

## PMSTPCOL PEmails

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**From:** Ballinger, Amy [aballinger@STPEGS.COM]  
**Sent:** Tuesday, October 14, 2008 4:45 PM  
**To:** Adrian Muniz; Belkys Sosa; George Wunder; Loren Plisco; Raj Anand; Rocky Foster; Tekia Govan; Tom Tai  
**Subject:** Response to Request for Additional Information  
**Attachments:** ABR-AE-08000076.pdf

Good Afternoon,

Attached, please find a courtesy electronic copy of the RAI response letter, with attachments, which answers the NRC's Request for Additional Information.

The official paper copy was sent overnight according to the letter addressee list. If you have any questions, please contact Coley Chappell at (361) 972-4745 or Bill Mookhoek at (361) 972-7274.

Have a great day

*Amy Ballinger*

STP Units 3 & 4

Licensing Specialist

Phone: (361)972-4644

Fax: (361) 972-4751

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**From:** Ballinger, Amy

**Created By:** aballinger@STPEGS.COM

**Recipients:**

"Adrian Muniz" <Adrian.Muniz@nrc.gov>  
Tracking Status: None  
"Belkys Sosa" <Belkys.Sosa@nrc.gov>  
Tracking Status: None  
"George Wunder" <George.Wunder@nrc.gov>  
Tracking Status: None  
"Loren Plisco" <Loren.Plisco@nrc.gov>  
Tracking Status: None  
"Raj Anand" <Raj.Anand@nrc.gov>  
Tracking Status: None  
"Rocky Foster" <Rocky.Foster@nrc.gov>  
Tracking Status: None  
"Tekia Govan" <Tekia.Govan@nrc.gov>  
Tracking Status: None  
"Tom Tai" <Tom.Tai@nrc.gov>  
Tracking Status: None

**Post Office:** exgmb1.CORP.STPEGS.NET

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South Texas Project Electric Generating Station 4000 Avenue F – Suite A Bay City, Texas 77414

October 13, 2008  
ABR-AE-08000076

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
One White Flint North  
11555 Rockville Pike  
Rockville MD 20852-2738

South Texas Project  
Units 3 and 4  
Docket Nos. 52-012 and 52-013  
Response to Request for Additional Information

Attached are responses to NRC staff questions included in Request for Additional Information (RAI) letter number 60 related to Combined License Application (COLA) Part 5 and Part 9, Standard Review Plan (SRP) Section 13.03 and SRP Section 14.03.10. This submittal forms a complete response to RAI letter number 60, consisting of responses to the following RAI question numbers:

14.03.10-1	14.03.10-6	14.03.10-11	13.03-71
14.03.10-2	14.03.10-7	14.03.10-12	
14.03.10-3	14.03.10-8	14.03.10-13	
14.03.10-4	14.03.10-9		
14.03.10-5	14.03.10-10		

When a change to the COLA is indicated, the change will be incorporated into the next routine revision of the COLA following NRC acceptance of the RAI response.

There are no commitments in this letter.

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

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

Executed on Oct. 13, 2008



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

sab

Attachments:

1. Question 14.03.10-1
2. Question 14.03.10-2
3. Question 14.03.10-3
4. Question 14.03.10-4
5. Question 14.03.10-5
6. Question 14.03.10-6
7. Question 14.03.10-7
8. Question 14.03.10-8
9. Question 14.03.10-9
10. Question 14.03.10-10
11. Question 14.03.10-11
12. Question 14.03.10-12
13. Question 14.03.10-13
14. Question 13.03-71

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

Director, Office of New Reactors  
U. S. Nuclear Regulatory Commission  
One White Flint North  
11555 Rockville Pike  
Rockville, MD 20852-2738

Regional Administrator, Region IV  
U. S. Nuclear Regulatory Commission  
611 Ryan Plaza Drive, Suite 400  
Arlington, Texas 76011-8064

Richard A. Ratliff  
Bureau of Radiation Control  
Texas Department of State Health Services  
1100 West 49th Street  
Austin, TX 78756-3189

