

ACCIDENT CLASSIFICATION GUIDE
EP I-0PURPOSE

The purpose of this procedure is to describe the Accident Classification System and to delineate those actions necessary to properly identify an accident class by initiating conditions and associated observable plant parameters. Detailed emergency responses or "Action Statements" for each class of emergency are found in Procedures EP I-1, EP I-2, EP I-3 and EP I-4.

DESCRIPTION - ACCIDENT CLASSIFICATION GUIDE

The Classification Guide is separated into four (4) basic modules.

They are:

- 1) RADIOLOGICAL - An actual release of radioactive material, abnormal radiation level, or indicated failure of a fission product boundary.
- 2) OPERATIONAL - Any plant conditions, equipment failure or combination of the two (2) which could result in a radiological incident.
- 3) FIRE/NATURAL/SECURITY - Any fire, natural phenomena, or security event affecting the operability of structures or equipment which could lead to a radiological incident.
- 4) MISCELLANEOUS - Any event not addressed in the Radiological, Operational, or Fire/Natural/Security modules which could lead to a radiological incident or require off-site notification.

Each basic module is broken down into major event categories as submodules, illustrated on the "Accident Classification Flowchart" (Attachment No. 1 of this procedure). Each submodule is then further divided. The specific indicating conditions comprise the left hand column of each page in the Classification Guide. The middle column in the Guide lists the observable plant parameters of "Emergency Action Levels" (EAL's), the recognition of which requires entry into the appropriate accident classification (listed by Emergency Procedure) required for specific initiating conditions.

DESCRIPTION - ACCIDENT CLASSIFICATION FLOWCHART

The Accident Classification Flowchart (Attachment No. 1 of this procedure) is a tool designed to assist the Senior Shift Supervisor/Shift Technical Advisor/EDO in selecting the appropriate portion of the Accident Classification Guide when certain combinations of plant conditions may dictate selection of, or escalation to, a higher order of emergency classification.

USE OF THE ACCIDENT CLASSIFICATION SYSTEM

The mechanisms by which Emergency Procedures EP I-1 through EP I-4 are initially implemented are as follows:

- 1) An event occurs which causes initiation of a Plant Emergency Instruction which in turn refers to a specific part within the Accident Classification Guide.
- 2) Plant parameters which reach an EAL for an accident class in the Accident Classification Guide are observed by plant operators.

Upon recognition of conditions which require implementation of the Emergency Plan, the Control Operators will notify the Senior Shift Supervisor/Shift Supervisor.

In the event that plant conditions degrade or additional abnormal plant conditions arise, the Senior Shift Supervisor/Shift Supervisor/EDO/STA may find additional assessment guidance by use of the Accident Classification Flowchart (although the Flowchart is not intended to replace the Accident Classification Guide). The Flowchart can indicate, for certain combinations of plant conditions, which basic module in the guide contains the Initiating Conditions, EAL's, and applicable Emergency Procedure for the conditions present.

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SALEM GENERATING STATION ACCIDENT CLASSIFICATION GUIDE FLOWCHART

GENERAL EMERGENCY

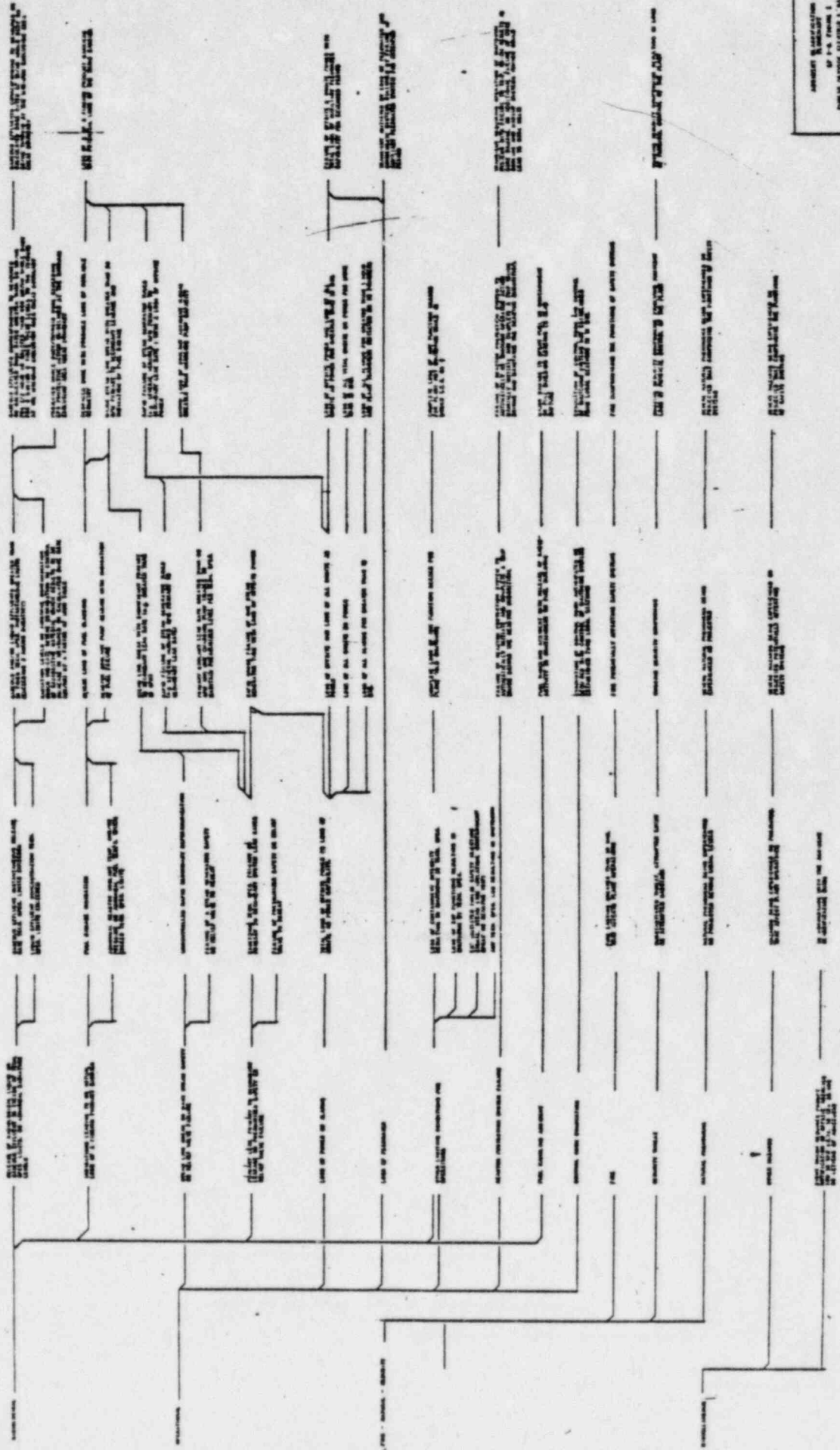
SITE AREA EMERGENCY

ALERT

URGENT EVENT

SUSPICIOUS

BASIC MODES



GENERAL EMERGENCY CODE
 OF THE FIRM IS
 SALEM GENERATING STATION
 SALEM, OREGON
 DATE: _____
 DRAWN BY: _____
 CHECKED BY: _____

