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SUBJECT: Responds to questions re proposed emergency plan rev to incorporate NUMARC EAL methodology.

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August 30, 1996

AEP:NRC:1192C

Docket Nos.: 50-315
50-316

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555

Gentlemen:

Donald C. Cook Nuclear Plant Units 1 and 2
PROPOSED EMERGENCY ACTION LEVELS
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
(TAC NOs. M89878 and M89879)

This letter is in response to questions concerning our proposed emergency plan revision to incorporate the NUMARC emergency action level (EAL) methodology. The questions were first raised during a conference call between NRC staff and AEP personnel on July 23, 1996, and discussed more completely during a meeting at NRC headquarters on August 6, 1996.

Attachment 1 to this letter contains a list of questions received from our project manager, John Hickman, and our responses. Attachment 2 contains our proposed Emergency Plan, Section 12.3.5, Emergency Classification System. Attachment 3 contains our implementing procedure PMP 2080 EPP.101, Emergency Classification (EALs). Attachment 4 contains the EAL Basis Document. Attachment 5 contains the Core Cooling and Heat Sink Critical Safety Function Status Trees requested during the August 6, 1996, meeting. It also includes a copy of the loss of residual heat removal (RHR) cooling procedure.

PMP 208 EPP.101 and the basis document have been modified as necessary to respond to the issues raised during the above mentioned conference call and meeting. We have also made minor editorial changes to these documents.

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PDR ADOCK 05000315
P PDR

We remain available to answer any additional questions that the NRC staff might have.

Sincerely,

S J Brewer for

E. E. Fitzpatrick
Vice President

jen

Attachments

cc: A. A. Blind
A. B. Beach
NFEM Section Chief
NRC Resident Inspector - Bridgman
J. R. Padgett

9609110081

Attachment 1
to AEP:NRC:1192C

Questions and Answers

Fission Product Barrier EALs

1.Q. Is the containment radiation EAL for Fuel Clad Carrier 1.2 conservative? How was it calculated and is it consistent with your current core damage assessment procedure?

1.A. The number is conservative (only noble gases considered) but is consistent with our procedure (PMP 2081 EPP.105). An apparent inconsistency between the graph (Appendix A.2) and table (Appendix A.3) will be clarified in the next revision to the procedure. The region of the graph where our containment radiation EALS would be located is off scale (low) from the graph.

2.Q. Why are core exit thermocouples not used as an EAL for potential loss of fuel clad?

2.Q. The Fuel Clad Barrier 1.1 (potential loss) has been modified to include "Core Exit Thermocouples >700°."

3.Q. In RCS Barrier 2.3, what is a prolonged release?

3.A. Prolonged is defined in this loss EAL as 30 minutes, which is the assumed break flow termination time period in our steam generator tube rupture analysis.

4.Q. Why isn't a threshold value for "valves not closed and downstream pathway to the environment exists" included as a containment potential loss threshold value?

4.A. A discussion of "valves not closed..." is included in the basis discussion for loss under Containment Barrier 3.3: Containment Breach/Bypass. The wording of the threshold value has been modified to more closely resemble the NUMARC wording.

5.Q. Why was an EAL added for hydrogen concentration >0.5% and key equipment inoperable?

5.A. Discussion of rationale for this EAL is in basis for Containment Barrier 3.2 - Containment Pressure. A deviation statement was added to the basis for this added EAL.

6.Q. Why doesn't the EAL for hydrogen >4% include an oxygen concentration?

6.A. We do not monitor oxygen concentration in containment. A statement has been added to the basis document explaining that an explosive mixture in containment is determined by hydrogen concentration only.

Hazards EALs

7.Q. Why do the security EALs contain the same wording for UE, Alert and SAE (i.e. "Other security events as determined by the Modified Amended Security Plan")?

7.A. Specific security events have been added to the EALs, including confirmed bomb discovery in a vital area for SAE.

8.Q. Why is "significant visible damage" specified in H-1, Alert rather than just "visible damage"?

8.A. The word significant was removed from the EAL.

9.Q. Why does H-3, Alert specify initiation of control room evacuation and initiation of the evacuation procedure both?

9.A. The reference to the procedure has been removed form the EAL. A discussion of the procedure is contained in the basis document.

10.Q. Why are values for operating basis and design basis earthquakes not included in the EAL for an operating basis earthquake, Alert?

