

GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

**Abnormal Rad Levels / Radiological Effluents**

<p><b>RG1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Release of gaseous radioactivity resulting in offsite dose greater than 1,000 mRem TEDE or 5,000 mRem CDE Thyroid.</p> <p><u>Emergency Action Level (EAL):</u></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> </ul> <p>1. Dose assessment using actual meteorology indicates doses at or beyond the site boundary of <b>EITHER</b>:</p> <p style="margin-left: 20px;">a. &gt; <b>1000 mRem TEDE</b></p> <p style="margin-left: 40px;"><b>OR</b></p> <p style="margin-left: 20px;">b. &gt; <b>5000 mRem CDE Thyroid</b></p> <p><b>OR</b></p> <p>2. Field survey results at or beyond the site boundary indicate <b>EITHER</b>:</p> <p style="margin-left: 20px;">a. Gamma (closed window) dose rates &gt; <b>1000 mR/hr</b> are expected to continue for <b>≥ 60 minutes</b>.</p> <p style="margin-left: 40px;"><b>OR</b></p> <p style="margin-left: 20px;">b. Analyses of field survey samples indicate &gt; <b>5000 mRem CDE Thyroid for 60 minutes</b> of inhalation.</p>	<p><b>RS1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Release of gaseous radioactivity <b>resulting in offsite dose greater than 100 mRem TEDE or 500 mRem CDE Thyroid.</b></p> <p><u>Emergency Action Level (EAL):</u></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> </ul> <p>1. Dose assessment using actual meteorology indicates doses at or beyond the site boundary of <b>EITHER</b>:</p> <p style="margin-left: 20px;">a. &gt; <b>100 mRem TEDE</b></p> <p style="margin-left: 40px;"><b>OR</b></p> <p style="margin-left: 20px;">b. &gt; <b>500 mRem CDE Thyroid</b></p> <p><b>OR</b></p> <p>2. Field survey results at or beyond the site boundary indicate <b>EITHER</b>:</p> <p style="margin-left: 20px;">a. Gamma (closed window) dose rates &gt; <b>100 mR/hr</b> are expected to continue for <b>≥ 60 minutes</b>.</p> <p style="margin-left: 40px;"><b>OR</b></p> <p style="margin-left: 20px;">b. Analyses of field survey samples indicate &gt; <b>500 mRem CDE Thyroid for 60 minutes</b> of inhalation.</p>	<p><b>RA1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Release of gaseous or liquid radioactivity resulting in offsite dose greater than 10 mRem TEDE or 50 mRem CDE Thyroid.</p> <p><u>Emergency Action Level (EAL):</u></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> <li>If an ongoing release is detected and the release start time is unknown, assume that the release duration has exceeded 15 minutes.</li> <li>Classification based on effluent monitor readings assumes that a release path to the environment is established. If the effluent flow past an effluent monitor is known to have stopped due to actions to isolate the release path, then the effluent monitor reading is no longer valid for classification purposes.</li> <li>The pre-calculated effluent monitor values presented in EAL #1 should be used for emergency classification assessments until the results from a dose assessment using actual meteorology are available.</li> </ul> <p>1. Reading on <b>Stack (RN 10 A/B) Effluent Monitor</b> &gt; <b>1.5 E+05 cps for ≥ 15 minutes</b>.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p style="margin-left: 20px;">2. Dose assessment using actual meteorology indicates doses at or beyond the site boundary of <b>EITHER</b>:</p> <p style="margin-left: 40px;">a. &gt; <b>10 mRem TEDE</b></p> <p style="margin-left: 60px;"><b>OR</b></p> <p style="margin-left: 40px;">b. &gt; <b>50 mRem CDE Thyroid</b></p> <p style="margin-left: 20px;"><b>OR</b></p> <p style="margin-left: 20px;">3. Analysis of a liquid effluent sample indicates a concentration or release rate that would result in doses greater than <b>EITHER</b> of the following at or beyond the site boundary.</p> <p style="margin-left: 40px;">a. <b>10 mRem TEDE for 60 minutes</b> of exposure.</p> <p style="margin-left: 60px;"><b>OR</b></p> <p style="margin-left: 40px;">b. <b>50 mRem CDE Thyroid for 60 minutes</b> of exposure.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p style="margin-left: 20px;">4. Field survey results at or beyond the site boundary indicate <b>EITHER</b>:</p> <p style="margin-left: 40px;">a. Gamma (closed window) dose rates &gt; <b>10 mR/hr</b> are expected to continue for <b>≥ 60 minutes</b>.</p> <p style="margin-left: 60px;"><b>OR</b></p> <p style="margin-left: 40px;">b. Analyses of field survey samples indicate &gt; <b>50 mRem CDE Thyroid for 60 minutes</b> of inhalation.</p>	<p><b>RU1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Release of gaseous or liquid radioactivity greater than 2 times the ODCM limits for 60 minutes or longer.</p> <p><u>Emergency Action Level (EAL):</u></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> <li>If an ongoing release is detected and the release start time is unknown, assume that the release duration has exceeded 15 minutes.</li> <li>Classification based on effluent monitor readings assumes that a release path to the environment is established. If the effluent flow past an effluent monitor is known to have stopped due to actions to isolate the release path, then the effluent monitor reading is no longer valid for classification purposes.</li> </ul> <p>1. Reading on the Rad Waste Discharge effluent monitor &gt; <b>2x alarm setpoint</b> established by a current radioactive release discharge permit for <b>≥ 60 minutes</b>.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p style="margin-left: 20px;">2. Reading on <b>Stack (RN 10 A/B) Effluent Monitor</b> &gt; <b>2.85 E+02 cps for ≥ 60 minutes</b>.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p style="margin-left: 20px;">3. Confirmed sample analyses for gaseous or liquid releases indicate concentrations or release rates &gt; <b>2x ODCM Limit</b> with a release duration of <b>≥ 60 minutes</b>.</p>
---	--	--	---

