******	*******	& CENERAL ELLERAN	6			
		GENERAL EMERGENCY  RG1 Release of gaseous radicactivity resulting in offsite dose greater than 1,000 mrem TEDE or 5,000 mrem thyroid CDE	RS1 Release of gaseous radioactivity resulting in offsite dose greater that 100 mrem TEDE or 500 mrem thyroid CDE		UNUSUAL EVENT  RU1 Release of gaseous or liquid radioactivity greater than 2 times the ODCM limits for 60 minutes or longer	
		RG1.1 In the absence of real-time dose assessment, reading on any	RS1.1 In the absence of real-time dose assessment, reading on any	The latest terms of the la	1 2 3 4 5 DEF	
		Table R-1 effluent radiation monitor > column "GE" for ≥ 15 min. (Notes 1, 2, 3, 4) RG1.2	Table R-1 effluent radiation monitor > column "SAE" for ≥ 15 min. (Notes 1, 2, 3, 4)	Table R-1 effluent radiation monitor > column "ALERT" for ≥ 15 min. (Notes 1, 2, 3, 4)	Reading on any Table R-1 effluent radiation monitor > column "UE" for ≥ 60 min. (Notes 1, 2, 3)  RU1.2	
	4	Dose assessment using actual meteorology indicates doses > 1000 mrem TEDE or 5000 mrem thyroid CDE at or beyond the SITE BOUNDARY (Notes 3, 4)	in the state of th	RA1.2  Dose assessment using actual meteorology indicates doses > 10 mrem TEDE or 50 mem thyroid CDE at or beyond the	Sample analysis for a gaseous or liquid release indicates a concentration or release rate > 2 x ODCM limits for ≥ 60 min. (Notes 1, 2)	
	Rad Effluent	RG1.3 Field survey results indicate EITHER of the following at or	the SITE BOUNDARY (Notes 3, 4)  RS1.3  Field survey results indicate EITHER of the following at or	SITE BOUNDARY (Notes 3, 4)  RA1.3  Analysis of a liquid effluent sample indicates a concentration		
		beyond the SITE BOUNDARY:  - Closed window dose rates > 1000 mR/hr expected to continue for ≥ 60 min.	beyond the SITE BOUNDARY:	or release rate that would result in doses > 10 mrem TEDE or 50 mrem thyroid CDE at or beyond the SITE BOUNDARY for 60 min. of exposure (Notes 1, 2)		
		Analyses of field survey samples indicate thyroid CDE     5000 mrem for 60 min. of inhalation. (Notes 1, 2)	Analyses of field survey samples indicate thyroid CDE     > 500 mrem for 60 min. of inhalation. (Notes 1, 2)	RA1.4  Field survey results indicate EITHER of the following at or beyond the SITE BOUNDARY:  - Closed window dose rates > 10 mR/hr expected to continue for ≥ 60 min.		
