

#### **4.0 Emergency Planning ITAAC**

The NRC and the Nuclear Energy Institute developed a generic set of emergency planning (EP) inspection, test, analysis, and acceptance criteria (ITAAC) known as EP-ITAAC. This set of EP-ITAAC has been tailored to the ABWR reactor design and EP program requirements for STP 3 & 4.

Table 4.0-1 includes the site-specific emergency planning ITAAC proposed for STP 3 & 4.

**Table 4.0-1 Emergency Planning— Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC)**

<b>EP Program Elements</b>	<b>Inspections, Tests, Analyses</b>	<b>Acceptance Criteria</b>
<b>1.0 Assignment of Responsibility-Organizational 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 staffing rosters will be performed.	1.1 The procedurally identified staffing personnel are available for Units 3 & 4.
<b>2.0 Onsite Emergency Response 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 staffing rosters will be performed.	2.1 The procedurally identified staffing personnel are available for Units 3 & 4.
<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 EOF will be performed to verify that it has displays for retrieving facility system and effluent parameters specified in the emergency classification and EAL scheme.	3.1 Displays exist or can be retrieved in the EOF for the plant parameters listed in the reference ABWR DCD Tier 1 Table 2.7.1a, Item B.

**Table 4.0-1 Emergency Planning— Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC) (Continued)**

EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
<b>4.0 Notification Methods and Procedures</b>		
<p>4.1 The means exists to notify responsible State and local organizations within 15 minutes after the licensee declares an emergency.</p> <p>4.2 The means exists to notify emergency response personnel.</p>	<p>4.1 – 4.2 A test will be performed of the capabilities.</p>	<p>4.1 The responsible State and local agencies receive notification within 15 minutes after the licensee declares a test emergency.</p> <p>4.2 The Emergency Notification and Response System (ENRS) activates the global page message delivery system and 95% of the personnel receive the message.</p>
<b>5.0 Emergency Communications</b>		
<p>5.1 The means exists for communications among the control room, TSC, EOF, principal State and local emergency operations centers (EOCs), and radiological field assessment teams.</p> <p>5.2 The means exists for communications from the control room, TSC, and EOF to the NRC headquarters and regional office EOCs (including establishment of the Emergency Response Data System (ERDS) [or its successor system] between the onsite computer system and the NRC Operations Center.)</p>	<p>5.1 -5.2 A test will be performed of the capabilities.</p>	<p>5.1 Communications are established among the control room, TSC, EOF, principal State and local EOCs, and radiological field assessment teams.</p> <p>5.2 Communications are established from the control room, TSC and EOF to the NRC headquarters and regional office EOCs, and an access port for ERDS [or its successor system] is provided.</p>
<b>6.0 Emergency Facilities and Equipment</b>		
<p>6.1 The licensee has established a TSC and onsite OSC.</p>		<p>6.1. See reference ABWR DCD, Tier 1, Table 2.17.1.</p>
<p>6.2 The licensee has established an EOF.</p>	<p>6.2 An inspection of the as-built EOF will be performed, including a test of the capabilities.</p>	<p>6.2.1 EOF communications equipment is installed, and voice transmission and reception are accomplished with the control room and TSC. The EOF voice is audible and intelligible at each location.</p>

**Table 4.0-1 Emergency Planning— Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC) (Continued)**

EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
		6.2.2 Displays exist or can be retrieved in the EOF for the plant parameters listed in the reference ABWR DCD, Tier 1, Table 2.7.1a, Item B.
<b>7.0 Accident Assessment</b>		
<p>7.1 The means exists to provide initial and continuing radiological assessment throughout the course of an accident.</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 radioactive materials based on plant system parameters and effluent monitors.</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>7.4 The means exists to acquire and evaluate meteorological information.</p>	7.1 - 7.5 and 7.7 An inspection and test will be performed of the capabilities.	<p>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 .</p> <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>7.3 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>7.4 Meteorological data is available at the EOF and control room.</p>

**Table 4.0-1 Emergency Planning— Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC) (Continued)**

EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
7.5 The means exists to determine the release rate and projected doses if the instrumentation used for assessment is off scale or inoperable.		7.5 A procedure provides instructions to determine the release rate and projected doses if the instrumentation used for assessment is off scale or inoperable.
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.		7.7 A procedure provides instructions for performing assessments of actual or potential magnitude and locations of any radiological hazards through liquid or gaseous release pathways
<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.	<p>8.1.1 The exercise was completed within the specified time periods of Appendix E to 10 CFR Part 50. The following onsite exercise objectives have been met:</p> <ol style="list-style-type: none"> <li>1. Emergency responders recognize and correctly classify the event,</li> <li>2. Emergency responders notify onsite and offsite personnel of the event,</li> <li>3. Emergency responders perform accurate dose assessment,</li> <li>4. Emergency Director issues protective actions for onsite personnel,</li> <li>5. The emergency response facilities are activated in a timely manner,</li> </ol>

**Table 4.0-1 Emergency Planning— Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC) (Continued)**

EP Program Elements	Inspections, Tests, Analyses	Acceptance Criteria
		<p>6. The on-call ERO is activated in a timely manner,</p> <p>7. The Shift Supervisor turns over command and control of emergency response to either the TSC Manager or the EOF Director ,</p> <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.</p> <p>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>

**Table 4.0-1 Emergency Planning— Inspection, Test, Analysis, and Acceptance Criteria (EP-ITAAC) (Continued)**

<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.
<b>10.0 Implementing Procedures</b>		
10.1 The licensee has submitted detailed implementing procedures for its emergency plan no less than 180 days prior to fuel load.	10.1 An inspection of the submittal letter will be performed.	10.1 STP has submitted detailed implementing procedures for the onsite emergency plan no less than 180 days prior to fuel load.