Radiological Effluents

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled

GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

**Abnormal Rad Levels / Radiological Effluents**

Radiological Effluents	<p><b>RG2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Spent fuel pool level cannot be restored to at least 316 feet for 60 minutes or longer.</p> <p><b>Emergency Action Levels (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the General Emergency promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>Spent fuel pool level cannot be restored to at least <b>316 feet</b> as indicated on LI-54-65A or LI-54-65B on SFP monitoring panel (PNL-54-65H) for <b>≥ 60 minutes</b>.</p>	<p><b>RS2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Spent fuel pool level at 316 feet.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Lowering of spent fuel pool level to <b>316 feet</b> as indicated on LI-54-65A or LI-54-65B on SFP monitoring panel (PNL-54-65H).</p>	<p><b>RA2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Significant lowering of water level above, or damage to, irradiated fuel.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>Uncovery of irradiated fuel in the REFUELING PATHWAY.</li> </ol> <p style="text-align: center;"><b>OR</b></p> <ol style="list-style-type: none"> <li>Damage to irradiated fuel resulting in a release of radioactivity from the fuel as indicated by <b>ANY</b> Table R1 Radiation Monitor Alarm.</li> </ol> <p style="text-align: center;"><b>OR</b></p> <ol style="list-style-type: none"> <li>Lowering of spent fuel pool level to <b>326 feet</b> as indicated on LI-54-65A or LI-54-65B on SFP monitoring panel (PNL-54-65H).</li> </ol>	<p><b>RU2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>UNPLANNED loss of water level above irradiated fuel.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>UNPLANNED water level drop in the REFUELING PATHWAY as indicated by;                     <ul style="list-style-type: none"> <li>SFP water level &lt; <b>low water level alarm</b>.</li> </ul> </li> </ol> <p style="text-align: center;"><b>OR</b></p> <ul style="list-style-type: none"> <li>Indication or report of a drop in water level in the REFUELING PATHWAY.</li> </ul> <p style="text-align: center;"><b>AND</b></p> <ol style="list-style-type: none"> <li>UNPLANNED Area Radiation Monitor reading rise on <b>ANY</b> radiation monitor in Table R1.</li> </ol>																			
	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Table R1 Refuel Floor ARM's</th> </tr> <tr> <td colspan="2"> <ul style="list-style-type: none"> <li>ARM 18 (West end of shield wall)</li> <li>ARM 25 (Reactor Building – east wall)</li> <li>ARM 29 Refuel Bridge (Low Range)</li> <li>Refuel Bridge (High Range)</li> <li>Reactor Building Vent Radiation Monitor</li> </ul> </td> </tr> </table>	Table R1 Refuel Floor ARM's		<ul style="list-style-type: none"> <li>ARM 18 (West end of shield wall)</li> <li>ARM 25 (Reactor Building – east wall)</li> <li>ARM 29 Refuel Bridge (Low Range)</li> <li>Refuel Bridge (High Range)</li> <li>Reactor Building Vent Radiation Monitor</li> </ul>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Table R2 Areas Requiring Continuous Occupancy</th> </tr> <tr> <td colspan="2"> <ul style="list-style-type: none"> <li>Main Control Room</li> <li>Central Alarm Station – (by survey)</li> </ul> </td> </tr> </table> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Table R3 Areas with Entry Related Mode Applicability</th> </tr> <tr> <th style="width:60%;">Area</th> <th style="width:40%;">Entry Related Mode Applicability</th> </tr> <tr> <td style="text-align: center;">Reactor Building</td> <td rowspan="4" style="text-align: center; vertical-align: middle;">Modes 2, 3 and 4</td> </tr> <tr> <td>198' Northeast corner</td> </tr> <tr> <td>261' North and Shutdown Cooling Room</td> </tr> <tr> <td>281' North</td> </tr> <tr> <td style="text-align: center;">Turbine Building</td> <td rowspan="2"></td> </tr> <tr> <td>291' North</td> </tr> </table>	Table R2 Areas Requiring Continuous Occupancy		<ul style="list-style-type: none"> <li>Main Control Room</li> <li>Central Alarm Station – (by survey)</li> </ul>		Table R3 Areas with Entry Related Mode Applicability		Area	Entry Related Mode Applicability	Reactor Building	Modes 2, 3 and 4	198' Northeast corner	261' North and Shutdown Cooling Room	281' North	Turbine Building		291' North	<p><b>RA3</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Radiation levels that impede access to equipment necessary for normal plant operations, cooldown or shutdown.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> If the equipment in the room or area listed in Table R3 was already inoperable, or not available, before the event occurred, then no emergency classification is warranted.</p> <ol style="list-style-type: none"> <li>Dose rate &gt; <b>15 mR/hr</b> in <b>ANY</b> of the areas in Table R2.</li> </ol> <p style="text-align: center;"><b>OR</b></p> <ol style="list-style-type: none"> <li>UNPLANNED event results in radiation levels that prohibit or significantly impede access to <b>ANY</b> of the areas in Table R3.</li> </ol>
Table R1 Refuel Floor ARM's																							
<ul style="list-style-type: none"> <li>ARM 18 (West end of shield wall)</li> <li>ARM 25 (Reactor Building – east wall)</li> <li>ARM 29 Refuel Bridge (Low Range)</li> <li>Refuel Bridge (High Range)</li> <li>Reactor Building Vent Radiation Monitor</li> </ul>																							
Table R2 Areas Requiring Continuous Occupancy																							
<ul style="list-style-type: none"> <li>Main Control Room</li> <li>Central Alarm Station – (by survey)</li> </ul>																							
Table R3 Areas with Entry Related Mode Applicability																							
Area	Entry Related Mode Applicability																						
Reactor Building	Modes 2, 3 and 4																						
198' Northeast corner																							
261' North and Shutdown Cooling Room																							
281' North																							
Turbine Building																							
291' North																							

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled

GENERAL EMERGENCY			SITE AREA EMERGENCY			ALERT		
FG1 Loss of ANY two barriers AND Loss or Potential Loss of third barrier. 1 2			FS1 Loss or Potential Loss of ANY two barriers. 1 2			FA1 ANY Loss or ANY Potential Loss of either Fuel Clad or RCS 1 2		
Sub-Category	FC – Fuel Clad		RC – Reactor Coolant System		CT - Containment			
	Loss	Potential Loss	Loss	Potential Loss	Loss	Potential Loss		
1. RCS Activity	Coolant activity > 300 uCi/gm I-131 equivalent.	None	None	None	None	None		
2. RPV Water Level	1.SAP entry required	2. RPV water level <u>cannot</u> be restored and maintained > -84 inches. OR 3. RPV water level <u>cannot</u> be determined.	1. RPV water level <u>cannot</u> be restored and maintained > -84 inches. OR 2. RPV water level <u>cannot</u> be determined.	None	None	SAP entry required.		
3. Primary Containment Pressure / Conditions	None	None	1. a. Primary Containment pressure > 3.5 psig. AND b. Primary Containment pressure rise is due to RCS leakage.	None	1. UNPLANNED rapid drop in Primary Containment pressure following Primary Containment pressure rise. OR 2. Primary Containment pressure response <u>not</u> consistent with LOCA conditions.	3. Torus pressure > 35 psig and rising. OR 4. a. Primary Containment hydrogen concentration ≥ 6%. AND b. Primary Containment oxygen concentration ≥ 5%. OR 5. Heat Capacity Temperature Limit (N1-EOP-4 Figure M) exceeded.		
4. RCS Leak Rate	None	None	1. UNISOLABLE Main Steam line, EC steam line, Feedwater, or RWCU line break. OR 2. RPV Blowdown is required.	3. UNISOLABLE primary system leakage that results in EITHER of the following: a. ANY area temperature > N1-EOP-5 Detail T alarm set point. OR b. ANY area radiation level > N1-EOP-5 Detail R alarm set point.	None	None		
5. Primary Containment Radiation	Drywell radiation reading > 1.8 E+03 R/hr.	None	Drywell radiation reading > 100 R/hr.	None	None	Drywell radiation reading > 1.8 E+04 R/hr.		
6. Primary Containment Isolation Failure	None	None	None	None	1. UNISOLABLE direct downstream pathway to the environment exists after primary containment isolation signal. OR 2. Intentional Primary Containment venting/purging per EOPs or SAPs due to accident conditions. OR 3. UNISOLABLE primary system leakage that results in EITHER of the following: a. Maximum safe general area temperature > 135°F. OR b. Maximum safe area radiation level > 8 R/hr.	None		
7. Emergency Director Judgment	1. Any Condition in the opinion of the Emergency Director that indicates Loss of the Fuel Clad Barrier.	2. Any Condition in the opinion of the Emergency Director that indicates Potential Loss of the Fuel Clad Barrier.	1. Any Condition in the opinion of the Emergency Director that indicates Loss of the RCS Barrier.	2. Any Condition in the opinion of the Emergency Director that indicates Potential Loss of the RCS Barrier.	1. Any Condition in the opinion of the Emergency Director that indicates Loss of the Containment Barrier.	2. Any Condition in the opinion of the Emergency Director that indicates Potential Loss of the Containment Barrier.		

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY		ALERT		UNUSUAL EVENT	
<b>System Malfunction</b>							
Loss of AC Power	<p><b>MG1</b> <span style="float: right;">1 2</span></p> <p>Prolonged loss of all offsite and all onsite AC power to emergency buses.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>1. Loss of <b>ALL</b> offsite and onsite AC power to 4.16 kV Emergency Buses.</p> <p><b>AND</b></p> <p>2. <b>EITHER</b> of the following:</p> <p style="margin-left: 20px;">a. Restoration of at least one 4.16 kV Emergency Bus in <b>&lt; 4 hours</b> is <b>not</b> likely.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p style="margin-left: 20px;">b. RPV water level <b>cannot</b> be restored and maintained <b>&gt; -109 inches</b>.</p>	Loss of DC Power	<p><b>MS1</b> <span style="float: right;">1 2</span></p> <p>Loss of all offsite and onsite AC power to emergency buses for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>1. Loss of <b>ALL</b> offsite and onsite AC Power to 4.16 kV Emergency Buses.</p> <p><b>AND</b></p> <p>2. Failure to restore power to at least one 4.16 kV Emergency Bus from the time of loss of both offsite and onsite AC power in <b>&lt; 15 minutes</b>.</p>	<p><b>MA1</b> <span style="float: right;">1 2</span></p> <p>Loss of all but one AC power source to emergency buses for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>1. AC power capability to 4.16 kV Emergency Buses reduced to only one of the following power sources for <b>≥ 15 minutes</b>.</p> <ul style="list-style-type: none"> <li>• T-101 N</li> <li>• T-101 S</li> <li>• DG-102 Emergency Diesel Generator</li> <li>• DG-103 Emergency Diesel Generator</li> </ul> <p><b>AND</b></p> <p>2. <b>ANY</b> additional single power source failure will result in a loss of all AC power to SAFETY SYSTEMS.</p>	<p><b>MU1</b> <span style="float: right;">1 2</span></p> <p>Loss of all offsite AC power capability to emergency buses for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>Loss of <b>ALL</b> offsite AC power capability to 4.16 kV Emergency Buses for <b>≥ 15 minutes</b>.</p> <ul style="list-style-type: none"> <li>• T-101 N</li> <li>• T-101 S</li> </ul>		
	<p><b>MG2</b> <span style="float: right;">1 2</span></p> <p>Loss of all AC and Vital DC power sources for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>1. Loss of <b>ALL</b> offsite and onsite AC power to 4.16 kV Emergency Buses.</p> <p><b>AND</b></p> <p>2. Voltage is <b>&lt; 106 VDC</b> on 125 VDC Battery Boards 11 and 12.</p> <p><b>AND</b></p> <p>3. <b>ALL</b> AC and Vital DC power sources have been lost for <b>≥ 15 minutes</b>.</p>		<p><b>MS2</b> <span style="float: right;">1 2</span></p> <p>Loss of all Vital DC power for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>Voltage is <b>&lt; 106 VDC</b> on 125 VDC Battery Boards 11 and 12 for <b>≥ 15 minutes</b>.</p>				

