 Rev. 4**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Changes are designated by revision bars.
- Remove all references to RM-21A Dose Assessment System.
- Revised Data Sheet 1, Step 3.1.6 to add clarification for determining differences between measured dose rates and projected dose rates.
- Addendum 2, page 5, removed Cond. Vac. Pump Noble Gas Release Rate from Table.

**Summary of Changes for
Offsite Dose Calculations
0ERP01-ZV-TP01 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

Changes are designated by revision bars.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
1.	Changed procedure usage from In Hand to N/A.	To comply with procedure OPGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide.
2.	Changed Addendum's 1,4, & 6 to In Hand.	These Addendum's shall be in hand to perform required calculations.
3.	Step 1.2, deleted RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
4.	Step 2.1, removed responsibilities and directions to section 4.0 & 5.0.	Entire step did not fit the definitions section.
5.	Old Step 2.3.1, Deleted Radiation Monitoring System (RM-21A).	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
6.	New Step 2.3.1, Deleted, This method may be used when manual data entry is necessary or a rapid evaluation of a hypothetical release scenario is desired.	This step is no longer applicable, STAMPEDE requires manual input of data, RM-21A has been removed, Change addresses CR-01-52-10.
7.	Step 3.1, Revised to state the following, For Steam Generator Tube Rupture (SGTR) events with 100% S/G water level, the steam flow reported on ICS will be high and result in an over conservative PAR. Use the default MSL flow rate specified by the dose assessment program.	Change addresses CR 00-6111-2.
8.	New Step 3.4, Deleted reference to the lapse rate being available from the National	The National Weather Service does not supply lapse rate, Sigma-Theta or the Default

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
	Weather Service.	"D" Stability Class should be used. Change addresses CR 00-1485-6.
9.	Added Step 3.9, If multiple release paths are indicated by elevated radiological monitor readings, then calculate each pathway and sum results. (Example: ...).	Clarify Addition of dose assessment results.
10.	Section 4.0, changed from one step to 4 steps.	Clarified responsibility for dose assessment.
11.	Added step 4.4, Offsite dose calculations are updated as requested by the Emergency Director, Radiological Manager, or Radiological Director.	Directions moved from Section 2.0
12.	New step 5.4, Changed to add parameters for increased dose assessment calculations.	Directions moved from Section 2.0
13.	Old step 5.6, deleted RM-21A directions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
14.	Deleted old step 7.6, Addendum 5, RM-21A Offsite Dose Calculations.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
15.	Form 1, Deleted RM-21A from method of projection.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
16.	Addendum 1, step 2.1.1, removed RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
17.	Addendum 1, Step 3.1, moved 4.72 E+2 from flow rate to conversion factor.	Addresses CR 00-1818-5, there is a typo where the equation in step 3.1 incorrectly has the conversion factor value listed under the flow rate entry.
18.	Addendum 1, Step 3.2.b. 1-4, deleted RM-21A instructions.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

0ERP01-ZV-TP01, Offsite Dose Calculations, Rev. 11

	Changes to Revision 10	Reason
19.	Addendum 4, Page 15, provides example calculations using the containment leakage nomograph. Example 1 states that using the listed input values provided, the correct release rate should be 4.0 E+6 Vs 1.2 E+6 $\mu\text{Ci}/\text{sec}$.	Change addresses CR 00-1818-6.
20.	Deleted old Addendum 5, RM-21A Offsite Dose Calculations	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.
21.	New Addendum 5, Page 17, second paragraph, deleted the following, Additional options to allow editing of the data tables and editing of saved radiological assessments are available under the user identifications of HPS1 and HPS2.	Address CR 00-1818-2, The codes HPS1 and HPS2 refer to the RM-21A.
22.	New Addendum 5, step 4.0, Added directions to calculate Protective Action Recommendations beyond 10 miles	Change addresses CR 00-1818-4.
23.	New Addendum 6, step 4.0, added revision 6.3 to STAMPEDE.	Emergency Dose Rate Tables have been revised with 6.3.
24.	New Addendum 6, pages 2-8, revised dose rate tables.	Emergency Dose Rate Tables have been revised using STAMPEDE, Rev. 6.3.
25.	Addendum 7, revised flowchart to remove RM-21A.	RM-21A Dose Assessment capabilities have been replaced by STAMPEDE, Change addresses CR-01-52-10.

**Summary of Changes for
Performance Indicator Tracking Guide
OPGP05-ZV-0013 Rev 1
Department Procedure**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
1.	Page 3, Step 2.2.1.2, changed to complete Addendum 2, Attachment 7.B of procedure OPGP05-ZN-0007, obtain Manager, Plant Protection signature, and Forward completed form to Quality and Licensing.	Report requirements of procedure OPGP05-ZN-0007 became effective after this procedure.
2.	Page 4, Step 4.8, added reference to procedure 0ERP01-ZV-TP01, Offsite Dose Calculations.	Editorial Change.
3.	Page 4, Step 4.9, added reference to procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.	Editorial Change.
4.	Page 4, Step 5.4, Changed 3 years retention to 3 2 years.	Changed to match requirements of procedure OPGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators.
5.	Page 6, Data Sheet 1, Step 1.4, added the steps that need to be complete for accurate Notification Form.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
6.	Page 7, Data Sheet 1, Step 1.5, added 15 minute time requirement for PAR.	Change based on revision to NEI 99-02, Regulatory Assessment Performance Indicator Guideline.
7.	Page 9, Data Sheet 1, Step 4.1.3, added use of 0ERP01-ZV-TP01, Offsite Dose Calculations, Form 1, Offsite Dose Calculations Transmittal Form or dose assessment computer printout.	Needed to document PAR generation.
8.	Page 9, Data Sheet 1, Step 4.1.5, added use of Form 2, Performance Indicator Quarterly Data Summary (Typical) is used to document each Quarter.	Editorial change, old form was not needed.

OPGP05-ZV-0013, Performance Indicator Tracking Guide, Rev 1

	Changes to Revision 0	Reason
9.	Page 9, Data Sheet 2, Step 4.1.1, 4.1.2, 4.1.3, clarified required documentation.	Editorial change.
10.	Page 10, Data Sheet 2, Step 1.2.1.1, changed to track all Control Room Shift Supervisor qualified personnel.	Changed IAW NEI 99-02, Revision 1, 4/23/2001, page 86, line 2 & 3.
11.	Page 14, Form 1, combined Form 1 and Form 3 data and removed old Form 3.	Editorial change, old form was not needed.
12.	Page 15, Form 2, revised from monthly to Quarterly and added 8 Quarter Data Table.	Editorial change, old format was not needed.

**Summary of Changes for
Emergency Response Exercises and Drills
OPGP05-ZV-0001, Rev. 5**

This revision does not reduce the effectiveness nor change the intent of the Emergency Response Program.

NO.	CHANGE TO REV. 4	REASON
1	New Step 2.3, Added definition of DEP.	Editorial Correction
2	New Step 5.9, Added reference to NEI 99-02, Regulatory Assessment Performance Indicator Guideline	Editorial Correction
3	New Step 5.9, Added reference to OPGP05-ZV-0013, Performance Indicator Tracking Guide.	Editorial Correction
4	New Step 6.4, Added documentation required for LOR Training Drill	Change address CR 01-52-28, Quality Audit Report finding.
5	Addendum 1, Step 6.0, Added "Verify Drill/Exercise Performance Indicators in accordance with OPGP05-ZV-0013."	Step added to comply with guidance in NEI 99-02, Regulatory Assessment Performance Indicator Guideline

**Summary of Changes for
Assistant Support Organization Director
0ERP01-ZV-EF28 Rev. 2**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Editorial change

- Remove all reference to RM-21A Dose Assessment System.

**Summary of Changes for
Notifications to Offsite Agencies
0ERP01-ZV-IN02 Rev. 11**

This revision does not reduce the effectiveness nor change the intent of the procedure as described within the Emergency Plan.

The content changes are:

- Added SA6 event description.
- Revised NRC Event Notification Worksheet (Form 361) with Revision 12-2000
- Change affecting new downwind sectors to affecting additional zones

**Summary of Changes for
Emergency Plan Revision
OPGP05-ZV-0010 Rev. 4**

This revision does not reduce the effectiveness or change the intent of the emergency response program.

The change is based on removal of the requirement to obtain NRC prior approval of Emergency Action Level (EAL) changes that do not decrease the effectiveness of the emergency response program.

Changes are designated by revision bars.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
1.	Removed Form 1, State of Texas/Matagorda County Acknowledgment Letter	This information is captured using procedure OPAP01-ZA-0102, Review & Comment Form
2.	Page 3, step 2.2.3, & Page 7, step 4.11, changed procedure OPGP05-ZV-0002 to OPGP05-ZV-0014	Editorial Change.
3.	Note box, Old Page 4, changed into two steps (3.1.2.1 & 3.1.2.2) and moved EAL reference to Section 3.5.	Plan and EAL revised differently, all EAL changes do not need NRC prior approval. State & county do not approve Plan changes.
4.	Note box, Old Page 6, changed into two steps (3.2.1.1 & 3.2.1.2) and moved EAL reference to Section 3.3.	Plan and EAL revised differently, EAL changes that do not reduce the effectiveness of the emergency response program do not need NRC prior approval. State & county do not approve Plan changes.
5.	Removed old step 3.3 & 3.3.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
6.	Removed old step 3.4 & 3.4.1, Page 6.	Instructions incorporated into sections 3.1 & 3.2.
7.	Removed old step 3.5.2, Page 6.	Plan changes shall be made concurrent with implementing procedures as necessary.
8.	Step 3.3.2, Page 6, requires all procedure revisions other than administrative	This ensures a 10CFR50.54(q) screening is performed on all implementing procedures.

OPGP05-ZV-0010, Emergency Plan Revision, Rev. 4

	Changes to Revision 3	Reason
	clarification to include Form 3.	
9.	<p>Step 3.3.3, Page 7, Added Emergency Action Level Review shall be submitted to the following Officials for review and comment (this list may not be all inclusive):</p> <ul style="list-style-type: none"> • State of Texas, Division of Emergency Management, • State of Texas, Bureau of Radiation Control, • Matagorda County. 	Added state and county EAL change review and comment.
10.	Step 3.4, Page 6, added directions for NRC Transmittal.	Clarification.
11.	Step 3.4.2, Page 6, added directions for NRC prior approval.	Clarification.
12.	Step 3.4.3, Page 7, added directions for processing NRC prior approval changes.	Clarification.
13.	Step 4.8, added NUMARC Reference.	NUMARC was added to Form 3
14.	New Form 3, Note box, removed reference to Emergency Action Levels	This box is incorrect, NRC approval is only required for a decrease in effectiveness.
15.	New Form 3, Note box changed to form introduction.	Clarification.
16.	New Form 3, Step 1, added NRC Emergency Response Program Commitments	Clarification.
17.	New Form 3, Added step 3.1.1, If yes, does the proposed EAL changes differ from the requirements of NUMARC/NESP-007, Rev 2	Ensures NUMARC/NESP-007 is reviewed for EAL changes.

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31299819	OPGP05-ZV-0010	Rev. 3	Page 14 of 16
Emergency Plan Revision			
Form 3	Emergency Plan Approval Form		Page 1 of 1

Attached for your review and approval is Revision Interim Change Notice 19-3 of the STPEGS Emergency Plan.

PORC Meeting No. 01-015 5/30/01

Review & Concurrence: *Al Parbury* 1 6/8/01
 Plant General Manager Date

Approved: *J. J. [Signature]* 1 6/20/01
 Vice President, Business Services Date

Effective Date: 06/28/01

When completed, this form shall serve as certification that Revision Interim Change Notice 19-3 is the current revision of the STPEGS Emergency Plan.

When completed, a copy of this form shall become the cover page of the revision for controlled distribution.

This Page when completed, shall be retained as per the Document Type List (DTL)

SOUTH TEXAS PROJECT GENERATING STATION

EMERGENCY PLAN

SECTION B

To ensure reports can be made, NRC Headquarters Operations Center maintains a 24 hour emergency telephone and duty officer. The NRC Region IV Response Team, located in Arlington, Texas, has the capability of responding in approximately five hours. The leader of this response team will normally be the Region IV Regional Administrator, assuming the role as NRC Director of Site Operations, when so directed by the NRC Chairperson.

- B.5 Private Sector and Contract Organizations include various groups that will provide support and services to the Station as follows:**
- a. Westinghouse Nuclear Services Division - has established a contract with the Station to provide general services related to nuclear steam supply operation during and following an accident situation. Westinghouse provides a capability to respond on a 24 hour a day basis.**
 - b. Methodist Hospital - by Letter of Agreement, Methodist Hospital in Houston Texas, serves as a referral source for long-term care of radiological injuries. Methodist Hospital is available 24 hours per day for consultation or treatment of personnel who have been either internally contaminated or may have received an acute dose of radiation. Methodist Hospital is located approximately 70 air miles from the Station.**
 - c. EquiStar Petrochemical Plant (Matagorda Operations) and Celanese Chemical Group (Bay City Plant) - by separate Letters of Agreement, will notify the Station of emergencies occurring at their plants which could involve offsite chemical releases, on a 24 hours a day basis.**
 - d. Best Western Matagorda Hotel and Conference Center - by Letter of Agreement and contract with the Station will place the facility at the disposal of the Utility during a declared emergency at the Station, on a 24 hour a day basis. This includes the use of a meeting room/ball room for conversion to the Joint Information Center. The Best Western Matagorda Hotel and Conference Center is located approximately 15 road miles from the Station.**

SOUTH TEXAS PROJECT GENERATING STATION

EMERGENCY PLAN

SECTION G

- G.9 The Station has radiological and radiochemistry laboratories located in each unit. The facilities are designed to provide quick and efficient analyses of samples from the Station process systems, Reactor Coolant System, and secondary systems. The specific instruments that are incorporated in the systems utilized for core damage assessment are certified to perform their intended functions in an accident environment with abnormal chemistry and radiation parameters. Environmental monitoring sample analysis can also be performed in either unit's facilities. The physical separation of the units will allow the facilities in the unaffected unit to be used as a backup. The radiological station and radiochemical laboratory facilities may be supplemented by the use of the following:
- A mobile radiological laboratory set up at the staging area at the Bay City Civic Center and operated by the Texas Department of Health, Bureau of Radiation Control;
 - The laboratory facilities of neighboring nuclear facilities as coordinated by the Institute of Nuclear Power Operations;
 - Duke Engineering (Contract); and
 - Comanche Peak (Letter of Agreement).
- G.10 Personnel decontamination facilities are located near the Station Radiologically Controlled Area egress point and in the Emergency Operations Facility. Personnel decontamination is performed at the Station using normal Radiation Protection Procedures.
- 7.11 A first aid station is located onsite and has provisions for treatment of minor injuries.
- 7.12 The Station is equipped to maintain and repair mechanical, structural, electrical and control instrumentation and equipment in the Station. Additional equipment may be requested from other utility facilities or contractors.
- 7.13 The Emergency Response Facilities Data Acquisition and Display System is an integrated system that performs the following functions:
- a. Implementation of the Safety Parameter Display System as described in NUREG-0696 and NUREG-0737, Supplement 1;
 - b. Data acquisition and signal processing for the Engineered Safety Features Status Monitoring System; and,

SOUTH TEXAS PROJECT GENERATING STATION

EMERGENCY PLAN

SECTION H

- d. Steam generator pressure and levels; and,
- e. Reactor coolant temperature.

Additionally, the instrumentation provides data in the Control Room, Technical Support Center and the Emergency Operations Facility via the Emergency Response Facilities Data Acquisition and Display System.

- H.1.4 A liquid radiation monitor is provided for gross failed fuel detection. The monitor obtains a continuous sample from the reactor coolant system and activates an alarm on the Radiation Monitoring System if a predetermined activity level is reached. The monitor is described in Section 11.0 of the Station Updated Final Safety Analysis Report.
- H.1.5 The Station has a system for monitoring radioactivity throughout the Station. This system is called the Radiation Monitoring System and consists of area and process/effluent radiological monitoring instrumentation. More information on the Radiation Monitoring System can be found in Section J of this Plan and is described in detail in Section 12.3 of the Station Updated Final Safety Analysis Report.
- H.1.6 The Station has two permanent meteorological towers near site for the analysis of current Station area meteorological data. The primary tower is a 60 meter (196.9 feet) tower, instrumentation, and computerized data output. The primary tower instrumentation includes sensors to measure wind direction, wind speed, air temperature, dew point, solar radiation, precipitation, and calculated differential temperatures between elevations. Data from the primary tower is relayed to the Station. This data is displayed by the Integrated Computer System (ICS/ERFDADS) and the Control Room meteorological instruments Table H-1 provides details on instrumentation and elevations of primary meteorological instrumentation.

The backup system consists of a 10 meter (32.8 feet) tower with similar but fewer instruments to measure air temperature, wind speed, and wind direction.

Data from either tower can be fed by independent digital processors to the Control Rooms, Technical Support Centers, Emergency Operations Facility, the Nuclear Regulatory Commission and State and County offices through direct dial modem communications.

Weather forecasts are available from the National Weather Service by telephone. The Station has the option of using contracted commercial weather service or the National Weather Service.

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EMERGENCY PLAN

SECTION H

duration of the emergency classification to allow for offsite protective action recommendation escalation, recovery or termination (with concurrence of County, State, and NRC organizations) as dictated by environmental sampling results.

Offsite Field Teams may be deployed to take dose rate readings and iodine concentrations in accordance with OERP01-ZV-TP02, Offsite Field Team. The Radiological Director will provide direct input to the Emergency Director concerning the need to make protective action recommendations to offsite agencies.

Environmental radiological impact analysis is available using computerized dose assessment models or equivalent. This is more adequately detailed in Emergency Response Procedure OERP01-ZV-TP01, Offsite Dose Calculations.

SOUTH TEXAS PROJECT GENERATING STATION

EMERGENCY PLAN

SECTION I

- I.4 The Station is designed and equipped with a series of safety systems engineered to meet Title 10 Code of Federal Regulations Part 100 criteria for reactor safety. The Station recognizes that in any accident situation, it is prudent and logical to make every effort to reduce and minimize exposure of the public to radioactive materials and radiation. This is accomplished by issuing offsite protective action recommendations when plant conditions indicate a potential for release of radioactive material or if a release is occurring or has occurred. The Protective Action Guidelines for the general public for thyroid dose due to inhalation from a passing plume and exposure to airborne radioactive material, as recommended by the Environmental Protection Agency, are five (5) rem Thyroid Committed Dose Equivalent and one (1) rem Total Effective Dose Equivalent respectively. Additional information is provided in Addendum I-1.

Recommendations for protective actions for the general public will originate from the Control Room, the Technical Support Center, or the Emergency Operations Facility (depending on facility activation) based on plant conditions and/or based on data derived from offsite dose assessment or actual field monitoring measurements. Emergency Response Procedures establishing these methodologies are 0ERP01-ZV-TP01, Offsite Dose Calculations and 0ERP01-ZV-IN07 Offsite Protective Action Recommendations. These procedures establish methods for determining projected dose to the public at risk. Recommendations will be made in accordance with agreements made with the Texas Department of Health, Bureau of Radiation Control. Whenever possible, message formats provided in the Emergency Response Procedure 0ERP01-ZV-IN02, Notifications to Offsite Agencies, in accordance with Section E of this Plan will be utilized. The implementing procedures relating to Protective Action Guidelines assure that the recommendations are determined through an approved process. The Emergency Director shall approve Offsite protective action recommendations.

- I.5 In the event public notification is required, both transient and resident population within the ten mile Emergency Planning Zone will be initially notified through the Prompt Notification System as referenced and described in Section E of this Plan and by the Matagorda County officials. Additional notification and information will be provided to the transient and resident population as well as the general public outside the ten mile Emergency Planning Zone through the Emergency Alert System. Radio station KMKS FM, Bay City, is the primary Emergency Alert System station for the Station nuclear emergency response and KIOX FM is secondary.

Information brochures and other public information documents describing notification, protective actions and general radiological education are provided by mailing and by general distribution to residents and transients within the ten mile Emergency Planning Zone. Matagorda County will issue messages similar to

SOUTH TEXAS PROJECT GENERATING STATION

EMERGENCY PLAN

SECTION J

- J.8 All tools and items of equipment used in the Radiologically Controlled Areas must be checked for contamination before being taken from the Radiologically Controlled Area.
- a. Vehicles leaving the site will be monitored and decontaminated, as necessary.
 - b. Emergency vehicles on life saving missions will not be delayed for radiological considerations.
- J.9 In the event of a major radiation emergency, exposure to airborne concentration of radioactivity will be limited by the following policy:
- a. Whenever practicable, total internal exposure of any individual during an emergency should be maintained As Low As Reasonably Achievable.
 - b. Respiratory protection will be used whenever appropriate.
 - c. Exposure limits for noble gases are based on beta plus gamma radiation effects to the skin and lens of the eyes.
 - d. Potassium Iodide should be issued to all onsite personnel on a voluntary basis at a General Emergency or when dose projections onsite or survey results projected exceed twenty-five (25) rem Committed Dose Equivalent to the thyroid. The issuance shall be determined by the Emergency Director and Radiological Director.
- J.10 The Radiation Monitoring System monitors radioactivity in the station. This system, consisting of two subsystems, provides monitoring capability for area radiation and process/effluent stream radiation monitoring. The process/effluent Radiation Monitoring System is comprised of two smaller subsystems, the Liquid Monitoring System, and the Atmosphere Monitoring System. These Subsystems are described in Section H of this Plan and in the Station Updated Final Safety Analysis Report Section 9.0, 11.0, and 12.0. The Radiation Monitoring System is designed to provide output in normal and emergency operating ranges and is designed to operate in emergency radiation fields.
- J.10.1 The dose assessment models described in procedure OERP01-ZV-TP01, Offsite Dose Calculations, provides site specific estimates and predictions of atmospheric effluent transport and diffusion during and immediately after an airborne release. The diffusion model used meets the criteria of a Class A model as defined in NUREG-0654/Federal Emergency Management Agency Report-1 and additionally can perform X/Q calculations, dose and dose rate projections, and deposition rates for the Plume Exposure Pathway Emergency Planning Zone.

SOUTH TEXAS PROJECT GENERATING STATION

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SECTION M

M.1.3 To meet these objectives, the Emergency Preparedness Training Program will include, but is not limited to the following:

- a. General content of the Plan and procedures
- b. Location of emergency equipment and supplies
- c. Names, locations, and functions of the emergency response facilities
- d. Use of Station communication systems
- e. Personnel accountability, assembly, and evacuation

M.2 The overall responsibility for assignment of Emergency Preparedness Training lies with the Supervisor, Emergency Response as described in approved Plant Procedures.

M.2.1 Each Emergency Response Facility Manager is responsible to ensure the personnel within their facility receive the training required to attend their duties in the Station Emergency Response Organization. Personnel assigned Station Emergency Response Organization duties are responsible to become familiar with their emergency response duties and responsibilities.

M.2.2 All Station Emergency Response Organization personnel are not required to have the in-depth training that is required of those personnel who will be in a management position during a declared event. However, cross-training is allowed.

M.2.3 Annually, Station personnel shall re-qualify for their position. The requalification may be accomplished by either classroom instruction or through the drill and exercise program by being a participant, mentor, coach, evaluator, or controller, but not as an observer. Multiple assignees to a given key Emergency Response Organization position may receive credit for the same drill if their participation is a meaningful and thorough opportunity to gain proficiency in the assigned position.

M.2.3.1 Computer Based Training (CBT) is an acceptable equivalent method for classroom refresher training.

M.2.4 New personnel assigned to the Station shall attend applicable Emergency Plan Training prior to assuming any Emergency Response Organization position.

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Dose Assessment Specialist			
Quality	Safety-Related	Usage: N/A	Effective Date: 06/28/01
Max Keys	N/A	N/A	Emergency Response Division
PREPARER	TECHNICAL	USER	COGNIZANT ORGANIZATION

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Dose Assessment Specialist**1.0 Purpose and Scope**

- 1.1 This procedure specifies the actions to be completed by the Dose Assessment Specialist in the Emergency Operations Facility (EOF) during a declared emergency.
- 1.2 This procedure implements the requirements of the South Texas Project Electric Generating Station (STPEGS) Emergency Plan specific to the Dose Assessment Specialist.

2.0 Responsibilities

- 2.1 The Dose Assessment Specialist is responsible for:
 - 2.1.1 Identifying potential and existing release pathways and associated monitoring points.
 - 2.1.2 Performing dose calculations.
 - 2.1.3 Formulating offsite Protective Action Recommendations (PARs).
 - 2.1.4 Evaluating projected doses versus Protective Action Guides (PAGs) and Emergency Action Levels (EALs).
 - 2.1.5 Evaluating projected downwind doses versus actual field readings and validating the dose projection model.
 - 2.1.6 Identifying discrepancies between the STPEGS dose projection calculations and State and NRC calculations.

3.0 References

- 3.1 STPEGS Emergency Plan
- 3.2 0PGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide
- 3.3 0ERP01-ZV-TP01, Offsite Dose Calculations
- 3.4 0ERP01-ZV-IN01, Emergency Classification
- 3.5 0ERP01-ZV-IN02, Notifications to Offsite Agencies
- 3.6 0ERP01-ZV-IN07, Protective Action Recommendations
- 3.7 0ERP01-ZV-RE01, Recovery Operations
- 3.8 0ERP01-ZV-RE02, Documentation

Dose Assessment Specialist**4.0 Procedure**

- 4.1 When responding to the EOF during an Emergency, implement the appropriate portion of Data Sheet 1, Dose Assessment Specialist Checklist, based on the Emergency Classification declared at the time of arrival.
- 4.2 Use Addendums and Checklists to help direct emergency activities.

