

SIDE 2

EAL TABLE 4
DOSE PROJECTION MONITORS

1. CNMT HI RANGE ACCIDENT MONITORS
2. PLANT VENT STACK #1 W/IN EFFLUENT CHANNEL
3. MAIN STEAM LINE MONITORS
4. STACK #B MONITOR W/IN EFFLUENT CHANNEL
5. STACK #A MONITOR W/IN EFFLUENT CHANNEL

EAL TABLE 5
EFFLUENT MONITORS

1. PLANT VENT STACK #1 W/IN EFFLUENT CHANNEL
2. TURBINE BUILDING STACK #3A W/IN EFFLUENT CHANNEL
3. STACK #B W/IN EFFLUENT CHANNEL
4. STACK #A W/IN EFFLUENT CHANNEL
5. TREATED LAUNDRY AND HOT SHOWER DISCHARGE MONITOR
6. SECONDARY WASTE SAMPLE TANK DISCHARGE MONITOR
7. WASTE MONITOR W/IN DISCHARGE MONITOR
8. TURBINE BLDG. DRAIN MONITOR

EAL TABLE 6
SEISMIC EVENT SYMPTOMS

1. SEISMIC MON SYS SEE EXCESSIVE ALARM (ASB 10-4-4) AND/OR "ALARM" LIGHT ON THE SEISMIC SWITCH PANEL
2. WHITE EVENT INDICATOR ON SBA CONTROL PANEL
3. ALARM AT TRIAXIAL RESPONSE SPECTRUM ANNUNCIATOR
4. NOTICEABLE TREMORS OR VIBRATION

EAL STATUS BOARD

EAL REF. NO(S):