C. M. Canady  
City of Austin  
Electric Utility Department  
721 Barton Springs Road  
Austin, TX 78704

\*Steven P. Frantz, Esquire  
A. H. Gutterman, Esquire  
Morgan, Lewis & Bockius LLP  
1111 Pennsylvania Ave. NW  
Washington D.C. 20004

\*George F. Wunder  
\*Rocky D. Foster  
Two White Flint North  
11545 Rockville Pike  
Rockville, MD 20852

(electronic copy)

\*George Wunder  
\*Rocky D. Foster  
Loren R. Plisco  
U. S. Nuclear Regulatory Commission

Steve Winn  
Eddy Daniels  
Joseph Kiwak  
Jim von Suskil  
NRG South Texas 3/4 LLC

Jon C. Wood, Esquire  
Cox Smith Matthews

J. J. Nesrsta  
R. K. Temple  
Kevin Pollo  
L. D. Blaylock  
CPS Energy

**RAI 14.03.10-1****QUESTION:**

**ITAAC-1:** EP Program Element “Assignment of Responsibility – Organizational Control”

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria A.1.e, A.4; Table C.II.1-B1 of Appendix B to RG 1.206]

The description of Acceptance Criteria for ITAAC-1.1 in Table 4.0-1 is inconsistent with that provided in Table C.II.1-B1 of Appendix B to RG 1.206, and does not identify specific capabilities. Either revise the text in Table 4.0-1, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response below.

<b>EP Program Elements</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>1.0 Assignment of Responsibility-Organization Control</b>		
1.1 The staff exists to provide 24-hour per day emergency response and manning of communications links, including continuous operations for a protracted period.	1.1 An inspection of the implementing procedures and or staffing rosters will be performed.	<p>1.1 The staff exists to provide 24-hour per day emergency response and manning of communications links, including continuous operations for a protracted period.</p> <p>The procedurally identified ‘On shift Emergency Response Organization (ERO) Communicator’ staffing personnel are is available for Units 3 &amp; 4 on a 24 hour basis.</p>

**RAI 14.03.10-2****QUESTION:****ITAAC-2: EP Program Element “Onsite Emergency Response Organization”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria B.5, B.7; Table C.II.1-B1 of Appendix B to RG 1.206]

The description of Acceptance Criteria for ITAAC-2.1 in Table 4.0-1 is inconsistent with that provided in Table C.II.1-B1 of Appendix B to RG 1.206, and does not identify responsibilities and specific capabilities. Either revise the text in Table 4.0-1, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response below.

EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
<b>2.0 Onsite Emergency Organization</b>		
2.1 The staff exists to provide minimum and augmented on-shift staffing levels, consistent with Table B-1 of NUREG- 0654/FEMA-REP-1, Rev. 1.	2.1 An inspection of the implementing procedures and or staffing rosters will be performed.	2.1 The staff exists to provide minimum and augmented onshift staffing levels, consistent with Table B-1 of NUREG-0654/FEMA-REP-1, Rev. 1.  The Emergency Plan Table C-1 and procedurally identified staffing personnel are available for Units 3 & 4 to conduct their identified responsibilities contained in Emergency Plan Section C.

**RAI 14.03.10-3****QUESTION:****ITAAC-3: EP Program Element “Emergency Classification System”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criterion D.1; Table C.II.1-B1 of Appendix B to RG 1.206]

The description of "Inspections, Tests, Analyses" 3.1 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9, does not include Control Room and TSC, and the description of "Acceptance Criteria" does not include "TSC", and does not state that "the ranges of the displays encompass the values specified in the emergency classification and EAL scheme.", as provided in Table C.II.1-B1 of Appendix B to RG 1.206. Either revise the text in Table 4.0-1, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response below.

