

06/06/91

PUBLIC SERVICE ELECTRIC & GAS COMPANY  
DOCUMENT DISTRIBUTION NOTICE

PAGE 1 OF 1

TRANSMITTAL: DDG 0187788



NUCLEAR REGULATORY COMMISSION  
DOCUMENT CONTROL DESK  
WASHINGTON, DC 20555

COPYHOLDER: SECG0101  
DESCRIPTION: LJC SECG-TOC 91019

PLEASE INSERT THE FOLLOWING DOCUMENTS INTO YOUR CONTROLLED FILE/MANUAL.  
SUPERCEDED DOCUMENTS MUST BE SO MARKED AND PHYSICALLY REMOVED OR DESTROYED.

CLASS	DOCUMENT ID	SHT/ VOL	INST	REV	STAT	TYPE	FORMAT	QTY
PROC	SECG-TOC	000		011	A	SECG	H	001

PLEASE SIGN AND DATE THIS NOTICE TO ACKNOWLEDGE RECEIPT  
AND RETURN WITHIN 5 WORKING DAYS TO:  
DOCUMENT DISTRIBUTION GROUP NDAB, N04

COPYHOLDER SIGNATURE: \_\_\_\_\_

9106120218 910530  
PDR ADOCK 05000272  
F PDR

DATE: \_\_\_\_\_

DDG USE ONLY: DATA ENTRY COMPLETED: \_\_\_\_\_

100079

A045

ARTIFICIAL ISLAND  
SALEM EVENT CLASSIFICATION GUIDE  
MAY 30, 1991

CHANGE PAGES FOR  
REVISION #11

The Table of Contents forms a general guide to the current revision of each section of the Salem Event Classification Guide. The changes that are made in this TOC Revision #11 are shown below. Please check that your revision packet is complete and remove the outdated material listed below.

ADD			REMOVE		
<u>Page</u>	<u>Description</u>	<u>Rev.</u>	<u>Page</u>	<u>Description</u>	<u>Rev.</u>
1 of 2 thru 2 of 2	TOC	11	1 of 2 thru 2 of 2	TOC	10
1 of 2 thru 2 of 2	Section Signature Page	7	1 of 2 thru 2 of 2	Section Signa- ture Page	6
1 of 10 thru 10 of 10	Section ii	1	1 of 10 thru 10 of 10	Section ii	0
1 of 3 thru 3 of 3	Section 1	2	1 of 3 thru 3 of 3	Section 1	1
1 of 3 thru 3 of 3	Section 17	2	1 of 3 thru 3 of 3	Section 17	1

**SALEM  
EVENT CLASSIFICATION GUIDE  
TABLE OF CONTENTS  
April 26, 1991**

**CONTROL COPY #**  
ECG  
T.O.C  
Pg. 1 of 2  
**101**

<u>SECTION</u>	<u>TITLE</u>	<u>REV.</u>	<u>PAGES</u>	<u>EFFECTIVE DATES</u>
T.O.C.	Table of Contents	10	2	Apr 26, 1991
Sig. i-18	Section Identification/Signature Page	6	2	Apr 26, 1991
Sig. Att.	ECG Attachments/Signature Page	9	2	Apr 26, 1991
i.	Introduction	0	4	May 26, 1989
ii.	Cross Reference - Event to Requirement	0	10	May 26, 1989
iii.	Cross Reference - Attachment to Events	4	1	Nov 2, 1990
1.	PRIMARY LEAKAGE/SG TUBE LEAKAGE	1	3	Sept 15, 1989
2.	SECONDARY LEAKAGE	0	1	May 26, 1989
3.	FAILURE TO TRIP/RPS PROBLEMS	1	2	Nov 2, 1990
4.	LOSS OF DECAY HEAT REMOVAL	0	2	May 26, 1989
5.	FUEL DAMAGE/DEGRADED CORE	1	2	Sept 15, 1989
6.	FISSION PRODUCT BOUNDARY FAILURE	0	1	May 26, 1989
7.	RADIOLOGICAL RELEASES/OCCURRENCES	0	5	May 26, 1989
8.	NON-RADIOACTIVE LEAK/SPILL (toxic gas, oil spill, hazmat)	1	2	Sept 15, 1989
9.	ELECTRICAL POWER FAILURE	1	2	Mar 2, 1990
10.	LOSS OF INSTRUMENTS/ALARMS/COMMUNICATIONS	2	2	Apr 26, 1991
11.	CONTROL ROOM EVACUATION	0	1	May 26, 1989
12.	QUAKE/STORMS (earthquake, wind, floods, etc)	0	6	May 26, 1989
13.	SITE HAZARDS (aircraft crash, missiles, explosions, etc.)	0	5	May 26, 1989
14.	FIRE	0	1	May 26, 1989
15.	PERSONNEL EMERGENCIES/MEDICAL	0	2	May 26, 1989
16.	SECURITY EVENTS/FFD	3	3	July 27, 1990
17.	PUBLIC INTEREST ITEMS	1	3	Sept 29, 1989
18.	TECH SPECS/PLANT STATUS CHANGES	3	6	Nov 2, 1990

