Attachment 13.03-3E

COMANCHE PEAK STEAM ELECTRIC STATION

EMERGENCY PLAN MANUAL

ASSESSMENT OF EMERGENCY ACTION LEVELS EMERGENCY CLASSIFICATION AND PLAN ACTIVATION

PROCEDURE NO. EPP-201

REVISION NO. 11

EFFECTIVE DATE: 03/3/2000

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EMERGENCY PLANNING MANAGER

1.0 PURPOSE

This procedure provides guidance to the Shift Manager, TSC Manager, or EOF Manager to assist in the classification of an emergency as either a "Notification of Unusual Event", "Alert", "Site Area Emergency", or "General Emergency".

2.0 APPLICABILITY

This procedure applies to the Shift Manager, TSC Manager, or EOF Manager in the event of an emergency situation at CPSES.

3.0 DEFINITIONS/ACRONYMS

3.1 Airliner - Meant to be a large aircraft with the potential for causing significant damage to the plant. The NRC Headquarters Operations Officer (HOO) will communicate to the licensee if the threat involves an airliner.

3.2 Alert - Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of intentional malicious dedicated efforts of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels. [C-05703]

3.3 Emergency Action Levels (EALs) - Plant or radiological parameters which are the basis for quantifying the initiating condition and classifying the severity of the emergency.

3.4 Emergency Classification - A classification system of emergency severity based on projected or confirmed initiating conditions/emergency action levels. The classes, from least to most severe, are: Notification of Unusual Event, Alert, Site Area Emergency and General Emergency.

3.5 Emergency Conditions - Situations occurring which cause or may threaten to cause hazards affecting the health and safety of employees or the public, or which may result in damage to property.

3.6 General Emergency - Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or security events that result in an actual loss of physical control of the facility. Releases can be expected to exceed EPA Protective Action Guideline exposure levels for more than the immediate area. [C-05705]

3.7 Hostile Action - An act toward NPP or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using weapons, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the NPP. Non-terrorism-based EALs should be used to address such activities, (e.g. violent acts between individuals in the owner controlled area).

3.8 Hostile Force - One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.

3.9 Notification of Unusual Event - Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs. [C-05702]

3.10 Site Area Emergency - Events are in process or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or security events that result in intentional damage because of malicious dedicated efforts of HOSTILE ACTION; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) prevents effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels that exceed EPA Protective Action Guideline exposure levels beyond the site boundary. [C-05704]

4.0 INSTRUCTIONS

4.1 General Instructions

NOTE: For the purposes of this procedure, the title Emergency Coordinator is used generically to refer to the position with responsibility for emergency classifications, even though the Emergency Coordinator may not always have this responsibility.

4.1.1 In most cases the decision to declare, upgrade, or proceed to recovery/closeout of an emergency rests with the Emergency Coordinator. When the EOF Manager is the Emergency Coordinator, he may elect to have the TSC Manager retain

responsibility for assessing, classifying, and declaring an emergency condition.

4.1.2 Attachment 1, "Emergency Classification Flowcharts", cites specific conditions that denote whether the emergency is to be classified as a Notification of Unusual Event, Alert, Site Area Emergency or General Emergency. These Emergency Classification Flowcharts are provided as guidance to assist the Emergency Coordinator in making that decision. In many cases , a very general statement has been used in a block of the flowchart. This was done to allow the Emergency Coordinator flexibility to assess any undefinable parameters which may exist. [C-05327]

4.1.3 Plant-specific operator actions required to mitigate the emergency condition are prescribed in the appropriate Abnormal Conditions Procedures orEmergency Operating Procedures (ABN's or EOP's) and are independent of any actions required by this Emergency Plan Procedure.

4.1.4 The Emergency Coordinator should consider the effect that combinations of initiating events have upon the Emergency Classification level. That is, events if taken individually would constitute a lower Emergency Classification level but collectively may exceed the intent for a higher Emergency Classification level.

This is not intended to imply that events are additive. For example, if a single event may be classified on two different charts as an NOUE, declaration of an Alert would not be appropriate.

4.2 Use of Emergency Classification Flowcharts

4.2.1 Start on the left side of the flowchart to be evaluated. Identify the entry arrows associated with the flowchart. Some flowcharts will contain multiple entry points. These entry points are identified by boxes on the left hand side having an entry arrow.

4.2.2 Follow the arrows horizontally for true statements and vertically for false statements.

4.2.3 Information in brackets "[ ]" is intended as a recommended place to look to determine if the statement is true. These indicators are not intended to be all inclusive nor are these indicators absolute indication that an emergency exists.

4.2.4 An asterisk "*" in an instrument number indicates that either 1 or 2 could be used as a unit designator. For example, V-*EA1 means V-1EA1 or V-2EA1.

4.2.5 Color coded copies of the Emergency Classification Flowcharts (Attachment 1) are maintained in the Control Room, the Technical Support Center, and the Emergency Operations Facility and selected Position Assistance Documents (PAD's).

4.2.6 Flowchart color coding (similar to that used in the Emergency Operating Procedures) is as follows:

- No Action In This Category - GREEN
- Notification of Unusual Event - BLUE
- Alert - YELLOW
- Site Area Emergency - ORANGE
- General Emergency - RED

4.2.7 Chart 6, "Safety System Failure or Malfunction," provides diagnostic indications for Anticipated Transient Without Trip (ATWT) conditions. Once ATWT conditions are satisfied, subsequent evaluations using this chart must assume that an ATWT condition exists until the event is closed out by plant management.

4.2.8 For diagnostic indications other than ATWT involving changing plant parameters, indications used to determine whether the box is true or false should be based on parameter values at the time the evaluation is performed. This rule of usage assumes that plant systems are functioning as designed and that all other related parameters are also being used to make the final determination.

4.3 Initial Actions [C-08621]

> CAUTION: Shutdown and outage conditions should be given special consideration since they will likely create abnormalities such as the loss of containment integrity or loss of the RCS pressure boundary (refueling, mid-loop operations, equipment hatch open, etc.). These types of boundary breaches combined with a plant transient (loss of AC power, etc.) may create a worse situation than would be expected if the Unit was at power.

4.3.1 Upon recognition that an abnormal or emergency condition exists, the Shift Manager shall be immediately notified.

4.3.2 Operators shall refer to the appropriate ABN's or EOP's and take actions based upon the indicated symptoms.

4.3.3 The Shift Manager shall evaluate the event to determine the need for classifying the emergency condition into one of the four (4) Emergency Classification levels.

4.3.4 The Shift Manager shall refer to the Emergency Classification Flowcharts maintained in the Control Room or in the Shift Manager's PAD to ascertain whether or not the event fits the general description for any of the initiating conditions listed. If the event does not fit any of these general descriptions, the Shift Manager should evaluate the implications of the event and, if appropriate, classify the emergency condition based upon professional judgement. If classification is not warranted, no further action is required except to continue monitoring the event.

4.3.5 If the on-duty Shift Manager determines that the event does fit one or more of the Emergency Classifications shown on the flow charts, the Shift Manager shall assume the role of Emergency Coordinator as prescribed in Procedure EPP-109, "Duties and Responsibilities of the Emergency Coordinator/Recovery Manger" and consult his PAD for further actions. [C-05687, 01278]

4.4 Subsequent Actions [C-05701]

The Shift Manager or Emergency Coordinator shall continually monitor plant conditions and compare the current plant conditions to the Emergency Classification Flowcharts to determine whether a change in emergency classification is warranted and whether to escalate the emergency classification or proceed to EPP-121, "Reentry, Recovery and Closeout".