ACCIDENT CLASSIFICATION GUIDE

RADIOLOGICAL: An actual Release of Radioactive material, abnormal radiation levels or indicated failure of a fission product boundary.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
1. Gaseous effluent instantaneous release rate Technical Specifications limits exceeded for 1 hr. (Appendix B Technical Specification 2,3.3).	<p>A. Any of the following valid process monitor readings for longer than 1 hr. which are greater than:</p> <p>1R-41C: 4.3E5 cpm 1R-41B: 8.3E4 cpm</p> <p>2R-41C: 4.9E5 cpm 2R-41B: 8.3E4 cpm</p> <p>Confirmation by grab sample and laboratory analysis shall be made as soon as possible.</p>	<p>UE (EP I-1)</p>
2. Sustained liquid release (greater than 15 min.) of radiological effluents greater than 10 times Technical Specification instantaneous limits and which is not immediately controllable.	<p>A. Any of the following valid RMS process monitor readings for longer than 15 min. which are greater than:</p> <p>1R-41C: 4.3E6 cpm or high off-scale 1R-41B: 8.5E5 cpm</p> <p>2R-41C: 4.9E6 cpm or high off-scale 2R-41B: 8.3E5 cpm</p>	<p>A (EP I-2)</p>
3. Dose rate at the minimum exclusion area equivalent to 500 mR/hr W.B. or 2500 mR/hr to the thyroid for 2 minutes.	<p>A. Any of the following valid RMS process monitor reading for longer than two minutes which are greater than:</p> <p>1R-41C: 2.9E7 cpm 1R-41B: 5.8E6 cpm 1R-43: 5.0E0 mR/hr 2R-41C: 3.4E7 cpm 2R-41B: 5.8E6 cpm</p>	<p>SAE (EP I-3)</p>
A. Based upon Gaseous Effluent Monitors and site specific 5% worst case meteorology.	<p>B. Valid radiation monitor reading as follows:</p> <p>1R-21: Off-scale or 2R-21: 3.7E5 mR/hr,</p>	<p>SAE (EP I-3)</p>
B. Based upon containment radiation levels, design basis, leak rate and site specific 5% worst case meteorology.	<p>C. 1) Field team measures whole body dose rates greater than 50 mrem/hr for 0.5 or greater than 500 mrem/hr for 2 min. at the MEA.</p>	<p>SAE (EP I-3)</p>
C. Based upon dose rate survey	<p><u>OR</u></p> <p>2) Field team measures Thyroid dose rates (equivalent I-131 concentrations) greater than:</p> <p>250 mrem/hr (1.0E-7 uCi/cc) for 0.5 hr; or 2500 mrem/hr (1.0E-6 uCi/cc) for 3 min. at the MEA.</p>	<p>SAE (EP I-3)</p>
D. Projected W.B./Thyroid dose using actual meteorology.	<p>D. As indicated by dose calculation procedure EP IV-111, 112, or 113.</p>	<p>SAE (EP I-3)</p>

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INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
4. Dose rate at the minimum exclusion area equivalent to 1R/hr W.B. or 5R/hr to the thyroid.	A. Any of the following valid Radiation Monitor readings as follows:	GE (EP I-4)
	1R-41C: Off-scale <u>or</u> 1R-41B: Off-scale <u>OR</u> 1R-43: 10mR/hr <u>or</u> 2R-41C: Off-scale <u>or</u> 2R-41B: Off-scale	
	B. Valid Radiation Monitor reading as follows:	GE (EP I-4)
	1R-21: Off-scale <u>or</u> 2R-21: 7.5E5 mR/hr.	
	C. Field survey team measures 1 R/hr. W.B. at the MEA <u>or</u> 5 R/hr Thyroid (I-131 concentration of 2.0E-6 uCi/cc).	GE (EP I-4)
	D. As indicated by dose calculation procedure EP IV-111, 112, or 113.	GE (EP I-4)
5. Radiation levels or airborne contamination which indicate a severe degradation in the control of radioactive materials which results in an increase in measure or calculated dose rate (mR/hr) by a factor of 1000 times.	A. Increase in measured or calculated dose rates (mR/hr) either installed or portable monitoring equipment by a factor of 1000.	A (EP I-2)
	<u>OR</u>	
	B. Unit 1 verification based on increase of analog strip chart reading over a 20 minute period.	
	<u>OR</u>	
	C. Unit 2 verification based on radiation monitoring computer trend.	
6. Liquid effluent concentration specification limits exceed for 15 min.	A. Any of the following valid radiation monitoring readings for longer than 15 minutes which are greater than:	UE (EP I-1)
	1R-18: 1.0E4 cpm <u>or</u> 2R-18: 4.0E4 cpm <u>and</u>	
	B. Isolation valve fails to close.	
	<u>OR</u>	
	C. 1R19A, B, C, D: alarm and blowdown to 12 SGB tank in progress <u>or</u> 2R19A, B, C, D: alarm and blowdown to 22 SGB tank in progress <u>OR</u>	

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RADIOLOGICAL: An actual Release of Radioactive material, abnormal radiation levels or indicated failure of a fission product boundary.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
11. (Continued) Loss of 2 or 3 fission product barriers with a potential loss of 3rd barrier, (e.g., loss of primary coolant boundary, clad failure and high potential for loss of containment).	<p>B. Loss of Primary Coolant Inventory</p> <p>1. Primary coolant leakage exceeds makeup capacity, low pressurizer level, pressurizer level decreasing and Charging Pumps' flow at maximum.</p> <p><u>OR</u></p> <p>2. a) Valid containment pressure greater than 4.0 psig. <u>AND</u> b) Accumulator(s) discharge (while in mode 1, 2, or 3).</p> <p><u>OR</u></p> <p>3. Inadequate sub-cooling, as indicated by P-250 strip chart recorder or manual calculation and the plant in modes 1, 2, or 3.</p> <p><u>OR</u></p> <p>4. The following radiation monitor readings:</p> <p>a) 1(2)R21 indicating 20R/hr or greater. <u>AND</u> b) Any 2 of 4 of the following RMS channels off-scale:</p> <p style="margin-left: 40px;">1(2)R2 1(2)R7 1(2)R10A 1(2)R10B</p> <p><u>OR</u></p> <p>5. Either one of the following:</p> <p>a) 2 out of 5 Fan Coil Unit Drainage Alarms Actuate, or indication of Containment pressure greater than 4.0 psig, (2/4) <u>AND</u> b) Containment sump level greater than 81'3". There is <u>no</u> indication of an in-containment steam line break.</p> <p>C. Containment Failure (Actual or Likely)</p> <p>1. Containment H₂ concentration greater than 4%.</p> <p><u>OR</u></p> <p>2. Indication of Containment pressure greater than 47 psig and increasing. (2/4)</p> <p><u>OR</u></p> <p>3. Either of the following:</p> <p>a) There are less than 5 Fan Coil Units available, with no Containment Spray train capability, <u>or</u> b) There are less than 3 Fan Coil Units available, with only 1 Containment Spray train capability. <u>AND</u> c) Indication of Containment pressure greater than 23.5 psig and increasing. (2/4)</p>	GE (EP I-4)

ACCIDENT CLASSIFICATION GUIDE

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INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
11. (Continued) Loss of 2 or 3 fission product barriers with a potential loss of 3rd barrier, (e.g., loss of primary coolant boundary, clad failure and high potential for loss of containment).	<p><u>OR</u></p> <p>4. Unisolatable steam line break outside containment with indications of a primary to secondary leak.</p> <p><u>OR</u></p> <p>5. Containment penetration isolation valve(s) or hatch failure as determined by EDO/BSS (Visual observation or high airborne activities around penetration or hatches).</p>	GE (EP I-4)
12. Exceeding primary to secondary leak rate Technical Specification or primary system leak rate Technical Specification	<p>A. Primary to secondary leakage exceeding either of the following:</p> <p>1) 1 gpm total leakage through all steam generators, <u>OR</u> 2) 500 gallons per day through any one steam generator</p> <p><u>OR</u></p> <p>B. Reactor coolant system leakage exceeding any of the following:</p> <p>1) No pressure boundary leakage, <u>OR</u> 2) 1 gpm Unidentified Leakage, <u>OR</u> 3) 10 gpm Identified Leakage, <u>OR</u> 4) 40 gpm Controlled Leakage with RCS at Normal Operating Pressure</p>	UE (EP I-1)
13. Failure of a Pressurizer Safety or Relief Valve to Reseat	<p>A. Pressurizer pressure less than 2200 psig with POPS not armed <u>OR</u></p> <p>B. Pressurizer pressure less than 375 psig with POPS armed.</p> <p><u>AND</u></p> <p>C. Relief/Safety valve tail pipe high temperature indication <u>OR</u></p> <p>D. Pressurizer Relief Tank level increasing.</p>	UE (EP I-1)
14. Rapid gross failure of one Steam Generator tube with loss of offsite power.	<p>A. Reactor Trip and Safety Injection initiates on decreasing Pressurizer Pressure.</p> <p><u>AND</u></p> <p>B. Valid Radiation Monitor Alarms are received on channels R15 or R19A, B, C, or D.</p> <p><u>AND</u></p> <p>C. Pressurizer pressure (after initial decrease) recovers to a pressure greater than secondary (main steam) pressure and (if required) steam line atmospheric discharges to control steam pressure.</p> <p><u>AND</u></p> <p>D. Offsite power loss is indicated by Overhead Annunciator or meters on panel RP6 or indication of the Control Console.</p>	A (EP I-2)