5.0 Support Documents

- 5.1 Addendum 1, Shift Turnover Briefing
- 5.2 Addendum 2, Meteorological and Radiation Monitor Information
- 5.3 Data Sheet 1, Dose Assessment Specialist Checklist

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Dose Assessment Specialist			
Addendum 1	Shift Turnover Briefing		Page 1 of 1

- 1.0 Provide a briefing of events to the relief person including the following areas:
 - 1.1 Current Emergency Classification.
 - 1.2 Current Protective Action Recommendations.
 - 1.3 Current Protective Actions implemented by County.
 - 1.4 Current whole body and thyroid offsite dose calculations.
 - 1.5 Completed checklists.
 - 1.6 Emergency Action Logs.
 - 1.7 Current shift schedule and staffing levels.

- 2.0 Inform the following personnel of the transfer of responsibility to the oncoming shift personnel:
 - 2.1 Radiological Director.
 - 2.2 NRC Dose Assessor.
 - 2.3 State/BRC Representatives in the EOF.

- 3.0 Update the EOF staffing board.

- 4.0 Document the time of turnover and the identity of your relief on your LOG and provide copies to your replacement. Provide the original LOG sheets to the Deputy EOF Director.

- 5.0 Verify your phone number on the shift schedule. If this phone number is inside the 10 mile EPZ, then provide an alternate number for contact should evacuation of the EPZ be necessary.

- 6.0 Take a copy of your shift schedule.

- 7.0 If issued a TLD, then maintain custody of the TLD until Termination or Recovery.

- 8.0 Verify possession of a STPNOC Picture Badge for access through possible roadblocks when returning to the site for the next shift or request a replacement Picture Badge from the Support Orientation Coordinator.

- 9.0 Inform the Security Officer responsible for access control to the EOF of the shift change and sign out when leaving the facility.

Dose Assessment Specialist

Addendum 2

Meteorological and Radiation Monitor Information

Page 1 of 2

Description	Units	Range	Monitor #	Unit 1	Unit 2	ICS/ERFDADS Screen #
Meteorological Tower 15 Minute Average	-	-	-	-	-	2601
Unit Vent Particulate Channel	μCi/cc	1.6 E-11 to 1.6 E-05	RE-8010A	1UV110	2UV110	(R)/8110
Unit Vent Iodine Channel	μCi/cc	3.3 E-12 to 1.2 E-05	RE-8010B	1UV210	2UV210	(R)/8110
Unit Vent Release Rate	μCi/Sec	3.0 E+01 to 2.0 E+13	RT-8010B	1UV610	2UV610	(R)/8110
IVC Main Steam Line A	mR/hr	1.0 E-01 to 1.0 E+04	RE-8046A	1MS146	2MS146	(R)/8110 *
IVC Main Steam Line A	mR/hr	1.0 E+02 to 1.0 E+07	RE-8046B	1MS246	2MS246	(R)/8110 *
IVC Main Steam Line A	μCi/cc	1.4 E-02 to 1.4 E+06	RT-8046	1MS446	2MS446	-
IVC Main Steam Line B	mR/hr	1.0 E-01 to 1.0 E+04	RE-8047A	1MS147	2MS147	(R)/8110 *
IVC Main Steam Line B	mR/hr	1.0 E+02 to 1.0 E+07	RE-8047B	1MS247	2MS247	(R)/8110 *
IVC Main Steam Line B	μCi/cc	1.4 E-02 to 1.4 E+06	RT-8047	1MS447	2MS447	-
IVC Main Steam Line C	mR/hr	1.0 E-01 to 1.0 E+04	RE-8048A	1MS148	2MS148	(R)/8110 *
IVC Main Steam Line C	mR/hr	1.0 E+02 to 1.0 E+07	RE-8048B	1MS248	2MS248	(R)/8110 *
IVC Main Steam Line C	μCi/cc	1.4 E-02 to 1.4 E+06	RT-8048	1MS448	2MS448	-
IVC Main Steam Line D	mR/hr	1.0 E-01 to 1.0 E+04	RE-8049A	1MS149	2MS149	(R)/8110 *
IVC Main Steam Line D	mR/hr	1.0 E+02 to 1.0 E+07	RE-8049B	1MS249	2MS249	(R)/8110 *
IVC Main Steam Line D	μCi/cc	1.4 E-02 to 1.4 E+06	RT-8049	1MS449	2MS449	-
Liquid Waste Channel 1	μCi/cc	7.8 E-08 to 7.8 E-02	RE-8038	1WL138	2WL138	N/A
Liquid Waste Effluent Release Rate	μCi/Sec	1.0 E-03 to 1.0 E+03	RT-8038	1WL238	2WL238	8110
Condensate Polishing System	μCi/cc	7.8 E-08 to 7.8 E-02	RE-8042	1CP042	2CP042	-

*Values are better of Channels 1 and 2.

Dose Assessment Specialist

Addendum 2

Meteorological and Radiation Monitor Information

Page 2 of 2

Description	Units	Range	Monitor #	Unit 1	Unit 2	ICS/ERFDADS Screen #
Steam Generator Blowdown Flash Tank	μCi/cc	7.8 E-08 to 7.8 E-02	RE-8043	1SG043	2SG043	8110
TGB Drain Sump	μCi/cc	7.8 E-08 to 7.8 E-02	RE-8041	1DR041	2DR041	N/A
RCB 68 PAM Area Monitor	R/hr	1 to 1.0 E+08	RE-8050	1AM050	2AM050	(R)/8110
RCB 68 PAM Area Monitor	R/hr	1 to 1.0 E+08	RE-8051	1AM051	2AM051	(R)/8110
EAB EL. 10	mR/hr	1.0 E-02 to 1.0 E+03	RT-8057	1AM057	2AM057	8110
MAB EL. 10	mR/hr	1.0 E-02 to 1.0 E+03	RT-8058	1AM058	2AM058	8110
Control Room	mR/hr	1.0 E-01 to 1.0 E+04	RT-8066	1AM066	2AM066	8110
EAB EL. 35	mR/hr	1.0 E-02 to 1.0 E+03	RT-8067	1AM067	2AM067	8110
EAB EL. 60	mR/hr	1.0 E-02 to 1.0 E+03	RT-8076	1AM076	2AM076	8110
MAB Hatch	mR/hr	1.0 E-01 to 1.0 E+04	RT-8077	1AM077	2AM077	8110
TSC	mR/hr	1.0 E+02 to 1.0 E+07	RT-8094	1AM094	2AM094	8110
PASS	mR/hr	1.0 E+02 to 1.0 E+07	RT-8097	1AM097	2AM097	8110
Stack	mR/hr	1.0 E+02 to 1.0 E+07	RT-8098	1AM098	2AM098	8110
ICS/ERFDADS Unit Vent Flow	cfm	0 to 2.9 E+08	-	-	-	HMFA9308

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Dose Assessment Specialist			
Data Sheet 1	Dose Assessment Specialist Checklist		Page 1 of 4

(Name)	(Date)	(Unit)
Action	Time	

1.0 INITIAL ACTIVITIES

- 1.1 Report to the EOF and sign in on the EOF Staffing Board. _____
- 1.2 Inform the Radiological Director of your arrival and obtain a briefing of the current situation. _____
- 1.3 If the event is radiologically based, then review with the System Status Evaluator the current EAL that is being exceeded and any associated radiological EALs, particularly any EAL that could result in an escalation to a higher Emergency Classification. _____
- 1.4 Initiate an Emergency Action Log of significant activities. In particular, document telephone calls made and received and any data or information received from or provided to other persons. _____

2.0 ASSESSMENT ACTIVITIES

- 2.1 Using the ICS/ERFDADS, evaluate radiation monitors per Addendum 2, Meteorological and Radiation Monitor Information that could indicate a radiological release and identify the key monitors that should be tracked closely. _____
- 2.2 Track any effluent monitors that are showing increasing trends. _____

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Dose Assessment Specialist			
Data Sheet 1	Dose Assessment Specialist Checklist		Page 2 of 4

<u>Action</u>	<u>Time</u>
---------------	-------------

3.0 SPECIAL ACTIVITIES TO BE IMPLEMENTED AS NEEDED

3.1 Radiological Release Occurring or Imminent

3.1.1 Inform the following persons that radiation monitors indicate a release is imminent or occurring:

Radiological Director _____

System Status Evaluator _____

Offsite Field Team Supervisor _____

3.1.2 Perform an offsite dose calculation using 0ERP01-ZV-TP01, Offsite Dose Calculations. _____

3.1.3 Review 0ERP01-ZV-IN01, Emergency Classification, and assist the Radiological Director in determining the proper Emergency Classification. _____

3.1.4 Review 0ERP01-ZV-IN07, Offsite Protective Action Recommendations. _____

3.1.5 As required, assist in the generation of 0ERP01-ZV-IN02, Data Sheet 1, Offsite Agency Notification Message Form. As appropriate, provide this information to the TSC Chemical/Radiochemical Manager or Radiological Director, and attach to 0ERP01-ZV-TP01, Form 1, Offsite Dose Calculations Transmittal Form. Forward both forms to the Radiological Director for review. _____

3.1.6 When Offsite Field Team results are available, compare the measured dose rates to the projected dose rates and revise dose assessment input as necessary.

3.1.6.1 Obtain a ratio by dividing the projected by the measured dose rates and increase or decrease dose assessment input as necessary to obtain the measured dose for that location. Monitor to ensure PAGs have not changed. _____

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Dose Assessment Specialist			
Data Sheet 1	Dose Assessment Specialist Checklist		Page 3 of 4

Action	Time
---------------	-------------

4.0 ONGOING ACTIVITIES

- 4.1 Monitor parameters using the ICS/ERFDADS to identify potential and existing release pathways. _____
- 4.2 Perform offsite dose calculations whenever radiological releases are occurring. _____
- 4.3 Review 0ERP01-ZV-IN01, Emergency Classification, and assist the Radiological Director in determining the proper Emergency Classification. _____
- 4.4 Review 0ERP01-ZV-IN07, Offsite Protective Action Recommendations, and recommend the appropriate offsite protective actions to the Radiological Director. _____
- 4.5 If a dose assessment indicates PAGs exceeded at >10 miles, verify with field teams, notify Radiological Director. Discuss with Radiological Director expanded Protective Action Recommendations for downwind sectors greater than 10 miles in 2 mile increments until PAGs are not exceeded. _____
- 4.6 Coordinate with the System Status Evaluator on radiological parameters relating to EAL conditions. _____
- 4.7 Maintain an Emergency Action Log of significant activities, telephone calls, and important information. _____

5.0 SHIFT CHANGE

- 5.1 Upon arrival of your shift replacement, complete all actions listed on Addendum 1, Shift Turnover Briefing. _____

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Dose Assessment Specialist			
Data Sheet 1	Dose Assessment Specialist Checklist		Page 4 of 4

Action	Time
---------------	-------------

6.0 RECOVERY ACTIVITIES

- | | |
|---|-------|
| 6.1 Assist the Radiological Director in developing a list of activities and tasks, which should be completed using 0ERP01-ZV-RE02, Form 1, Corrective Action Items List. | _____ |
| 6.2 Assist the State of Texas, Bureau of Radiation Control personnel with deposition modeling and calculations. Assist in the development of protective actions for the public. | N/A |
| 6.3 Assist in the development of recovery plans and procedures using the guidance in 0ERP01-ZV-RE01, Recovery Operations. | N/A |
| 6.4 <u>IF</u> a shift change occurs, <u>THEN</u> brief your replacement based on applicable section of Addendum 1, Shift Turnover Briefing. | _____ |

7.0 TERMINATION ACTIVITIES

- | | |
|--|-------|
| 7.1 Assist the Radiological Director in developing a list of activities and tasks which should be completed using 0ERP01-ZV-RE02, Form 1, Corrective Action Items List. | _____ |
| 7.2 Provide a list of any supplies or forms needing replenishment to the Procurement/Resources Supervisor. | _____ |
| 7.3 Collect and organize in chronological order all documents, checklists, and logs. | _____ |
| 7.4 Assist the Radiological Director in writing an Emergency Response Summary report using the guidance in 0ERP01-ZV-RE02, Addendum 1, Emergency Response Summary Report Outline | _____ |
| 7.5 Turn over all documentation generated during the emergency to the Deputy EOF Director. | _____ |

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Offsite Dose Calculations			
Quality	Non Safety-Related	Usage: N/A	Effective Date: 06/28/01
Max Keyes	K. Reynolds	N/A	Emergency Response Division
PREPARER	TECHNICAL	USER	COGNIZANT ORGANIZATION

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Offsite Dose Calculations**1.0 Purpose and Scope**

- 1.1 This procedure provides instructions for performing offsite dose calculations by estimating offsite dose rates and integrated doses to the general public during a declared event when radioactive material is released from the South Texas Project Electric Generating Station (STPEGS).
- 1.2 Methods that may be used for dose calculations included in this procedure are STAMPEDE, Emergency Dose Rate Tables, and OPDA.
- 1.3 This procedure implements the requirements of the STPEGS Emergency Plan specific to calculating offsite doses to the General Public.

2.0 Definitions

- 2.1 **OFFSITE DOSE CALCULATION:** A calculation of the estimated offsite dose to the general public based on releases of radioactive material, meteorological conditions, time since reactor shutdown, and the expected release duration. The offsite dose calculation is helpful in formulating offsite Protective Action Recommendations (PAR).
- 2.2 **PROTECTIVE ACTION GUIDE (PAG) :** An action to be taken to avoid or reduce a projected dose as identified in EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents.

2.3 OFFSITE DOSE CALCULATIONAL METHODS:**2.3.1 South Texas Assessment Model Projecting Emergency Dose Evaluation (STAMPEDE)**

A computer program used to perform offsite dose calculations using an IBM-PC or compatible computer. TEDE dose rates, inhalation thyroid CDE dose rates and doses integrated through the duration of the release are calculated.

2.3.2 Emergency Dose Rate Tables

Tables which predict TEDE and thyroid CDE dose rates at 1 to 10 miles from the STPEGS are based on an estimated release rate ($\mu\text{Ci}/\text{sec}$) and the atmospheric stability class (A through G). The default isotopic mix was based on a gap inventory using STAMPEDE. Wind speed varies per stability class as indicated on each table.

Offsite Dose Calculations**2.3.3 Onshift Prompt Dose Assessment (OPDA)**

A computerized calculation program which operates in a Windows environment to estimate TEDE and thyroid CDE dose based on an estimated release rate ($\mu\text{Ci}/\text{sec}$), atmospheric stability class and release pathway. This method may be used by onshift Health Physics technicians and supervisors in performing a prompt dose assessment.

- 2.4 **RELEASE:** For radiological purposes, a release is any quantity of radioactive material that when released equals or exceeds the limit for an Unusual Event.
- 2.5 **SOURCE TERM:** With respect to offsite dose calculations, the characteristics and release rates of the radioactive material.
- 2.6 **DEFAULT RELEASE DURATION -** The amount of time in hours, automatically used by dose projection programs as the release duration. This default value is selected to best characterize release duration based on maximum evacuation times and historical meteorological data.
- 2.7 **DELTA TEMPERATURE:** The temperature differential measured between the 60 meter and 10 meter levels of the primary meteorological tower (60 m ($^{\circ}\text{F}$) - 10 m ($^{\circ}\text{F}$)).
- 2.8 **SIGMA-THETA:** A method to assign atmospheric stability classes based on the standard deviation of the wind direction in degrees ($^{\circ}$).
- 2.9 **ATMOSPHERIC STABILITY CLASS:** A letter designator indicating the relative stability or instability of an air mass.
- 2.10 **GROUND LEVEL RELEASE:** All releases at the STPEGS are assumed to be best modeled as though at ground level and are dispersed based on 10 meter meteorological data.

3.0 Precautions and Limitations

- 3.1 For Steam Generator Tube Rupture (SGTR) events with 100% S/G water level, the steam flow reported on the Integrated Computer System (ICS) will be high and result in an over conservative PAR. Use the default MSL flow rate specified by the dose assessment program.
- 3.2 The dose projection capabilities of all methods depend upon models which become less exact at greater distances from the release point.

Offsite Dose Calculations

- 3.3 When collecting wind speed and wind direction meteorological data from the primary or backup meteorological tower, or the National Weather Service Forecast Office, care must be taken to ensure that a 15 minute average value is used in dose calculations and not an instantaneous value.
- 3.4 Regional meteorological data may be required to help evaluate offsite dose calculations. This information can be obtained from the National Weather Service in Dickinson, Texas. The types of information which can be obtained include temperature, wind speed, wind direction, cloud height, and cloud cover. As time permits, forecast data may be used to supplement dose projections.
- 3.5 Default parameters are built into the STAMPEDE program for ground wind velocity, ground level wind direction, and atmospheric stability class. These parameters are displayed on screen while working with STAMPEDE.
- 3.6 IF dose assessment results indicate Protective Action Guides (PAGs) exceeded at >10 miles, AND the Emergency Director resides in the affected Unit Control Room, THEN as available, verify dose assessment results with field teams and notify the Emergency Director. Discuss with the Emergency Director expanded PARs for downwind sectors >10 miles in 2 mile increments until PAGs are not exceeded.
- 3.7 IF dose assessment results indicate PAGs exceeded at >10 miles, AND the Emergency Director resides in the TSC, THEN verify dose assessment results with field teams and notify the Radiological Manager. Discuss with the Radiological Manager expanded PARs for downwind sectors >10 miles in 2 mile increments until PAGs are not exceeded.
- 3.8 IF dose assessment results indicate PAGs exceeded at >10 miles, AND the Emergency Director resides in the EOF, THEN verify dose assessment results with field teams and notify the Radiological Director. Discuss with the Radiological Director expanded PARs for downwind sectors >10 miles in 2 mile increments until PAGs are not exceeded.
- 3.9 If multiple release paths are indicated by elevated radiological monitor readings, then calculate each pathway and sum results. (Example: Two S/G Tube Ruptures with two stuck open PORV's results in the following - Calculate Main Steam Line Monitors RT-8046 and RT-8049 and sum results).

4.0 Responsibilities

- 4.1 Prior to activation of the TSC or EOF, the Acting Radiological Manager is responsible for implementation of this procedure (i.e., Onshift Dose Assessment). Offsite dose calculation results shall be provided to the Emergency Director.

Offsite Dose Calculations

- 4.2 Upon activation of the TSC, the Radiological Manager is responsible for implementation of this procedure. Offsite dose calculation results shall be provided to the Emergency Director.
- 4.3 Upon activation of the EOF, the Radiological Director is responsible for implementation of this procedure. The Dose Assessment Specialist shall perform offsite dose calculations as directed by the Radiological Director and provide results.
- 4.4 Offsite dose calculations are updated as requested by the Emergency Director, Radiological Manager, or Radiological Director.

5.0 Procedure

- 5.1 Use the appropriate sections of Addendum 1, Offsite Dose Calculation Input Worksheet, as needed, to perform offsite dose calculations.
- 5.2 Review Addendum 2, UFSAR Accident Assumptions, as necessary.
- 5.3 Select the appropriate Dose Assessment tool using Addendum 7, Method Selection Flowchart.
- 5.4 Changes to any of the following parameters requires additional offsite dose calculations:
 - 5.4.1 Increased release rates or wind speed (that add additional zones downwind)
 - 5.4.2 Wind direction (that add additional zones)
 - 5.4.3 Atmospheric stability classification (that add additional zones)
- 5.5 If a prompt dose assessment is required from onshift Health Physics personnel, the OPDA program as described in Addendum 3, Use of OPDA Program, may be used. The program is available on PC in both units at the 41 ft. Health Physics control point, and can be run by double-clicking on the OPDA icon and inputting the requested data.
- 5.6 IF the type of accident is a Loss of Coolant Accident, Fuel Handling Accident inside the Reactor Containment Building, Control Rod Ejection or Reactor Coolant Pump Shaft Seizure and Containment Leakage directly to the environment is the release pathway, THEN Addendum 4, Containment Leakage Nomograph, may be used to estimate containment source term in the absence of better indications of a release.
- 5.7 STAMPEDE may be used for performing offsite dose calculations, implement Addendum 5, Use of STAMPEDE Program.

Offsite Dose Calculations

5.8 IF all computer based dose assessment methods are unavailable, THEN implement Addendum 6, Emergency Dose Rate Tables.

5.9 Complete Form 1, Offsite Dose Calculations Transmittal Form.

6.0 References

6.1 STPEGS Emergency Plan

6.2 0ERP01-ZV-EF15, Dose Assessment Specialist

6.3 0ERP01-ZV-IN07, Offsite Protective Action Recommendations

6.4 0PRP01-ZA-0034, Health Physics Division Computer Programs

6.5 0PGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide

7.0 Support Documents

7.1 Form 1, Offsite Dose Calculations Transmittal Form (Sample)

7.2 Addendum 1, Offsite Dose Calculation Input Worksheet (IN HAND)

7.3 Addendum 2, UFSAR Accident Assumptions

7.4 Addendum 3, Use of OPDA Program

7.5 Addendum 4, Containment Leakage Nomograph (IN HAND)

7.6 Addendum 5, Use of STAMPEDE Program

7.7 Addendum 6, Emergency Dose Rate Tables (IN HAND)

7.8 Addendum 7, Method Selection Flowchart

Offsite Dose Calculations

Form 1

Offsite Dose Calculations Transmittal Form (Sample)

Page 1 of 1

RESULTS

Method of Projection:

- STAMPEDE
- OPDA
- EMERGENCY DOSE RATE TABLES

Offsite Dose Projection:

	1 mile	2 mile	5 mile	10 mile
TEDE (Rem)	_____	_____	_____	_____
CDE (Rem)	_____	_____	_____	_____

Projected duration of release _____

IF dose assessment results indicate PAGs exceeded at >10 miles, AND the Emergency Director resides in the TSC, THEN verify dose assessment results with field teams and notify the Radiological Manager. Discuss with the Radiological Manager expanded PARs for downwind sectors >10 miles in 2 mile increments until PAGs are not exceeded.

IF dose assessment results indicate PAGs exceeded at >10 miles, AND the Emergency Director resides in the EOF, THEN verify dose assessment results with field teams and notify the Radiological Director. Discuss with the Radiological Director expanded PARs for downwind sectors >10 miles in 2 mile increments until PAGs are not exceeded.

PERFORMED BY:

Name

Date/Time

REVIEWED BY:

Radiological Director

Date/Time

-END-

1.0 Atmospheric Stability Classification

<u>Stability Classification</u>	<u>Class</u>	<u>Delta T (60m-10m)°F</u>	<u>Sigma-Theta</u>
Extremely Unstable	A	< -1.71	≥ 22.5
Moderately Unstable	B	-1.71 to -1.53	17.5 to 22.5
Slightly Unstable	C	-1.52 to -1.35	12.5 to 17.5
Neutral	D	-1.34 to -0.45	7.5 to 12.5
Slightly Stable	E	-0.44 to 1.35	3.8 to 7.5
Moderately Stable	F	1.36 to 3.60	2.1 to 3.8
Extremely Stable	G	> 3.60	< 2.1

2.0 Estimating Release Rates:

2.1 If the release point is the unit vent

2.1.1 The release rate can be obtained from the RM-11 channel (1 or 2) UV610.

2.1.2 If the Unit Vent release rate channel is unavailable the following calculation applies

$$\begin{array}{ccccccc}
 \underline{\hspace{2cm}} & = & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} & \times & \underline{\hspace{2cm}} \\
 \text{Release Rate} & = & \text{Flow Rate} & \times & \text{Concentration} & \times & \text{Conversion Factor} \\
 (\mu\text{Ci/sec}) & & (\text{scfm}) & & (\mu\text{Ci/cc}) & & (4.72 \text{ E} + 2)
 \end{array}$$

2.2 If the release point is the Main Steam Line PORV or Safety Valve either of the following calculations apply.

NOTE

Use .2% Iodine for coolant leakage through the S/G.

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Offsite Dose Calculations			
Addendum 1	Offsite Dose Calculation Input Worksheet (IN HAND)		Page 2 of 3

2.2.1

$$\begin{array}{l}
 \text{Release Rate} \\
 (\mu\text{Ci/Sec})
 \end{array}
 =
 \begin{array}{l}
 \text{MSL Flow} \\
 (\text{lb. mass/hr}) \\
 \text{ERFDADS} \\
 \text{Screen 3015}
 \end{array}
 \times
 \begin{array}{l}
 \text{MSL Activity} \\
 (\mu\text{Ci/cc}) \\
 \text{RT-8046-49}
 \end{array}
 \times
 \begin{array}{l}
 \text{Conversion Factor} \\
 (2.54)
 \end{array}$$

2.2.2

$$\begin{array}{l}
 \text{Release Rate} \\
 (\mu\text{Ci/Sec})
 \end{array}
 =
 \begin{array}{l}
 \text{Primary to Secondary} \\
 \text{Leak Rate} \\
 (\text{GPM})
 \end{array}
 \times
 \begin{array}{l}
 \text{RCS Activity} \\
 (\mu\text{Ci/ml})
 \end{array}
 \times
 \begin{array}{l}
 \text{Conversion Factor} \\
 (63.08)
 \end{array}$$

2.3 If the release point is containment leaking directly to the environment then either estimate the release rate from field team data or use the containment leakage nomograph, Addendum 4 (if the proper conditions apply).