5.0 REFERENCES

5.1 CPSES Emergency Plan, Section 2.0

5.2 EPP-109, "Duties and Responsibilities of the Emergency Coordinator/Recovery Manager"

5.3 NUREG-0654/FEMA-REP-1, Rev. 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants"

5.4 NUMARC/NESP-007, "Methodology for Development of Emergency Action Levels"

5.5 10CFR, Part 50.72, "Notification of Significant Events"

5.6 CPSES FSAR Chapter 15

5.7 EPP-121, "Reentry, Recovery and Closeout"

6.0 ATTACHMENTS/FORMS

6.1 Attachments

6.1.1 Attachment 1, "Emergency Classifications Flowcharts"

6.1.2 Attachment 2, "Bases for Emergency Classification Flowcharts"

6.2 Forms

None

ATTACHMENT 1
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EMERGENCY CLASSIFICATION FLOWCHARTS
[C-05327, 05701, 05702, 05703, 05704, 05705, 09308, 26728]

ATTACHMENT 1
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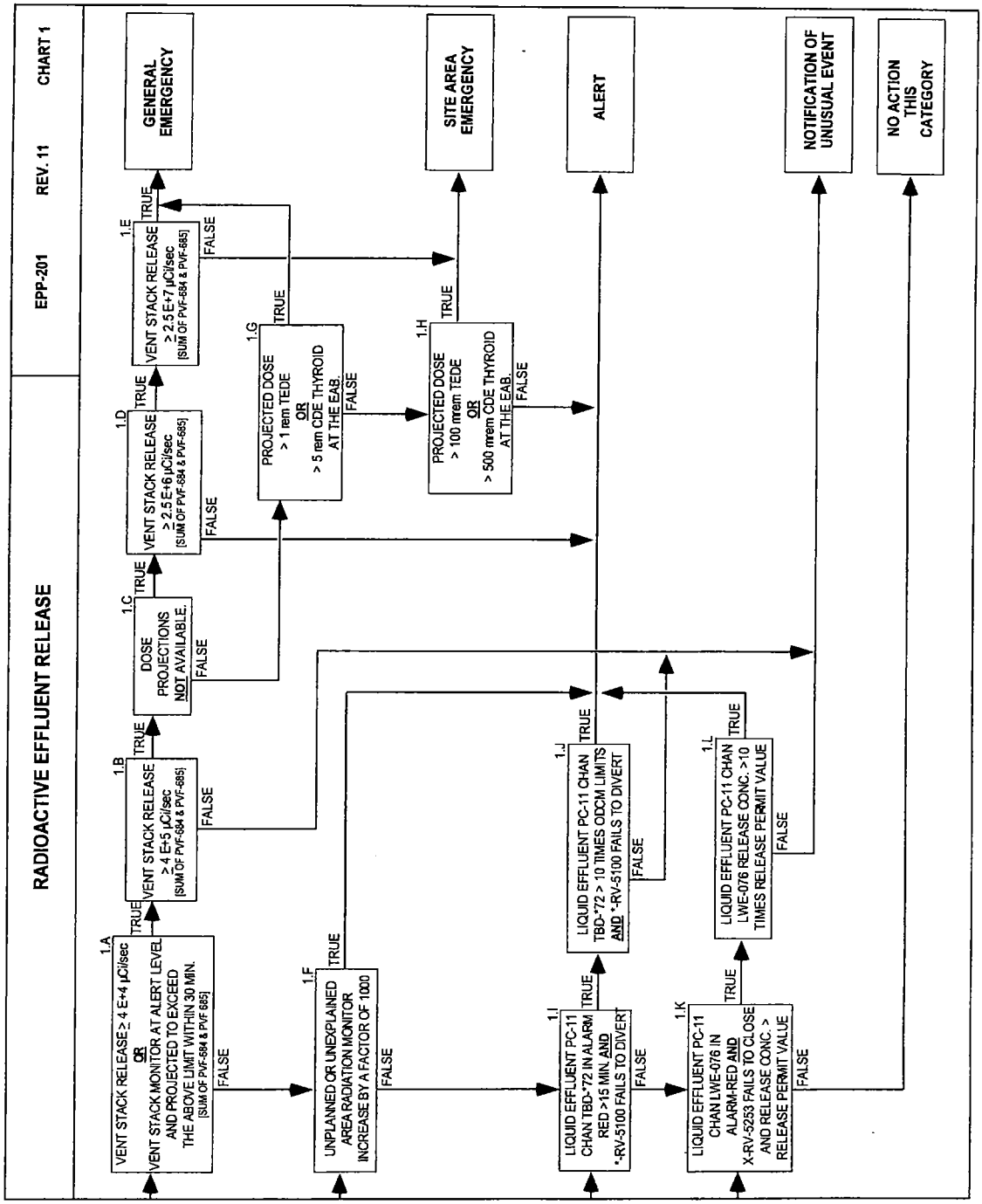
EMERGENCY CLASSIFICATION FLOWCHARTS



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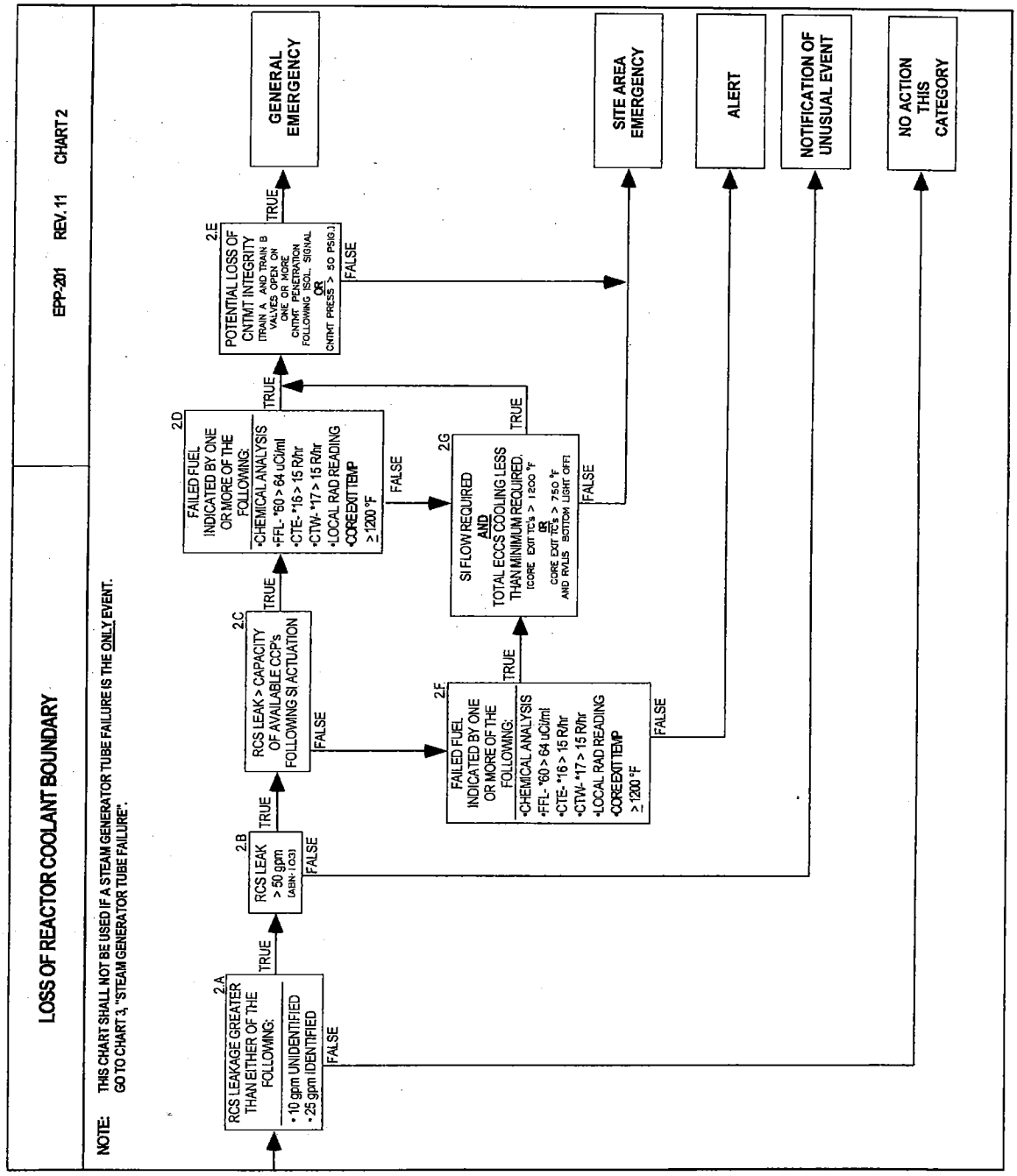
EMERGENCY CLASSIFICATION FLOWCHARTS