PART I-0

PART 1

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Part 1

ACCIDENT CLASSIFICATION GUIDE

RADIOLOGICAL: An actual Release of Radioactive material, abnormal radiation levels or indicated failure of a fission product boundary.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
15. Rapid failure of Steam Generator tubes (e.g., several hundred gpm primary to secondary leak rate).	A. Reactor Trip and Safety Injection initiate on decreasing Pressurizer Pressure.	UE (EP I-1)
	<u>AND</u> B. Valid Radiation Monitor Alarms are received on Channels R15 or R16A, B, C, or D.	
	<u>AND</u> C. Pressurizer Pressure fails to recover to a pressure greater than Steam Generator Pressure.	
16. Steam line break with significant (e.g., greater than 10 gpm) primary to secondary leak rate.	A. Steam Line Isolation and Safety Injection initiated on High Steam Line Flow with either Low Tavg or Low Steam Pressure and valid Radiation Monitoring Alarms on Channels R15 or R19A, B, C, or D.	A (EP I-2)
	<u>OR</u> B. Safety Injection initiated on Steam Line High Differential Pressure and valid Radiation Monitor Alarms on R15 or R19A, B, C, or D.	
17. Primary coolant leak rate greater than 50 gpm.	A. In accordance with Technical Specification Section 3.4.6.2 Unit 1 or 3.4.7.2 Unit 2 and one charging pump is unable to maintain pressurizer	A (EP I-2)
18. Known Loss of Coolant Accident greater than makeup pump capacity.	A. Low pressurizer level with level decreasing and Charging Pumps' flow at maximum.	SAE (EP I-3)
19. Rapid failure of Steam Generator tubes (several hundred gpm leakage) with loss of offsite power.	A. Reactor Trip and Safety Injection initiate on decreasing Pressurizer Pressure.	SAE (EP I-3)
	<u>AND</u> B. Valid Radiation Monitor Alarms are received on Channels R15 or R19A, B, C, or D.	
	<u>AND</u> C. Pressurizer Pressure fails to recover to a pressure greater than Steam Generator Pressure.	
	<u>AND</u> D. Offsite power loss is indicated by Overhead Annunciators and/or meters on Panel RP6 and on control console.	
20. Steam Line break with greater than 50 gpm primary to secondary leakage and indication of fuel damage.	A. Steam Line Isolation and Safety Injection initiated on High Steam Line Flow with either Low Tavg or Low Steam Pressure <u>or</u>	SAE (EP I-3)
	B. Safety Injection initiated on Steam Line High Differential Pressure.	

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ACCIDENT CLASSIFICATION GUIDE

RADIOLOGICAL: An actual Release of Radioactive material, abnormal radiation levels or indicated failure of a fission product boundary.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
20. Steam Line break with greater than 50 gpm primary to secondary leakage and indication of fuel damage (cont.).	<p><u>AND</u> C. Valid Radiation Monitor Alarms on Channels R15 or R19A, B, C, or D.</p> <p><u>AND</u> D. Unit 1 letdown monitor 1R31A in high alarm (off-scale) Unit 2 letdown monitor 2R31A in high alarm (off-scale)</p> <p><u>AND</u> E. Laboratory analysis which indicates an increase in failed fuel of 1 percent in 30 min. or a total failed fuel rate of 5 percent, <u>or</u></p> <p>1) Primary coolant sample indicates I-131 concentration greater than 300 uCi/cc.</p>	
21. Loss of Containment Integrity resulting in a unit shutdown by Technical Specifications.	A. In accordance with Technical Specification Section 3.6.1.	OE (EP I-1)
22. Fuel damage accident with release of radioactivity to containment or fuel handling building.	<p>A. A valid alarm on the following Radiation Monitor</p> <p>1) 1(2)R5: Alarm <u>or</u> 2) 1(2)R9: Alarm <u>or</u> 3) 1(2)R29: Alarm</p> <p><u>AND</u> 4) 1R41B: Alarm <u>or</u> 5) 1R41C: Alarm</p> <p><u>OR</u></p> <p>B. 2 of the 4 Containment RMS Monitor</p> <p>1) 1(2)R2: Alarm 2) 1(2)R7: Alarm 3) 1(2)R10A: Alarm 4) 1(2)R10B: Alarm</p> <p><u>AND</u> 1) 1(2)R21: 1R/hr</p>	A (EP I-2)
23. Major damage to spent fuel in containment or fuel handling building (e.g., object damages fuel or water loss below fuel level).	<p><u>AND</u> C. Verify fuel handling problem where damage to fuel may have occurred.</p> <p>A. A valid alarm on the following Radiation Monitor</p> <p>1) 1(2)R5: Alarm <u>or</u> 2) 1(2)R9: Alarm <u>or</u> 3) 1(2)R29: Alarm</p> <p><u>OR</u></p> <p>B. 2 of the 4 Containment RMS Monitor</p> <p>1) 1(2)R2: Alarm 2) 1(2)R7: Alarm 3) 1(2)R10A: Alarm 4) 1(2)R10B: Alarm</p> <p><u>AND</u> 1) 1(2)R21: 1R/hr</p> <p><u>AND</u> C. Confirmed fuel damage or loss of water level to below fuel level.</p>	SAE (EP I-3)

ACCIDENT CLASSIFICATION GUIDE

OPERATIONAL: Any abnormal plant conditions, equipment failures, or combination of the two which could result in a radiological incident.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
1. Manual or automatic actuation of emergency core cooling systems with a discharge to the vessel.	<p>A. Any limit in Technical Specification Table 3.3-3 and 3.3-4 exceeded or manual initiation has been made <u>or</u></p> <p>B. Logic lights for any single or coincidence initiation lit on RP-4, Safeguards Status Display.</p> <p><u>AND</u></p> <p>C. ESF System Actuation is verified by control console indication (flow, valve positions, tank levels, etc.) for any of the following:</p> <ul style="list-style-type: none"> 1) <u>Safety Injection</u> 2) <u>Steam Line Isolation</u> 3) <u>Containment Spray</u> 	UE (EP I-1)
2. Uncontrolled rapid secondary depressurization (Steam or feedwater line rupture).	<p>A. High Steam Flow <u>or</u></p> <p>B. Abnormal increase in feedwater flow to one or two steam generators</p> <p><u>AND</u></p> <p>C. Any of the following:</p> <ul style="list-style-type: none"> 1) Low steam generator pressure 2) Low T (average) 3) Reduced RCS pressure 	UE (EP I-1)
3. Failure of a Steam Generator Safety or Atmospheric Relief Valve to reseal.	<p>A. Visual and/or audible indication at the vent stacks of the open valve after pressure restored to desired level.</p> <p><u>OR</u></p> <p>B. Excess feedwater flow or steamflow for the affected generator.</p>	UE (EP I-1)
4. Loss of Engineered Safety Feature function requiring shutdown by Technical Specification (because of malfunction, personnel error or procedural inadequacy).	<p>A. In accordance with Technical Specification Section 3.5.2</p>	UE (EP I-1)

ACCIDENT CLASSIFICATION GUIDE

OPERATIONAL: Any abnormal plant conditions, equipment failures, or combination of the two which could result in a radiological incident.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
5. An event which requires initiation of unit shutdown to comply with Technical Specification Limiting Conditions for Operation.	A. In accordance with Technical Specifications.	UE (EP I-1)
6. Complete loss of any function needed for plant cold shutdown.	A. Failure of the RHR system to attain or maintain the primary system temperature less than 200°F.	A (EP I-2)
	<u>OR</u>	
	B. Entry into Action Statement a. of Technical Specification 3.5.3 (Emergency Core Cooling System).	
7. Complete loss of any function needed for plant hot shutdown.	A. Loss of Main and Auxiliary Feedwater.	SAE (EP I-3)
	<u>OR</u>	
	B. Loss of Steam Dump system and all Steam Generator Power Operated Relief Valves and Safety Valves.	
8. Total loss of offsite power or loss of onsite AC power capability.	A. Shutdown required in accordance with Technical Specification Section 3.8.1.1.a.	UE (EP I-1)
	<u>OR</u>	
	B. Indication of the loss of 500 KV, 13 KV and 4 KV group buses on the control console, RP06 electrical display and lit overhead annunciators (Section J and K).	
	<u>OR</u>	
	C. Reactor Trip on "Loss of 4 KV Group Buses" (overhead annunciator F-26).	
	<u>OR</u>	
	D. Shutdown required in accordance with Technical Specification Section 3.8.1.1.b.	
	<u>OR</u>	
	E. Indication of loss of 4 KV Vital Buses on the control console and on overhead annunciators (J-17, 18, 19) with inability to energize those buses from the emergency diesels.	