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY		ALERT		UNUSUAL EVENT				
<b>System Malfunction</b>										
RPS Failure		<p><b>MS3</b> <span style="float: right;">1</span></p> <p>Inability to shutdown the reactor causing a challenge to RPV Water Level or RCS heat removal.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>Automatic scram did <b>not</b> shutdown the reactor as indicated by Reactor Power &gt; 6%.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li><b>ALL</b> manual / ARI actions to shutdown the reactor have been unsuccessful as indicated by Reactor Power &gt; 6%.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li><b>EITHER</b> of the following conditions exist:                             <ul style="list-style-type: none"> <li>RPV water level <b>cannot</b> be restored and maintained &gt; -109 inches.</li> <li><b>OR</b></li> <li>Heat Capacity Temperature Limit (N1-EOP-4 Figure M) exceeded.</li> </ul> </li> </ol>		<p><b>MA3</b> <span style="float: right;">1</span></p> <p>Automatic or manual scram fails to shutdown the reactor, and subsequent manual actions taken at the Reactor Control Console are not successful in shutting down the reactor.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> A manual action is any operator action, or set of actions, which causes the control rods to be rapidly inserted into the core, and does not include manually driving in control rods or implementation of boron injection strategies.</p> <p><b>Note:</b> A manual action is any operator action, or set of actions, which causes the control rods to be rapidly inserted into the core, and does not include manually driving in control rods or implementation of boron injection strategies.</p> <ol style="list-style-type: none"> <li>Automatic or manual scram did <b>not</b> shutdown the reactor as indicated by Reactor Power &gt; 6%.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>Manual / ARI actions taken at the Reactor Control Console are <b>not</b> successful in shutting down the reactor as indicated by Reactor Power &gt; 6%.</li> </ol>		<p><b>MU3</b> <span style="float: right;">1</span></p> <p>Automatic or manual scram fails to shutdown the reactor.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> A manual action is any operator action, or set of actions, which causes the control rods to be rapidly inserted into the core, and does not include manually driving in control rods or implementation of boron injection strategies.</p> <ol style="list-style-type: none"> <li> <ol style="list-style-type: none"> <li>Automatic scram did <b>not</b> shutdown the reactor as indicated by Reactor Power &gt; 6%.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>Subsequent manual / ARI action taken at the Reactor Control Console is successful in shutting down the reactor as indicated by Reactor Power ≤ 6%.</li> </ol> </li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li> <ol style="list-style-type: none"> <li>Manual scram did <b>not</b> shutdown the reactor as indicated by Reactor Power &gt; 6%.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li><b>EITHER</b> of the following:                                     <ol style="list-style-type: none"> <li>Subsequent manual / ARI action taken at the Reactor Control Console is successful in shutting down the reactor as indicated by Reactor Power ≤ 6%.</li> </ol> </li> <li><b>OR</b></li> <li>Subsequent automatic scram / ARI is successful in shutting down the reactor as indicated by Reactor Power ≤ 6%.</li> </ol> </li> </ol>				
	Control Room Indications	<table border="1" style="width: 100%;"> <thead> <tr> <th>Table M1 Control Room Parameters</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>Reactor Power</li> <li>RPV Water Level</li> <li>RPV Pressure</li> <li>Primary Containment Pressure</li> <li>Torus Water Level</li> <li>Torus Water Temperature</li> </ul> </td> </tr> </tbody> </table>	Table M1 Control Room Parameters	<ul style="list-style-type: none"> <li>Reactor Power</li> <li>RPV Water Level</li> <li>RPV Pressure</li> <li>Primary Containment Pressure</li> <li>Torus Water Level</li> <li>Torus Water Temperature</li> </ul>	<table border="1" style="width: 100%;"> <thead> <tr> <th>Table M2 Significant Transients</th> </tr> </thead> <tbody> <tr> <td> <ul style="list-style-type: none"> <li>Turbine runback &gt; 25% thermal reactor power</li> <li>Reactor scram</li> <li>ECCS actuation</li> <li>Thermal power oscillations &gt; 10%</li> </ul> </td> </tr> </tbody> </table>	Table M2 Significant Transients	<ul style="list-style-type: none"> <li>Turbine runback &gt; 25% thermal reactor power</li> <li>Reactor scram</li> <li>ECCS actuation</li> <li>Thermal power oscillations &gt; 10%</li> </ul>		<p><b>MA4</b> <span style="float: right;">1 2</span></p> <p>UNPLANNED loss of Control Room indications for 15 minutes or longer with a significant transient in progress.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <ol style="list-style-type: none"> <li>UNPLANNED event results in the inability to monitor <b>ANY</b> Table M1 parameter from within the Control Room for <b>≥ 15 minutes</b>.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li><b>ANY</b> Table M2 transient in progress.</li> </ol>	
Table M1 Control Room Parameters										
<ul style="list-style-type: none"> <li>Reactor Power</li> <li>RPV Water Level</li> <li>RPV Pressure</li> <li>Primary Containment Pressure</li> <li>Torus Water Level</li> <li>Torus Water Temperature</li> </ul>										
Table M2 Significant Transients										
<ul style="list-style-type: none"> <li>Turbine runback &gt; 25% thermal reactor power</li> <li>Reactor scram</li> <li>ECCS actuation</li> <li>Thermal power oscillations &gt; 10%</li> </ul>										

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
<b>System Malfunction</b>				
Hazard Affecting Safety System			<p><b>MA5</b> <span style="float: right;">1 2</span></p> <p>Hazardous event affecting a SAFETY SYSTEM required for the current operating mode.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> If it is determined that the conditions of MA5 are not met then assess the event via HU3, HU4, or HU6.</p> <p>1. The occurrence of <b>ANY</b> of the following hazardous events:</p> <ul style="list-style-type: none"> <li>• Seismic event (earthquake)</li> <li>• Internal or external flooding event</li> <li>• High winds or tornado strike</li> <li>• FIRE</li> <li>• EXPLOSION</li> <li>• Other events with similar hazard characteristics as determined by the Shift Manager</li> </ul> <p><b>AND</b></p> <p>2. <b>EITHER</b> of the following:</p> <p>a. Event damage has caused indications of degraded performance in at least one train of a SAFETY SYSTEM required by Technical Specifications for the current operating mode.</p> <p><b>OR</b></p> <p>b. The event has caused <b>VISIBLE DAMAGE</b> to a SAFETY SYSTEM component or structure required by Technical Specifications for the current operating mode.</p>	
	RCS Leak			

