

		GENERAL EMERGENCY					SITE AREA EMERGENCY					ALERT					UNUSUAL EVENT				
		RG1.1					RS1.1					RA1.1					RU1.1				
1	Offsite Rad Conditions	ANY monitor reading > Table R-1 "GE" column for ≥ 15 min. (Note 1) Do not delay declaration awaiting dose assessment results If dose assessment results are available, declaration should be based on dose assessment instead of radiation monitor values (see EAL RG1.2)					ANY monitor reading > Table R-1 "SAE" column for ≥ 15 min. (Note 1) Do not delay declaration awaiting dose assessment results If dose assessment results are available, declaration should be based on dose assessment instead of radiation monitor values (see EAL RS1.2)					ANY gaseous monitor reading > Table R-1 "Alert" column for ≥ 15 min. (Note 2)					ANY gaseous monitors > Table R-1 "UE" column for ≥ 15 min. (Note 2)				
		Dose assessment using actual meteorology indicates doses > 1,000 mRem TEDE or 5,000 mRem thyroid CDE at or beyond the SITE BOUNDARY					Dose assessment using actual meteorology indicates doses > 100 mRem TEDE or 500 mRem thyroid CDE at or beyond the SITE BOUNDARY					Confirmed sample analyses for gaseous or liquid releases indicate concentrations or release rates > 200 x ODCM limits for ≥ 15 min. (Note 2)					Confirmed sample analyses for gaseous or liquid releases indicate concentrations or release rates > 2 x ODCM limits for ≥ 60 min. (Note 2)				
		Field survey results indicate closed window dose rates > 1,000 mRem/hr expected to continue for ≥ 60 min. at or beyond the SITE BOUNDARY (Note 1) OR Analyses of field survey samples indicate thyroid CDE > 5,000 mRem for 1 hr of inhalation at or beyond the SITE BOUNDARY (Note 1)					Field survey results indicate closed window dose rates > 100 mRem/hr expected to continue for ≥ 60 min. at or beyond the SITE BOUNDARY (Note 1) OR Analyses of field survey samples indicate thyroid CDE > 500 mRem for 1 hr of inhalation at or beyond the SITE BOUNDARY (Note 1)					None					None				
2	Onsite Rad Conditions & Spent Fuel Events	Table R-1 Effluent Monitor Classification Thresholds					Table R-1 Effluent Monitor Classification Thresholds					Table R-1 Effluent Monitor Classification Thresholds					Table R-1 Effluent Monitor Classification Thresholds				
		Alarm on ANY of the following radiation monitors due to damage to irradiated fuel or loss of water level: • 2RMS-RE111 • 2RMS-RE112 • 2RMS-RE113 • 2RMS-RE114 • 2RMS-RE140 • 2HVR-RE14A • 2HVR-RE14B					UNPLANNED water level drop in a reactor refueling pathway as indicated by inability to restore and maintain SFP level > low water level alarm (Note 3) AND Area radiation monitor reading rise on ANY of the following: • 2RMS-RE111 • 2RMS-RE112 • 2RMS-RE113 • 2RMS-RE114 • 2RMS-RE140					A water level drop in a reactor refueling pathway that will result in irradiated fuel becoming uncovered					UNPLANNED area radiation readings rise by a factor of 1,000 over NORMAL LEVELS				
		Dose rates > 15 mRem/hr in EITHER of the following areas requiring continuous occupancy to maintain plant safety functions: Control Room OR CAS					Dose rates > 15 mRem/hr in EITHER of the following areas requiring continuous occupancy to maintain plant safety functions: Control Room OR CAS					None					None				
3	CR/CAS Rad	None					None					None					None				
		HA1.1					HA1.1					HA1.1					HA1.1				
		Seismic event > OBE (0.075g) as indicated by EITHER: Computer Plot ERSNCO2, OBE Detected OR ANY amber LED light lit at the Seismic Monitor Panel, Response Spectrum Annunciator AND Earthquake confirmed by ANY of the following: • Earthquake felt in plant • JAFNPP seismic instrumentation • Control Room indication of degraded performance of systems required for the safe shutdown of the plant					Seismic event identified by ANY two of the following: • Annunciator 842121 SEISMIC ACCELERATION EXCEEDED indicates seismic event detected • Confirmation of earthquake received on NMP-1 or JAFNPP seismic instrumentation • Earthquake felt in plant					Tornado striking within PROTECTED AREA boundary OR Sustained high winds > 90 mph resulting in EITHER: VISIBLE DAMAGE to ANY SAFETY-RELATED STRUCTURE, SYSTEM, OR COMPONENT within ANY Table H-1 area OR Control Room indication of degraded performance of ANY SAFETY-RELATED STRUCTURE, SYSTEM, OR COMPONENT within ANY Table H-1 area					Tornado striking within PROTECTED AREA boundary OR Sustained high winds > 90 mph				