3.0 Calculating Release Rates

3.1

$$\begin{array}{l}
 \text{Unit Vent} \\
 \text{Release Rate} \\
 (\mu\text{Ci/Sec})
 \end{array}
 =
 \begin{array}{l}
 \text{Flow Rate} \\
 (\text{scfm})
 \end{array}
 \times
 \begin{array}{l}
 \text{Concentration} \\
 (\mu\text{Ci/cc})
 \end{array}
 \times
 \begin{array}{l}
 \text{Conversion} \\
 \text{Factor} \\
 (4.72\text{E}+2)
 \end{array}$$

3.2 A displayed Unit Vent release rate may be obtained by:

- a. Viewing any TREND display on the RM-11 for 1UV610 or 2UV610 [REQUEST FROM TSC]

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Offsite Dose Calculations			
Addendum 2	UFSAR Accident Assumptions		Page 1 of 1

<u>Type of Accident</u>	<u>UFSAR Section/Table</u>	<u>Release Locations</u>
LOCA	15.6.5/15.6-10	RCB Leakage Unit Vent
Fuel Handling Accident	15.7.4/15.7-9	RCB Leakage Unit Vent
Parameters For Other Accidents Listed Below:	Misc. Chapter 15	As Indicated Below
Mainsteam Line Break	15.1.5/15.1-2	Turbine Building Isolation Valve Cubicles
Locked Rotor	15.3.3/15.3-3	RCB Leakage Unit Vent (*)
RCCA Ejection	15.4.8/15.4-4	RCB Leakage Unit Vent (*)
CVCS Letdown Line Break Outside RCB	15.6.2/15.6-13	Unit Vent
Steam Generator Tube Rupture	15.6.2/15.6-13	PORV's Turbine Building Isolation Valve Cubicles Unit Vent
Recycle Holdup Tank Rupture	15.7.1/15.7-1	Unit Vent
Liquid Tank Rupture	15.7-2	Ground Seepage Unit Vent

(*) IF primary-to-secondary leakage is present, THEN the Turbine Building, Isolation Valve Cubicles, and Power Operated Relief Valves (PORV's) are additional release points.

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Offsite Dose Calculations			
Addendum 3	Use of OPDA Program		Page 1 of 1

OPDA is a computerized calculation loaded into selected computers at STPEGS. The Met Data entry button allows the operator to set the stability class, affected zones and sectors by entering a delta temperature and wind direction. If the release rate is known, push Unit Vent Release button, enter the monitored release rate, and push the Calculate Projection button. If the release rate is not known but may be estimated from other information, select the most appropriate of the following buttons:

- MAJOR LEAK FROM RCB
- S/G TUBE RUPTURE
- SLOW PRESSURE DROP - RCB

After entering the required information, click on the Calculate Projection button.

The results are displayed for review. They may be printed if a printer is available by selecting the Print button.

IF dose assessment results indicate Protective Action Guides (PAGs) exceeded at >10 miles, AND the Emergency Director resides in the affected Unit Control Room, THEN as available, verify dose assessment results with field teams and notify the Emergency Director. Discuss with the Emergency Director expanded PARs for downwind sectors >10 miles in 2 mile increments until PAGs are not exceeded.

NOTE

Four hours is automatically used by the OPDA dose projection programs for the release duration.

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Offsite Dose Calculations			
Addendum 4	Containment Leakage Nomograph (IN HAND)		Page 1 of 3

1. The containment activity concentration may be estimated by use of the High Range Containment Monitor (RT-8050, RT-8051):

RT-8050 _____ R/hr @ Time _____

RT-8051 _____ R/hr @ Time _____

2. Time after reactor trip (in hours): _____

3. Estimate the release rate by recording the initial pressure in containment:

- a. Record the initial pressure and time [ERFDADS Screen Z]

pressure P_1 _____ at T_1 _____

- b. Record the subsequent pressure and time [ERFDADS Screen Z]

pressure P_2 _____ at T_2 _____

Calculate pressure drop:

P_1 _____ - P_2 _____ = _____ P

Calculate time in hours:

T_2 _____ - T_1 _____ = _____ T(hrs)

- c. IF a decrease in pressure is recorded, AND containment spray is NOT in progress, THEN calculate decrease in pressure per hour:

$P /$ _____ T(hrs) = _____ P/hr

4. Using the Containment Leakage Nomograph (page 3 of 3), connect point for radiation level on line A THRU time after reactor trip on line B, to concentration (Ci/m^3 or $\mu Ci/cc$) on line C. Connect point on line C THRU point on line D (decrease in pressure per hour) to value on line E ($\mu Ci/sec$ release rate).
5. Complete dose projections using Addendum 5, Use of STAMPEDE Program or Addendum 6, Emergency Dose Rate Tables.

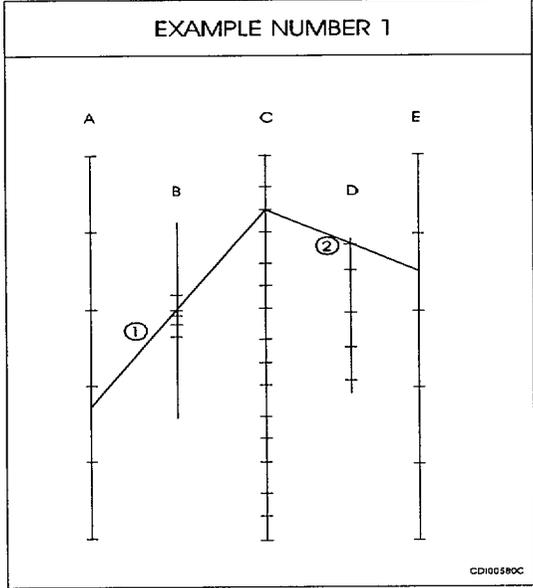
NOTE

Scales are logarithmic or nonlinear

EXAMPLE CALCULATIONS:

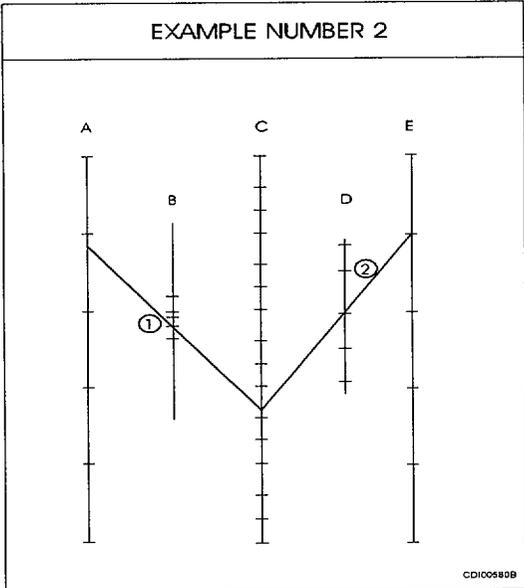
1. Data: RT-8050/8051 = 2E+4 R/hr,
10 hrs after reactor trip.
No RCB pressure decreases are noted!

Find: RT-8050 reading of 2E+4 R/hr on A scale, and 10 hrs on B scale. Connect the two points with a straight line through C scale to find 2000 Ci/m³ (2000 μCi/cc). Connect the point at 2000 Ci/m³ to FSAR LEAK LIMIT (0.3% containment volume/day) on D scale. Extend line from C scale through D scale to read 4.0E+6 μCi/sec release rate.



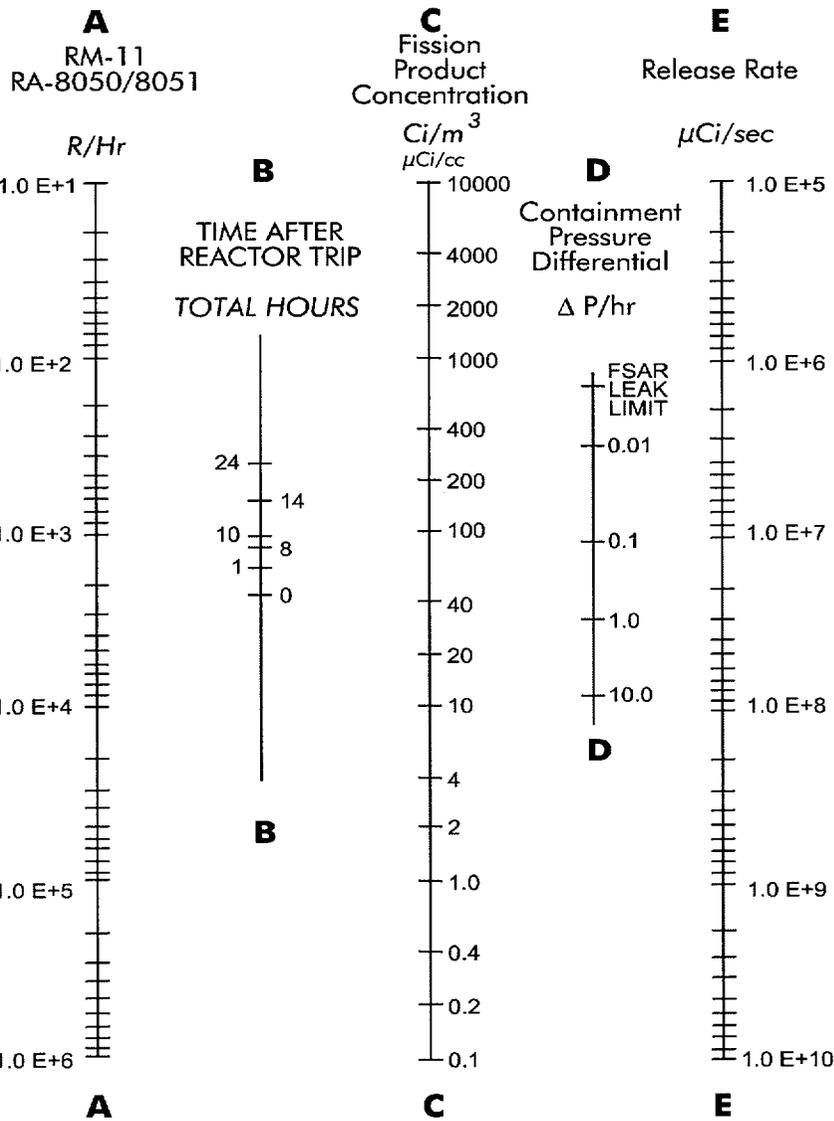
2. Data: RT-8050/8051 = 1.1E+2 R/hr,
1 hour after the reactor trip,
with 0.1 psi pressure drop per hour.

Find: 1.1E+2 R/hr on A scale. Draw a line through 1 hour on B scale to find 5 Ci/m³ (5 μCi/cc) on C scale. Connect the point from C scale through 0.1 psi/hr on D scale to find 1E+6 μCi/sec release rate on E scale.



Offsite Dose Calculations

SOURCE TERM ESTIMATOR



CDI00580
08/30/00

WARNING

Do NOT use this Nomograph greater than 24 hours after reactor shutdown due to isotopic decay.

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Offsite Dose Calculations			
Addendum 5	Use of STAMPEDE Program		Page 1 of 1

NOTE

Four hours is automatically used by the STAMPEDE dose projection programs for the release duration.

- 1.0 The STAMPEDE computer program and its associated data tables are loaded into selected computers at STPEGS and the Texas Bureau of Radiation Control. Detailed operating instructions (User Manual) are available at these locations. The program is accessed from the MicroSoft Windows display by clicking on the appropriate icon. The main program can be accessed using the following user identification with NO password:

EPLAN
- 2.0 The program may be run using a mouse to point to the appropriate data field after which the operator clicks the mouse to make that data field active. Although the code is generally self-explanatory, user manuals are located at each work station as an aid to operation. Default values are provided for all entries should actual data not be available.
- 3.0 A set of program diskettes is located at each work station. Should the work area require evacuation, stored data should be copied to one of these diskettes as described in the user instructions. This data along with the other program diskettes can be loaded into a computer at an alternate location as described in the users manual.
- 4.0 If necessary to issue Protective Action Recommendations beyond 10 miles, then perform the following:
 - 4.1 Click on Dose Calc Distances, enter 6 <CR>
 - 4.2 Enter the correct value (in miles), enter 12 <CR>
 - 4.3 Review results to ensure the 12 mile PAG Doses do not exceed 1 rem TEDE or 5 rem thyroid CDE.
 - 4.4 If it does, return to step 4.1 and repeat the calculation with a larger number not to exceed 20.

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Offsite Dose Calculations			
Addendum 6	Emergency Dose Rate Tables (IN HAND)		Page 1 of 8

- 1.0 Use the following Emergency Dose Rate Table which corresponds to the current stability class.
[DEFAULT: Stability Class D]
- 2.0 Locate the TEDE and thyroid CDE dose rate (Rem/hr) for the one, two, five and ten-mile radii that corresponds to the release rate.
- 3.0 Multiply the dose rates by the expected duration of the release. (Use 4 hour release duration if actual duration not known.)
- 4.0 Data in the tables was generated by STAMPEDE, Revision 6.3, using the GAP Inventory at time 00:00 after reactor trip.

STABILITY CLASS A

NOTE

IF the release rate is between two values, THEN interpolate.

Release Rate ($\mu\text{Ci/sec}$)	DOSE RATE (Rem/hour)							
	1 Mile		2 Mile		5 Mile		10 Mile	
	TEDE	CDE	TEDE	CDE	TEDE	CDE	TEDE	CDE
1.00E+06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00E+07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
1.00E+08	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
2.00E+08	0.01	0.02	0.00	0.01	0.00	0.01	0.00	0.00
4.00E+08	0.01	0.03	0.01	0.03	0.00	0.01	0.00	0.01
1.00E+09	0.03	0.12	0.01	0.06	0.01	0.02	0.00	0.01
2.00E+09	0.06	0.24	0.03	0.13	0.01	0.05	0.00	0.02
4.00E+09	0.12	0.50	0.06	0.26	0.02	0.10	0.01	0.05
1.00E+10	0.29	1.20	0.14	0.62	0.05	0.24	0.02	0.12
2.00E+10	0.58	2.44	0.27	1.26	0.10	0.49	0.04	0.23
4.00E+10	1.16	4.76	0.54	2.45	0.19	0.96	0.08	0.46

TEDE = Total Effective Dose Equivalent
(External + Internal)

CDE = Committed Dose Equivalent
(Thyroid)

Wind Speed: 14.8 mph

STABILITY CLASS B

NOTE

IF the release rate is between two values, THEN interpolate.

DOSE RATE (Rem/hour)								
Release Rate ($\mu\text{Ci/sec}$)	1 Mile		2 Mile		5 Mile		10 Mile	
	TEDE	CDE	TEDE	CDE	TEDE	CDE	TEDE	CDE
1.00E+06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+06	0.001	0.00	0.00	0.00	0.0	0.00	0.00	0.00
1.00E+07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+07	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+07	0.01	0.04	0.00	0.01	0.00	0.00	0.00	0.00
1.00E+08	0.02	0.09	0.01	0.02	0.00	0.00	0.00	0.00
2.00E+08	0.04	0.19	0.01	0.05	0.00	0.01	0.00	0.00
4.00E+08	0.09	0.38	0.02	0.09	0.00	0.01	0.00	0.01
1.00E+09	0.22	0.92	0.05	0.22	0.01	0.03	0.00	0.02
2.00E+09	0.43	1.78	0.09	0.43	0.01	0.07	0.01	0.03
4.00E+09	0.86	3.62	0.19	0.88	0.03	0.13	0.01	0.06
1.00E+10	2.17	9.29	0.48	2.25	0.06	0.34	0.03	0.16
2.00E+10	4.31	17.94	0.94	4.35	0.13	0.66	0.05	0.31
4.00E+10	8.65	36.49	1.90	8.85	0.25	1.33	0.11	0.62

TEDE = Total Effective Dose Equivalent
(External + Internal)

CDE = Committed Dose Equivalent
(Thyroid)

Wind Speed: 14.2 mph

STABILITY CLASS C

NOTE

IF the release rate is between two values, THEN interpolate.

Release Rate ($\mu\text{Ci}/\text{sec}$)	DOSE RATE (Rem/hour)							
	1 Mile		2 Mile		5 Mile		10 Mile	
	TEDE	CDE	TEDE	CDE	TEDE	CDE	TEDE	CDE
1.00E+05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00E+06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
1.00E+07	0.01	0.03	0.00	0.01	0.00	0.00	0.00	0.00
2.00E+07	0.01	0.05	0.00	0.01	0.00	0.00	0.00	0.00
4.00E+07	0.02	0.11	0.01	0.03	0.00	0.01	0.00	0.00
1.00E+08	0.06	0.24	0.01	0.07	0.00	0.01	0.00	0.00
2.00E+08	0.12	0.50	0.03	0.14	0.00	0.02	0.00	0.05
4.00E+08	0.24	1.01	0.06	0.28	0.01	0.05	0.00	0.01
1.00E+09	0.59	2.45	0.15	0.68	0.02	0.11	0.01	0.03
2.00E+09	1.18	5.01	0.29	1.38	0.04	0.23	0.01	0.06
4.00E+09	2.33	9.70	0.58	2.68	0.09	0.45	0.02	0.11
1.00E+10	5.88	25.04	1.47	6.91	0.22	1.16	0.05	0.29
2.00E+10	11.80	50.75	2.96	14.01	0.44	2.35	0.10	0.58
4.00E+10	23.43	98.62	5.84	27.23	0.86	4.57	0.20	1.13

TEDE = Total Effective Dose Equivalent
(External + Internal)

CDE = Committed Dose Equivalent
(Thyroid)

Wind Speed: 13.6 mph

STABILITY CLASS D

NOTE

IF the release rate is between two values, THEN interpolate.

Release Rate ($\mu\text{Ci}/\text{sec}$)	DOSE RATE (Rem/hour)							
	1 Mile		2 Mile		5 Mile		10 Mile	
	TEDE	CDE	TEDE	CDE	TEDE	CDE	TEDE	CDE
1.00E+05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00E+06	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+06	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00
4.00E+06	0.01	0.03	0.00	0.01	0.00	0.00	0.00	0.00
1.00E+07	0.02	0.08	0.01	0.03	0.00	0.01	0.00	0.00
2.00E+07	0.04	0.17	0.01	0.06	0.00	0.01	0.00	0.00
4.00E+07	0.08	0.33	0.03	0.12	0.01	0.03	0.00	0.01
1.00E+08	0.19	0.80	0.06	0.28	0.01	0.07	0.00	0.02
2.00E+08	0.39	1.65	0.12	0.58	0.03	0.13	0.01	0.04
4.00E+08	0.78	3.34	0.25	1.18	0.05	0.27	0.02	0.09
1.00E+09	1.95	8.15	0.62	2.87	0.12	0.66	0.04	0.21
2.00E+09	3.86	16.35	1.23	5.76	0.25	1.33	0.07	0.42
4.00E+09	7.75	33.18	2.47	11.69	0.50	2.70	0.15	0.86
1.00E+10	19.23	80.62	6.08	28.40	1.23	6.56	0.36	2.09
2.00E+10	38.72	161.74	12.34	58.38	2.52	13.49	0.74	4.30
4.00E+10	77.75	336.78	24.88	118.62	5.10	27.42	1.44	8.73

TEDE = Total Effective Dose Equivalent
(External + Internal)

CDE = Committed Dose Equivalent
(Thyroid)

Wind Speed: 13.2 mph

STABILITY CLASS E

NOTE

IF the release rate is between two values, THEN interpolate.

Release Rate ($\mu\text{Ci/sec}$)	DOSE RATE (Rem/hour)							
	1 Mile		2 Mile		5 Mile		10 Mile	
	TEDE	CDE	TEDE	CDE	TEDE	CDE	TEDE	CDE
1.00E+05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
1.00E+06	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.00
2.00E+06	0.01	0.04	0.00	0.02	0.00	0.00	0.00	0.00
4.00E+06	0.02	0.09	0.01	0.03	0.00	0.01	0.00	0.00
1.00E+07	0.05	0.21	0.02	0.08	0.00	0.02	0.00	0.01
2.00E+07	0.09	0.42	0.03	0.16	0.01	0.04	0.00	0.02
4.00E+07	0.18	0.83	0.06	0.31	0.01	0.08	0.00	0.03
1.00E+08	0.46	2.12	0.15	0.78	0.03	0.19	0.01	0.07
2.00E+08	0.92	4.16	0.30	1.54	0.07	0.38	0.02	0.13
4.00E+08	1.85	8.47	0.61	3.130	0.13	0.78	0.04	0.27
1.00E+09	4.56	20.47	1.49	7.57	0.32	1.88	0.10	0.64
2.00E+09	9.17	41.63	3.02	15.38	0.65	3.81	0.21	1.31
4.00E+09	18.50	88.17	6.12	31.47	1.33	7.80	0.42	2.68
1.00E+10	46.12	211.50	15.24	78.16	3.31	19.38	1.04	6.65
2.00E+10	91.24	411.27	29.93	151.98	6.46	37.69	2.03	12.93
4.00E+10	184.06	841.05	60.75	310.81	13.16	77.07	4.15	26.45

TEDE = Total Effective Dose Equivalent
(External + Internal)
CDE = Committed Dose Equivalent
(Thyroid)

Wind Speed: 9.3 mph

STABILITY CLASS F

NOTE

IF the release rate is between two values, THEN interpolate.

Release Rate ($\mu\text{Ci/sec}$)	DOSE RATE (Rem/hour)							
	1 Mile		2 Mile		5 Mile		10 Mile	
	TEDE	CDE	TEDE	CDE	TEDE	CDE	TEDE	CDE
1.00E+04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.00E+05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
4.00E+05	0.01	0.03	0.00	0.01	0.00	0.00	0.00	0.00
1.00E+06	0.01	0.07	0.01	0.03	0.00	0.01	0.00	0.00
2.00E+06	0.03	0.14	0.01	0.06	0.00	0.02	0.00	0.01
4.00E+06	0.05	0.27	0.02	0.11	0.01	0.03	0.00	0.01
1.00E+07	0.14	0.70	0.05	0.29	0.01	0.08	0.00	0.03
2.00E+07	0.27	1.38	0.10	0.58	0.02	0.16	0.01	0.06
4.00E+07	0.55	2.74	0.20	1.15	0.05	0.31	0.02	0.11
1.00E+08	1.36	6.78	0.51	2.85	0.12	0.77	0.04	0.28
2.00E+08	2.77	14.00	1.03	5.90	0.24	1.57	0.08	0.57
4.00E+08	5.47	27.29	2.03	11.50	0.48	3.12	0.16	1.12
1.00E+09	13.80	69.46	5.14	29.26	1.21	7.93	0.40	2.85
2.00E+09	27.13	134.70	10.04	56.73	2.35	15.38	0.78	5.51
4.00E+09	54.79	274.09	20.36	115.44	4.78	31.29	1.58	11.21
1.00E+10	138.64	699.83	51.72	294.76	12.17	79.89	4.04	28.63

TEDE = Total Effective Dose Equivalent
(External + Internal)

CDE = Committed Dose Equivalent
(Thyroid)

Wind Speed: 5.9 mph

STABILITY CLASS G

NOTE

IF the release rate is between two values, THEN interpolate.