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled

GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

**System Malfunction**

Communications			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4">Table M3 Communication Capabilities</th> </tr> <tr> <th>System</th> <th>Onsite</th> <th>Offsite</th> <th>NRC</th> </tr> </thead> <tbody> <tr> <td>Gaitronics</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>Hand Held Portable Radio (Station Radio)</td> <td style="text-align: center;">X</td> <td></td> <td></td> </tr> <tr> <td>PBX (Conventional Telephone lines)</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td>Control Room installed satellite phone (non portable)</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td>ENS</td> <td></td> <td style="text-align: center;">X</td> <td style="text-align: center;">X</td> </tr> <tr> <td>RECS</td> <td></td> <td style="text-align: center;">X</td> <td></td> </tr> </tbody> </table>	Table M3 Communication Capabilities				System	Onsite	Offsite	NRC	Gaitronics	X			Hand Held Portable Radio (Station Radio)	X			PBX (Conventional Telephone lines)	X	X	X	Control Room installed satellite phone (non portable)	X	X	X	ENS		X	X	RECS		X		<p><b>MU7</b> <span style="float: right; border: 1px solid black; padding: 2px;">12</span></p> <p>Loss of all onsite or offsite communication capabilities.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>1. Loss of all Table M3 onsite communication capabilities affecting the ability to perform routine operations. <b>OR</b></li> <li>2. Loss of all Table M3 offsite communication capabilities affecting the ability to perform offsite notifications. <b>OR</b></li> <li>3. Loss of all Table M3 NRC communication capabilities affecting the ability to perform NRC notifications.</li> </ol>
Table M3 Communication Capabilities																																				
System	Onsite	Offsite	NRC																																	
Gaitronics	X																																			
Hand Held Portable Radio (Station Radio)	X																																			
PBX (Conventional Telephone lines)	X	X	X																																	
Control Room installed satellite phone (non portable)	X	X	X																																	
ENS		X	X																																	
RECS		X																																		

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D - Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT		
<b>Hazards and Other conditions Affecting Plant Safety</b>						
Hostile Action		<p><b>HS1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>HOSTILE ACTION within the PROTECTED AREA.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>A notification from the Security Force that a HOSTILE ACTION is occurring or has occurred within the PROTECTED AREA.</p>	<p><b>HA1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>HOSTILE ACTION within the OWNER CONTROLLED AREA or airborne attack threat within 30 minutes.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>1. A validated notification from NRC of an aircraft attack threat &lt; <b>30 minutes</b> from the site.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>2. Notification by the Security Force that a HOSTILE ACTION is occurring or has occurred within the OWNER CONTROLLED AREA.</li> </ol>	<p><b>HU1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Confirmed SECURITY CONDITION or threat.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>1. Notification of a credible security threat directed at the site as determined per SY-AA-101-132, Security Assessment and Response to Unusual Activities.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>2. A validated notification from the NRC providing information of an aircraft threat.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>3. Notification by the Security Force of a SECURITY CONDITION that does <b>not</b> involve a HOSTILE ACTION.</li> </ol>		
	Transfer of Plant Control	<table border="1" style="width: 100%;"> <tr> <th style="text-align: center;">Table H1 Safety Functions</th> </tr> <tr> <td> <ul style="list-style-type: none"> <li>• Reactivity Control (ability to shutdown the reactor and keep it shutdown)</li> <li>• RPV Water Level (ability to cool the core)</li> <li>• RCS Heat Removal (ability to maintain a heat sink)</li> </ul> </td> </tr> </table>	Table H1 Safety Functions	<ul style="list-style-type: none"> <li>• Reactivity Control (ability to shutdown the reactor and keep it shutdown)</li> <li>• RPV Water Level (ability to cool the core)</li> <li>• RCS Heat Removal (ability to maintain a heat sink)</li> </ul>	<p><b>HS2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Inability to control a key safety function from outside the Control Room.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <ol style="list-style-type: none"> <li>1. A Control Room evacuation has resulted in plant control being transferred from the Control Room to alternate locations per N1-SOP-21.2, Control Room Evacuation.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>2. Control of <b>ANY</b> Table H1 key safety function is <b>not</b> reestablished in &lt; <b>15 minutes</b>.</li> </ol>	<p><b>HA2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Control Room evacuation resulting in transfer of plant control to alternate locations.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>A Control Room evacuation has resulted in plant control being transferred from the Control Room to alternate locations per N1-SOP-21.2, Control Room Evacuation.</p>
Table H1 Safety Functions						
<ul style="list-style-type: none"> <li>• Reactivity Control (ability to shutdown the reactor and keep it shutdown)</li> <li>• RPV Water Level (ability to cool the core)</li> <li>• RCS Heat Removal (ability to maintain a heat sink)</li> </ul>						

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled



GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

Hazards and Other conditions Affecting Plant Safety

Fire			<p><b>HU3</b> <span style="float: right;">1 2 3 4 D</span></p> <p>FIRE potentially degrading the level of safety of the plant.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> <li>• Escalation of the emergency classification level would be via IC CA2 or MA5.</li> </ul> <ol style="list-style-type: none"> <li>1. A FIRE in <b>ANY</b> Table H2 area is <b>not</b> extinguished in <b>&lt; 15 minutes of ANY</b> of the following FIRE detection indications:             <ul style="list-style-type: none"> <li>• Report from the field (i.e., visual observation)</li> <li>• Receipt of multiple (more than 1) fire alarms or indications</li> <li>• Field verification of a single fire alarm</li> </ul> <p><b>OR</b></p> </li> <li>2. a. Receipt of a single fire alarm in <b>ANY</b> Table H2 area (i.e., no other indications of a FIRE).             <p style="margin-left: 20px;"><b>AND</b></p> <ul style="list-style-type: none"> <li>b. The existence of a FIRE is <b>not</b> verified in <b>&lt; 30 minutes</b> of alarm receipt.</li> </ul> <p><b>OR</b></p> </li> <li>3. A FIRE within the plant PROTECTED AREA not extinguished in <b>&lt; 60 minutes</b> of the initial report, alarm or indication.             <p><b>OR</b></p> </li> <li>4. A FIRE within the plant PROTECTED AREA that requires firefighting support by an offsite fire response agency to extinguish.</li> </ol>
------	--	--	--

Table H2 Areas
<ul style="list-style-type: none"> <li>• Reactor Building (when inerted the Drywell is exempt)</li> <li>• Control Room</li> <li>• Screenhouse</li> <li>• Turbine Building                             <ul style="list-style-type: none"> <li>• 11 and 12 Battery Rooms</li> <li>• 11 and 12 Battery Board Rooms</li> <li>• Cable Spreading Room</li> <li>• 291' North</li> <li>• Diesel Generator Engine and Board Rooms</li> </ul> </li> </ul>

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled

GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

Hazards and Other conditions Affecting Plant Safety

<b>Earthquake</b>			<p><b>HU4</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Seismic event greater than OBE levels</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• For emergency classification if EAL 2 is not able to be confirmed, then the occurrence of a seismic event is confirmed in manner deemed appropriate by the Shift Manager or Emergency Director in <b>≤ 15 minutes</b> of the event.</li> <li>• Escalation of the emergency classification level would be via IC CA2 or MA5.</li> </ul> <p>Seismic event as indicated by:</p> <ol style="list-style-type: none"> <li>1. Control Room personnel feel an actual or potential seismic event.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>2. <b>ANY</b> one of the following confirmed in <b>≤ 15 minutes</b> of the event:             <ul style="list-style-type: none"> <li>• The earthquake resulted in Modified Mercalli Intensity (MMI) <b>≥ VI</b> and occurred <b>≤ 3.5 miles</b> of the plant.</li> <li>• The earthquake was magnitude <b>≥ 6.0</b></li> <li>• The earthquake was magnitude <b>≥ 5.0</b> and occurred <b>≤ 125 miles</b> from the plant.</li> <li>• NMP-2 seismic instrumentation indicates <b>&gt; 0.075g</b></li> </ul> </li> </ol>											
<b>Toxic Gas</b>	<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2">Table H3 Areas with Entry Related Mode Applicability</th> </tr> <tr> <th style="width:50%;">Area</th> <th style="width:50%;">Entry Related Mode Applicability</th> </tr> </thead> <tbody> <tr> <td>Reactor Building</td> <td rowspan="4">Modes 2, 3, and 4</td> </tr> <tr> <td>198' Northeast corner 261' North and Shutdown Cooling Room</td> </tr> <tr> <td>281' North</td> </tr> <tr> <td>Turbine Building</td> </tr> <tr> <td>291' North</td> <td></td> </tr> </tbody> </table>	Table H3 Areas with Entry Related Mode Applicability		Area	Entry Related Mode Applicability	Reactor Building	Modes 2, 3, and 4	198' Northeast corner 261' North and Shutdown Cooling Room	281' North	Turbine Building	291' North		<p><b>HA5</b> <span style="float: right;">2 3 4</span></p> <p>Gaseous release impeding access to equipment necessary for normal plant operations, cooldown or shutdown.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> If the equipment in the listed room or area was not available, or out of service, before the event occurred, then no emergency classification is warranted.</p> <ol style="list-style-type: none"> <li>1. Release of a toxic, corrosive, asphyxiant or flammable gas in <b>ANY</b> Table H3 area.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>2. Entry into the room or area is prohibited or impeded.</li> </ol>	
Table H3 Areas with Entry Related Mode Applicability														
Area	Entry Related Mode Applicability													
Reactor Building	Modes 2, 3, and 4													
198' Northeast corner 261' North and Shutdown Cooling Room														
281' North														
Turbine Building														
291' North														