SALEM  
EVENT CLASSIFICATION GUIDE  
TABLE OF CONTENTS - (Continued)  
April 26, 1991

<u>ATTACHMENT</u>	<u>TITLE</u>	<u>REV.</u>	<u>PAGES</u>	<u>EFFECTIVE DATE</u>
1.	Unusual Event	5	10	Apr 26, 1991
2.	Alert	2	8	Apr 26, 1991
3.	Site Area Emergency	2	8	Apr 26, 1991
4.	General Emergency	2	10	Apr 26, 1991
5.	Reserved			
6.	CM1 Log (UE/A/SAE)	7	8	Apr 26, 1991
7.	CM1 Log (GE)	7	8	Apr 26, 1991
8.	CM2 Log	4	12	Oct 19, 1990
9.	Non-Emergency Notifications Reference	6	2	Apr 26, 1991
10.	One Hour Report - NRC/Region	1	5	July 27, 1990
11.	One Hour Report - NRC/OPS (Security)	2	5	July 27, 1990
12.	One Hour Report - NRC/OPS	2	5	Apr 26, 1991
13.	Reserved			
14.	Four Hour Report - NRC/OPS	3	5	July 27, 1990
15.	Four Hour Report - Environmental	2	5	July 27, 1990
16.	Four Hour Report - Spill/Hazmat	1	6	July 27, 1990
17.	Four Hour Report - Fatality/Medical	3	7	July 27, 1990
18.	Four Hour Report - Transportation Accident	1	6	July 27, 1990
19.	Twenty Four Hour Report - FFD	0	3	July 27, 1990
20.	Twenty Four Hour Report - NRC/OPS	2	5	July 27, 1990
21.	Reportable Event - LACT/MOU	0	2	May 26, 1989
22.	Other/Engineering	1	3	Mar 2, 1990
23.	Written Reports/LERS/Others	1	10	Nov 2, 1990

**SALEM**  
**EVENT CLASSIFICATION GUIDE**  
**SECTION SIGNATURE PAGE**

**April 26, 1991**

<u>SECTION</u>	<u>TITLE</u>	<u>REV.</u>	<u>PAGES</u>	<u>EFFECTIVE DATES</u>
i.	Introduction	0	4	May 26, 1989
ii.	Cross Reference - Event to Requirement	0	10	May 26, 1989
iii.	Cross Reference - Attachment to Events	4	1	Nov 2, 1990
1.	PRIMARY LEAKAGE/SG TUBE LEAKAGE	1	3	Sept 15, 1989
2.	SECONDARY LEAKAGE	0	1	May 26, 1989
3.	FAILURE TO TRIP/RPS PROBLEMS	1	2	Nov 2, 1990
4.	LOSS OF DECAY HEAT REMOVAL	0	2	May 26, 1989
5.	FUEL DAMAGE/DEGRADED CORE	1	2	Sept 15, 1989
6.	FISSION PRODUCT BOUNDARY FAILURE	0	1	May 26, 1989
7.	RADIOLOGICAL RELEASES/OCCURRENCES	0	5	May 26, 1989
8.	NON-RADIOACTIVE LEAK/SPILL (toxic gas, oil spill, hazmat)	1	2	Sept 15, 1989
9.	ELECTRICAL POWER FAILURE	1	2	Mar 2, 1990
10.	LOSS OF INSTRUMENTS/ALARMS/COMMUNICATIONS	2	2	Apr 26, 1991
11.	CONTROL ROOM EVACUATION	0	1	May 26, 1989
12.	QUAKE/STORMS (earthquake, wind, floods, etc)	0	6	May 26, 1989
13.	SITE HAZARDS (aircraft crash, missiles, explosions, etc.)	0	5	May 26, 1989
14.	FIRE	0	1	May 26, 1989
15.	PERSONNEL EMERGENCIES/MEDICAL	0	2	May 26, 1989
16.	SECURITY EVENTS/FFD	3	3	July 27, 1990
17.	PUBLIC INTEREST ITEMS	1	3	Sept 29, 1989
18.	TECH SPECS/PLANT STATUS CHANGES	3	6	Nov 2, 1990

SIGNATURE PAGE

Prepared By: D. Fawcett  
(If Editorial Revisions Only, Last Approved Revision)

3/18/91  
Date

Reviewed By: Craig W. Banner  
Station Qualified Reviewer

3/26/91  
Date

Significant Safety Issue  
( ) Yes (  ) no

Reviewed By: V Polizzi  
Department Manager

4/3/91  
Date

Reviewed By: [Signature]  
Emergency Preparedness Manager

3-27-91  
Date

Reviewed By: N/A  
General Manager - Quality Assurance/Safety Review  
(If Applicable)

\_\_\_\_\_  
Date

SORC Review and Station Approvals

91-042 V Polizzi  
Mtg. No. Salem Chairman

4/3/91  
Date

N/A  
Mtg. No. Hope Creek Chairman

\_\_\_\_\_  
Date

[Signature]  
General Manager - Salem

4/3/91  
Date

N/A  
General Manager - Hope Creek

\_\_\_\_\_  
Date

SALEM EVENT CLASSIFICATION  
CROSS REFERENCE  
EVENT TO REQUIREMENT DOCUMENT  
SECTION ii

NOTE: This section is not to be used for Event Classification. Refer to Sections 1 thru 18.

