

ENGINEERING CHANGE NOTICE

Page 1 of 41. ECN 634415
Proj. ECN

2. ECN Category (mark one)	3. Originator's Name, Organization, MSIN, and Telephone No. W. F. White, Cognizant Engineer, T4-20, 376-8925	4. USQ Required? [X] Yes <input type="checkbox"/> No	5. Date 5/12/97
<input type="checkbox"/> Supplemental <input type="checkbox"/> Direct Rev. <input type="checkbox"/> Change ECN <input type="checkbox"/> Temporary <input type="checkbox"/> Standby <input type="checkbox"/> Supersedure <input type="checkbox"/> Cancel/Void	6. Project Title/No./Work Order No. Definition and Means of Maintaining the Criticality Detectors and Alarms Portion of the PFP Safety Envelope	7. Bldg./Sys./Fac. No. PFP Complex	8. Approval Designator SQ
	9. Document Numbers Changed by this ECN (includes sheet no. and rev.) HNF WHC-SD-CP-SDD-003, Rev. '3	10. Related ECN No(s). N/A	11. Related PO No. N/A
12a. Modification Work <input type="checkbox"/> Yes (fill out Blk. 12b) <input checked="" type="checkbox"/> No (NA Blks. 12b, 12c, 12d)	12b. Work Package No. N/A	12c. Modification Work Complete N/A <hr/> Design Authority/Cog. Engineer Signature & Date	12d. Restored to Original Condition (Temp. or Standby ECN only) N/A <hr/> Design Authority/Cog. Engineer Signature & Date

13a. Description of Change

This change is an update of the supporting document.

See attached USQ.

14a. Justification (mark one)

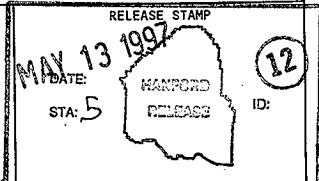
Criteria Change <input type="checkbox"/>	Design Improvement <input type="checkbox"/>	Environmental <input type="checkbox"/>	Facility Deactivation <input type="checkbox"/>
As-Found <input checked="" type="checkbox"/>	Facilitate Const <input type="checkbox"/>	Const. Error/Omission <input type="checkbox"/>	Design Error/Omission <input type="checkbox"/>

14b. Justification Details

Revision 0-G of LCO 3.1.2 has not yet been approved by the U.S. Department of Energy-Richland Operations Office, therefore, revision 3 is not an RL approved SDD. Revision 4 is the correct supporting document being released.

15. Distribution (include name, MSIN, and no. of copies)

See Distribution Sheet



ENGINEERING CHANGE NOTICE				Page 2 of 2	1. ECN (use no. from pg. 1) 634415
16. Design Verification Required [] Yes [X] No	17. Cost Impact N/A ENGINEERING Additional Savings [] \$	CONSTRUCTION Additional Savings [] \$	18. Schedule Impact (days) Improvement Delay [] N/A []		
19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.					
SDD/DD	Seismic/Stress Analysis []	Tank Calibration Manual []			
Functional Design Criteria	Stress/Design Report []	Health Physics Procedure []			
Operating Specification	Interface Control Drawing []	Spares Multiple Unit Listing []			
Criticality Specification	Calibration Procedure []	Test Procedures/Specification []			
Conceptual Design Report	Installation Procedure []	Component Index []			
Equipment Spec.	Maintenance Procedure []	ASME Coded Item []			
Const. Spec.	Engineering Procedure []	Human Factor Consideration []			
Procurement Spec.	Operating Instruction []	Computer Software []			
Vendor Information	Operating Procedure []	Electric Circuit Schedule []			
OM Manual	Operational Safety Requirement []	ICRS Procedure []			
FSAR/SAR	IEFD Drawing []	Process Control Manual/Plan []			
Safety Equipment List	Cell Arrangement Drawing []	Process Flow Chart []			
Radiation Work Permit	Essential Material Specification []	Purchase Requisition []			
Environmental Impact Statement	Fac. Proc. Samp. Schedule []	Tickler File []			
Environmental Report	Inspection Plan []	N/A [X]			
Environmental Permit	Inventory Adjustment Request []				
20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.					
Document Number/Revision	Document Number/Revision	Document Number/Revision			
N/A					
21. Approvals					
Design Authority Cog. Eng. WF White Cog. Mgr. GA Glover QA <i>W. J. G.</i> Safety S.E. NW NW Environ. Other PSP Ops. J.P. King <i>J. P. King</i>	Signature <i>3. W. White</i> <i>GA Glover</i> <i>W. J. G.</i> <i>S. E. NW NW</i> <i>J. P. King</i>	Date <u>5/12/97</u> <u>5/12/97</u> <u>5-12-97</u> <u>5/12/97</u> <u>5/12/97</u> <u>5/12/97</u> <u>5/12/97</u>	Design Agent PE QA Safety Design Environ. Other Signature <u>5/12/97</u>	Date <u>5/12/97</u> <u>5/12/97</u> <u>5/12/97</u> <u>5/12/97</u> <u>5/12/97</u> <u>5/12/97</u> <u>5/12/97</u>	
DEPARTMENT OF ENERGY Signature or a Control Number that tracks the Approval Signature					
<u>ADDITIONAL</u>					

