

5/11/83

Arizona Public Service Company

P.O. BOX 21666 • PHOENIX, ARIZONA 85036

G. CARL ANDOGNINI
VICE PRESIDENT
NUCLEAR OPERATIONS

NOS 83-261

March 2, 1983

Mr. Brian K. Grimes, Director
Division of Emergency Preparedness
Office of Inspection and Enforcement
U. S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Grimes:

In preparation for the planned May 11, 1983 Emergency Preparedness Exercise for the Palo Verde Nuclear Generating Station, enclosed are two (2) copies of (a) a description of the scope and (b) a listing of objectives for subject exercise.

You may expect information pertaining to the scenario and anticipated license applicant actions within thirty (30) days of the date of this letter. As the scenario is further developed, it may prove advisable to alter the sequencing of events from what is presented in the enclosure. Also, start and end times for events are under discussion with Arizona State Government at the present time.

We would appreciate your comments within 15 days of the date of this letter.

Very truly yours,

G. Carl Andognini
G. Carl Andognini

GCA/SRF:ml

cc: Director, Office of Nuclear Reactor Regulation
Director, Office of Inspection and Enforcement
NRC Resident, Palo Verde Nuclear Generating Station

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6.0 EXERCISE SCENARIO

6.1 Narrative Summary

The scenario begins with a contaminated injury requiring offsite medical assistance. This results in the declaration of a Notification of Unusual Event. While the contaminated injury is being transported to Maryvale Samaritan Hospital, a dropped rod accident occurs and the rod recovered. However, the flux tilt caused by the rod drop casualty results in fuel cladding failure. An Alert is declared due to an increase on the Letdown Monitor of greater than 1% fuel failures within a 30-minute period. While awaiting confirmatory chemistry results, a rod ejection accident occurs. A Site Area Emergency is declared as the loss of coolant becomes greater than make-up pump capacity. The reactor is tripped. The Power Access Purge Downstream Isolation Valve fails to close when a containment isolation signal is received. An uncontrolled fire involving the turbine lube oil storage tanks occurs requiring offsite fire assistance. The casualty is escalated to a General Emergency when the failure of the Power Access Purge Upstream Isolation Valve results in a release to atmosphere with levels greater than 5R/hr (Thyroid) at the site boundary. The release path is terminated by an emergency repair of the Power Access Purge Downstream Isolation Valve.

Due to releases of radioactive materials to the environment, radiation monitoring teams will be deployed. The scenario also incorporates medical and fire emergencies requiring offsite assistance.

News media participation is expected and both APS and state media centers will be activated. Exchange of information among the various public information spokespersons will facilitate joint releases to the news media.

6.2 Major Sequence of Events

<u>Time</u>	<u>Event</u>
Initial Conditions	Unit 1 has been operating at 100% power since the last maintenance outage 12 weeks ago. Primary coolant specific activity has been stable at 1 uCi/gram Dose Equivalent I-131. A transient 2 hours ago is causing an expected iodine spike. Present RCS activity is 65 uCi/gram and leveling. An RCS sample is in progress. The following equipment is OOC for maintenance: Train A Diesel Generator, Non-essential Auxiliary Feedwater Pump, Train A Containment Spray Pump, Train A HPSI Pump, and #1 Charging Pump. Surveillance test on Train B Diesel Generator completed satisfactory at the end of the last shift. Power Access Purge is in operation for a planned containment entry in 48 hours. Units 2 and 3 are under construction. The wind is from the southwest at 5 mph.
0830	Contaminated injury. NOTIFICATION OF UNUSUAL EVENT declared.
0900	Rod drop accident.
0908	Rod recovered.
0913	Letdown Monitor indicates an increase of greater than 1% fuel failures within a 30 minute period. ALERT declared. Accountability conducted.
1045	CEA Ejection. SITE AREA EMERGENCY declared. Site evacuation conducted. Reactor is tripped.
1100	Fire in the Turbine Lube Oil Storage Tank area.

1110 Offsite fire assistance requested.

1150 The fire is out.

1155 Failure of the Power Access Purge system results in a release to atmosphere. GENERAL EMERGENCY declared.

1240 Gradual wind shift. Wind from the west at 7 mph.

1410 The Power Access Purge Downstream Isolation Valve has been repaired and is closed. Release to atmosphere terminated.

1430 Downgrade to SITE AREA EMERGENCY.

1500 (Advancement of clocks 9 hours). Plume dispersed. Plant in a stable condition.

