



# ARKANSAS POWER & LIGHT COMPANY

## Arkansas Nuclear One

TITLE: RECORD OF CHANGES AND REVISIONS

FORM NO. 1000.06A

EMERGENCY PLAN PROCEDURE

REV. # 8 PC #

PLANT EVAUCATION

1903.30 REV. 3

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APPROVED BY:

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### 1.0 PURPOSE

The purpose of this procedure is to provide the symptoms for which a Plant Evacuation should be declared and the subsequent actions to be taken by plant personnel.

### 2.0 SCOPE

This procedure is applicable to emergency situations involving Unit One and/or Unit Two.

### 3.0 REFERENCES

#### 3.1 References Used in Procedure Preparation:

3.1.1 Arkansas Nuclear One Emergency Plan

#### 3.2 References Used in Conjunction with this Procedure:

3.2.1 1903.10, "Emergency Action Level Response"

#### 3.3 Related ANO Procedures:

3.3.1 1903.23, "Personnel Emergency"

3.3.2 1903.40, "Duties of the Emergency Evacuation Team"

### 4.0 DEFINITIONS

4.1 A Plant Evacuation is the orderly withdrawal of all personnel from the protected area except those personnel required to respond to the situation.

4.2 The Protected Area is the area encompassed by physical barriers and to which access is controlled (i.e., the security fence).

4.3 Onsite Technical Support Center - The location within the ANO Administration Building equipped with instrumentation and communication systems and facilities useful in monitoring the course of an accident; this center is located in the 3rd Floor Conference Room.

4.4 Onsite Operational Support Center - the ANO Administration Building; the normal work location for an individual is used as the initial reporting area in this center with the following exceptions:

4.4.1 Planning & Scheduling Supervisor - Fourth Floor Conference Room.

4.4.2 Radwaste Coordinator - individual's supervisor's office in the Administration Building.



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### 4.4.3 Emergency Team Personnel

- A. Evacuation-Main Guard Station (Material Management Personnel); Emergency Control Center [Secondary Operational Support Center (Training Personnel)]
- B. Fire - 2nd floor conference room
- C. Medical - First Aid Room/2nd floor break room
- D. Radiation - (onsite team) 1st floor classroom (and adjacent offices)
- E. Recovery - same as 4.4.3.D

### 4.4.4 Operations Personnel - Operations Manager's office

## 5.0 RESPONSIBILITIES

- 5.1 The affected unit's Shift Operations Supervisor is responsible for declaring a Plant Evacuation when any of the symptoms contained in Section 6.0 occur.
- 5.2 The Duty Emergency Coordinator is responsible for coordinating activities associated with a Plant Evacuation (to include informing the Duty Emergency Coordinator/Recovery Manager of personnel accountability results).
- 5.3 Security Personnel are responsible for evacuation and personnel accountability following a Plant Evacuation.
- 5.4 The Emergency Evacuation Team is responsible for assisting Security Personnel (as directed) in evacuation and personnel accountability; the Materials Management personnel may assist with assigned duties onsite, as necessary; the Training personnel may assist with assigned duties off-site, as necessary.
- 5.5 The Emergency Medical Team is responsible for aiding and decontaminating injured personnel identified during a Plant Evacuation.
- 5.6 Emergency Team Leaders are responsible for reporting accountability of team personnel to the Technical Support Center Δ (Ext. , Δ).
- 5.7 Each Operational Support Center staff person is responsible for accounting for himself to the Technical Support Center, Δ (Ext. , Δ).



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### 6.0 SYMPTOMS

- 6.1 Unevaluated general area radiation levels exceeding 2.5 mRem/hr outside of the controlled access areas which are not attributed to any cause other than a possible radiological incident.
- 6.2 Unevaluated airborne radioactivity in excess of  $1 \times 10^{-9}$   $\mu\text{Ci/cc}$  measured outside of the controlled access areas.
- 6.3 An uncontrolled toxic gas leak where the hazard is not confined to a local area and the conditions continue to increase in severity.