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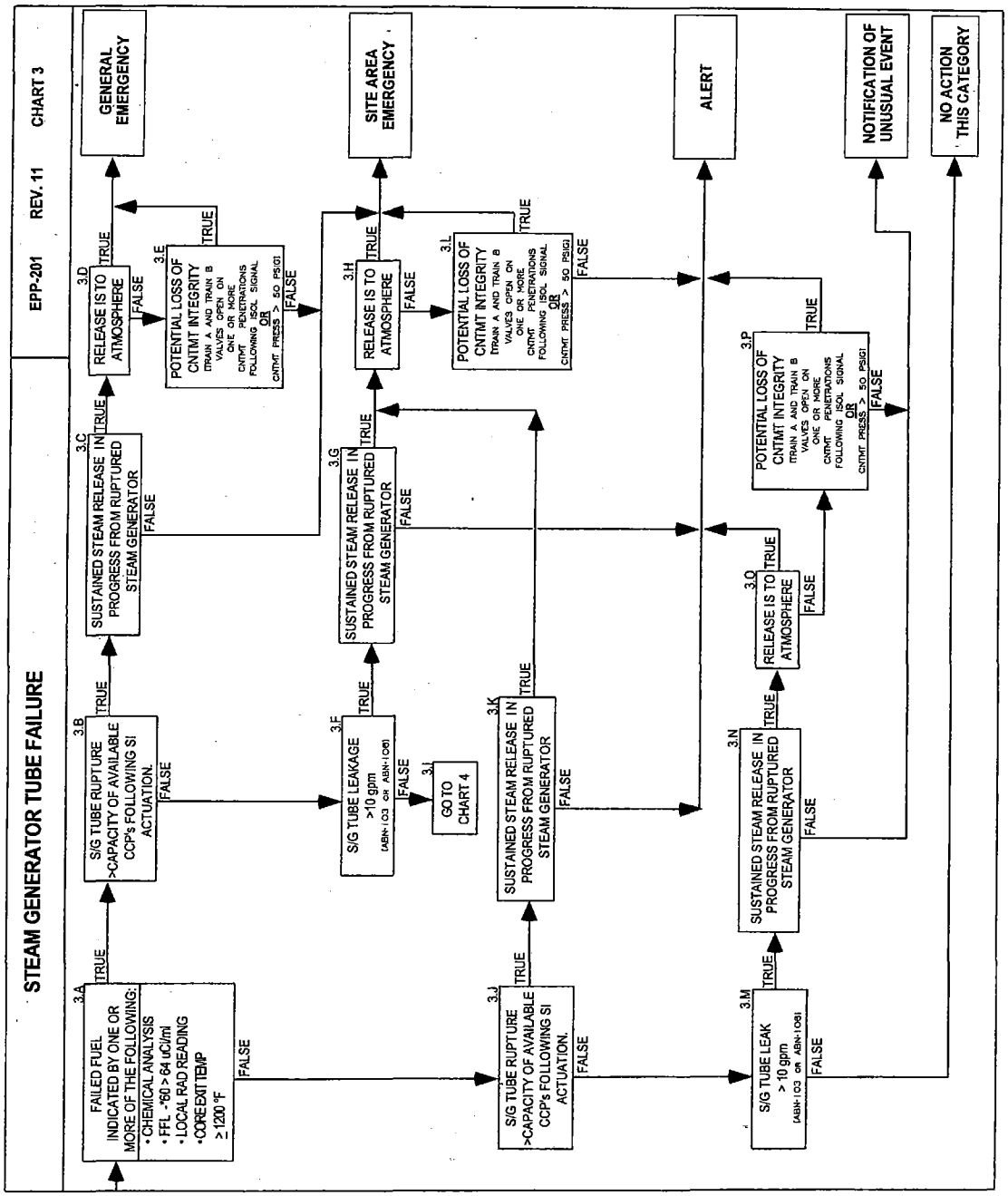

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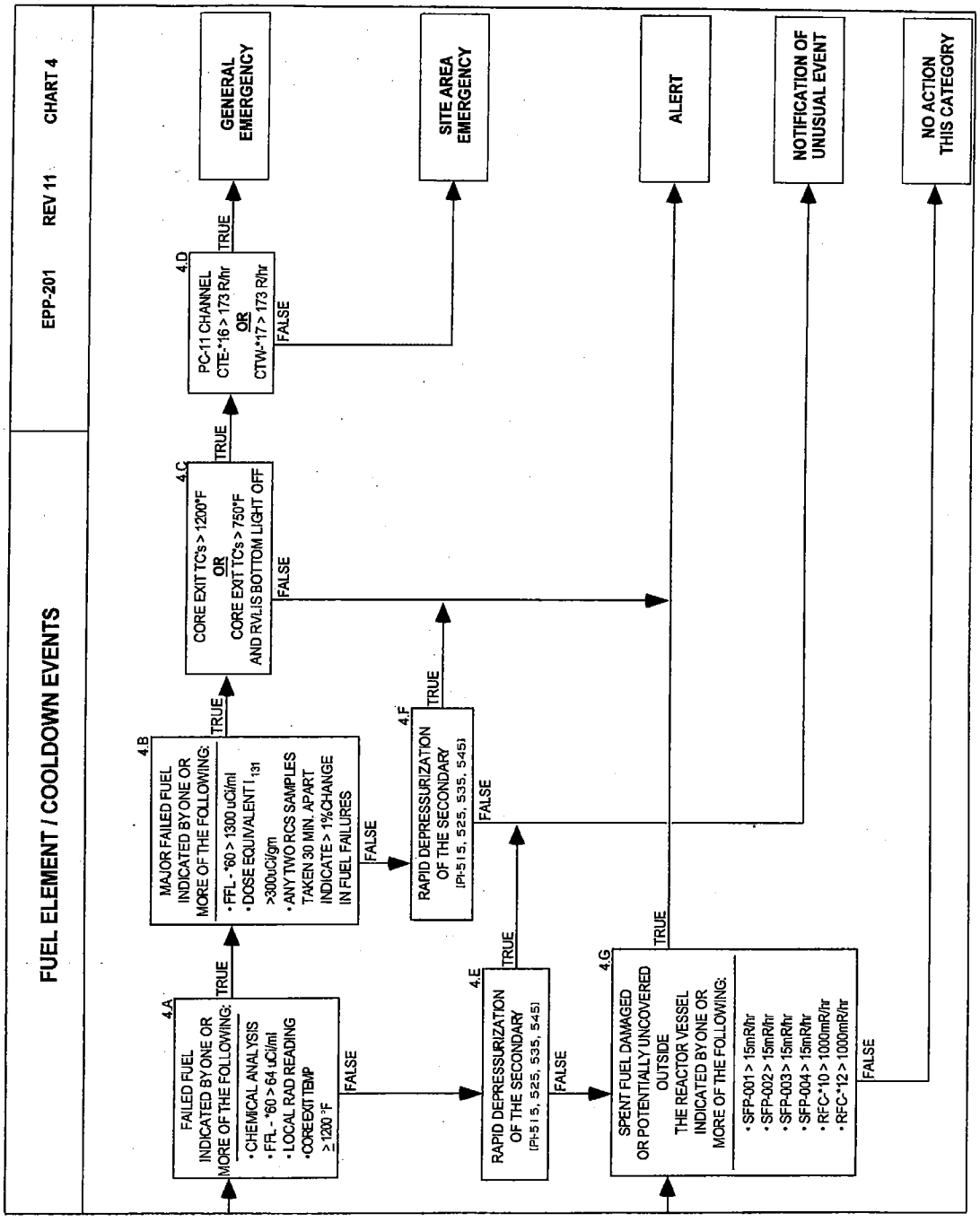

