

MILLSTONE UNIT 2 EMERGENCY ACTION LEVELS

GENERAL EMERGENCY ALPHA
 GENERAL EMERGENCY BRAVO
 SITE AREA EMERGENCY CHARLIE-TWO
 ALERT CHARLIE-ONE
 UNUSUAL EVENT DELTA-TWO
 UNUSUAL EVENT DELTA-ONE

IN-PLANT RADIATION	SECURITY THREAT/DESTRUCTIVE PHENOMENA	FIRE/GASES	JUDGEMENT	CLASSIFICATION
<p>GA1 MAJOR FUEL DAMAGE Mode ALL</p> <p>RM 82-0/R231 Reading > 1200 R/h</p> <p>At least 20% Fuel Clad Damage As Determined By Core Damage Rating</p> <p>Spent Fuel Exposed from Water Boils from Open Vessel Cavity of SF Pool AND BOTH of the following</p> <p>Spent Fuel Has Decayed < 90 Days</p> <p>CTMT Integrity NOT Established OR Exposed Spent Fuel Outside CTMT</p>	<p>TG1 SECURITY EVENT Mode ALL</p> <p>1. Loss of physical control of the control room</p> <p>2. Loss of physical control of main shutdown capability</p>		<p>JG1 JUDGEMENT Mode ALL</p> <p>Other Conditions Exist Which Indicate Potential or Likely Major Failures of Plant Functions Needed For Protection of the Public</p>	<p>GENERAL EMERGENCY</p> <p>ALPHA</p> <p>OR</p> <p>BRAVO</p> <p>Events in Progress or Have Occurred Which Involve Actual or Likely Major Failures of Plant Functions Needed for Protection of the Public</p>
<p>SA1 SPENT FUEL DAMAGE Mode ALL</p> <p>Spent Fuel is Exposed from Open Vessel or Cavity AND BOTH of the following</p> <p>Spent Fuel Has Decayed < 90 Days</p> <p>CTMT Integrity Established</p>	<p>TS1 SECURITY EVENT Mode ALL</p> <p>Intrusion into Vital Area by a Hostile Force</p>	<p>GS1 CONTROL ROOM EVACUATION Mode ALL</p> <p>Unit Control from Saf Shutdown Panel C-10 Or C-21 NOT Established Within 15 Minutes After Control Room Evacuation</p>	<p>JS1 JUDGEMENT Mode ALL</p> <p>Other Conditions Exist For Which Judgement Indicates Actual or Likely Major Failures of Plant Functions Needed For Protection of the Public</p>	<p>SITE AREA EMERGENCY</p> <p>CHARLIE-TWO</p> <p>Events in Progress or Have Occurred Which Involve Actual or Likely Major Failures of Plant Functions Needed for Protection of the Public</p>
<p>SA2 SPENT FUEL ASSEMBLY DAMAGE Mode ALL</p> <p>Spent Fuel is Exposed from Open Vessel, Cavity, or SF Pool AND Spent Fuel Has Decayed \geq 30 Days</p> <p>Fuel Handling Accident Causing Damage to Spent Fuel, Indicated by Fuel Building OR Containment Radiation Monitors Increasing</p>	<p>TA1 SECURITY EVENT Mode ALL</p> <p>Intrusion into Protected Area by a Hostile Force</p> <p>TA2 DESTRUCTIVE PHENOMENA Mode ALL</p> <ol style="list-style-type: none"> Seismic Event > 0.09g ZPA Onsite Sustained Windspeed > 90 MPH Visible Damage to Structures or Equipment AND Affecting Safe Shutdown Vessel or Vehicle Collision AND Affecting Safe Shutdown Missiles Affecting Safe Shutdown Flooding Affecting Safe Shutdown 	<p>GA1 CONTROL ROOM EVACUATION Mode ALL</p> <p>Control Room Evacuation Initiated</p> <p>GA2 FIRE/EXPLOSION Mode ALL</p> <p>Fire or Explosion Affecting Safe Shutdown Area AND Damage to Structures OR Equipment Indicated</p> <p>GA3 TOXIC/FLAMMABLE GASES Mode ALL</p> <p>Life Threatening Toxic Gases OR Flammable Gas Concentrations as Identified in C-OP 200.5, "Oil, Hazardous Material, Hazardous Waste and Mixed Waste Contingency Plan" Affecting Areas for Safe Shutdown</p>	<p>JA1 JUDGEMENT Mode ALL</p> <p>Any Condition For Which Judgement Indicates That Safety Systems May Be Degraded AND Which Requires Emergency Response Organization Staffing</p>	<p>ALERT</p> <p>CHARLIE-ONE</p> <p>Events in Progress or Have Occurred Which Involve an Actual or Likely Major Failures of Plant Functions Needed for Protection of the Plant</p>
<p>A2 PLANT RADIATION Mode ALL</p> <p>Radiation Readings > 15 mR/hr in Control Room OR Central Alarm Station OR Secondary Alarm Station</p> <p>Radiation Reading > 5 R/hr in Areas Requiring Access for Safe Shutdown</p>	<p>TU1 SECURITY EVENT Mode ALL</p> <p>Bomb Device Discovered in Protected Area</p> <p>TU2 DESTRUCTIVE PHENOMENA Mode ALL</p> <ol style="list-style-type: none"> Seismic Activity Detected Per AOP-2562, Earthquake Report by Plant Personnel of Tornado Striking Within Protected Area Visible Damage to Structures or Equipment Within the Protected Area Onsite Sustained Windspeed > 75 MPH Explosion Within the Protected Area Turbine Failure Causing Observable Casing Damage Vessel or Vehicle Collision With Structures OR Equipment Required for Safe Shutdown Flood Level > 19 Feet Mean Sea Level Flooding in Areas Containing Safe Shutdown Equipment 	<p>GU1 FIRE Mode ALL</p> <p>Fire in Building OR Areas Adjacent to Areas Needed for Safe Shutdown NOT Extinguished Within 15 Minutes of Notification OR Verification of Control Room Alarms</p> <p>GU2 TOXIC/FLAMMABLE GASES Mode ALL</p> <ol style="list-style-type: none"> Life Threatening Toxic Gases OR Flammable Gas Concentrations as Identified in C-OP 200.5, "Oil, Hazardous Material, Hazardous Waste and Mixed Waste Contingency Plan" Affecting Normal Operation Notification of a Near-Site Release That May Require Evacuation 	<p>JU1 JUDGEMENT Mode ALL</p> <p>Any Condition For Which Judgement Indicates Potential Degradation in the Level of Safety of the Plant</p>	<p>UNUSUAL EVENT</p> <p>DELTA-TWO</p> <p>OR</p> <p>DELTA-ONE</p> <p>Events in Progress or Have Occurred Which Indicate a Potential Degradation of the Level of Safety of the Plant</p>