4	Natural or Destructive Phenomena	HA1.2					HA1.2					HA1.2					HA1.2				
		Sustained high winds > 90 mph resulting in EITHER: VISIBLE DAMAGE to ANY SAFETY-RELATED STRUCTURE, SYSTEM, OR COMPONENT within ANY Table H-1 area OR Control Room indication of degraded performance of ANY SAFETY-RELATED STRUCTURE, SYSTEM, OR COMPONENT within ANY Table H-1 area					Sustained high winds > 90 mph resulting in EITHER: VISIBLE DAMAGE to ANY SAFETY-RELATED STRUCTURE, SYSTEM, OR COMPONENT within ANY Table H-1 area OR Control Room indication of degraded performance of ANY SAFETY-RELATED STRUCTURE, SYSTEM, OR COMPONENT within ANY Table H-1 area					Turbine failure-generated PROJECTIONS resulting in EITHER: VISIBLE DAMAGE to ANY SAFETY-RELATED STRUCTURE, SYSTEM, OR COMPONENT within ANY Table H-1 area OR Control Room indication of degraded performance of ANY SAFETY-RELATED STRUCTURE, SYSTEM, OR COMPONENT within ANY Table H-1 area					Turbine failure resulting in ANY of the following: • Gearing penetration • Damage to turbine seals • Damage to generator seals				
		Lake water level > 254 ft OR Intake water level < 233 ft					Lake water level > 254 ft OR Intake water level < 233 ft					HA1.5					HA1.5				
5	Control Room Evacuation	HA4.1					HA4.1					HA4.1					HA4.1				
		A HOSTILE ACTION has occurred such that plant personnel are unable to operate equipment required to maintain safety functions					A HOSTILE ACTION is occurring or has occurred within the PROTECTED AREA as reported by the Security Site Supervisor					A HOSTILE ACTION is occurring or has occurred within the Protected Area as reported by the Security Site Supervisor					A SECURITY CONDITION that does not involve a HOSTILE ACTION as reported by the Security Site Supervisor				
		A validated notification from NRC of an AIRLINER attack threat within 30 min. of the site					Control Room evacuation has been initiated AND Control of the plant cannot be established within 15 min. (Note 4)					Control Room evacuation has been initiated					Control Room evacuation has been initiated				
6	Judgment	HG4.1					HG4.1					HG4.1					HG4.1				
		A HOSTILE ACTION has caused failure of Spent Fuel Cooling systems AND IMMINENT fuel damage is likely					Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which involve actual or potential substantial degradation of the level of safety of the plant or indicate a security threat 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 (1,000 mRem TEDE or 5,000 mRem thyroid CDE) offsite for more than the immediate site area					Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which involve actual or potential substantial degradation of the level of safety of the plant or indicate a security threat 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 (1,000 mRem TEDE or 5,000 mRem thyroid CDE) beyond the SITE BOUNDARY					Other conditions exist which in the judgment of the Emergency Director indicate that events are in progress or have occurred which involve actual or potential substantial degradation of the level of safety of the plant or indicate a security threat 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 (1,000 mRem TEDE or 5,000 mRem thyroid CDE)				
		None					None					None					None				
E	ISFSI	None					None					None					None				
		None					None					None					None				
		None					None					None					None				