ACCIDENT CLASSIFICATION GUIDE

OPERATIONAL: Any abnormal plant conditions, equipment failures, or combination of the two which could result in a radiological incident.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
9. Loss of offsite power and loss of all onsite AC power.	A. Indication of the loss of 500 KV, 13 KV, and 4 KV Group Buses on the control console, RP-6 electrical display and lit overhead annunciators (Section J and K).	A (EP I-2)
	<u>AND</u>	
	B. Indication of loss of 4 KV Vital Buses on the control console and on the overhead annunciators (J-17, 18, 19) with inability to energize those buses from the emergency diesels.	
10. Loss of offsite power and loss of all onsite AC power for more than 15 minutes.	A. Indication of the loss of 500 KV, 13 KV and 4 KV Group Buses on the control console, RP-5 electrical display and lit overhead annunciators (Section J and K) for greater than 15 minutes.	SAE (EP I-3)
	<u>AND</u>	
	B. Indication of loss of 4 KV Vital Buses on the control console and on overhead annunciators (J-17, 18, 19) with inability to energize those buses from the emergency diesels for greater than 15 minutes.	
11. Failure of offsite and onsite power along with total loss of Auxiliary Feedwater System capability for several hours and projected core melt and failure of containment.	A. Loss of 500 KV, 13 KV and 4 KV Group Buses, Vital Buses	GE (EP I-4)
	<u>AND</u>	
	B. Inability to energize 4 KV Vital Buses from emergency diesel generators for greater than 2 hours.	
	<u>AND</u>	
	C. Flow indication for Auxiliary Feedwater System shows no flow for greater than 2 hours.	
12. Loss of all onsite DC power.	A. Receipt of all the following valid overhead annunciator alarms; A23, A31, A39, A46 and A47.	A (EP I-2)
13. Loss of all onsite DC power for more than 15 minutes.	A. Receipt of all of the following valid overhead annunciator alarms; A23, A31, A39, A46 and A47.	SAE (EP I-3)
	<u>AND</u>	
	B. Inability to restore onsite DC power within 15 minutes of the occurrence.	
14. Loss of all overhead annunciator alarms for more than 15 minutes due to an unknown cause.	A. As Stated.	A (EP I-2)
15. Loss of all overhead annunciator alarms for more than 1 hour and a planned transient initiated or in progress.	A. As Stated.	SAE (EP I-3)

ACCIDENT CLASSIFICATION GUIDE

OPERATIONAL: Any abnormal plant conditions, equipment failures, or combination of the two which could result in a radiological incident.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
16. Failure of the Reactor Protection System to initiate and complete a trip which brings the reactor subcritical.	A. Receipt of Reactor Protection Logic input (see Technical Specification Table 2.2-1) as displayed on panel RP-4. <u>AND</u> B. Not all Rod Bottom lights lit or Nuclear Instrumentation indicates reactor not subcritical.	A (EP I-2)
17. Failure of the Reactor Protection System to automatically, or through control operation action, manually initiate and complete a trip which brings and maintains the reactor subcritical.	A. Receipt of Reactor Protection Logic (see Technical Specification Table 2.2-1) as on panel RP-4. <u>AND</u> B. All Rod Bottom lights not lit or Nuclear Instrumentation indicates reactor not subcritical.	SAE (EP I-3)
18. Evacuation of Control Room anticipated or required with control of shutdown systems established from local stations.	<u>AND</u> C. No boration capabilities.	A (EP I-2)
19. Evacuation of Control Room and control of shutdown systems not established from local stations in 15 minutes.	A. As Stated.	SAE (EP I-3)
20. Transient initiated by loss of Feedwater and Condensate Systems followed by failure of Auxiliary Feedwater Systems for extended period and core melting possible in several hours.	A. Reactor trip on low feedwater flow; <u>AND</u> B. Decreasing wide-range steam generators; toward off-scale low on all steam generators; <u>AND</u> C. 1) Auxiliary feedwater flow indicators indicate zero flow 2 minutes after required; <u>or</u> 2) Control Console indication of turbine and motor driven Auxiliary Feedwater pumps indicates pumps not running 2 minutes after required; <u>AND</u> D. Auxiliary Feedwater cannot be restored within 30 minutes.	A (EP I-2)
21. Transient requiring operation of shutdown systems with failure to scram which results incore damage or additional failure of core cooling and makeup systems (which could lead to core melt).	A. Reactor remains critical or returns to criticality after trip. <u>AND</u> E. 1) Flow indicators on safety injection systems and RHR systems show zero flow with safety injection initiated; <u>or</u> 2) Status lights show safety injection systems and RHR pumps not running with safety injection initiated.	CE (EP I-4)

ACCIDENT CLASSIFICATION GUIDE

FIRE/NATURAL/SECURITY: Any fire, natural phenomena, or security event affecting the operability of structures or equipment which could lead to a radiological incident.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
1. Fire lasting greater than 10 minutes that affects plant operation (e.g., causes a reduction in power or a mode change).	A. Observation of a fire lasting greater than 10 minutes that affects plant operation.	UE (EP I-1)
	<u>OR</u>	
	B. Fire alarm received and confirming observation of a fire lasting greater than 10 minutes that affects plant operation.	
2. Fire potentially affecting safety systems.	A. Observations of a fire in one of the following areas potentially affecting a safety system: 1) Containment <u>or</u> 2) Control Room <u>or</u> 3) Relay Room <u>or</u> 4) Protection Racks <u>or</u> 5) Auxiliary Building <u>or</u> 6) Service Water Structure <u>or</u> 7) Penetration Areas <u>or</u> 8) Fuel Handling Building	A (EP I-2)
	<u>OR</u>	
	B. Observation of a fire that, in the judgment of the Senior Shift Supervisor/EDO, could affect a safety system.	
3. Fire compromising the function of safety systems.	A. Observation of a fire in one of the following areas that has affected a safety system: 1) Containment <u>or</u> 2) Control Room <u>or</u> 3) Relay Room <u>or</u> 4) Protection Racks <u>or</u> 5) Auxiliary Building <u>or</u> 6) Service Water Structure <u>or</u> 7) Penetration Areas <u>or</u> 8) Fuel Handling Building	SAE (EP I-3)
	<u>OR</u>	
	B. Observation of a fire than, in judgment of the Senior Shift Supervisor/EDO has affected a safety system.	
4. Security Incident		
A. Substantiated Security Threat, attempted entry or attempted sabotage.	A. Implementation of Security Procedures, Section 5.3, event (5), (6) or (8).	UE (EP I-1)
B. Ongoing Security Compromise.	B. Ongoing Security event, Security Procedure, Section 5.3, events (5), (6), or (8).	A (EP I-2)