<b>EP Program Elements</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>3.0 Emergency Classification System</b>		
3.1 A standard emergency classification and emergency action level (EAL) scheme exists, and identifies facility system and effluent parameters constituting the bases for the classification scheme.	3.1 An inspection of the <u>Control Room, TSC, and</u> EOF will be performed to verify that they have displays for retrieving facility system and effluent parameters specified in the emergency classification and EAL scheme.	<p>3.1 The specified parameters are retrievable in the Control Room, TSC, and EOF, and the ranges of the displays encompass the values specified in the emergency classification and EAL scheme.</p> <p>The acceptance testing criteria will be in accordance with Table 2.7.1a Item B Tier 1 Design Certification for the ABWR. Additional data required to support the EAL scheme will be retrievable in the Control Room, TSC, and EOF.</p> <p>Displays exist or can be retrieved in the EOF for plant parameters listed in the reference ABWR DCD Tier 1 Table 2.7.1a, Item B.</p>



**RAI 14.03.10-4****QUESTION:****ITAAC-4:** EP Program Element “Notification Methods and Procedures”

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria E.1, E.2; Table C.II.1-B1 of Appendix B to RG 1.206]

The description of Acceptance Criterion 4.1 for ITAAC-4.1 in Table 4.0-1 includes the phrase “..a test emergency.” This is inconsistent with the text provided in Table C.II.1-B1 of Appendix B to RG 1.206 under “Acceptance Criteria” 5.1. Either revise the text in Table 4.0-1, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response below.

<b>EP Program Elements</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>4.0 Notification Methods and Procedures</b>		
4.1 The means exists to notify responsible State and local organizations within 15 minutes after the licensee declares an emergency.	4.1 – 4.2 A test will be performed of the capabilities.	4.1 The responsible State and local agencies receive notification within 15 minutes after the licensee declares a test simulated emergency.

**RAI 14.03.10-5****QUESTION:****ITAAC-6: EP Program Element “Accident Assessment”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria I.2, I.3, I.4, I.5, I.6, I.8; Table C.II.1-B1 of Appendix B to RG 1.206]

1) “Acceptance Criteria” 9.1 in Table C.II.1-B1 of Appendix B to RG 1.206 corresponds to the applicant’s “Acceptance Criteria” 7.1 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9. “Acceptance Criteria” 7.1 does not include “initial and continuing radiological assessment throughout the course of an accident”, as does “Acceptance Criteria” 9.1. Either revise Table 4.0-1 with necessary additional text, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response below. Text changes below also include the text changes for the responses to RAI 14.03.10-6, 7, 8, 9, and 10.

<b>EP Program Elements</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>7.0 Accident Assessment</b>		
7.1 The means exists to provide initial and continuing radiological assessment throughout the course of an accident.	<p><del>7.1–7.5 and 7.7 An inspection and test will be performed of the capabilities.</del></p> <p>7.1 A test of the emergency plan will be conducted by performing a drill to verify the capability to perform accident assessment.</p>	<p><del>7.1 A 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.</del></p> <p>7.1 The means exist to provide initial and continuing radiological assessment throughout the course of an accident. Using selected monitoring parameters listed in ABWR DCD Tier 1 Table 2.7.1a, simulated degraded plant conditions are assessed and protective actions are initiated in accordance with the following criteria:</p> <p>A. Accident Assessment and Classification</p> <p>1. Demonstrate the ability to</p>

		<p>identify initiating conditions, determine emergency action level (EAL) parameters and correctly classify the emergency throughout the drill.</p> <p><b>B. Radiological Assessment and Control</b></p> <p>1. Demonstrate the ability to obtain onsite radiological surveys and samples.</p> <p>2. Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers.</p> <p>3. Demonstrate the ability to assemble and deploy field monitoring teams.</p> <p>4. Demonstrate the ability to satisfactorily collect and disseminate field team data.</p> <p>5. Demonstrate the ability to develop dose projections.</p> <p>6. Demonstrate the ability to make the decision whether to issue radioprotective drugs, (KI), to emergency workers</p> <p>7. Demonstrate the ability to develop appropriate protective action recommendations (PARs) and expeditiously notify appropriate authorities within 15 minutes of development.</p>
7.2 The means exists to determine the source term of releases of radioactive material within plant systems, and the magnitude of the release of radioactive materials based on plant system parameters and effluent monitors.	7.2 A test of the Emergency Plan Implementing Procedures (EPIPs) and the Off Site Dose Calculation Manual (ODCM) will be completed to verify ability to determine the source term, magnitude of releases.	<p>7.2 A procedure provides instructions for determining the source term of releases of radioactive material within plant systems, and the magnitude of the release of radioactive materials based on plant parameters and effluent monitors.</p> <p>7.2 The means exists to determine the source term of releases of radioactive material within plant systems, and the magnitude of the release of</p>