### 7.0 IMMEDIATE ACTIONS

- 7.1 Any person who identifies any of the emergency conditions described in Section 6.0 shall notify the affected unit's Shift Operations Supervisor immediately.
- 7.2 Upon verification, the Shift Operations Supervisor shall contact, by the most expedient means, the following groups, as necessary, and provide them with designated assembly area, evacuation route(s) (based upon symptoms and prevailing wind direction) and protective measures, as necessary:

7.2.1 Main Guard Station

7.2.2 Emergency Evacuation Team

NOTE: The evacuation announcement should include evacuation routes and designated assembly area (this announcement should be repeated several times, if possible).

- 7.3 The Shift Operations Supervisor shall declare a Plant Evacuation over the Public Address System and sound the plant evacuation alarm.
- 7.4 Shift Operations Personnel on duty should report to the Control Room.

### 8.0 FOLLOW UP ACTIONS

- 8.1 Determine if any Emergency Action Level criteria have been exceeded. (Refer to 1903.10, "Emergency Action Level Response").
- 8.2 Shift Operations personnel which are onsite but not on duty should report to the Control Room from the appropriate response center.
- 8.3 Personnel other than Shift Operations Personnel in the Controlled Access Areas shall proceed to the Controlled Access points and monitor themselves, if possible, prior to exiting.



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- 8.4 Emergency response personnel shall report to their pre-assigned assembly areas unless directed otherwise. Accountability of reporting individuals shall be supplied to the Technical Support Center Δ Δ as soon as practical following announcement of the evacuation (refer to 1903.10 Attachments 1-8 for the applicable roster). The Emergency Team Leaders and Shift Operations Supervisors are responsible for providing the accountability information for their personnel.
- 8.5 Personnel, other the emergency response personnel shall proceed to their respective guard house, turn in their personnel I.D. badge, exit the plant and proceed to the designated assembly area (i.e. the Emergency Control Center unless directed otherwise).
- 8.6 Security/Emergency Evacuation Team personnel should take the following actions:
- 8.6.1 Assign personnel to perform the following tasks:
- A. Advise exiting personnel of the designated evacuation routes and assembly areas.
  - B. Direct personnel to the designated assembly area.
  - C. Advise (by the most expedient means) non-ANO personnel within the affected portions of the Exclusion Area to evacuate.
  - D. Set up road blocks to limit access to the plant site.
  - E. Provide security, as necessary, at the designated assembly area.
- 8.6.2 Security officers shall log badges out and place them in the badge holders as expeditiously as practical.
- 8.6.3 As soon as badges are logged out, Security will obtain a computer printout of personnel remaining on-site. If the Security computer is not operable, Security personnel should account for exiting personnel as stated in Paragraph 8.6.6.
- 8.6.4 Security shall contact the Technical Support Center Δ Δ and obtain the accountability results for emergency response personnel.
- 8.6.5 Security shall then check the list of accounted for personnel on-site against the computer printout of personnel on-site. Results shall be reported to the Duty Emergency Coordinator/Recovery Manager by Security personnel.

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- 8.6.6 If the Security computer is not working, the list of accounted for on-site personnel obtained from the Technical Support Center  $\Delta$   $\Delta$  should be checked against badges in the badge racks. Persons not accounted for in this manner will be reported to the Duty Emergency Coordinator/Recovery Manager.
- 8.6.7 If there is not time for Security to complete the accountability on-site, the badges and badge racks should be taken to the west end of the Emergency Control Center, ground floor. Accountability should then be established as stated in Paragraph 8.6.3 through 8.6.6 above.
- 8.6.8  $\Delta$  Security personnel shall, upon ANO personnel exiting each applicable area, lock their post, as necessary, and assemble at the Main Guard Station (or as directed) for further instructions.  $\Delta$
- 8.7 If there are persons(s) unaccounted for, the Duty Emergency Coordinator/Recovery Manager shall direct personnel to search for the unaccounted for individual(s).
- 8.8 After initial accountability is established, security personnel issuing/receiving personnel badges are responsible for notifying the Technical Support Center of changes when personnel ingress/egress the protected area.
- 8.9 When the plant is determined to have returned to a condition where the plant evacuation is no longer required, the Duty Emergency Coordinator/Recovery Manager may terminate the plant evacuation.