10.A. Cook Nuclear Plant does not have real time seismic instrumentation, so numerical values for earthquake intensity are not included in this EAL. The operator assessment method specified in NUMARC is used.

11.Q. Why isn't the NUMARC EAL for "unanticipated explosion within protected area" included in any EAL?

11.A. That EAL has been added under the Initiating Condition "Natural or destructive phenomena inside protected area".

Radiation EALs

12.Q. Do the effluent monitor readings for Alert (200 x ODCM release limits) overlap with the monitor readings calculated for SAE?

12.A. No.

13.Q. Why is the new fuel storage vault (NFSV) monitor alarm used as an EAL for an Alert?

13.A. The function of the NFSV monitor is considered similar to that of the spent fuel pool monitor R-5. An alarm on that monitor is currently an EAL for an Alert. A statement has been added to the basis reflecting this.

14.Q. Why does EAL #1 For R-3, Unusual Event, contain the words "with irradiated fuel in containment"?

14.A. Those words have been deleted from the R-3 table.

15.Q. Why isn't the water level for the reactor cavity included in EAL #3 for R-3: Alert?

15.A. The reactor cavity water level was added to the EAL.

Systems EALs

16.Q. Should a definition of Anticipated Transient without Scram (ATWS) be included in the S-1 EAL table?

16.A. Yes, a definition based on wording in 10CFR 50.62 has been added to the tables and basis documents.

17.Q. What are your definitions of Heat Sink Red and Subcriticality Red?

17.A. The Heat Sink and Subcriticality Critical Safety Function Status Trees are attached to this letter (Attachment 5).

18.Q. Will loss of offsite power with just one diesel generator available result in both a UE and an Alert?

18.A. Yes. The EAL for UE has been changed to loss of all off site power with two diesel generators supplying power.

19.Q. Is proper allowance given for protective action in the EAL for S-2A, General Emergency?

19.A. The four hour restoration period is appropriate, as that time period was assumed in station blackout analysis (AEP:NRC:05730). A statement will be added to the basis with this information.

Events that could theoretically occur after 4 hours have not been analyzed; therefore, it is difficult to estimate the amount of time available to implement protective actions. It should be noted however, that about 3 hours prior to declaration of the GE, all site emergency facilities would have been activated. The state emergency organization should also be operational, so the mechanism should be in place for making immediate protective action recommendations to the public.

20.Q. Why isn't mode applicability given in the S-3 tables?

20.A. A note will be added in the left-hand column saying that the modes will be indicated with appropriate initiating conditions (IC's).

21.Q. Why is there no EAL given for fuel clad degradation based on radiation monitor readings?

21.A. Cook Nuclear Plant does not have a failed fuel monitor. A statement reflecting that fact will be added to the basis.

22.Q. Request information on OHP 4022.017.001, "Loss of RHR Cooling".

22.A. A copy of the procedure is provided in Attachment 5.

23.Q. Regarding S-5 EALs, what is the definition of not successful?

23.A. "Objectives of the procedure could not be accomplished". The definition will be added to the basis.

Attachment 2
to AEP:NRC:1192C

Emergency Classification System

12.3.5

EMERGENCY CLASSIFICATION SYSTEM

12.3.5.1 Initiating Conditions (ICs)/Emergency Action Levels (EALs)

The ICs/EALs that will be utilized in initiating specific emergency actions described herein are not limited to one set of criteria or radiological parameters. The ICs/EALs were created following the methodology of NUMARC/NESP-007, Rev. 2. The ICs for various emergency condition categories (ECCs) are indicated herein. The EALs are only included in the Emergency Plan Procedures.

The ICs/EALs will classify an event or condition into one of four Emergency Classification Levels (ECLs) if an emergency classification is appropriate. The action to be taken by the operating shift depends upon the severity of the incident, its effects and type.

12.3.5.2 Protective Actions

For incidents that fall under the Emergency Classification Levels as defined herein, the Michigan State Police, the Berrien County Sheriff's Department, and the NRC and AEP Emergency Response Organization, as required, will be notified by the Site Emergency Coordinator that such an incident has occurred.

It is the responsibility of the Governor of Michigan or his authorized representative to make protective action decisions such as sheltering, evacuation, administration of thyroid blocking agents, etc. These decisions are based upon the protective action guides in Annex S of the Michigan Emergency Management Plan (MEMP). Since copies of the MEMP are maintained and readily available at the various Emergency Response Facilities, the protective action guides and their bases will not be reproduced here.

