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*Ax45
NRR*

	GENERAL EMERGENCY	SITE AREA EMERGENCY	ALERT	UNUSUAL EVENT																								
M System Malfunc.	1 Loss of Emergency AC Power	Prolonged loss of all offsite and all onsite AC power to emergency buses MG1.1 [1 2 3] Loss of all offsite AND all onsite AC power capability to emergency buses SM-7 and SM-8 AND EITHER: Restoration of emergency bus SM-7 or SM-8 in LT 4 hours is <u>not</u> likely (Note 1) OR RPV level <u>cannot</u> be restored and maintained GT -186 in. Loss of all emergency AC and vital DC power sources for 15 minutes or longer MG1.2 [1 2 3]	Loss of all offsite and all onsite AC power to emergency buses for 15 minutes or longer MS1.1 [1 2 3] Loss of all offsite and all onsite AC power capability to emergency buses SM-7 and SM-8 for GE 15 min. (Note 1)	Loss of all but one AC power source to emergency buses for 15 minutes or longer MA1.1 [1 2 3] AC power capability, Table 2, to emergency buses SM-7 and SM-8 reduced to a single power source for GE 15 min. (Note 1) AND Any additional single power source failure will result in a loss of all AC power to SAFETY SYSTEMS	Loss of all offsite AC power capability to emergency buses for 15 minutes or longer MU1.1 [1 2 3] Loss of all offsite AC power capability, Table 2, to emergency buses SM-7 and SM-8 for GE 15 min. (Note 1)																							
		Loss of all offsite AND all onsite AC power capability to emergency buses SM-7 and SM-8 for GE 15 min. (Note 1) AND Indicated voltage is LT 108 VDC on both 125 VDC buses DP-S1-1 and DP-S1-2 for GE 15 min. (Note 1) MS2.1 [1 2 3] Indicated voltage is LT 108 VDC on both 125 VDC buses DP-S1-1 and DP-S1-2 for GE 15 min. (Note 1)	Loss of all vital DC power for 15 minutes or longer MS2.1 [1 2 3] Indicated voltage is LT 108 VDC on both 125 VDC buses DP-S1-1 and DP-S1-2 for GE 15 min. (Note 1)	None	None																							
	2 Loss of Vital DC Power	None	None	None	None																							
	3 Loss of Control Room Indications	None	None	UNPLANNED loss of Control Room indications for 15 minutes or longer with a significant transient in progress MA3.1 [1 2 3] An UNPLANNED event results in the inability to monitor one or more Table 10 parameters from within the Control Room for GE 15 min. (Note 1) AND Any Table 11 transient event in progress	UNPLANNED loss of Control Room indications for 15 minutes or longer MU3.1 [1 2 3] An UNPLANNED event results in the inability to monitor one or more Table 10 parameters from within the Control Room for GE 15 min. (Note 1)																							
	4 RCS Activity	None	Table 5 Plant Structures Containing Safe Shutdown Systems or Components <ul style="list-style-type: none"> Vital portions of the Rad Waste/Control Building: <ul style="list-style-type: none"> 467' elevation vital island 487' elevation cable spreading room Main Control Room and vertical cable chase 525' elevation HVAC area Reactor Building Vital portions of the Turbine Building <ul style="list-style-type: none"> DEH pressure switches RPS switches on turbine throttle valves Main steam line radiation monitors Turbine Building ventilation radiation monitors Main steam line piping up to MS-V-146 and the first stop valves Standby Service Water Pump Houses Diesel Generator Building 	Table 10 Safety System Parameters <ul style="list-style-type: none"> Reactor power RPV level RPV pressure Primary containment pressure Wetwell level Wetwell temperature 	Reactor coolant activity greater than Technical Specification allowable limits MU4.1 [1 2 3] SJAЕ CONDSTR OUTLET RAD HI-Hi alarm (P602) MU4.2 [1 2 3] Coolant activity GT 0.2 µCi/gm dose equivalent I-131																							