<u>Initiating Event/Condition</u>	<u>Reference*</u>
<b>1. Primary Leakage/SG Tube Leakage</b>	
A. PZR Safety/PORV failure to reseal	UE6
B. Primary Leak exceeding T/S limits resulting in Unit shutdown	UE5
C. Primary Leak > 50 GPM	A5
D. Primary Leak (LOCA) > total MU capacity	SAE1
E. Primary to Secondary leak exceeding T/S LCO.	UE5
F. Primary to Secondary Leak (several hundred GPM)	A3
G. Primary to Secondary Leak with a faulted SG.	A4
H. Primary to Secondary Leak with loss of offsite power	A2
I. Primary to Secondary Leak >50 gpm with a faulted SG and indicated fuel damage	SAE5
J. Primary to Secondary Leak (several hundred GPM) with loss of offsite power	SAE3

\* Unless otherwise identified, references are as outlined in Appendix 1, NUREG-0654  
Only Initiating Event/Condition references for Emergency Classes UE - GE are listed here. Non-emergency references are included in the sections themselves.

NOTE: This section is not to be used for Event Classification. Refer to sections 1 thru 18.

<u>Initiating Event/Condition</u>	<u>Reference</u>
<b>2. Secondary Leakage</b>	
A. SG Safety/MS-10 failure to reseal	UE6
B. Faulted SG causing a rapid uncontrolled secondary depressurization	UE17
<b>3. Failure to trip/RPS problems</b>	
A. Failure of the RPS to initiate and complete a trip which brings the Rx subcritical	All
B. Failure of the RPS to automatically, or by operator action to manually, initiate and complete a trip which brings the Rx subcritical	SAE9
C. Transient requiring operation of shutdown systems with failure to trip, resulting in core damage or additional failure of core cooling and makeup systems	GE5c
<b>4. Loss of decay heat removal</b>	
A. Complete loss of any function needed for cold shutdown	A 10
B. Complete loss of any function needed for hot shutdown	SAE8
C. Transient initiated by loss of Feed and Condensate followed by failure of Aux Feed for extended period (core damage possible in several hours)	GE5b



NOTE: This section is not to be used for Event Classification.  
Refer to sections 1 thru 18.

**5. Fuel Damage/Degraded Core**

- |   |              |
|---|--------------|
| A. Fuel damage indications  | UE3b<br>UE3c |
| B. Fuel damage resulting from<br>a RCP seizure  | A9           |
| C. Severe loss of fuel cladding   | Alb<br>Alc   |
| D. Degraded core with possible<br>loss of coolable geometry                             | SAE2         |
| E. Fuel handling accident with<br>release to FHB or Containment                         | Al2          |
| F. Major damage to irradiated fuel<br>in Containment or Fuel Handling<br>Building (FHB) | SAE10        |

**6. Fission Product Boundary Failures(2/3)**

- |                                 |     |
|---------------------------------|-----|
| A. Severe loss of fuel cladding | GE2 |
| B. Loss of Primary Coolant      | GE2 |
| C. Containment failure          | GE2 |

**7. Radiological Releases**

- |   |                    |
|---|--------------------|
| A. Transport of a contaminated<br>individual from site to off-<br>site medical facility | UE16               |
| B. Loss, theft or diversion<br>of any special nuclear<br>material onsite                | UE12<br>10CFR70.52 |

NOTE: This section is not to be used for Event Classification. Refer to sections 1 thru 18.

<u>Initiating Event/Condition</u>	<u>Reference</u>
<b>7. Radiological Releases/Occurrences (cont'd)</b>	
C. Increase in measured or calculated dose rate (mR/hr) or airborne activity level by $\geq$ 1000 times (indication of severe degradation in control of radioactive materials).	A6
D. Liquid release that exceeds T/S limits for $\geq$ 15 min.	UE2
E. Gaseous release that exceeds T/S limits for $\geq$ 15 min.	UE2
F. Gaseous release that exceeds 10 times T/S limits for $\geq$ 15 min.	A15
G. Dose Rate at Minimum Exclusion Area (MEA) equivalent to 5000 mR/hr WB or 2500 mR/hr thyroid for > 2 min. (MEA is defined as any monitoring location greater than 0.79 miles away from the affected unit).	SAE13
H. Dose Rate at Minimum Exclusion Area (MEA) equivalent to 1R/hr WB or 5 R/hr thyroid.	GE1
<b>8. Nonradioactive Leak/Spill</b>	
A. Toxic or flammable gas release that threatens plant personnel.	UE14d
B. Toxic or flammable gas release entering vital areas.	A18d
C. Toxic or flammable gas release entering into vital areas where lack of access constitutes a safety problem	SAE16c

NOTE: This section is not to be used for Event Classification. Refer to sections 1 thru 18.