		<p>radioactive materials based on plant system parameters and effluent monitors.</p> <p>The EPIPS and ODCM correctly calculate source terms and magnitudes of postulated releases.</p>
<p>7.3 The means exists to continuously assess the impact of the release of radioactive materials to the environment, accounting for the relationship between effluent monitor readings, and onsite and offsite exposures and contamination for various meteorological conditions.</p>	<p>7.3 A test of the EPIPs and the ODCM will be completed to verify the relationship between effluent monitor readings, and offsite exposures and contaminations, has been established.</p>	<p>7.3 A 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.</p> <p>7.3 The means exists to continuously assess the impact of the release of radioactive materials to the environment, accounting for the relationship between effluent monitor readings, and onsite and offsite exposures and contamination for various meteorological conditions.</p> <p>The EPIPs and ODCM calculate the relationship between effluent monitor readings and offsite exposure and contamination for various meteorological conditions.</p>
<p>7.4 The means exists to acquire and evaluate meteorological information.</p>	<p>7.4 A test will be performed to verify the ability to access meteorological information in the TSC and Control Room.</p>	<p>7.4 Meteorological data is available at the EOF and control room.</p> <p>7.4 The means exists to acquire and evaluate meteorological information.</p> <p>The following parameters are displayed in the TSC and Control Room.</p> <ul style="list-style-type: none"> <li>• Wind speed (10 m and 60 m)</li> <li>• Wind direction (10 m and 60 m)</li> <li>• Vertical temperature difference (between 10 m and 60 m)</li> <li>• Ambient temperature (10 m)</li> <li>• Precipitation</li> </ul>
<p>7.5 The means exists to determine the release rate and projected doses if the instrumentation used for assessment is off scale or inoperable.</p>	<p>7.5 A test will be performed of the capabilities.</p>	<p>7.5 A procedure provides instructions to determine the release rate and projected doses if the instrumentation used for assessment is off scale or</p>

		<p>inoperable.</p> <p>7.5-A drill or exercise is conducted demonstrating the capability for determining release rates and projected doses if the instrumentation used for assessment is off scale or inoperable.</p>
<p>7.7 The means exists to make rapid assessments of actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways, including activation, notification means, field team composition, transportation, communication, monitoring equipment, and estimated deployment times.</p>	<p>7.7 A test will be performed of the capabilities.</p>	<p>7.7 A procedure provides instructions for performing assessments of actual for potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways.</p> <p>7.7 A drill or exercise is conducted demonstrating the capability for making rapid assessments of actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways.</p>

**RAI 14.03.10-6**

**QUESTION:**

**ITAAC-6: EP Program Element “Accident Assessment”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria I.2, I.3, I.4, I.5, I.6, I.8; Table C.II.1-B1 of Appendix B to RG 1.206]

2) The description of “Acceptance Criteria” 7.1 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9, identifies only one capability, namely, “offsite dose calculations”; however, “radiological assessment” includes more than just “offsite dose calculations”. Include other “means” associated with “radiological assessment”, or justify why they are not necessary.

*[NRC suggests that the applicant review the ITAAC-related RAIs associated with other COLAs, such as, Vogtle and North Anna]*

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response to RAI 14.03.10-5.

**RAI 14.03.10-7**

**QUESTION:**

**ITAAC-6: EP Program Element “Accident Assessment”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria I.2, I.3, I.4, I.5, I.6, I.8; Table C.II.1-B1 of Appendix B to RG 1.206]

3) The description of “Acceptance Criteria” 7.3 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9, identifies only one capability, namely, “offsite dose calculations”; however, assessing the impact requires more than just “offsite dose calculations”. Include other “means” associated with assessment of impact, or justify why they are not necessary. Explain why a “relationship between effluent monitor readings, and onsite and offsite exposures and contamination for various meteorological conditions” is not identified under the “Acceptance Criteria”, as provided in Table C.II.1-B1 of Appendix B to RG 1.206.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response to RAI 14.03.10-5.