For incidents involving actual or imminent releases of radioactive material to the atmosphere, PMP 2081 EPP.305 "Protective Action Recommendations," will be used as the basis for recommendations for protective actions to the public. The procedure is based on the current issue of the "Manual for Protective Action Guides and Protection Action for Nuclear Incidents" (EPA 400-R-92-001). The EPA Guide provides Protective Action Guides (PAGs) for whole body external gamma radiation and for inhalation of radioactive material in an airborne plume.

The most effective actions to be recommended to the public are: evacuation, sheltering, and access control. Evacuation potentially provides the greatest margin of protection. On the other hand, because sheltering may be implemented in less time than evacuation, it may be the protective action of choice if rapid evacuation is impeded for any reason. Also, since sheltering is less disruptive than evacuation, it may be the protective action of choice when the dose reduction factor associated with shelter is adequate to reduce the projected dose to less than PAG levels. Access control is an effective action to avoid exposure of personnel who might otherwise enter areas of high exposure unnecessarily.

Emergency Plan Procedures have been established to provide the mechanism and criteria for recommending protective actions to state and local governments.

12.3.5.3 Initiating Conditions/Emergency Action Levels

Initiating Conditions (ICs) are those conditions, in general description, that require implementation of emergency actions based on the associated Emergency Classification Level. Emergency Action Levels are, where possible, specific descriptions of the ICs using predesignated, non-subjective criteria.

The Site Emergency Coordinator will exercise subjective judgement, based on the following criteria, to ensure all incidents are classified at the highest appropriate Emergency Classification Level.

- Conditions which indicate a potential degradation of the level of safety of the plant warrant a declaration of an Unusual Event.
- Conditions which indicate an actual or potential substantial degradation of plant safety systems AND that increased monitoring of plant functions is needed warrant a declaration of an Alert.
- Conditions which indicate likely or actual major failures of plant functions needed for the protection of the public warrant a declaration of a Site Area Emergency.
- Conditions which indicate an actual or imminent substantial core degradation with potential for loss of containment from EITHER unit warrant a declaration of a General Emergency.

The tables on pages 12.3-63 through 12.3-68 contain the ICs used for Emergency Classifications. The EALs are contained within PMP 2080 EPP.101. The table on page 12.3.69 provides classification guidance when addressing loss or potential loss of fission product barriers. Pages 12.3.70 through 12.3.72 contain the criteria to be used to determine whether or not a barrier is lost or potentially lost.

INITIATING CONDITIONS

RECOGNITION CATEGORY: Hazards and Other Conditions Affecting Plant Safety				MODES: ALL
ECC	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
H-1: FIRE	Fire within Protected Area boundary not extinguished within 15 minutes of detection.	Fire or explosion affecting the operability of plant safety systems required to establish or maintain safe shutdown.	Not Applicable	Not Applicable
H-2: TOXIC OR FLAMMABLE GASES[1]	Release of toxic or flammable gases deemed detrimental to safe operation of the plant.	Release of toxic or flammable gases within a facility structure which jeopardizes operation of systems required to maintain safe operations or to maintain cold shutdown.	Not Applicable	Not Applicable
H-3: CONTROL ROOM EVACUATION	Not Applicable	Control Room evacuation has been initiated.	Control Room evacuation has been initiated and plant control cannot be established.	Not Applicable
H-4: SECURITY EVENTS	Confirmed security event which indicates a potential degradation in the level of safety of the plant.	Security event in a plant protected area.	Security event in a plant vital area.	Security event resulting in loss of ability to reach and maintain cold shutdown.
H-5: SITE EMERGENCY COORDINATOR (SEC) JUDGEMENT	Other conditions existing which in the judgement of the SEC warrant declaration of an unusual event.	Other conditions existing which in the judgement of the SEC warrant declaration of an alert.	Other conditions existing in the judgement of the SEC warrant declaration of a site area emergency.	Other conditions existing which in the judgement of the SEC warrant declaration of a general emergency.

[1] Asphyxiators such as carbon dioxide are not toxic, but it can be lethal if entry is required into the area that is oxygen-deficient. Thus, oxygen-deficiency is not a basis for classification unless access to the area is required for safe operation and access cannot be made because of the personnel hazard.