	5 RCS Leakage	None	None	Table 11 Transient Events <ul style="list-style-type: none"> Reactor scram Runback GT 25% thermal reactor power Electrical load rejection GT 25% full electrical load ECCS injection Thermal power oscillations GT 10% 	RCS leakage for 15 minutes or longer MU5.1 [1 2 3] (1) RCS unidentified or pressure boundary leakage GE 10 gpm for GE 15 min. OR (2) RCS identified leakage GT 25 gpm for GE 15 min. OR (3) Leakage from the RCS to a location outside containment GT 25 gpm for GE 15 min.																							
	6 RPS Failure	None	Inability to shut down the reactor causing a challenge to RPV water level or RCS heat removal MS6.1 [1 2] An automatic OR manual scram fails to shut down the reactor AND All actions to shut down the reactor are <u>not</u> successful as indicated by reactor power GT 5% AND EITHER: RPV level <u>cannot</u> be restored and maintained above -186 in. or <u>cannot</u> be determined OR WW temperature and RPV pressure <u>cannot</u> be maintained below the HCTL	Automatic or manual scram fails to shut down the reactor, and subsequent manual actions taken at the reactor control console are <u>not</u> successful in shutting down the reactor MA6.1 [1 2] An automatic OR manual scram fails to shut down the reactor AND Manual scram actions taken at the reactor control console (mode switch in shutdown, manual push buttons or ARI) are <u>not</u> successful in shutting down the reactor as indicated by reactor power GT 5% (Note 8)	Automatic or manual scram fails to shut down the reactor MU6.1 [1 2] An automatic OR manual scram did <u>not</u> shut down the reactor AND A subsequent automatic scram OR manual scram action taken at the reactor control console (mode switch in shutdown, manual push buttons or ARI) is successful in shutting down the reactor as indicated by reactor power LE 5% (APRM downscale) (Note 8)																							
	7 Loss of Comm.	Table 4 Communication Methods <table border="1"> <thead> <tr> <th>System</th> <th>Onsite</th> <th>ORO</th> <th>NRC</th> </tr> </thead> <tbody> <tr> <td>Plant Public Address (PA) System</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Plant Telephone System</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>Plant Radio System Operations and Security Channels</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Offsite calling capability from the Control Room via direct telephone</td> <td></td> <td>X</td> <td>X</td> </tr> <tr> <td>Long distance calling capability on the commercial phone system</td> <td></td> <td>X</td> <td>X</td> </tr> </tbody> </table>	System	Onsite	ORO	NRC	Plant Public Address (PA) System	X			Plant Telephone System	X	X		Plant Radio System Operations and Security Channels	X			Offsite calling capability from the Control Room via direct telephone		X	X	Long distance calling capability on the commercial phone system		X	X	None	None
System	Onsite	ORO	NRC																									
Plant Public Address (PA) System	X																											
Plant Telephone System	X	X																										
Plant Radio System Operations and Security Channels	X																											
Offsite calling capability from the Control Room via direct telephone		X	X																									
Long distance calling capability on the commercial phone system		X	X																									
8 Hazardous Event Affecting Safety Systems	None	None	Hazardous event affecting a SAFETY SYSTEM needed for the current operating mode MA8.1 [1 2 3] The occurrence of any Table 8 hazardous event AND Event damage has caused indications of degraded performance on one train of a SAFETY SYSTEM needed for the current operating mode AND EITHER: Event damage has caused indications of degraded performance to a second train of a SAFETY SYSTEM needed for the current operating mode OR Event damage has resulted in VISIBLE DAMAGE to a second train of a SAFETY SYSTEM needed for the current operating mode (Notes 9, 10)	None																								