AREAS OF CONCERN FOR SAFE SHUTDOWN	
Control Room	Switchgear Rooms
Cable Vaults	Intake Structure
Turbine Building	Switchgear Area
Penetration Areas	Coolant Tanks Area
RBCCW Rooms	Containment
Diesel Generator Room	DC Equipment and Battery Rooms
Charging Pump Cubicles	Safety Injection Pump Rooms
Switchyard	

NOTE: When two or more EALs apply, always choose the EAL of the highest incident classification, also always read from top to bottom in each category.

MILLSTONE UNIT 2 EMERGENCY ACTION LEVELS

GENERAL EMERGENCY ALPHA
 GENERAL EMERGENCY BRAVO
 SITE AREA EMERGENCY CHARLIE-TWO
 ALERT CHARLIE-ONE
 UNUSUAL EVENT DELTA-TWO
 UNUSUAL EVENT DELTA-ONE

IN-PLANT RADIATION		SECURITY THREAT/DESTRUCTIVE PHENOMENA		FIRE/GASES		JUDGEMENT		CLASSIFICATION
RG1	MAJOR FUEL DAMAGE Mode ALL	TG1	SECURITY EVENT Mode ALL			JG1	JUDGEMENT Mode ALL	GENERAL EMERGENCY
RS1	SPENT FUEL DAMAGE Mode ALL	TS1	SECURITY EVENT Mode ALL	GS1	CONTROL ROOM EVACUATION Mode ALL	JS1	JUDGEMENT Mode ALL	SITE AREA EMERGENCY