RECOGNITION CATEGORY: Natural / Destructive Phenomena					MODES: ALL
ECC		UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
NATURAL/ DESTRUCTIVE PHENOMENA MODES: ALL	IC	NATURAL OR DESTRUCTIVE PHENOMENA INSIDE THE PROTECTED AREA	NATURAL OR DESTRUCTIVE PHENOMENA INSIDE A VITAL AREA	NOT APPLICABLE	NOT APPLICABLE
	EAL N-1 SEISMIC ACTIVITY -OR-	CONFIRMED[1] seismic event as indicated by: Seismic instrument activation -or- Ground motion at plant recognized as an earthquake based on consensus of control room operators on duty.	CONFIRMED[1] seismic event as indicated by: Seismic instrument activation -or- Ground motion at plant recognized as an earthquake based on consensus of control room operators on duty -and- Either: Visible major damage to structures, systems, and components in vital areas -or- Plant trip	Not Applicable	Not Applicable
	EAL N-2 TORNADO/ HIGH WIND -OR-	Report of a tornado strike within the protected area.	Report of a TORNADO strike in a plant vital area. -OR- Sustained HIGH WIND ≥ 90 Miles Per Hour	Not Applicable	Not Applicable
	EAL N-3 VISIBLE STRUCTURAL DAMAGE -OR-	Not Applicable	Report of visible structural damage to a structure containing systems required to establish and maintain cold shutdown.	Not Applicable	Not Applicable

[1]The National Earthquake Center (phone number (303) 273-8500 or 1-800-525-7848) is the primary confirmation source.

RECOGNITION CATEGORY: Natural / Destructive Phenomena					MODES: ALL
ECC		UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
NATURAL/ DESTRUCTIVE PHENOMENA MODES: ALL	IC	NATURAL OR DESTRUCTIVE PHENOMENA INSIDE THE PROTECTED AREA	NATURAL OR DESTRUCTIVE PHENOMENA INSIDE A VITAL AREA	NOT APPLICABLE	NOT APPLICABLE
	EAL N-4 VEHICLE COLLISION -OR-	Vehicle collision into structures or systems within the protected area.	Vehicle collision affecting a vital area.	Not Applicable	Not Applicable
	EAL N-5 MAIN TURBINE ROTATING COMPONENT FAILURE -OR-	Main turbine rotating component failure causing visible damage or damage to the generator seals.	Main turbine rotating component failure generated missiles penetrate a plant vital area.	Not Applicable	Not Applicable
	EAL N-6 PLANT FLOODING	Not Applicable	Flooding in a vital area affecting safety related equipment		
	EAL N-7 UNANTICIPATED EXPLOSION	Report by plant personnel of an unanticipated explosion within protected area boundary resulting in visible damage to permanent structures or equipment	Not Applicable	Not Applicable	Not Applicable

RECOGNITION CATEGORY: Fuel Damage / Abnormal Radiological Conditions				MODES: ALL
ECC	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
R-1: RADIOACTIVE EFFLUENT RELEASE	UNPLANNED[1] release of gaseous or liquid radioactivity to the environment that exceeds 2X the ODCM Release limits for 60 minutes or longer.	UNPLANNED[1] release of gaseous or liquid radioactivity to the environment that exceeds 200X the ODCM Release limits for 15 minutes or longer.	Site boundary dose resulting from an actual or imminent effluent release exceeds either 100 mrem TEDE or 500 mrem CDE thyroid for the actual or projected duration of the release.	Site boundary dose resulting from an actual or imminent effluent release exceeds either 1000 mrem TEDE or 5000 mrem CDE thyroid for the actual or projected duration of the release.
R-2: INCREASING IN-PLANT RADIATION LEVELS	Unexpected increase in plant radiation levels.	Release of radioactive material or increases in radiation levels within the facility that impede operation of systems required to maintain safe operation or to establish or maintain cold shutdown.	Not Applicable	Not Applicable
R-3: LOSS OF WATER LEVEL IN ANY AREA HOLDING IRRADIATED FUEL	An UNCONTROLLED water level decrease in the reactor refueling cavity, the spent fuel pool, and/or the fuel transfer canal with all irradiated fuel assemblies covered by water.	Major damage to irradiated fuel or loss of water level that has or will uncover irradiated fuel outside of the reactor vessel.	Not Applicable	Not Applicable

[1] Unplanned means the release occurred without a Release Permit or the conditions specified on the Release Permit have been exceeded.

