

ENTERGY OPERATIONS INCORPORATED

ARKANSAS NUCLEAR ONE

Arkansas Nuclear One  
Russellville, Arkansas  
Date: 950213

MEMORANDUM

TO: 103  
CC - NRC - WASHINGTON

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SUBJECT: PLANT MANUAL UPDATE: NEW REVISION TO PROCEDURE

PROCEDURE/FORM NUMBER: OP-1903.030

REV. # 21 TC # 0 PC # 0

PROCEDURE/FORM TITLE: EVACUATION

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PROCEDURE(S)

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# ENTERGY OPERATIONS INCORPORATED ARKANSAS NUCLEAR ONE

60 of 75

TITLE: EVACUATION

PROC/WORK PLAN NO.  
**1903.030**

REV.  
**21**

EXP. DATE  
**N/A**

SAFETY-RELATED  
☒ YES ☐ NO

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PAGE 1 OF 1

IPTE ☐ YES  
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PAGE CHG

PAGE CHG

**Self Check...**

PAGE CHG

PAGE CHG

1  
2  
3  
4  
5  
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**Stop**

**Think**

**Act**

**Review**

...because Nobody's perfect

VERIFIED BY

DATE

TIME

APPROVAL AUTHORITY:

APPROVAL DATE:

*2-9-95*

FORM TITLE:

**LIST OF AFFECTED PAGES**

FORM NO.  
**1000.006A**

REV.  
**42 PC-1**

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 1 of 24 REV: 21 CHANGE:
---------------------------------	--	-------------------------------------

## 1.0 PURPOSE

The purpose of this procedure is to provide the symptoms for which a Localized Evacuation, Plant Evacuation, Exclusion Area Evacuation, or an Offsite 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 PROCEDURES PREPARATION:

- 3.1.1 Emergency Plan
- 3.1.2 ANO Security Plan and Procedures
- 3.1.3 E-27 Sheets 1-4, "Schematic Diagram for the Evacuation Warning System"
- 3.1.4 E-427, Sheets 1-7, "Schematic Diagram for the Evacuation Warning System"

### 3.2 REFERENCES USED IN CONJUNCTION WITH THIS PROCEDURE:

- 3.2.1 1903.010, "Emergency Action Level Classification"
- 3.2.2 1903.011, "Emergency Response/Notifications"
- 3.2.3 1043.034, "Security at ANO and the EOF During an Emergency"
- 3.2.4 1904.XXX, "Offsite Dose Projections Series"
- 3.2.5 1903.064, "Emergency Response Facility - Control Room"
- 3.2.6 1903.065, "Emergency Response Facility - Technical Support Center (TSC)"
- 3.2.7 1903.066, "Emergency Response Facility - Operational Support Center (OSC)"
- 3.2.8 1903.067, "Emergency Response Facility - Emergency Operations Facility (EOF)"
- 3.2.9 1903.077, "U.S. Army Corps of Engineers"

### 3.3 RELATED ANO PROCEDURES:

- 3.3.1 1903.023, "Personnel Emergency"
- 3.3.2 1903.034, "Emergency Operations Facility Evacuation"

### 3.4 REGULATORY CORRESPONDENCE CONTAINING NRC COMMITMENTS WHICH ARE IMPLEMENTED IN THIS PROCEDURE:

- 3.4.1 OCAN078609, Response to Deficiency 313; 368/8612-04, Step 6.3.2.

PRGC/WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 2 of 24 REV: 21 CHANGE:
--------------------------------	--	-------------------------------------

3.4.2 OCAN128211, Response to IR 313/82-23; 368/82-20, Sections  
6.5.4 A-E

#### 4.0 DEFINITIONS

- 4.1 The Protected Area is the area encompassed by physical barriers (i.e., the security fence) and to which access is controlled.
- 4.2 The Exclusion Area is that area surrounding ANO within a minimum radius of 0.65 miles of the reactor buildings, but outside the protected area (security fence) and controlled to the extent necessary by ANO during periods of emergency.
- 4.3 A Localized Evacuation is the orderly withdrawal of all personnel from selected areas within the protected area. The area selected for a localized evacuation should have well defined boundaries and be easily controllable (e.g., Unit 1 and/or Unit 2 Auxiliary Buildings, Radwaste Building, Hydrogen Storage Area, etc.).
- 4.4 A Plant Evacuation is the orderly withdrawal of all personnel from the protected area except for those personnel required to respond to the situation.
- 4.5 An Exclusion Area Evacuation is the orderly withdrawal of personnel from that portion of the Exclusion Area which is affected by an emergency condition as described in Section 6.1.3
- 4.6 An Offsite Evacuation is the orderly withdrawal of personnel from that portion of the area outside of the Arkansas Nuclear One Exclusion Area which is affected by an emergency condition as described in Section 6.1.4.
- 4.7 An Immediate Evacuation is the immediate and orderly withdrawal of all personnel from the affected Emergency Response Facility.
- 4.8 A Precautionary Evacuation is a multi-stage evacuation of personnel located within an Emergency Response Facility (i.e. secondary group evacuates first followed by a primary group as directed by the facility director).
- 4.9 Technical Support Center - The location within the ANO Plant 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.
- 4.10 Operational Support Center - Emergency response center within the ANO Maintenance Facility where support is coordinated for the following functions:
  - Onsite Radiological Monitoring
  - Maintenance
  - Nuclear Chemistry
  - Emergency Medical Support
  - Fire Fighting Support

The OSC serves as the assembly point and briefing area for repair and damage control teams and is located in the Maintenance Facility.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 3 of 24 REV: 21 CHANGE:
---------------------------------	--	-------------------------------------

4.11 Initial Accountability - Measures to account for all individuals remaining onsite after the declaration of a plant evacuation. The objective is to ascertain the names of missing individuals within 30 minutes following the declaration of a plant evacuation.