	FC - Fuel Clad Barrier		RCS - Reactor Coolant System Barrier		PC - Containment Barrier	
	Loss	Potential Loss	Loss	Potential Loss	Loss	Potential Loss
A RPV Water Level	SAG entry required	RPV level <u>cannot</u> be restored and maintained GT -161 in. or <u>cannot</u> be determined.	RPV level <u>cannot</u> be restored and maintained GT -161 in. or <u>cannot</u> be determined.	None	None	SAG entry required
B RCS Leak Rate	None	None	UNISOLABLE break in any of the following: • Main Steam Line • RCIC Steam Line • RWCU • Feedwater OR Emergency RPV Depressurization is required	UNISOLABLE primary system leakage that results in exceeding EITHER: RB area temperature alarm level (PPM 5.3.1 Table 23) OR RB area radiation alarm level (PPM 5.3.1 Table 24)	UNISOLABLE primary system leakage that results in exceeding EITHER: RB area maximum safe operating temperature (PPM 5.3.1 Table 23) OR RB area maximum safe operating radiation (PPM 5.3.1 Table 24)	None
C PC Conditions	None	None	PC pressure GT 1.68 psig due to RCS leakage	None	UNPLANNED rapid drop in PC pressure following PC pressure rise OR PC pressure response <u>not</u> consistent with LOCA conditions	PC pressure GT 45 psig OR Explosive mixture exists inside PC (H ₂ GE 6% and O ₂ GE 5%) OR WW temperature and RPV pressure <u>cannot</u> be maintained below the HCTL
D PC Rad / RCS Activity	Containment Radiation Monitor CMS-RIS-27E or CMS-RIS-27F reading GT 3,600 R/hr OR Primary coolant activity GT 300 µCi/gm Dose Equivalent I-131	None	Containment Radiation Monitor CMS-RIS-27E or CMS-RIS-27F reading GT 70 R/hr	None	None	Containment Radiation Monitor CMS-RIS-27E or CMS-RIS-27F reading GT 14,000 R/hr
E PC Integrity or Bypass	None	None	None	None	UNISOLABLE direct downstream pathway to the environment exists after PC isolation signal OR Intentional PC venting per EOPs	None
F Emergency Director Judgment	Any condition in the opinion of the Emergency Director that indicates loss of the fuel clad barrier	Any condition in the opinion of the Emergency Director that indicates potential loss of the Fuel Clad barrier	Any condition in the opinion of the Emergency Director that indicates loss of the RCS barrier	Any condition in the opinion of the Emergency Director that indicates potential loss of the RCS barrier	Any condition in the opinion of the Emergency Director that indicates loss of the Containment barrier	Any condition in the opinion of the Emergency Director that indicates potential loss of the Containment barrier