UNREVIEWED SAFETY QUESTION (USQ)
SCREENING AND EVALUATION

1. Identification Number: ECN 634415	USQ SCREENING	Page 1 of 2
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2. Title: WHC-SD-CP-SDD-003, "Definition and means of maintaining the Criticality Detectors and Alarms Portion of the PFP Safety Envelope"

DESCRIPTION

The changes to this supporting document clarify statements and update the current status of the system.

INSTRUCTIONS: Respond to each question and provide justification for each response. A restatement of the question does not constitute a satisfactory justification or basis. An adequate justification provides sufficient explanation such that an independent reviewer could reach the same conclusion based on the information provided [DOE 5480.21, 10.e.1].

QUESTIONS

1. Does the proposed change or occurrence represent a change to the facility or procedures as described in the Authorization Basis?
[] N/A No [] Yes/Maybe

BASIS: The changes described are administrative in nature, WHC-SD-CP-OSR-010, "PFP Operating Safety Requirements," Appendix A, "Bases," Section B 3.1 "Criticality Safety System," describes the bases for the LCO's and the surveillance requirements. The changes described do not affect these bases.

2. Does the proposed change or occurrence represent conditions that have not been analyzed in the Authorization Basis?
[] N/A No [] Yes/Maybe

BASIS: There are no physical changes. The accident scenarios in Chapter 9 of the PFP FSAR (WHC-SD-CP-SAR-021) are not affected by the changes described.

3. Does the proposed change represent a test or experiment NOT described in the Authorization Basis that may affect the safe operation of the facility?
 N/A [] No [] Yes/Maybe

BASIS: Test and experiments are not involved.

4. Does the proposed change or occurrence represent a change to the Technical Safety Requirements or a reduction in the margin of safety defined in the Technical Safety Requirements?
[] N/A No [] Yes/Maybe

BASIS: No changes which will affect the OSR (WHC-SD-CP-OSR-010), LCO's, or SRs are involved.

UNREVIEWED SAFETY QUESTION (USQ)
SCREENING AND EVALUATION

1. Identification Number: ECN 634415	USQ SCREENING	Page 2 of 2
2. Title: WHC-SD-CP-SDD-003, "Definition and means of maintaining the Criticality Detectors and Alarms Portion of the PFP Safety Envelope"		

USQE #1 L. E. Edvalson
(Print Name)USQE #2 G. A. Glover
(Print Name)

Signature

Date: 5/12/97



Signature

Date: 5/12/97

If there is a YES/MAYBE response to questions 1, 2, 3, or 4, then a USQ Evaluation must be completed.

The following guidance should be considered when completing this screening. This guidance should not be considered all-inclusive; additional factors may need to be considered depending on the nature of the proposed change.

Does the proposed change:

- 1) Modify, add, or delete a safety class function of a structure, system or component stated in the authorization basis?
- 2) Alter the design of a structure, system or component as described in the authorization basis?
- 3) Modify, add, or delete the description of operation, operating environment, or analyses of any system or component described in the authorization basis?
- 4) Modify, add, delete or conflict with any of the design bases stated in the authorization basis?
- 5) Conflict with the principle or general design criteria stated in the authorization basis?
- 6) Modify, add, or delete any plant design features described in the authorization basis?
- 7) Modify, add, or delete a flow diagram or facility drawing provided in the authorization basis?
- 8) Create the potential for new system or component interactions (e.g., seismic, electrical breaker coordination)?