4.12 Continuous Accountability Measures to maintain accountability for all individuals remaining onsite following a plant evacuation.

## 5.0 RESPONSIBILITY AND AUTHORITY

5.1 The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) is responsible for declaring a Localized, Plant, or Exclusion Area Evacuation when any of the symptoms contained in Sections 6.1.1, 6.1.2, or 6.1.3 are detected.

5.1.1 The TSC Director and/or Radiation Protection and Radwaste Manager should ensure that evacuated personnel are monitored (i.e., via portal monitors or manual frisking) prior to their release from the site.

5.2 Arkansas Department of Health (ADH) personnel are responsible for implementing an Offsite Evacuation. This shall be accomplished in accordance with the Protective Action Guidelines contained in the State of Arkansas Emergency Operations Plan, Annex V, "Arkansas Nuclear One Radiological Incident Response Plan". The individual responsible for Emergency Direction and Control (i.e., the Shift Superintendent, TSC Director, or Emergency Operations Facility Director) is responsible for recommending an Offsite Evacuation in accordance with Procedure 1903.011, "Emergency Response/Notifications", Attachment 6.

5.3 The Security Shift Commander is responsible to provide initial accountability information to the TSC Support Superintendent. This information should be available within 30 minutes following a plant evacuation.

5.4 The TSC Support Superintendent is responsible to ensure that continuous accountability stations are established (control rooms, Maintenance Facility, and Admin. building) and results reported to the TSC Director.

5.5 Emergency Response Organization (ERO) Personnel who remain onsite following a plant evacuation are responsible to carry out instructions for initial and continuous accountability as described in section 6.3 of this procedure.

## 6.0 INSTRUCTIONS

### 6.1 INITIATING CONDITIONS

#### NOTE

If releases of radioactivity are in progress or suspected, the 1904.XXX, "Offsite Dose Projections Series" procedures should be utilized to assess the potential doses. Once the doses have been assessed, a determination can be made as to whether or not the conditions warrant the declaration of an emergency class and the subsequent recommendation of protective actions for onsite and offsite personnel.

PRGC/WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 4 of 24 REV: 21 CHANGE:
--------------------------------	--	-------------------------------------

#### 6.1.1 Localized Evacuation

- A. A localized evacuation will be initiated if any condition exists which in the opinion of the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) may pose a threat to the health and safety of plant workers. The threat must be confined to a localized area (i.e., the area selected for evacuation should have well defined boundaries and be easily controllable).
- B. If the threat extends beyond a localized area, then consideration should be given for a Plant, Exclusion Area and/or Offsite Evacuation.

#### 6.1.2 Plant Evacuation

The principal consideration when contemplating a Plant Evacuation is the safety of plant personnel.

A plant evacuation shall be considered in response to the following conditions:

- A. Declaration of a Site Area or General Emergency.
- B. General area radiation levels outside of a Radiologically Controlled Area exceeds 2.5 mRem/hr, which is attributed to a loss of control of radioactive material and the threat cannot be confined to a well-defined area.
- C. Unevaluated airborne radioactivity exceeds  $9E-10$  uCi/cc, which is attributed to a loss of control of radioactive material and the threat cannot be confined to a well-defined area.
- D. An uncontrolled toxic gas leak (originating either on-site or off-site) where the hazard is not confined to a local area.

The decision to evacuate non-essential personnel or retain them on-site should be based on the course of action which presents the minimum risk to employees. For example:

- \* An ongoing security threat within the protected area (consult with the Security Shift Commander to aid in determining the safest course of action).
- \* Inclement weather (e.g., Tornado, high winds, hazardous road conditions may preclude a safe evacuation of plant personnel).
- \* Radiological hazards exist. (Determine which action would result in lower dose to nonessential personnel).
- \* Other hazards exist which might subject evacuees to a higher risk to personnel safety.



PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 5 of 24 REV: 21 CHANGE:
---------------------------------	--	-------------------------------------

#### 6.1.3 Exclusion Area Evacuation

- A. An exclusion area evacuation shall be initiated if unevaluated general area radiation levels exceed 2.5 mREM/hr within the Exclusion Area.
- B. Personnel within the Exclusion Area could receive an exposure to a toxic gas (e.g., transportation accident involving truck, rail, or barge).

#### 6.1.4 Offsite Evacuation

- A. An Offsite Evacuation shall be recommended in accordance with Procedure 1903.011, "Emergency Response/Notifications", Attachment 6.

#### 6.1.5 EOF Evacuation

- A. See Procedure 1903.034, "Emergency Operations Facility Evacuation"

### 6.2 IMMEDIATE ACTIONS

#### 6.2.1 Localized Evacuation

- A. If the conditions listed in section 6.1.1 are observed, then a localized evacuation of the affected area(s) should be initiated.
- B. Before making an announcement over the PA system, ensure that consideration is given for the following:
  1. Determine if any areas of the plant should be avoided during the localized evacuation.
  2. Determine, if necessary, any other special protective measures which should be taken by evacuees (such as ad hoc respiratory protection, etc.).
  3. Determine which portion, if any, of the Evacuation Alarm System should be activated (see step 6.2.1.D).
- C. Make the following announcement over the plant PA system (dial 197):
 

"Attention all personnel. Attention all personnel. Due to (state reason) all personnel evacuate the (state the localized area to be evacuated). All other plant personnel continue normal activities until instructed otherwise."
- D. Activate the localized evacuation alarm, if evacuating the Reactor Building and/or the Auxiliary Buildings, for approximately 20 seconds. A brief description of the control room handswitch settings for the Evacuation Alarm System is outlined below:
  1. Unit 1 - Three (3) position handswitch

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 6 of 24 REV: 21 CHANGE:
---------------------------------	--	-------------------------------------

- a. REAC. BLD. Activates the Unit 1 Reactor Building Alarm System only
  - b. OFF - Deactivates the Evacuation Alarm System
  - c. PHY. PLT. Activates the Evacuation Alarm System for the entire physical plant including surrounding buildings located within the protected area.
2. Unit 2 - Four (4) position handswitch
- a. OFF - Deactivates the Evacuation Alarm System
  - b. CTMT - Activates the Unit 2 Reactor Building Alarm system only
  - c. CTMT AUX - Activates only the Unit 2 Reactor Building and Unit 2 portion of the Auxiliary Building Alarm System
  - d. PLANT - Activates the Evacuation Alarm System for the entire physical plant including surrounding buildings located within the protected area.
- E. Repeat the announcement in step 6.2.1.C in a slow, clear tone of voice several times (alternating the announcement with the activation of the localized evacuation alarm, if applicable).