Modes: [1] [2] [3]
 Power Operations Startup Hot Shutdown



13.1.1 Rev. 49 MR 1
 CLASSIFYING THE EMERGENCY
 1/16/2019
HOT CONDITIONS
 (RCS GT 200°F)

GENERAL EMERGENCY SITE AREA EMERGENCY ALERT UNUSUAL EVENT

<p>1 RPV Level</p> <p>2 Loss of Emergency AC Power</p> <p>3 RCS Temp.</p> <p>4 Loss of Vital DC Power</p> <p>5 Loss of Comm.</p> <p>6 Hazardous Events Affecting Safety Systems</p>	<p>Loss of RPV inventory affecting fuel clad integrity with containment challenged</p> <p>CG1.1 [] [] [] [4] [5] []</p> <p>RPV level LT -161 in. for GE 30 min. (Note 1) AND Any of the following indications of containment challenge:</p> <ul style="list-style-type: none"> CONTAINMENT CLOSURE <u>not</u> established (Note 6) Explosive mixture inside PC (H₂ GE 6% and O₂ GE 5%) UNPLANNED rise in PC pressure RB area radiation GT any Maximum Safe Operating level (PPM 5.3.1 Table 24) <p>CG1.2 [] [] [] [4] [5] []</p> <p>RPV level <u>cannot</u> be monitored for GE 30 min. (Note 1) AND Core uncover is indicated by any of the following:</p> <ul style="list-style-type: none"> UNPLANNED wetwell level rise GT 2 inches (PPM 5.2.1 entry condition) VALID indication of RB room flooding as identified by high level alarms (PPM 5.3.1 Table 25) Observation of UNISOLABLE RCS leakage outside primary containment of sufficient magnitude to indicate core uncover <p>AND Any of the following indications of containment challenge:</p> <ul style="list-style-type: none"> CONTAINMENT CLOSURE <u>not</u> established (Note 6) Explosive mixture inside PC (H₂ GE 6% and O₂ GE 5%) UNPLANNED rise in PC pressure RB area radiation GT any Maximum Safe Operating level (PPM 5.3.1 Table 24) 	<p>Loss of RPV inventory affecting core decay heat removal capability</p> <p>CS1.1 [] [] [] [4] [5] []</p> <p>(1) CONTAINMENT CLOSURE <u>not</u> established AND RPV level LT -129 in. OR (2) CONTAINMENT CLOSURE established AND RPV level LT -161 in.</p> <p>CS1.2 [] [] [] [4] [5] []</p> <p>RPV level <u>cannot</u> be monitored for GE 30 min. (Note 1) AND Core uncover is indicated by any of the following:</p> <ul style="list-style-type: none"> UNPLANNED wetwell level rise GT 2 inches (PPM 5.2.1 entry condition) VALID indication of RB room flooding as identified by high level alarms (PPM 5.3.1 Table 25) Observation of UNISOLABLE RCS leakage outside primary containment of sufficient magnitude to indicate core uncover 	<p>Significant loss of RPV inventory</p> <p>CA1.1 [] [] [] [4] [5] []</p> <p>(1) Loss of RPV inventory as indicated by RPV level LT -50 in. OR (2) RPV level <u>cannot</u> be monitored for GE 15 min. (Note 1) AND UNPLANNED increase in any Table 1 sump or pool levels due to a loss of RPV inventory</p> <div data-bbox="1128 372 1360 559" style="border: 1px solid black; padding: 5px;"> <p>Table 1 Sumps/Pool</p> <ul style="list-style-type: none"> Any valid Hi-Hi level alarm on R-1 through R-5 sumps EDR GE 25 GPM FDR GE 10 GPM Wetwell level rise Observation of UNISOLABLE RCS leakage </div>	<p>Unplanned loss of RPV inventory</p> <p>CU1.1 [] [] [] [4] [5] []</p> <p>(1) UNPLANNED loss of reactor coolant results in RPV level less than a required lower limit for GE 15 min. (Note 1) OR (2) RPV level <u>cannot</u> be monitored AND UNPLANNED increase in any Table 1 sump or pool levels due to a loss of RPV inventory</p> <div data-bbox="1471 404 1703 652" style="border: 1px solid black; padding: 5px;"> <p>Table 2 AC Power Sources</p> <p>Offsite</p> <ul style="list-style-type: none"> Startup Transformer TR-S Backup Transformer TR-B Backfeed 500 KV power through Main Transformers (if already aligned in modes 4, 5, def only) <p>Onsite</p> <ul style="list-style-type: none"> DG1 DG2 Main Generator via TR-N1/N2 </div>
	None	None	Loss of all offsite and all onsite AC power to emergency buses for 15 minutes or longer	Loss of all but one AC power source to emergency buses for 15 minutes or longer
	None	None	Loss of all offsite and all onsite AC power capability to emergency buses SM-7 and SM-8 for GE 15 min. (Note 1) AND Any additional single power source failure will result in a loss of all AC power to SAFETY SYSTEMS	AC power capability, Table 2, to emergency buses SM-7 and SM-8 reduced to a single power source for GE 15 min. (Note 1) AND Any additional single power source failure will result in a loss of all AC power to SAFETY SYSTEMS
	None	None	Inability to maintain plant in cold shutdown	UNPLANNED increase in RCS temperature
	None	None	UNPLANNED increase in RCS temperature to GT 200°F for GT Table 7 duration (Note 1) OR UNPLANNED RPV pressure increase GT 10 psig	UNPLANNED increase in RCS temperature to GT 200°F Loss of all RCS temperature and RPV water level indication for GE 15 min. (Note 1)
	None	None	None	Loss of vital DC power for 15 minutes or longer
None	None	None	Loss of all onsite or offsite communications capabilities	
None	None	None	Loss of all Table 4 onsite communication methods OR Loss of all Table 4 ORO communication methods OR Loss of all Table 4 NRC communication methods	
None	None	Hazardous event affecting a SAFETY SYSTEM needed for the current operating mode	None	
None	None	The occurrence of any Table 8 hazardous event AND Event damage has caused indications of degraded performance on one train of a SAFETY SYSTEM needed for the current operating mode AND EITHER: Event damage has caused indications of degraded performance to a second train of a SAFETY SYSTEM needed for the current operating mode OR Event damage has resulted in VISIBLE DAMAGE to a second train of a SAFETY SYSTEM needed for the current operating mode (Notes 9, 10)	None	