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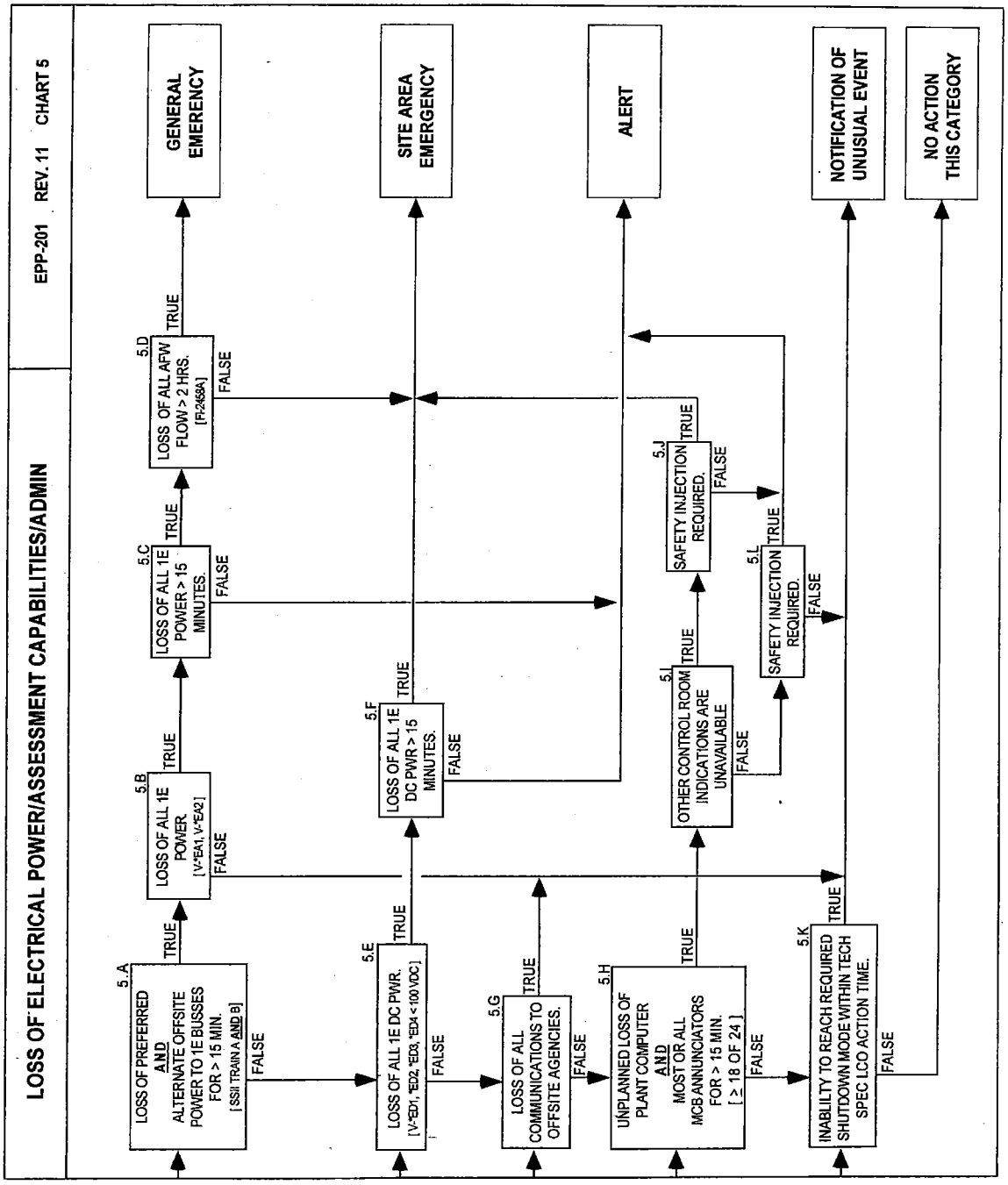

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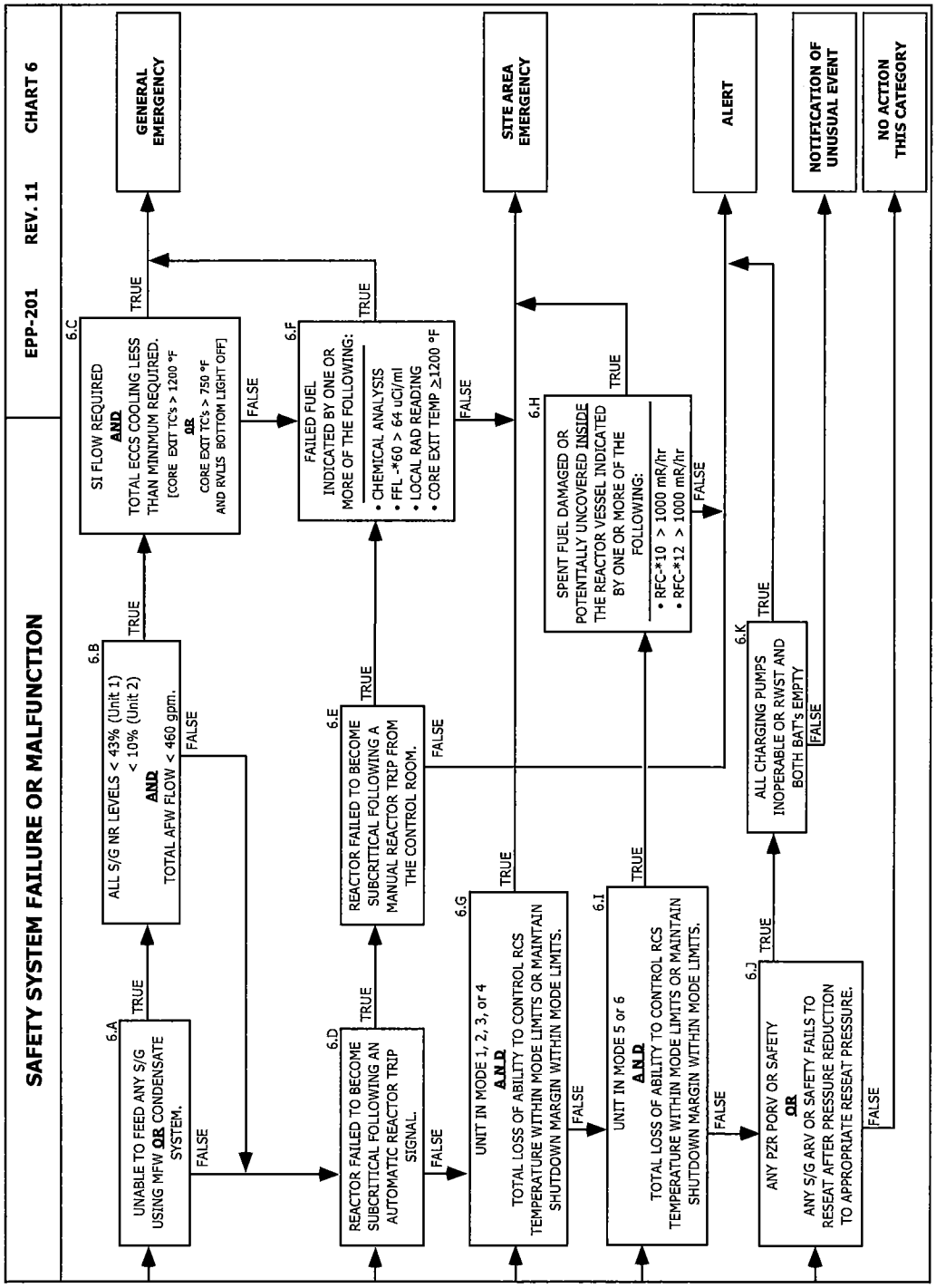
EMERGENCY CLASSIFICATION FLOWCHARTS