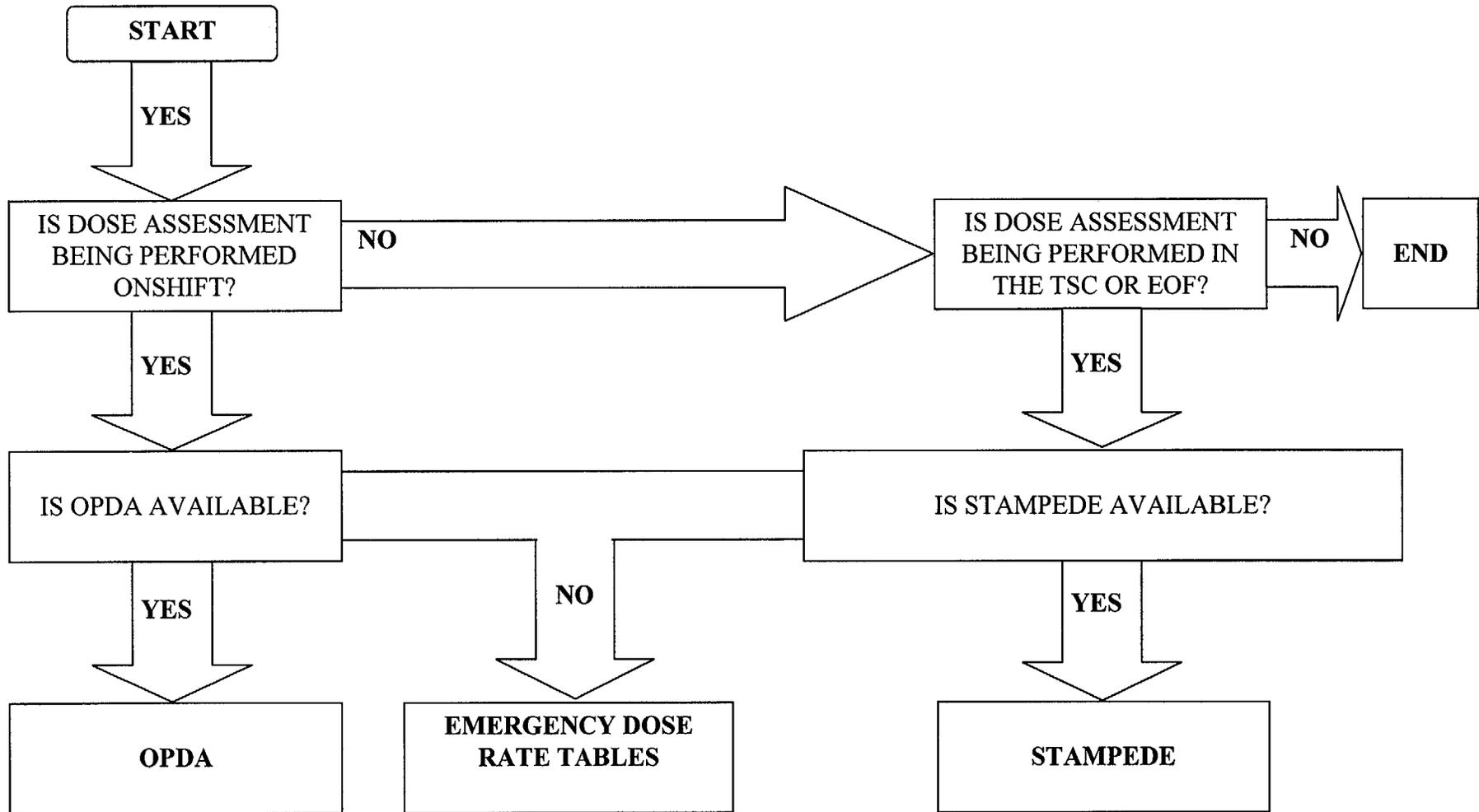
Release Rate ($\mu\text{Ci/sec}$)	DOSE RATE (Rem/hour)							
	1 Mile		2 Mile		5 Mile		10 Mile	
	TEDE	CDE	TEDE	CDE	TEDE	CDE	TEDE	CDE
1.00E+04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.00E+04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00E+04	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
1.00E+05	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
2.00E+05	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.00
4.00E+05	0.01	0.05	0.00	0.02	0.00	0.01	0.00	0.00
1.00E+06	0.03	0.13	0.01	0.06	0.00	0.02	0.00	0.01
2.00E+06	0.05	0.26	0.02	0.13	0.01	0.04	0.00	0.02
4.00E+06	0.10	0.51	0.05	0.26	0.01	0.08	0.00	0.03
1.00E+07	0.25	1.26	0.11	0.64	0.03	0.20	0.01	0.07
2.00E+07	0.50	2.58	0.23	1.31	0.06	0.40	0.02	0.15
4.00E+07	0.99	497	0.44	2.53	0.12	0.77	0.04	0.29
1.00E+08	2.49	12.63	1.12	6.43	0.30	1.97	0.10	0.73
2.00E+08	5.02	25.65	2.26	13.05	0.60	3.99	0.21	1.48
4.00E+08	9.84	49.56	4.39	25.24	1.16	7.71	0.40	2.86
1.00E+09	24.88	126.18	11.14	64.20	2.95	19.64	1.01	7.28
2.00E+09	50.23	256.47	22.57	130.48	5.99	39.92	2.05	14.80
4.00E+09	98.73	498.20	44.12	253.47	11.66	77.54	4.00	28.75
1.00E+10	249.38	1267.20	111.79	644.71	29.61	197.24	10.15	73.12

TEDE = Total Effective Dose Equivalent
(External + Internal)

CDE = Committed Dose Equivalent
(Thyroid)

Wind Speed: 5.5 mph

Offsite Dose Calculations



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Performance Indicator Tracking Guide			
Non-Quality	Non Safety-Related	Usage: Referenced	Effective Date: 06/26/01

Max Keyes	N/A	N/A	Emergency Response Division
PREPARER	TECHNICAL	USER	COGNIZANT ORGANIZATION

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Performance Indicator Tracking Guide**1.0 Purpose and Scope**

1.1 The purpose of this procedure is to provide guidance to the Emergency Response Division Staff for the collection of Performance Indicator (PI) data and the associated supporting documentation:

1.1.1 Collection of Drill, Exercise, and Actual Event (DEP) performance indicator data and the associated supporting documentation.

1.1.1.1 This indicator monitors timely and accurate performance in drills, exercises, and actual events when presented with opportunities for classification of emergencies, notification of offsite authorities, and development of protective action recommendations (PARs). It is the ratio, in percent, of timely and accurate performance of those actions to total opportunities.

1.1.2 Collection of Emergency Response Organization (ERO) drill participation performance indicator data and the associated supporting documentation.

1.1.2.1 This indicator measures the percentage of key Emergency Response Organization (ERO) members who have participated recently in proficiency-enhancing drills, exercises, training opportunities, or in an actual event.

1.1.3 Collection of Alert and Notification System Reliability performance indicator data and the associated supporting documentation.

NOTE

This indicator does not measure the effectiveness of route alerting or Alert Radio operability.

1.1.3.1 This indicator monitors the reliability of the offsite Alert and Notification System (ANS), a critical link for alerting and notifying the public of the need to take protective actions. It provides the percentage of the sirens that are capable of performing their safety function.

1.1.3.2 The purpose of the alert and notification system performance indicator is to provide a uniform industry reporting availability approach and is not intended to replace the Federal Emergency Management Agency (FEMA) Alert and Notification reporting requirement.

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- 1.2 This procedure identifies the requirements of the South Texas Project Electric Generating Station Performance Indicator Tracking for Emergency Response.
- 1.3 These indicators are monitored as part of the NRC Regulatory Assessment Process. The NRC uses these results to allocate inspection resources and prepare plans to monitor performance when adverse performance trends are identified.

2.0 Responsibilities

- 2.1 Manager, Plant Protection or designee will review and submit performance indicator results to Quality and Licensing.

- 2.2 The Supervisor Emergency Response or designee

- 2.2.1 On a monthly basis collect performance indicator data from Emergency Response Staff.

- 2.2.1.1 Review and ensure accuracy of performance indicator data.

- 2.2.1.2 Complete Addendum 2, Attachment 7.B of procedure 0PGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators, and obtain Manager, Plant Protection signature.

- a. Forward completed form to Quality and Licensing.

- b. Advise the Manager, Plant Protection of any negative trends (i.e., green to white indicators).

- 2.3 Emergency Response Staff

- 2.3.1 On a monthly basis evaluate and report results to the Supervisor, Emergency Response or designee the following Emergency Response performance, indicators:

- 2.3.1.1 Drill, Exercise, and Event (DEP) performance indicator data.

- 2.3.1.2 Emergency Response Organization (ERO) drill participation performance indicator data.

- 2.3.1.3 Alert and Notification System Reliability performance indicator data.

Performance Indicator Tracking Guide**3.0 Precautions and Limitations**

- 3.1 A performance indicator report shall be forwarded to Quality and Licensing monthly.
- 3.2 All performance indicators supporting documentation shall be retained in accordance with the Document Type List (DTL).

4.0 References

- 4.1 Nuclear Regulatory Commission Emergency Preparedness Position (EPPOS) No. 2
- 4.2 NEI 99-02, Regulatory Assessment Performance Indicator Guideline
- 4.3 0PGP05-ZV-0007, Prompt Notification System
- 4.4 0ERP01-ZV-IN01, Emergency Classification
- 4.5 0ERP01-ZV-IN02, Notifications to Offsite Agencies
- 4.6 0ERP01-ZV-IN07, Offsite Protective Action Recommendations
- 4.7 0PGP05-ZV-0001, Emergency Response Exercises and Drills
- 4.8 0ERP01-ZV-TP01, Offsite Dose Calculations
- 4.9 0PGP05-ZN-0007, Preparation and Submittal of NRC Performance Indicators

5.0 Procedure

- 5.1 To evaluate Drill, Exercise, and Actual Event Performance (DEP) refer to Data Sheet 1
- 5.2 To evaluate Emergency Response Organization drill participation refer to Data Sheet 2
- 5.3 To evaluate Alert and Notification System Reliability refer to Data Sheet 3
- 5.4 Completed records shall be retained for two (2) years

Performance Indicator Tracking Guide**6.0 Support Documents**

- 6.1 Data Sheet 1, Drill, Exercise, and Actual Event Performance
- 6.2 Data Sheet 2, Emergency Response Organization Drill Participation
- 6.3 Data Sheet 3, Alert and Notification System Reliability
- 6.4 Form 1, Performance Indicator Data Summary (Typical)
- 6.5 Form 2, DEP Quarterly Report (Typical)
- 6.6 Form 3, Training & Participation Data Summary (Typical)

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Data Sheet 1	Drill, Exercise, and Actual Event Performance		Page 1 of 4

1.0 Indicator Definitions and Terms

- 1.1 The percentage of all selected drill, exercise, and actual opportunities that were performed accurately and on time during the previous 24 months (eight quarters).
- 1.2 Opportunities should include multiple events during a single drill or exercise (if supported by the scenario) or actual event, as follows:
 - 1.2.1 Each expected classification should be included,
 - 1.2.2 Notification includes notifications made to the state and county authorities for initial and changes to emergency classification and Protective Action Recommendations within the established 15 minute criteria in accordance with 0ERP01-ZV-IN02, Notifications to Offsite Agencies (periodic follow up notifications and briefings when the classification or Protective Action Recommendations have not changed are not included),
 - 1.2.3 Protective Action Recommendations include initial and any change as defined in 0ERP01-ZV-IN07, Offsite Protective Action Recommendations.
 - 1.2.4 A single notification may be counted twice if it contains a new Protective Action Recommendation and Classification (e.g., General Emergency with a new Protective Action Recommendation Notification).
- 1.3 Classifications are considered timely when an abnormal condition is recognized and appropriately classified within 15 minutes. The classification is considered accurate if the most appropriate Emergency Action Level (EAL) is chosen in accordance with 0ERP01-ZV-IN01, Emergency Classification.
- 1.4 Notifications are considered timely when the initial roll call is completed within 15 minutes of classification. Accurate means when the following Offsite Agency Notification Message Form Steps are completed correctly relative to the classification made:
 - 1.4.1 Step 1, Affected Unit #
 - 1.4.2 Step 2, This is a Drill or This is not a Drill
 - 1.4.3 Step 4, Emergency Classification, date & time
 - 1.4.4 Step 5, Radiological release in progress
 - 1.4.5 Step 6, Recommended Protective Actions & potentially affected zones & sectors
 - 1.4.6 Step 8, Initiating Condition Alpha-Numeric and description of emergency
 - 1.4.7 Step 9, Wind direction and speed

Above steps completed as per procedure 0ERP01-ZV-IN02, Notifications to Offsite Agencies.

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- 1.5 Protective Action Recommendations (PAR) are considered timely when an abnormal condition is recognized and appropriate PAR developed within 15 minutes and considered accurate if the selected Protective Action Recommendations are correct per procedure 0ERP01-ZV-IN07, Offsite Protective Action Recommendations. If no protective action recommendations are necessary then this is not counted as performance indicator data.
- 1.6 Each of the functions shall be evaluated independent of the others. Such that:
- 1.6.1 An error on classification (either over- or under-classification) does not cascade to the accuracy portion of the notification or Protective Action Recommendation.
- 1.6.2 An error in determining a Protective Action Recommendation does not cascade to the accuracy portion of the notification.
- 1.7 As a minimum, actual emergency declarations and evaluated exercises are to be included in this indicator. In addition, other simulated emergency events that STPEGS formally assesses for performance of classification, notification or Protective Action Recommendation will be included in this indicator (opportunities cannot be removed from the indicator due to poor performance). Therefore, sessions that will be used for Drill, Exercise, and Event Performance (DEP) performance indicator data will be selected prior to the session and will also include any actual events during the reporting quarter. The following activities may be selected for DEP data collection:
- 1.7.1 Evaluated Exercises
- 1.7.2 Dress Rehearsals
- 1.7.3 Combined Functional Drills
- 1.7.4 Licensed Operator Requalification (LOR) Sessions when classification, notification and protective action recommendation determination are objectives of the session.
- 1.7.5 Table Top Drills conducted that include interface between at least two ERFs (or phone cells simulating another ERF) when classification, notification and protective action recommendation determination are objectives of the session.
- 1.7.6 A drill does not have to include all Emergency Response Organization facilities to be counted in this indicator. When a drill is of appropriate scope for a single Emergency Response Organization facility if it reasonably simulates the interaction with one or more of the following facilities, as appropriate:
- 1.7.6.1 The Control Room,
- 1.7.6.2 The Technical Support Center (TSC),
- 1.7.6.3 The Operations Support Center (OSC),

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- 1.7.6.4 The Emergency Operations Facility (EOF),
- 1.7.6.5 Environmental Field Teams,
- 1.7.6.6 Inplant Teams, and
- 1.7.6.7 Offsite governmental authorities.

1.7.7 Actual Events.

1.8 With respect to classification of emergencies, the 15-minute goal is a reasonable period of time for assessing and classifying an emergency once indications are available and recognized that an EAL may have been exceeded. Allowing up to 15-minutes for classifying an emergency will have minimal impact upon the overall emergency response to protect the public health and safety. The 15-minute goal should not be interpreted as providing a grace period in which an attempt is made to restore plant conditions and avoid classifying the emergency, but rather a period that is used to ensure that the classification is appropriate to the relative risk involved.

2.0 Data Reporting Elements

2.1 The following data are required to calculate this indicator:

2.1.1 The number of classification, notification, and Protective Action Recommendation opportunities during the previous month/quarter. Use Form 1, Performance Indicator Data Summary (Typical) to capture each session and Form 2, DEP Quarterly Report (Typical).

2.1.2 The number of classification, notification, and Protective Action Recommendation opportunities performed accurately and on time during the previous month/quarter.

2.2 The percentage of classification, notification, and Protective Action Recommendation opportunities that were performed accurately and on time during the pervious 24 months (eight quarters) will be calculated. The indicator is calculated and reported monthly/quarterly.

3.0 Calculations

3.1 The site indicator is calculated, in percent, as follows:

$$\left[\frac{\text{\# of timely and accurate classifications, notifications, \& PAR's from DE \& AE's * during the previous 24 months (8 quarters)}}{\text{The total opportunities to perform Classifications, Notifications, and PAR's during the previous 24 months (8 quarters)}} \right] \times 100$$

*DE & AE's = Drills, Exercises, and Actual Events

3.2 Evaluate the percentage against the South Texas Project Performance Threshold Bands in step 5.0 of this procedure and forward to the Supervisor, Emergency Response or designee.

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4.0 Documentation

4.1 Documentation of Performance Indicator's shall consist of the following:

- 4.1.1 The requirements of procedure OPGP05-ZV-0001, Emergency Response Exercises and Drills, Section 6.0, Documentation.
- 4.1.2 OERP01-ZV-IN02, Notifications to Offsite Agencies, Form 1, Offsite Agency Notification Message Form (Typical)
- 4.1.3 OERP01-ZV-TP01, Offsite Dose Calculations, Form 1, Offsite Dose Calculations Transmittal Form or dose assessment computer printout.
- 4.1.4 Form 1, Performance Indicator Data Summary (Typical), is used to document each session.
- 4.1.5 Form 2, DEP Quarterly Report (Typical) is used to document each Quarter.
- 4.1.6 Actual Event Report (As Applicable).

5.0 South Texas Project Performance Threshold Bands

- 5.1 Green $\geq 95\%$
- 5.2 White $\geq 90\%$ and $< 95\%$ (NRC Green)
- 5.3 Red $< 90\%$ (NRC White)

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Data Sheet 2	Emergency Response Organization Drill Participation	Page 1 of 3	

1.0 Indicator Definitions and Terms

- 1.1 The percentage of key Emergency Response Organization members that have participated in a drill, exercise, or actual event participation (described on Data Sheet 1, Step 1.7) during the previous 8 quarters, as measured on the last calendar day of the quarter.
- 1.2 Key Emergency Response Organization members are those who fulfill the following functions:
 - 1.2.1 Control Room
 - 1.2.1.1 Shift Supervisor – All individuals responsible for classification, notification, and determination of Protective Action Recommendations.
 - 1.2.1.2 State/County Communicator – Completes Offsite Agency Notification Message Form and provides state/county notification.
 - 1.2.2 Technical Support Center
 - 1.2.2.1 TSC Manager - Management of plant operations resources and responsible for classification, notification, and determination of Protective Action Recommendations.
 - 1.2.2.2 Chemical/Radiochemical Manager – Completes Offsite Agency Notification Message Form and directs state/county notification.
 - 1.2.2.3 Assistant Operations Manager - Responsible for classification of conditions.
 - 1.2.2.4 Technical Manager – Responsible for Technical support.
 - 1.2.2.5 Radiological Manager - Radiological effluent and environs monitoring, and dose projections to generate Protective Action Recommendations.
 - 1.2.3 Operational Support Center
 - 1.2.3.1 OSC Coordinator – Key OSC Manager.
 - 1.2.4 Emergency Operations Facility
 - 1.2.4.1 EOF Director - Management of corporate resources and responsible for classification, notification, and determination of Protective Action Recommendations.
 - 1.2.4.2 Engineering Assistant- Completes Offsite Agency Notification Message Form and directs state/county notification.

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Data Sheet 2	Emergency Response Organization Drill Participation		Page 2 of 3

1.2.4.3 Radiological Director - Radiological effluent and environs monitoring, and dose projections to generate Protective Action Recommendations.

- 1.3 Evaluated simulator training evolutions that contribute to the DEP performance indicator statistics could be considered as opportunities for key Emergency Response Organization member participation and may be used for this indicator.
- 1.4 When a key Emergency Response Organization member or operating crew member has participated in more than one drill during the 8 quarter evaluation period, the most recent participation is used. The previous drill participation is not counted in determining the indicator value.
- 1.5 If a change occurs in the number of key Emergency Response Organization members, this change will be reflected in both the numerator and denominator of the indicator calculation.
- 1.6 The meaning of drills in this usage, is intended to include proficiency enhancing evolutions that reasonably simulate (actual or response cell) the interactions between appropriate facilities and/or individuals that would be expected to occur during emergencies.
- 1.7 Participation may be as a participant, mentor, coach, evaluator, or controller, but not as an observer. Multiple assignees to a given key Emergency Response Organization position could take credit for the same drill if their participation is a meaningful opportunity to gain proficiency in the assigned position.
- 1.8 Personnel assigned in more than one key Emergency Response Organization position must participate in a qualifying drill, exercise, training opportunity, or actual event in each position and are counted separately for each position during the 8 quarter period.

2.0 Data Reporting Elements

- 2.1 The following data are necessary to calculate this indicator: Form 3, Training & Participation Data Summary (Typical) may be used to document this information:
 - 2.1.1 Total number of current selected key Emergency Response Organization members.
 - 2.1.2 Total current selected key Emergency Response Organization members that have participated in a drill, exercise, or actual event during the previous eight quarters.
- 2.2 Key Emergency Response Organization participation data is collected, calculated, and verified by Emergency Response Staff. The indicator is calculated and reported monthly/quarterly and is based on participation over the previous 8 quarters.

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3.0 Calculations

3.1 The site indicator is calculated, in percent, as follows:

$$3.1.1 \left[\frac{\text{\# of Key ERO Members that have participated in a drill, exercise of actual event during the previous 8 quarter}}{\text{Total number of Key ERO Members}} \right] \times 100$$

3.2 Evaluate the percentage against the South Texas Project Performance Threshold Bands in Step 5.0 of this procedure and forward to the Supervisor, Emergency Response or designee.

4.0 Documentation

4.1 Form 3, Training & Participation Data Summary (Typical) provides an end of the month snapshot of the key Emergency Response Organization participation and stability. Documentation shall consist of:

4.1.1 Attendance Records or facility Staffing records as applicable.

4.1.2 End of quarter ERO Roster.

4.1.3 End of quarter Operations Shift Schedule.

5.0 South Texas Project Performance Threshold Bands

5.1 Green $\geq 90\%$

5.2 White $\geq 80\%$ and $< 90\%$ (NRC Green)

5.3 Red $< 80\%$ (NRC White)

6.0 Form 3, Training & Participation Data Summary (Typical) Instructions:

6.1 This is the station's total Key Emergency Response Organization population tracked by the Performance Indicator.

6.2 Number Tracked - indicates the total number of individuals tracked for that Emergency Response Position.

6.3 Number Participated - indicates the total number of individuals who have participated in that Emergency Response Position.

6.4 Percent – Divide the # Participated by # Tracked and multiply by 100.

6.5 Totals – Key Emergency Response Organization Members that have participated in a drill, exercise, or actual event in the previous eight quarters.

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Data Sheet 3	Alert and Notification System Reliability		Page 1 of 1

1.0 Indicator Definition and Terms

- 1.1 The percentage of Alert and Notification System (ANS) sirens that are capable of performing their function, as measured by periodic siren testing in the previous 12 months.
- 1.2 Periodic tests are the regularly scheduled tests in accordance with OPGP05-ZV-0007, Prompt Notification System that are conducted to actually test the ability of the sirens to perform their function (e.g., silent, growl, and siren sound test).
- 1.3 Definitions:
 - 1.3.1 Siren-Tests: the number of sirens times the number of times they are tested.
 - 1.3.2 Successful siren-tests: the sum of sirens that performed their function when tested.

2.0 Data Reporting Elements

- 2.1 The following data are reported:
 - 2.1.1 The total number of Alert and Notification System siren-tests during the previous month/quarter.
 - 2.1.2 The number of successful Alert and Notification System siren-tests during the previous month/quarter.
 - 2.1.3 The percentage of Alert and Notification System sirens that are capable of performing their function over the previous 12 months (4 quarters).

3.0 Calculations

- 3.1 The site value, in percent, for this indicator is calculated as follows:

$$\left[\frac{\text{\# of succesful siren - tests in the previous 12 months}}{\text{total number of siren - tests in the previous 12 months}} \right] \times 100$$
- 3.2 Evaluate the percentage against the South Texas Project Performance Threshold Bands in step 5.0 of this procedure and forward to the Supervisor, Emergency Response or designee.

4.0 Documentation

- 4.1 Test data is collected and documented using procedure OPGP05-ZV-0007, Prompt Notification System, and provided to the Emergency Response Division for calculation and verification.

5.0 South Texas Project Performance Threshold Bands

- 5.1 Green $\geq 98\%$
- 5.2 White $\geq 94\%$ and $< 98\%$ (NRC Green)
- 5.3 Red $< 94\%$ (NRC White)

Actual
 Exercise
 Dress Rehearsal
 CFD
 Tabletop
 LOR
 OTHER

1. ACCIDENT CLASSIFICATION

DATE/TIME: _____

Classification	Location	Expected EAL	Expected Time	Initiating Condition (Time)	Actual EAL	Actual Time
Unusual Event						
Alert						
Site Area Emergency						
General Emergency						

2. NOTIFICATION

Notification	Location	DPS Pierce & Matagorda County (Time)	Notification Required (Time)
Unusual Event			
Alert			
Site Area Emergency			
General Emergency			
PAR			
PAR			

3. PROTECTIVE ACTION RECOMMENDATION

PAR's	Location	Expected PAR	Expected Time	Actual PAR	Actual Time

Opportunities	Satisfactory	Unsatisfactory

Evaluated By: _____

Drill, Exercise and Actual Event Performance of Classification, Notification and PARs for __ (QTR) __ (YEAR)

Functional Requirement	Number of Successes during the Quarter	Number of Opportunities during the Quarter				Quarterly Percent
Classification						
Notification						
PARs						
Total		÷	X	100	=	

The percentage of all selected drill, exercise, and actual opportunities that were performed accurately and on time during the previous 24 months (eight quarters).

8 QUARTER DEP								
Date								
Quarter	QTR							
Successes								
Opportunities								
Percent								

Thresholds

- Green** ≥ 95%
- White** ≥ 90%
- Red** < 90%

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Form 3	Training & Participation Data Summary (Typical)		Page 1 of 1

The following data will be collected to track performance indicator inputs. The data collected will be used for the Emergency response organization Participation Performance Indicator. The selected positions are performance indicator for _____ (month) _____ (year).

	A	B	C
Station Position	Number Tracked	Number Participated	Percent
Shift Supervisor			
State/County Communicator			
TSC Manager			
Chemical/Radiochemical Manager			
Assistant Operations Manager			
Technical Manager			
Radiological Manager			
OSC Coordinator			
EOF Director			
Engineering Assistant			
Radiological Director			
Totals			

NOTE: $C = B / A \times 100$

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Max Keyes	N/A	N/A	Emergency Response Division
PREPARER	TECHNICAL	USER	COGNIZANT ORGANIZATION

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Emergency Response Exercises and Drills**1.0 Purpose and Scope**

- 1.1 This procedure delineates requirements and provides guidance for developing, conducting, evaluating and documenting emergency response exercises or drills to comply with regulatory requirements.
- 1.2 This procedure applies to the conduct of exercises or drills necessary to evaluate the proficiency of emergency response personnel, to verify a proper state of emergency preparedness at the South Texas Project Electric Generating Station (STPEGS) and provide criteria for federal, state, and county agency participation, as necessary, in STPEGS exercises or drills.
- 1.3 This procedure describes the duties and responsibilities of personnel who are assigned as a Controller or Evaluator. Additionally, it describes the requirements for qualification to be completed prior to conducting a drill or exercise.
- 1.4 This procedure applies to all station personnel who may participate in the development, control or evaluation of emergency response exercises or drills at the STPEGS.

2.0 Definitions

- 2.1 **COMBINED FUNCTIONAL DRILL:** A simulated casualty that tests the integrated capability and a major portion of the basic elements of the Emergency Plan and Emergency Response Organization (ERO).
- 2.2 **CONTROLLER:** An individual who has the responsibility to provide details, instructions, and data during a drill or exercise.
- 2.3 **DEP:** Drill Exercise Performance Indicator.
- 2.4 **DRILL:** A supervised instruction period aimed at testing, developing and maintaining skills in a particular operation. It may be a component of an exercise.
- 2.5 **EXERCISE DEFICIENCY:** An item which indicates the demonstrated level of response would have precluded effective implementation of the Emergency Plan in the event of an actual emergency.
- 2.6 **EVALUATOR:** An individual who has the responsibility to evaluate actions during an emergency drill or exercise.
- 2.7 **EXERCISE/DRILL COORDINATOR:** An individual who is assigned overall responsibility for the conduct and control of a drill or exercise.
- 2.8 **EXERCISE:** An exercise is an event that tests the integrated capability and a major portion of the basic elements existing within the emergency preparedness plans and organizations.