Table 7 RCS Reheat Duration Thresholds

* If an RCS heat removal system is in operation within this time frame and RCS temperature is being reduced the EAL is not applicable

RCS Status	Containment Closure Status	Heat-up Duration
Intact	N/A	60 min. *
Not intact	established	20 min. *
	not established	0 min.

Table 4 Communication Methods

System	Onsite	ORO	NRC
Plant Public Address (PA) System	X		
Plant Telephone System	X	X	
Plant Radio System Operations and Security Channels	X		
Offsite calling capability from the Control Room via direct telephone		X	X
Long distance calling capability on the commercial phone system		X	X

Table 8 Hazardous Events

- Seismic event
- Internal or external FLOODING event
- High winds
- Tornado strike
- FIRE
- EXPLOSION
- Volcanic ash fallout
- Other events with similar hazard characteristics as determined by the Shift Manager

Modes:

4 Cold Shutdown	5 Refueling	DEF Defueled
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13.1.1 Rev. 49 MR 1
CLASSIFYING THE EMERGENCY
1/16/2019
**COLD CONDITIONS
(RCS ≤ 200°F)**

GENERAL EMERGENCY

SITE AREA EMERGENCY

ALERT

UNUSUAL EVENT

1 Rad Effluent

2 Irradiated Fuel Event

3 Area Radiation Levels

1 ISFSI Confinement Boundary

1 Security

2 Seismic Event

3 Natural or Tech. Hazard

4 Fire

5 Hazardous Gases

6 Control Room Evacuation

7 Judgment

Release of gaseous radioactivity resulting in offsite dose greater than 1,000 mrem TEDE or 5,000 mrem thyroid CDE
RG1.1 (1) Reading on any Table 3 effluent radiation monitor GT column "GENERAL" for GE 15 min.
OR
(2) Dose assessment using actual meteorology indicates doses GT 1,000 mrem TEDE or 5,000 mrem thyroid CDE at or beyond the SITE BOUNDARY
Notes 1, 2, 3, 4
RG1.2 (1) 2 3 4 5 DEF
Field survey results indicate EITHER of the following at or beyond the SITE BOUNDARY:
Closed window dose rates GT 1,000 mR/hr expected to continue for GE 60 min.
Analyses of field survey samples indicate thyroid CDE GT 5,000 mrem for 60 min. of inhalation.
Notes 1, 2