<u>Initiating Event/Condition</u>	<u>Reference</u>
<b>9. Electrical/Power Failure</b>	
A. Loss of onsite A.C. Power capability that requires Unit Shutdown.	UE7
B. Loss of all offsite power.	UE7
C. Loss of all offsite power and loss of most onsite A.C. Power.	A7
D. Loss of all offsite power and loss of most onsite A.C. Power for an extended period of time.	SAE6
E. Total loss of all A.C. Power.	SAE6
F. Total loss of all A.C. Power with total loss of auxiliary Feedwater capability for several hours.	GE5d
G. Loss of all onsite DC Power	A8
H. Loss of all onsite DC power for > 15 min.	SAE7
<b>10. Loss of Instruments/Alarms/Communications</b>	
A. Indications or alarms on process or effluent parameters not functional in Control Room <u>or</u> loss of assessment or communications capability.	UE11
B. Loss of all or most OHAs	A14
C. Loss of all or most OHAs and plant transient initiated or in progress	SAE12
<b>11. Control Room Evacuation</b>	
A. Evacuation of Control Room anticipated or required.	A20

NOTE: This section is not to be used for Event Classification. Refer to sections 1 thru 18.

<u>Initiating Event/Condition</u>	<u>Reference</u>
<b>11. Control Room Evacuation (Cont'd)</b>	
B. Evacuation of Control Room completed with control of S/D systems not established locally within 15 minutes.	SAE18
<b>12. Earthquake/Severe Weather</b>	
A. Earthquake/seismic event felt in-plant or instrument detected	UE13a
B. Earthquake/seismic event greater than Operating Basis Earthquake (OBE)	AL17a
C. Earthquake/seismic event greater than Design Basis Earthquake (DBE)	SA15a
D. Flood: Water level in river near design basis.	UE13b
E. Flood: Water level in river greater than design basis.	AL17b
F. Flood: Water level in river high.	SA15b
G. Water level in river low	UE13b
H. Water level in river low near design basis	AL17b
I. Water level in river lower than design basis	SA15b
J. Hurricane/unusual wind indicated by met tower instrumentation	UE13d
K. Hurricane/unusual wind indicated by met tower instrumentation-near design basis	AL17d
L. Hurricane/unusual wind indicated by met tower instrumentation-greater than design basis	SA15c
M. Tornado funnel observed, within MEA	UE13c

NOTE: This section is not to be used for Event Classification. Refer to sections 1 thru 18.

<u>Initiating Event/Condition</u>	<u>Reference</u>
<b>12. Earthquake/Severe Weather (cont'd)</b>	
N. Tornado funnel observed within the protected area	A17c
O. Tornado funnel observed, affecting plant structures	SA5c
P. Any major internal or external events (e.g., floods, earthquakes, substantially beyond design basis) which could cause massive common damage to plant systems which would result in a General Emergency.	GE7
<b>13. Site Hazards (explosions, crashes, etc.)</b>	
A. Aircraft unusual activity over Facility or crash occurring in the MEA	UE14a
B. Aircraft crash occurring within the Protected Area	A18a
C. Aircraft crash affecting Plant Structures	SAE16a
D. Turbine rotating component failure	UE14e
E. Turbine rotating component failure causing casing penetration	A18e
F. Missile impact onsite from any source within the Protected Area.	A18b
G. Missile impact onsite damaging a Plant Structure	SAE16b

NOTE: This section is not to be used for event Classification. Refer to sections 1 thru 18.

<u>Initiating Event/Condition</u>	<u>Reference</u>
<b>13. Site Hazards (explosions, crashes, etc.) (cont'd)</b>	
H. Unplanned explosion affecting plant operations	UE14c
I. Unplanned explosion potentially compromising the function of one or more safety systems or normal operation of the plant	A18c
J. Unplanned explosion compromising the function of one or more safety systems	SAE16b
K. Any major internal or external events (e.g., crashes, explosions, substantially beyond design basis) which could cause massive common damage to plant systems which would result in a General Emergency	GE7
<b>14. Fire</b>	
A. Fire lasting > 10 min that affects plant operations	UE10
B. Fire potentially compromising the function of one or more safety systems	A13
C. Fire compromising the function of one or more safety systems	SAE11
D. Any major fire (substantially beyond design basis) which could cause massive common damage to safety systems.	GE7
<b>15. Personnel Emergencies</b>	
A. Transport of a contaminated individual from site to offsite medical facility.	UE16

NOTE: This section is not to be used for Event Classification. Refer to sections 1 thru 18.