Emergency Response Exercises and Drills

- 2.9 EXERCISE WEAKNESS: An item which indicates the demonstrated level of response may have precluded effective implementation of the Emergency Plan in the event of an actual emergency.
- 2.10 FULL PARTICIPATION: Offsite local and state authorities and licensee personnel physically and actively take part in demonstrating their integrated capabilities to adequately assess and respond to an emergency at the STPEGS.
- 2.11 IMPROVEMENT ITEM: An item which may enhance the current program.
- 2.12 LEAD CONTROLLER: A Controller who has been designated by the drill coordinator, as the senior Controller in the particular Emergency Response Facility to which he/she has been assigned.
- 2.13 OBSERVER: An individual who only observes exercise/drill activities.
- 2.14 PARTIAL PARTICIPATION: Offsite authorities may take part in drills/exercises sufficient to successfully demonstrate direction and control functions.
- 2.15 LEVEL
- 2.15.1 Level 1: A Combined Functional Drill other than a Dress Rehearsal or Graded Exercise.
- 2.15.2 Level 2: The Dress Rehearsal for a Graded Exercise.
- 2.15.3 Level 3: Graded Exercise.
- 2.16 SCENARIO DEVELOPMENT COMMITTEE (SDC): A committee established to develop Level 1, Level 2 or Level 3 emergency response exercise or drill scenarios.
- 2.17 SCENARIO MANAGEMENT REVIEW COMMITTEE (SMRC): A committee chaired by the Supervisor Emergency Response or designee and usually comprised of three upper level management personnel who provide final review and approval of Dress Rehearsal and Graded Exercise scenarios.
- 2.18 TABLETOP DRILL: A walkthrough training session conducted for one or more emergency response facilities or designated functional groups to enhance teamwork and practice individual skills. A tabletop drill is not a Combined Functional Drill.

Emergency Response Exercises and Drills**3.0 Responsibilities****3.1 The Supervisor, Emergency Response or designee**

- 3.1.1 Oversight for the planning, development, conduct and evaluation of exercises or drills.
- 3.1.2 Approves objectives and evaluation criteria for each Combined Functional Drill.
- 3.1.3 Chairs the SMRC for review of the Dress Rehearsal and Exercises.
- 3.1.4 Ensures an identified exercise weakness or deficiency receives corrective action.
- 3.1.5 Designates Lead Controllers.
- 3.1.6 Obtains senior management approval for the Dress Rehearsal or Graded Exercise scenarios.
- 3.1.7 Designates the Exercise/Drill Coordinator.

3.2 Exercise/Drill Coordinator

- 3.2.1 Assumes responsibility for the overall conduct and control of an exercise or drill utilizing Form 1, Drill Coordinator Status Tracking Checklist.
- 3.2.2 Ensures qualified individuals are available to perform Lead Controller, Controller or Evaluator duties.
- 3.2.3 Submits exercise or drill scenarios to the Supervisor, Emergency Response, for approval.
- 3.2.4 Ensures documents generated as a result of this procedure are assembled and disposed of in accordance with Section 6.0 of this procedure.

3.3 Controllers provide players with exercise or drill plant casualty, simulation, system or component parameter information and information earned by the player.

3.4 Evaluators provide evaluation of ERO personnel performance.

3.5 The SMRC reviews and provides approval on Dress Rehearsal and exercise scenarios and objectives. (IR 90-10)

3.6 The SDC develops and reviews Combined Functional Drills, the Dress Rehearsal, and the Graded Exercise.

Emergency Response Exercises and Drills

3.7 STPEGS Department Managers

3.7.1 Provide candidates for Controllers and Evaluators as requested by the Exercise/Drill Coordinator.

3.7.2 Provide candidates for SDCs.

4.0 Procedure

NOTE

CONFIDENTIALITY of scenario contents shall be maintained by all individuals involved in the development process, or who participate as Controllers/Evaluators.

Personnel involved in the development, review and approval of exercise or drill scenarios should be excluded as exercise/drill participants and act as a Controller or Evaluator during the exercise/drill.

4.1 Scenario Development (SDC) and Scenario Management Review Committees (SMRC)

4.1.1 Scenario Development Committees

4.1.1.1 If the scenario is level 1, 2 or 3, then the Supervisor Emergency Response shall ensure a SDC is established.

4.1.1.2 Guidance for selection of a Scenario Development Committee is found in Addendum 1.

4.1.2 Scenario Management Review Committee (IR 90-10)

4.1.2.1 The Supervisor, Emergency Response requests the names of management level individuals to serve on the SMRC.

4.1.2.2 If possible, the committee member should be a member of the ERO.

4.2 Scenario Development and Exercise Preparation

4.2.1 Guidance for scenario development and exercise preparation for Level 1, 2 or 3 drills is found in Addendum 2.

4.2.2 The Drill Coordinator will oversee the development of scenarios using Form 1 as guidance.

Emergency Response Exercises and Drills

4.3 Conduct and Control of Drills and Exercise

- 4.3.1 Combined Functional Drills shall be conducted utilizing an approved scenario.
- 4.3.2 Every attempt should be made to utilize the plant simulator to its full capability in the dynamic mode.
- 4.3.3 Exercise/drill initial conditions should be made available to players on the day prior to the start of the exercise/drill. The only exception is for unannounced exercises/drills.
- 4.3.4 Personnel serving as Controllers and/or Evaluators shall be qualified in accordance with section 4.6 of this procedure.
- 4.3.5 Deviations from the approved scenario by the Controllers shall be referred to the Exercise/Drill Coordinator for approval prior to implementation.
- 4.3.6 Drills other than a Graded Exercise are considered training periods and can be placed in time suspension by the Exercise/Drill Coordinator at any time to correct a problem that is developing, or to explain any specific questions that may arise during the drill period.
- 4.3.7 Graded Exercises should not be placed on time hold during the exercise period; however, the Exercise/Drill Coordinator can terminate an exercise if it appears the exercise is not continuing in a manner that would allow for satisfactory completion of the approved objectives.
- 4.3.8 If an actual emergency should occur during the course of conducting the drill or exercise then any level drill or exercise may be suspended or terminated by the Shift Supervisor, Drill Coordinator or Drill Emergency Director.
- 4.3.9 The Exercise/Drill Coordinator and controllers/evaluators utilize the guidelines found in Addendum 3, Guidance for Conduct of an Exercise or Drill.

4.4 Evaluation of Drills and Exercises

- 4.4.1 Drills and Exercises shall have specific evaluation criteria which describe how to measure the degree of success or failure attained for each objective. Exercise/drill objective evaluations shall be documented.

Emergency Response Exercises and Drills

- 4.4.2 Each Emergency Response Facility shall conduct a facility debrief and self-critique monitored by the Lead Controller of that facility following the termination of a drill or exercise.
 - 4.4.2.1 Participants should include all players, Controllers, and Evaluators.
 - 4.4.2.2 Players will present team comments.
 - 4.4.2.3 Controllers and Evaluators will critique players.
- 4.4.3 Following the facility critique, a Controller/Evaluator meeting should be conducted addressing the following, as applicable.
 - 4.4.3.1 Completing any unchecked objective items with Controller/Evaluator input.
 - 4.4.3.2 Reviewing the completed objective items.
 - 4.4.3.3 Reviewing player comment input.
 - 4.4.3.4 Assembling critique items to be presented at the Station critique.
- 4.4.4 Station Critiques for Combined Functional Drills are conducted using guidance provided in Addendum 4.
- 4.5 Lead Controllers
 - 4.5.1 The Emergency Response Division personnel function as Emergency Response Lead Controllers. Other station personnel may be selected by the Supervisor, Emergency Response, to function as Lead Controllers if required.
 - 4.5.2 A Lead Controller provides instructional training in the conduct and evaluation of exercises and drills to personnel qualifying as Controllers or Evaluators. Lead Controllers provide on-the-spot correction of erroneous player performance, with the exception of during the Graded Exercise.
- 4.6 Controller and Evaluator Qualification
 - 4.6.1 Controller/Evaluator qualification is the responsibility of the Exercise/Drill Coordinator. The period of qualification is indefinite and may be revoked at the discretion of the Supervisor, Emergency Response.

Emergency Response Exercises and Drills

- 4.6.2 Controller/Evaluator candidates complete Controller/Evaluator training course EPT-312. The course consists of material for controlling and evaluating an exercise or drill. Controller/Evaluators are briefed by Lead Controllers regarding responsibilities prior to the conduct of Combined Functional Drills.
- 4.6.3 Guidance for Controllers is found in Addendum 5.

5.0 References

- 5.1 STPEGS Emergency Plan
- 5.2 NUREG-0654/FEMA-REP-1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Response in Support of Nuclear Power Plants
- 5.3 10 CFR 50, Appendix E
- 5.4 0PGP03-ZT-0139, Emergency Response Training Program
- 5.5 0PGP03-ZX-0002, Condition Reporting Process
- 5.6 NUREG/CR-3365, Report to the NRC on Guidance for Preparing Scenarios for Emergency Preparedness Exercises at Nuclear Generating Stations
- 5.7 STPEGS ST-HL-AE-3497, July 11, 1990, Response to Inspection Report 90-10
- 5.8 NEI 99-02, Regulatory Assessment Performance Indicator Guideline
- 5.9 0PGP05-ZV-0013, Performance Indicator Tracking Guide

6.0 Documentation

- 6.1 For Level 1, 2 or 3 drills, the following documentation is assembled and forwarded to Records Management.
- 6.1.1 Approved Scenario Manual
- 6.1.2 A Station Critique package or Drill/Exercise Report which contains the material necessary to demonstrate evaluation of all applicable objectives and a proper self- critique process was conducted.
- 6.1.3 Controller/Evaluator briefing and Player briefing attendance sheets.
- 6.2 For mini-drills (e.g., medical, assembly and accountability, PASS, Radiological Monitoring Drill), the following documentation is assembled and forwarded to Records Management.

Emergency Response Exercises and Drills

6.2.1 Scenario timeline

6.2.2 Scenario objective(s)

6.2.3 A Critique Package which contains the materials necessary to demonstrate evaluation of all applicable objectives and a proper self-critique process was conducted.

6.3 For table top drills, the following documentation is assembled and forwarded to Records Management.

6.3.1 Scenario timeline

6.3.2 Scenario objective(s)

6.4 For Licensed Operator Requalification drills (LOR), the following documentation is assembled and forwarded to Records Management.

6.4.1 Scenario timeline

6.4.2 Scenario objective(s)

6.4.3 A Critique Package which contains the materials necessary to demonstrate evaluation of all applicable objectives and a proper self-critique process was conducted.

7.0 Support Documents

Addendum 1, Guidance for Selection of a Scenario Development Committee

Addendum 2, Guidance for Scenario Development and Exercise Preparation

Addendum 3, Guidance for Conduct of an Exercise or Drill

Addendum 4, Guidance for Conduct of Station Critique

Addendum 5, Guidance for Controllers

Form 1, Drill Coordinator Status Tracking Checklist

Form 2, Drill Scenario Development Status Tracking Checklist

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Addendum 1	Guidance for Selection of a Scenario Development Committee		Page 1 of 1

- 1.0 For a Dress Rehearsal and/or Graded Exercise, the Supervisor, Emergency Response, should request the following Departments to supply the names of candidates with expertise in the below listed disciplines to the Emergency Response Division for consideration as members of the SDC.
 - 1.1 Candidates for each of the following: Chemistry, Rad/Met data
 - 1.2 Plant Operations
 - 1.3 Candidates for each of the following: fire response, injured personnel, security events
 - 1.4 Simulator support
 - 1.5 Candidates from each craft: Mechanical, Electrical, and I&C
- 2.0 Selection as a SDC member should be based on the following:
 - 2.1 Each candidate should have at least two years line experience at STPEGS or have completed Licensed Operator Training or Certification at STPEGS or have previous experience in Emergency Response.
 - 2.2 Plant Operations candidates should have a Senior Reactor Operator (SRO) license and previous Unit or Shift Supervisor experience.
 - 2.3 Training Department candidates should be qualified simulator instructors and have at a minimum an SRO certification.
- 3.0 The candidates' qualifications are reviewed by the Supervisor, Emergency Response and, if acceptable, approved by the Supervisor, Emergency Response. (IR 90-10)
- 4.0 Final make-up of the SDC is at the discretion of the Exercise/Drill Coordinator.

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NOTE

Overall exercise preparation and conduct is tracked with Form 1, Drill Coordinator Status Tracking Checklist. Scenario development is tracked with Form 2, Drill Scenario Development Status Tracking Checklist.

- 1.0 Prior to a Dress Rehearsal or Graded Exercise, the SMRC shall review and approve the scenario.
- 2.0 Scenario developmental responsibility guidance is as follows:
 - 2.1 Emergency Response
 - 2.1.1 Scenario development coordination
 - 2.1.2 Introduction
 - 2.1.3 Objectives
 - 2.1.4 Guidelines
 - 2.1.5 Controller/Evaluators
 - 2.1.6 Initial conditions (plant and met)
 - 2.1.7 Narrative summary
 - 2.1.8 Time-line
 - 2.1.9 Messages
 - 2.1.10 Controller instructions and forms
 - 2.1.11 Supplementary material
 - 2.1.12 Word processing
 - 2.1.13 Scenario manual assembly
 - 2.1.14 Conceptual scenario events
 - 2.1.15 Scenario validation on simulator

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2.2 Generation Support

- 2.2.1 Chemistry data for Reactor Coolant System (RCS), Post Accident Sampling System (PASS), etc.
- 2.2.2 Onsite rad data (contamination, survey, Radiological Monitoring System, etc.)
- 2.2.3 Offsite rad data
- 2.2.4 Meteorological data
- 2.2.5 Conceptual scenario events
- 2.2.6 Messages
- 2.2.7 Final technical review

2.3 Plant Operations

- 2.3.1 Plant parameter data
- 2.3.2 Initial conditions
- 2.3.3 Scenario validation on simulator
- 2.3.4 Conceptual scenario events
- 2.3.5 Messages
- 2.3.6 Clearance Orders, Operability Tracking Logs
- 2.3.7 Final technical review

2.4 Plant Protection

- 2.4.1 Medical emergency data
- 2.4.2 Fire emergency events
- 2.4.3 Security events data
- 2.4.4 Conceptual scenario events
- 2.4.5 Final technical review

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Addendum 2	Guidance for Scenario Development and Exercise Preparation		Page 3 of 6

2.5 Training

2.5.1 Scenario validation on simulator

2.5.2 Conceptual scenario events

2.5.3 Final technical review

2.6 Maintenance

2.6.1 Repair team data

2.6.2 Conceptual scenario events

2.6.3 Mockup work packages

2.6.4 Final technical review

3.0 Select objectives for the scenario

3.1 Exercise scenarios shall have specific objective requirements.

3.2 The objectives should allow for demonstration of items found deficient in previous exercises.

3.3 The objectives may include incident specific items judged worthy of evaluation during the exercise.

3.4 If a full participation Level 3 exercise, then the Exercise/Drill Coordinator shall obtain review and concurrence of Federal Emergency Management Agency (FEMA).

4.0 Determine main scenario events

4.1 If a Level 2 or 3 exercise, then present to SMRC for preliminary review and concurrence.

4.2 Run main scenario sequence on simulator

4.3 Task SDC members to:

4.3.1 Evaluate data for accuracy

4.3.2 Establish peripheral scenario sequence

4.3.3 Determine any other necessary data

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- 5.0 Run scenario on simulator
 - 5.1 Verify all indications
 - 5.2 Retrieve applicable Section 6 data and supply to SDC members
 - 5.3 Determine all necessary references
 - 5.4 Determine initial conditions and develop simulated exercise work packages, Equipment Clearance Orders (ECOs) and Operability Tracking Logs (OTLs)

- 6.0 Develop the following data:
 - 6.1 Detailed plant data - verify simulator data and generate any other appropriate data
 - 6.2 Inplant radiological and radiochemistry data
 - 6.3 Inplant chemistry and radiological sample results, portable instrument readings and detailed equipment status
 - 6.4 Onsite and offsite radiological data
 - 6.5 Peripheral event data
 - 6.6 Reentry and recovery data
 - 6.7 Messages to support all scenario activities

- 7.0 If a Graded Exercise then run the scenario on the simulator with a crew unfamiliar with the sequence of events.
 - 7.1 Verify all indications
 - 7.2 Compare to previous run
 - 7.3 Review data for emulation disparities from anticipated real plant conditions
 - 7.4 Document and ensure crew comments are addressed by the SDC
 - 7.5 Emphasize to simulator crew the need to maintain confidentiality of simulator run from Graded Exercise participants

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- 8.0 Perform final technical review of:
 - 8.1 Overview;
 - 8.2 Inplant data and systems status;
 - 8.3 Onsite radiological data;
 - 8.4 Release pathways;
 - 8.5 Offsite radiological data;
 - 8.6 Peripheral events;
 - 8.7 Conflict of scenario with established procedures;
 - 8.8 Event initiation and technical message.
- 9.0 If Level 2 or 3 scenario then present to SMRC and Supervisor Emergency Response, for final review and signature approval.
- 10.0 If scenario is a Graded Exercise then submit to NRC & FEMA.
 - 10.1 Meet with the NRC & FEMA (if required) to present scenario.
 - 10.2 Document NRC & FEMA comments and present to SDC and SMRC.
- 11.0 Continue review prior to exercise date.
 - 11.1 Implement appropriate corrections.
 - 11.2 Ensure guidelines of final technical review are followed for any changes.
 - 11.3 If Level 2 or 3 exercise then ensure SMRC is informed of any major changes made and approves of the changes.

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Addendum 2	Guidance for Scenario Development and Exercise Preparation		Page 6 of 6

- 12.0 Scenario messages, to the extent possible, should not contain information which is identical to or clearly and specifically related to Emergency Action Level values.
- 13.0 The scenario messages and their time-line should be consistent with the information which would be available at that time in the event. For example, it would take several hours from the time a PASS sample is requested to the time the results would be available.
- 14.0 To the extent possible, contingency actions should be identified in the scenario and its messages. For example, if Control Room personnel could solve a problem or provide an exercise solution that would interfere with the overall scenario, contingencies should be available to the Lead Controller of the facility.

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Addendum 3	Guidance for Conduct of an Exercise or Drill		Page 1 of 1

- 1.0 Free play (allowing the players to go as far as possible in their response actions to a simulated initiating event) is encouraged and managed by the controller team. All actions should be performed unless the actions could result in.
 - 1.1 Radiation exposure;
 - 1.2 Unsafe conditions or unsafe work activities;
 - 1.3 Expenditures which have not been approved for the drill;
 - 1.4 Impact on unit operations or availability;
 - 1.5 Removing a weapon from its holster or firing a weapon;
 - 1.6 Jeopardizing the scenario.
- 2.0 Controllers and Evaluators should attend a Controller/Evaluator pre-drill briefing for any exercise or drill in which they act as Controllers or Evaluators. Controllers shall know in advance:
 - 2.1 Exercise objectives;
 - 2.2 Extent of play;
 - 2.3 Simulation allowed;
 - 2.4 Applicable portions of the scenario.
- 3.0 Scenario messages used to control the progress of the scenario shall be issued by a Controller at a time consistent with the scenario time-line sequence of events.
- 4.0 Contingency messages used to elicit a response for further action are utilized only when specifically authorized by the Lead Controller. This type of contingency message may result in an exercise weakness or deficiency.
- 5.0 Controllers shall not question or provide instruction other than to clarify scenario parameters or information to any player in a Graded Exercise. In any other Tabletop Drill, Combined Functional Drill or Exercise, interfacing by the Controller or Evaluator or Instructor to correct on-the-spot deficiencies in order to maximize training effort is allowed.
- 6.0 Controllers should be careful to avoid making scenario events obvious by pre-positioning themselves or materials at event locations. Controllers should promptly arrive at event locations.
- 7.0 Observers shall not question, instruct, provide details or interact in any manner with any player in a Graded Exercise.
- 8.0 Controllers and Evaluators shall maintain a chronological record of key events and observations.

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Addendum 4	Guidance for Conduct of Station Critique		Page 1 of 1

- 1.0 Appropriate exercise Controllers/Evaluators, and key personnel from each facility should assemble for a post-exercise critique that is facilitated by the Exercise/Drill Coordinator.
- 2.0 Controllers and Evaluators should ensure follow-up questions on specific performance actions/observations are asked to appropriate players to ensure an accurate event sequence.
- 3.0 At the post-exercise critique, items are sorted into strengths, improvement, weakness, and deficiency items.
- 4.0 The results of the post-exercise critique are presented at a Station Critique to appropriate personnel and as a pre-brief to the NRC Graded Exercise inspectors prior to their exit.
- 5.0 If an exercise weakness is identified by the NRC following a Graded Exercise then ensure proposed corrective actions are entered into the Station Condition Report Process.
- 6.0 Combined Functional Drill weakness and deficiency items are tracked to completion by the Emergency Response Division and documentation is provided. Appropriate items, as determined by the Supervisor, Emergency Response, are tracked by using OPGP03-ZX-0002, Condition Reporting Process.

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Addendum 5	Guidance for Controllers		Page 1 of 1

- 1.0 Controllers read the following sections of the scenario, as applicable: introduction, objectives, guidelines, narrative summary, initial plant conditions, initial meteorological conditions, onsite scenario time-line, and messages. Also, Controllers should familiarize themselves with any other scenario data that is relevant to the area assigned or may be assigned to.
- 2.0 Controllers attend one or more pre-exercise/drill briefs. These sessions are conducted by the Emergency Response Division and consist of a detailed discussion of the scenario.
- 3.0 Controllers Should physically walk-down the area, if applicable. Controllers are responsible for familiarizing themselves with all aspects of the area as it is affected by the scenario.

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Form 1	Drill Coordinator Status Tracking Checklist		Page 1 of 5

NOTE

The checklist is provided as an aid for the Exercise/Drill Coordinator.

1.0 Classification and Scheduling

1.1 Exercise/Drill Coordinator assigned: _____
Name

1.2 Assigned date of exercise: _____
Date

1.3 Exercise Level: (Check one or more as required)

1.3.1 Level 1:

_____ 1.3.1.1 Complete activation of on site and duty ERO other than for a Dress Rehearsal or Graded Exercise.

1.3.2. Level 2:

_____ 1.3.2.1 Complete activation of on site and duty ERO for a Dress Rehearsal.

1.3.3 Level 3:

_____ 1.3.3.1 Full Participation Graded Exercise.

_____ 1.3.3.2 Partial Participation Graded Exercise.

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2.0 Scenario Development and Routing

- Date
- _____ Determine Controllers, Evaluators, and participants for exercise.
- _____ For any exercise, coordinate the date and time of the event with the Plant General Manager, or designee, and appropriate offsite agencies, if involved.
- _____ For Level 2 and Level 3 exercises, a SMRC shall review and concur with the scenario objectives and the scenario, prior to final approval. (IR 90-10)
- _____ Submit to SMRC objectives, scenario narrative and time-line for Dress Rehearsal or Graded Exercise for review and approval. (IR 90-10)
- _____ Submit exercise scenario package to the Supervisor, Emergency Response, for final review and approval.
- _____ If Level 3 full participation exercise, submit objectives to FEMA/NRC 90 days before the exercise.
- _____ If Level 3 full participation exercise, submit scenario to FEMA/NRC 60 days before the exercise.
- _____ If Level 3 exercise, receive FEMA/NRC acceptance of the scenario.
- _____ If the State Division of Emergency Management (DEM) or Bureau of Radiation Control (BRC) is involved in an exercise scenario, then provide each agency a copy.

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3.0 Notification of Exercise

3.1 For a Dress Rehearsal or Graded Exercise, the Exercise/Drill Coordinator notifies, as applicable, the following and determines whether they wish to participate or observe at the beginning of the scenario development process.

3.1.1 Offsite Agencies

<u>Date</u>	<u>Participate</u>	
_____	_____	Matagorda County, County Judge's Office
_____	_____	Matagorda County Sheriff's Office
_____	_____	Bay City Fire Department
_____	_____	Palacios Fire Department
_____	_____	Matagorda County Hospital District
_____	_____	Ambulance Services
_____	_____	Texas Department of Public Safety, Division of Emergency Management
_____	_____	Texas Department of Public Safety, Pierce, Disaster District Sub 2A
_____	_____	Texas Department of Public Safety, License and Weight Division, Rosenberg Office
_____	_____	Texas Department of Health, Bureau of Radiation Control
_____	_____	NRC Resident Inspector
_____	_____	Other (specify) -

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3.2 Prior to a Graded Exercise, contact participating agencies and remind them of exercise date (or week for unannounced).

<u>Date</u>	<u>Participate</u>	
		Matagorda County, County Judge's Office
		Matagorda County Sheriff's Office
		Bay City Fire Department
		Palacios Fire Department
		Matagorda County Hospital District
		Ambulance Services
		Texas Department of Public Safety, Division of Emergency Management
		Texas Department of Public Safety, Pierce, Disaster District Sub 2A
		Texas Department of Public Safety, License and Weight Division, Rosenberg Office
		Texas Department of Health, Bureau of Radiation Control
		NRC Resident Inspector
		Other (specify) -

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4.0 Exercise Evaluators/Controllers

Date

_____ Meet with Evaluator/Controllers and other personnel involved with the exercise to brief them on scope, sequence of events, and proper documentation

_____ Pass out the scenario to Evaluators/Controllers

_____ Discuss drillmanship techniques (i.e., actual vs. simulated events, prompting, preventing actual injuries, etc.)

5.0 Initial Condition Distribution

Date

_____ Distribute initial conditions prior to exercise start. Exception: unannounced exercises

6.0 Post Exercise

6.1 Critique

Date

_____ Meet with Evaluator/Controllers to discuss their comments prior to the Station critique.

_____ Conduct a Station of the exercise to review comments and performance observations.

_____ Verify Drill/Exercise Performance Indicators in accordance with OPGP05-ZV-0013.

NOTE

Prior to adjourning the critique, allow participants to comment on exercise performance, which may include comments on the scenario.