Release of gaseous radioactivity resulting in offsite dose greater than 100 mrem TEDE or 500 mrem thyroid CDE
RS1.1 (1) 2 3 4 5 DEF
(1) Reading on any Table 3 effluent radiation monitor GT column "SAE" for GE 15 min.
OR
(2) Dose assessment using actual meteorology indicates doses GT 100 mrem TEDE or 500 mrem thyroid CDE at or beyond the SITE BOUNDARY
Notes 1, 2, 3, 4
RS1.2 (1) 2 3 4 5 DEF
Field survey results indicate EITHER of the following at or beyond the SITE BOUNDARY:
Closed window dose rates GT 100 mR/hr expected to continue for GE 60 min.
Analyses of field survey samples indicate thyroid CDE GT 500 mrem for 60 min. of inhalation.
Notes 1, 2

Release of gaseous or liquid radioactivity resulting in offsite dose greater than 10 mrem TEDE or 50 mrem thyroid CDE
RA1.1 (1) 2 3 4 5 DEF
(1) Reading on any Table 3 effluent radiation monitor GT column "ALERT" for GE 15 min.
OR
(2) Dose assessment using actual meteorology indicates doses GT 10 mrem TEDE or 50 mrem thyroid CDE at or beyond the SITE BOUNDARY
Notes 1, 2, 3, 4
RA1.2 (1) 2 3 4 5 DEF
Analysis of a liquid effluent sample indicates a concentration or release rate that would result in doses GT 10 mrem TEDE or 50 mrem thyroid CDE at or beyond the SITE BOUNDARY for 60 min. of exposure (Notes 1, 2)
RA1.3 (1) 2 3 4 5 DEF
Field survey results indicate EITHER of the following at or beyond the SITE BOUNDARY:
Closed window dose rates GT 10 mR/hr expected to continue for GE 60 min.
Analyses of field survey samples indicate thyroid CDE GT 50 mrem for 60 min. of inhalation.
Notes 1, 2

Release of gaseous or liquid radioactivity greater than 2 times the ODCM limits for 60 minutes or longer
RU1.1 (1) 2 3 4 5 DEF
(1) Reading on any Table 3 effluent radiation monitor GT column "UE" for GE 60 min.
OR
(2) Sample analyses for a gaseous or liquid release indicates a concentration or release rate > 2 x ODCM limits for GE 60 min.
Notes 1, 2, 3

Spent fuel pool level cannot be restored to at least the top of the fuel racks for 60 minutes or longer
RG2.1 (1) 2 3 4 5 DEF
Spent fuel pool level cannot be restored to at least 0.5 ft for GE 60 min. (Note 1)

Spent fuel pool level at the top of the fuel racks
RS2.1 (1) 2 3 4 5 DEF
Lowering of spent fuel pool level to 0.5 ft

Significant lowering of water level above, or damage to, irradiated fuel
RA2.1 (1) 2 3 4 5 DEF
Uncovery of irradiated fuel in the REFUELING PATHWAY
RA2.2 (1) 2 3 4 5 DEF
Damage to irradiated fuel resulting in a release of radioactivity
AND
High alarm on any of the following radiation monitors:
ARM-RIS-1 Reactor Building Fuel Pool Area
ARM-RIS-2 Reactor Building Fuel Pool Area
ARM-RIS-34 Reactor Building Elevation 606
ARM-RIS-609A-D Rx Bldg Vent
RA2.3 (1) 2 3 4 5 DEF
Lowering of spent fuel pool level to 10 ft

Unplanned loss of water level above irradiated fuel
RU2.1 (1) 2 3 4 5 DEF
UNPLANNED water level drop in the REFUELING PATHWAY as indicated by EITHER of the following:
SFP level LE 22.3 ft
SFP low level alarm
AND
UNPLANNED rise in area radiation levels as indicated by any of the following radiation monitors:
ARM-RIS-1 Reactor Building Fuel Pool Area
ARM-RIS-2 Reactor Building Fuel Pool Area
ARM-RIS-34 Reactor Building Elevation 606

Table 3 Effluent Monitor Classification Thresholds
Table 9 Safe Operation & Shutdown Rooms/Areas