#### 6.2.2 Plant Evacuation

- A. The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) should refer to form 1903.030B, "Plant Evacuation Checklist" to determine if a plant evacuation is advisable.
- B. Shift Operations personnel on duty should report to the Control Room. Shift Operations personnel not on duty (training/support) should report to the OSC Assembly Area (located in the Maintenance Facility) and report to the OSC Director.
- C. The following groups should immediately report to their designated emergency work location and notify their immediate supervisor of their location for accountability purposes.
  - 1. Technical Support Center Staff (TSC)
  - 2. Operational Support Center Staff (OSC)
  - 3. System Engineering Personnel (Adm. Building - 3rd Floor Library)



PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE:  EVACUATION	PAGE: 7 of 24 REV: 21 CHANGE:
---------------------------------	--	-------------------------------------

4. All other shift personnel (i.e. affected unit Maintenance personnel, Nuclear Chemistry personnel, Health Physics personnel, etc.) should report to the OSC Assembly Area (located in the Maintenance Facility).
- D. Maintenance personnel from the unaffected unit who are neither a part of the OSC staff or are not assigned a position or task in the Emergency Response Organization, should report to the EOF and standby for instructions (See Procedure 1903.067, "Emergency Response Facility - Emergency Operation Facility (EOF)", for assembly location.)
- E. If the threat extends beyond the protected area, then consideration should be given for initiating an Exclusion Area Evacuation and/or recommending an evacuation (and/or sheltering) of offsite areas.

#### 6.2.3

##### Exclusion Area Evacuation

- A. If either of the conditions listed in section 6.1.3 are detected, then an exclusion area evacuation should be initiated.
- B. Coordinate with Security Personnel on the evacuation and control of the affected area(s) within the exclusion area (including the Generation Support Building).
- C. Contact the U.S. Army Corps of Engineers to request that boat access to the portions of Lake Dardanelle within the exclusion area be controlled.
- D. Make the following announcement over the plant (197) and EOF PA system (dial 199 and pause approx. 15 sec.)  
  
"Attention all personnel. Attention all personnel. Due to (state reason) security will be restricting access to (state area). All personnel avoid this (these) area(s) until further notice."
- E. If the threat extends beyond the exclusion area, then consideration should be given for recommending an evacuation (and/or sheltering) of offsite areas.

#### 6.2.4

##### Offsite Evacuation

- A. Refer to Procedure 1903.011, "Emergency Response/Notifications", Attachment 6, to determine the appropriate offsite Protective Action Recommendation (PAR).

### 6.3

#### ACCOUNTABILITY

##### 6.3.1

The objective of Initial Accountability is to ascertain the names of missing individuals no later than 30 minutes after the decision has been made to evacuate non-essential personnel. This will be achieved in the following manner:

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 8 of 24 REV: 21 CHANGE:
---------------------------------	--	-------------------------------------

- A. Plant evacuees are accounted for as they exit the plant and are logged offsite by the security computer.
- B. Emergency response personnel, who remain onsite are required to log in at the nearest security card reader using the special accountability code 0000 in lieu of their PID.
- C. A list of missing individuals will be generated by the security computer based upon information acquired through steps 6.3.1.A and 6.3.1.B above. This list shall be available no later than 30 minutes after the decision has been made to evacuate non-essential personnel.
- D. The TSC Director shall initiate search and rescue efforts to locate missing personnel identified by the security computer.

6.3.2 Personnel who remain onsite following a plant evacuation are also to be accounted for on a continuous basis throughout an emergency.

- A. Continuous Accountability control points shall be established at entry/exit points to the Administration Building, Maintenance Facility and Control Rooms.
- B. Personnel entering or leaving the Administration Building or Control Rooms are responsible to record their relocation on Form 1903.030A, "Onsite Continuous Accountability Log".
- C. Accountability information for onsite personnel who are not assembled in the Administration Building, Maintenance Facility or Control Rooms can be obtained from the ERO member responsible for that particular task as described in section B of the Emergency Plan and the Emergency Response Facility Procedures - 1903.064, 1903.065, 1903.066 and 1903.067 (e.g., information on Nuclear Chemistry personnel can be obtained from the Nuclear Chemistry Manager.)
  - 1. Additional information for onsite personnel, including their department and the individual responsible for them while onsite, can be obtained through the Support Manager.

#### 6.4 FOLLOW-UP ACTIONS

- 6.4.1 Determine if any Emergency Action Level criteria have been exceeded. (Refer to 1903.010, "Emergency Action Level Classification")
- 6.4.2 Personnel (other than emergency response personnel) in the Controlled Access Areas should proceed to the Controlled Access points and monitor themselves, if possible, or follow HP instructions at the Controlled Access points prior to exiting.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 2 of 24 REV: 21 CHANGE:
---------------------------------	--	-------------------------------------

- 6.4.3 Personnel other than the emergency response personnel should proceed to their respective guard house, turn in their personnel I.D. badge and their personnel dosimetry badge (TLD), exit the plant and proceed home or as directed by State and local authorities.
- 6.4.4 Security personnel should implement evacuation and personnel accountability measures per Procedure 1043.034, "Security at ANO and the EOF During an Emergency".
- 6.4.5 If there are person(s) unaccounted for following a plant evacuation, the Shift Superintendent/TSC Director shall direct personnel to search for unaccounted individual(s).
- 6.4.6 When conditions have been determined to no longer require evacuation, the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) may terminate the localized, exclusion area and/or plant evacuation. Termination of evacuations involving offsite areas must be coordinated with ADH personnel.