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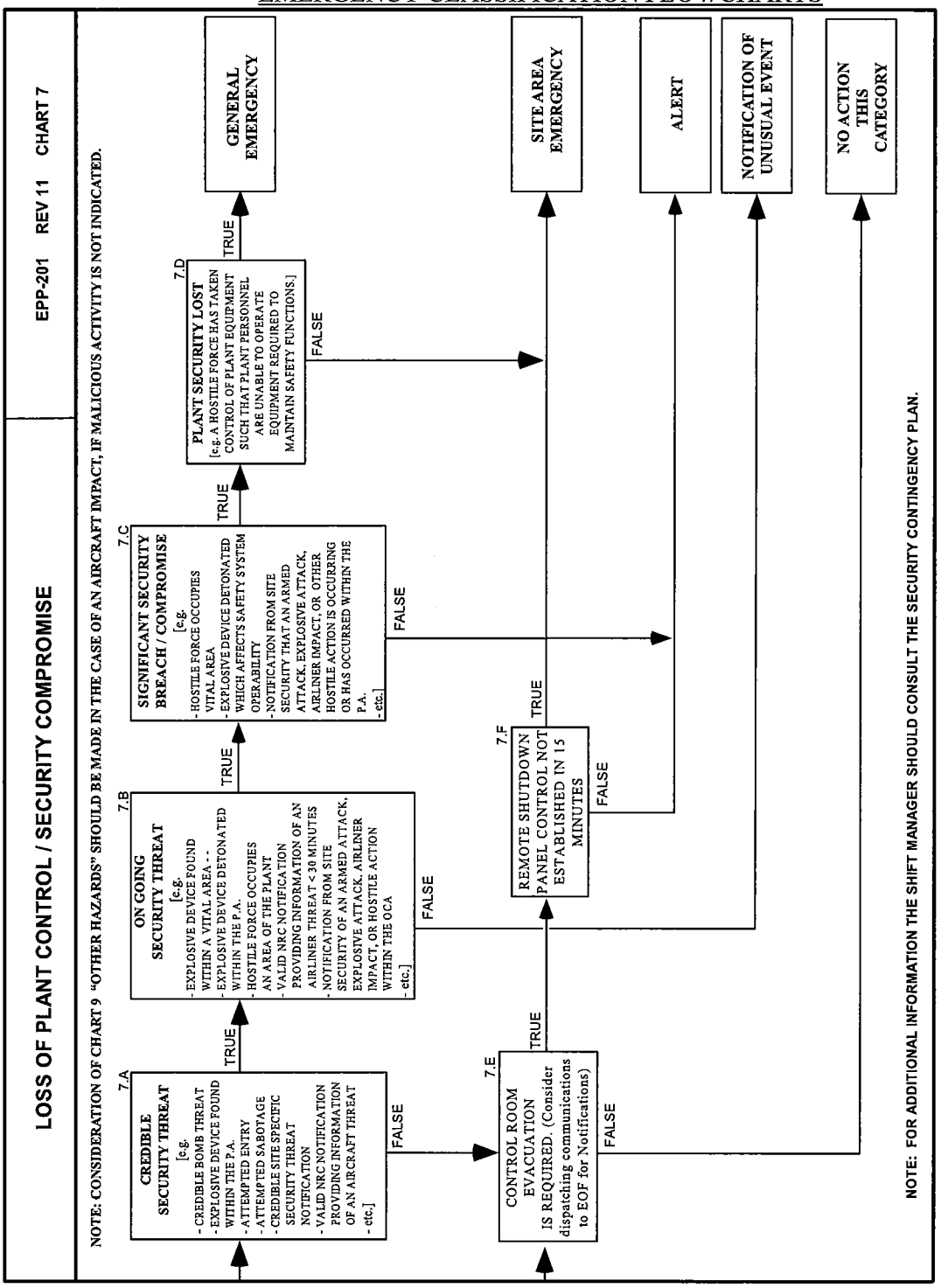
EMERGENCY CLASSIFICATION FLOWCHARTS



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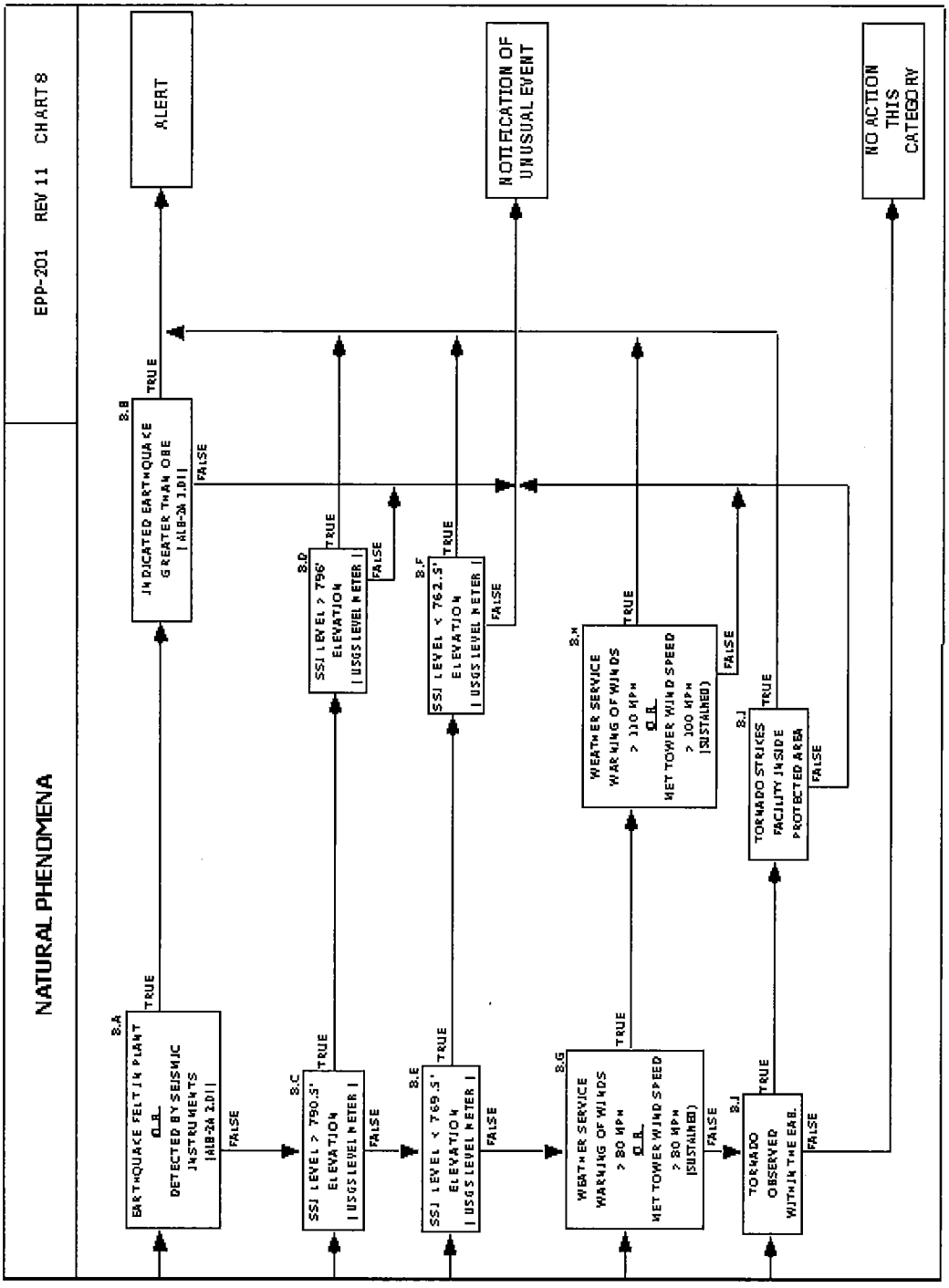
EMERGENCY CLASSIFICATION FLOWCHARTS



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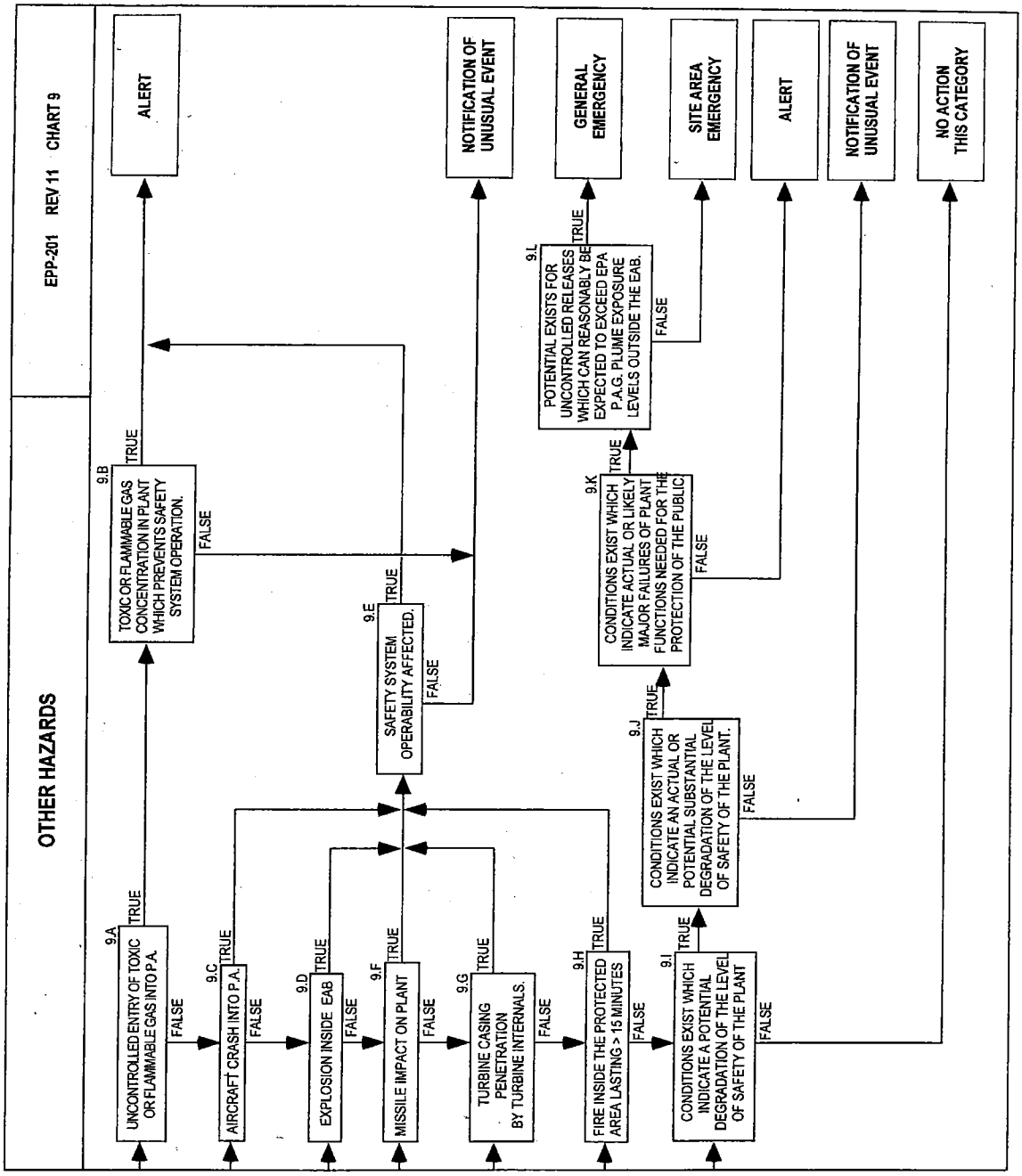
EMERGENCY CLASSIFICATION FLOWCHARTS