Initiating Event/Condition

Reference

**16. Security Events**

- |  |                    |
|--|--------------------|
| A. Loss, theft or diversion of any special nuclear material onsite   | UE12<br>10CFR70.52 |
| B. Substantiated threat, attempted entry or discovery of a suspected destructive device or evidence of a malicious act.                                | UE12               |
| C. Security Alert  | UE12               |
| D. Substantiated threat, attempted entry or discovery of a suspected destructive device or evidence of a malicious act with a Security Alert declared. | A16                |
| E. Ongoing security compromise   | A16                |
| F. Ongoing security compromise involving imminent loss of physical control of the plant.   | SAE14              |
| G. Ongoing security compromise resulting in the loss of physical control of the plant.   | GE3                |

**17. Public Interest Items**

- |  |      |
|--|------|
| A. Any plant conditions that warrant increased awareness on the part of STATE/LOCAL authorities.                                       | UE15 |
| B. Any plant conditions that warrant precautionary activation of the TSC and placing EOF and other key emergency personnel on standby. | A19  |

NOTE: This section is not to be used for Event Classification. Refer to sections 1 thru 18.

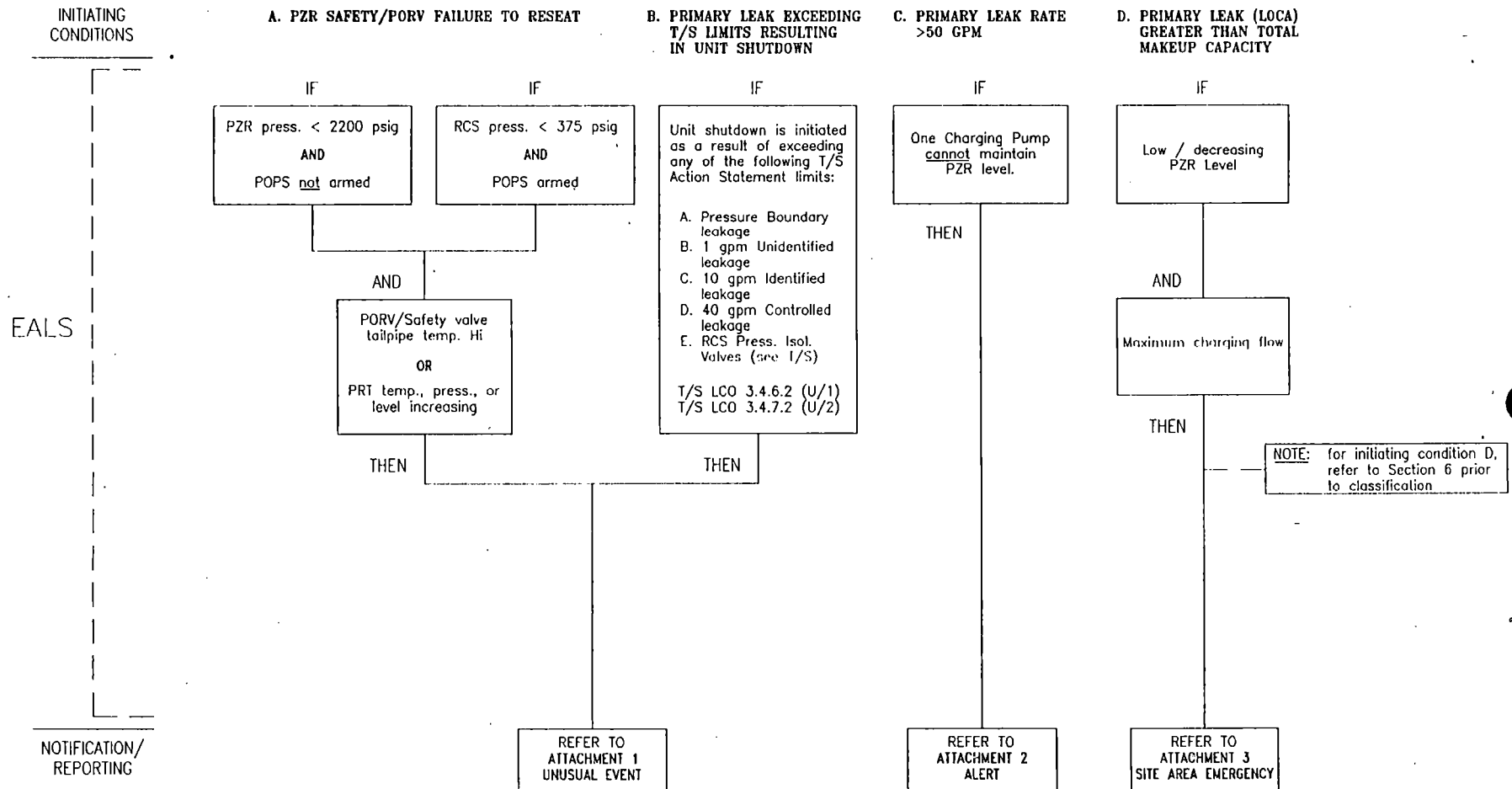
<u>Initiating Event/Condition</u>	<u>Reference</u>
C. Any plant conditions that warrant precautionary activation of the TSC and EOF and precautionary notification to the general public	SAE17
<b>18. Tech. Specs/Plant Status Changes</b>	
A. Unit shutdown initiated to comply with certain T/S LCO's.	UE3, UE4, UE5, UE7, UE8
B. Exceeding any T/S Safety Limit	UE4 Tech. Spec 2.1 and 6.7.1
C. Manual or automatic ECCS actuation with discharge to the vessel.	UE1
D. Liquid Release that exceeds T/S limits for $\geq$ 15 mins.	UE2
E. Gaseous Release that exceeds T/S limits for $\geq$ 15 mins.	UE2