DEFINITION AND MEANS OF MAINTAINING THE CRITICALITY DETECTORS AND ALARMS PORTION OF THE PFP SAFETY ENVELOPE

W. F. White

Babcock and Wilcox Hanford Co., Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

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Org Code: 15510 Charge Code: K6058
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Key Words: Criticality Alarm System, Authorization Basis, Safety Envelope, OSR, TSR

Abstract: The Criticality Alarm System (CAS) provides continuous detection for high radiation (criticality) events, and automatically initiates an evacuation signal to affected personnel. The Safety Envelope (SE) for PFP includes the necessary equipment and the required procedures to ensure the CAS is capable of performing its intended function.

This document provides the definition and means of maintaining the SE for PFP related to the CAS. This document also identifies and provides a justification for those portions of the CAS excluded from the PFP Safety Envelope.

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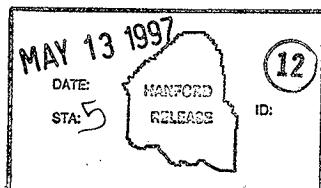
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Release Approval

5/13/97
Date



Release Stamp

Approved for Public Release

RECORD OF REVISION

(1) Document Number

Page 1

(2) Title

Definition and Means of Maintaining the Criticality Detectors and Alarms Portion of the PFP Safety Envelope

CHANGE CONTROL RECORD

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1.0. INTRODUCTION

The purpose of this document is to provide the definition and means of maintaining the Safety Envelope (SE) related to the Criticality Alarm System (CAS). This document provides amplification of the Limiting Condition for Operation (LCO) described in the Plutonium Finishing Plant (PFP) Operational Safety Requirements (OSR), WHC-SD-CP-OSR-010, Rev. 0, 1994, Section 3.1.2, "Criticality Detectors and Alarms."

This document, with its appendices, provides the following:

1. System functional requirements for determining system operability (Section 3).
2. A list of annotated system block diagrams which indicate the safety envelope boundaries (Appendix C).
3. A list of the Safety Class 1 and 2 Safety Envelope (SC-1/2 SE) equipment for input into the Master Component Index (Appendix B).
4. Functional requirements for individual SC-1/2 SE components, including appropriate setpoints and process parameters (Section 6 and Appendix A).
5. A list of the operational, maintenance and surveillance procedures necessary to operate and maintain the SC-1/2 SE components as required by the LCO (Section 6 and Appendix A).

2.0. BACKGROUND

The CAS provides continuous detection for high radiation (criticality) events and automatically initiates an evacuation signal to affected personnel. The CAS also establishes the approximate time of the criticality event.

There are two methods used to detect a criticality event at PFP. A gamma detection system is the predominant method and is used throughout the facility. In addition, a neutron detection system is used in the 2736-Z Building. Criticality detection is divided into 9 zones within the PFP complex. Each zone is serviced by several detectors, a criticality alarm panel, backup power supply, and annunciators.

Eight of these zones (1 through 7 and 9) are intertied such that the detection of a criticality event by one criticality alarm panel initiates evacuation signals in all eight zones. Zone 8 services the 241-Z Building, which is physically separate from the rest of the

facility, and is not intertied to the other zones. Additional descriptions of the zones, criticality alarm components, and associated testing and calibration requirements are contained in WHC-IP-1115, Nuclear Criticality Alarm Manual for PFP.

3.0. SYSTEM REQUIREMENTS

3.1. COVERAGE REQUIREMENTS

WHC-CM-4-29, Section 11 requires a CAS to be installed and maintained operational for all fissionable material facilities and for fissionable material outside the core of nuclear reactor facilities, unless one of the following criteria is met:

1. A CAS is not required when a documented safety analysis shows that it is not needed due to the physical form and isotopic distribution of fissionable material. Such analyses shall be approved by the independent safety review organization.
2. A CAS is not required when intervening shielding ensures that the maximum calculated dose in occupied locations will not exceed 25 rems whole body exposure or equivalent from the maximum accident of concern. Detection without facility evacuation is required in shielded areas in accordance with WHC-CM-4-29, Nuclear Criticality Safety Manual, Section 11.0, "Criticality Alarm System," Subsection 5.2.2, "Shielded Areas."
3. A CAS is not required when fissionable material packaging/shipping requirements have been complied with, and the material is either awaiting transport or in route in sealed, approved shipping containers.

PFP Operational Safety Requirement, LCO 3.1.2, "Criticality Detectors and Alarms" implements these requirements for PFP.