GENERIC RULES for CLASSIFICATION CHARTS

A. Always check all classification charts. Many events can warrant different classifications based on different charts.

B. Start on the left side of the flowchart to be evaluated.Identify the entry arrows associated with the flowchart. Some flowcharts will contain multiple entry points. These entry points are identified by boxes on the left hand side having an entry arrow. Follow the arrows horizontally for true statements and vertically for false statements.

C. Information in brackets "[ ]" is intended as a recommended place to look to determine if the statement is true. These indicators are not intended to be all inclusive nor are these indicators absolute indication that an emergency exists.

D. An asterisk "*" in an instrument number indicates that either 1 or 2 could be used as a unit designator. For example, V-*EA1 means V-1EA1 or V-2EA1.

E. Color coding used in the charts is as follows:

GREEN	-	No action (check STA-501 for reportability)
BLUE	-	Notification of Unusual Event
YELLOW	-	Alert
ORANGE	-	Site Area Emergency
RED	-	General Emergency

F. If possible, readings from process and area radiation monitors should be verified by cross-checking other potentially affected systems or areas.

G. For diagnostic indications other than ATWT involving changing plant parameters, indications used to determine whether the box is true or false should be based on parameter values at the time the evaluation is performed. This rule of usage assumes that plant systems are functioning as designed and that all other related parameters are also being used to make the final determination.

If conditions (other than ATWT) warranting an emergency classification did occur, <u>but no longer exist</u>, an emergency declaration should not be made, but non-routine reporting IAW STA-501 is required to satisfy 10CFR50.72(b).

H. Chart 6, "Safety System Failure or Malfunction," provides diagnostic indications for Anticipated Transient Without Trip (ATWT) conditions. Once ATWT conditions are satisfied, subsequent evaluations using this chart must assume that an ATWT condition exists until the event is closed out by plant management.

I. All times referenced in decision blocks start upon initiation of the event in question, not time of entry into the block.

J. The Emergency Coordinator should consider the effect that combinations of initiating events have upon the Emergency Classification level. That is, events if taken individually would constitute a lower Emergency Classification level but collectively may exceed the intent for a higher Emergency Classification level.

This is not intended to imply that events are additive. For example, if a single event may be classified on two different charts as an NOUE, declaration of an Alert would not be appropriate.

BASES for RADIOACTIVE EFFLUENT RELEASE

EPP-201 REV. 11 CHART 1

1.A **Combined** vent stack release rate which could result in greater than ODCM allowable limits under nominal release conditions. If only 1 stack reading is available, double it's reading for a **combined** vent stack release rate. (NUREG-0654)

1.B **Combined** vent stack release rate which could result in a site boundary exposure 10 times the value of block 1.A. This level is chosen to represent a release that, if allowed to continue for 2 hours, could result in a site boundary exposure of 1 mrem. (NUREG-0654)

1.C Dose projection results, using actual release conditions, are preferred for comparison to blocks 1.G. and/or 1.H. Generally 15 minutes is allowed to produce dose projections. Any longer than 15 minutes and classifications should be based on monitor readings. (NUMARC NESP-007)
(Blocks 1.D and 1.E approximate the doses of blocks 1.G and 1.H; if projections are not available)

1.D **Combined** vent stack release rate calculated to result in a dose of approximately 100 mrem TEDE at the site boundary under nominal release conditions. (NUMARC NESP-007)

1.E **Combined** vent stack release rate calculated to result in a dose of approximately 1 rem TEDE at the site boundary under nominal release conditions. (NUMARC NESP-007)

1.F Confirmed **AREA** Radiation Monitor reading which provides positive indication of a severe loss of control of radioactive materials. (NUMARC NESP-007)

1.G Used with dose projections based on actual release conditions. Doses listed are IAW the EPA-400 Protective Action Guides. (NUMARC NESP-007)

1.H Used with dose projections based on actual release conditions. Doses listed are 10% of the EPA-400 Protective Action Guides. 10% of the EPA PAG's (100 mrem) is considered appropriate since it corresponds to the annual non-occupational exposure limit. (NUMARC NESP-007)

1.I Liquid release for $\geq$ 15 minutes from the Turbine Building with failure to terminate release flow on a corresponding process alarm. Based more on the loss of control of the Radiological Effluent System than on the actual radiological release. (NUREG-0654)

1.J Liquid release from the Turbine Building at 10 times ODCM limits with failure to terminate release flow on a corresponding process alarm. This level is chosen to represent a release that, if allowed to continue for 2 hours, could result in a site boundary exposure of 1 mrem. (NUREG-0654)

1.K Liquid release from the Radioactive Waste System with failure to terminate release flow on a corresponding process alarm. Based more on the loss of control of the Radiological Effluent System than on the actual radiological release. (NUREG-0654)

1.L Unisolated liquid release from the Radioactive Waste System 10 times the value of the release permit. This level is chosen to represent a release that, if allowed to continue for 2 hours, could result in a site boundary exposure of 1 mrem. (NUREG-0654)

BASES for LOSS OF REACTOR COOLANT BOUNDARY
EPP-201 REV. 11 CHART 2

2.A RCS leakage greater than 10 GPM from an unidentified or pressure boundary source should be readily observable with normal Control Room indications (ABN-103 MCB estimate). Any value less than this would require time intensive determinations not consistent with these EAL's (OPT-303 calculation).
25 GPM from an identified source is chosen due to the lesser significance of leakage from an identified source vice one from an unidentified source. (NUMARC NESP-007)

2.B RCS leakrate (ABN-103 MCB estimate) indicating potential loss of the RCS fission product barrier. (NUREG-0654)

2.C Combination of RCS barrier failure and/or other conditions which may prevent sufficient makeup capability to keep the core covered and prevent fuel damage. Following SI initiation, determination should be made based on RCS pressure stabilizing above the pressure of the SI Pump discharge, independent of Pressurizer level. (NUREG-0654)

2.D Either chemical analysis as reported by Chemistry Department [CHM-506 determination] or one of the PC-11 monitors listed would constitute indication of minor (~1%) fuel cladding damage, well above any anticipated iodine spike concentration. FFL process monitor value is based on exceeding Tech Spec activity. CTE and CTW area monitor values are calculated from the FSAR 1% fuel damage source term. Local Rad reading is obtained by Chemistry Department after placing the Primary Sample sink in recirculation then taking a reading from a remote readout on a Model 300 and using a conversion factor translating an R/hr reading to Failed Fuel %. A reading of 10 R/hr is approximately equal to 1% failed fuel. (Ref. TE-97-106-00-00). Core exit temperature is based on maintaining a coolable geometry in the core (1200 °F CET temperature is the CSF RED path entry). (NUREG-0654)

2.E This block is based on the loss or potential loss of the Containment fission product barrier (includes known breach of containment penetration). Both the isolation valves must have failed to shut on 1 or more penetration (loss) **OR** a sufficient pressure exists within the Containment to challenge it's design capability (potential loss) **OR** a known loss of containment exists. 50 psig was chosen because it is the CSF RED Path entry criteria. (NUMARC NESP-007)

2.F Same as block 2.D.