1500 Exercise terminated.

ARIZONA PUBLIC SERVICE COMPANY
PALO VERDE NUCLEAR GENERATING STATION
EMERGENCY PREPAREDNESS EXERCISE
MAY 1983

1.0 SCHEDULE

- 1.1 Date: May 11, 1983
- 1.2 Time: 0830
- 1.3 Duration: 6-1/2 hours

2.0 PARTICIPATING PARTIES

- 2.1 Arizona Public Service Company
- 2.2 State of Arizona
- 2.3 County of Maricopa
- 2.4 Maryvale Samaritan Hospital
- 2.5 American Red Cross
- 2.6 Nuclear Regulatory Commission (Region V)
- 2.7 Federal Emergency Management Agency (Region IX)

3.0 PURPOSE

- 3.1 To conduct an exercise that includes the mobilization of licensee, state, and local personnel and resources to adequately verify the capability to respond to an accident scenario requiring response.
- 3.2 To meet the requirements of 10 CFR 50, Appendix E, 44 CFR 350.9, and guidance in NUREG 0654/FEMA REP-1, Rev. 1.

4.0 OBJECTIVES

4.1 Onsite (Arizona Public Service Company)

- 4.1.1 Demonstrate that APS can assess plant conditions, classify the event, take corrective action to limit the severity, and disseminate vital information.
- 4.1.2 Demonstrate the ability to alert, notify, and mobilize emergency response personnel.
- 4.1.3 Demonstrate the ability of APS to notify offsite agencies in a timely manner.
- 4.1.4 Demonstrate the adequacy of the emergency procedures in terms of management control of an emergency situation.
- 4.1.5 Demonstrate the capability of APS to alert, account for, and evacuate onsite personnel.
- 4.1.6 Demonstrate the effectiveness and availability of emergency equipment.
- 4.1.7 Demonstrate the capability to control a simulated fire.
- 4.1.8 Demonstrate the ability to assess and monitor actual or potential offsite radiological hazards and make timely protective action recommendations to offsite agencies.

4.2 Offsite (State of Arizona, County of Maricopa)

- 4.2.1 Demonstrate that emergency response organizations can alert, notify, and mobilize emergency response personnel.
- 4.2.2 Demonstrate that timely and accurate decisions can be made regarding protective actions for the plume exposure pathway emergency planning zone.
- 4.2.3 Demonstrate that the Radiological Technical organization can respond to and provide assessment and analysis of a simulated airborne release.
- 4.2.4 Demonstrate that the Monitoring Pool has the capability to perform terrestrial monitoring tasks.
- 4.2.5 Demonstrate the capability to establish and operate a reception and care center.
- 4.2.6 Demonstrate contamination control and the ability to perform personnel decontamination.
- 4.2.7 Demonstrate that the county can provide access control and traffic regulation.
- 4.2.8 Demonstrate the capability to control access to Emergency Operations Center in order to maintain security during an emergency.

4.3 Joint (Arizona Public Service Company, State of Arizona, and County of Maricopa)

- 4.3.1 Demonstrate coordination of the release of information to the media.
- 4.3.2 Demonstrate that emergency response organizations can activate and staff direction and control facilities in a timely fashion.
- 4.3.3 Demonstrate the ability to implement and coordinate protective actions in the Plume Exposure Pathway EPZ.
- 4.3.4 Demonstrate the adequacy of communication links between all emergency facilities and field teams.
- 4.3.5 Demonstrate the adequacy of communication linkages to both the public and news media.
- 4.3.6 Demonstrate the capability to transport and administer emergency medical service to contaminated patients.
- 4.3.7 Demonstrate the capability of government emergency response organizations to execute response plans to protect the public health, safety and property in the Plume Exposure Pathway EPZ.

5.0 EXERCISE LIMITS

- 5.1 All facilities will be fully activated in accordance with the associated plans.
- 5.2 Site evacuation will be simulated with a small group of people (15-25).
- 5.3 Offsite evacuation will be simulated with a small group of people (15-25).
- 5.4 Evacuation of people requiring special assistance will be simulated with one person.
- 5.5 Emergency Broadcast System will not be activated. Messages will be drafted and transmitted to the broadcast stations.
- 5.6 EPZ Sirens will not be sounded.
- 5.8 One sheriff unit will provide supplemental notification of evacuation and then provide security patrol.
- 5.9 Two prespecified road blocks will be established with barricades delivered and then secured.
- 5.10 One reception center will be established and evacuees registered. This includes setting up sleeping facilities and providing a meal.
- 5.11 Three State/County field monitoring teams will be dispatched. Three utility onsite/offsite monitoring teams will be dispatched.

5.12 One simulated contaminated injury will be transported to Maryvale Samaritan Hospital.

5.13 Two state Public Inquiry Center Operators will be provided and exercised during about a one hour interval.

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