ACCIDENT CLASSIFICATION GUIDE

FIRE/NATURAL/SECURITY: Any fire, natural phenomena, or security event affecting the operability of structures or equipment which could leak to a radiological incident.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
4. Security Incident (continued)		
C. Ongoing Security Compromise involving imminent loss of physical control of the plant.	C. Ongoing Security event which may result in loss of physical control of the plant (physical attack with occupancy of the Control Room, hot shutdown panel or vital areas), Security Procedures, Section 5.3, events (6) or (8).	SAE (EP I-3)
D. Ongoing Security Compromise resulting in the loss of physical control of the plant.	D. Ongoing Security event which results in loss of physical control of the plant (physical attack with occupancy of the Control Room, hot shutdown panel or other vital areas of the plant), Security Procedures, Section 5.3, events (6) or (8).	GE (EP I-4)
5. Natural phenomena being experienced or projected beyond usual events.		
A. Any earthquake felt in-plant or detected on station seismic instrumentation.	A. Seismic monitoring instrumentation is activated (0.02g), as indicated by all of the following: 1) Seismic Monitor Alarm (overhead annunciator B43) actuates in Unit No. 1 Control Room <u>and</u> 2) Observation that seismic monitoring is recording <u>and</u> 3) Verification of seismic disturbance by calling the National Earthquake Information Center at (303) 234-3994.	UE (EP I-1)
B. Unusual flood or low water levels.	B. Tide level recorder indicates 97.5 ft. (PSE&G DATUM) for flood, or 83.1 ft. (PSE&G DATUM) for low water.	UE (EP I-1)
C. Any tornado on site.	C. Tornado funnel observed within the minimum exclusion area.	UE (EP I-1)
D. Any hurricane or unusual wind conditions.	D. Sustained winds in excess of 90 mph, as indicated by any of the following Meteorological Instrumentation: 1) Nominal Elev. 33 ft. channel for wind speed <u>or</u> 2) Nominal Elev. 150 ft. channel for wind speed <u>or</u> 3) Nominal Elev. 300 ft. channel for wind speed	UE (EP I-1)
6. Severe natural phenomena being experienced or projected.		
A. Earthquake greater than OBE levels.	A. Seismic Monitoring Equipment (strip-chart) indicated (0.1g) or greater <u>and</u> verification of a seismic disturbance by calling the <u>Natural Earthquake Information Center</u> at (303) 234-3994.	A (EP I-2)
B. Flood or low water near design levels.	B. Tide level recorder indicates 99.0 ft. (PSE&G DATUM) for floods, or 81.0 ft. (PSE&G DATUM) for low water.	A (EP I-2)
C. Any tornado striking facility.	C. Tornado funnel observed within the Security Boundary.	A (EP I-2)

ACCIDENT CLASSIFICATION GUIDE

FIRE/NATURAL/SECURITY: Any fire, natural phenomena, or security event affecting the operability of structures or equipment which could lead to a radiological incident.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
6. Severe natural phenomena being experienced or projected. (continued)	D. Sustained winds of 95 mph, as indicated by any of the following Meteorological Instrumentation: 1) Elev. 33 ft. channel for wind speed <u>or</u> 2) Elev. 150 ft. channel for wind speed <u>or</u> 3) Elev. 300 ft. channel for wind speed	A (EP I-2)
7. Severe natural phenomena being experienced or projected that compromises the functions of safety systems.	A. Seismic Monitoring Equipment (strip-chart) indicates (0.2g) or greater and verification of a Seismic Disturbance by calling the <u>National Earthquake Information Center</u> at (303) 234-3994.	SAE (EP I-3)
A. Earthquake greater than DBE levels.	B. Tide level recorder indicates 100.5 ft. (PSE&G DATUM) for flood, or 78.4 ft. (PSE&G DATUM) for low water.	SAE (EP I-3)
C. Any tornado on site affecting safety structures.	C. Tornado funnel on site impacting the following: 1) Turbine Building <u>or</u> 2) Service Building <u>or</u> 3) Auxiliary Building <u>or</u> 4) Containment building <u>or</u> 5) Service Water Intake Structure <u>or</u> 6) RWST or PWST or APWST <u>or</u> 7) Fuel Handling Building	SAE (EP I-3)
D. Any hurricane or unusual wind conditions.	D. Sustained winds in excess of 100 mph as indicated by the following Meteorological Instrumentation: 1) Elevation 33 ft. wind speed <u>or</u> 2) Elevation 150 ft. wind speed <u>or</u> 3) Elevation 300 ft. wind speed	SAE (EP I-3)

ACCIDENT CLASSIFICATION GUIDE

MISCELLANEOUS: Any event not addressed in the radiological, operational, or fire/security module which could lead to radiological incident or require offsite notification.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
1. Aircraft Crash Occurrences:		
A. Near Site	A. Aircraft crash within the minimum exclusion area or a crash affecting one of the 500 KV transmission lines.	UE (EP I-1)
B. On Site	B. Aircraft crash within the security boundary.	A (EP I-2)
C. Onsite affecting plant structures	C. Aircraft crash causing damage or fire in: 1) Turbine Building <u>or</u> 2) Service Building <u>or</u> 3) Auxiliary Building <u>or</u> 4) Containment Building <u>or</u> 5) Service Water Intake Structure <u>or</u> 6) RWST or PWST or AFWST <u>or</u> 7) Fuel Handling Building	SAE (EP I-3)
2. Onsite Toxic Flammable Gases:		
A. A release which threatens onsite personnel.	A. Observation of a release or warning from offsite.	UE (EP I-1)
B. A release which enters vital areas.	B. Observation or measurement of gases which exceed flammability or toxicity levels after entering the Control Room <u>or</u> Auxiliary Building ventilation system.	A (EP I-2)
C. A release which enters vital areas compromising the functions of safety systems.	C. Detonation or combustion of a flammable gas in one of the areas actually affecting a safety system. 1) Containment <u>or</u> 2) Control Room <u>or</u> 3) Relay Room <u>or</u> 4) Protection Racks <u>or</u> 5) Auxiliary Building <u>or</u> 6) Penetration Areas <u>or</u> 7) Service Water Intake Structure <u>or</u> 8) Fuel Handling Building	SAE (EP I-3)
3. Turbine generator failure causing an outer casing penetration.	A. Turbine trip and observation of penetrations through the outer casing.	UE (EP I-1)
4. Missile impact onsite resulting in structural damage.	A. Observation of an impact causing severe structural damage to a building within the security boundary.	A (EP I-2)

ACCIDENT CLASSIFICATION GUIDE

MISCELLANEOUS: Any event not addressed in the radiological, operational, or fire/security module which could lead to radiological incident or require offsite notification.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
5. Missile impact onsite resulting in damage to a vital structure.	A. Observation of an impact causing structural damage to the following: <ul style="list-style-type: none"> 1) Turbine Building <u>or</u> 2) Service Building <u>or</u> 3) Auxiliary Building <u>or</u> 4) Containment Building <u>or</u> 5) Service Water Intake Structure <u>or</u> 6) RWST or PWST or AFWST <u>or</u> 7) Fuel Handling Building 	SAE (EP I-3)
6. Explosion within the security boundary excluding planned activities.	A. Observation of an explosion or its consequences, B. An explosion in one of the following areas potentially affecting a safety system. <ul style="list-style-type: none"> 1) Containment <u>or</u> 2) Control Room <u>or</u> 3) Relay Room <u>or</u> 4) Protection Racks <u>or</u> 5) Auxiliary Building <u>or</u> 6) Penetration Areas <u>or</u> 7) Service Water Intake Structure 	UE (EP I-1) A (EP I-2)
C. An explosion compromising the functions of safety systems.	C. An explosion in one of the following areas that has affected a safety system. <ul style="list-style-type: none"> 1) Containment <u>or</u> 2) Control Room <u>or</u> 3) Relay Room <u>or</u> 4) Protection Racks <u>or</u> 5) Auxiliary Building <u>or</u> 6) Penetration Areas <u>or</u> 7) Service Water Intake Structure <u>or</u> 8) Fuel Handling Building 	SAE (EP I-3)
7. Other Plant conditions exist that warrant increased awareness on the part of State and local offsite authorities.	A. As judged by the Senior Shift Supervisor/EDO,	UE (EP I-1)
8. Other Plant conditions exist that warrant precautionary activation of Technical Support Center.	A. As judged by the Senior Shift Supervisor/EDO,	A (EP I-2)

ACCIDENT CLASSIFICATION GUIDE

MISCELLANEOUS: Any event not addressed in the radiological, operational, or fire/security module which could lead to radiological incident or require offsite notification.