#### 6.5 Evacuation of the Technical Support Center and Operational Support Center

The Technical Support Center (TSC) and the Operational Support Center (OSC) are normally not evacuated in the event of a Plant Evacuation. The Onsite Radiological Monitoring Section of the Emergency Radiation Team shall monitor radiation levels while the centers remain occupied. However, if the following symptoms are observed in the TSC/OSC, actions should be taken in accordance with Sections 6.5.2 and 6.5.3.

##### 6.5.1 Symptoms

- A. Area radiation levels above 2.5 mRem/hr.
- B. Unevaluated airborne radioactivity  $>9E^{-10}$   $\mu\text{Ci/cc}$ .

##### 6.5.2 Immediate Action

- A. Notify the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) of the above condition(s).
- B. The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) should determine if the condition warrants further protective actions in accordance with Section 6.5.3. Attachment 1 is provided for action guidance.

##### 6.5.3 Follow-Up Actions

- A. The Onsite Radiological Monitoring Section of the Emergency Radiation Team should increase surveillance of airborne radioactivity to once per hour.
- B. The Onsite Radiological Monitoring Section of the Emergency Radiation Team should determine the dose rates in the area approximately every 15 minutes. Projected personnel accumulated doses should be evaluated and appropriate stay times should be established.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 10 of 24 REV: 21 CHANGE:
---------------------------------	--	--------------------------------------

NOTE

If necessary, additional respiratory protection equipment should be obtained from the Onsite Radiological Monitoring Section of the Emergency Radiation Team.

- C. If the iodine concentration exceeds  $2.7E^{-9}$   $\mu\text{Ci/cc}$ , an occupancy log must be kept to record DAC hours. If the iodine concentration exceeds 4 DAC ( $8.0E^{-8}$   $\mu\text{Ci/cc}$ ), respiratory protection or evacuation is required.
- D. If the radiation level is greater than 100 mRem/hr but less than 1 Rem/hr:
  - 1. 30 minutes may be allowed to determine if it is a temporary condition or a long-term condition.
  - 2. If it is determined that a temporary condition exists, evaluate the projected personnel accumulated dose.
  - 3. If it is determined that a long-term condition exists, evacuation of the Technical Support Center and Operational Support Center will be required.
- E. If radiation levels reach 1 Rem/hr, immediate evacuation of the Technical Support and Operational Support Center is required.
- F. If the Technical/Operational Support Centers are evacuated, Technical/Operational Support Center personnel should relocate to the EOF (use west end, ground floor entrance).

NOTE

After relocation to the Secondary TSC/OSC, Emergency Team Leaders are responsible for reporting accountability of team personnel to their supervisors. Each TSC/OSC staff person is responsible for accounting himself to their supervisors. Each manager shall report accountability information to the TSC Support Superintendent.

- G. If the Technical/Operational Support Centers are evacuated, security personnel should implement evacuation and personnel accountability measures per Procedure 1043.034. "Security at ANO and the EOF During an Emergency".
- H. Accountability results of emergency personnel should be reported to the TSC Director at the EOF, or to the Shift Superintendent if the TSC Director cannot be readily contacted.

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 11 of 24 REV: 21 CHANGE:
---------------------------------	--	--------------------------------------

- I. \*The Security Shift Commander, except for Control Room personnel, should be the last to exit the plant to assure security and accountability actions have been completed. They should advise the Shift Superintendent of the affected unit upon their exit of the plant.\*
- J. When a Technical/Operational Support Center evacuation is declared, the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) should consider the need for an Exclusion Area Evacuation per Section 6.1.3 if not already declared.

#### 6.5.4 Immediate Evacuation of TSC/OSC

- A. The TSC Director should verify the need for and declare an immediate evacuation of the Technical/Operational Support Centers when symptoms occur which require such action per Section 6.5.3.E.
- B. The TSC Director should contact the Main Guard Station and the Shift Superintendent to advise that an immediate evacuation has been declared.
- C. The TSC Director should ensure that an evacuation announcement is made over the Public Address System, and the plant evacuation alarm is sounded. The TSC Director should determine, at his discretion, the affected personnel to whom the announcement applies.

#### NOTE

The evacuation announcement should state: "An immediate evacuation of Technical Support Center and Operational Support Center personnel has been declared. (Affected personnel) implement evacuation procedures. (Affected personnel) relocate to the EOF via (designated evacuation route)." (This announcement and the evacuation alarm should be repeated several times, if possible).

- D. All Technical/Operational Support personnel should gather essential materials (e.g. log books, status sheets, drawings in-use, etc.) and equipment (e.g. SCBA's, survey meters, protective clothing, etc.) and evacuate their respective areas without further delay.
- E. Prior to his relocation to the Secondary Technical Support Center, the TSC Director may, at his discretion, transfer his duties to the following individual who will function as interim TSC Director:
  - 1. If the Emergency Operations Facility is not activated, the Shift Superintendent of the affected unit may temporarily assume the TSC Director duties; or

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: <b>EVACUATION</b>	PAGE: 12 of 24 REV: 21 CHANGE:
---------------------------------	---	--------------------------------------