**RAI 14.03.10-8**

**QUESTION:**

**ITAAC-6: EP Program Element “Accident Assessment”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria I.2, I.3, I.4, I.5, I.6, I.8; Table C.II.1-B1 of Appendix B to RG 1.206]

4) The description of “Acceptance Criteria” 7.4 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9, does not identify “specific capabilities” regarding meteorological data availability in TSC and Control Room, as provided in Table C.II.1-B1 of Appendix B to RG 1.206. Either revise Table 4.0-1 with necessary additional text, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response to RAI 14.03.10-5.



**RAI 14.03.10-9**

**QUESTION:**

**ITAAC-6: EP Program Element “Accident Assessment”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria I.2, I.3, I.4, I.5, I.6, I.8; Table C.II.1-B1 of Appendix B to RG 1.206]

5) The description of “Acceptance Criteria” 7.5 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9, does not identify “specific capabilities” regarding determination of release rate and projected doses if the instrumentation used for assessment is off scale or inoperable, as provided in Table C.II.1-B1 of Appendix B to RG 1.206. Either revise Table 4.0-1 with necessary additional text, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response to RAI 14.03.10-5.

**RAI 14.03.10-10**

**QUESTION:**

**ITAAC-6: EP Program Element “Accident Assessment”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criteria I.2, I.3, I.4, I.5, I.6, I.8; Table C.II.1-B1 of Appendix B to RG 1.206]

6) The description of “Acceptance Criteria” 7.7 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9, does not identify “specific capabilities” regarding performing assessments of actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways, as provided in Table C.II.1-B1 of 4 Appendix B to RG 1.206. Either revise Table 4.0-1 with necessary additional text, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response to RAI 14.03.10-5.

**RAI 14.03.10-11****QUESTION:****ITAAC-7: EP Program Element “Exercises and Drills”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criterion N.1; Table C.II.1-B1 of Appendix B to RG 1.206]

1) Table C.II.1-B1 of Appendix B to RG 1.206, “Acceptance Criteria” 14.1.1, provides in bracket that the COL applicant will identify exercise objectives and associated acceptance criteria. The description of “Acceptance Criteria” 8.1.1 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9, does not identify the objective of issuing protective action recommendations (PAR) to offsite organizations. Additionally, the applicant has not listed the “acceptance criteria” associated with the “exercise objectives”. Explain why “Acceptance Criteria” associated with the “exercise objectives” are not provided. *[NRC suggests that the applicant review the ITAAC-related RAIs associated with other COLAs, such as, Vogtle and North Anna]*

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response below. Text changes below also include the text changes for the response to RAI 14.03.10-12.

EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
<b>8.0 Exercises and Drills</b>  8.1 Licensee conducts a full participation exercise to evaluate major portions of emergency response capabilities, which includes participation by each State and local agency within the plume exposure EPZ, and each State within the ingestion control EPZ.	8.1 A full participation exercise (test) will be conducted within the specified time periods of Appendix E to 10 CFR Part 50.	8.1.1 The exercise is completed within the specified time periods of Appendix E to 10 CFR Part 50. Onsite exercise objectives have been met and there are no uncorrected onsite deficiencies.  The following onsite exercise objectives are met:  A. Accident Assessment and Classification  1. Emergency responders recognize and correctly classify the event.  1. Demonstrate the ability to identify initiating conditions, determine emergency action level (EAL) parameters, and correctly