SECTION 1

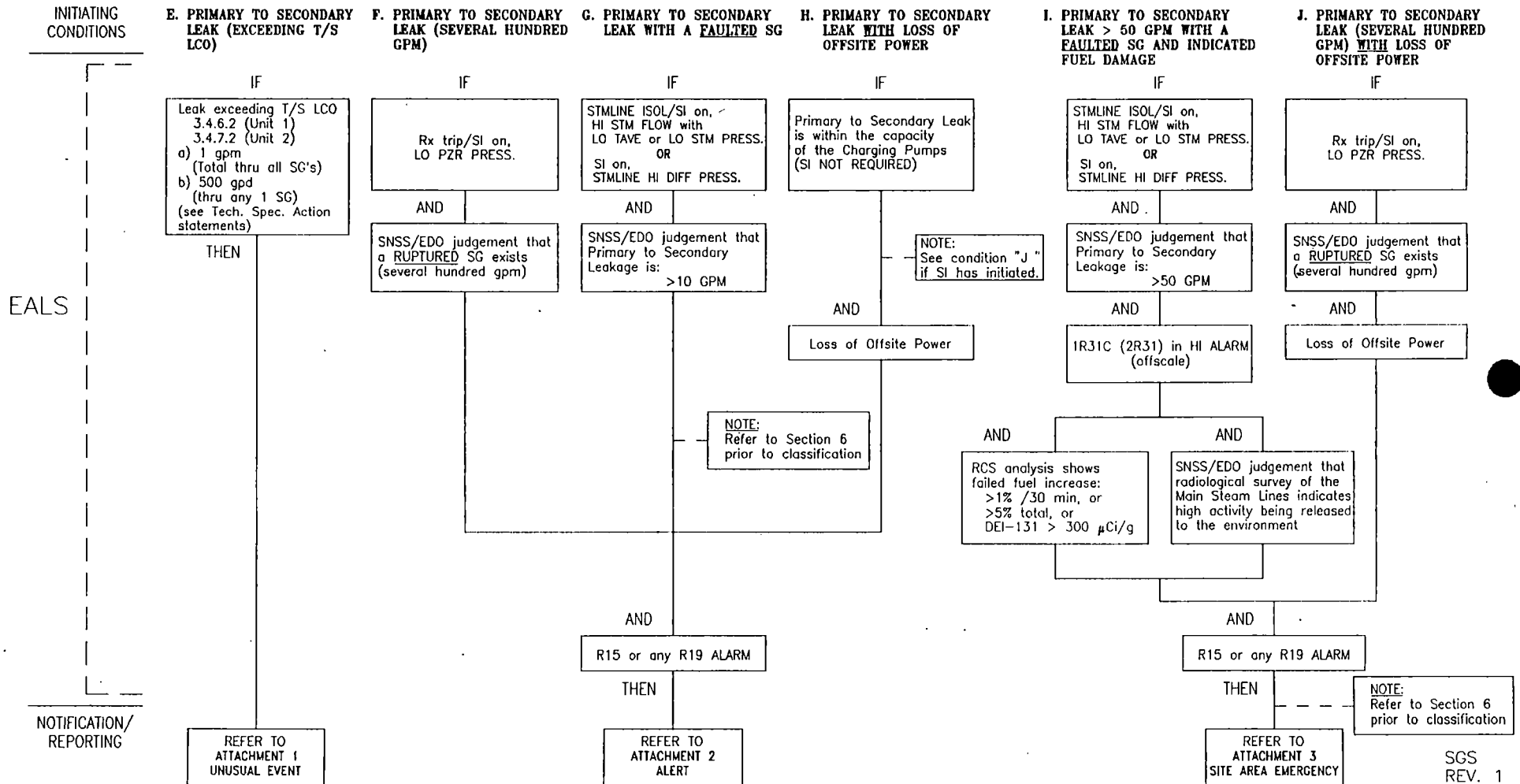
# PRIMARY LEAKAGE / SG TUBE LEAKAGE PRIMARY LEAK / LOCA