2. If the Emergency Operations Facility is operational, then a turnover of emergency functions to the EOF Director shall be performed in accordance with procedure 1903.065.
- F. After transferring these duties to the appropriate individual, the TSC Director should evacuate in accordance with Section 6.5.3.I.
- G. Upon arrival at the Secondary Technical Support Center, the TSC Director should establish communications with the interim TSC Director to receive a status update and to reassume Emergency Coordinator duties.
- H. Emergency response personnel should report to their preassigned work areas in the Emergency Operations Facility, unless directed otherwise, (see Procedure 1903.067, "Emergency Response Facility - Emergency Operations Facility (EOF)", for room assignments).
- I. The TSC Director should ensure that the NRC and State authorities are advised of the relocation to and operational status of the Secondary Technical/Operational Support Center(s).
- J. The TSC Director should advise the Shift Superintendent when the Secondary Technical Support Center is functional.
- K. The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) must approve reentry into the plant until the evacuation is terminated.
- L. When the plant is determined to have returned to a condition where the TSC/OSC evacuation is no longer required, the TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) may terminate the TSC/OSC evacuation.

#### 6.5.5

#### Precautionary Evacuation of TSC/OSC

- A. The TSC Director should verify the need for and declare a precautionary evacuation of the Technical/Operational Support Centers when symptoms occur which require such action per Section 6.5.3.C and/or 6.5.3.D.
- B. The TSC Director should contact the Main Guard Station and Shift Superintendent and advise them that a precautionary evacuation has been declared.
- C. The TSC Director should ensure that an evacuation announcement is made over the Public Address System, and the plant evacuation alarm is sounded. The TSC Director should determine, at his discretion, the affected personnel to whom the announcement applies.



PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 13 of 24 REV: 21 CHANGE:
---------------------------------	--	--------------------------------------

NOTE

The evacuation announcement should state: "A Precautionary Evacuation of Technical Support Center and Operational Support Center personnel has been declared. (Affected personnel) implement evacuation procedures. (Affected personnel) relocate to the EOF via (designated evacuation route)." (This announcement and the evacuation alarm should be repeated several times, if possible.)

- D. All Technical/Operational Support personnel shall gather necessary materials (e.g. log books, status sheets, drawings in-use, etc.) and equipment (e.g. SCBA's, survey meters, protective clothing, etc.) and evacuate their respective areas as instructed by the TSC Director per Section 6.5.5.E.
- E. A precautionary evacuation of the TSC/OSC should be accomplished by relocating a primary and a secondary group of emergency response personnel as identified in Attachment 2, or as otherwise designated by the TSC Director. The secondary TSC/OSC group should evacuate first; the primary group should evacuate upon the direction of the TSC Director, if practical after the secondary group is in place at the EOF. \*Security personnel will normally evacuate with the primary group\*.
- F. Prior to his relocation to the Secondary Technical Support Center, the TSC Director may, at his discretion, transfer his duties to the following individual who will function as interim TSC Director:
  - 1. Shift Superintendent, as deemed necessary if the TSC Director is in a situation such that he could not perform TSC Director duties during the TSC to Secondary TSC transition, and if the EOF is not activated; or
  - 2. EOF Director, if EOF is activated.
- G. After transferring these duties to the appropriate individual, the TSC Director and the primary TSC group should evacuate in accordance with Section 6.5.3.I.
- H. Upon arrival at the Secondary Technical Support Center, the TSC Director should establish communications with the interim TSC Director to receive a status update and to reassume Emergency Coordinator duties.
- I. Emergency response personnel should report to their preassigned work areas in the EOF, unless directed otherwise. (See procedure 1903.067, "Emergency Response Facility - Emergency Operations Facility (EOF)" for room assignments.)

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 14 of 24 REV: 21 CHANGE:
---------------------------------	--	--------------------------------------

- J. The TSC Director should ensure that the NRC and State Emergency Operation Centers are advised of the relocation to and operational status of the Secondary Technical/Operational Support Center(s).
- K. The TSC Director should advise the Shift Superintendent when the Secondary Technical Support Center is functional.
- L. The TSC Director (or the affected unit's Shift Superintendent if the TSC Director is not available) must approve reentry into the plant until the evacuation is terminated.
- M. When the plant is determined to have returned to a condition where the plant evacuation is no longer required, the TSC Director may terminate the plant evacuation.

NOTE  
INFORMATION CONTAINED WITHIN THE SYMBOLS (\*) IS PROPRIETARY OR PRIVATE INFORMATION

#### 6.6 EOF EVACUATION

- 6.6.1 See Procedure 1903.034, "Emergency Operations Facility Evacuation"

#### 6.7 ROAD BLOCKS

- 6.7.1 Road blocks restricting access to ANO should be manned by at least one ANO Security Officer. The ANO Security Officer should be capable of making radio contact with the Security Shift Commander. The Security Shift Commander shall obtain verbal approval from the Shift Superintendent/TSC Director or the EOF Director before allowing passage of individual(s) who are not part of the response organization.