Radiation levels that IMPEDE access to equipment necessary for normal plant operations, cooldown or shutdown
RA3.1 (1) 2 3 4 5 DEF
(1) Dose rates GT 15 mR/hr in Control Room (ARM-RIS-19) or CAS (by survey)
OR
(2) An UNPLANNED event results in radiation levels that prohibit or IMPEDE access to any Table 9 rooms or areas (Note 5)

Damage to a loaded cask CONFINEMENT BOUNDARY
EU1.1 Storage Operations
Damage to a loaded canister (MPC) CONFINEMENT BOUNDARY as indicated by measured dose rates on a loaded overpack GT EITHER:
20 mrem/hr (gamma + neutron) on the top of the overpack
100 mrem/hr (gamma + neutron) on the side of the overpack, excluding inlet and outlet ducts

Table 9 Safe Operation & Shutdown Rooms/Areas
Room/Area Modes Applicability
RW 467 Radwaste Control Room (RHR flush to RW tanks) 3
RW 467 Vital Island (RHR-V-9 disconnect) 3
RB 422 B RHR Pump Rm (local pump temperatures) 3
RB 454 B RHR Pump Rm (operate RHR-V-85B) 3

None

None

None

HOSTILE ACTION within the PROTECTED AREA
HS1.1 (1) 2 3 4 5 DEF
A HOSTILE ACTION is occurring or has occurred within the PROTECTED AREA as reported by the Security Sergeant or Security Lieutenant

HOSTILE ACTION within the OWNER CONTROLLED AREA or airborne attack threat within 30 minutes
HA1.1 (1) 2 3 4 5 DEF
(1) A HOSTILE ACTION is occurring or has occurred within the OWNER CONTROLLED AREA as reported by the Security Sergeant or Security Lieutenant
OR
(2) A validated notification from NRC of an aircraft attack threat within 30 min. of the site

Confirmed SECURITY CONDITION or threat
HU1.1 (1) 2 3 4 5 DEF
(1) A SECURITY CONDITION that does not involve a HOSTILE ACTION as reported by the Security Sergeant or Security Lieutenant
OR
(2) Notification of a credible security threat directed at the site
OR
(3) A validated notification from the NRC providing information of an aircraft threat

None

None

See CA6.1/MA8.1 for potential for upgrade to an Alert based on degraded safety system performance or damage

Seismic event GT OBE levels
HU2.1 (1) 2 3 4 5 DEF
Seismic event GT Operating Basis Earthquake (OBE) as indicated by H13.P851.S1.5-1 (OPERATING BASIS EARTHQUAKE EXCEEDED) activated

Notes
1 The Emergency Director should declare the event promptly upon determining that time limit has been exceeded, or will likely be exceeded
2 If an ongoing release is detected and the release start time is unknown, assume that the release duration has exceeded the specified time limit
3 If the effluent flow past an effluent monitor is known to have stopped, indicating that the release path is isolated, the effluent monitor reading is no longer VALID for classification purposes
4 The pre-calculated effluent monitor values presented in EALs RA1.1, RS1.1 and RG1.1 should be used for emergency classification assessments until the results from a dose assessment using actual meteorology are available
5 If the equipment in the listed room or area was already inoperable or out-of-service before the event occurred, then no emergency classification is warranted
6 If CONTAINMENT CLOSURE is re-established prior to exceeding the 30-minute time limit, declaration of a General Emergency is not required
7 This EAL does not apply to routine traffic impediments such as fog, snow, ice, or vehicle breakdowns or accidents
8 A manual scram 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
9 If the affected SAFETY SYSTEM train was already inoperable or out of service before the hazardous event occurred, then emergency classification is not warranted
10 If the hazardous event only resulted in VISIBLE DAMAGE, with no indications of degraded performance to at least one train of a SAFETY SYSTEM, then this emergency classification is not warranted

None

See CA6.1/MA8.1 for potential for upgrade to an Alert based on degraded safety system performance or damage