GENERAL EMERGENCY _____

SITE AREA EMERGENCY _____

ALERT _____

UNUSUAL EVENT _____

CONTINUING ACTION: _____ TIME _____

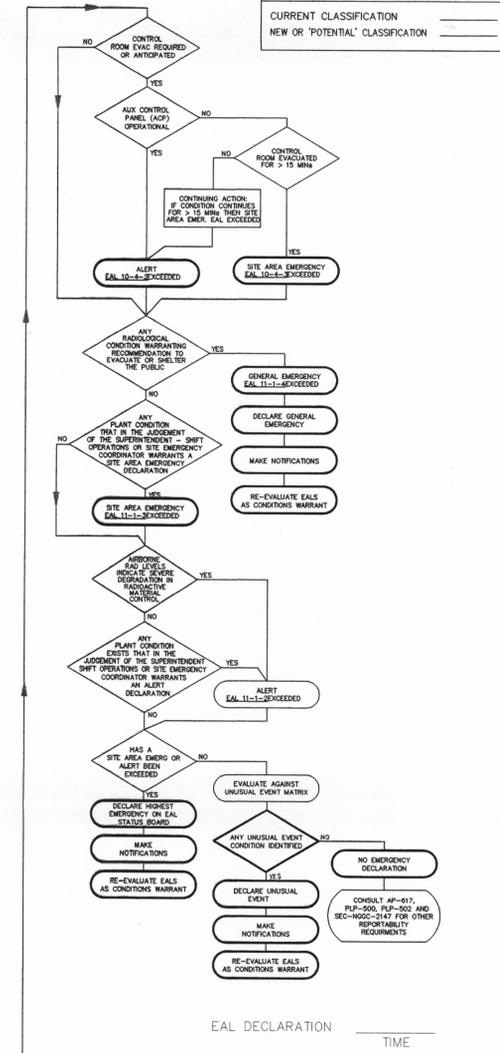
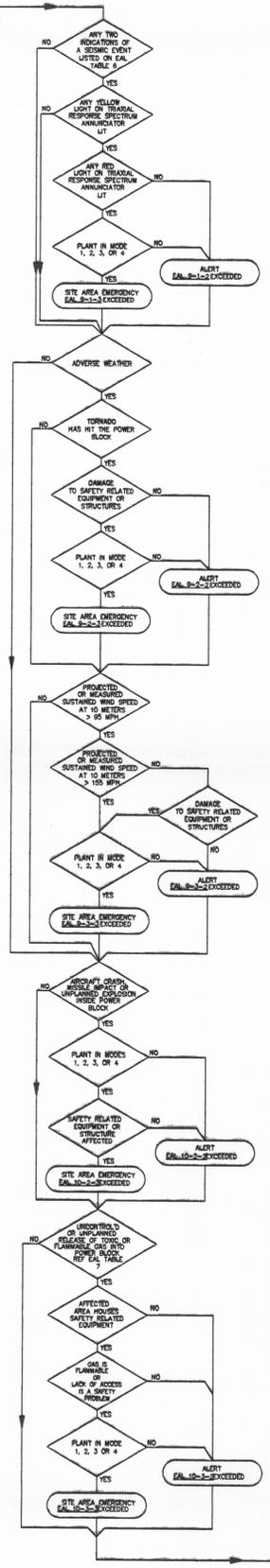
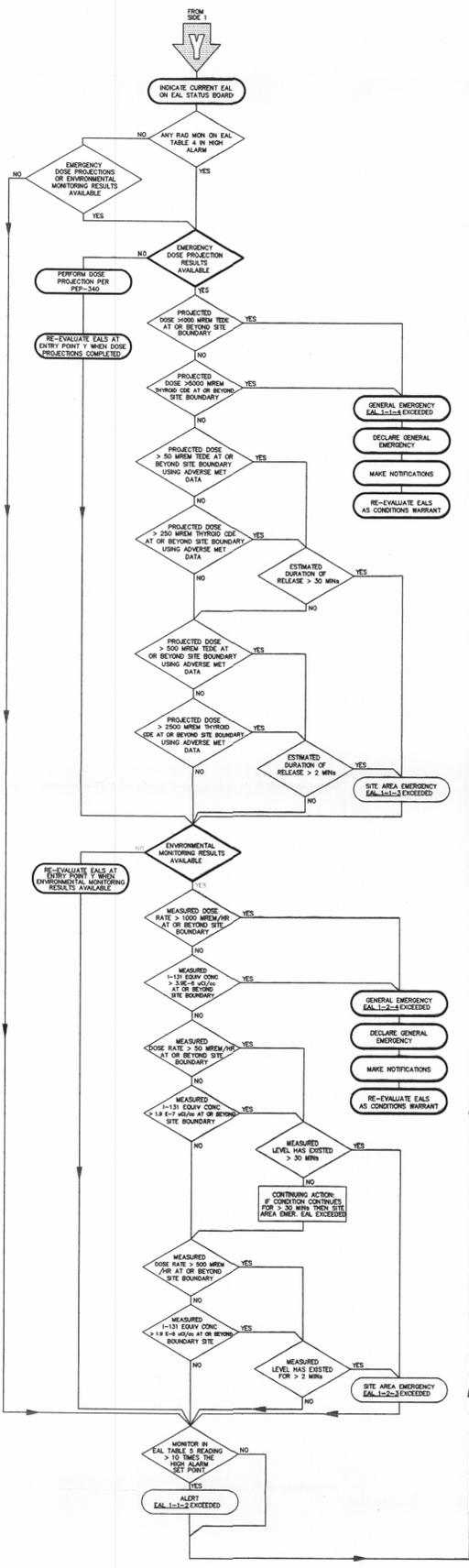
BEGAN: _____