#### 7.0 ATTACHMENTS AND FORMS

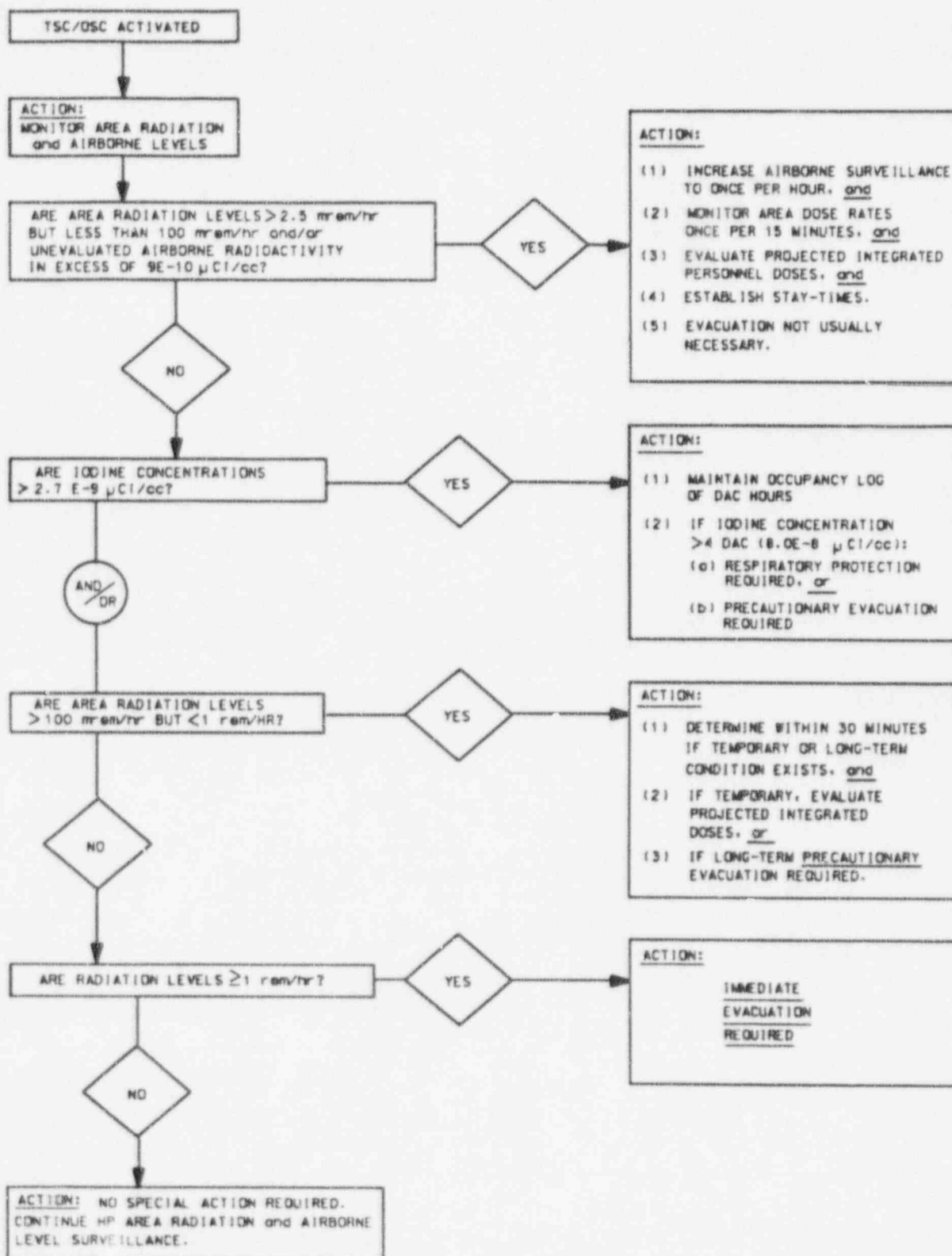
- 7.1 Form 1903.30A - Onsite Accountability
- 7.2 Form 1903.30B - Plant Evacuation Checklist
- 7.3 Attachment 1 - Technical and Operational Support Center Evacuation Decision Flow Chart
- 7.4 Attachment 2 - TSC/OSC Precautionary Evacuation Primary/Secondary Group Assignments

PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 15 of 24 REV: 21 CHANGE:
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ATTACHMENT 1

Technical and Operational Support Center

Evacuation Decision Flow Chart



PROC./WORK PLAN NO. 1903.030	PROCEDURE/WORK PLAN TITLE: EVACUATION	PAGE: 16 of 24 REV: 21 CHANGE:
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ATTACHMENT 2

TSC/OSC Precautionary Evacuation  
Primary/Secondary Group Assignments

(Note: TSC Director may alter assignments as he deems necessary)

Technical Support Center:

<u>Primary</u>	<u>Secondary</u>
TSC Director	Operations Manager
Engineering Manager	Maintenance Manager
	Radiation Protection and Radwaste Manager
	TSC Support Superintendent
	Assistants/Communicators
	USNRC Personnel

Operational Support Center:

<u>Primary</u>	<u>Secondary</u>
As determined by the TSC Director	All OSC personnel not designated by the TSC Director to remain onsite.

1. Minimal staffing for a recovery team, considering on-going or short term repair requirements, and to include at least one HP and one medical team member.
2. Minimal security personnel as recommended by the Security Shift Supervisor/Security Coordinator.



Section 1 - Evacuation Determination (TSCD or Shift Superintendent).  
 Section 2 - Evacuation Preparation (TSCD or Shift Superintendent).  
 Section 3 - Evacuation Announcement Instructions (Shift Superintendent).

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SECTION 1

CIRCLE ONE

This section should be used to determine if a plant evacuation is advisable, based on the following steps.

1.0 Determine if any Initiating Conditions listed below are present (then proceed to step 2).

- |  |     |    |
|--|-----|----|
| 1.1 Site Area or General Emergency has been declared.  | Yes | No |
| 1.2 General area radiation levels outside of a Radiologically Controlled Area exceeds 2.5 mRem/hr, which is attributed to a <u>loss of control</u> of radioactive material and the threat cannot be confined to a well-defined area. | Yes | No |
| 1.3 Unevaluated airborne radioactivity exceeds 9E-10 $\mu$ Ci/cc, which is attributed to a <u>loss of control</u> of radioactive material and the threat cannot be confined to a well defined area.                                  | Yes | No |
| 1.4 An uncontrolled toxic gas leak (originating either on-site or off-site) where the hazard is not confined to a local area.  | Yes | No |

2.0 Determine if any of the Extenuating Conditions listed below, which might preclude immediate evacuation, are present (then proceed to step 3).