Table H-1 Safe Shutdown Areas

- Reactor Building (including Primary Containment)
- Control Room
- Diesel Generator Engine and Board Rooms
- Standby Switchgear and Battery Rooms
- HPCS Switchgear and Battery Rooms
- Remote Shutdown Rooms
- Control Building HVAC Rooms
- Service Water Pump Rooms
- Electrical Protection Assembly Room
- PGCC Relay Room

- Notes**
- The ED should not wait until the applicable time has elapsed, but should declare the event as soon as it is determined that the condition will likely exceed the applicable time.
 - The ED should not wait until the applicable time has elapsed, but should declare the event as soon as it is determined that the release duration has exceeded, or will likely exceed, the applicable time. In the absence of data to the contrary, assume that the release duration has exceeded the applicable time if an ongoing release is detected and the release start time is unknown.
 - If loss of water level in the refueling pathway occurs while in Mode 4, 5 or D, consider classification under EALS CU3.1, CU3.2 or CU3.3.
 - The ED should not wait until the applicable time has elapsed, but should declare the event as soon as it is determined that the condition has exceeded, or will likely exceed, the applicable time.
 - If the equipment in the stated area was already inoperable, or out of service, before the event occurred, then EAL HA3.1 should not be declared as it will have no adverse impact on the ability of the plant to safely operate or safely shutdown beyond that already allowed by Technical Specifications at the time of the event.

		GENERAL EMERGENCY					SITE AREA EMERGENCY					ALERT					UNUSUAL EVENT				
		SG1.1					SS1.1					SA1.1					SU1.1				
1	Loss of AC Power	Loss of all offsite and all onsite AC power, Table S-1, to 4.16 KV emergency buses 2ENS*SWG101 and 2ENS*SWG103 AND EITHER: Restoration of 4.16 KV emergency bus 2ENS*SWG101 or 2ENS*SWG103 within 4 hours is not likely OR RPV water level cannot be restored and maintained above -14 in. or RPV water level cannot be determined					Loss of all offsite and all onsite AC power, Table S-1, to 4.16 KV emergency buses 2ENS*SWG101 and 2ENS*SWG103 and 2ENS*SWG103 for ≥ 15 min. (Note 4)					AC power capability to 4.16 KV emergency buses 2ENS*SWG101 and 2ENS*SWG103 reduced to a single power source, Table S-1, for ≥ 15 min. (Note 4) AND ANY additional single power source failure will result in a loss of all power to 4.16 KV emergency buses 2ENS*SWG101 and 2ENS*SWG103					Loss of all offsite AC power, Table S-1, to 4.16 KV emergency buses 2ENS*SWG101 and 2ENS*SWG103				
		None					None					None					None				
		An automatic scram fails to shut down the reactor as indicated by reactor power > 4% AND All manual actions fail to shut down the reactor as indicated by reactor power > 4% AND EITHER of the following exist or have occurred: RPV water level cannot be restored and maintained above -38 in. or RPV water level cannot be determined OR Suppression pool temperature and RPV pressure cannot be maintained below the Heat Capacity Temperature Limit (N2-EOP-PC Figure M)					An automatic scram failed to shut down the reactor as indicated by reactor power > 4% AND Manual actions taken at the reactor control console (mode switch in shutdown, manual scram push buttons and ASR) failed to shut down the reactor as indicated by reactor power > 4% AND Suppression pool temperature and RPV pressure cannot be maintained below the Heat Capacity Temperature Limit (N2-EOP-PC Figure M)					An automatic scram failed to shut down the reactor AND Manual actions taken at the reactor control console (mode switch in shutdown, manual scram push buttons or ASR) successfully shut down the reactor as indicated by reactor power ≤ 4%					An UNPLANNED sustained positive period observed on nuclear instrumentation				
2	Loss of DC Power	None					None					None					None				
		None					None					None					None				
		None					None					None					None				
3	Criticality & RPS Failure	None					None					None					None				
		None					None					None					None				
		None					None					None					None				
4	Inability to Reach or Maintain Shutdown Conditions	None					None					None					None				
		None					None					None					None				
		None					None					None					None				
5	Inst.	None					None					None					None				
		None					None					None					None				
		None					None					None					None				
6	Comm.	None					None					None					None				
		None					None					None					None				
		None					None					None					None				
7	Fuel Clad Degradation	None					None					None					None				
		None					None					None					None				
		None					None					None					None				
8	RCS Leakage	None					None					None					None				
		None					None					None					None				
		None					None					None					None				
F	Fission Product Barrier Degradation	None					None					None					None				
		None					None					None					None				
		None					None					None					None				