INITIATING CONDITION	EMERGENCY ACTION LEVELS	ACCIDENT CLASS
9. Other Plant conditions exist that warrant precautionary activation of the Technical Support Center and the Emergency Operations Facility and/or notification to the general public.	A. As judged by the Senior Shift Supervisor/EDO.	SAE (EP I-3)
10. Any seriously injured and contaminated person requiring off-site medical treatment and off-site decontamination.	A. As judged by the Senior Shift Supervisor/EDO.	UE (EP I-1)
11. Any of the following items which require notification in accordance with letters of agreement.		
A. Any unit startup or a unit trip (planned/unplanned) from greater than 20% turbine power.	A. As judged by the Senior Shift Supervisor/EDO.	UE (EP I-1)
B. Any event requiring a press release be prepared.	B. As judged by the Public Affairs Manager - Nuclear/Designee	UE (EP I-1)
C. Unusually large fish kills, large movement of equipment or personnel which could significantly affect local traffic pattern.	C. As judged by the Senior Shift Supervisor/EDO.	UE (EP I-1)
D. Significant increase in noise levels stream release on site alarm or sirens which might be heard off-site.	D. As judged by the Senior Shift Supervisor/EDO.	UE (EP I-1)
E. Derating caused by a regulatory action.	E. As stated.	UE (EP I-1)

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EP I-0
PART 4

Rev. 3

EMERGENCY PROCEDURE
EP I-1
NOTIFICATION OF UNUSUAL EVENT/SIGNIFICANT EVENT

ACTION STATEMENTS - SECTION I - EMERGENCY COORDINATOR

Initials

The Senior Shift Supervisor shall:

- _____ 1. Determine classification of the event to be an Unusual Event as defined by EP I-0; or a Significant Event as defined by Attachment 4 of this procedure.

EP I-0 Part _____, No. _____
and/or Significant Event No. _____
- _____ 2. Assume the responsibilities of the Emergency Coordinator.
(see page 4 for responsibilities)
- _____ 3. Fill in data on the Initial Contact Message Form (Figure 8) - Attachment 2 to this procedure.
- _____ 4. Direct that the Station Status Check List (Figure 9) - Attachment 3 to this procedure be completed (to the extent possible at this time) and given to the Designated Communicator.
- _____ 5. Direct the Designated Communicator to make notifications of Attachment 1 to this procedure within the time limits listed and maintain communications with the NRC Operations Center when directed to do so by the NRC duty officer.
- _____ 6. Direct the communicator to respond to calls from State or local officials by providing the information on the Station Status Check List or Press Release received from the Public Affairs Manager - Nuclear and have the name and affiliation of the person calling recorded on the Station Status Checklist.

ACTION STATEMENTS

7. Direct the Communicator to refer requests for information from other agencies to the Public Affairs Manager - Nuclear.
8. Refer to EP I-7, "Station Fire," to conduct fire fighting actions. If outside assistance is required, have the Salem Fire Dispatcher called. Give the location, type of fire, and where vehicles will be met by Security personnel to communicator.
9. If this is a security event, coordinate with the Security Lieutenant to implement the Contingency Plan and Procedures.
10. Transfer the Emergency Coordinator responsibilities to the Emergency Duty Officer, when available.
11. Forward all completed forms to the Senior Operating Supervisor. Attach any other completed EP's or attachments used.

ACTION STATEMENTS - SECTION II - COMMUNICATOR

The Designated Communicator shall:

1. When directed by the Senior Shift Supervisor/EDO use the data provided on the Initial Contact Message Form to notify persons listed on the Communications Log within the time limits specified on Attachment 1.
2. Upon receipt of a phone call from the New Jersey Bureau of Radiation Protection (BRP) or Delaware Division of Emergency Planning and Operations (DEPO) do the following:
 - a) Provide the Station Status Checklist (Figure 9) - Attachment 2 to this procedure - at current level of completion.

3. When directed by the Senior Shift Supervisor/EDO contact the Salem Fire Dispatcher and provide the following message:

- a) This is the Communicator at Salem Generating Station. This is a notification of a fire.
- b) We request fire company support.
- c) The type of fire is _____.
- d) The location of the fire is _____.
- e) The fire truck(s) will be met at _____ and directed to the location of the fire by our security force.

Notify security (ext. _____ of location where fire truck(s) should be met and type of fire.

ACTION LEVEL

Whenever an action level listed in EP I-0 as an Unusual Event has been reached, notification of an Unusual Event will be made to offsite authorities and designated personnel within the time limits listed in Attachment 1.

Whenever an action level described as a Significant Event (Attachment 4) is reached, notification of a Significant Event will be made to offsite authorities and designated personnel within the time limits listed in Attachment 1.

NOTE

Notification shall be reperformed for additional events, as defined in EP I-0 or Attachment 4 to this procedure.

An Event which satisfies both the definition of an Unusual Event and a Significant Event shall be classified as an Unusual Event.

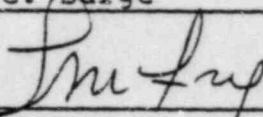
LIMITS ON AUTHORITY

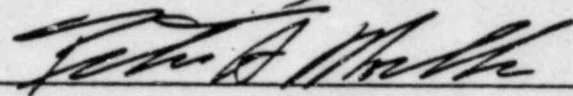
The person acting as the Emergency Coordinator (Senior Shift Supervisor, Emergency Duty Officer, or Emergency Response Manager) has the authority and responsibility to immediately and unilaterally initiate any emergency action including the decision to notify and provide protective action recommendations to authorities responsible for implementing off site emergency measures.


ATTACHMENTS

- Attachment 1 - Communications Log (Figure 7)
- Attachment 2 - Initial Contact Message Form (Figure 8)
- Attachment 3 - Station Status Checklist (Figure 9)
- Attachment 4 - Significant Event Classification

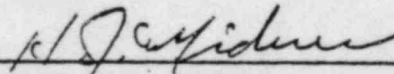
Prepared By: C. Burge

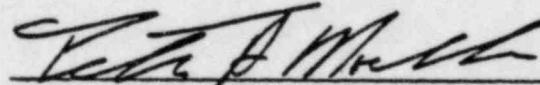
Reviewed By:  12/6/82
Department Head Date

Reviewed By:  12/16/82
Nuclear Emergency Planning Engineer Date

Reviewed By: ¹⁰⁷  1/6/83
Station Quality Assurance Review Date
(if required see EP VI-2)

SORC Meeting Number: 83-03 1/13/83
Date

Approved By:  1/14/83
General Manager - Salem Operations Date

Approved By:  1/17/83
Manager - Nuclear Site Protection Date

TIME LIMIT IN (MINUTES)	REQUIRED FOR EVENT CLASS				PERSON TO BE CONTACTED	PERSON CONTACTED	DATE/ TIME	CONTACTED BY
	UE/SE	A	SAE	GE				
15	YES	YES	YES	YES	Primary: EDO (Contact One) L. Fry Office: Car; Beeper: Home; J. Gueller Office: Car: NA; Beeper: Home:			
15	YES	YES	YES	YES	Secondary: TSS (Contact One) L. Miller Office: Car; Beeper: Home; L. Catalfomo Office: Car: NA; Beeper: Home:			
15	YES	YES	YES	YES	NEW JERSEY Primary: Secondary:			
15	YES	YES	YES	YES	DELAWARE Primary: Secondary:			
15	NO	NO	NO	YES	Salem County Primary: (Direct Line) Secondary:			
15	NO	NO	NO	YES	Cumberland County Primary: (Direct Line) Secondary:			
15	NO	NO	NO	YES	New Castle County Primary: (Direct Line) Secondary:			
15	NO	NO	NO	YES	Kent County Primary: (Direct Line) Secondary:			
15	NO	NO	NO	YES	U. S. Coast Guard Primary:			

(Figure 7)
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ATTACHMENT 1
COMMUNICATIONS LOG

EP I-1
Attachment 1

ATTACHMENT 1
COMMUNICATIONS LOG

EP 1-1
Attachment 1

TIME LIMIT IN (MINUTES)	REQUIRED FOR EVENT CLASS			PERSON TO BE CONTACTED	PERSON CONTACTED	DATE/TIME	CONTACTED BY
	UE/SE	A	SAE				
30	YES	YES	YES	General Manager - Salem Operations (Contact One) H. Midura Office: Beeper: J. Driscoll Office: (Asst. CM) Beeper: R. A. Uderitz Office: (VP - Nuclear) Beeper: N/A			
30	YES	YES	YES	Public Affairs Manager-Nuclear (Contact One) R. Silverio Office: Beeper: W. Denman Office: Beeper: NA;			
30	NO	YES	YES	Security-Site (Shift Lieutenant) Primary: Secondary:			
60	YES	YES	YES	Security-Hope Creek Hope Creek Project Union Security			
60	NO	YES	YES	Second Sun Visitor's Center Primary: Secondary:			
60	YES	YES	YES	LAC Township Primary: (Direct Line) Secondary:			
60	YES	YES	YES	NRC Primary: (ENS) Secondary: or			
60	YES	YES	YES	NRC Resident (Contact One) L. Norrholm - Office: B. Summer - Office:			

TIME LIMIT IN (MINUTES)	REQUIRED FOR EVENT CLASS				PERSON TO BE CONTACTED	PERSON CONTACTED	DATE/ TIME	CONTACTED BY
	UE/SE	A	SAE	GE				
90	YES	YES	YES	YES	New Jersey DOP Primary: Secondary: See Addendum 1			
90	YES	YES	YES	YES	New Jersey BPU Primary: Secondary:			
90	NO	YES	YES	YES	American Nuclear Insurers Primary:			

ATTACHMENT 1
COMMUNICATIONS LOG

EP I-1
Attachment 1

(Figure 7)
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ATTACHMENT 2
INITIAL CONTACT MESSAGE FORM

DIRECTIONS FOR COMMUNICATOR

Upon completion of the below prepared message the Emergency Coordinator or the Designated Communicator shall make the required notifications using Attachment 1 to this procedure.