		<p>classify the emergency throughout the exercise.</p> <p><u>Review Criteria:</u> Determine the correct highest emergency classification level based on events in progress, considering past events and their impact on the current conditions, within 15 minutes from the time the initiating condition(s) or EAL is identified.</p> <p><del>2. Emergency responders notify onsite and offsite personnel of the event,</del> B. Notifications</p> <p>1. Demonstrate the ability to alert, notify, and mobilize site emergency response personnel.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Complete an public address announcement within 5 minutes of the initial event classification for an Alert or higher.</li><li>▪ Activate the Emergency Notification Response System (ENRS) within 10 minutes of the initial event classification for an Alert or higher.</li></ul> <p>2. Demonstrate the ability to notify responsible State, local government agencies within 15 minutes, and the NRC within 60 minutes after declaring and emergency.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Transmit information using the designated notification form in accordance with approved EPIPs within 15 minutes of event classification.</li><li>▪ Transmit information using the designated notification form in accordance with approved EPIPs within 60</li></ul>
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		<p>minutes of last transmittal for a follow-up notification to State and local authorities.</p> <ul style="list-style-type: none"> <li>Transmit information using the notification form within 60 minutes of event classification for an initial notification of the NRC.</li> </ul> <p>3. Demonstrate the ability to warn or advise onsite individuals of the emergency conditions.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"> <li>Initiate notification of onsite individuals (via plant page or telephone) using the designated checklist within 15 minutes of notification.</li> </ul> <p>4. Demonstrate the capability of the Prompt Notification System (PNS), for the public, to operate properly when required.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"> <li>90% of the sirens operate properly as indicated by the PNS command console.</li> </ul> <p>3. Emergency responders perform accurate dose assessment,</p> <p><b>C. Emergency Response</b></p> <p>1. Demonstrate the capability to direct and control emergency operations.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"> <li>Command and control is demonstrated by the Control Room in the early phase of the emergency and by the TSC or EOF within 60 minutes from activation.</li> </ul> <p>2. Demonstrate the ability to transfer emergency direction from the Control Room (simulator) to the TSC within 30 minutes from activation of the TSC.</p>
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		<p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Evaluation of briefings conducted prior to turnover responsibility. Personnel document transfer of duties.</li></ul> <p>3. Demonstrate the ability to prepare for around-the-clock staffing requirements.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Complete 24-hour staff assignments.</li></ul> <p>4. Demonstrate the ability to perform assembly and accountability for all onsite individuals within 30 minutes of an emergency requiring protected area assembly and accountability.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Protected area personnel assembly and accountability completed within 30 minutes of the SAE or higher emergency declaration via public address announcement.</li></ul> <p>4. Emergency Director issues protective actions for onsite personnel,</p> <p>D. Emergency Response Facilities</p> <p>1. Demonstrate timely activation of the Operations Support Center (OSC).</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ The OSC is activated within about 60 minutes of the initial notification.</li></ul> <p>2. Demonstrate the adequacy of equipment, security provisions, and habitability precautions for the OSC, as appropriate.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Evaluation of the adequacy</li></ul>
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		<p>of the emergency equipment in the emergency response facilities, including availability and general consistency with EIPs.</p> <ul style="list-style-type: none"><li>▪ The Security Force Supervisor implements and follows applicable EIPs.</li><li>▪ The Health Physics Coordinator implements the designated checklist if onsite/offsite release has occurred.</li></ul> <p>3. Demonstrate the adequacy of communications for all emergency support resources.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Emergency response communications listed in EIPs are available and operational.</li><li>▪ Communications systems are tested in accordance with the ERF activation checklist.</li><li>▪ ERF personnel are able to operate all specified communication systems.</li><li>▪ Clear primary and backup communications links are established and maintained for the duration of the exercise.</li></ul> <p>5. The emergency response facilities are activated in a timely manner,</p> <p>E. Radiological Assessment and Control</p> <p>1. Demonstrate the ability to obtain onsite radiological surveys and samples.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ HP Technicians demonstrate the ability to obtain appropriate instruments (range and type) and take surveys.</li><li>▪ Airborne samples are taken when the conditions indicate</li></ul>