2.G Failure to deliver the cooling necessary to prevent overheat damage to the core. 1200 °F CET temperature (CSF RED path) **OR** 750 °F CET temperature with level below the bottom RVLIS indication (CSF ORANGE path) represents a potential loss of the fuel cladding barrier. (NUMARC NESP-007)

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BASES for STEAM GENERATOR TUBE RUPTURES

EPP-201 REV. 11 CHART 3

3.A Either chemical analysis as reported by Chemistry Department [CHM-506 determination] or one of the PC-11 monitors listed would constitute indication of minor (~1%) fuel cladding damage, well above any anticipated iodine spike concentration. FFL process monitor value is based on <u>exceeding</u> Tech Spec activity. Local Rad reading is obtained by Chemistry Department after placing the Primary Sample sink in recirculation then taking a reading from a remote readout on a Model 300 and using a conversion factor translating an R/hr reading to Failed Fuel %. A reading of 10 R/hr is approximately equal to 1% failed fuel. (Ref. TE-97-106-00-00) Core exit temperature is based on maintaining a coolable geometry in the core (1200 °F CET temperature is the CSF RED path entry). (NUREG-0654)

3.B Combination of RCS barrier failure and/or other conditions which may prevent sufficient makeup capability to keep the core covered and prevent fuel damage. Following SI initiation, determination should be made based on RCS pressure stabilizing above the pressure of the SI Pump discharge, independent of Pressurizer level. (NUREG-0654)

3.C Any release of steam ≥15 minutes from a ruptured S/G. This would include a S/G fault inside containment if not isolated within 15 minutes. Momentary steam releases via the S/G ARV's or safeties is <u>not</u> intended to result in an escalation. (NUREG-0654)

3.D Release path of steam from the ruptured S/G is to the atmosphere.

3.E This block is based on the loss or potential loss of the Containment fission product barrier (includes known breach of containment penetration). Both the isolation valves must have failed to shut on 1 or more penetration (loss) **<u>OR</u>** sufficient pressure exists within the Containment to challenge it's design capability (potential loss). 50 psig was chosen because it is the CSF RED Path entry criteria **<u>OR</u>** a known loss of containment exists. (NUMARC NESP-007)

3.F SGTR leakage greater than 10 GPM should be readily observable with normal Control Room indications (ABN-103 or ABN-106 MCB estimate). Any value less than this would require time intensive determinations not consistent with these EAL's (OPT-303 calculation). (NUMARC NESP-007)

3.G Same as block 3.C
3.H Same as block 3.D

3.I (Prompt to classify using chart 4)

3.J Same as block 3.B

3.K Same as block 3.C
3.L Same as block 3.E
3.M Same as block 3.F
3.N Same as block 3.C
3.O Same as block 3.D
3.P Same as block 3.E

BASES for FUEL ELEMENT/COOLDOWN EVENTS

EPP-201 REV. 11 CHART 4

4.A Either chemical analysis as reported by Chemistry Department [CHM-506 determination] or FFL-*60 monitor would constitute indication of minor fuel cladding damage only, well above any anticipated iodine spike concentration. FFL process monitor value is based on exceeding Tech Spec activity. Local Rad reading is obtained by Chemistry Department after placing the Primary Sample sink in recirculation then taking a reading from a remote readout on a Model 300 and using a conversion factor translating an R/hr reading to Failed Fuel %. A reading of 10 R/hr is approximately equal to 1% failed fuel. (Ref. TE-97-106-00-00) Core exit temperature is based on maintaining a coolable geometry in the core (1200 °F CET temperature is the CSF RED path entry). (NUREG-0654)

4.B Advanced fuel cladding damage, probably in the range of a 1% - 5% failure. FFL process monitor value is calculated from an assumed 5% fuel cladding damage source term. DEI-131 is as reported by the Chemistry Department. Determining 1% change in fuel damage will probably require Engineering determination per EPP-312. (NUREG-0654)

4.C Failure to deliver the cooling necessary to prevent overheat damage to the core. 1200 °F CET temperature (CSF RED path) **OR** 750 °F CET temperature with level below the bottom RVLIS indication (CSF ORANGE path) represents a potential loss of the fuel cladding barrier. (NUMARC NESP-007)

4.D Major fuel damage with possible loss of coolable geometry, CTE and CTW area monitor values are calculated from an assumed 20% fuel cladding damage source term. (NUREG-0654)

4.E Actual, unisolable, depressurization sufficient to result in High Steamline Pressure Rate isolation signal. Concern is for uncontrolled RCS cooldown. (NUREG-0654)

4.F Same as block 4.E

4.G Damage or uncovery of a spent fuel assembly **outside** the reactor vessel. SFP and RFC radiation monitor values are based on water level above the fuel being significantly lower than Tech Spec value. Damage/uncovery of a new fuel assembly should not result in a radioactive release warranting emergency declaration. Higher than normal rad reading due to movement of components other than fuel assemblies (e.g. upper internals, core barrel, etc.) Do not warrant a TRUE from this box. (NUMARC NESP-007)

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BASES for LOSS OF ELECTRICAL POWER/ASSESSMENT CAPABILITIES/ADMIN

EPP-201 REV. 11 CHART 5

5.A Prolonged loss of offsite AC power reduces the required system redundancies and makes the plant more vulnerable to a Station Blackout. 15 minutes was chosen to preclude momentary or transient power losses. (NUREG-0654)

5.B Momentary power loss to the vital AC busses. Momentary power losses due to automatic bus transfers do not apply. (NUREG-0654)

5.C Extended loss of all vital AC busses. Escalation beyond this level (SAE) requires consideration of the ability to keep the core cooled and covered. (NUREG-0654)

5.D Assumes other methods of keeping the core cooled are unavailable. The decision to escalate to GE should not be delayed if core cooling is challenged as shown by review of the CSF's. (NUREG-0654)

5.E Momentary or transient power loss to all vital DC busses. This considers the effect that a loss of vital DC power has on the control and monitoring functions needed to maintain the critical safety functions. (NUREG-0654)

5.F Extended loss of all vital DC busses. This considers the effect that a loss of vital DC power has on the control and monitoring functions needed to maintain the critical safety functions. There is no escalation beyond this level (SAE) on loss of DC power only. (NUREG-0654)

5.G **ALL** encompasses normal telephone, FTS lines, fax machines, etc. Communications are required to both counties and the state. Intended to be used when extraordinary means (i.e.: radio relay of communications or dispatch of personnel directly to offsite agencies) are necessary to make these communications possible. (NUMARC NESP-007)

5.H 75% (18 of 24) is chosen as **most** of the MCB (horseshoe only) annunciators. This condition increases the probability of a degraded plant condition going undiagnosed. 15 minutes was chosen to preclude momentary or transient losses. (NUMARC NESP-007)

5.I Sufficient plant system indicators are available to the Control Room crew to monitor the plant without the need for additional operating personnel. (NUMARC NESP-007)

5.J SI, either automatic or manual, is the threshold for a significant plant transient in progress. This transient could require the use of the unavailable plant system indicators to safely monitor and control the transient. (NUMARC NESP-007)

5.K NOUE declaration is required when the plant is **NOT** brought to the required operating mode within the allowable action statement time in the Tech Specs. Declaration of NOUE is based on the time at which the LCO specified action statement time period lapses under the Tech Specs, and is not related to how long the plant conditions may have existed. (NUMARC NESP-007)

5.L Same as block 5.J.