Hazardous event
HU3.1 (1) 2 3 4 5 DEF
(1) A tornado strike within the PROTECTED AREA
OR
(2) Volcanic ash fallout requiring plant shutdown
HU3.2 (1) 2 3 4 5 DEF
Internal room or area FLOODING of a magnitude sufficient to require manual or automatic electrical isolation of a SAFETY SYSTEM component needed for the current operating mode
HU3.3 (1) 2 3 4 5 DEF
(1) Movement of personnel within the PROTECTED AREA is IMPEDED due to an offsite event involving hazardous materials (e.g., an offsite chemical spill, 618-11 event or toxic gas release)
OR
(2) A hazardous event that results in on-site conditions sufficient to prohibit the plant staff from accessing the site via personal vehicles (Note 7)

None

None

See CA6.1/MA8.1 for potential for upgrade to an Alert based on degraded safety system performance or damage

FIRE potentially degrading the level of safety of the plant
HU4.1 (1) 2 3 4 5 DEF
A FIRE is not extinguished within 15 min. of any of the following FIRE detection indications (Note 1):
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
AND
The FIRE is located within any Table 5 area
HU4.2 (1) 2 3 4 5 DEF
Receipt of a single fire alarm (i.e., no other indications of a FIRE)
AND
The fire alarm is indicating a FIRE within any Table 5 area
AND
The existence of a FIRE is not verified within 30 min. of alarm receipt (Note 1)
HU4.3 (1) 2 3 4 5 DEF
(1) A FIRE within the ISFSI or plant PROTECTED AREA not extinguished within 60 min. of the initial report, alarm or indication (Note 1)
OR
(2) A FIRE within the ISFSI or plant PROTECTED AREA that requires fire-fighting support by an offsite fire response agency to extinguish

None

Inability to control a key safety function from outside the Control Room
HS6.1 (1) 2 3 4 5 DEF
An event has resulted in plant control being transferred from the Control Room to the Remote Shutdown Panel or Alternate Remote Shutdown Panel
AND
Control of any of the following key safety functions is not reestablished within 15 min. (Note 1):
Reactivity (Modes 1 and 2 only)
RPV water level
RCS heat removal

Gas release IMPEDING access to equipment necessary for normal plant operations, cooldown or shutdown
HA5.1 (1) 2 3 4 5 DEF
Release of a toxic, corrosive, asphyxiant or flammable gas into any Table 9 rooms or areas
AND
Entry into the room or area is prohibited or IMPEDED (Note 5)
HA6.1 (1) 2 3 4 5 DEF
Control Room evacuation resulting in transfer of plant control to alternate locations
An event has resulted in plant control being transferred from the Control Room to the Remote Shutdown Panel or Alternate Remote Shutdown Panel

None

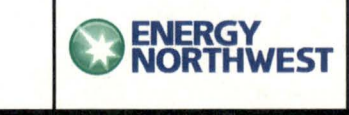
Other conditions existing which in the judgment of the Emergency Director warrant declaration of General Emergency
HG7.1 (1) 2 3 4 5 DEF
Other conditions exist which, in the judgment of the Emergency Director, indicate that events are in progress or have occurred which involve actual or IMMINENT substantial 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.

Other conditions existing which in the judgment of the Emergency Director warrant declaration of Site Area Emergency
HS7.1 (1) 2 3 4 5 DEF
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.

Other conditions existing which in the judgment of the Emergency Director warrant declaration of an Alert
HA7.1 (1) 2 3 4 5 DEF
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.

Other conditions existing which in the judgment of the Emergency Director warrant declaration of a UE
HU7.1 (1) 2 3 4 5 DEF
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.

Modes: 1 2 3 4 5 DEF
Power Operations Startup Hot Shutdown Cold Shutdown Refueling Defueled



13.1.1 Rev. 49 MR 1
CLASSIFYING THE EMERGENCY
1/16/2019
ALL CONDITIONS