3.2. FUNCTIONAL REQUIREMENTS

WHC-CM-5-8, PFP Administration, Section 3.2, "Criticality Alarm System;" and WHC-CM-4-29, Section 11 require that the design, location and setpoint adjustment of the CAS shall provide detection of a criticality event and automatically signal evacuation immediately. Additionally, WHC-CM-4-29, Section 11, paragraph 5.3, requires that each system shall include monitoring circuits to detect a malfunction or loss of primary power. Malfunction or power loss shall be indicated by visual and/or

audible signals. The status of the system shall be constantly indicated in a designated, occupied location.

3.3. OPERABILITY REQUIREMENTS

Minimum operability of the CAS is defined as two functional detector/module pairs within one detector station (normally consisting of three detector/module pairs) provided all other SE components are functional. WHC-CM-5-8, Section 3.2, Subsection 4.4, "Operability" further defines the operability requirements for the CAS.

3.4. OPERATIONAL SAFETY REQUIREMENTS

The Operational Safety Requirements associated with the criticality alarm system are contained in WHC-SD-CP-OSR-010, Section 3.1.2. The requirement for this LCO is:

LCO 3.1.2 The Criticality Alarm System (CAS) shall be OPERABLE.

3.5. DESIGN REQUIREMENTS

The design requirements for the criticality alarm system are contained in WHC-CM-4-29, Section 11, Subsection 5.3, "Design Requirements". This document will not address compliance to all the design requirements. Only the components necessary to fulfill OSR requirements are addressed. The CAS is designed such that 2-out-of N (where $N \geq 3$) detectors must be tripped to initiate a criticality evacuation signal. The system contains audio and visual alarm annunciators necessary to inform affected personnel of the need to evacuate. The system also includes monitoring circuits to detect malfunction or loss of power and will automatically switch to backup power in the event of loss of normal power.

4.0. SAFETY ENVELOPE EQUIPMENT

Safety Class 1 and 2 Safety Envelope (SC-1/2 SE) equipment are those components necessary to ensure the CAS is capable of performing its minimum functional requirements as specified in Section 3.0 of this document. This is in support of LCO 3.1.2.

The block diagram defining the CAS SC-1/2 SE boundary is shown on drawing H-2-28883, Sheet 1, "Criticality Alarm System Block Diagram and Drawing Index." Appendix B of this document lists the CAS SC-1/2 SE equipment by individual Zones.

**DEFINITION AND MEANS OF MAINTAINING THE
CRITICALITY DETECTORS AND ALARMS PORTION
OF THE PFP SAFETY ENVELOPE**

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SC-1/2 SE equipment included within a typical CAS Zone are the following:

1. Criticality Detector Station(s) consisting of a minimum of three criticality alarm detectors (CADs) (either gamma or neutron).
2. Criticality Alarm Panel (CAP) containing the following:
One Criticality Alarm Detection Module (CADM) per CAD
One Criticality Alarm Logic Module (CALM) serving up to six CADMs
One Criticality Alarm Relay Module (CARM)
One Audible Signal Generator (ASG)
Intertie Relay(s)
3. Evacuation Annunciators:
Criticality Alarm Horn(s) (CAH)
Criticality Alarm Flasher(s) (CAF), where required
4. Backup Power:
Battery and Battery Charger
Uninterruptible Power Supply (UPS) for CAP 7 only.
5. Transportable Criticality Alarm Systems when placed in service to satisfy requirements of LCO 3.1.2.

The CAS remote monitoring system (multiplexer (MUX) units, Criticality Alarm Annunciators (CAA), and AC power loss relays) is part of the PFP Safety Class 3 Safety Envelope (SC-3 SE). These SSCs are not essential to preventing or alarming a nuclear criticality. They provide remote indication of Criticality Alarm System operability and work with other methods to satisfy LCO 3.1.2 and ensure continued operability of the CAS. The other methods of ensuring operability include the redundancy designed into the CAS (and included in the SC-1/2 SE); the monthly, quarterly, and annual surveillances required by LCO 3.1.2; and the once per shift CAP surveillance in procedure ZO-100-400.

All of the SC-3 SE SSCs, except the loss of power relays, are functionally tested by Safety Envelope Surveillance (ZSE) procedures. An annual functional test of the loss of power relays will be developed and performed under the B631 Phase 2 Project. Also, administrative procedures require hourly CAP surveillances when the CAS remote monitoring system is not functional. These procedures help to ensure the CAS remains operable at all times.