BASES for SAFETY SYSTEM FAILURE or MALFUNCTION

EPP-201 REV. 11 CHART 6

6.A Degraded plant heat sink. The ability to feed even 1 S/G would cause a FALSE answer to this block. (NUREG-0654)

6.B Loss of heat sink as indicated by CSF RED path entry. (NUREG-0654)

6.C Failure to deliver the cooling necessary to prevent overheat damage to the core. 1200 °F CET temperature (CSF RED path) **OR** 750 °F CET temperature with level below the bottom RVLIS indication (CSF ORANGE path) represents a potential loss of the fuel cladding barrier. (NUMARC NESP-007)

6.D Based on the reactor **NOT** becoming subcritical once an RPS automatic trip setpoint has been exceeded. Anticipated transient without trip (ATWT). Once the conditions of box 6.D have been satisfied, these conditions must be considered to exist until the event is closed out by management. (NUREG-0654)

6.E Failure of trip breakers and/or control circuits, such that action away from the MCB is required to trip the reactor. (NUREG-0654)

6.F Either chemical analysis as reported by Chemistry Department [CHM-506 determination] or FFL-*60 monitor would constitute indication of fuel cladding damage, well above any anticipated iodine spike concentration. FFL process monitor value is based on Tech Spec activity. Core exit temperature is based on maintaining a coolable geometry in the core (1200 °F CET temperature is the CSF RED path entry). Local Rad reading is obtained by Chemistry Department after placing the Primary Sample sink in recirculation then taking a reading from a remote readout on a Model 300 and using a conversion factor translating an R/hr reading to Failed Fuel %. A reading of 10 R/hr is approximately equal to 1% failed fuel. (Ref. TE-97-106-00-00) (NUREG-0654)

6.G Focused on maintenance of functions instead of system status. This is a measure of the ability to remove decay heat (generally using a secondary heat sink, but could be RHR) and/or control reactivity. A loss which caused a heatup resulting in an unplanned MODE change would not warrant a declaration if MODE 3 or 4 can be maintained using available systems. (NUMARC NESP-007)

6.H Damage or uncovery of a <u>spent</u> fuel assembly **inside** the reactor vessel. RFC radiation monitor values are based on water level above the fuel being significantly lower than Tech Spec value. (NUMARC NESP-007)

6.I Focused on maintenance of functions instead of system status. Primarily a concern after entering MODE 5/6 then the subsequent loss of capability to remove decay heat and/or control reactivity. (NUMARC NESP-007)

6.J This block applies only to **UNISOLABLE** failures to reseat. PZR Safety and PORV's are addressed due to the loss of RCS inventory, therefore the leakage levels of block 2.A apply. S/G Safety and ARV's are addressed due to the uncontrolled RCS cooldown. Instrument related valve lifts that are resolved by switching channels are **NOT** intended to result in an emergency classification. (NUREG-0654)

6.K Provides escalation path for S/G Safety or ARV problems that could challenge S/D margin limits. (NUREG-0654)

BASES for LOSS of PLANT CONTROL / SECURITY COMPROMISE

EPP-201 REV. 11 CHART 7

7.A Based on CPSES Security Contingency Plan and NRC Bulletin 2005-02. (See Note 1) (NUREG-0654, NRC Bulletin 2005-02, S.O. 2002)

7.B Based on CPSES Security Contingency Plan and NRC Bulletin 2005-02. (See Note 1) (NUREG-0654, NRC Bulletin 2005-02)

7.C Based on CPSES Security Contingency Plan and NRC Bulletin 2005-02. (See Note 1) (NUREG-0654, NRC Bulletin 2005-02)

7.D This IC encompasses conditions under which a HOSTILE FORCE has taken physical control of VITAL AREAs (containing vital equipment or controls of vital equipment) required to maintain safety functions and control of that equipment cannot be transferred to and operated from another location. Typically, these safety functions for a PWR are reactivity control, RCS inventory, and secondary heat removal. If control of the plant equipment necessary to maintain safety functions cna be transferred to another, then the above initiating condition is not met.

This EAL includes loss of physical control of spent fuel pool cooling systems if imminent fuel damage is likely (e.g. freshly offloaded reactor core in the pool).

Loss of physical control of the control room or remote shutdown capability alone may not prevent the ability to maintain safety functions per se. Design of the remote shutdown capability and the location of the transfer switches should be taken in to account. (NEI 99-01 HG1)

7.E Control Room evacuation requires additional support for plant monitoring and/or direction of plant staff by the TSC, OSC, and/or EOF. (NUREG-0654)

7.F Control has been established when the necessary transfer switches (ABN-803 or ABN-905) have been shifted to the Remote Shutdown Panel. (NUREG-0654)

GENERAL NOTES:

1. The discovery of an unknown device would change the level of security interest (i.e. SECON level) but by itself would not meet the criteria for declaring an emergency. In determining whether or not a suspicious object is an explosive device several factors can be used. Does the device have characteristics of an explosive device (wiring to a timing device or fuse mechanism), a portion of the device appears to be an explosive (sticks of TNT or plastic explosive), a bomb threat is received that describes the appearance/location of the device, etc.

2. PA is the Protected Area.

3. Vital Areas are defined by Security controls. Vital Areas are listed on form STA-902-1.

BASES for NATURAL PHENOMENA

EPP-201 REV. 11 CHART 8

8.A Felt and recognized as an earthquake by a consensus of control room operators on duty in the plant. (NUMARC NESP-007)

8.B Possible damage or degradation of plant safety systems. Other indications of OBE earthquake include visible structural damage to any building containing systems or equipment required for safe shutdown of the plant. (NUMARC NESP-007)

8.C Calculated maximum SSI level during Probable Maximum Flood (PMF) from FSAR, Section 2.4.3.7. (NUMARC NESP-007)

8.D This is the elevation of the top of the SCR dam. (NUMARC NESP-007)

8.E Minimum level of the canal connecting the SSI to SCR. Level below this means the SSI is isolated from the reservoir. (NUMARC NESP-007)

8.F One foot above the minimum level assumed in FSAR, Section 2.4.11.5 for continued operation of a SSW pump. (NUMARC NESP-007)

8.G Design wind load of Seismic Category I structures is 80 mph. Sustained refers to $\geq$15 minutes. (NUMARC NESP-007)

8.H Winds which could cause loss of functions needed for safe shutdown of the plant. Sustained refers to $\geq$15 minutes. (NUMARC NESP-007)

8.I A tornado that has "touched down" in the Exclusion Area Boundary (EAB), not just an observed funnel cloud in the sky. (NUMARC NESP-007)

8.J A tornado that strikes plant structures or equipment, potentially damaging functions needed for safe shutdown of the plant. (NUMARC NESP-007)

BASES for OTHER HAZARDS

EPP-201 REV. 11 CHART 9

9.A Release of a toxic or flammable gas into the Protected Area in amounts that could affect the health and safety of plant personnel **OR** could affect normal operation of the plant. This does not apply to **minor** Hydrogen leaks, that do not affect plant operation. (NUMARC NESP-007)

9.B Either life threatening or hazardous gas concentration in the plant, which would jeopardize the ability to perform a safe plant shutdown. Not intended to apply to outlying structures (warehouses, shops, or offices) that do not contain systems or equipment necessary for safe shutdown. (NUMARC NESP-007)

9.C Actual crash into the Protected Area.

9.D Explosions in the Exclusion Area Boundary (EAB) that could adversely affect normal site activities. (NUMARC NESP-007)

9.E The event of the preceding blocks has or will result in degraded safety system performance, or visible damage to safety related structures and/or equipment. (NUMARC NESP-007)

9.F Not intended to apply to outlying structures (warehouses, shops, or offices) that do not contain systems or equipment necessary for safe shutdown. (NUMARC NESP-007)

9.G Based on the effects of this event on the continued operation of the plant and the safety of plant personnel. (NUREG-0654)

9.H Applicable to structures either housing or adjacent to structures housing safety related systems or equipment (i.e. power block). Not intended to apply to outlying structures (warehouses, shops, or offices) that do not contain systems or equipment necessary for safe shutdown. 15 minutes chosen to be consistent with other classification and notification requirements. The 15 minute clock begins when the fire is first detected, i.e: fire alarm received or verbal report is received in the Control Room. (NUMARC NESP-007)

9.I Addresses unanticipated conditions not specifically addressed elsewhere, but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the **Unusual Event** classification. (NUMARC NESP-007)

9.J Addresses unanticipated conditions not specifically addressed elsewhere, but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the **Alert** classification. (NUMARC NESP-007)

9.K Addresses unanticipated conditions not specifically addressed elsewhere, but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the **Site Area Emergency** classification. (NUMARC NESP-007)

9.L Addresses unanticipated conditions not specifically addressed elsewhere, but that warrant declaration of an emergency because conditions exist which are believed by the Emergency Coordinator to fall under the **General Emergency** classification. P.A.G.'s are EPA-400 Protective Action Guides. (NUMARC NESP-007)