NOTE: In the event of a test, drill or exercise, preface and complete each message with the phrase "THIS IS A DRILL, THIS IS A DRILL".

SECTION I (Provide to all)

THIS IS _____, _____
(NAME) (TITLE)

SALEM NUCLEAR GENERATING STATION, UNIT NO. _____

THIS IS A NOTIFICATION OF:

- a SIGNIFICANT EVENT
- an UNUSUAL EVENT
- an ALERT
- a SITE AREA EMERGENCY
- a GENERAL EMERGENCY

THIS EVENT OCCURRED AT _____ ON _____
(TIME - 24 HOUR CLOCK) (DATE)

- THERE IS NO RELEASE IN PROGRESS.
- WE HAVE A NORMAL RELEASE IN PROGRESS.
- WE HAVE AN UNCONTROLLED RELEASE IN PROGRESS.

SECTION II (Provide to New Jersey and Delaware Only)

- NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME
- WE RECOMMEND SHELTERING FOR THE FOLLOWING SECTOR(S) _____ /
(Distance-Miles)
- WE RECOMMEND EVACUATION FOR THE FOLLOWING SECTOR(S) _____ /
(Distance-Miles)

SECTION III (Provide to PSE&G personnel only)

DESCRIPTION OF EVENT _____

ATTACHMENT 3
STATION STATUS CHECK LIST

Salem Generating Station Unit No. _____

Transmitted By: Name _____ Position: _____

1. Date and Time of Incident: Date _____ Time _____ (24 hr clock)

2. Accident Classification: Significant Event Unusual Event
 Alert Site Area Emergency General Emergency

3. Cause of Incident:

Primary Initiating Condition used for declaration of incident
EPI-0 Part _____, Number _____ and/or
Significant Event No. _____
Description of the incident _____

4. Status of Reactor: Tripped At Power
 Hot Shutdown Cold Shutdown

5. Pressurizer Pressure _____ psig, Core Exit TC _____ °F

6. Is offsite power available? YES NO

7. Are two or more diesel generators operable? YES NO

8. Did the emergency safeguards system activate? YES NO

9. Has the containment been isolated? YES NO

10. Other pertinent information _____

Station Status Checklist - Radiological Information

11. Gaseous Release: YES NO
- (A) Release Terminated: YES NO
- (B) Anticipated or Known Duration of Release _____ Hours
- (C) Type of Release: GROUND ELEVATED
- (D) Wind Speed: _____ MPH Wind Direction: (Toward) _____
 Divide by 2 to get _____ M/Sec (From) _____
 Delta Temp: _____ (Compass Points)
- (E) Stability Class: Unstable Neutral Stable
- (F) Release Rate Iodine _____ Ci/Sec.
- (G) Release Rate Noble Gas: _____ Ci/Sec.

12. Liquid Release: YES NO
- (A) Release Terminated: YES NO
- (B) Anticipated or Known Duration of Release _____ Hours
- (C) Estimated Concentration _____ pico Curies/Liter
- (D) Release Rate _____ Liters/Hour

13. Projected Off-site Dose Rates (As Soon As Data Is Available):

Distance (miles)	Adult	
	Whole Body (mrem/hr)	Child Thyroid (mrem/hr)
_____	_____	_____
_____	_____	_____
_____	_____	_____

14. 15 minute updates to States:
- | | Time | Initials |
|--|-------|----------|
| <input type="checkbox"/> State of New Jersey | _____ | _____ |
| State of Delaware | _____ | _____ |
| <input type="checkbox"/> Others | | |
| Name _____ | _____ | _____ |
| Agency _____ | | |
| Name _____ | _____ | _____ |
| Agency _____ | | |

ATTACHMENT 4
SIGNIFICANT EVENT CLASSIFICATION

DIRECTIONS

The Emergency Coordinator shall review the initiating conditions listed below to determine if significant event notification is required. Notification shall be made as indicated in Attachment 1 to this procedure.

SIGNIFICANT EVENT INITIATING CONDITIONS

- | | |
|---|--|
| 1. Any event requiring initiating any section(s) of the Station Emergency Plan Procedures, except for EP I-5, for injuries requiring less than 48 hour hospital stay. | As evaluated by the Emergency Coordinator |
| 2. Any accidental, unplanned, or uncontrolled radioactive release. (Normal or expected releases from maintenance or other operational activities are not included.) | As evaluated by the Emergency Coordinator and the Radiation Protection Engineer. |
| 3. Any serious personnel radioactive contamination requiring extensive onsite decontamination or outside assistance. | As evaluated by the Emergency Coordinator and the Radiation Protection Engineer. |
| 4. Any event that results in the plant not being in a controlled or expected condition (Mode 1-6). | As evaluated by the Emergency Coordinator. |
| 5. Union strikes affecting the availability of operating personnel or the security personnel. | As evaluated by the Emergency Coordinator. |
| 6. Any serious or fatal injury occurring on site and requiring off-site medical assistance (hospital stay greater than 48 hours). | As evaluated by the Emergency Coordinator. |
| 7. Any event involving nuclear material which has or may have: | As evaluated by the Emergency Coordinator and the Radiation Protection Engineer |
| a) Exposure of the whole body to 25 rems or more; exposure of the skin of the whole body of 150 rems or more; or exposure of the feet, ankles, hands or forearms to 375 rems or more. | |

ATTACHMENT 4
SIGNIFICANT EVENT CLASSIFICATION

- b) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 5,000 times the limits specified for such materials in Appendix B, Table II of 10CFR20.
 - c) A loss of one working week or more of the operation of any facilities affected.
 - d) Damage to property in excess of \$200,000.
8. Any event involving nuclear material which has or may have:
- a) Exposure of the whole body to 5 rems or more; exposure of the skin of the whole body to 30 rems or more; or exposure of the feet, ankles, hands, or forearms to 75 rems or more.
 - b) The release of radioactive material in concentrations which, if averaged over a period of 24 hours, would exceed 500 times the limits specified for such materials in Appendix B, Table II of 10CFR20.
- As evaluated by the
Emergency Coordinator
and the Radiation
Protection Engineer.

TIME LIMIT IN (MINUTES)	REQUIRED FOR EVENT CLASS				PERSON TO BE CONTACTED	PERSON CONTACTED	DATE/ TIME	CONTACTED BY
	UE/SE	A	SAE	GE				
15	YES	YES	YES	YES	Primary: EDO (Contact One) L. Fry Office: Car: Beeper: Home J. Gueller Office: Car: Beeper: Home			
15	YES	YES	YES	YES	Secondary: TSS (Contact One) L. Miller Office: Car: Beeper: Home: L. Catalfomo Office: Car: NA, Beeper: Home:			
15	YES	YES	YES	YES	NEW JERSEY Primary: (Direct Line) Secondary:			
15	YES	YES	YES	YES	DELAWARE Primary: (NAWAS) Secondary:			
15	NO	NO	NO	YES	Salem County Primary: (Direct Line) Secondary:			
15	NO	NO	NO	YES	Cumberland County Primary: (Direct Line) Secondary:			
15	NO	NO	NO	YES	New Castle County Primary: (Direct Line) Secondary:			
15	NO	NO	NO	YES	Kent County Primary: (Direct Line) Secondary:			
15	NO	NO	NO	YES	U. S. Coast Guard Primary:			