7.0 Action Plan

During the critique process, items will be noted that do not meet expectations or standards. Those items, requiring further review, evaluation and/or action for resolution, will be entered into OPGP03-ZX-0002, Condition Reporting Process.

Date

_____ Condition Reports Generated (if applicable)

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NOTE

This checklist is provided as an aid for the Exercise/Drill Coordinator.

1.0 Scenario Coordinator assigned _____
NAME

2.0 Scope of Scenario Scenario Identification Number: _____

		COMP DATE
3.0	Objectives Determined	
3.1	Define DEP Objectives;	_____
3.2	Reviewed by SMRC (IR 90-10);	_____
3.3	Reviewed by select senior management (IR 90-10);	_____
3.4	Approved by Supervisor, Emergency Response;	_____
3.5	Presented to SDC.	_____
4.0	Main Scenario Events determined;	
4.1	SMRC concurrence (IR 90-10);	_____
4.2	Preliminary simulator run complete;	_____
4.3	Data distributed to SDC members;	_____
4.4	Peripheral scenario events determined;	_____
4.5	Additional data needs determined.	_____

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Form 2	Drill Scenario Development Status Tracking Checklist		Page 2 of 2

		COMP DATE
5.0	Scenario simulator run complete	_____
6.0	Data development complete	_____
7.0	Graded Exercise simulator verification complete	_____
8.0	SMRC review and concurrence	_____
9.0	Final technical review complete	_____

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Assistant Support Organization Director				
Quality	Non Safety-Related	Usage: N/A	Effective Date: 06/28/01	
Max Keyes	N/A	N/A	Emergency Response Division	
PREPARER	TECHNICAL	USER	COGNIZANT ORGANIZATION	

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Assistant Support Organization Director**1.0 Purpose and Scope**

- 1.1 This procedure specifies the actions to be completed by the Assistant Support Organization Director in the Emergency Operations Facility (EOF) during a declared emergency.

2.0 Responsibilities

- 2.1 The Assistant Support Organization Director is responsible for:

- 2.1.1 Arranging for meals and food services for the site.
- 2.1.2 Ensuring that EOF administrative support and supplies are maintained.
- 2.1.3 Ensuring that necessary records and documents are available and maintained to support the EOF function.
- 2.1.4 Developing an EOF shift schedule.
- 2.1.5 Arranging for additional Emergency Response Organization (ERO) staff, as necessary.

3.0 Precautions and Limitations

- 3.1 The Emergency Operations Facility may be activated at an Alert classification but will be activated when a Site Area Emergency or General Emergency classification has been declared in accordance with Procedure 0ERP01-ZV-IN01, Emergency Classification.

- 3.1.1 The Emergency Director has ordered the activation of the Emergency Operations Facility to support response activities.

4.0 Procedure

- 4.1 At an Alert or higher Emergency Classification or as directed by the Emergency Director implement Data Sheet 1, Initial Activities.
- 4.2 Complete Checklist activities as follows:
- 4.2.1 Use the right column to log the time an activity is performed.
 - 4.2.2 Reoccurring activities should be documented using the Emergency Action Log.
 - 4.2.3 Implement other activities as necessary.
- 4.3 Use Checklists to help direct emergency activities.

Assistant Support Organization Director**5.0 References**

- 5.1 STPEGS Emergency Plan
- 5.2 0PGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide
- 5.3 0ERP01-ZV-IN01, Emergency Classification
- 5.4 0ERP01-ZV-RE01, Recovery Operations
- 5.5 0ERP01-ZV-RE02, Documentation
- 5.6 0ERP01-ZV-OF01, Alternate Emergency Operations Facility Activation, Operation, and Deactivation

6.0 Support Documents

- 6.1 Addendum 1, Shift Turnover Briefing
- 6.2 Addendum 2, Development of Shift Schedules
- 6.3 Addendum 3, Administrative Staff Responsibilities
- 6.4 Data Sheet 1, Assistant Support Organization Director Checklist
- 6.5 Data Sheet 2, EOF Staffing Log
- 6.6 Data Sheet 3, EOF Equipment Operability Checklist
- 6.7 Data Sheet 4, Arrangement for Food Services
- 6.8 Data Sheet 5, Transmittals Received/Sent Log

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Addendum 1	Shift Turnover Briefing		Page 1 of 1

- 1.0 Provide a briefing of the event to the shift replacement including the following areas:
 - 1.1 Basis of the current emergency classification and the EALs of importance.
 - 1.2 Completed checklists and logs.
 - 1.3 Current meal arrangements.
 - 1.4 Current shift schedule.
 - 1.5 Recovery plans developed and corrective actions for plant recovery.
- 2.0 Inform the following of the transfer of responsibilities to the oncoming shift replacement.
 - 2.1 Administrative Staff
 - 2.2 Support Organization Director
 - 2.3 Support Orientation Coordinator
 - 2.4 Communications System Supervisor
 - 2.5 Administrative Manager
- 3.0 Update the Staffing Board.
- 4.0 Document the time of turnover and the identity of your relief on your Log and provide copies to your replacement.
- 5.0 Verify your telephone number on the shift schedule. If this telephone number is inside the 10 mile EPZ, then provide an alternate telephone number for contact should evacuation of the EPZ be necessary.
- 6.0 Take a copy of your shift schedule.
- 7.0 If issued a TLD, then maintain custody of the TLD until termination or recovery.
- 8.0 Verify possession of a STPNOC picture badge for access through possible road blocks when returning to the site for the next shift, or request a replacement picture badge from the Support Orientation Coordinator.
- 9.0 Inform the Security Officer responsible for access control at the Emergency Operations Facility of the shift change and sign out when leaving.

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Assistant Support Organization Director			
Addendum 2	Development of Shift Schedules		Page 1 of 1

- 1.0 Use a copy of the Emergency Response Organization Roster to make shift assignments.
 - 1.1 The groups should be scheduled approximately one hour apart. No shift personnel should be assigned to more than 16 hours without relief or 24 hours within a 48 hour period.
 - 1.2 Using the Emergency Response Organization Roster, mark up names for each position for first and second shift.
- 2.0 Obtain approval from the Deputy EOF Director for the shift schedule.
- 3.0 Contact the Radiological Director for special instructions for personnel reporting to work for the next shift.
- 4.0 Contact the Security Manager for special instructions for personnel reporting to work for the next shift.
- 5.0 Contact the next shift personnel and provide the schedule for their shift and any special instructors specified by the Radiological Director and Security Manager. For any individuals living within the 10 mile EPZ, obtain an alternate telephone number should an evacuation be later implemented.
 - 5.1 For individuals without an alternative telephone number, direct the individual to contact the Support Organization Director upon an ordered relocation. Also, direct them to carry their STPNOC Picture Badge for access through roadblocks.
- 6.0 Select an alternate for any persons who could not be reached.
 - 6.1 Inform the Deputy EOF Director of any positions which could not be filled.
- 7.0 Provide a copy of the shift schedule to each person in the Emergency Operations Facility and post on the wall by the exit doors.
- 8.0 Fax a copy of the shift schedule to the Administrative Manager in the Technical Support Center.
- 9.0 Fax a copy of the shift schedule to the State of Texas EOC, Matagorda County EOC, and Federal Response Center, if activated.

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Addendum 3	Administrative Staff Responsibilities		Page 1 of 2

- 1.0 Photocopy Machine
 - 1.1 Assume responsibility for maintenance and operations of the photocopy machine.
 - 1.1.1 Functionally check photocopies and ensure necessary supplies are available.
 - 1.1.1.1 Run several 8 1/2 X 11 test copies.
 - 1.1.1.2 Run several 8 1/2 X 14 test copies.
 - 1.1.1.3 Ensure that the following supplies are available:
 - 1.1.1.3.1 One box of 8 1/2 X 11 paper.
 - 1.1.1.3.2 One box of 8 1/2 X 14 paper.
 - 1.1.1.3.3 Toner
- 2.0 Assist the Records Supervisor with document control:
 - 2.1 Retrieve documents upon request from document control files.
 - 2.2 Make necessary photocopies of controlled documents.
 - 2.3 Promptly return all controlled documents to document control files.
 - 2.4 Notify the Assistant Support Organization Director of any difficulties.
- 3.0 Assume responsibility for maintenance and operations of the fax machine:
 - 3.1 Functionally check the fax machine.
 - 3.2 Set the time and date.
 - 3.3 Log all fax messages received and transmitted on Data Sheet 5, Transmittals Received/Sent Log.
 - 3.4 When faxes are received distribute to the person indicated on the fax. Otherwise distribute copies to each Director and NRC.
 - 3.5 Maintain a chronological file of all fax messages received and sent.

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Addendum 3	Administrative Staff Responsibilities		Page 2 of 2

4.0 Shift Change Records:

4.1 Establish a file for each of the following disciplines. Include in the file all documents turned over during shift change.

4.1.1 EOF Director

4.1.2 Deputy EOF Director

4.1.3 Emergency Operations Facility Liaison

4.1.4 Licensing Director

4.1.5 Radiological Director

4.1.6 Technical Director

4.1.7 Support Organization Director

4.1.8 Public Affairs Coordinator

5.0 Complete Data Sheet 3, EOF Equipment Operability Checklist.

6.0 Assist the Assistant Support Organization Director with:

6.1 Developing shift schedules.

6.2 Arranging for food service.

6.3 Arranging for support personnel.

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Data Sheet 1	Assistant Support Organization Director Checklist		Page 1 of 5

_____	_____	_____
(Name)	(Date)	(Unit)
ACTION		TIME

1.0 INITIAL ACTIVITIES

- 1.1 Report to the Emergency Operations Facility and sign in on the Staffing Board. _____
- 1.2 Inform the Support Organization Director of your arrival. _____
- 1.3 Verify the Assistant Support Organization Director's Emergency Response Manual is available. _____
- 1.4 Initiate an Emergency Action Log. _____
- 1.5 Verify staffing levels of the EOF. Ensure all personnel have signed in on the EOF Staffing Board. Direct one of the Administrative Staff to complete Data Sheet 2, EOF Staffing Log. _____
- 1.6 Report the staffing status for the EOF to the Deputy EOF Director. Contact the Technical Support Center (TSC) Administrative Manager to obtain a status of TSC/OSC staffing. Request that copies of the TSC/OSC staffing log be faxed to the EOF. _____
 - 1.6.1 Fax a copy of Data Sheet 2 to the Administrative Manager. _____
 - 1.6.2 Provide copies of Data Sheet 2 and TSC/OSC staffing logs to all EOF Directors. _____
- 1.7 Request a copy of the Joint Information Center (JIC) staffing from the Site Public Affairs Specialist. _____
- 1.8 Direct Administrative Staff to use Addendum 3, Administrative Staff Responsibilities, and report when completed with Data Sheet 3. _____

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Assistant Support Organization Director			
Data Sheet 1	Assistant Support Organization Director Checklist		Page 2 of 5

ACTION	TIME
1.9 Begin arranging for food service once the initial activities of establishing EOF operations has been completed.	_____
1.9.1 If arrangements for food from offsite have been made by the Technical Support Center, then:	
1.9.1.1 Contact the Administrative Manager and assume responsibility for providing food services including interfacing with the vendor, establishing meal schedules, and ensuring the correct number of meals are ordered.	_____
1.9.1.2 Inform the Deputy EOF Director of current arrangements for food as established by the TSC and that you are assuming responsibility for meals.	_____
1.9.1.3 Complete Data Sheet 4, Arrangement for Food Services.	_____
1.9.1.4 Inform the vendor of the change in responsibility for meals and provide a telephone number.	_____
1.9.2 If arrangements for food from offsite have not been made, then:	
1.9.2.1 Notify the Administrative Manager that you are assuming the responsibility for food services to the site.	_____
1.9.2.2 Refer to Data Sheet 4 for instructions on meal procurement.	_____
1.10 Begin planning a shift schedule if the emergency condition may extend beyond 12 hours.	

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Assistant Support Organization Director			
Data Sheet 1	Assistant Support Organization Director Checklist		Page 3 of 5

ACTION	TIME
---------------	-------------

2.0 SPECIAL ACTIVITIES

2.1 Radiological Release Occurring or Imminent:

2.1.1 Begin calling personnel scheduled for the next shift and provide any special instructions for reporting to the site as provided by the Radiological Director.	N/A
---	-----

2.2 Evacuation of the Emergency Operations Facility:

2.2.1 Collect the following documents:

2.2.1.1 Assistant Support Organization Director's Emergency Response Manual.	N/A
--	-----

2.2.1.2 All logs, checklists and any other important data generated.	N/A
--	-----

2.2.1.3 List of employee telephone numbers.	N/A
---	-----

2.2.2 Contact the Administrative Manager and inform him/her of the evacuation of the Emergency Operations Facility.	N/A
---	-----

2.2.3 Obtain any special precautions issued by the Radiological Director for proceeding to the Alternate Emergency Operations Facility.	N/A
---	-----

2.2.4 When directed by the EOF Director, proceed with the Administrative Staff, Records Supervisor, and Support Orientation Coordinator to the Alternate Emergency Operations Facility.	N/A
---	-----

2.2.5 Upon arrival at the Alternate Emergency Operations Facility, reestablish contact with the Administrative Manager and provide your new telephone number.	N/A
---	-----

2.2.6 Arrange for food services for individuals who have evacuated to the Alternate Emergency Operations Facility.	N/A
--	-----

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Assistant Support Organization Director			
Data Sheet 1	Assistant Support Organization Director Checklist		Page 4 of 5

ACTION	TIME
2.3 Shuttle Service:	
2.3.1 Arrange to provide shuttle service to the site.	N/A
2.3.2 When shuttle services have been established, inform the EOF staff and the Administrative Manager.	N/A
2.3.3 Request the Site Public Affairs Specialist to include information on the shuttle in the next press release.	N/A
2.3.4 Post a sign at the exit to the EOF with information regarding the shuttle.	N/A
3.0 ONGOING ACTIVITIES	
3.1 Direct the activities of the Administrative Staff.	N/A
3.2 Ensure adequate administrative support, supplies and records are maintained for the EOF.	N/A
3.3 Coordinate with the Administrative Manager for changes in the total number of emergency response personnel onsite and the schedule for meals. Ensure that adequate numbers of meals are procured to meet the schedule.	N/A
4.0 SHIFT CHANGE	
4.1 Upon arrival of your shift replacement, complete all actions listed in Addendum 1, Shift Turnover Briefing. Include the Administrative Staff, Support Orientation Coordinator, and Communications System personnel in the briefing.	N/A

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Data Sheet 1	Assistant Support Organization Director Checklist		Page 5 of 5

ACTION

TIME

5.0 RECOVERY ACTIVITIES

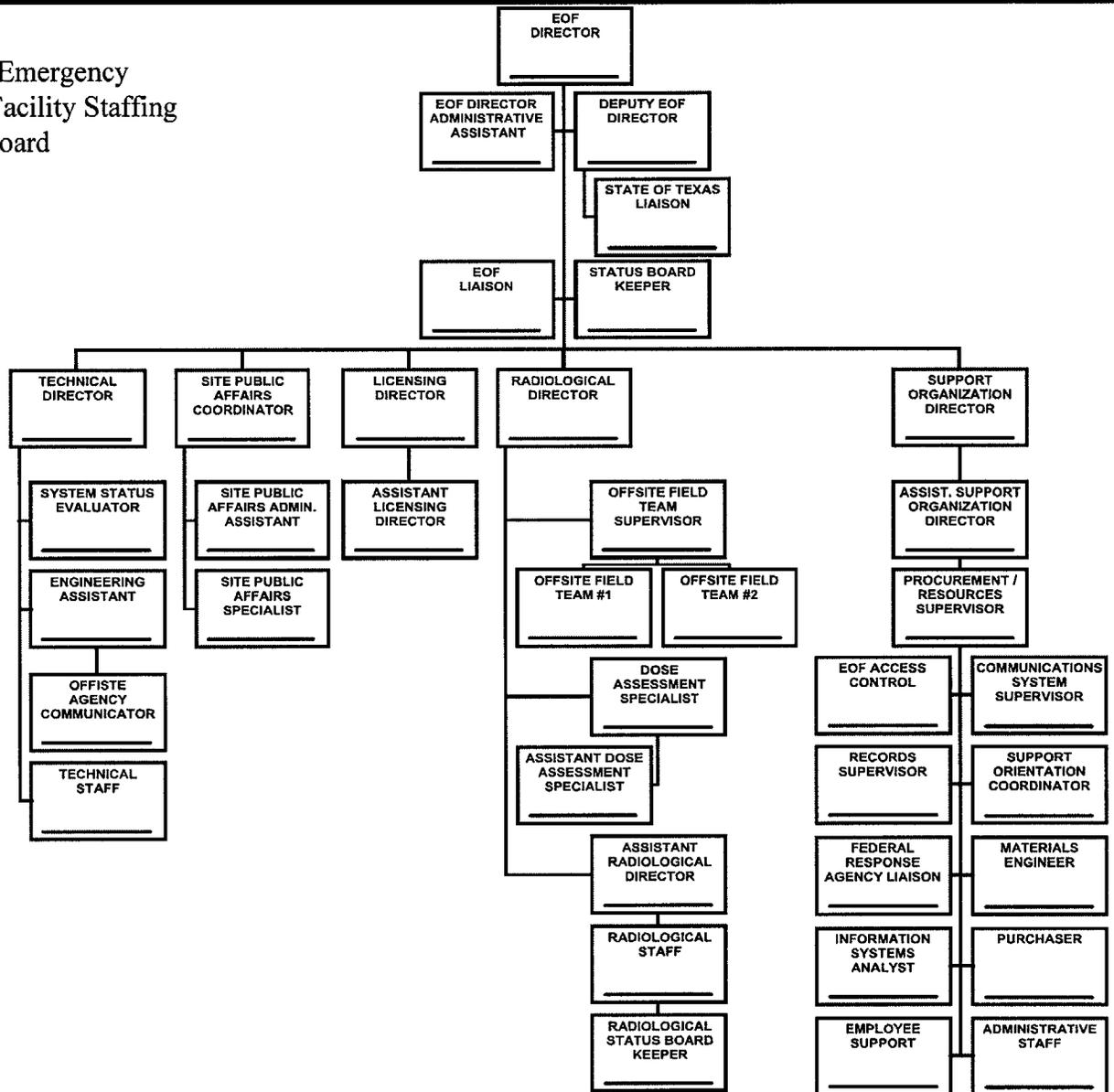
- | | | |
|-----|---|-----|
| 5.1 | Assist with the development of a list of activities and tasks which should be completed using 0ERP01-ZV-RE02, Documentation, Form 2, Corrective Action Items List, and provide a copy of the list to the Support Organization Director. | N/A |
| 5.2 | Assist in the development of recovery plans and procedures using the guidance in 0ERP01-ZV-RE01, Recovery Operations. | N/A |

6.0 TERMINATION ACTIVITIES

- | | | |
|-----|--|-----|
| 6.1 | Develop a list of activities and tasks which should be completed using 0ERP01-ZV-RE02, Documentation, Form 1, Corrective Action Items List, and provide a copy of the list to the Support Organization Director. | N/A |
| 6.2 | Collect and organize in chronological order all documents, checklist, and logs from all Emergency Operations Facility personnel. Turn over all documentation to the Emergency Response Division. | N/A |
| 6.3 | Assist the Support Organization Director in writing an Emergency Response Summary report using the guidance in 0ERP01-ZV-RE02, Documentation. | N/A |
| 6.4 | Direct the Administrative Staff to organize and clean up the Emergency Operations Facility or Alternate Emergency Operations Facility. | N/A |

Assistant Support Organization Director

Typical Emergency
Operations Facility Staffing
Board



	(Name)	(Date)	(Unit)
	EQUIPMENT	OPERABILITY	MINIMUM SUPPLIES
			TIME
1.	Emergency Lighting	Verify operability of emergency lighting in the EOF by pushing the TEST button.	• None

2.	Status Board	Verify adequate markers and erasers are available.	• Three black markers

3.	EOF Clock	Synchronize EOF clock to ICS/ERFDADS.	• None

4.	Fax machine	Operation check completed by Administration Staff assigned to fax machine.	• 1 ream of paper

5.	Photocopy Machine	Operations check completed by Administration staff assigned to photo copy machine.	• One box 8½ x 11 paper • 1 box of legal paper • Toner

6.	ICS/ERFDADs terminal <u>AND</u> printer	Operations check by Technical Staff	None

7.	Telephones	Operations check by the Communications Systems Supervisor	None

8.	Facility Public Address System	Operation check by the Communications Systems Supervisor	None

- 1.0 Food may be obtained from one of three sources:
 - 1.1 On-site stored food;
 - 1.2 Vending machines, personal lunches, or Nuclear Support Center (NCS) Cafeteria; or
 - 1.3 Outside vendor.
- 2.0 Obtaining Food From Offsite Vendors:
 - 2.1 Contact the Radiological Director to determine if special radiological precautions should be taken for delivery of food.
 - 2.2 Contact the Security Manager to determine if special actions should be taken for delivery of food.
 - 2.3 Establish an eating schedule with Deputy EOF Director concurrence.
 - 2.4 Determine the number of meals needed utilizing the table below.
 - 2.5 Provide the vendor special instructions for delivery to the site.
 - 2.6 When informed that the food has arrived at the East or West Gatehouse, request the OSC Coordinator to arrange for delivery to the TSC, OSC, and Control Room.
- 3.0 On-Site Stored Food:
 - 3.1 Confirm with the Radiological Director that on-site stored food has not been radiologically contaminated.
 - 3.2 Establish an eating schedule with concurrence of the Deputy EOF Director.
 - 3.3 Determine the number of meals needed using the table below.
 - 3.4 Contact the OSC Coordinator and request support for delivery of food to personnel at the TSC, OSC, Control Room and Security.

<u>LOCATION</u>	<u>MEALS NEEDED</u>	<u>SOURCE OF INFORMATION</u>
Emergency Operations Facility	_____	Survey EOF Staff
Operations Support Center	_____	Contact the OSC Coordinator
Technical Support Center	_____	Contact Admin. Manager
Control Room	_____	Contact Operations Manager
Security	_____	Contact Security Manager
Total (add 10%)	_____	

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Notifications To Offsite Agencies			
Quality	Non Safety-Related	Usage: N/A	Effective Date: 07/11/01
Max Keyes	N/A	N/A	Emergency Response Division
PREPARER	TECHNICAL	USER	COGNIZANT ORGANIZATION

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Notifications To Offsite Agencies**1.0 Purpose and Scope**

- 1.1 This procedure specifies the actions to be taken for notifying offsite agencies and the Nuclear Regulatory Commission of a declared emergency at the South Texas Project Electric Generating Station (STPEGS).

2.0 Definitions

- 2.1 Emergency Notification System (ENS) – FTS - 2001 Telephone System, used for initial notification of an emergency to the NRC.

3.0 Precautions and Limitations**NOTE**

Addendum 3, Emergency Communications provides information on the following communications links:

- NRC Emergency Notification System (ENS)
- State and County Ringdown Line
- Health Physics Network (HPN)
- Reliant Dispatcher Ringdown Line
- 800 Mhz Radio

- 3.1 Notifications to offsite agencies shall meet the following time limits and criteria:

- 3.1.1 The State of Texas and Matagorda County shall be contacted within 15 minutes of the Emergency Director declaring:

- Initial classification of the emergency;
- Change in the classification; or
- Change in Protective Action Recommendations (PARs) for the public, including changes in wind direction resulting in PARs affecting additional zones.

Once contacted, the information contained in Items 1-8 and 12 of Data Sheet 1 Offsite Agency Notification Message Form shall be transmitted. All information shall be provided after message Number 1.

Notifications To Offsite Agencies

- 3.1.2 Notify the NRC Operations Center immediately following notifications to the State/County and no later than one hour after the emergency has been declared. Use Data Sheet 4, NRC Event Notification Worksheet, as a record of conversation. If more than one communicator is available, NRC notification may be made concurrently with State/County notification.
 - 3.1.3 The Emergency Response Data System (ERDS) shall be activated at the time the NRC Operations Center is notified of the Alert, Site Area Emergency or General Emergency (see Addendum 4, Instructions for Operating Emergency Response Data System).
 - 3.1.4 Issue updates to the State and County approximately hourly unless a State/County consensus is obtained for a reduced frequency (e.g. a static condition).
 - 3.1.5 Immediately update the NRC, via the open line of communications, per Section 5.2.1.4 of this procedure.
 - 3.1.6 After Offsite Agency Notification Message Number 1, all subsequent notifications shall be completed in entirety.
- 3.2 If the Emergency Classification or PARs are changed during the 15 minute notification period, then continue to complete notifications to the State/County prior to initiating the new notification, and inform the agencies that a change in classification or change in PAR will be forthcoming. (LCTS 9100453-936)
- 3.2.1 An exception to this situation is when Termination is declared before the offsite agencies are notified of the emergency condition. For this situation, issue both notification forms concurrently.
- 3.3 Notifications to offsite agencies shall follow the guidelines in Addendum 3, Emergency Communications, when communication system deficiencies exist.
- 3.4 Any revisions to this procedure that directly or indirectly affect the format or usage of Data Sheet 1 shall be reviewed by the Texas Department of Health, Bureau of Radiation Control (BRC) prior to becoming effective.

