

YANKEE NUCLEAR POWER STATION
IMPLEMENTING PROCEDURES TO THE EMERGENCY PLAN
TABLE OF CONTENTS

TABLE OF CONTENTS

Rev. 146

IMPLEMENTING PROCEDURES

Classification of Emergencies	OP-3300	Rev. 21
Emergency Medical/Confined Space Response Actions	OP-3305	Rev. 25
Control Room Actions During an Emergency	OP-3315	Rev. 19
Technical Support Center (TSC) Activation and Operations	OP-3324	Rev. 16
Release of Public Information Under Emergency Conditions	OP-3343	Rev. 14
Security Force Actions Under Emergency Conditions	OP-3344	Rev. 25
Emergency Preparedness Drills and Exercises	AP-3400	Rev. 10
Emergency Equipment Readiness Check	AP-3425	Rev. 8
Technical Support Center (TSC) Readiness Check	AP-3426	Rev. 16
Emergency Preparedness Training	AP-3450	Rev. 9
Responsibilities for Maintaining and Implementing the Emergency Preparedness Program for YNPS	AP-3451	Rev. 1
Revision Process for the YNPS Defueled Emergency Plan	AP-3452	Rev. 2

CLASSIFICATION OF EMERGENCIES

SCOPE

To provide a means to classify an emergency based on reaching specific predetermined levels.

ENCLOSURES

OP-3300 - Pgs. 1-2
Attachment A - Pgs. 1-7

REFERENCES

1. Yankee Plant Defueled Emergency Plan
2. AP-0227, "Condition Reporting and Investigation"
3. Off-Site Dose Calculation Manual
4. NEI 99-01, Rev. 4, "Methodology for Development of Emergency Action Levels," August 2000

DEFINITIONS

Emergency Action Level (EAL): A Plant specific system and/or effluent parameter values characteristic of a spectrum of off-normal conditions which, if exceeded, will initiate one of the two emergency classifications.

Event: A category of EALs grouped according to plant systems or condition. The magnitude of the event, as indicated by the EAL, dictates which class of emergency must be declared.

UNUSUAL EVENT: Signifies events are in progress or have occurred which indicate a potential degradation of the level of safety at the plant.

ALERT: An event which indicates an actual or potential substantial degradation in the level of safety to personnel on-site or to the safe containment of fuel.

Hurricane Warning: An emergency category issued by the NWS indicating that sustained winds of 74 miles per hour or more are expected in a specified area in 24 hours or less.

DISCUSSION

Attachment A provides a method to determine which event class is appropriate for the event(s) which is/are occurring. In addition to specific Emergency Action Level (EALs), nonplant-related events (e.g., aircraft crash on-site) are included. If an event in progress requires assistance or additional resources, the Defueled Emergency Plan

may be implemented at the Shift Supervisor's discretion even though no EAL has been reached. The methods of classifying an emergency include:

- The use of specific plant instrumentation readings.
- Review of system status.
- Consideration of outside forces which could impact the plant.

Emergencies will be classified as one of the following:

- UNUSUAL EVENT
- ALERT

PRECAUTIONS

None

PREREQUISITES

1. Perform this procedure concurrent with other emergency/operating procedures and operator actions which are in progress to mitigate and control the event(s) at hand.

PROCEDURE

1. Identify the event category per Attachment A.

NOTE: When determining the class of the event, the EALs are to be used exclusively within the applicable event.

2. Classify the event per Attachment A.
3. Declare the most severe event class, consistent with the EAL that has been reached.

NOTE: Notification of off-site (state and federal) authorities is intended to be completed as soon as possible but within one hour. This time is measured from the time at which operators declare an emergency.

4. Once an event class has been determined, initiate OP-3315, Control Room Actions During an Emergency.

FINAL CONDITIONS

1. An event has been classified and the Defueled Emergency Plan has been initiated as appropriate.

OR

2. The event has been reclassified, if plant conditions have deteriorated/improved.

ATTACHMENT A

CLASSIFICATION OF EVENTS

<u>Event No.</u>	<u>Initiating Event Category</u>	<u>Page No.</u>
1	Radioactive Releases/Abnormal Radiation Levels	2, 3
2	Spent Fuel Pit Events	4
3	Security Compromise	5
4	General Events	6
5	ISFSI Events	7

EVENT NO. 1 - RADIOACTIVE RELEASES/ABNORMAL RADIATION LEVELS

ALERT

- I. Radiation levels which indicate a severe degradation in the control of radioactive materials. (i.e., release)

EAL:

- A.1 Confirmed release of radioactivity that results in a Spent Fuel Pit manipulator crane area radiation monitor greater than 100 mR/hr.

OR

- A.2 Confirmed release of radioactivity that results in a Primary Vent Stack Normal Range Noble Gas Monitor reading off-scale high (OSH).

UNUSUAL EVENT

- I. Unplanned, uncontrolled release of liquid effluent greater than two times Off-Site Dose Calculation Manual limits.

EAL:

- A. The concentration of the liquid effluent has been analyzed to be greater than 2 times the limit specified in 10CFR20, Appendix B, Table II.

- II. Damage to an irradiated fuel assembly with the release of radioactivity to the Spent Fuel Pit Building.