RECOGNITION CATEGORY: System Malfunctions				MODES: As Shown
ECC	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
S-1: FAILURE OF REACTOR PROTECTION SYSTEM (RPS) Modes: As Indicated Under IC	Not Applicable	Failure of RPS instrumentation to complete or initiate an automatic trip once a RPS setpoint has been exceeded. A manual reactor trip was successful. Modes: 1-3	Failure of RPS instrumentation to complete or initiate an automatic reactor trip once a RPS setpoint has been exceeded and manual reactor trip was not successful. Modes: 1,2	Failure of RPS instrumentation to complete an automatic trip and manual trip was NOT successful and there is indication of an extreme challenge to the ability to cool the core. Modes: 1,2
S-2A: LOSS OF AC POWER[1] Modes 1-4	Loss of all offsite power to essential buses for > 15 minutes.	AC power capability to essential buses reduced to a single power source for > 15 minutes such that any additional single failure would result in a station blackout.	Loss of all offsite power and loss of ALL onsite AC power to essential buses.	Prolonged loss of ALL offsite power and ALL onsite AC power to essential buses.
S-2B: LOSS OF AC POWER[1] Modes 5,6	Loss of all offsite power to essential buses for > 15 minutes.	Loss of ALL offsite power and loss of ALL onsite AC power to essential buses during cold shutdown or refueling.	Not Applicable	Not Applicable
S-3: LOSS OF DC POWER Modes: As Indicated Under IC	Unplanned loss of required DC power during cold shutdown or refueling mode for > 15 minutes. Modes: 5,6	Not Applicable	Loss of all vital DC power for > 15 minutes. Modes: 1-4	Not Applicable
S-4: INABILITY TO MAINTAIN A UNIT IN COLD SHUTDOWN Mode 5,6	Not Applicable	Inability to maintain plant in cold shutdown.	Loss of water level in the reactor vessel that has or will uncover fuel in the reactor vessel.	Not Applicable
S-5: LOSS OF SYSTEMS NEEDED TO ACHIEVE OR MAINTAIN HOT SHUTDOWN Modes 1-4	Not Applicable	Not Applicable	Complete loss of function needed to achieve or maintain Hot Shutdown.	Not Applicable

[1] Evaluate each unit's power supplies separately.

RECOGNITION CATEGORY: System Malfunctions				MODES: As Shown
ECC	UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
S-6: LOSS OF ALARMS OR INDICATION Modes 1-4	Unplanned loss of safety system annunciators and/or indications in the Control Room for > 15 minutes.	Unplanned loss of most or all safety system annunciators or indications in the Control Room with either (1) a significant transient[1] in progress, or (2) compensatory non-alarming indicators are unavailable.	Inability to monitor a significant transient[1] in progress.	Not Applicable
S-7: FUEL CLAD DEGRADATION Modes: All	Indication of fuel clad degradation in active fuel.	Not Applicable	Not Applicable	Not Applicable
S-8: EXCESSIVE RCS LEAKAGE Modes: 1-4	Reactor coolant system leakage.	Not Applicable	Not Applicable	Not Applicable
S-9: TECH SPEC COMPLIANCE Modes: 1-4	Inability to reach required shutdown within technical specification time limit.	Not Applicable	Not Applicable	Not Applicable
S-10: LOSS OF COMMUNICATION SYSTEMS Modes: ALL	Unplanned loss of all onsite or offsite communications.	Not Applicable	Not Applicable	Not Applicable

[2] Examples of Significant Transient include: 1) reactor trip, 2) unanticipated power changes of ≥ 10%, and 3) valid ESF actuations.

EMERGENCY CONDITION CATEGORIES (ECC)
INITIATING CONDITION MATRIX FOR FISSION PRODUCT DEGRADATION BARRIER

RECOGNITION BARRIER: FISSION PRODUCT BARRIER DEGRADATION			
UNUSUAL EVENT	ALERT	SITE AREA EMERGENCY	GENERAL EMERGENCY
ANY Loss or ANY Potential Loss of Containment barrier	ANY Loss or ANY Potential Loss of either Fuel Clad or Reactor Coolant System (RCS) barrier	Loss of BOTH Fuel Clad AND RCS barrier -OR-	Loss of any two barriers AND potential loss of third barrier
		Potential Loss of BOTH Fuel Clad AND RCS barrier -OR-	
		Potential Loss of EITHER Fuel Clad OR RCS barrier, and Loss of ANY additional barrier	

(Note: Once a barrier has been declared lost, the symptoms of the loss may disappear. SEC judgement may be used to determine whether to carry the barrier as lost. If the ability to monitor a barrier is degraded the SEC must use judgement to determine barrier status. If no turnaround in safety system performance is expected and escalation to Site Area Emergency or General Emergency is expected within two hours, then IMMINENT barrier degradation should be assumed and the SEC should make the appropriate classification.)