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY		ALERT		UNUSUAL EVENT	
<b>Hazards and Other conditions Affecting Plant Safety</b>							
<b>Hazardous Event</b>						<p><b>HU6</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Hazardous Event</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>EAL #4 does not apply to routine traffic impediments such as fog, snow, ice, or vehicle breakdowns or accidents.</li> <li>Escalation of the emergency classification level would be via IC CA2 or MA5.</li> </ul> <ol style="list-style-type: none"> <li>Tornado strike within the PROTECTED AREA.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Internal room or area flooding of a magnitude sufficient to require manual or automatic electrical isolation of a SAFETY SYSTEM component required by Technical Specifications for the current operating mode.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Movement of personnel within the PROTECTED AREA is impeded due to an offsite event involving hazardous materials (e.g., an offsite chemical spill or toxic gas release).</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>A hazardous event that results in onsite conditions sufficient to prohibit the plant staff from accessing the site via personal vehicles.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Intake water level &lt; 238.8 feet.</li> </ol>	
	<p><b>HG7</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Other conditions exist which in the judgment of the Emergency Director warrant declaration of a GENERAL EMERGENCY.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which involve actual or IMMINENT substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.</p>	<p><b>HS7</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Other conditions exist which in the judgment of the Emergency Director warrant declaration of a SITE AREA EMERGENCY.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts, (1) toward site personnel or equipment that could lead to the likely failure of or, (2) that prevent effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.</p>	<p><b>HA7</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Other conditions exist which in the judgment of the Emergency Director warrant declaration of an ALERT.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Other conditions exist which, in the judgment of the Emergency Director, indicate that events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.</p>	<p><b>HU7</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Other conditions exist which in the judgment of the Emergency Director warrant declaration of an UNUSUAL EVENT.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.</p>			

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D – Defueled

Month 20XX

**HOT MATRIX**

NMP 2-11

**HOT MATRIX**

EP-AA-1013 Addendum 3 (Rev. X)

GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

ISFSI Malfunction

ISFSI			<p><b>E-HU1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Damage to a loaded cask CONFINEMENT BOUNDARY.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Damage to a loaded cask CONFINEMENT BOUNDARY as indicated by a radiation reading:</p> <p>For 61BT DSC:</p> <ul style="list-style-type: none"> <li>• &gt; 800 mrem/hr 3 feet from the HSM surface</li> <li style="padding-left: 20px;"><b>OR</b></li> <li>• &gt; 200 mrem/hr outside the HSM door on centerline of DSC</li> <li style="padding-left: 20px;"><b>OR</b></li> <li>• &gt; 40 mrem/hr end of shield wall exterior</li> </ul> <p>For 61BTH DSC:</p> <ul style="list-style-type: none"> <li>• &gt; 1400 mrem/hr on the HSM or HSM-H front surface</li> <li style="padding-left: 20px;"><b>OR</b></li> <li>• &gt; 200 mrem/hr on the HSM or HSM-H door centerline</li> <li style="padding-left: 20px;"><b>OR</b></li> <li>• &gt; 40 mrem/hr on the end shield wall exterior</li> </ul>
-------	--	--	--

Modes: 1 – Power Operation    2 – Hot Shutdown    3 – Cold Shutdown    4 – Refueling    D - Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY		ALERT		UNUSUAL EVENT	
<b>Abnormal Rad Levels / Radiological Effluents</b>							
Radiological Effluents	<p><b>RG1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Release of gaseous radioactivity resulting in offsite dose greater than 1,000 mRem TEDE or 5,000 mRem CDE Thyroid.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> </ul> <p>1. Dose assessment Using actual meteorology indicates doses at or beyond the site boundary of <b>EITHER</b>:</p> <p style="margin-left: 20px;">a. &gt; 1000 mRem TEDE</p> <p style="margin-left: 40px;"><b>OR</b></p> <p style="margin-left: 20px;">b. &gt; 5000 mRem CDE Thyroid</p> <p><b>OR</b></p> <p>2. Field survey results at or beyond the site boundary indicate <b>EITHER</b>:</p> <p style="margin-left: 20px;">a. Gamma (closed window) dose rates &gt; 1000 mR/hr are expected to continue for ≥ 60 minutes.</p> <p style="margin-left: 40px;"><b>OR</b></p> <p style="margin-left: 20px;">b. Analyses of field survey samples indicate &gt; 5000 mRem CDE Thyroid for 60 minutes of inhalation.</p>	<p><b>RS1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Release of gaseous radioactivity resulting in offsite dose greater than 100 mRem TEDE or 500 mRem CDE Thyroid.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> </ul> <p>1. Dose assessment using actual meteorology indicates doses at or beyond the site boundary of <b>EITHER</b>:</p> <p style="margin-left: 20px;">a. &gt; 100 mRem TEDE</p> <p style="margin-left: 40px;"><b>OR</b></p> <p style="margin-left: 20px;">b. &gt; 500 mRem CDE Thyroid</p> <p><b>OR</b></p> <p>2. Field survey results at or beyond the site boundary indicate <b>EITHER</b>:</p> <p style="margin-left: 20px;">a. Gamma (closed window) dose rates &gt; 100 mR/hr are expected to continue for ≥ 60 minutes.</p> <p style="margin-left: 40px;"><b>OR</b></p> <p style="margin-left: 20px;">b. Analyses of field survey samples indicate &gt; 500 mRem CDE Thyroid for 60 minutes of inhalation.</p>	<p><b>RA1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Release of gaseous or liquid radioactivity resulting in offsite dose greater than 10 mrem TEDE or 50 mrem CDE Thyroid.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> <li>If an ongoing release is detected and the release start time is unknown, assume that the release duration has exceeded 15 minutes.</li> <li>Classification based on effluent monitor readings assumes that a release path to the environment is established. If the effluent flow past an effluent monitor is known to have stopped due to actions to isolate the release path, then the effluent monitor reading is no longer valid for classification purposes.</li> <li>The pre-calculated effluent monitor values presented in EAL #1 should be used for emergency classification assessments until the results from a dose assessment using actual meteorology are available.</li> </ul> <p>1. Reading on <b>Stack (RN 10 A/B)</b> Effluent Monitor &gt; 1.5 E+05 cps for ≥ 15 minutes.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p>2. Dose assessment using actual meteorology indicates doses at or beyond the site boundary of <b>EITHER</b>:</p> <p style="margin-left: 40px;">a. &gt; 10 mRem TEDE</p> <p style="margin-left: 80px;"><b>OR</b></p> <p style="margin-left: 40px;">b. &gt; 50 mRem CDE Thyroid</p> <p style="margin-left: 20px;"><b>OR</b></p> <p>3. Analysis of a liquid effluent sample indicates a concentration or release rate that would result in doses greater than <b>EITHER</b> of the following at or beyond the site boundary.</p> <p style="margin-left: 40px;">a. 10 mRem TEDE for 60 minutes of exposure.</p> <p style="margin-left: 80px;"><b>OR</b></p> <p style="margin-left: 40px;">b. 50 mRem CDE Thyroid for 60 minutes of exposure.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p>4. Field survey results at or beyond the site boundary indicate <b>EITHER</b>:</p> <p style="margin-left: 40px;">a. Gamma (closed window) dose rates &gt; 10 mR/hr are expected to continue for ≥ 60 minutes.</p> <p style="margin-left: 80px;"><b>OR</b></p> <p style="margin-left: 40px;">b. Analyses of field survey samples indicate &gt; 50 mRem CDE Thyroid for 60 minutes of inhalation.</p>	<p><b>RU1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Release of gaseous or liquid radioactivity greater than 2 times the ODCM limits for 60 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> <li>If an ongoing release is detected and the release start time is unknown, assume that the release duration has exceeded 60 minutes.</li> <li>Classification based on effluent monitor readings assumes that a release path to the environment is established. If the effluent flow past an effluent monitor is known to have stopped due to actions to isolate the release path, then the effluent monitor reading is no longer valid for classification purposes.</li> </ul> <p>1. Reading on the Rad Waste Discharge effluent monitor &gt; 2x alarm setpoint established by a current radioactive release discharge permit for ≥ 60 minutes.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p>2. Reading on <b>Stack (RN 10 A/B)</b> Effluent Monitor &gt; 2.85 E+02 cps for ≥ 60 minutes.</p> <p style="margin-left: 20px;"><b>OR</b></p> <p>3. Confirmed sample analyses for gaseous or liquid releases indicate concentrations or release rates &gt; 2x ODCM Limit with a release duration of ≥ 60 minutes.</p>			