- |   |     |    |
|---|-----|----|
| 2.1 An ongoing security threat within the protected area (consult with the Security Shift Commander to aid in determining the safest course of action). | Yes | No |
| 2.2 Inclement weather (e.g., tornado, high winds, hazardous road conditions that may preclude a safe evacuation of plant personnel).                    | Yes | No |
| 2.3 Radiological or Hazardous Materials conditions exist which would subject evacuees to higher exposure/risk to personnel safety.                      | Yes | No |
| 2.4 Other hazards exist which might subject evacuees to a higher risk to personnel safety.  | Yes | No |

FORM TITLE:	FORM NO.	REV.
PLANT EVACUATION CHECKLIST	1903.030B	21



CIRCLE ONE

- 3.0 COMPARE the risks presented by on-site and near-site conditions (identified in Sections 1.0 and 2.0) with the risks associated with evacuation of non-essential personnel.

THEN select the action listed below which presents the MINIMUM RISK to personnel safety.

IF plant conditions present NO RISK to on-site personnel,  
THEN select 3.2 below.

- |     |   |     |    |
|-----|---|-----|----|
| 3.1 | If <u>EVACUATE</u> non-essential personnel is selected,<br>proceed to Section 2.                    | Yes | No |
| 3.2 | If <u>NOT EVACUATE</u> non-essential personnel is selected,<br>proceed to Step 4.0 of this section. | Yes | No |

## 4.0 NO PLANT EVACUATION

INITIALS/TIME

- 4.1 IF a plant evacuation WILL NOT be initiated, AND A Site Area or General Emergency has been declared, make the following announcement over the plant page (dial 197):

"Attention all personnel. Attention all personnel. A \_\_\_\_\_ (Site Area Emergency/General Emergency) has been declared on Unit \_\_\_\_\_ (One/Two). Emergency response personnel report to your designated assembly areas (or "continue emergency response activities", as appropriate). All other personnel continue normal activities unless instructed otherwise."

- A. Repeat the announcement using the EOF paging system (dial 199 and pause approximately 15 seconds).

- 4.2 Ensure that the conditions which prompted the potential evacuation are periodically monitored and re-evaluated.

(END OF SECTION 1)

FORM TITLE:	PLANT EVACUATION CHECKLIST	FORM NO.	1903.030B	REV.	21
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## SECTION 2

INITIALS/TIME

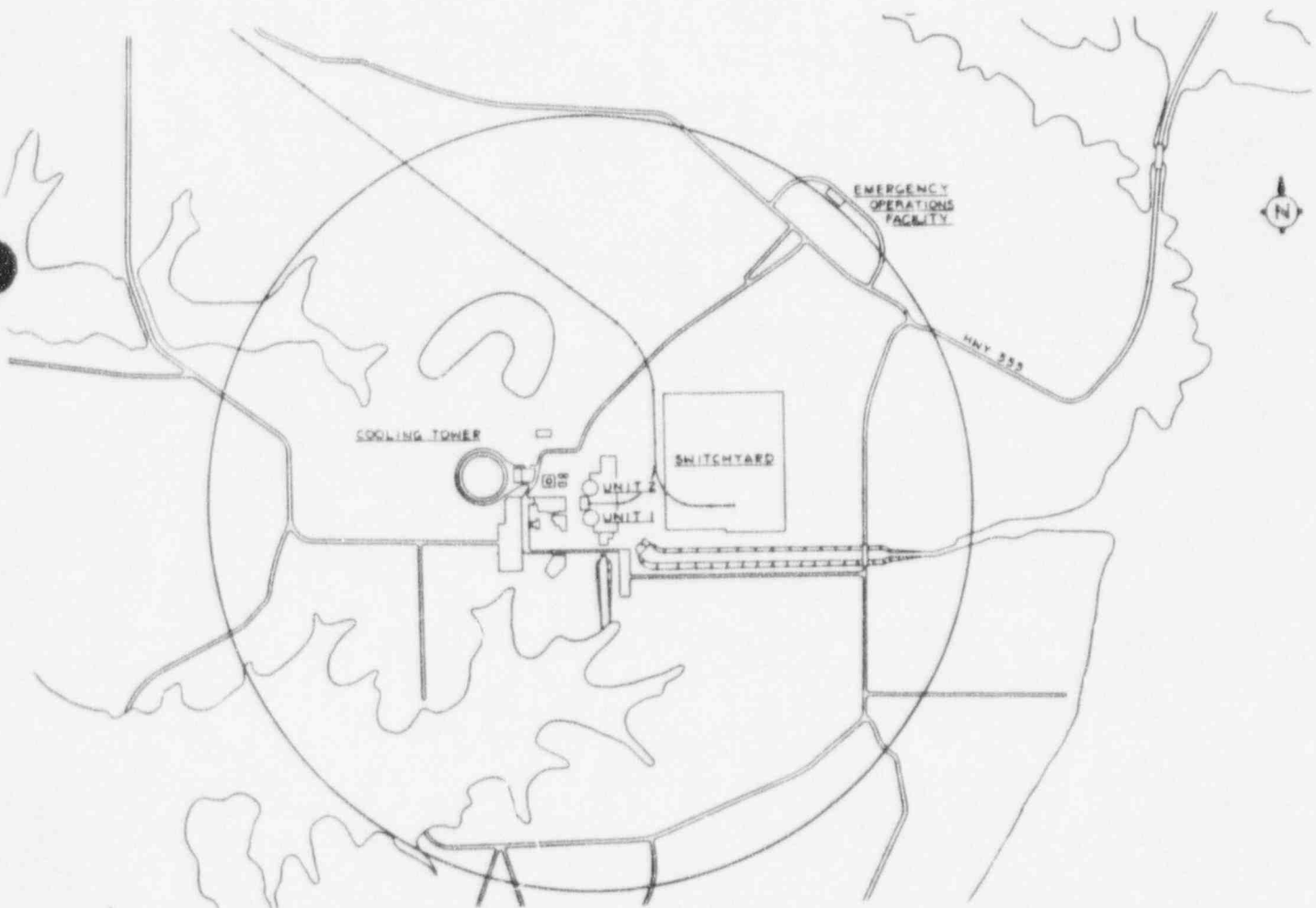
This section is used to prepare for a plant evacuation.