5.0. SAFETY ENVELOPE PROCEDURES

Procedures provide administrative control over the maintenance and calibration of the Criticality Alarm System to ensure operability of safety envelope components. Procedures also provide proper responses to alerts or alarms resulting from component failure, loss of power, or the detection of a nuclear criticality.

5.1. MAINTENANCE PROCEDURES

The procedures which satisfy the surveillance requirements for maintenance calibration and functional testing of CAS safety envelope equipment are identified in Section 6.0 of this document.

Non-LCO maintenance procedures related to the CAS are:

1-ZM-008, "Functional Testing of Transportable Criticality Alarm Systems"

1-ZM-023, "Restoring Criticality Alarm System to Normal Operation After AC Power Loss- System 99A"

1-ZM-030, "Neutron Criticality Alarm System Restoration After Power Loss-System 99A"

ZSR-99A-002, "Criticality Alarm System Sound Level Test" (Refer to WHC-CM-5-8 Volume 1 section 3.2 paragraph 5.4, "Alarm Horn Sound Level Test").

This procedure provides the annual test of all the CAS horns including sound level measurements (in decibels) at specific locations within the facility. If needed, this test is performed at mid-interval (see WHC-CM-5-8 Volume 1 section 3.2 paragraph 5.4.1).

5.2. ALARM RESPONSE PROCEDURES

Response procedures for CAS alarm signals are contained in WHC-CM-5-8, Section 3.2. Actions are provided for each of the following alarm conditions:

1. CALM/CARM Alarm or Evacuation (AH-00-GAH) Signal.
2. CALM/CARM Alert.
3. Detector Failure (Yellow Indicating Light).
4. Detector Power Failure (White Indicating Light).
5. Combination of Detector/Power Failure(s).

5.3. OPERATING PROCEDURES

Operating procedure ZO-100-400, "Perform Nuclear Operations Surveillance and Responses," includes a local surveillance once each shift of each CAP to verify CAS operability.

6.0. SAFETY ENVELOPE SURVEILLANCE REQUIREMENTS

The surveillance requirements in LCO 3.1.2 for the Criticality Alarm System are:

	<u>SURVEILLANCE</u>	<u>FREQUENCY</u>
SR 3.1.2.1	VERIFY OPERABILITY of each detector and detector module response to a radiation check source.	Monthly
SR 3.1.2.2	VERIFY OPERABILITY of the CAS battery and uninterruptible power supply systems.	Monthly
SR 3.1.2.3	VERIFY actuation of Audible Sound Generator audible and visual alarms.	Quarterly
SR 3.1.2.4	VERIFY OPERABILITY of the CAS Logic and Relay Modules.	Quarterly
SR 3.1.2.5	CALIBRATE each CAS detector and detector module.	Annually

**ZSE-99A-001, "Criticality Alarm System (CAS) Check out and
Audible/Visual Alarm Test"**

This procedure is performed quarterly to verify the CAS gamma detector visual and audible alarm systems operate as designed. The procedure verifies that each Criticality Alarm Detector Module (CADM), Criticality Alarm Logic Module (CALM), Criticality Alarm Relay Module (CARM), Audible Signal Generator (ASG) and alarm horn operate properly.

Procedure ZSE-99A-001 is performed to satisfy Surveillance Requirement 3.1.2.3.

ZSE-99A-002, "Criticality Alarm System, Neutron Criticality Detector System and Alarm Functional Test"

This procedure is performed monthly to verify the CAS neutron detectors respond properly to a neutron check source. The procedure is also performed quarterly to verify the CAS neutron detector visual and audible alarm systems operate as designed.

Procedure ZSE-99A-002 is performed to satisfy Surveillance Requirements 3.1.2.1 and 3.1.2.3.

ZSE-99A-006, "Monthly Inspection of Criticality Alarm System Batteries"

This procedure is performed monthly to verify CAS Battery Systems are capable of performing as designed by measuring the electrolyte level, specific gravity and cell voltage for each cell.

Procedure ZSE-99A-006 is performed to satisfy Surveillance Requirement 3.1.2.2.

ZSE-99A-007, "Topaz UPS n Monitor - 2736-ZA In-Service-Test"

This procedure is performed monthly to verify the TOPAZ uninterruptible power supply (UPS) in building 2736-ZA operates as designed. This UPS provides an uninterruptible 115 VAC to the neutron monitors for the vaults in 2736-Z.

Procedure ZSE-99A-007 is performed to satisfy Surveillance Requirement 3.1.2.2.