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY		ALERT		UNUSUAL EVENT							
<b>Abnormal Rad Levels / Radiological Effluents</b>													
Radiological Effluents	<p><b>RG2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Spent fuel pool level cannot be restored to at least 316 feet for 60 minutes or longer.</p> <p><b>Emergency Action Levels (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the General Emergency promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>Spent fuel pool level cannot be restored to at least <b>316 feet</b> as indicated on LI-54-65A or LI-54-65B on SFP monitoring panel (PNL-54-65H) for <b>≥ 60 minutes</b>.</p>	<p><b>RS2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Spent fuel pool level at 316 feet.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Lowering of spent fuel pool level to <b>316 feet</b> as indicated on LI-54-65A or LI-54-65B on SFP monitoring panel (PNL-54-65H).</p>	<p><b>RA2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Significant lowering of water level above, or damage to, irradiated fuel.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>Uncovery of irradiated fuel in the REFUELING PATHWAY.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Damage to irradiated fuel resulting in a release of radioactivity from the fuel as indicated by <b>ANY</b> Table R1 Radiation Monitor Alarm.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Lowering of spent fuel pool level to <b>326 feet</b> as indicated on LI-54-65A or LI-54-65B on SFP monitoring panel (PNL-54-65H).</li> </ol>	<p><b>RU2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Unplanned loss of water level above irradiated fuel.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>UNPLANNED water level drop in the REFUELING PATHWAY as indicated by;                             <ul style="list-style-type: none"> <li>SFP water level &lt; <b>low water level alarm</b>.</li> </ul> </li> </ol> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>Indication or report of a drop in water level in the REFUELING PATHWAY.</li> </ul> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>UNPLANNED Area Radiation Monitor reading rise on <b>ANY</b> radiation monitor in Table R1.</li> </ol>									
	<p style="text-align: center;"><b>Table R1 Refuel Floor ARM's</b></p> <ul style="list-style-type: none"> <li>ARM 18 (West end of shield wall)</li> <li>ARM 25 (Reactor Building – east wall)</li> <li>ARM 29 Refuel Bridge (Low Range)</li> <li>Refuel Bridge (High Range)</li> <li>Reactor Building Vent Radiation Monitor</li> </ul>	<p style="text-align: center;"><b>Table R2 Areas Requiring Continuous Occupancy</b></p> <ul style="list-style-type: none"> <li>Main Control Room</li> <li>Central Alarm Station – (by survey)</li> </ul>	<p><b>RA3</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Radiation levels that impede access to equipment necessary for normal plant operations, cooldown or shutdown.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> If the equipment in the room or area listed in Table R3 was already inoperable, or not available, before the event occurred, then no emergency classification is warranted.</p> <ol style="list-style-type: none"> <li>Dose rate &gt; <b>15 mR/hr</b> in <b>ANY</b> of the areas in Table R2.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>UNPLANNED event results in radiation levels that prohibit or significantly impede access to <b>ANY</b> of the areas in Table R3.</li> </ol>										
<p style="text-align: center;"><b>Table R3 Areas with Entry Related Mode Applicability</b></p> <table border="1"> <thead> <tr> <th>Area</th> <th>Entry Related Mode Applicability</th> </tr> </thead> <tbody> <tr> <td>Reactor Building</td> <td rowspan="4" style="text-align: center;">Modes 2, 3 and 4</td> </tr> <tr> <td>198' Northeast corner</td> </tr> <tr> <td>261' North and Shutdown Cooling Room</td> </tr> <tr> <td>281' North</td> </tr> <tr> <td>Turbine Building</td> <td rowspan="2"></td> </tr> <tr> <td>291' North</td> </tr> </tbody> </table>		Area	Entry Related Mode Applicability	Reactor Building	Modes 2, 3 and 4	198' Northeast corner	261' North and Shutdown Cooling Room	281' North	Turbine Building		291' North		
Area	Entry Related Mode Applicability												
Reactor Building	Modes 2, 3 and 4												
198' Northeast corner													
261' North and Shutdown Cooling Room													
281' North													
Turbine Building													
291' North													

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
Cold Shutdown / Refueling System Malfunctions				
Loss of AC Power			<p><b>CA1</b> <span style="float: right;">3 4 D</span></p> <p>Loss of all offsite and onsite AC power to emergency buses for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <ol style="list-style-type: none"> <li>Loss of all offsite and onsite AC power to 4.16 kV Emergency Buses.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>Failure to restore power to at least one 4.16 kV Emergency Bus from the time of loss of both offsite and onsite AC power in <b>&lt; 15 minutes</b>.</li> </ol>	<p><b>CU1</b> <span style="float: right;">3 4 D</span></p> <p>Loss of all but one AC power source to emergency buses for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <ol style="list-style-type: none"> <li>AC power capability to 4.16 kV Emergency Buses reduced to only one of the following power sources for <b>≥ 15 minutes</b>.                             <ul style="list-style-type: none"> <li>T-101 N</li> <li>T-101 S</li> <li>DG-102 Emergency Diesel Generator</li> <li>DG-103 Emergency Diesel Generator</li> </ul> </li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li><b>ANY</b> additional single power source failure will result in a loss of all AC power to SAFETY SYSTEMS.</li> </ol>
	Hazard Affecting Safety System			<p><b>CA2</b> <span style="float: right;">3 4</span></p> <p>Hazardous event affecting SAFETY SYSTEM required for the current operating mode.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> If it is determined that the conditions of CA2 are not met then assess the event via HU3, HU4, or HU6.</p> <ol style="list-style-type: none"> <li>The occurrence of <b>ANY</b> of the following hazardous events:                             <ul style="list-style-type: none"> <li>Seismic event (earthquake)</li> <li>Internal or external flooding event</li> <li>High winds or tornado strike</li> <li>FIRE</li> <li>EXPLOSION</li> <li>Other events with similar hazard characteristics as determined by the Shift Manager</li> </ul> </li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li><b>EITHER</b> of the following:                             <ol style="list-style-type: none"> <li>Event damage has caused indications of degraded performance in at least one train of a SAFETY SYSTEM required by Technical Specifications for the current operating mode.</li> </ol> </li> <li><b>OR</b></li> <li>The event has caused <b>VISIBLE DAMAGE</b> to a SAFETY SYSTEM component or structure required by Technical Specifications for the current operating mode.</li> </ol>

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY		ALERT		UNUSUAL EVENT																															
Cold Shutdown / Refueling System Malfunctions																																					
DC Power						<p><b>CU3</b> <span style="float: right;">3 4</span></p> <p>Loss of Vital DC power for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>Voltage is &lt; <b>106 VDC</b> on required 125 VDC Battery Boards 11 and 12 for <b>≥ 15 minutes</b>.</p>																															
	Communications				<table border="1"> <thead> <tr> <th colspan="4">Table C1 Communication Capabilities</th> </tr> <tr> <th>System</th> <th>Onsite</th> <th>Offsite</th> <th>NRC</th> </tr> </thead> <tbody> <tr> <td>Gaitronics</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Hand Held Portable Radio (Station Radio)</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>PBX (Conventional Telephone lines)</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>Control Room installed satellite phone (non portable)</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>ENS</td> <td></td> <td>X</td> <td>X</td> </tr> <tr> <td>RECS</td> <td></td> <td>X</td> <td></td> </tr> </tbody> </table>	Table C1 Communication Capabilities				System	Onsite	Offsite	NRC	Gaitronics	X			Hand Held Portable Radio (Station Radio)	X			PBX (Conventional Telephone lines)	X	X	X	Control Room installed satellite phone (non portable)	X	X	X	ENS		X	X	RECS		X	
Table C1 Communication Capabilities																																					
System	Onsite	Offsite	NRC																																		
Gaitronics	X																																				
Hand Held Portable Radio (Station Radio)	X																																				
PBX (Conventional Telephone lines)	X	X	X																																		
Control Room installed satellite phone (non portable)	X	X	X																																		
ENS		X	X																																		
RECS		X																																			
Heat Sink					<p><b>CA5</b> <span style="float: right;">3 4</span></p> <p>Inability to maintain plant in cold shutdown.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> <li>A momentary UNPLANNED excursion above the Technical Specification cold shutdown temperature limit when heat removal function is available does not warrant classification.</li> </ul> <ol style="list-style-type: none"> <li>UNPLANNED rise in RCS temperature to &gt; <b>212°F</b> for &gt; <b>Table C2 duration</b>.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>UNPLANNED RPV pressure rise &gt; <b>10 psig</b> as a result of temperature rise.</li> </ol>	<p><b>CU5</b> <span style="float: right;">3 4</span></p> <p>UNPLANNED rise in RCS temperature.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</li> <li>A momentary UNPLANNED excursion above the Technical Specification cold shutdown temperature limit when heat removal function is available does not warrant classification.</li> </ul> <ol style="list-style-type: none"> <li>UNPLANNED rise in RCS temperature to &gt; <b>212°F</b>.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Loss of the following for <b>≥ 15 minutes</b>:                             <ul style="list-style-type: none"> <li><b>ALL</b> RCS temperature indications</li> </ul> </li> </ol> <p><b>AND</b></p> <ul style="list-style-type: none"> <li><b>ALL</b> RPV level indications</li> </ul>																															