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		<p>the need for the information.</p> <p>2. Demonstrate the ability to continuously monitor and control radiation exposure to emergency workers.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Emergency workers are issued self-reading dosimeters when radiation levels require, and exposures are controlled to 10 CFR Part 20 limits (unless the emergency director authorizes emergency limits).</li><li>▪ Exposure records are available, either from the Health Physics computer or a hard copy dose report.</li><li>▪ Emergency workers include Security and personnel within all emergency facilities.</li></ul> <p>3. Demonstrate the ability to assemble and deploy field monitoring teams within 60 minutes from the decision to do so.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Field Monitoring team is ready to be deployed within 60 minutes of being requested from the OSC.</li></ul> <p>4. Demonstrate the ability to satisfactorily collect and disseminate field team data.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>▪ Field team data to be collected is dose rate or counts per minute (cpm) from the plume, both open and closed window, and air sample (gross/net cpm) for particulate and iodine, if applicable.</li><li>▪ Satisfactory data dissemination is from the field team to the Dose Assessor, via the field team</li></ul>
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		<p>communicator and field team coordinator.</p> <p>5. Demonstrate the ability to develop dose projections.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"> <li>▪ The on-shift HP or the Dose Assessor performs timely and accurate dose projections, in accordance EIPs.</li> </ul> <p>6. Demonstrate the ability to make the decision whether to issue radioprotective drugs (KI) to emergency workers.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"> <li>▪ KI is taken (simulated) if the estimated dose to the thyroid will exceed 25 rem committed dose equivalent (CDE).</li> </ul> <p>7. Demonstrate the ability to develop appropriate protective action recommendations (PARs), and notify appropriate authorities within 15 minutes of development.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"> <li>▪ Total effective dose equivalent TEDE and CDE dose projections from the dose assessment computer code are compared to EIPs.</li> <li>▪ PARs are developed within 15 minutes of data availability.</li> <li>▪ PARs are transmitted via voice or fax within 15 minutes of event classification and/or PAR development.</li> </ul> <p>6. The on-call ERO is activated in a timely manner.</p> <p><u>F. Public Information</u></p> <p>1. Demonstrate the capability to develop and disseminate clear,</p>
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		<p>accurate, and timely information to the news media in accordance with EPIPs.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>Media information (e.g., press releases, press briefings, electronic media) are made available by the On-Call Media Representative.</li><li>Follow-up information is provided, at a minimum, within 60 minutes of an emergency classification or PAR change.</li></ul> <p>2. Demonstrate the capability to establish and effectively operate rumor control in a coordinated fashion.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>Calls are answered in a timely manner with the correct information, in accordance with EPIPs.</li><li>Calls are returned or forwarded, as appropriate, to demonstrate responsiveness.</li><li>Rumors are identified and addressed.</li></ul> <p>7. The Shift Supervisor turns over command and control of emergency response to either the TSC Manager or the EOF Director.</p> <p><u>G. Evaluation</u></p> <p>1. Demonstrate the ability to conduct a post-exercise critique, to determine areas requiring improvement and corrective action.</p> <p><u>Review Criteria:</u></p> <ul style="list-style-type: none"><li>An exercise time line is developed, followed by an evaluation of the objectives.</li><li>Significant problems in achieving the objectives are discussed to ensure</li></ul>
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		<p>understanding of why objectives were not fully achieved.</p> <ul style="list-style-type: none"><li>▪ Recommendations for improvement in areas are discussed.</li></ul> <p>8. Communication are established between the emergency response facilities;</p> <p>9. Personnel are dispatched to the field from the OSC to perform repair efforts and from the EOF to perform radiological surveys;</p> <p>10. Emergency worker exposure controls are established, and</p> <p>11. Emergency responders perform re-entry and recovery. There are no uncorrected onsite exercise deficiencies.</p> <p>8.1.2 Onsite emergency response personnel are mobilized in sufficient numbers to fill emergency response positions. Onsite emergency response personnel accomplished the objectives listed in 8.1.1.</p> <p>8.1.3 The exercise was completed within the specified time periods of Appendix E to 10 CFR Part 50; offsite exercise objectives have been met, and there are no uncorrected offsite exercise deficiencies. If one or more deficiencies are identified, the provisions in 10 CFR 50.54(gg) shall apply.</p>
		<p>8.1.2 Onsite emergency response personnel are mobilized in sufficient number to fill the emergency positions identified in emergency plan Section C, and they successfully perform their assigned responsibilities as outlined in Acceptance Criterion 8.1.1.D, Emergency Response Facilities.</p>