Note: Both ZSE-99A-006 and ZSE-99A-007 must be completed to satisfy Surveillance Requirement 3.1.2.2.

ZSE-99A-011, "Criticality Alarm System Functional Test"

This procedure is performed monthly to verify each CAS gamma detector responds properly to a gamma check source. This procedure also verifies the proper operation of the CAS Logic and Relay Modules.

Procedure ZSE-99A-011 is performed to satisfy Surveillance Requirements 3.1.2.1 and 3.1.2.4.

ZSE-99A-021, "Criticality Alarm System Quarterly Calibration"

This procedure is performed quarterly to calibrate the CAS gamma detectors. The procedure uses a gamma calibration source to verify the proper calibration of each detector, and verifies the proper artificial background setting and the high radiation alarm setpoint.

Procedure ZSE-99A-021 is performed to satisfy Surveillance Requirement 3.1.2.5.

REFERENCES

ANSI/ANS 8.3 American National Standard, "Criticality Accident Alarm System," 1986

WHC-CM-4-29 Nuclear Criticality Safety Manual

WHC-CM-5-8 PFP Administration Manual, Section 3.2, "Criticality Alarm System"

WHC-IP-1115 Nuclear Criticality Alarm Manual PFP

WHC-SD-CP-SAR-021 Plutonium Finishing Plant Final Safety Analysis Report, Rev. 0, 1995

WHC-SD-CP-OSR-010 Plutonium Finishing Plant Operational Safety Requirements, Rev. 0, 1994

APPENDIX A

OSR LCO COMPLIANCE SHEET		
APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):		
3.1.2 Criticality Detectors and Alarms		
LCO 3.1.2 The Criticality Alarm System (CAS) shall be OPERABLE.		
APPLICABILITY: ALL MODES		
ACTIONS:		
CONDITION	REQUIRED ACTION	COMPLETION TIME
A. Single detector or detector module inoperable for any detector station.	<p>A.1 Enter MODE 2, Limited Plutonium Handling Operations in the affected area. Stop fissile material (greater than 15 grams) movements in the affected area.</p> <p><u>AND</u></p> <p>A.2 Repair or replace failed detector or detector module.</p>	<p>4 Hours</p> <p>48 Hours</p>
B. A Criticality Alarm Panel (CAP) is inoperable.	<p>B.1 Enter MODE 2, Limited Plutonium Handling Operations in the affected area. Stop (greater than 15 grams) fissile material movements in the affected area.</p> <p><u>OR</u></p> <p>B.2 -----NOTE----- Limited movement of fissile material may be resumed after a TCAS has been installed in accordance with plant procedures</p> <p>-----</p> <p>Install TCAS and limit plutonium handling in accordance with plant procedures.</p>	<p>Immediately</p> <p>Immediately</p>

OSR LCO COMPLIANCE SHEET

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

SURVEILLANCE REQUIREMENTS:

	SURVEILLANCE	FREQUENCY
SR 3.1.2.1	VERIFY OPERABILITY of each detector and detector module response to a radiation check source.	Monthly
SR 3.1.2.2	VERIFY OPERABILITY of the CAS battery and uninterruptable power supply systems.	Monthly
SR 3.1.2.3	VERIFY actuation of Audible Sound Generator audible and visual alarms.	Quarterly
SR 3.1.2.4	VERIFY OPERABILITY of the CAS Logic and Relay Modules.	Quarterly
SR 3.1.2.5	CALIBRATE each CAS detector and detector module.	Annually

APPLICABLE ACCIDENT ANALYSES (FSAR CH 9) SECTION/TITLE:

9.2 ACCIDENTS

9.2.3 Criticality

9.2.4 Seismic Event

9.2.4.11 Accident Scenarios-Criticality

APPLICABLE PLANT/PROCESS DESIGN/OPERATION DESCRIPTION(S) [FSAR CHAPTER/SECTION]:

5.0 PROCESS SYSTEMS

5.4 SERVICE AND UTILITY SYSTEMS

5.4.2 Electrical

5.4.2.2 Safety Considerations and Controls.

5.4.2.2.11 CAS.

5.4.10 Safety Communications and Alarms

5.4.10.1 Major Components and Operating Characteristics.

5.4.10.1.7 CAS.

8.0 RADIATION PROTECTION

8.3 RADIATION PROTECTION DESIGN FEATURES

8.3.4 Area Radiation and Airborne Radioactivity Monitoring Instrumentation

8.3.4.1 Criticality Monitoring System

BOUNDARY IDENTIFICATION DRAWINGS:

H-2-28883, sheet 1, CRITICALITY ALARM SYSTEM BLOCK DIAGRAM AND DRAWING INDEX

OSR LCO COMPLIANCE SHEET

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

ESSENTIAL SYSTEM DRAWINGS:

H-2-28083, sheet 9, NUCLEAR CRITICALITY ALARM SYSTEM [Bldg 2736-Z, 2736-ZA]
H-2-28883, sheet 2, CRITICALITY ALARM SYSTEM BLOCK DIAGRAM AND DRAWING INDEX
H-2-28885, sheet 7, CRITICALITY ALARM SYSTEM FOUNDATION & TUNNEL [Bldg 234-5Z]
H-2-28885, sheet 8, CRITICALITY ALARM SYSTEM FIRST FLOOR [Bldg 234-5Z]
H-2-28885, sheet 9, CRITICALITY ALARM SYSTEM DUCT LEVEL [Bldg 234-5Z]
H-2-28885, sheet 10, CRITICALITY ALARM SYSTEM SECOND FLOOR [Bldg 234-5Z]
H-2-28885, sheet 11, CRITICALITY ALARM SYSTEM ROOF [Bldg 234-5Z]
H-2-28888, sheet 2, CRITICALITY ALARM SYSTEM FLOOR PLAN [Bldg 236-Z]
H-2-80143, sheet 2, CRITICALITY ALARM SYSTEM [Bldg 2721-Z, 2736-ZB]
H-2-91823, sheet 6, CRITICALITY ALARM SYSTEM FLOOR PLAN [Bldg 241-Z]

IMPLEMENTING PROCEDURES/COMPLIANCE VERIFICATION

OPERATING: ZO-100-400, "Perform Nuclear Operations Surveillance and Responses"

LABORATORY: NONE

HEALTH PHYSICS: NONE

OPERATING SPECIFICATION(S): NONE

ADMINISTRATIVE:

WHC-CM-4-29, Nuclear Criticality Safety Manual

WHC-CM-5-8, PFP Administration Manual, Section 3.2, CRITICALITY ALARM SYSTEM

WHC-IP-1115, Nuclear Criticality Alarm Manual for PFP

WHC-5-8 Vol 1, PFP Administration Manual, Section 3.2 par. 5.4, "Alarm Horn Sound Level Test"

MAINTENANCE:

NON-LCO

1-ZM-023, "Restoring Criticality Alarm System to Normal Operation After AC Power Loss- System 99A"

1-ZM-030, "Neutron Criticality System Restoration to Battery Back-up After Power Loss-System 99A"

1-ZM-008, "Functional Testing of Transportable Criticality Alarm Systems"

OSR LCO COMPLIANCE SHEET			
APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):			
3.1.2 Criticality Detectors and Alarms			
SURVEILLANCE REQUIREMENTS	PROCEDURE NUMBER	DESCRIPTION	PROCEDURE FREQUENCY
SR 3.1.2.1	ZSE-99A-011, "Criticality Alarm System Functional Test"	Verifies gamma detectors respond properly to a check source.	Monthly
	ZSE-99A-002, "Neutron Criticality Detector System and Alarm Functional Test"	Verifies neutron detectors respond properly to a check source.	Monthly
SR 3.1.2.2	ZSE-99A-006, "Monthly Inspection of Criticality Alarm System Batteries"	Verifies battery operability.	Monthly
	ZSE-99A-007, "Topaz UPS n Monitor - 2736 ZA In-Service-Test"	Verifies UPS operability.	Monthly
SR 3.1.2.3	ZSE-99A-001, "Criticality Alarm System (CAS) Check out and Audible/Visual Alarm Test"	Verifies CAPs and alarm horn operability.	Quarterly
	ZSE-99A-002, "Neutron Criticality Detector System and Alarm Functional Test"	Verifies neutron detector visual and audible alarm operability.	Quarterly
SR 3.1.2.4	ZSE-99A-011, "Criticality Alarm System Functional Test"	Verifies proper operation of CAS Logic and Relay Modules.	Quarterly
SR 3.1.2.5	ZSE-99A-021, "Criticality Alarm System Quarterly Calibration"	Calibrates CAS gamma detectors.	Quarterly
Other: None			
NOTES/COMMENTS: None			