R				<ul> <li>Analyses of field survey samples indicate thyroid CDE</li> <li>50 mrem for 60 min. of inhalation.</li> <li>(Notes 1, 2)</li> </ul>		
Abnorm. Rad		RG2 Spent fuel pool level cannot be restored to at least the top of the fuel 1 2 3 4 5 DEF	RS2 Spent fuel pool level at the top of the fuel racks  1 2 3 4 5 DEF	RA2 Significant lowering of water level above, or damage to, irradiated fuel 1 2 3 4 5 DEF	RU2 UNPLANNED loss of water level above irradiated fuel  1 2 3 4 5 DEF	
Levels / Rad		RG2.1  Spent fuel pool level cannot be restored ≥ 95 ft. 3 in. ele. for > 60 min. (Note 1)	RS2.1 Lowering of spent fuel pool level to ≤ 95 ft. 3 in. ele.	RA2.1 Uncovery of irradiated fuel in the REFUELING PATHWAY	RU2.1 UNPLANNED water level drop in the REFUELING PATHWAY	
Effluent	2		nitor Classification Thresholds	RA2.2  Damage to irradiated fuel resulting in a release of radioactivity AND	The state of the s	
	Irradiated Fuel Event		GE         SAE         Alert         UE           09 μCi/sec         2.13E+08 μCi/sec         2.13E+07 μCi/sec         1.80E+06 μCi/sec	Any of the following radiation monitor indications:  - Reactor Bldg Vent Rad Monitor Channel A or B (> 3 mR/hr)	of the following radiation monitors: - ARM Channel 26 New Fuel Vault - ARM Channel 27 North of Fuel Pool	
		Reactor Bldg Vent Noble Gas CAC-AQH-1264-3 -	6.14E+04 cpm	- ARM Channel 26 New Fuel Vault (> 6 mR/hr) - ARM Channel 27 North of Fuel Pool (> 10 mR/hr) - ARM Channel 28 Between Reactor and Fuel Pool	ARM Channel 28 Between Reactor and Fuel Pool     ARM Channel 29 Cask Wash Area	
		Turbine Building Vent Rad D12-RM-23 1.07E+	08 μCi/sec 1.07E+07 μCi/sec 1.07E+06 μCi/sec 1.13E+04 μCi/sec	(> 1000 mR/hr) - ARM Channel 29 Cask Wash Area (> 40 mR/hr)		
		Service Water Effluent Radioactivity D12-RM-K605 –	2 X hi alarm	RA2.3  Lowering of spent fuel pool level to ≤ 105 ft. 3 in. ele.		
	9	Radwaste Effluent Rad D12-RM-K604	2 X hi-hi alarm	RA3 Radiation levels that IMPEDE access to equipment necessary for normal plant operations, cooldown or shutdown  1 2 3 4 5 DEF		
	3 Area Rad	None	Table R-2 Safe Shutdown Rooms/Areas  Room / Area Mode(s)	RA3.1  Dose rates > 15 mR/hr in EITHER of the following areas: Control Room (ARM Channel 1-1)		
	Levels	- Re	eactor Building -17' North RHR Unit 1 & 2 3, 4, 5	OR Central Alarm Station (by survey) RA3.2	None	
		- Re	eactor Building 20' East & West MCC Areas Unit 1 & 2 3, 4, 5 eactor Building 20' Pipe Tunnel Unit 1 & 2 3, 4, 5 3, 4, 5	An UNPLANNED event results in radiation levels that prohibit or IMPEDE access to any Table R-2 rooms or areas (Note 5)		
		HG1 Hostile Action resulting in loss of physical control of the facility  1 2 3 4 5 DEF	HS1 Hostile Action within the Protected Area  1 2 3 4 5 DEF	HA1 Hostile action within the owner controlled area or airborne attack threat within 30 minutes  1 2 3 4 5 DEF	HU1 Confirmed SECURITY CONDITION or threat  1 2 3 4 5 DEF	
		HG1.1 A HOSTILE ACTION is occurring or has occurred within the PROTECTED AREA as reported by the Security Shift	HS1.1 A HOSTILE ACTION is occurring or has occurred within the PROTECTED AREA as reported by the Security Shift	HA1.1 A HOSTILE ACTION is occurring or has occurred within the OWNER CONTROLLED AREA as reported by the Security	HU1.1 A SECURITY CONDITION that does not involve a HOSTILE	
	1	Supervision  AND EITHER of the following has occurred:  Any of the following safety functions cannot be controlled	Supervision	Shift Supervision HA1.2	ACTION as reported by the Security Shift Supervision  HU1.2	
	Security	or maintained - Reactivity - RPV water level		A validated notification from NRC of an aircraft attack threat within 30 min. of the site	Notification of a credible security threat directed at the site HU1.3	
		-RCS heat removal OR Damage to spent fuel has occurred or is IMMINENT			A validated notification from the NRC providing information of an aircraft threat	
	2			See SA8.1 for potential for upgrade to an	HU2 Seismic event greater than OBE levels	
	Seismic Event	None	None	See SA8.1 for potential for upgrade to an Alert based on degraded safety system performance or damage	1 2 3 4 5 DEF  HU2.1 Seismic event > OBE per 0AOP-13.0	
					HU3 Natural or Technological Hazard	
					1 2 3 4 5 DEF  HU3.1 A tornado strike within the PROTECTED APEA	
					A tornado strike within the PROTECTED AREA  HU3.2 Internal room or area FLOODING of a magnitude sufficient	
	3				to require manual or automatic electrical isolation of a SAFETY SYSTEM component needed for the current operating mode	