NOTE: Refer to Page 2 for suspected  
Primary to Secondary Leakage



SECTION 1

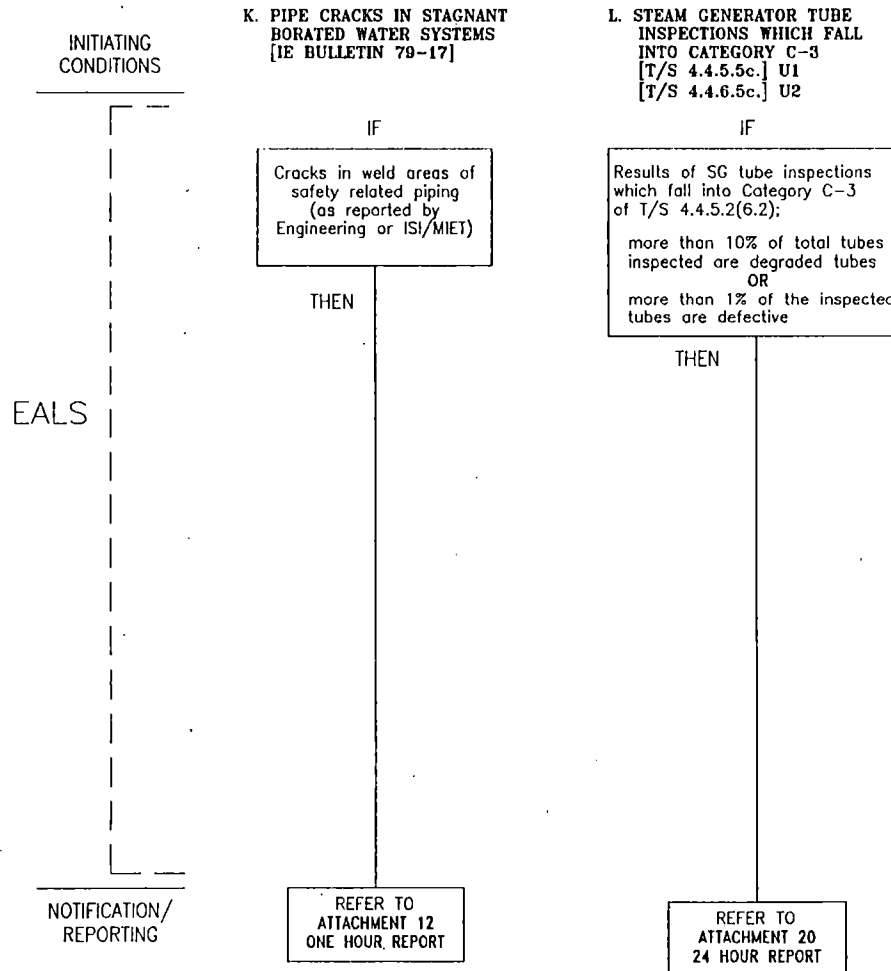
PRIMARY LEAKAGE / SG TUBE LEAKAGE  
PRIMARY TO SECONDARY LEAKAGE



SECTION 1

# PRIMARY LEAKAGE / SG TUBE LEAKAGE

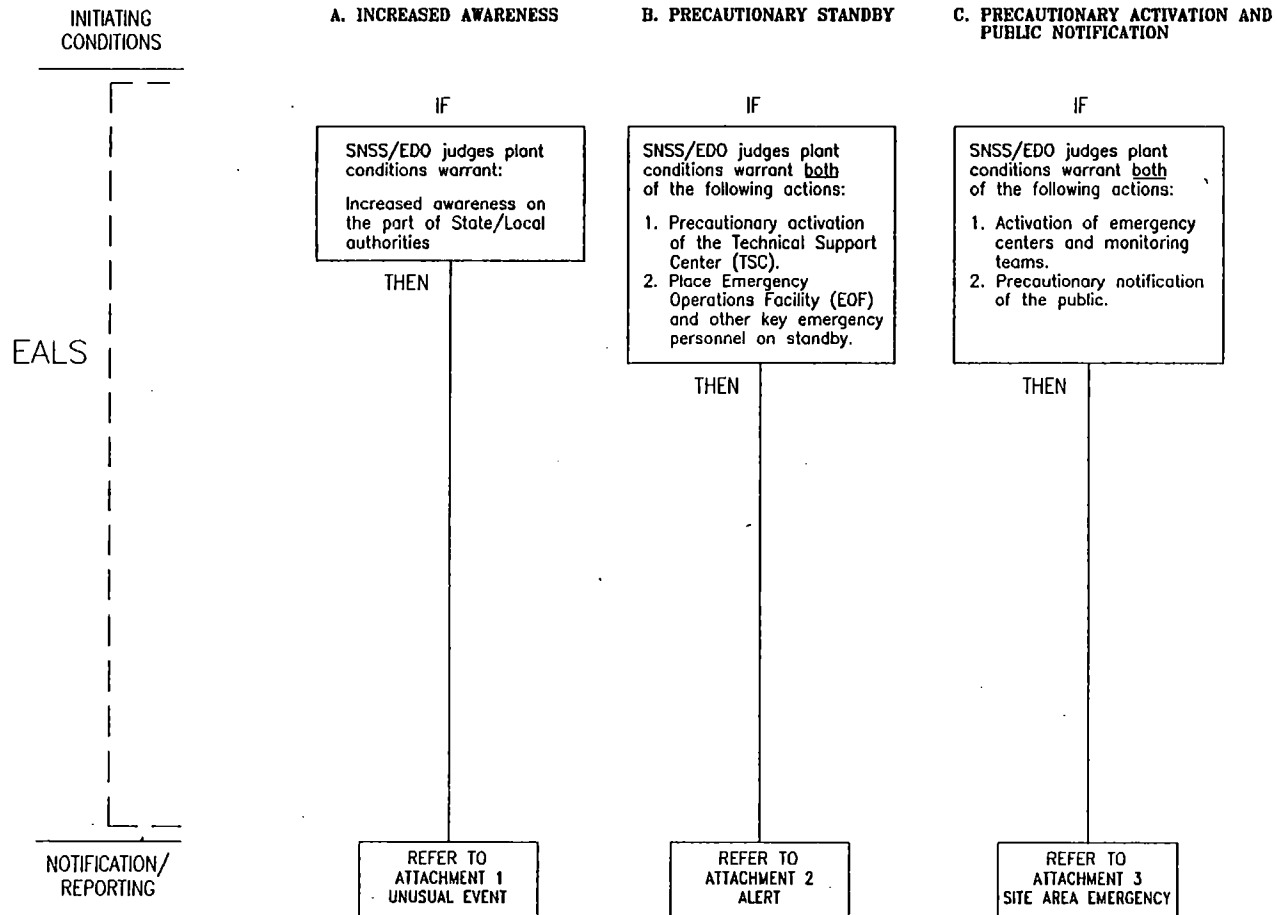