FISSION PRODUCT BARRIER REFERENCE TABLE

1. FUEL CLAD BARRIER Applicable Modes: 1,2,3,4	
LOSS	**POTENTIAL LOSS**
1.1L <u>Critical Safety Function Status Trees</u> Core Cooling Critical Safety Function Status Tree - RED. -OR- 1.2L <u>Containment Radiation</u> Containment area radiation greater than 200 R/hr. -OR- 1.3L <u>Primary Coolant Activity</u> Reactor Coolant System activity level greater than 300 microcuries per cc I-131 dose equivalent. -OR- Assessment of core damage greater than 5% clad failure. -OR- 1.4L <u>Site Emergency Coordinator (SEC) Judgement</u>	1.1P <u>Critical Safety Function Status Trees</u> Core Exit Thermocouples > 700° -OR- RVLIS Level < 39%. -OR- Heat Sink Critical Safety Function Status Tree - RED. -OR- 1.4P <u>SEC Judgement</u>

FISSION PRODUCT BARRIER REFERENCE TABLE

2. RCS BARRIER Applicable Modes: 1,2,3,4	
LOSS	POTENTIAL LOSS
2.1L RCS Leak Rate Unisolable RCS leak rate greater than available makeup capacity as indicated by a complete loss of RCS subcooling. -OR- 2.3L Steam Generator Leakage Entry into OHP-4023.E-3, "Steam Generator Tube Rupture" -AND- A non-isolable secondary line break or a prolonged release of contaminated secondary coolant resulting in a radioactive release to the environment from the affected steam generator. -OR- 2.4L Containment Radiation Alarm Containment Area Radiation > 10 R/hr. -OR- 2.5L SEC Judgement	2.1P Critical Safety Function Status Trees RCS Integrity Critical Safety Function Status Tree - RED. -OR- Heat Sink Critical Safety Function Status Tree - RED. -OR- 2.2P RCS Leak Rate UNISOLABLE RCS leakage greater than capacity of one centrifugal charging pump in normal charging mode. -OR- 2.3P Steam Generator Leakage Ruptured steam generator with primary to secondary leak rate greater than capacity of one charging pump in normal charging lineup. -OR- 2.5P SEC Judgement

3. CONTAINMENT BARRIER Applicable Modes: 1,2,3,4

LOSS	POTENTIAL LOSS
3.3L Containment Integrity Unisolable breach of containment. -OR- Containment pressure/sump level NOT performing consistent with expected conditions. -OR- Rapid unexplained containment pressure or sump level decrease following pressure increase caused by LOCA. -OR- Entry into ECA-1.2, LOCA OUTSIDE CONTAINMENT. -OR- 3.4L SG Secondary Side Release Primary to secondary leakage rate greater than technical specification limit. -AND- Uncontrolled release of secondary coolant from the associated steam generator to the environment is occurring. -OR- 3.7L SEC Judgement	3.1P Critical Safety Function Status Containment Critical Safety Function Status Tree - RED. -OR- 3.2P Containment Pressure Hydrogen greater than 4%. -OR- Containment spray systems both inoperable OR fail to auto start on HI-HI containment pressure. -OR- Both containment air recirculation fans inoperable OR fail to auto start on HI-HI containment pressure. -OR- Containment pressure exceeds 12 psig. -OR- Containment hydrogen concentration greater than 0.5% AND key hydrogen control equipment (Containment air recirculation/hydrogen skimmer systems, electric hydrogen recombiners OR igniters) inoperable. -OR- 3.5P Containment Radiation Containment area radiation greater than 1000 R/hr. -OR- Assessment of core damage greater than 20% clad failure. -OR- 3.6P Core Exit Thermocouples Core Cooling Critical Safety Function Status Tree - RED. -AND- Restoration procedures are not effective within 15 minutes. -OR- 3.7P SEC Judgement