EAL:

- A. Confirmed Spent Fuel Pit Building continuous air monitor alarming and greater than 80,000 cpm above background.

OR

- B. Primary Vent Stack Normal Range Noble Gas Monitor reading greater than 10,000 cpm above background.

(continued on next page)

EVENT NO. 1 - RADIOACTIVE RELEASES/ABNORMAL RADIATION LEVELS -
(continued)

ALERT

UNUSUAL EVENT

- III. A fuel handling or component incident, resulting in radiation levels which indicate a degradation in the control of radioactive material,

EAL

- A. Valid radiation monitor reading increases by a factor of 1000 over normal levels (Normal being the highest reading in the past 24 hours excluding the current peak value).

AND

- B. Access to areas required for incident mitigation is limited.

- IV. Unexpected increase in ISFSI radiation.

EAL:

- A. Average surface dose rate readings on VCC equal or exceed any of the following (>2 x Tech Specs):

100 mrem/hour (neutron + gamma) on the side (concrete surfaces); or

70 mrem/hour (neutron + gamma) on the top; or

200 mrem/hour (neutron + gamma) at air inlet and outlet vents.

EVENT NO. 2 - SPENT FUEL PIT EVENTS

ALERT

UNUSUAL EVENT

- I. Uncontrolled decrease of Spent Fuel Pit water level.

EAL:

- A. Spent Fuel Pit low water level alarm.

AND

- B. Total loss of capability to restore water level to the Spent Fuel Pit.

- II. Loss of Spent Fuel Pit Cooling systems.

EAL:

- A. Total loss of capability to cool to Spent Fuel Pit.

AND

- B. Spent Fuel Pit temperature exceeds 140°F.

EVENT NO. 3 - SECURITY COMPROMISE

NOTE: Implementation of the Security Contingency Plan does not necessarily require the declaration of an emergency. The Shift Supervisor/Incident Director should coordinate with the Security Shift Supervisor for classification.

ALERT

I. Severe security event.

EAL:

A. Ongoing severe security event involving a physical attack on the facility.

OR

B. Penetration of the Plant Industrial Area Boundary is made by hostile forces.

UNUSUAL EVENT

I. Communications with security has confirmed the seriousness or credibility of the following related events.

EAL:

A. Bomb threat.

OR

B. Attack threat.

OR

C. Actual civil disturbance involving violent activities at the Plant Industrial Area Boundary.

OR

D. Attempted entry into the Plant Industrial Area with malicious intent.

OR

E. Internal security disturbance on-site.

OR

F. Unavailability of the security force.

OR

G. Confirmed tampering with security equipment which results in a significant loss of capability.

II. Security event with a loss of level of safety of the ISFSI. (applicable once all fuel is transferred to the ISFSI)

EAL:

A. Breach of ISFSI security boundary resulting in a physical attack on a loaded NAC-MPC.

EVENT NO. 4 - GENERAL EVENTS

ALERT

I. Hazards severely affecting the Spent Fuel Pit Building, Fuel Transfer Enclosure (FTE) or on-site personnel.

EAL:

A. A fire on-site causing damage to the Spent Fuel Pit Building or FTE (when fuel is in FTE).

OR

B. Earthquake experienced on-site causing damage to the Spent Fuel Pit Building or FTE (when fuel is in FTE).

OR

C. A hurricane or severe weather experienced on-site causing damage to the Spent Fuel Pit Building or FTE (when fuel is in FTE).

OR

D. Any tornado experienced on-site causing damage to the Spent Fuel Pit Building or FTE (when fuel is in FTE).

OR

E. Aircraft crash on-site causing damage to the Spent Fuel Pit Building or FTE (when fuel is in FTE).

OR

F. Explosion on-site causing damage to the Spent Fuel Pit Building or FTE (when fuel is in FTE).

OR

G. A release of toxic or flammable gases requiring evacuation of the site.

II. Plant conditions exist that warrant precautionary mobilization of emergency personnel and facilities.

EAL:

A. Shift Supervisor's opinion.

UNUSUAL EVENT

I. Hazards experienced or projected which have the potential for affecting the Spent Fuel Pit Building, Fuel Transfer Enclosure (FTE), ISFSI, a loaded NAC-MPC or on-site personnel.

EAL:

A. A fire on-site lasting greater than 30 minutes after detection or explosion.

OR

B. Earthquake experienced on-site for greater than 5 seconds.

OR

C. A hurricane WARNING issued for the local area by the National Weather Service.

OR

D. Floods affecting the plant site.

OR

E. A tornado experienced on-site.

OR

F. Aircraft crash on-site.

OR

G. Unusual aircraft activity over site which poses a potential security threat.

OR

H. Toxic or flammable gas releases on-site.

II. Plant conditions exist that warrant increased awareness on the part of the plant staff.

EAL:

A. Shift Supervisor's opinion.

EVENT NO. 5 - ISFSI EVENTS

ALERT

UNUSUAL EVENT

I. Damage to a loaded cask confinement boundary.

EAL:

A. Tip over of a loaded NAC-MPC.

OR

B. Any condition in the opinion of the Shift Supervisor that indicates loss of integrity of a loaded NAC-MPC.