REQUIRED DURATION (MIN) _____

EXPIRES: _____

CURRENT CLASSIFICATION _____

NEW OR 'POTENTIAL' CLASSIFICATION _____



EAL TABLE 1
RADIATION MONITOR TAG NUMBERS

MONITOR DESCRIPTION	INSTRUMENT TAG NO.	RM-11 CHANNEL ID NO.	ERFS POINT ID NO.
CNMT LEAK DETECTION MONITOR	RM-1-1-3002A-SA	203303	RLT3602B
CNMT HI RANGE ACCIDENT MONITORS	RM-10R-3589-SA RM-10R-3580-SB	2A1822 2A1813	ROR3589A ROR3580A
PLANT VENT STACK #1 EFFLUENT CHANNEL	RM-21AV-3509-15A	1EX817	RAV3509H
TURBINE BUILDING STACK 3A W/IN EFFLUENT CHANNEL	RM-11V-3536-1	2EX827	RTV3536D
MAIN STEAM LINE MONITORS	RM-14S-3591-SB RM-14S-3592-SB RM-14S-3593-SB	5A1164 5A1165 5A1166	RMS3591A RMS3592A RMS3593A
FUEL BREACH AREA RAD. MONITORS:			
VOLUME CONTROL TANK RM-19R-3595	1A4058		RRR3595A
CHARGING PUMP 1A ROOM RM-19R-3596A	1A4060		RRR3596A
CHARGING PUMP 1B ROOM RM-19R-3596B	1A4061		RRR3596B
CHARGING PUMP 1C ROOM RM-19R-3596C	1A4062		RRR3596C
RECYCLE EQUIP. GAL RM-19R-3597	1A4063		RRR3597A
LETDOWN HV VALVE GAL RM-19R-3601	1A4064		RRR3601A
MODERATING HV VEV. GAL RM-19R-3602	1A4065		RRR3602A
STACK #B MONITOR W/IN EFFLUENT CHANNEL	RM-1WV-3046-1	4EX837	RWV3046H
STACK #3A MONITOR W/IN EFFLUENT CHANNEL	RM-1WV-3547-1	4EX847	RWV3547H
LIQUID EFFLUENT MONITORS TREATED LAUNDRY & HOT SHOWER DISCHARGE	RDW-1M-3540	4L6566	RWL3540A
SECONDARY WASTE SAMPLE TANK DISCHARGE	RDW-21WS-3542	4L6886	RWS3542A
WASTE MONITOR TANK DISCHARGE	RDW-1M-3541	4L6776	RWL3541A
TURBINE BLDG. DRAIN	RDW-1M-3528	2L276	RMD3528A

EAL TABLE 7
TOXIC, FLAMMABLE, & ASPHYXIANT GASES

GAS	PROPERTY			CHEMICAL FACT SHEET NUMBER
	TOXIC	FLAMMABLE	ASPHYXIANT	
ACETYLENE	X	X		AP-501-00810
HYDROGEN (1)	X	X		AP-501-00123
CARBON DIOXIDE	X	X		AP-501-00085
AMMONIA	X	X		AP-501-00837
D-10 (USED IN PORTAL MONITORS)	X			AP-501-00591
OXYGEN (2)		X		AP-501-00068
NITROGEN		X		AP-501-00130
ARGON		X		AP-501-00319
HELIUM		X		AP-501-00573
IRON		X		AP-501-00967

THIS LIST INCLUDES GASES STORED IN BULK AND IS NOT INTENDED TO BE ALL INCLUSIVE.
(1) VENTING OF H₂ FROM THE H₂ TANK VENT STACK OR H₂ RELEASER IN ACCORDANCE WITH DESIGN AND IS A PLANNED EVENT.
(2) OXYGEN ITSELF IS NOT FLAMMABLE, HOWEVER, ITS PRESENCE INCREASES THE FLAMMABILITY OF MATERIALS.
ASPHYXIANT GASES IN LARGE ENOUGH QUANTITIES CAN DISPLACE OXYGEN AND POSE A DANGER TO PERSONNEL AND SHOULD BE CONSIDERED A TOXIC.
THE TYPE AND QUANTITY OF GAS RELEASED, VOLUME OF AREA AND VENTILATION SYSTEMS IN SERVICE SHOULD BE EVALUATED TO DETERMINE WHETHER PERSONNEL OR EQUIPMENT COULD BE IN AN ADVERSE ENVIRONMENT, OR WHETHER ACCESS TO EQUIPMENT REQUIRED TO OPERATE THE PLANT IS IMPROVED.