	Natural or	None	None	See SA8.1 for potential for upgrade to an	HU3.3	
	Technical Hazard	, note	Note	Alert based on degraded safety system performance or damage	Movement of personnel within the PROTECTED AREA is IMPEDED due to an event external to the PROTECTED AREA involving hazardous materials (e.g., an offsite chemical spill or toxic gas release)	
					HU3.4	
					A hazardous event that results in onsite conditions sufficient to prohibit the plant staff from accessing the site via personal vehicles (Note 7)	
					HU3.5 Intake Canal water level > +19 ft. Mean Sea Level OR	
					Intake Canal water level < -7.75 ft. Mean Sea Level  HU4 FIRE potentially degrading the level of safety of the plant	
				. See SAD 4 from the William	1 2 3 4 5 DEF	
H				See SA8.1 for potential for upgrade to an Alert based on degraded safety system performance or damage	HU4.1 A FIRE is not extinguished within 15 min. of any of the following FIRE detection indications (Note 1):	
- Innered					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	
Hazards	1				AND The FIRE is located within any Table H-1 area	
	4 Fire	None	None	Table H-1 Fire Areas	HU4.2 Receipt of a single fire alarm (i.e., no other indications of a FIRE)	
				Reactor Building     Diesel Generator Building	AND The fire alarm is indicating a FIRE within any Table H-1 area AND	
				- Diesel 4-Day Tank Rooms - Service Water Building	The existence of a FIRE is not verified within 30 min. of alarm receipt (Note 1)	
				- Turbine Building - Control Building	HU4.3 A FIRE within the plant PROTECTED AREA not extinguished within 60 min. of the initial report, alarm or indication (Note 1)	
				- CSTs - Diesel Fuel Oil Storage tank	HU4.4 A FIRE within the plant PROTECTED AREA that requires	
				HA5 Gaspous release impedia-	firefighting support by an offsite fire response agency to extinguish	
	5		Table H-2 Safe Shutdown Rooms/Areas  Room / Area Mode(s)	HA5 Gaseous release impeding access to equipment necessary for normal plant operations, cooldown or shutdown  1 2 3 4 5 DEF		
Н	lazardous Gases	None - Read	ctor Building -17' North RHR Unit 1 & 2 3, 4, 5 ctor Building -17' South RHR Unit 1 & 2 3, 4, 5	HA5.1 Release of a toxic, corrosive, asphyxiant or flammable gas into any Table H-2 rooms or areas	None	
			ctor Building 20' Pipe Tunnel Unit 1 & 2 3, 4, 5	AND Entry into the room or area is prohibited or IMPEDED (Note 5)		
			1 2 3 4 5 DEF	HA6 Control Room evacuation resulting in transfer of plant control to alternate locations  1 2 3 4 5 DEF		
	6	None	An event has resulted in plant control being transferred from the Control Room to the Remote Shutdown Panels	HA6.1  An event has resulted in plant control being transferred from the Control Room to the Remote Shutdown Panels		
	Control Room vacuation		Control of any of the following key safety functions is not reestablished within 22.5 min. (Note 1):	- GIOO	None	
			Reactivity     RPV water level     RCS heat removal			
		HG7 Other conditions exist which in the judgment of the Site Emergency Coordinator warrant declaration of a General Emergency	HS7 Other conditions existing that in the judgment of the Site Emergency Coordinator warrant declaration of a Site Area Emergency	HA7 Other conditions exist that in the judgment of the Site Emergency Coordinator warrant declaration of an Alert	HU7 Other conditions existing that in the judgment of the Site Emergency	
	7	1 2 3 4 5 DEF HG7.1	1 2 3 4 5 DEF	1 2 3 4 5 DEF	1   2   3   4   5   DEF	
		Other conditions exist which in the judgment of the Site Emergency Coordinator indicate that events are in progress or have occurred which involve actual or IMMINENT	Other conditions exist which in the judgment of the Site Emergency Coordinator indicate that events are in progress	Other conditions exist which, in the judgment of the Site Emergency Coordinator, indicate that events are in progress	Other conditions exist which in the judgment of the Site Emergency Coordinator indicate that events are in progress or	
J	SEC udgment	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	of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or	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	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	
		be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the	could lead to the likely failure of or, (2) that prevent effective access to equipment needed for the protection of the public.	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	radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.	