<p>RA2 SPENT FUEL ASSEMBLY DAMAGE Mode ALL</p> <p>Spent Fuel is Exposed from Open Vessel, Cavity, or SF Pool AND Spent Fuel Has Decayed \geq 30 Days</p> <p>2. Fuel Handling Accident Causing Damage to Spent Fuel, Indicated by Fuel Building OR Containment Radiation Monitors Increasing</p>	<p>TA1 SECURITY EVENT Mode ALL</p> <p>Intrusion Into Protected Area by a Hostile Force</p> <p>TA2 DESTRUCTIVE PHENOMENA Mode ALL</p> <ol style="list-style-type: none"> Seismic Event > 0.09g ZPA Onsite Sustained Windspeed > 90 MPH Visible Damage to Structures or Equipment AND Affecting Safe Shutdown Vessel or Vehicle Collision AND Affecting Safe Shutdown Missiles Affecting Safe Shutdown Flooding Affecting Safe Shutdown 	<p>GA1 CONTROL ROOM EVACUATION Mode ALL</p> <p>Control Room Evacuation Initiated</p> <p>GA2 FIRE/EXPLOSION Mode ALL</p> <p>Fire or Explosion Affecting Safe Shutdown Area AND Damage to Structures OR Equipment Indicated</p> <p>GA3 TOXIC/FLAMMABLE GASES Mode ALL</p> <p>Life Threatening Toxic Gases OR Flammable Gas Concentrations as Identified in C-OP 200.5, "Oil, Hazardous Material, Hazardous Waste and Mixed Waste Contingency Plan" Affecting Areas for Safe Shutdown</p>	<p>JA1 JUDGEMENT Mode ALL</p> <p>Any Condition For Which Judgement Indicates That Safety Systems May Be Degraded AND Which Requires Emergency Response Organization Staffing</p>	<p>ALERT</p> <p>CHARLIE-ONE</p> <p>Events in Progress or Have Occurred Which Involve an Actual or Potential Substantial Degradation of the Level of Safety of the Plant</p>
<p>RA2 PLANT RADIATION Mode ALL</p> <ol style="list-style-type: none"> Radiation Readings > 15 mR/hr in Control Room OR Central Alarm Station OR Secondary Alarm Station Radiation Reading > 5 R/hr in Areas Requiring Access for Safe Shutdown 	<p>TU1 SECURITY EVENT Mode ALL</p> <p>Bomb Device Discovered in Protected Area</p> <p>TU2 DESTRUCTIVE PHENOMENA Mode ALL</p> <ol style="list-style-type: none"> Seismic Activity Detected Per AOP-2562, Earthquake Report by Plant Personnel of Tornado Striking Within Protected Area Visible Damage to Structures or Equipment Within the Protected Area Onsite Sustained Windspeed > 75 MPH Explosion Within the Protected Area Turbine Failure Causing Observable Casing Damage Vessel or Vehicle Collision With Structures OR Equipment Required for Safe Shutdown Flood Level > 19 Feet Mean Sea Level Flooding in Areas Containing Safe Shutdown Equipment 	<p>GU1 FIRE Mode ALL</p> <p>Fire in Building OR Areas Adjacent to Areas Needed for Safe Shutdown NOT Extinguished Within 15 Minutes of Notification OR Verification of Control Room Alarms</p> <p>GU2 TOXIC/FLAMMABLE GASES Mode ALL</p> <ol style="list-style-type: none"> Life Threatening Toxic Gases OR Flammable Gas Concentrations as Identified in C-OP 200.5, "Oil, Hazardous Material, Hazardous Waste and Mixed Waste Contingency Plan" Affecting Normal Operation Notification of a Near-Site Release That May Require Evacuation 	<p>JU1 JUDGEMENT Mode ALL</p> <p>Any Condition For Which Judgement Indicates Potential Degradation in the Level of Safety of the Plant</p>	<p>UNUSUAL EVENT</p> <p>DELTA-TWO</p> <p>OR</p> <p>DELTA-ONE</p> <p>Events in Progress or Have Occurred Which Indicate a Potential Degradation of the Level of Safety of the Plant</p>

AREAS OF CONCERN FOR SAFE SHUTDOWN	
Control Room	Switchgear Rooms
Cable Vaults	Intake Structure
Turbine Building	Switchgear Area
Penetration Areas	Coolant Tanks Area
RBCCW Rooms	Containment
Diesel Generator Room	DC Equipment and Battery Rooms
Charging Pump Cubicles	Safety Injection Pump Rooms
Switchyard	

2 Millstone

NOTE: When two or more EALs apply, always choose the EAL of the highest incident classification, also always read from top to bottom in each category.