UNUSUAL EVENT MATRIX

1) GASEOUS OR LIQUID EFFLUENT(S) EXCEEDING TECHNICAL SPECIFICATIONS	2) FUEL DAMAGE INDICATION	3) LOSS OF SECONDARY COOLANT OR COOLING	4) LOSS OF REACTOR COOLANT	5) LOSS OF POWER	6) LOSS OF HIGH ANNUNCIATORS OR COMMUNICATIONS CAPABILITY	7) SECURITY THREAT	8) OTHER PLANT OR EQUIPMENT PROBLEMS	9) NATURAL PHENOMENA	10) OTHER HAZARDS	11) SITE EMERGENCY ACCIDENT
EAL-1-1-1 VALID HIGH ALARM ON ANY OF THE MONITORS IN EAL TABLE 5 AND THE RELEASE HAS NOT BEEN TERMINATED (UNUSUAL EVENT EXISTS UNTIL EFFLUENT DISCHARGE IS TERMINATED AND WHEN ALL REQUIRED NOTIFICATIONS ARE MADE)	EAL-2-1-1 GROSS FUEL/FUEL DETECTOR INDICATES AN INCREASE > 25A CPM WITHIN 30 MINUTES EAL-2-2-1 RCS SPENTRY ACTIVITY EXCEEDS TECHNICAL SPECIFICATION 3.4.8 LIMITS FOR DOSE EQUIVALENT 1-131 OR GROSS RADIOACTIVITY (FOR DOSE EQUIVALENT 1-131 THE EAL IS NOT EXCEEDED UNLESS THE 40 HOUR TIME INTERVAL, OR PIP 3.4-1 LIMITS ARE EXCEEDED)	EAL-3-1-1 LOSS OF ALL PRESSURIZATION OF STEAM GENERATOR SECONDARY SIDE EAL-3-2-1 FAILURE OF A SG SAFETY OR PWRV TO FULLY RESET AFTER OPERATION EAL-3-3-1 MARK STEAM LINE OR FEEDWATER LINE BREAK EAL-3-4-1 A BREAK IS A LEAK WHICH EXCEEDS THE OPERATING ABILITY TO SHUTDOWN THE PLANT IN A CONTROLLED MANNER OR TO NOT EXCEED NON-SPEC COOLDOWN LIMITS EAL-3-5-1 STEAM GENERATOR BLOWDOWN LINE BREAK (MODES 1,2 AND 3)	EAL-4-1-1 FAILURE OF A PRESSURIZER SAFETY OR PORV TO CLOSE FOLLOWING APPLICABLE PRESSURE EAL-4-2-1 ANY RCS PRESSURE BOUNDARY LEAKAGE EAL-4-3-1 ANY OTHER RCS LEAKAGE IN EXCESS OF TECHNICAL SPECIFICATION 3.4.6.2 WITH THE 4 HOURS CORRECTIVE ACTION NOT SATISFIED	EAL-5-1-1 LOSS OF ALL OFFSITE POWER EAL-5-2-1 LOSS OF BOTH GENERATORS EAL-5-3-1 ANY OTHER RCS LEAKAGE IN EXCESS OF TECHNICAL SPECIFICATION 3.4.6.2 WITH THE 4 HOURS CORRECTIVE ACTION NOT SATISFIED	EAL-6-1-1 UNPLANNED LOSS OF >75% OF W/IN ANNUNCIATORS (ALARM) FOR >15 MINUTES AS DETERMINED BY: MODES 1-4 TOTAL # ALMS = 30 MODES 5-8 TOTAL # ALMS = 20 (ALB 1.2, 4-13, 15, 22, 23, EITHER 24 OR 25 BASED ON EDO OPERABILITY, 26-28, & 30) EAL-6-2-1 FAILURE OF BOTH SITE TELEPHONE AND EMERGENCY (PAGED) TELEPHONE SWITCHES	EAL-7-1-1 CONFIRMED SECURITY EVENT WHICH INDICATES A POTENTIAL DEGRADATION IN THE LEVEL OF SAFETY OF THE PLANT AS DETERMINED BY: UNAUTHORIZED ACCESS TO THE PLANT UNAUTHORIZED ALTERATION OR TAMPERING HAS OR IS OCCURRING AFFECTING SAFETY RELATED EQUIPMENT UNAUTHORIZED INTERFERENCE WITH PLANT OPERATIONS CIVIL DISTURBANCE IMPROBABLE UNPLANNED LOSS OF PROTECTED AREA	EAL-8-1-1 INABILITY TO REACH REQUIRED SHUTDOWN (MODE 3) CONDITION WITHIN TECH. SPEC. EAL-8-2-1 INDICATOR OF ANY TWO VALID SYMPTOMS LISTED ON EAL TABLE 6 EAL-8-3-1 TORNADO REPORTED WITHIN THE EAB EAL-8-4-1 SUSTAINED WIND SPEED AT 10 METERS OF 74 MPH OR GREATER EAL-8-5-1 UNPLANNED EXPLOSION WITHIN THE PROTECTED AREA RESULTING IN VISIBLE DAMAGE TO PERMANENT STRUCTURES OR EQUIPMENT EAL-10-1-1 UNPLANNED TOXIC OR FLAMMABLE GAS RELEASE WITH THE EAB (REFERENCE EAL TABLE 7)	EAL-9-1-1 FIRE WITHIN THE PROTECTED AREA NOT EXTINGUISHED WITHIN 15 MINUTES OF CONTROL ROOM NOTIFICATION OR VERIFICATION OF A CONTROL ROOM ALARM EAL-10-1-1 TORNADO REPORTED WITHIN THE EAB EAL-10-2-1 SUSTAINED WIND SPEED AT 10 METERS OF 74 MPH OR GREATER EAL-10-3-1 UNPLANNED EXPLOSION WITHIN THE PROTECTED AREA RESULTING IN VISIBLE DAMAGE TO PERMANENT STRUCTURES OR EQUIPMENT EAL-10-4-1 UNPLANNED TOXIC OR FLAMMABLE GAS RELEASE WITH THE EAB (REFERENCE EAL TABLE 7)	EAL-11-1-1 OTHER BLAMING CONDITIONS EXIST THAT WARRANT INVESTIGATION AND AWARENESS ON THE PART OF THE PLANT OPERATOR STAFF, HANNETT COUNTY, LEE COUNTY, WAKE COUNTY, OR THE STATE OF NORTH CAROLINA EAL-11-2-1 ADJACENT, TOWN OR OTHER VEHICLE CRASH THAT MAY DAMAGE PLANT STRUCTURE CONTAINING FUNCTIONS OR SYSTEMS REQUIRED FOR SAFE SHUTDOWN OF THE PLANT EAL-11-3-1 UNPLANNED TOXIC OR FLAMMABLE GAS RELEASE WITH THE EAB (REFERENCE EAL TABLE 7)	EAL REFERENCE NUMBERS (X-Y-Z): X = CATEGORY (1-11) Y = IDENTIFIER WITHIN CATEGORY Z = CLASSIFICATION (1-4) 1 = UNUSUAL EVENT 2 = ALERT 3 = SITE AREA EMERGENCY 4 = GENERAL EMERGENCY