				exposure levels.		
					EU1 Damage to a loaded cask CONFINEMENT BOUNDARY  1 2 3 4 5 DEF	
E		None	None	None	EU1.1  Damage to a loaded canister confinement boundary as	
ISFS	51				indicated by an on-contact radiation reading on the surface of a loaded spent fuel cask > any of the following: - 1,400 mrem/hr on the HSM-H front surface - 10 mrem/hr on the HSM-H door centerline	
				DUK	- 20 mrem/hr on the end shield wall exterior	
Mod	les:	1 2 Power Operations Startup Ho	3 4 5 ot Shutdown Cold Shutdown Refuel	DEF	Initial Emergency Actions  OPEP-02.1, Rev. 6 Draft A	
		- Conup H	ot Shutdown Cold Shutdown Refuel	Defueled		

		<b>G</b> ENERAL EM	ERGENC	1   5	TITE AREA EMERGENCY	ALERT	UNUSUAL EVENT
	Loss of Emer. AC Power	SG1 Prolonged loss of all offsite and all onsite AC power to emergency buses OR loss of all emergency AC and vital DC power sources for 15 minutes or longer  1 2 3  SG1.1  Loss of all offsite and all onsite AC power capability to Emergency 4 KV Buses E1(E3) and E2(E4)  AND EITHER:  - Restoration of at least one emergency bus in < 4 hours is not likely (Note 1)  - RPV water level cannot be restored and maintained > MSCRWL (LL-4)			Loss of all offsite and all onsite AC power to emergency buses for 15 minutes or longer  1 2 3	SA1 Loss of <b>all but one</b> AC power source to emergency buses for 15 minutes or longer	SU1 Loss of all offsite AC power capability to emergency buses for 15 minutes or longer
					SS1.1 Loss of all offsite and all onsite AC power capability to Emergency 4 KV Buses E1(E3) and E2(E4) for ≥ 15 min.  Note 1)	SA1.1  AC power capability to Emergency 4 KV Buses E1(E3) and E2(E4) reduced to a single power source for ≥ 15 min. (Note 1)  AND  Any additional single power source failure will result in loss of all unit-specific AC power to SAFETY SYSTEMS	SU1.1 Loss of all offsite AC power capability to Emergency 4 KV Buses E1(E3) and E2(E4) for ≥ 15 min. (Note 1)
		SG1.2 Loss of all offsite and all onsite AC power capability to Emergency 4 KV Buses E1(E3) and E2(E4) for ≥ 15 min. AND Loss of all 125 VDC power based on battery bus voltage indications < 105 VDC on all vital DC buses 1(2)A-1, A-2, B-1 and B-2 for ≥ 15 min. (Note 1)		B-1			
	Loss of Vital DC Power			S	S2 Loss of all vital DC power for 15 minutes or longer  1 2 3   S2.1  S2.1  S3.1  S4.1  S5.2.1  S5.2.1  S5.2.1  S5.2.1  S5.2.1  S5.2.1  S5.2.1  S6.2.1  S7.2.1  S8.2.1  S8.2.2  S8.2.	None	None
	2				Table S-1 Safety System Parameters	SA3 UNPLANNED loss of Control Room indications for 15 minutes or longer with a significant transient in progress  1 2 3	SU3 UNPLANNED loss of Control Room indications for 15 minutes or longer
	Loss of CF Indications				- Reactor Power - RPV Water Level - RPV pressure - Primary containment pressure - Torus water level - Torus temperature	SA3.1  An UNPLANNED event results in the inability to monitor one or more Table S-1 parameters from within the Control Room for ≥ 15 min. (Note 1)  AND  Any significant transient is in progress, Table S-2	SU3.1  An UNPLANNED event results in the inability to monitor one or more Table S-1 parameters from within the Control Room for ≥ 15 min. (Note 1)
S	4 RCS Activity	None			Table S-2 Significant Transients  - Reactor scram - Runback > 25% rated thermal power - Electrical load rejection > 25% electrical load - ECCS injection - Thermal power oscillations > 10% (peak to peak)	None	SU4 Reactor coolant activity greater than Technical Specification allowable limits  1 2 3  SU4.1  Steam Jet Air Ejector Radiation Monitor 1(2)D12-RM-K601A /B Hi-Hi alarm (Process Off-Gas Rad Hi-Hi alarm 1(2)UA-03 4-2) ≥ 15 min. (Note 1)  SU4.2  Coolant activity > 0.2 μCi/gm I-131 dose equivalent for > 48 hrs OR  Coolant activity > 4.0 μCi/gm I-131 dose equivalent instantaneous