1. Determine the appropriate evacuation route(s) based on symptoms and wind direction (see map below).

Evacuation route(s) to be used (circle one):

Route 1      Route 2      Both (routes 1 and 2)

ANO Emergency Operations Facility Location & Site Evacuation Routes



NOTE: Circumference denotes Exclusion Area boundary (0.65 mile radius)

FORM TITLE:	FORM NO.	REV.
PLANT EVACUATION CHECKLIST	1903.030B	21

2. Determine if any areas of the plant should be avoided during evacuation.

Plant areas to be avoided (or none): \_\_\_\_\_

3. Determine any other special protective measures that should be taken by plant evacuees (such as ad hoc respiratory protection, etc.).

Special protective measures necessary (or none): \_\_\_\_\_

4. Contact Security and direct them to perform initial accountability. \_\_\_\_\_ /

5. Contact Health Physics:

5.1 Request HP coverage at the portal monitors located at plant exit locations. \_\_\_\_\_ /

5.2 If necessary, instruct HP personnel at the controlled access exit point to relax decontamination/radiation protection measures in order to expedite evacuation of the controlled access area.

6. Choose the appropriate announcement to be made by Control Room personnel. (circle one) A B

6.1 For a plant evacuation due to declaration of a Site Area Emergency (SAE) or General Emergency (GE), choose announcement "A".

A. "Attention all personnel. Attention all personnel. A \_\_\_\_\_ (Site Area Emergency/General Emergency) has been declared on Unit \_\_\_\_\_ (One/Two). All emergency response and emergency standby personnel report to your assembly areas immediately. All other personnel evacuate the plant and proceed home or as directed by offsite authorities."

(If applicable, also give the evacuation route(s) to be used and/or any other special protective measures while taking into consideration that several emergency response personnel may be responding to the EOF from the plant.)

FORM TITLE:	PLANT EVACUATION CHECKLIST	FORM NO.	1903.030B	REV.	21
-------------	----------------------------	----------	-----------	------	----

- 6.2 For a plant evacuation due to a reason other than declaration of a SAE or GE, choose announcement "B"

B. "Attention all personnel. Attention all personnel. A plant evacuation has been declared on Unit \_\_\_\_\_ (One/Two). All emergency response and emergency standby personnel report to your assembly areas immediately. All other personnel evacuate the plant and proceed home or as directed by offsite authorities."

(If applicable, also give the evacuation route(s) to be used and/or any other special protective measures while taking into consideration that several emergency response personnel may be responding to the EOF from the plant.)

7. Contact the Shift Superintendent of the affected unit and direct him to refer to Section 3 of this checklist to coordinate making the evacuation announcement and sounding the evacuation alarm. \_\_\_\_\_/

7.1 Direct the Shift Superintendent to make the announcement chosen in Step 6.

7.2 Provide information about the evacuation route(s) and/or special protective actions to be taken by plant evacuees.

8. Direct the ERO staff to log in at a security card reader using "0000". \_\_\_\_\_/

9. If the incident extends into Exclusion Area Evacuation, the Shift Superintendent or the TSC Director shall perform the following: \_\_\_\_\_/

9.1 Contact the U.S. Corps of Engineers (Section 6 of the Emergency Telephone Directory) to request that boat access to the portions of Lake Dardanelle within the exclusion area be controlled.

9.2 Direct Security to evacuate the Generation Support Building (GSB) and all buildings outside of the security fence but within the exclusion area.

Performed by: \_\_\_\_\_/\_\_\_\_\_  
(Signature) (Position)

(END OF SECTION 2)

FORM TITLE:	FORM NO.	REV.
PLANT EVACUATION CHECKLIST	1903.030B	21

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SECTION 3

This section contains tasks that should be completed from the control room.

1. Evacuation announcement to be made (circle one): A      B            /

A. "Attention all personnel. Attention all personnel. A  
(Site Area Emergency/General Emergency) has  
been declared on Unit \_\_\_\_\_ (One/Two). All emergency  
response and emergency standby personnel report to your  
assembly areas immediately. All other personnel evacuate  
the plant and proceed home or as directed by offsite  
authorities."

If necessary, include in the announcement the evacuation  
route(s) and/or special protective actions to be taken by  
plant evacuees:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

B. "Attention all personnel. Attention all personnel. A plant  
evacuation has been declared on Unit \_\_\_\_\_ (One/Two). All  
emergency response and emergency standby personnel report  
to your assembly areas immediately. All other personnel  
evacuate the plant and proceed home or as directed by  
offsite authorities."

If necessary, include in the announcement the evacuation  
route(s) and/or special protective actions to be taken by  
plant evacuees:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. Make the appropriate announcement via the plant paging system  
(dial 197).       /
3. Make the appropriate announcement via the EOF paging system (dial  
199 and pause approx. 15 seconds).       /
4. Sound the plant evacuation alarm for approximately 20 seconds.       /

FORM TITLE:	PLANT EVACUATION CHECKLIST	FORM NO.	1903.030B	REV.	21
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5. Repeat the appropriate announcement in a slow, clear tone of voice several times, alternating the announcement with the sounding of the plant evacuation alarm. \_\_\_\_\_ /
6. Instruct control room personnel from both units to log in to the designated security card reader using "0000". \_\_\_\_\_ /

Performed by: \_\_\_\_\_ /  
(signature) (position)

Date: \_\_\_\_\_

(END OF SECTION 3)

FORM TITLE: <b>PLANT EVACUATION CHECKLIST</b>	FORM NO. <b>1903.030B</b>	REV. <b>21</b>
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