DEFINITIONS OF AREAS REFERRED TO IN THESE EALS:

POWER BLOCK INCLUDES THE CONTAINMENT, REACTOR AUXILIARY BLDG., TURBINE BLDG., FUEL HANDLING BLDG. (INCLUDING THE "Y" AREA), WASTE PROCESSING BLDG., DIESEL GENERATOR BLDG., DIESEL FUEL OIL STORAGE, FIRE HOUSE, TANK AREA, INTAKE STRUCTURES, AND EXIST BARRIERS SERVING THESE AREAS.

PROTECTED AREA INCLUDES THE PLANT AREA INSIDE THE 2.5 MILE RADIUS OF THE PLANT.

SITE BOUNDARY (SB) IS APPROXIMATELY A CIRCLE OF 2500 FT. RADIUS (0.47 MILES).

EXCLUSION AREA BOUNDARY (EAB) IS APPROXIMATELY A CIRCLE OF 7000 FT. RADIUS (1.3 MILES).

EAL REFERENCE NUMBERS (X-Y-Z):
X = CATEGORY (1-11)
Y = IDENTIFIER WITHIN CATEGORY
Z = CLASSIFICATION (1-4)
1 = UNUSUAL EVENT
2 = ALERT
3 = SITE AREA EMERGENCY
4 = GENERAL EMERGENCY

HARRIS NUCLEAR PLANT
EMERGENCY ACTION LEVEL FLOW PATH
SIDE 2 REVISION: 01-1