System Malfunct	5 RCS Leakage	None			None	None	SU5 RCS leakage for 15 minutes or longer  1 2 3  SU5.1  RCS unidentified or pressure boundary leakage > 10 gpm for ≥ 15 min.  OR  Identified leakage > 25 gpm for ≥ 15 min.  OR  Leakage from the RCS to a location outside Primary  Containment > 25 gpm for ≥ 15 min.  (Note 1)
		None			6 Inability to shut down the reactor causing a challenge to RPV water level or RCS heat removal	SA6 Automatic or manual scram fails to shut down the reactor and subsequent manual actions taken at the reactor control consoles are not successful in shutting down the reactor	SU6 Automatic or manual scram fails to shut down the reactor
	6 RPS Failure				automatic or manual scram fails to reduce reactor power 2% (APRM downscale) AND actions to shut down the reactor are not successful as licated by reactor power ≥ 2% AND EITHER: RPV level cannot be restored and maintained > LL-4 or cannot be determined Suppression pool water temperature and RPV pressure cannot be maintained below the HCTL	Anautomatic or manual scram fails to reduce reactor power < 2% (APRM downscale) AND Manual scram actions taken at the reactor control console (Manual PBs, Mode Switch, ARI) are not successful in shutting down the reactor as indicated by reactor power ≥ 2% (Note 8)	SU6.1  An automatic scram did not reduce reactor power < 2% (APRM downscale) after any RPS setpoint is exceeded AND  A subsequent automatic scram or manual scram action taken at the reactor control console (Manual PBs, Mode Switch, ARI) is successful in shutting down the reactor as indicated by reactor power < 2% (APRM downscale) (Note 8)  SU6.2
		Table S-3 Communi	cation Methods Onsite Offsite	NRC	pressure carrier be maintained below the HCTL		A manual scram did not reduce reactor power < 2% (APRM downscale) after any manual scram action was initiated AND
		Public Address System PBX Telephone System	X X X	X			A subsequent automatic scram or manual scram action taken at the reactor control console (Manual PBs, Mode Switch, ARI) is successful in shutting down the reactor as indicated by reactor power < 2% (APRM downscale) (Note 8)
		Corporate Telephone Communications System Commercial Telephones	x x	X			SU7 Loss of all onsite or offsite communications capabilities  1 2 3
	Loss of Comm.	Satellite Phones Cellular Phones NRC Emergency Telecommunications System	X X X X	X X X	None	None	SU7.1 Loss of all Table S-3 onsite communication methods OR Loss of all Table S-3 offsite communication methods OR Loss of all Table S-3 NRC communication methods
	8 Hazardous Event				Table S-4 Hazardous Events  - Seismic event (earthquake)  - Internal or external FLOODING event  - High winds or tornado strike  - FIRE  - EXPLOSION  - Other events with similar hazard characteristics as determined by the Shift Manager	SA8 Hazardous event affecting a SAFETY SYSTEM needed for the current operating mode  1 2 3  SA8.1  The occurrence of any Table S-4 hazardous event AND EITHER:  Event damage has caused indications of degraded performance in at least one train of a SAFETY SYSTEM needed for the current operating mode  The event has caused VISIBLE DAMAGE to a SAFETY SYSTEM component or structure needed for the current operating mode	None