Table S-2 Significant Transients

- Automatic turbine ruckback > 25% thermal reactor power
- Electric load rejection > 25% full electrical load
- Reactor scram
- ECCS injection
- Thermal power oscillations > 10%

Table S-3 Communications Systems

System	Onsite (internal)	Offsite (external)
PBX (normal dial telephones)	X	X
Galtronics	X	X
Station radio (portable)	X	X
Control Room installed satellite phones (non portable)	X	X
ENS	X	X
RECS	X	X
UHF radios	X	X

Table F-1 Fission Product Barrier Matrix

	Fuel Clad Barrier		Reactor Coolant System Barrier		Containment Barrier	
	Loss	Potential Loss	Loss	Potential Loss	Loss	Potential Loss
A RPV Water Level	1. Primary Containment Flooding is required	1. RPV water level cannot be restored and maintained above -14 in. following depressurization of the RPV or RPV water level cannot be determined	1. RPV water level cannot be restored and maintained above -14 in. or RPV water level cannot be determined	None	None	1. Primary Containment Flooding is required
B Primary Containment Pressure / Temperature	None	None	2. Primary Containment pressure > 1.68 psig due to RCS leakage	None	None	2. Primary Containment pressure rise followed by a rapid UNPLANNED drop in pressure 3. Explosive mixture exists inside Primary Containment (≥ 8% H ₂ and ≥ 5% O ₂) 4. Suppression pool temperature and RPV pressure cannot be maintained below the Heat Capacity Temperature Limit (N2-EOP-PC Figure M)
C Isolation	None	None	3. Release pathway exists outside Primary Containment resulting from isolation failure in ANY of the following systems (excluding normal process system flowpaths from an UNISOLABLE system): • Main steam line • RCIC steam line • RWCU • Feedwater 4. RPV blowdown is required	1. UNISOLABLE primary system leakage outside Primary Containment as indicated by exceeding EITHER: RB area temperature above an isolation setpoint OR RB area radiation above an alarm setpoint	3. Failure of all Primary Containment isolation valves in ANY one line to close following auto or manual initiation AND Direct downstream pathway outside Primary Containment and to the environment exists	4. Intentional Primary Containment venting per EOPs 5. UNISOLABLE primary system leakage outside Primary Containment as indicated by exceeding EITHER: RB area maximum safe temperature value (N2-EOP-SC Detail S) OR RB area radiation > 8.00E+3 mR/hr
D Rad	2. Drywell area radiation ≥ 3100 R/hr (3.1 EB mRem/hr)	None	5. Drywell area radiation ≥ 41 R/hr (4.1 E4 mRem/hr)	None	None	5. Drywell area radiation ≥ 6.0 E4 R/hr (6.0 E7 mRem/hr)
E Judgment	3. Reactor coolant activity > 300 µCi/gm I-131 Equivalent	4. ANY condition in the opinion of the Emergency Director that indicates loss of the Fuel Clad barrier	6. ANY condition in the opinion of the Emergency Director that indicates loss of the Reactor Coolant System barrier	2. ANY condition in the opinion of the Emergency Director that indicates potential loss of the Fuel Clad barrier	6. ANY condition in the opinion of the Emergency Director that indicates potential loss of the Containment barrier	6. ANY condition in the opinion of the Emergency Director that indicates potential loss of the Containment barrier

EAL Identifier

XXXX.X

Category (R, H, E, S, F, C) | Sequential number within subcategory/classification

Emergency classification (G, S, A, U) | Subcategory number (1 if no subcategory)

Modes:

1	2	3	4	5	D
Power Operation	Startup	Hot Shutdown	Cold Shutdown	Refuel	Defueled

MODE 1, 2 or 3

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