Notifications To Offsite Agencies

4.0 Responsibilities

NOTE

Refer to Addendum 1, Responsibilities for Notification.

- 4.1 The individual with Emergency Director authority is responsible for approving all notifications to offsite agencies and ensuring notifications are made within the required time frames.
- 4.2 The Shift Supervisor is responsible for implementation of this procedure while functioning as the Emergency Director. Actual completion of forms may be delegated to the communicators.
- 4.3 The Control Room ENS Communicator is responsible for maintaining the open line with the NRC, unless otherwise directed by the NRC. This responsibility shall not transfer to the Technical Support Center (TSC) or Emergency Operations Facility (EOF).
- 4.4 The Control Room ENS Communicator is responsible for activating the ERDS at the time the NRC Operations Center is notified of the Alert, Site Area Emergency, or General Emergency (see Addendum 4).
- 4.5 The Control Room State/County Communicator is responsible for notifications to the State/County and for maintaining Data Sheet 3, Offsite Agencies Log, while the Shift Supervisor has Emergency Director authority.
- 4.6 The Chemical/Radiochemical Manager in the TSC is responsible for gathering information and preparing Data Sheet 1 and implementation of this procedure while the TSC Manager has Emergency Director authority. The Chemical/Radiochemical Manager is responsible for ensuring the correctness and timeliness of Data Sheet 1.
- 4.7 The TSC Communicator in the TSC is responsible for completing notifications to the State/County and NRC when provided completed notification forms from the Chemical/Radiochemical Manager, and maintaining Data Sheet 3. The TSC Communicator shall maintain a file containing copies of all Data Sheet 1 which originate from either the Control Room or Technical Support Center.
- 4.8 The Engineering Assistant in the EOF is responsible for implementation of this procedure while the EOF Director has Emergency Director authority. The Engineering Assistant is responsible for gathering information and preparing Data Sheet 1, and has primary responsibility for the correctness and timeliness of Data Sheet 1. The Engineering Assistant should also, if time permits, routinely complete Data Sheet 2.

Notifications To Offsite Agencies

- 4.9 The Offsite Agency Communicator in the EOF is responsible for completing notifications to the State/County, when directed by the Emergency Director, and for maintaining Data Sheet 3. The Offsite Agency Communicator shall maintain a file containing a copy of all Data Sheet 1 from the start of the event to recovery.
- 4.10 The Licensing Director in the EOF is responsible for completing notifications to the NRC over the ENS once the EOF is activated.

5.0 Procedure**CAUTION**

The State and County are required to be contacted within 15 minutes of the Emergency Director declaring any of the following:

- Initial classification of the emergency, (Item 4)
- Change in the classification, (Item 4) or
- Change in Protective Action Recommendations (PARs) for the public, including changes in wind direction resulting in PARs affecting additional Zones, (Item 6).

5.1 Offsite Agency Notification (State/County)

Notifications To Offsite Agencies

NOTE

Print the information on Data Sheet 1 (black ink should be used).

ONLY BLOCKS 1-8 AND 12 ARE REQUIRED TO BE COMPLETED UPON INITIAL NOTIFICATION. ALL INFORMATION SHALL BE PROVIDED AFTER MESSAGE NUMBER 1.

5.1.1 Complete Data Sheet 1

NOTE

The Communicator, at the time of contact, enters the names of the persons contacted at DPS Pierce and Matagorda County at the top of each form. Record the time of contact.

- 5.1.1.1 ITEM 1 - Name of the STPEGS person communicating information to offsite agencies. Mark the applicable Unit. If the event is common unit, then mark Unit 1.
- 5.1.1.2 ITEM 2 - Mark if notification is or is not a drill.
- 5.1.1.3 ITEM 3 - Start with number one (1). Number sequentially, independent of facility originating Data Sheet 1, and indicate which facility is originating the message.
- 5.1.1.4 ITEM 4 - Mark if the classification is new or unchanged. Fill in the date and time the current classification was declared. Mark the event classification.
- 5.1.1.5 ITEM 5 - A radiological release is defined as exceeding the Emergency Action Level (EAL) for an Unusual Event.
- 5.1.1.6 ITEM 6 - Mark if the recommended protective actions are new or unchanged.
 - a. Refer to 0ERP01-ZV-IN07, Offsite Protective Action Recommendations for PARs. Mark Block A or B. If Block A is marked then go to Step 5.1.1.7.

Notifications To Offsite Agencies

- b. Ensure correct notations are used for zones and sectors. Zones range from 1 to 11. Sectors range from A to R. Refer to Addendum 4 in 0ERP01-ZV-IN07, Offsite Protective Action Recommendations, for a cross reference of zones and sectors.

- 5.1.1.7 ITEM 7 - Indicate BRC disposition on PARs recommendation or BRC Not Contacted.

- 5.1.1.8 ITEM 8 - Mark if the event description is new or unchanged. Enter the alpha numeric designator in the initiating condition line.
 - a. Addendum 6 contains suggested wording which may be used by the communicator as an aid.
 - b. If wording other than that provide in Addendum 6 is used, then, include a brief explanation of the event in lay terms for clarification to offsite agencies. Legibly print a non-technical description of the event. **DO NOT USE ACRONYMS.**

NOTE

Only Blocks 1 - 8 and 12 are required to be completed upon initial notification. The remainder of the form should be completed if time allows. The entire form shall be completed on all subsequent notifications or updates.

- c. ITEM 9 - Mark NEW or UNCHANGED. Meteorological data is available on the Integrated Computer System (ICS) Emergency Response Facility Data Acquisition Display System (ERFDADS). Ensure 15 minute average lower wind speed and wind direction are used. See Addendum 5, Atmospheric Stability Classification.

- 5.1.1.9 ITEM 10 - Mark NEW or UNCHANGED. A radiological release is defined as exceeding the EAL for an Unusual Event. Use a default 4 hour value if the release duration unknown.

- 5.1.1.10 ITEM 11 - Additional remarks, if any.

Notifications To Offsite Agencies

- 5.1.1.11 ITEM 12 - Signature of Emergency Director authorizing release of Data Sheet 1.
- 5.1.2 Complete notifications using Data Sheet 3.
- 5.1.2.1 Contact State/County on ringdown line or alternate numbers.
- a. Read ITEMS 1-8.
 - b. Supply information in Items 9-11, if available.
- 5.1.2.2 Fax notification forms. Log time fax completed and confirmed.
- 5.1.2.3 If the Communicator is also making NRC notifications, complete Section 5.2 of this procedure prior to continuing.
- 5.1.2.4 Contact BRC and issue information on Data Sheet 1.
- 5.1.2.5 Notify unaffected Unit Control Room that an emergency fax notification has been made.
- 5.1.2.6 Notify Reliant System Operations on ECDC Unit 1 or Unit 2 ringdown lines that emergency fax notification has been made.
- 5.1.3 Issue update notifications to State and County approximately hourly unless a State/County consensus is obtained for a reduced frequency (e.g. a static condition).
- 5.1.3.1 Update notifications are made using Data Sheet 1, Offsite Agency Notification Message Form.
- 5.1.3.2 If the Emergency Director is located in the Emergency Operations Facility and events are not rapidly changing, then, following issuance of Data Sheet 1, issue Data Sheet 2, Supplemental Notification Form. (Guidance for issuing Data Sheet 2 is found in Addendum 2, Special Instructions for Completing Supplemental Notification Form.)
- 5.1.4 If Data Sheet 1 or Data Sheet 2 is issued with incorrect information, then immediately contact the notified agencies, correct the information and follow-up with a corrected Data Sheet 1 or Data Sheet 2.
- 5.1.5 If Data Sheet 1 or Data Sheet 2 is being transmitted with incorrect information, then immediately stop transmission, gather the correct information, and re-transmit a corrected Data Sheet 1 or Data Sheet 2.

Notifications To Offsite Agencies

5.2 NRC Notification

NOTE

Complete Data Sheet 4 (black ink should be used) for initial NRC notification. Complete all applicable blocks on the worksheet.

- 5.2.1 Notify the NRC Operations Center immediately following initial notification of State/County agencies and no later than one hour after the emergency has been declared. If more than one communicator is available, these notifications may be done concurrently. Use Data Sheet 4 as a record of initial conversation. Additional records of conversation may be made on Emergency Action Log Sheets.
- 5.2.1.1 Description - Provide a description of the event to include systems affected, actuation's and initiating signals, causes, effect of event on plant, actions taken or planned, etc. Additional space is provided on back of Data Sheet 4. Check block when Control Room Log Book entry is made.
- 5.2.1.2 Radiological Releases - Complete this section if the event is radiologically based. Information from Data Sheet 1 may be used if information described in Data Sheet 4 is not available and obtaining it would likely cause a late notification.
- 5.2.1.3 Activate the ERDS at the time the NRC Operations Center is notified of the Alert, Site Area Emergency or General Emergency (see Addendum 4).
- 5.2.1.4 The Control Room ENS Communicator must maintain an open telephone line with the NRC, unless otherwise directed by the NRC. During the course of the event, immediately report any further degradation in the level of safety of the plant or other worsening conditions, including those that require declaration of any of the emergency classes, or may change from one emergency class to another, or a termination of the emergency class. Immediately report the results of ensuing evaluations or assessments of plant conditions, the effectiveness of response or protective measures taken, and information relating to plant behavior that is not understood.
- 5.2.2 Notify NRC Resident Inspector. Log time of contact on Data Sheet 4.

Notifications To Offsite Agencies**6.0 References**

- 6.1 STPEGS Emergency Plan
- 6.2 OPGP05-ZV-0004, Emergency Plan Implementing Procedure Users Guide
- 6.3 0ERP01-ZV-IN07, Offsite Protective Action Recommendations
- 6.4 0ERP01-ZV-IN01, Emergency Classification
- 6.5 10CFR50.72(a)ii.3
- 6.6 Inspection Report 91-03-01 (LCTS 9100453-936)
- 6.7 10CFR50 Appendix E - IV.D.3
- 6.8 IEN 89-89

7.0 Support Documents

- 7.1 Data Sheet 1 - Offsite Agency Notification Message Form (Typical)
- 7.2 Data Sheet 2 - Supplemental Notification Form (Typical)
- 7.3 Data Sheet 3 - Offsite Agencies Log
- 7.4 Data Sheet 4 - NRC Event Notification Worksheet (Typical)
- 7.5 Addendum 1 - Responsibilities for Notifications
- 7.6 Addendum 2 - Special Instructions for Completing Supplemental Notification Form
- 7.7 Addendum 3 - Emergency Communications
- 7.8 Addendum 4 - Instructions for Operating Emergency Response Data System (ERDS)
- 7.9 Addendum 5 - Atmospheric Stability Classification
- 7.10 Addendum 6 - Suggested Wording for Event Description

Notifications To Offsite Agencies

Data Sheet 1

Offsite Agency Notification Message Form (Typical)

Page 1 of 1

STP 1690 (04/98)

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

Rev. 12

OFFSITE NOTIFICATION MESSAGE FORM

Roll call:

DPS Pierce

Matagorda County

Time

1. Communicator: Name _____ U1 U2

2. This is a drill This is NOT a drill

3. Message Number _____, Originating From: CR TSC EOF

4. Emergency Classification: New Unchanged

Declared at: _____ Date: _____ Time: _____

Unusual Event Alert Site Area Emergency General Emergency Terminated

5. Radiological release in progress: Yes No

6. Recommended Protective Actions: New Unchanged

A. No recommended protective actions at this time.

B. Recommended protective actions are:

1. Evacuate from zones: _____

2. Sectors affected: _____

7. Bureau of Radiation Control (BRC) concurs with recommendations in 6 above:

Yes BRC Not Contacted No

8. Event Description: New Unchanged

Classification Path/Initiating Condition: _____

Explain: _____

9. Meteorological data: New Unchanged

A. Wind direction from _____ Degrees Wind speed _____ MPH

B. Stability Class (Check One): A B C D E F G

C. Precipitation (Check One): None Rain Sleet Snow Hail Fog

10. Release Involves: New Unchanged

A. Radiological release in progress: Expected Duration: _____ hrs. Started: Date _____ Time _____

B. Radiological release which has ended: Duration: _____ hrs. Terminated: Date _____ Time _____

11. Remarks: _____

12. Approved: _____ Date _____ Time _____

Notification To Offsite Agencies

TP 1686C (12/99)
REV. 8

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

SUPPLEMENTAL NOTIFICATION FORM

THIS IS A DRILL
 THIS IS NOT A DRILL

1. MESSAGE S- 3. EMERGENCY DIRECTOR LOCATION: () CR () TSC () EOF
() AEOF
2. UNIT STATUS: UNIT 1 POWER _____
UNIT 2 POWER _____ NAME: _____

STATUS OF BOUNDARY	4. FUEL CLADDING	5. REACTOR COOLANT SYSTEM	6. CONTAINMENT
INTACT	()	()	()
POTENTIAL LOSS	()	()	()
LOSS	()	()	()
RE-ESTABLISHED	N/A	()	()

7. PROGNOSIS OF SITUATION
() IMPROVING () STABLE
() DEGRADING SLOWLY () DEGRADING QUICKLY
() UNKNOWN, UNDER ASSESSMENT

8. EAL #: _____

9. NUMBER OF FUNCTIONAL SAFETY TRAINS: _____

10. OFFSITE SUPPORT REQUESTED
() NONE
() AMBULANCE
() FIRE
() LOCAL LAW ENFORCEMENT
() WESTINGHOUSE
() BECHTEL
() INPO
() NRC
() OTHER _____

11. ONSITE PROTECTIVE MEASURES ORDERED	YES	NO
ACCOUNTABILITY	_____	_____
EVACUATION OF NON-ESSENTIALS	_____	_____
CONTROL ROOM EVACUATION	_____	_____
TSC/OSC RELOCATION	_____	_____
EOF RELOCATION	_____	_____
POTASSIUM IODIDE ISSUED	_____	_____
MEDICAL EMERGENCY OFFSITE TRANSPORT	_____	_____
OTHER _____	_____	_____

12. ORGANIZATION /FACILITIES ACTIVATED
() TSC/OSC
() EOF
() ALTERNATE EOF
() JIC

14. MISCELLANEOUS INFORMATION

13. PROJECTED OFFSITE DOSES (CENTERLINE)	TEDE (REM)	THYROID CDE (REM)
A. EXCLUSION AREA BOUNDARY	_____	_____
B. 2 MILES	_____	_____
C. 5 MILES	_____	_____
D. 10 MILES	_____	_____
E. ESTIMATED RELEASE DURATION	_____	HRS
F. RELEASE RATE	_____	µCi/sec

15. EMERGENCY DIRECTOR APPROVAL:
SIGNATURE _____

DATE _____ TIME _____

16. ACKNOWLEDGMENT OF RECEIPT:
SIGNATURE _____

DATE _____ TIME _____

MESSAGE NUMBER	*MATAGORDA COUNTY	*DPS - PIERCE	FAX COMPLETED AND CONFIRMED	*TEXAS DEPT. OF HEALTH (BRC)	*UNAFFECTED UNIT CONTROL ROOM Reliant ECDC	NOTIFICATIONS COMPLETED
	CONSOLE OR 979-245-5526 OR 979-244-1178 (When EOC Activated)	CONSOLE OR 979-543-6878 OR 979-532-1740	(Refer to Addendum 2)	512-834-6688 OR 512-458-7460	U1-8614/8610/ 8595/7732 U2-7953/8549/ 8683/8156 ECDC Ringdown or 281-897-2202	BY: NAME/LOCATION
15 MINUTE NOTIFICATION REQUIRED						

*LOG THE TIME OF CONTACT.

WHEN COMPLETED, THIS RECORD SHALL BE RETAINED IN ACCORDANCE WITH THE DOCUMENT TYPE LIST (DTL).

ADDITIONAL INFORMATION

RADIOLOGICAL RELEASES: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in event description)						
<input type="checkbox"/> LIQUID RELEASE	<input type="checkbox"/> GASEOUS RELEASE	<input type="checkbox"/> UNPLANNED RELEASE	<input type="checkbox"/> PLANNED RELEASE	<input type="checkbox"/> ONGOING	<input type="checkbox"/> TERMINATED	
<input type="checkbox"/> MONITORED	<input type="checkbox"/> UNMONITORED	<input type="checkbox"/> OFFSITE RELEASE	<input type="checkbox"/> T.S. EXCEEDED	<input type="checkbox"/> RM ALARMS	<input type="checkbox"/> AREAS EVACUATED	
<input type="checkbox"/> PERSONNEL EXPOSED OR CONTAMINATED		<input type="checkbox"/> OFFSITE PROTECTIVE ACTIONS RECOMMENDED		*State release path in description.		
	Release Rate (Ci/sec)	% T.S. Limit	HOO Guide	Total Activity (Ci)	% T.S. Limit	HOO Guide
Noble Gas			0.1 Ci/sec			1000 Ci
Iodine			10 μ Ci/sec			0.01 Ci
Particulate			1 μ Ci/sec			1 mCi
Liquid (excluding tritium and dissolved noble gases)			10 μ Ci/min			0.1 Ci
Liquid (tritium)			0.2 Ci/min			5 Ci
Total Activity						
	PLANT STACK	CONDENSER/AIR EJECTOR	MAIN STEAM LINE	SG BLOWDOWN	OTHER	
RAD MONITOR READINGS						
ALARM SETPOINTS						
% T. S. LIMIT (if applicable)						
RCS OR SG TUBE LEAKS: CHECK OR FILL IN APPLICABLE ITEMS (specific details/explanations should be covered in event description)						
LOCATION OF THE LEAK (e.g., SG #, valve, pipe, etc)						
LEAK RATE	UNITS: gpm/gpd	T. S. LIMITS	SUDDEN OR LONG TERM DEVELOPMENT			
LEAK START DATE:	TIME:	COOLANT ACTIVITY AND UNITS:		PRIMARY -	SECONDARY -	
	MST					
LIST OF SAFETY EQUIPMENT NOT OPERATIONAL:						
EVENT DESCRIPTION (Continued from front)				INITIALS AND DATE		

Notifications To Offsite Agencies

Addendum 1

Responsibilities For Notification

Page 1 of 1

RESPONSIBILITY	RESPONSIBLE PERSON BASED ON LOCATION OF EMERGENCY DIRECTOR		
	CR	TSC	EOF
Complete Data Sheet 1, Offsite Agency Notification Message Form	State/County Communicator	Chemical/Radiochemical Manager	Engineering Assistant
Complete Data Sheet 4, NRC Event Notification Worksheet and Maintain Open Line	ENS Communicator		
Update NRC on event status	ENS Communicator	Chemical/Radiochemical Manager	Licensing Director
Complete Data Sheet 2, Supplemental Notification Form			Engineering Assistant
Log State/County Notifications using Data Sheet 3, Offsite Agencies Log	State/County Communicator	TSC Communicator	Offsite Agency Communicator

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Notifications To Offsite Agencies			
Addendum 2	Special Instructions for Completing Supplemental Notification Form		Page 1 of 2

NOTE

- Data Sheet 2 should be completed using black ink. No items are to be left blank even if information is unchanged.
- The Engineering Assistant should, if time permits, routinely complete Data Sheet 2.

- ITEM 1 - Use same number as on Data Sheet 1, which will be completed in conjunction with this form.
- ITEM 3 - Identify the location of the Emergency Director and the name of the Communicator.
- ITEM 9 - Enter the number of Engineered Safety Features (ESF) trains in the affected unit which are functional.
- ITEM 10 - Mark offsite support requested which will be responding to the site. This block is completed to facilitate the support group requested through county established road blocks.
- ITEM 14 - Examples of miscellaneous information:
- a. Estimate of quantity of radioactive material released or being released and the points and heights of releases.
 - b. Chemical and physical form of released material, including estimates of the relative quantities and concentration of noble gases, iodines and particulates.
 - c. Estimate of any surface radioactive contamination in plant, onsite or offsite.
 - d. Any licensee emergency response actions underway.
- GENERAL -
- a. Enter unavailable if information is not known.
 - b. Enter N/A if item is not applicable.

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Notifications To Offsite Agencies			
Addendum 2	Special Instructions For Completing Supplemental Notification Form		Page 2 of 2

c. Fax the completed and approved Data Sheet 2 to all agencies listed below:

- Matagorda County Sheriff's Office Dispatcher
- Matagorda County Emergency Operations Center
- Texas Department of Public Safety (DPS) - Pierce, TX
- Texas Department of Health - BRC
- Division of Emergency Management
- Texas Department of Public Safety - Houston, TX
- Emergency Operations Facility
- Affected Unit's TSC
- Affected Unit's Control Room (when Emergency Direction is not in Control Room)
- Unaffected Unit's Control Room
- Site Public Affairs (EOF)
- Joint Information Center (JIC) (if activated)
- Energy Control Data Center

NOTE

Fax numbers can be found in the STPEGS Emergency Communications Directory.

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Notifications To Offsite Agencies			
Addendum 3	Emergency Communications (SPR 91-0447)		Page 1 of 5

1.0 Emergency Communications System

1.1 Emergency Notification System (ENS)

1.1.1 The ENS is a telephone circuit provided by the NRC.

1.1.2 The ENS is activated to notify the NRC of a declared emergency or drills/exercises and to maintain communications with the NRC Operations Center as needed.

1.1.3 If the ENS is activated, then a person SHALL remain on the line until the NRC agrees that the ENS may be terminated.

1.1.4 There are six (6) methods to notify the NRC. These are:

1.1.4.1 ENS telephone

1.1.4.2 Outside phone lines

1.1.4.3 Control Room direct phone line to Bay City

1.1.4.4 Microwave line to Reliant Energy Plaza and call forwarded to the NRC

1.1.4.5 Ringdown line to the Energy Control and Distribution Center (ECDC) and call forwarded to the NRC

1.1.4.6 Security radio communications to Matagorda County Sheriff's Office and forwarded to the NRC

1.1.5 The principal method of communications with the NRC is the ENS. The circuit may also be activated by the NRC.

1.1.6 If the ENS is out of service, then use outside phone lines to notify the NRC at one of the following telephone numbers (in order of priority) AND remain on the line.

1.1.6.1 9-1-301-816-5100

1.1.6.2 9-1-301-951-0550

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Addendum 3	Emergency Communications (SPR 91 0447)		Page 2 of 5

- 1.1.7 If the outside telephone lines are out of service, then use the Control Room direct phone line to Bay City and notify the NRC at one of the following telephone numbers (in order of priority) AND remain on the line.
 - 1.1.7.1 1-301-816-5100
 - 1.1.7.2 1-301-951-0550
- 1.1.8 If the Control Room direct telephone line to Bay City is out of order, then use the microwave tower line (32-0) to Reliant Energy Plaza (24 hours) and have the operator/Security complete the phone call to the NRC AND remain on the line if requested by the NRC.
- 1.1.9 If the microwave tower line is out of service, then use the ringdown line to the ECDC and have the dispatcher forward the telephone call or information to the NRC AND remain on the line if requested by the NRC.
- 1.1.10 If the ringdown line to the ECDC is out of service, then use the Security radio console to contact the Matagorda County Sheriff's Office and request the information be forwarded to the NRC. Stay on the radio with the Matagorda County Sheriff's Office.
- 1.2 State and County Ringdown Line
 - 1.2.1 The State-County ringdown line is provided to notify State and County officials of a declared emergency.
 - 1.2.2 The State-County ringdown line is an automatic ringdown telephone circuit terminated on a communications console or an ORANGE telephone.
 - 1.2.3 There are six (6) methods to notify the State/County. These are:
 - 1.2.3.1 State/County ringdown telephone
 - 1.2.3.2 Outside telephone lines
 - 1.2.3.3 Control Room direct telephone line to Bay City

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Addendum 3	Emergency Communications (SPR 91 0447)		Page 3 of 5

- 1.2.3.4 Microwave line to Reliant Energy Plaza and call forwarded to the State and County.
- 1.2.3.5 Security radio communications with the County.
- 1.2.3.6 Ringdown line to the ECDC and call forwarded to the State/County.
- 1.2.4 If the State/County ringdown line is out of service, then use outside telephone lines to notify the State and County at one of the following telephone numbers:
 - 1.2.4.1 State/DPS-Pierce
 - a. 9-1-979-543-6878
 - OR
 - b. 9-1-979-532-1740
 - 1.2.4.2 Matagorda County Sheriff's Office
 - a. 9-1-979-245-5526
- 1.2.5 If outside telephone lines are out of service, then use the Control Room direct telephone line to Bay City to notify the State/County.
- 1.2.6 If the Control Room direct telephone line to Bay City is out of service, then use the microwave line (32-0) to Reliant Energy Plaza (24 hours) and have the Operator/Security complete the telephone calls to the State/County.
- 1.2.7 If the microwave line is out of service, then use the Security radio communications to notify the County.
- 1.2.8 If Security radio communications are out of service, then use the ringdown line to the ECDC and have the dispatcher forward the telephone call or information to the State/County.

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Notifications To Offsite Agencies			
Addendum 3	Emergency Communications (SPR 91 0447)		Page 4 of 5

1.3 Health Physics Network (HPN)

1.3.1 The HPN is terminated on an FTS - 2001 telephone.

1.3.2 The HPN is to be used only at the request of the NRC.

1.3.4 If the outside telephone lines are out of service, then use the microwave line (32-0) to Reliant Energy Plaza (24 hours) and have the Operator/Security complete the telephone call to the NRC/HPN.

1.3.5 If the HPN telephone line is out of service, then notify the NRC Operations Center. (IEN 89-19)

1.3.5.1 NOTIFY the NRC when the telephone set has been returned to service. (IEN 89-19)

1.3.6 The HPN telephone is designed to provide communications with the NRC Health Physics Section and/or other nuclear power plants during a declared emergency or drill/exercise. STPEGS health physics personnel MAY request a conference call with other nuclear power plants on the HPN by asking the NRC to connect the desired plant(s).