Fission Product Barriers		FG1.1 1 2 3  Loss of any two barriers  AND  Loss or potential loss of third barrier (Table F-1)		Anna Ministration (Sec.)	s or potential loss of any two barriers (Table F-1)	Any loss or any potential loss of either Fuel Clad or RCS (Table F-1)	None

	Fuel Clad	Barrier	Reactor Coolar	nt System Barrier	Containment Barrier		
	Loss	Potential Loss	Loss	Potential Loss	Loss	Potential Loss	
A. RPV Water Level	1.Entry to SAMG-01 required	RPV level cannot be restored and maintained     TAF or cannot be determined	RPV level cannot be restored and maintained > TAF or cannot be determined	None	None	Entry to SAMG-01 required	
B. RCS Leak Rate	None	None	UNISOLABLE break in any of the following:	UNISOLABLE primary system leakage that results in exceeding EITHER of the following:     One or more Secondary Containment area radiation Maximum Normal Operating Limits (0EOP-03-SCCP Table 3)     One or more Secondary Containment area temperature Maximum Normal Operating Limits(0EOP-03-SCCP Table 1)	1. UNISOLABLE primary system leakage that results in exceeding EITHER of the following:  • One or more Secondary Containment area radiation Maximum Safe Operating Limits (0EOP-03-SCCP Table 3)  • One or more Secondary Containment area temperature Maximum Safe Operating Limits(0EOP-03-SCCP Table 1)	None	
C. PC Conditions	None	None	Primary Containment pressure     1.7 psig due to RCS leakage	None	UNPLANNED rapid drop in Primary     Containment pressure following Primary     Containment pressure rise      Primary Containment pressure response not     consistent with LOCA conditions	Primary Containment pressure > 62 psig     Deflagration concentrations exist inside PC (H2 ≥ 6% AND O2 ≥ 5%)     Heat Capacity Temperature Limit (HCTL exceeded	
D. PC Rad / RCS Activity	Drywell radiation > 2,000 R/hr     Primary coolant activity     > 300 μCi/gm I-131dose equivalent	None	Drywell radiation > 27 R/hr with reactor shutdown	None	None	Drywell radiation > 20,000 R/hr	
E. PC Integrity or Bypass	None	None	None	None	UNISOLABLE direct downstream pathway to the environment exists after Primary Containment isolation signal     Intentional Primary Containment venting per EOPs	None	
SEC Judgment	Any condition in the opinion of the Site Emergency Coordinator that indicates loss of the Fuel Clad barrier	Any condition in the opinion of the Site Emergency Coordinator that indicates potential loss of the Fuel Clad barrier	Any condition in the opinion of the Site Emergency Coordinator that indicates loss of the RCS barrier	Any condition in the opinion of the Site Emergency Coordinator that indicates potential loss of the RCS barrier	Any condition in the opinion of the Site     Emergency Coordinator that indicates loss of     the Containment barrier	Any condition in the opinion of the Site Emergency Coordinator that indicates potential loss of the Containment barrier	

Note 1: The SEC should declare the event promptly upon determining that time limit has been exceeded, or will likely be exceeded.

Note 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.

Note 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.

Note 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.

Note 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.

Note 6: If CONTAINMENT CLOSURE is re-established prior to exceeding the 30-minute time limit, declaration of a General Emergency is not required.

Note 7: This EAL does not apply to routine traffic impediments such as fog, snow, ice, or vehicle breakdowns or accidents. Note 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.