		8.1.3 The exercise is completed within the specified time periods of 10 CFR Part 50, Appendix E; offsite exercise objectives have been met; and there are no uncorrected offsite deficiencies, exercise deficiencies, or a license condition which requires offsite exercise deficiencies to be corrected prior to fuel load.
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**RAI 14.03.10-12**

**QUESTION:**

**ITAAC-7: EP Program Element “Exercises and Drills”**

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criterion N.1; Table C.II.1-B1 of Appendix B to RG 1.206]

2) In Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EPITAAC)” of Chapter 4 in COLA Part 9, “Acceptance Criteria” 8.1.2 appeared to have addressed Table C.II.1-B1 of Appendix B to RG 1.206 “Acceptance Criteria” 14.1.2. Explain why 8.1.2 does not include the word “successfully” in regard to emergency response personnel performing their assigned responsibilities. Additionally, explain why 8.1.2 does not identify “responsibilities and associated acceptance criteria” in relation to onsite emergency response personnel successfully performing their assigned responsibilities as provided in Table C.II.1-B1 of Appendix B to RG 1.206.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response to RAI 14.03.10-11.

**RAI 14.03.10-13****QUESTION:****ITAAC-8:** EP Program Element “Radiological Emergency Response Training”

[Basis: 10 CFR 52.79(a)(21); 10 CFR 52.80(a); NUREG-0654/FEMA-REP-1, Rev.1, Criterion O.1; Table C.II.1-B1 of Appendix B to RG 1.206]

Table C.II.1-B1 of Appendix B to RG 1.206 provides under the “Acceptance Criteria” that for this ITAAC, the COLA applicant will identify the specific training program. In the description of “Acceptance Criteria” 9.1 in Table 4.0-1, “Emergency Planning – Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)” of Chapter 4 in COLA Part 9, the applicant did not identify “the specific training program”. Either revise Table 4.0-1 to reflect the specific training program, or provide justification to retain the current text.

**RESPONSE:**

COLA Part 9 Table 4.0-1 will be revised as requested. The text changes made to Table 4.0-1 related to this question are provided in the response below.

<b>EP Program Elements</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>9.0 Radiological Emergency Response Training</b>		
9.1 Site-specific emergency response training has been provided for those who may be called upon to provide assistance in the event of an emergency.	9.1 An inspection and test will be performed of the capabilities.	9.1 Site-specific emergency response training has been provided for those who may be called upon to provide assistance in the event of an emergency. Training will be conducted in accordance with EPIPs.

**RAI 13.03-71****QUESTION:**

**SITE-55:** Subject: Evaluation against the Standard Review Plan  
[Basis: 10 CFR 52.79(a)(41)]

10 CFR 52.79(a)(41) requires the final safety analysis report to include an evaluation of the facility against the Standard Review Plan (SRP) revision in effect six months before the docket date of the application. The evaluation shall include an identification and description of all differences in design features, analytical techniques, and procedural measures proposed for a facility and those corresponding features, techniques, and measures given in the SRP acceptance criteria. Where difference exists, the evaluation shall discuss how the proposed alternative provides an acceptable method of complying with the Commission's regulations, or portions thereof, that underlie the corresponding SRP acceptance criteria.

ABWR DCD, Tier 2, Section 1.8.4.1, "SRP Deviations", provides that the SRP sections to be addressed by the COL applicant are indicated in the comments column of Table 1.8-19 as "COL Applicant". Table 1.8-19, "Standard Review Plans and Branch Technical Positions Applicable to ABWR" contains reference to SRP Section 13.3, "Emergency Planning" with the note "COL Applicant". FSAR, Tier 2, Section 1.8, "Conformance with Standard Review Plans and Applicability of Codes and Standards" provides Table 1.8-7, "Summary of Differences from SRP Section 7". Indicate where in the FSAR an evaluation against SRP Section 13.3 was documented.

**RESPONSE:**

The evaluation against Standard Review Plan (SRP) Section 13.3 is documented in Tier 2 Table 1.8-13 "Summary of Differences from SRP Section 13" of the ABWR Design Control Document (DCD) and incorporated by reference in Tier 2, Chapter 1 of the STP 3 & 4 FSAR.

This Table documents that there are no differences in design features, analytical techniques, and procedural measures given in the SRP acceptance criteria.

No COLA revision is required as a result of this RAI response.