1.4 Reliant Dispatcher Ringdown Line

1.4.1 The Reliant Dispatcher ringdown line is an automatic ringdown between the Energy Control and Data Center (ECDC) and STPEGS communications consoles.

1.5 800 MHz Radio

1.5.1 Press HOME on keypad to ensure channel 65 is on the LCD display. Channel 65 is monitored by the dispatcher.

1.5.2 If unnecessary traffic is coming over the radio, use MODE on the keypad until the prompt appears to put the radio to sleep. Entering 0 will put the unit to sleep. Pressing any button on the keypad will wake the unit up. Traffic will again be monitored.

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- 1.5.3 To contact the dispatcher, press ECC on the keypad. Channel 65 should be displayed, and momentarily, the dispatcher will acknowledge the unit calling. The handset is a push to talk handset.
- 1.5.4 The 800 MHz has many additional capabilities, including, use as a radio-telephone. Contact the EOF Communications Supervisor for additional instructions.

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Notifications To Offsite Agencies			
Addendum 4	Instructions for Operating Emergency Response Data Systems (ERDS)		Page 1 of 3

- 1.0 Emergency Response Data System (ERDS) Activation, Termination, and Error Handling Instructions:
- 2.0 Steps to Activate the ERDS from Integrated Computer System / Emergency Response Facility Data Acquisition Display System (ICS/ERFDADS) Main Menu:
 - 2.1 Click on the Menu UP Arrow (WDPF Main Menu)
 - 2.2 Select Custom Graphics
 - 2.3 Select Top Level Menu
 - 2.4 Select AF, AM, AP, BR, & CC DISPLAYS
 - 2.5 Select NRC Link Control
 - 2.6 Click in ACTIVATE Block to connect with the NRC ERDS Computer at the NRC Operations Center in Rockville, Maryland, via a dedicated telephone line.
 - 2.7 The dial-up should generally succeed within one minute, at which time the NRC Link Control screen will indicate ACTIVE and ONLINE and will begin counting GOOD CYCLES. Otherwise, the ICS/ERFDADS will automatically re-dial and attempt to connect with the NRC ERDS computer several additional times. If no connection is established within approximately five minutes, then NRC Link Control screen will indicate the link status via error messages. If more than five minutes elapses without a successful response, then site personnel should notify the NRC before terminating efforts to establish the ERDS datalink.
 - 2.8 The display terminal may now be used for other purposes while the ERDS data continues to be transmitted to the NRC. Whenever the ERDS is active, it is suggested that NRC Link Control or NRC Link Status screen be used to monitor the status of the ERDS datalink.
- 3.0 Steps to terminate the ERDS:
 - 3.1 If NRC Link Control screen is not present on an ICS/ERFDADS terminal, repeat the ERDS activation steps 2.1, 2.2, 2.3, 2.4, and 2.5.

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Addendum 4	Instructions For Operating Emergency Response Data Systems (ERDS)		Page 2 of 3

- 3.2 When NRC Link Control screen is present on the terminal CLICK in the TERMINATE Block. This action causes the ICS/ERFDADS to disconnect the telephone connection with the NRC ERDS computer in Rockville, Maryland.
- 3.3 When the ERDS is terminated by STP, the NRC Link Control and NRC Link Status screens will show the message Terminated and the Link Status Block with the message OFFLINE. When STP terminates the ERDS, then 15 minutes must lapse before attempting to activate the ERDS again from the same STP Unit.
- 4.0 Steps to handle ERDS error conditions:
- 4.1 If an error condition occurs, then the error messages will be displayed on NRC Link Control and NRC Link Status screens. If an error condition occurs, then obtain a hardcopy of the error message using Print Screen.
- 4.2 When the ERDS is active and no errors are occurring, then displays NRC Link Control and NRC Link Status screens will tag the ERDS Messages block with the message Active, the Link Status block with the message Online, the Read Error block with the message OK, the Nonsensical error block with the message OK. and the Write Error block with the message OK.
- 4.3 If an attempt is made to activate the ERDS by STP and all telephone lines at NRC are busy, then displays NRC Link Control and NRC Link Status screens will tag the ERDS Messages block with the message NRC lines busy. Obtain a hardcopy of the display showing the NRC lines busy message and then follow the steps to terminate the ERDS. Periodically try again to activate the ERDS, producing a hardcopy of the display each time the NRC lines busy message is shown.
- 4.4 If an attempt is made to activate the ERDS by STP and NRC denies access to the ERDS computer system in Rockville, Maryland, then displays NRC Link Control and NRC Link Status will tag the ERDS Messages block with the message Unaccepted by NRC. Obtain a hardcopy of the display showing the denied access by NRC message and then follow the steps to terminate the ERDS. Periodically try again to activate the ERDS, producing a hardcopy of the display each time the denied access by NRC message is shown.
- 4.5 NRC has the ability to terminate an active ERDS link. If NRC terminates such a link, then displays NRC Link Control and NRC Link Status will tag the ERDS Messages block with the message Terminated by NRC and the Link Status block with the message Offline. Obtain a hardcopy the display showing the ERDS link termination by NRC.

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Addendum 4	Instructions For Operating Emergency Response Data Systems (ERDS)		Page 3 of 3

4.6 If the ERDS link is active and the telephone line is disconnected, then the ICS/ERFDADS will automatically re-dial and attempt to reconnect with the NRC ERDS computer system. If the telephone line is disconnected, then displays NRC Link Control and NRC Link Status will tag the ERDS Messages block with either the message Active or with the message Modem trouble, the Link Status block with the message Offline, and the remainder of the status messages blocks with the message OK or the message TRBL.

If the ERFDADS is not able to reconnect with the NRC ERDS computer system, then hardcopy the displayed error messages and contact the ERFDADS System Engineer.

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Addendum 5	Atmospheric Stability Classification		Page 1 of 1

Stability Classification	Class	Delta T (60m-10m)°F	Sigma-Theta
Extremely Unstable	A	< -1.7	≥ 22.5
Moderately Unstable	B	-1.71 TO -1.53	17.5 TO 22.5
Slightly Unstable	C	-1.52 TO -1.35	12.5 TO 17.5
Neutral	D	-1.34 TO - 0.45	7.5 TO 12.5
Slightly Stable	E	-0.44 TO 1.35	3.8 TO 7.5
Moderately Stable	F	1.36 TO 3.60	2.1 TO 3.8
Extremely Stable	G	> 3.60	< 2.1

Notifications To Offsite Agencies

Addendum 6

Suggested Wording for Event Description

Page 1 of 2

NOTE

Obtain Initiating Condition alpha-numeric designation from the Emergency Director. Match designation with list below and enter into item 8 of Data Sheet 1.

Fission Product Barrier Degradation

FU1	Loss or potential loss of Containment barrier
FA1	Loss or potential loss of Fuel Clad or Reactor Coolant System barrier
FS1	Loss or potential loss of two fission product barriers
FG1	Loss of two fission product barriers with potential loss or loss of the third barrier

System Malfunction

SU1	Loss of offsite power to safety systems. Multiple sources of emergency power are available.
SU2	Plant operation determined to be outside of plant safety specifications.
SU3	Unplanned loss of most Control Room safety system alarm indications.
SU4	Unplanned loss of all onsite or offsite communications capabilities.
SU5	Unplanned loss of safety related battery power causing difficulty monitoring plant conditions while shutdown.
SU6	Indication of degradation or potential loss of the Fuel Clad fission product barrier.
SU7	Indication of degradation of Reactor Coolant System fission product barrier.
SA1	Loss of all power to safety systems while the plant is shutdown and cooled down.
SA2	Reactor failed to automatically shutdown when required. Manual shutdown was successful.
SA3	Inability to maintain appropriate cooled down temperature while shutdown.
SA4	Difficulty monitoring changing plant conditions due to unplanned loss of most Control Room safety system alarm indications.
SA5	Electrical power to safety systems has degraded to a single source.
SA6	Indication of potential loss of the Fuel Clad fission product barrier.
SS1	Loss of all electrical power to safety systems.
SS2	Reactor failed to automatically shutdown when required. Initial attempts at manual shutdown were not successful.
SS3	Unplanned loss of safety related battery power compromising the ability to monitor and control plant safety functions.
SS4	Complete loss of systems required for plant cooldown.
SS5	Loss of water level in the Reactor Vessel that has or will uncover the fuel in the Reactor Vessel while the plant is shutdown and cooled down.
SS6	Inability to monitor changing plant conditions due to unplanned loss of most Control Room safety system alarm indications.
SG1	Prolonged loss of all electrical power to safety systems which will lead to a loss of all three fission product barriers unless restored.
SG2	All attempts to shutdown the reactor have been unsuccessful which may lead to loss of all three fission product barriers.

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Notifications To Offsite Agencies			
Addendum 6	Suggested Wording for Event Description		Page 2 of 2

Abnormal Radiological Levels

RU1	Unplanned release to the environment of very low levels of radioactivity which exceed effluent limits and indicates a degradation in plant radiological controls.
RU2	Unexpected increase in plant radiation levels.
RA1	Unplanned release to the environment of low levels of radioactivity which significantly exceed effluent limits and indicates a substantial degradation in plant radiological controls.
RA2	Potential damage or damage to spent nuclear fuel outside of the Reactor Vessel.
RA3	Elevated plant radiation levels impede necessary access to plant operating stations.
RS1	Actual or projected radiological dose at the site boundary has reached a level which is equal to 10% of the dose which would prompt an offsite protective action recommendation.
RS2	An unexpected increase in containment radiation levels indicate a loss or potential loss of two fission product barriers.
RG1	Actual or projected radiological dose at the site boundary has reached a level which requires an offsite protective action recommendation.
RG2	An unexpected increase in containment radiation levels indicate a loss of two fission product barriers with potential loss or loss of third barrier.

Hazards and Other Conditions

HU1	Security event affecting normal operation of the plant.
HU2	(Fire or Explosion) in the (Protected Area or Switchyard) which affects normal plant operations.
HU3	(Toxic or Flammable) gasses are affecting normal plant operations.
HU4	(Describe destructive event) _____ is affecting normal plant operations.
HU5	Conditions exist, not specifically covered by the Station Emergency Plan, which are impacting normal plant operations and, in the judgment of the Emergency Director, warrants declaration of an Unusual Event.
HA1	Security event inside the Protected Area may potentially affect safe operation of the plant.
HA2	(Fire or Explosion) in a plant vital area may potentially affect safe operation of the plant.
HA3	(Toxic or Flammable) gasses may potentially affect safe operation of the plant.
HA4	(Describe destructive event) _____ may potentially affect safe operation of the plant.
HA5	Evacuation of Main Control Room. Plant controls established at Auxiliary Shutdown Panel.
HA6	Conditions exist, not specifically covered by the Station Emergency Plan, which may affect safe operation of the plant, and, in the judgment of the Emergency Director, warrants the declaration of an Alert.
HS1	Security event in a plant vital area which could affect safe shutdown.
HS2	Evacuation of Main Control Room and plant controls cannot be established.
HS3	Events affect the ability to shutdown the plant or maintain it in a safe shutdown condition.
HG1	Security event resulting in loss of ability to reach and maintain safe shutdown.
HG2	Conditions exist, not specifically covered by the Station Emergency Plan, which may potentially result in a hazard to the public, and in the judgment of the Emergency Director, warrants the declaration of a General Emergency.

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Emergency Plan Revision			
Quality	Non Safety-Related	Usage: Available	Effective Date: 07/11/01
Max Keyes	N/A	N/A	Emergency Response Division
PREPARER	TECHNICAL	USER	COGNIZANT ORGANIZATION

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Emergency Plan Revision**1.0 Purpose and Scope**

- 1.1 This procedure provides guidance for the revision and approval of the South Texas Project Electric Generating Station (STPEGS) Emergency Plan and implementing procedures.
- 1.2 This procedure defines the requirements of Title 10, Code of Federal Regulations, Part 50.54(q), for submission of revisions of the Emergency Plan to the Nuclear Regulatory Commission (NRC).
- 1.3 This procedure provides for the evaluation of proposed plant changes or procedures that may affect the Emergency Plan or the emergency planning effort at the STPEGS, in accordance with 0PAP01-ZA-0103, License Compliance Review.
- 1.4 This procedure implements appropriate portions of the STPEGS Emergency Plan.

2.0 Responsibilities**2.1 The Vice President, Business Services, is responsible for:**

- 2.1.1 Final approval of Revisions and Interim Change Notices (ICNs) to the Emergency Plan.
- 2.1.2 Approval of select implementing procedures.

2.2 The Supervisor, Emergency Response, or designee, is responsible for:

- 2.2.1 Maintaining the Emergency Plan and implementing procedures in accordance with appropriate regulations.
- 2.2.2 Performing an annual review of the Emergency Plan and implementing procedures, to include:
 - 2.2.2.1 Written critiques and evaluations of drills/exercises;
 - 2.2.2.2 Changes in key personnel that are part of the Emergency Response Organization;
 - 2.2.2.3 Changes in the organizational structure;
 - 2.2.2.4 Changes in applicable Federal and State regulations;
 - 2.2.2.5 Changes in functional capability of support organizations;

Emergency Plan Revision

- 2.2.2.6 Modifications to the Station facilities, procedures, emergency response facilities, site or operating status that could affect emergency response;
 - 2.2.2.7 Recommendations received from other organizations, such as Federal, State, or County agencies or private support groups;
 - 2.2.2.8 Annual independent audit findings;
 - 2.2.2.9 Comments from the State and County;
 - 2.2.2.10 Documented Condition Report or NRC Inspection Report identified items; and
 - 2.2.2.11 Changes to implementing procedures.
- 2.2.3 This review shall be performed and documented in accordance with OPGP05-ZV-0014, Emergency Response Activities.
- 2.3 Appropriate Department Managers, or designees, are responsible for:
- 2.3.1 Reviewing and commenting on proposed Revisions and ICNs to the Emergency Plan.
- 2.4 The Plant General Manager is responsible for:
- 2.4.1 Recommending for approval Revisions and ICNs to the Emergency Plan.
 - 2.4.2 Approving Revisions to select implementing procedures.
- 3.0 Procedure
- 3.1 Emergency Plan Revision
- 3.1.1 Revisions to the Emergency Plan shall be accomplished, as needed, and shall include items identified in Section 2.2.2.
 - 3.1.2 Revisions shall be prepared as follows:
 - 3.1.2.1 Revisions that decrease the effectiveness of the emergency response program shall be submitted to the NRC for approval prior to implementation.
 - 3.1.2.2 Revisions that decrease the effectiveness of the emergency response program shall be discussed and agreed on by the state and county governmental authorities.

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- 3.1.2.3 Every page of the Emergency Plan shall be marked to reflect the proposed revision number.
- 3.1.2.4 A review shall be performed to determine if 10CFR50.59 applies to the proposed revision. This review shall be documented on a License Compliance Review Form, in accordance with OPAP01-ZA-0103, License Compliance Review.
- 3.1.2.5 The proposed Revision shall be reviewed for compliance with 10CFR50.54 and NUREG 0654/FEMA-REP-1, Rev. 1, standards. This review shall be documented on Form 1, Emergency Plan Revision Checklist.
- 3.1.2.6 An independent technical review shall be performed utilizing OPAP01-ZA-0102, Form 4, Technical Review Checklist.
- 3.1.2.7 The proposed Revision, the completed License Compliance Review Form, and Technical Review Checklist shall be submitted to the following Managers/Officials for review and comment (this list may not be all inclusive):
- At least one facility manager from each of the emergency response facilities (Emergency Operations Facility, Technical Support Center and Operations Support Center),
 - Chemistry,
 - Health Physics,
 - Information Technology,
 - Licensing,
 - Operations,
 - Quality,
 - Security,
 - State of Texas, Division of Emergency Management,
 - State of Texas, Bureau of Radiation Control,
 - Matagorda County,

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- 3.1.2.8 Once the proposed Revision has completed the review and comment cycle, and all comments have been resolved, it shall be forwarded to the Plant Operations Review Committee (PORC) for recommendation for approval.
 - 3.1.2.9 If the proposed Revision is recommended for approval by PORC, it shall be forwarded to the Plant General Manager for review and concurrence as documented on Form 2, Emergency Plan Approval Form.
 - 3.1.2.10 The proposed Revision shall be submitted to the Vice President, Business Services, for final approval, as documented on Form 2.
 - 3.1.2.11 Once the revision has received final approval, the revision's effective date shall be typed on the bottom of every page of the Emergency Plan.
 - 3.1.2.12 Once the effective date has been typed on all pages of the Emergency Plan, it shall be forwarded to Document Control for distribution.
- 3.2 Interim Change Notice (ICN)
- 3.2.1 In instances where a revision to a page or several pages of the Emergency Plan is necessary, outside the full revision, an ICN may be processed as follows:
 - 3.2.1.1 ICNs that decrease the effectiveness of the emergency response program shall be submitted to the NRC for approval prior to implementation.
 - 3.2.1.2 ICNs that decrease the effectiveness of the emergency response program shall be discussed and agreed on by the state and county governmental authorities.
 - 3.2.1.3 The affected page(s) shall be marked with the ICN number (e.g., current revision number-dash-sequential ICN number: 18-1, 18-2, etc.)
 - 3.2.1.4 The ICN shall be processed in accordance with steps 3.1.2.4 thru 3.1.2.10.
 - 3.2.1.5 Once the ICN has received final approval, the ICN's effective date shall be typed on the bottom of all affected pages.

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3.2.1.6 Once the effective date has been typed on all affected pages, the affected pages shall be forwarded to Document Control for distribution.

3.3 Emergency Plan Implementing Procedure Revisions

3.3.1 Revisions to implementing procedures shall be processed in accordance with OPAP01-ZA-0102, Plant Procedures.

3.3.2 Revisions other than administrative clarifications shall be reviewed in accordance with Form 3, Emergency Response Program Evaluation.

3.3.3 Emergency Action Level changes shall be discussed and agreed on by the state and county governmental authorities (this list may not be all inclusive):

- State of Texas, Division of Emergency Management,
- State of Texas, Bureau of Radiation Control,
- Matagorda County.

3.4 30 Day NRC Transmittal (10CFR50.54(q))

3.4.1 All Emergency Plan Revisions, Implementing Procedure Revisions or Interim Change Notices shall be sent to the NRC Within thirty (30) days after effective date:

3.4.1.1 Draft a cover letter including the changed pages/procedure, Summary of Changes and Receipt Acknowledgement Form.

3.4.1.2 Forward the package to the Licensing Department for transmittal to the NRC.

3.4.2 Revisions requiring NRC approval prior to their effective date shall be submitted to the Plant Operations Review Committee (PORC) and be approved by the Plant General Manager prior to NRC Submittal.

3.4.2.1 Draft a cover letter including the changed pages/procedure, Summary of Changes and Receipt Acknowledgement Form.

3.4.2.2 Forward the package to the Licensing Department for transmittal to the NRC.

3.4.3 Any changes made during the NRC approval process require PORC submittal and approval by the Plant General Manager prior to effective date.

Emergency Plan Revision**4.0 References**

- 4.1 STPEGS Emergency Plan
- 4.2 10CFR50, Appendix E
- 4.3 10CFR50.47
- 4.4 10CFR50.54(q)
- 4.5 10CFR50.59
- 4.6 10CFR50.4
- 4.7 NUREG 0654, FEMA-REP-1, Rev. 1
- 4.8 NUMARC/NESP-007, Rev 2
- 4.9 0PAP01-ZA-0103, License Compliance Review
- 4.10 0PAP01-ZA-0102, Plant Procedures
- 4.11 OPGP05-ZV-0014, Emergency Response Activities

5.0 Support Documents

- 5.1 Form 1, Emergency Plan Revision Checklist
- 5.2 Form 2, Emergency Plan Approval Form
- 5.3 Form 3, Emergency Response Program Evaluation

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Emergency Plan Revision			
Form 1	Emergency Plan Revision Checklist		Page 1 of 5

Proposed revisions to the STPEGS Emergency Plan shall be checked against each of the following checklist items. The Reviewer shall answer each checklist item by initialing in the space provided. Any item answered YES shall be described in full detail. Provide supplemental sheets, as required.

10CFR50.54(q) states, in part:

The nuclear power reactor licensee may make changes to these plans without Commission approval only if the changes do not decrease the effectiveness of the plans and the plans, as changed, continue to meet the standards of 10CFR50.47(b) and the requirements of Appendix E of this part. NUREG 0654/FEMA-REP-1, Rev. 1 provides specific guidance in regard to the requirement of these standards.

- a) Does the revision affect this standard?
- b) Does the revision decrease the effectiveness of the STPEGS Emergency Plan?
- c) Bases for answer to a) and/or b).

Standards

1. Primary responsibilities for emergency response by the licensee and State and County organizations within the Emergency Planning Zones have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond and to augment its initial response on a continuous basis

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

2. Onshift licensee responsibilities for emergency response are defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

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3. Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and County staff at the licensee's Emergency Operation Facility have been made, and other organizations capable of augmenting the planned response have been identified.

a) YES _____ NO _____ (If NO, skip b and c)

b) YES _____ NO _____ N/A

c) BASES: _____

4. An emergency classification and emergency action level scheme, the basis of which include facility system and effluent parameters, is in use by the licensee, and State and County emergency management plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures.

a) YES _____ NO _____ (If NO, skip b and c)

b) YES _____ NO _____ N/A

c) BASES: _____

5. Procedures have been established for notification, by the licensee, of State and County response organizations and for notification of emergency personnel by all organizations; the content of initial and follow-up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway Emergency Planning Zone (EPZ) have been established.

a) YES _____ NO _____ (If NO, skip b and c)

b) YES _____ NO _____ N/A

c) BASES: _____

6. Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

a) YES _____ NO _____ (If NO, skip b and c)

b) YES _____ NO _____ N/A

c) BASES: _____

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Form 1	Emergency Plan Revision Checklist		Page 3 of 5

7. Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency (e.g., listening to a local broadcast station), the principal points of contact with the news media for dissemination of information during an emergency (including the physical location or locations) are established in advance, and procedures for coordinated dissemination of information to the public are established.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

8. Adequate emergency response facilities and equipment to support the emergency response are provided and maintained.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

9. Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

10. A range of protective actions have been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

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11. Means for controlling radiological emergency exposures, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guidelines.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

12. Arrangements are made for medical services for contaminated injured individuals.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

13. General plans for recovery and reentry are developed.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

14. Periodic exercises are conducted to evaluate major portions of emergency response capabilities, periodic drills are conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are corrected.

- a) YES _____ NO _____ (If NO, skip b and c)
- b) YES _____ NO _____ N/A
- c) BASES: _____

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Form 1	Emergency Plan Revision Checklist		Page 5 of 5

15. Radiological emergency response training is provided to those who may be called on to assist in an emergency.

a) YES _____ NO _____ (If NO, skip b and c)

b) YES _____ NO _____ N/A

c) BASES: _____

16. Responsibilities for emergency plan development, review, and distribution are established, and planners are properly trained.

a) YES _____ NO _____ (If NO, skip b and c)

b) YES _____ NO _____ N/A

c) BASES: _____

REVIEW FINDINGS: _____

REVIEWER: _____

DATE: _____

REVIEW APPROVAL: _____
 Supervisor, Emergency Response

DATE: _____

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Form 2	Emergency Plan Approval Form		Page 1 of 1

Attached for your review and approval is Revision/Interim Change Notice _____ of the STPEGS Emergency Plan.

PORC Meeting No. _____

Review & Concurrence: _____ / _____
Plant General Manager Date

Approved: _____ / _____
Vice President, Business Services Date

Effective Date: _____

When completed, this form shall serve as certification that Revision/Interim Change Notice _____ is the current revision of the STPEGS Emergency Plan.

When completed, a copy of this form shall become the cover page of the revision for controlled distribution

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Form 3	Emergency Response Program Evaluation		Page 1 of 2

Document: _____

Rev.: _____

This Form shall be used to determine if a proposed change to an Emergency Plan Implementing Procedure decreases the effectiveness of the STPEGS Emergency Response Program.

1. Does the proposed change differ from the requirements of NUREG-0654/FEMA REP-1, Rev. 1 or prior NRC Emergency Response Program Commitments in any of the following areas:

- | | | |
|--|------------------------------|-----------------------------|
| a. Assignment of Responsibility (Organization Control) | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Onsite Emergency Organization | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Emergency Response Support and Resources | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Emergency Classification System | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Notification Methods and Procedures | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Emergency Communications | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| g. Public Education and Information | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| h. Emergency Facilities and Equipment | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| i. Accident Assessment | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| j. Protective Response | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| k. Radiological Exposure Control | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| l. Medical and Public Health Support | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| m. Recovery and Reentry Planning and Post-Accident Operations | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| n. Exercises and Drills | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| o. Radiological Emergency Response Training | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| p. Responsibility for the Planning Effort: Development, Periodic, Review and Distribution of Emergency Plans | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

2. If YES was answered for any of the previous questions, then provide justification that the document would not decrease the effectiveness of the Emergency Response Program per 10CFR50.54(q):

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Emergency Plan Revision			
Form 3	Emergency Response Program Evaluation		Page 2 of 2

3. Does the document involve changes to:
- 3.1 Emergency Action Levels (EAL) Yes No
- 3.1.1 If yes, does the proposed EAL changes differ from the requirements of NUMARC/NESP-007, Rev 2 Yes No

4. Evaluation Comments: _____

5. Evaluated by: _____ Date: ____/____/____

6. Approved E-Plan Revision Required Before Implementation

Disapproved/Reason: _____

 Supervisor, Emergency Response

____/____/____
 Date