Table C2 RCS Heat-up Duration Thresholds		
RCS Status	Containment Closure Status	Heat-up Duration
Intact	Not Applicable	60 minutes*
Not Intact	Established	20 minutes*
	Not Established	0 minutes

\* If an RCS heat removal system is in operation within this time frame and RCS temperature is being reduced, then EAL #1 is not applicable.

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D - Defueled



GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

**Cold Shutdown / Refueling System Malfunctions**

<p><b>CG6</b> <span style="float: right;">3 4</span></p> <p>Loss of RPV inventory affecting fuel clad integrity with containment challenged.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>1. a. RPV water level &lt; - <b>84 inches</b> for <b>≥ 30 minutes</b>. <b>AND</b> b. <b>ANY</b> Table C4 Containment Challenge Indication. <b>OR</b></p> <p>2. a. RPV water level <b>cannot</b> be monitored for <b>≥ 30 minutes</b>. <b>AND</b> b. Core uncovery is indicated by <b>ANY</b> of the following:</p> <ul style="list-style-type: none"> <li>• Table C3 indication of a sufficient magnitude to indicate core uncovery.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• Refuel Bridge High Range Radiation Monitor reading <b>≥ 3 R/hr.</b></li> </ul> <p><b>AND</b></p> <p>c. <b>ANY</b> Table C4 Containment Challenge Indication.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>Table C3 Indications of RCS Leakage</b></p> <ul style="list-style-type: none"> <li>• UNPLANNED Drywell equipment drain tank level rise*</li> <li>• UNPLANNED Drywell floor drain tank level rise*</li> <li>• UNPLANNED Reactor Building equipment sump level rise*</li> <li>• UNPLANNED Reactor Building floor drain sump level rise*</li> <li>• UNPLANNED Torus water level rise*</li> <li>• UNPLANNED RPV make up rate rise*</li> <li>• Observation of leakage or inventory loss</li> </ul> <p>*Rise in level is attributed to a loss of RPV inventory</p> </div>	<p><b>CS6</b> <span style="float: right;">3 4</span></p> <p>Loss of RPV inventory affecting core decay heat removal capabilities.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>1. With CONTAINMENT CLOSURE <b>not</b> established, RPV water level &lt; - <b>10 inches</b>. <b>OR</b></p> <p>2. With CONTAINMENT CLOSURE established, RPV water level &lt; - <b>84 inches</b>. <b>OR</b></p> <p>3. a. RPV water level <b>cannot</b> be monitored for <b>≥ 30 minutes</b>. <b>AND</b></p> <p>b. Core uncovery is indicated by <b>ANY</b> of the following:</p> <ul style="list-style-type: none"> <li>• Table C3 indication of a sufficient magnitude to indicate core uncovery.</li> </ul> <p><b>OR</b></p> <ul style="list-style-type: none"> <li>• Refuel Bridge High Range Radiation Monitor reading <b>≥ 3 R/hr.</b></li> </ul> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p align="center"><b>Table C4 Containment Challenge Indications</b></p> <ul style="list-style-type: none"> <li>• Primary Containment Hydrogen Concentration <b>≥ 6%</b> and Oxygen Concentration <b>≥ 5%</b></li> <li>• UNPLANNED rise in containment pressure</li> <li>• CONTAINMENT CLOSURE <b>not</b> established*</li> <li>• Reactor Building area radiation &gt; 8 R/hr.</li> </ul> <p>* If CONTAINMENT CLOSURE is re-established prior to exceeding the 30-minute core uncovery time limit, then escalation to a General Emergency is <b>not</b> required.</p> </div>	<p><b>CA6</b> <span style="float: right;">3 4</span></p> <p>Loss of RPV inventory</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>1. Loss of RPV inventory as indicated by level &lt; + <b>5 inches</b>. <b>OR</b></p> <p>2. a. RPV water level <b>cannot</b> be monitored for <b>≥ 15 minutes</b>. <b>AND</b> b. Loss of RPV inventory per Table C3 indications.</p>	<p><b>CU6</b> <span style="float: right;">3 4</span></p> <p>UNPLANNED loss of RPV inventory for 15 minutes or longer.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <p>1. UNPLANNED loss of reactor coolant results in the inability to restore and maintain RPV level to above the <b>procedurally established lower limit</b> for <b>≥ 15 minutes</b>. <b>OR</b></p> <p>2. a. RPV level <b>cannot</b> be monitored. <b>AND</b> b. Loss of RPV inventory per Table C3 indication.</p>
--	--	--	--

RCS Leakage / Inventory

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT	
<b>Hazards and Other conditions Affecting Plant Safety</b>					
Hostile Action		<p><b>HS1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>HOSTILE ACTION within the PROTECTED AREA.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>A notification from the Security Force that a HOSTILE ACTION is occurring or has occurred within the PROTECTED AREA.</p>	<p><b>HA1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>HOSTILE ACTION within the OWNER CONTROLLED AREA or airborne attack threat within 30 minutes.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>1. A validated notification from NRC of an aircraft attack threat &lt; <b>30 minutes</b> from the site.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>2. Notification by the Security Force that a HOSTILE ACTION is occurring or has occurred within the OWNER CONTROLLED AREA.</li> </ol>	<p><b>HU1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Confirmed SECURITY CONDITION or threat.</p> <p><b>Emergency Action Level (EAL):</b></p> <ol style="list-style-type: none"> <li>1. Notification of a credible security threat directed at the site as determined per SY-AA-101-132, Security Assessment and Response to Unusual Activities.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>2. A validated notification from the NRC providing information of an aircraft threat.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>3. Notification by the Security Force of a SECURITY CONDITION that does <b>not</b> involve a HOSTILE ACTION.</li> </ol>	
	<table border="1" style="width: 100%;"> <tr> <td style="text-align: center;"><b>Table H1 Safety Functions</b></td> </tr> <tr> <td> <ul style="list-style-type: none"> <li>• Reactivity Control (ability to shutdown the reactor and keep it shutdown)</li> <li>• RPV Water Level (ability to cool the core)</li> <li>• RCS Heat Removal (ability to maintain a heat sink)</li> </ul> </td> </tr> </table>	<b>Table H1 Safety Functions</b>	<ul style="list-style-type: none"> <li>• Reactivity Control (ability to shutdown the reactor and keep it shutdown)</li> <li>• RPV Water Level (ability to cool the core)</li> <li>• RCS Heat Removal (ability to maintain a heat sink)</li> </ul>	<p><b>HS2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Inability to control a key safety function from outside the Control Room.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.</p> <ol style="list-style-type: none"> <li>1. A Control Room evacuation has resulted in plant control being transferred from the Control Room to alternate locations per N1-SOP-21.2, Control Room Evacuation.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>2. Control of <b>ANY</b> Table H1 key safety function is <b>not</b> reestablished in &lt; <b>15 minutes</b>.</li> </ol>	<p><b>HA2</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Control Room evacuation resulting in transfer of plant control to alternate locations.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>A Control Room evacuation has resulted in plant control being transferred from the Control Room to alternate locations per N1-SOP-21.2, Control Room Evacuation.</p>
<b>Table H1 Safety Functions</b>					
<ul style="list-style-type: none"> <li>• Reactivity Control (ability to shutdown the reactor and keep it shutdown)</li> <li>• RPV Water Level (ability to cool the core)</li> <li>• RCS Heat Removal (ability to maintain a heat sink)</li> </ul>					

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D - Defueled

GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

Hazards and Other conditions Affecting Plant Safety

Fire

**HU3** 1|2|3|4|D

FIRE potentially degrading the level of safety of the plant.