## PRIMARY LEAK



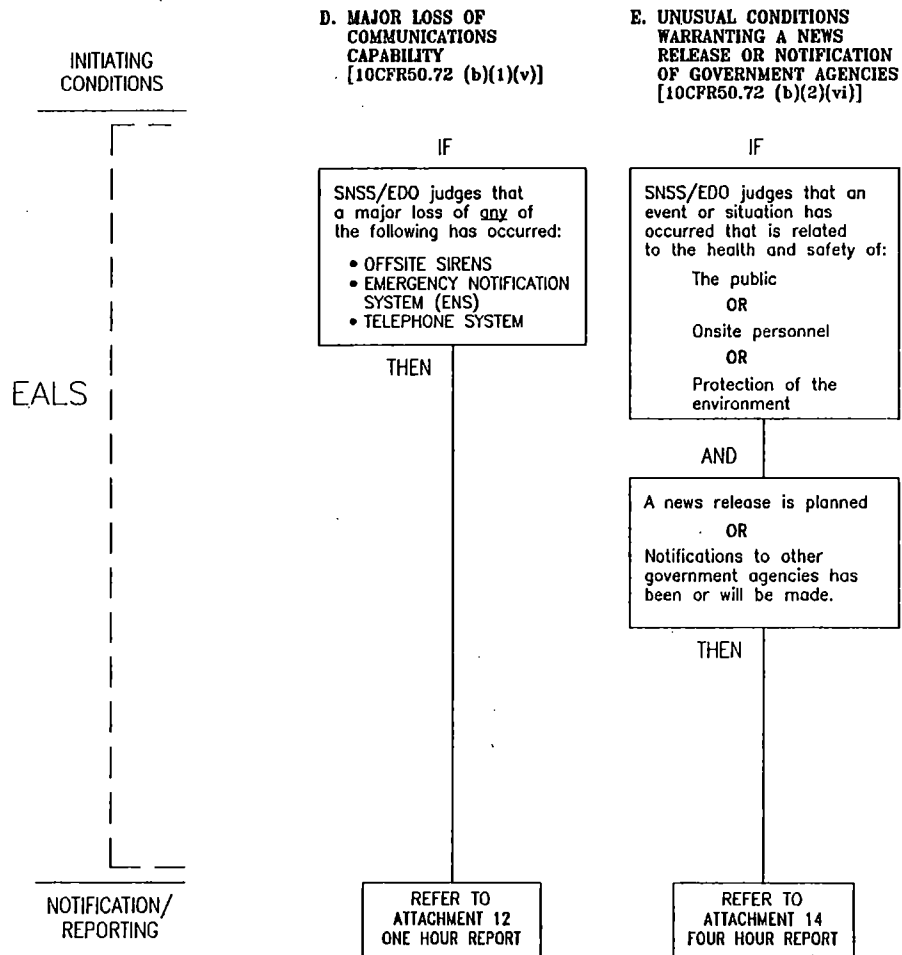
SECTION 17

PUBLIC INTEREST

PLANT CONDITIONS EXIST THAT WARRANT THE ALERTING OF STATE AND LOCAL OFFICIALS



PUBLIC INTEREST



SECTION 17

PUBLIC INTEREST