COMMUNICATIONS LOG

EP
Figure 7

TIME LIMIT IN (MINUTES)	REQUIRED FOR EVENT CLASS				PERSON TO BE CONTACTED	PERSON CONTACTED	DATE/ TIME	CONTACTED BY
	UE/SE	A	SAE	GE				
30	YES	YES	YES	YES	General Manager - Salem Operations (Contact One) H. Midura Office: - Beeper: Home: J. Driscoll Office: ; - (Asst. GM) Beeper: Home: R. A. Uderitz Office: Car: (VP - Nuclear) Beeper: N/A Home:			
30	YES	YES	YES	YES	Public Affairs Manager-Nuclear (Contact One) R. Silverio Office: Car: NA: Beeper: Home: W. Denman Office: ; Car: NA: Beeper: NA: Home:			
30	NO	YES	YES	YES	Security-Site (Shift Lieutenant) Primary: Secondary:			
60	YES	YES	YES	YES	Security-Hope Creek Hope Creek Project Union Security			
60	NO	YES	YES	YES	Second Sun Visitor's Center Primary: Secondary:			
60	YES	YES	YES	YES	LAC Township Primary: (Direct Line) Secondary:			
60	YES	YES	YES	YES	NRC Primary: (ENS) Secondary: or			
60	YES	YES	YES	YES	NRC Resident (Contact One) L. Norrholm - Office: Home: B. Summer - Office: Home:			

COMMUNICATIONS LOG

EP
Figure 7

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TIME LIMIT IN (MINUTES)	REQUIRED FOR EVENT CLASS				PERSON TO BE CONTACTED	PERSON CONTACTED	DATE/ TIME	CONTACTED BY
	UE/SE	A	SAE	GE				
90	YES	YES	YES	YES	New Jersey DOR Primary: Secondary: See Addendum 1			
90	YES	YES	YES	YES	New Jersey BPU Primary: Secondary:			
90	NO	YES	YES	YES	American Nuclear Insurers Primary:			

INITIAL CONTACT MESSAGE FORM

DIRECTIONS FOR COMMUNICATOR

Upon completion of the below prepared message the Emergency Coordinator or the Designated Communicator shall make the required notifications using Attachment 1 to this procedure.

NOTE: In the event of a test, drill or exercise, preface and complete each message with the phrase "THIS IS A DRILL, THIS IS A DRILL".

SECTION I (Provide to all)

THIS IS _____,
(NAME) (TITLE)

SALEM NUCLEAR GENERATING STATION, UNIT NO. _____

THIS IS A NOTIFICATION OF:

- a SIGNIFICANT EVENT
- an UNUSUAL EVENT
- an ALERT
- a SITE AREA EMERGENCY
- a GENERAL EMERGENCY

THIS EVENT OCCURRED AT _____ ON _____
(TIME - 24 HOUR CLOCK) (DATE)

- THERE IS NO RELEASE IN PROGRESS.
- WE HAVE A NORMAL RELEASE IN PROGRESS.
- WE HAVE AN UNCONTROLLED RELEASE IN PROGRESS.

SECTION II (Provide to New Jersey and Delaware Only)

- NO PROTECTIVE ACTIONS ARE RECOMMENDED AT THIS TIME
- WE RECOMMEND SHELTERING FOR THE FOLLOWING SECTOR(S) _____ /
(Distance-Miles)
- WE RECOMMEND EVACUATION FOR THE FOLLOWING SECTOR(S) _____ /
(Distance-Miles)

SECTION III (Provide to PSE&G personnel only)

DESCRIPTION OF EVENT _____

STATION STATUS CHECK LIST

Salem Generating Station Unit No. _____

Transmitted By: Name _____ Position: _____

1. Date and Time of Incident: Date _____ Time _____ (24 hr clock)

2. Accident Classification: Significant Event Unusual Event
 Alert Site Area Emergency General Emergency

3. Cause of Incident:

Primary Initiating Condition used for declaration of incident
EPI-0 Part _____, Number _____ and/or
Significant Event No. _____
Description of the incident _____

4. Status of Reactor: Tripped At Power
 Hot Shutdown Cold Shutdown

5. Pressurizer Pressure _____ psig Core Exit TC _____ °F

6. Is offsite power available? YES NO

7. Are two or more diesel generators operable? YES NO

8. Did the emergency safeguards system activate? YES NO

9. Has the containment been isolated? YES NO

10. Other pertinent information _____

Station Status Checklist - Radiological Information

11. Gaseous Release: YES NO
- (A) Release Terminated: YES NO
- (B) Anticipated or Known Duration of Release _____ Hours
- (C) Type of Release: GROUND ELEVATED
- (D) Wind Speed: _____ MPH Wind Direction: (Toward) _____
 Divide by 2 to get _____ M/Sec (From) _____
 Delta Temp: _____ (Compass Points)
- (E) Stability Class: Unstable Neutral Stable
- (F) Release Rate Iodine _____ Ci/Sec.
- (G) Release Rate Noble Gas: _____ Ci/Sec.

12. Liquid Release: YES NO
- (A) Release Terminated: YES NO
- (B) Anticipated or Known Duration of Release _____ Hours
- (C) Estimated Concentration _____ pico Curies/Liter
- (D) Release Rate _____ Liters/Hour

13. Projected Off-site Dose Rates (As Soon As Data Is Available):

Distance (miles)	Adult	
	Whole Body (mrem/hr)	Child Thyroid (mrem/hr)
_____	_____	_____
_____	_____	_____
_____	_____	_____

14. 15 minute updates to States:
- | | Time | Initials |
|--|-------|----------|
| <input type="checkbox"/> State of New Jersey | _____ | _____ |
| State of Delaware | _____ | _____ |
| <input type="checkbox"/> Others | _____ | _____ |
| Name | _____ | _____ |
| Agency | _____ | _____ |
| Name | _____ | _____ |
| Agency | _____ | _____ |

No. 101
 U.S. NRC, Dir. of NRR
 Washington, D.C. 20555
 Mr. S.A. Varga, Chief, Oper.
 Reactors ER#1, Div. of Licensing

SALEM GENERATING STATION
 EMERGENCY PLAN
 EMERGENCY PLAN PROCEDURES INDEX
 JANUARY 20, 1983

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EP I-4	General Emergency	2
EP I-5	Personnel Emergency	1
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EP I-7	Station Fire	1
EP I-8	Personnel Accountability	1
EP I-9	Search and Rescue Operations	1
EP I-10	Conducting an Inventory of Emergency Equipment	1
EP I-11	Communications Equipment	1
EP I-12	Site Evacuation	1
EP I-13	Post Accident Low Pressure Injection Monitoring	1
EP I-14	Initiation of Recovery Operations	1
EP I-15	Stable Iodine Thyroid Blocking	1
EP I-16	Recall of Evacuated Site Personnel	1
EP I-17	Radiation Protection - Emergency Action	1
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EP I-19	Activation/Evacuation of the Technical Support Center	1

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EP IV-107	Radiation Monitor Evaluation	1
EP IV-108	Protective Action Recommendations	2
EP IV-109	Plume Tracking by Helicopter	1
EP IV-110A	Field Monitoring by TSC	2
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EP IV-111	Effluent Dose Calculations	2
EP IV-112	Emergency Operations Facility - Radiological Assessment	0
EP IV-113	Computerized Dose Calculations	2
EP IV-114	Computerized Dose Calculations on Programmable Calculator	0
EP IV-115	Personnel and Vehicle Survey	1
EP IV-116	Fire Brigade Escort	1
EP IV-117	Re-Entry Team Radiation Protection	1
EP IV-118	High Activity Sample Analysis	2
EP IV-119	Personnel Decontamination	1
EP IV-120	Equipment Decontamination	1
EP IV-121	Containment Atmosphere Remote Sampling	1
EP IV-122	Emergency Staffing Guide	1
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EP IV-202	Chemistry Senior Supervisor Response	1
EP IV-203	Administrative Assistant Response	1
EP IV-204	Short Term Environmental Response	1
EP IV-205	Material and Instruments Supervisor Response	1
EP IV-206	Dosimetry-Counting Room Supervisor Response	1
EP IV-207	Rad Waste Supervisor Response	1
EP IV-208	Dose Assessment - ALARA Supervisor Response	1
EP IV-209	In-Plant Supervisor Response	1
EP IV-210	Procedures-Training Supervisor Response	1
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