**Emergency Action Level (EAL):**

**Note:**

- The Emergency Director should declare the event promptly upon determining that the applicable time has been exceeded, or will likely be exceeded.
- Escalation of the emergency classification level would be via IC CA2 or MA5.

1. A FIRE in **ANY** Table H2 area is **not** extinguished in **< 15 minutes** of **ANY** of the following FIRE detection indications:

- Report from the field (i.e., visual observation)
- Receipt of multiple (more than 1) fire alarms or indications
- Field verification of a single fire alarm

**OR**

2. a. Receipt of a single fire alarm in **ANY** Table H2 area (i.e., no other indications of a FIRE).

**AND**

b. The existence of a FIRE is **not** verified in **< 30 minutes** of alarm receipt.

**OR**

3. A FIRE within the plant PROTECTED AREA not extinguished in **< 60 minutes** of the initial report, alarm or indication.

**OR**

4. A FIRE within the plant PROTECTED AREA that requires firefighting support by an offsite fire response agency to extinguish.

Table H2 Areas
<ul style="list-style-type: none"> <li>• Reactor Building (when inerted the Drywell is exempt)</li> <li>• Control Room</li> <li>• Screenhouse</li> <li>• Turbine Building                             <ul style="list-style-type: none"> <li>• 11 and 12 Battery Rooms</li> <li>• 11 and 12 Battery Board Rooms</li> <li>• Cable Spreading Room</li> <li>• 291' North</li> <li>• Diesel Generator Engine and Board Rooms</li> </ul> </li> </ul>

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D – Defueled

GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
-------------------	---------------------	-------	---------------

Hazards and Other conditions Affecting Plant Safety

Earthquake			<p><b>HU4</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Seismic event greater than OBE levels.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>• For emergency classification if EAL 2 is not able to be confirmed, then the occurrence of a seismic event is confirmed in manner deemed appropriate by the Shift Manager or Emergency Director in <b>≤ 15 minutes</b> of the event.</li> <li>• Escalation of the emergency classification level would be via IC CA2 or MA5.</li> </ul> <p>Seismic event as indicated by:</p> <ol style="list-style-type: none"> <li>1. Control Room personnel feel an actual or potential seismic event.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>2. <b>ANY</b> one of the following confirmed in <b>≤ 15 minutes</b> of the event:             <ul style="list-style-type: none"> <li>• The earthquake resulted in Modified Mercalli Intensity (MMI) <b>≥ VI</b> and occurred <b>≤ 3.5 miles</b> of the plant.</li> <li>• The earthquake was magnitude <b>≥ 6.0</b></li> <li>• The earthquake was magnitude <b>≥ 5.0</b> and occurred <b>≤ 125 miles</b> from the plant.</li> <li>• NMP-2 seismic instrumentation indicates <b>&gt; 0.075g</b></li> </ul> </li> </ol>										
Toxic Gas	<table border="1" style="margin: auto;"> <thead> <tr> <th colspan="2">Table H3 Areas with Entry Related Mode Applicability</th> </tr> <tr> <th style="width: 50%;">Area</th> <th style="width: 50%;">Entry Related Mode Applicability</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Reactor Building</td> <td rowspan="5" style="text-align: center; vertical-align: middle;">Modes 2, 3, and 4</td> </tr> <tr> <td style="text-align: center;">198' Northeast corner 261' North and Shutdown Cooling Room</td> </tr> <tr> <td style="text-align: center;">281' North</td> </tr> <tr> <td style="text-align: center;">Turbine Building</td> </tr> <tr> <td style="text-align: center;">291' North</td> </tr> </tbody> </table>	Table H3 Areas with Entry Related Mode Applicability		Area	Entry Related Mode Applicability	Reactor Building	Modes 2, 3, and 4	198' Northeast corner 261' North and Shutdown Cooling Room	281' North	Turbine Building	291' North	<p><b>HA5</b> <span style="float: right;">2 3 4</span></p> <p>Gaseous release impeding access to equipment necessary for normal plant operations, cooldown or shutdown.</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b> If the equipment in the listed room or area was not available, or out of service, before the event occurred, then no emergency classification is warranted.</p> <ol style="list-style-type: none"> <li>1. Release of a toxic, corrosive, asphyxiant or flammable gas in <b>ANY</b> Table H3 area.</li> </ol> <p><b>AND</b></p> <ol style="list-style-type: none"> <li>2. Entry into the room or area is prohibited or impeded.</li> </ol>	
Table H3 Areas with Entry Related Mode Applicability													
Area	Entry Related Mode Applicability												
Reactor Building	Modes 2, 3, and 4												
198' Northeast corner 261' North and Shutdown Cooling Room													
281' North													
Turbine Building													
291' North													

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY		ALERT		UNUSUAL EVENT	
<b>Hazards and Other conditions Affecting Plant Safety</b>							
<b>Hazardous Event</b>						<p><b>HU6</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Hazardous Event</p> <p><b>Emergency Action Level (EAL):</b></p> <p><b>Note:</b></p> <ul style="list-style-type: none"> <li>EAL #4 does not apply to routine traffic impediments such as fog, snow, ice, or vehicle breakdowns or accidents.</li> <li>Escalation of the emergency classification level would be via IC CA2 or MA5.</li> </ul> <ol style="list-style-type: none"> <li>Tornado strike within the PROTECTED AREA.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Internal room or area flooding of a magnitude sufficient to require manual or automatic electrical isolation of a SAFETY SYSTEM component required by Technical Specifications for the current operating mode.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Movement of personnel within the PROTECTED AREA is impeded due to an offsite event involving hazardous materials (e.g., an offsite chemical spill or toxic gas release).</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>A hazardous event that results in onsite conditions sufficient to prohibit the plant staff from accessing the site via personal vehicles.</li> </ol> <p><b>OR</b></p> <ol style="list-style-type: none"> <li>Intake water level &lt; <b>238.8 feet</b>.</li> </ol>	
	<p><b>HG7</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Other conditions exist which in the judgment of the Emergency Director warrant declaration of a GENERAL EMERGENCY.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which involve actual or IMMINENT substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.</p>	<p><b>HS7</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Other conditions exist which in the judgment of the Emergency Director warrant declaration of a SITE AREA EMERGENCY.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts, (1) toward site personnel or equipment that could lead to the likely failure of or, (2) that prevent effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.</p>	<p><b>HA7</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Other conditions exist which in the judgment of the Emergency Director warrant declaration of an ALERT.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Other conditions exist which, in the judgment of the Emergency Director, indicate that events are in progress or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.</p>	<p><b>HU7</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Other conditions exist which in the judgment of the Emergency Director warrant declaration of an UNUSUAL EVENT.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.</p>			

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D – Defueled

GENERAL EMERGENCY		SITE AREA EMERGENCY		ALERT		UNUSUAL EVENT	
ISFSI Malfunction							
ISFSI							<p><b>E-HU1</b> <span style="float: right;">1 2 3 4 D</span></p> <p>Damage to a loaded cask CONFINEMENT BOUNDARY.</p> <p><b>Emergency Action Level (EAL):</b></p> <p>Damage to a loaded cask CONFINEMENT BOUNDARY as indicated by a radiation reading:</p> <p>For 61BT DSC:</p> <ul style="list-style-type: none"> <li>• &gt; 800 mrem/hr 3 feet from the HSM surface</li> <li style="text-align: center;">OR</li> <li>• &gt; 200 mrem/hr outside the HSM door on centerline of DSC</li> <li style="text-align: center;">OR</li> <li>• &gt; 40 mrem/hr end of shield wall exterior</li> </ul> <p>For 61BTH DSC:</p> <ul style="list-style-type: none"> <li>• &gt; 1400 mrem/hr on the HSM or HSM-H front surface</li> <li style="text-align: center;">OR</li> <li>• &gt; 200 mrem/hr on the HSM or HSM-H door centerline</li> <li style="text-align: center;">OR</li> <li>• &gt; 40 mrem/hr on the end shield wall exterior</li> </ul>

Modes: 1 – Power Operation 2 – Hot Shutdown 3 – Cold Shutdown 4 – Refueling D - Defueled