### 9.0 EVACUATION OF THE ONSITE TECHNICAL SUPPORT CENTER AND OPERATIONAL SUPPORT CENTER

The Onsite Technical Support Center and the Onsite Operational Center are not evacuated in the event of a Plant Evacuation. The Onsite Radiological Monitoring Section shall monitor radiation levels while the centers remain occupied. However, if the following symptoms are observed, actions shall be taken in accordance with Section 9.2 and 9.3.

#### 9.1 Symptoms

- 9.1.1 Area radiation monitor alarm indicates radiation levels above 2.5 mR/hr.
- 9.1.2 NMC alarm indicating particulate airborne of 450 CPM above background or gaseous airborne of 10 CPM above background. (Assuming installed iodine cartridges are removed and analyzed every 4 hours.)

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### 9.2 Immediate Action

- 9.2.1 Notify the Duty Emergency Coordinator/Recovery Manager of the above alarms.

### 9.3 Follow-Up Actions

- 9.3.1 The Onsite Radiological Monitoring Section shall increase surveillance of NMC and iodine cartridge to once per hour.

- 9.3.2 Reset Area Monitor alarm to 100 mR/hr and evaluate projected personnel accumulated dose rates versus projected stay time at those levels.

NOTE: Necessary respiratory protection equipment should be obtained from the Onsite Radiological Monitoring Section of the Emergency Radiation Team.

- 9.3.3 If the iodine concentration exceeds  $1 \times 10^{-10}$   $\mu\text{Ci/cc}$ , respiratory protection or evacuation is required.

- 9.3.4 If the radiation level is greater than 100 mR/hr but less than 1 R/hr:

- A. 30 minutes may be allowed to determine if it is a temporary condition or a long-term condition.
- B. If it is determined that a temporary condition exists, evaluate the projected personnel accumulated dose.
- C. If it is determined that a long-term condition exists, evacuation of the Onsite Technical Support Center and Operational Support Center will be required.

- 9.3.5 If radiation levels reach 1 R/hr, immediate evacuation of the Onsite Technical Support Center and Operational Support Center is required.

- 9.3.6 If the Technical/Operational Support Centers are evacuated, Security personnel shall take the following actions:

- A. As Operational/Technical Support Center personnel exit the plant, security will collect I.D. badges and account for the individuals. Accountability results will be reported to the Duty Emergency Coordinator/Recovery Manager at the Emergency Control Center.



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- B. Perimeter gates and doors shall be locked following the evacuation
- C. Outside security posts should be established as close to the plant as practical to restrict access.
- Δ D. A minimum of four Security officers should report to the Control Room area to support plant access and egress. Δ
- Δ E. As Security Officers evacuate the Guard Houses, they should carry the badge boards and a computer printout of personnel to the Emergency Control Center. It should not be necessary to evacuate Security until the Technical and Operational Support personnel are evacuated. Upon evacuation the Security Office should be established at the west end, ground floor, of the Emergency Control Center. Access approval and badging should be in this area. Security Officers should report to this area for assignments. Δ

9.3.7 The DEC/Recovery Manager must approve re-entry into the plant until the evacuation is terminated.

### 10.0 ROAD BLOCKS

10.1 Road blocks restricting access to ANO shall be manned by at least one ANO Security Officer. The ANO Security Officer shall be capable of making radio contact with the Security Duty Sergeant. The Security Duty Sergeant shall obtain verbal approval from the Duty Emergency Coordinator/Recovery Manager or the Incident Response Director before allowing passage of individual(s) who are not part of the response organization.

### 11.0 ATTACHMENTS AND FORMS

None

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