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**APPENDIX B
MASTER COMPONENT INDEX LISTING**

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 1

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
ASG-Z1	Audible Signal Generator. (Analog Type) Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-Z1.	Fabricated per H-2-72419	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-1A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 221A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-1B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 221A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-1C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 221A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-2A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 5.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-2B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 5.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-2C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 5.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-3A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 262.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z1-3B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 262.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z1-3C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 262.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 1

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAD-Z1-4A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 242B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-4B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 242B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-4C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 242B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-5A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 4B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-5B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 4B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-5C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Corridor 4B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-6A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 192A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-6B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 192A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z1-6C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Floor 1, Room 192A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-1A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 1

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CADM-Z1-1B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-1C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-2A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-2B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-2C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-3A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-3B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-3C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-4A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 1

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CADM-Z1-4B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-4C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-5A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-5B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-5C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-6A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-6B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z1-6C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z1.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-1	Criticality Alarm Horn. Located in Building 234-52 Corridor 2.	Audible Signaling Device; Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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ZONE 1

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAH-Z1-2	Criticality Alarm Horn. Located in Building 234-5Z Room 124.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-3	Criticality Alarm Horn. Located in Building 234-5Z Room 116.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-4	Criticality Alarm Horn. Located in Building 234-5Z Room 221E.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-5	Criticality Alarm Horn. Located in Building 234-5Z Corridor 3.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-6	Criticality Alarm Horn. Located in Building 234-5Z Corridor 242-B.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-7	Criticality Alarm Horn. Located in Building 234-5Z Corridor 4.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-8	Criticality Alarm Horn. Located in Building 234-5Z Corridor 4C.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-9	Criticality Alarm Horn. Located in 242-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-10	Criticality Alarm Horn. Located in Building 234-5Z Room 137.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAH-Z1-11	Criticality Alarm Horn. Located in Building 234-52 Room 133.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-12	Criticality Alarm Horn. Located in 242-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-13	Criticality Alarm Horn. Located outside on East wall of 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-14	Criticality Alarm Horn. Located outside on South wall of 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-15	Criticality Alarm Horn. Located in Corridor 1 of 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-16	Criticality Alarm Horn. Located outside on North wall of 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-17	Criticality Alarm Horn. Located in Building 234-52 Room 132.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-18	Criticality Alarm Horn. Located in Building 234-52 Room 221D.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-19	Criticality Alarm Horn. Located in Building 234-52 Room 221C.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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ZONE 1

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAH-Z1-20	Criticality Alarm Horn. Located in Building 234-5Z Room 221B.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z1-21	Criticality Alarm Horn. Located on Northeast Roof of 234-5Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11
CAH-Z1-22	Criticality Alarm Horn. Located on North Roof of 234-5Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11
CAH-Z1-23	Criticality Alarm Horn. Located on South Roof of 234-5Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11
CALM-Z1-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z1.	PER Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z1-2	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z1.	PER Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z1-3	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z1.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAP-Z1	Criticality Alarm Panel Zone 1. Contains the CADMs, CALMs, CARM, Inhibit switches, local (building) annunciation and Intertie relays for the Zone 1 Criticality Alarm System. Located in Building 234-5Z Corridor 2.	Relay Rack. Premier, TVA 7719-23	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CARM-Z1	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-Z1.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CBS-Z1-1	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the criticality alarm system in excess of 8 hours and charger capable of maintaining the charge on the battery and while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-Z1.	Battery: Exide Power Systems 12 or 3 CC-5 24 VDC, 100 A. Charger: Exide Power Systems SCRF 24-1-40-E 24 VDC, 40 A	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE). AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating false alarms.	Allen-Bradley # 700-C201A1	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-1A	Inhibit Switch for CAD/CADM-Z1-1A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-1B	Inhibit Switch for CAD/CADM-Z1-1B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-1C	Inhibit Switch for CAD/CADM-Z1-1C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-2A	Inhibit Switch for CAD/CADM-Z1-2A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-2B	Inhibit Switch for CAD/CADM-Z1-2B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-2C	Inhibit Switch for CAD/CADM-Z1-2C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-1-3A	Inhibit Switch for CAD/CADM-Z1-3A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-3B	Inhibit Switch for CAD/CADM-Z1-3B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-3C	Inhibit Switch for CAD/CADM-Z1-3C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-4A	Inhibit Switch for CAD/CADM-Z1-4A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-4B	Inhibit Switch for CAD/CADM-Z1-4B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-4C	Inhibit Switch for CAD/CADM-Z1-4C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-5A	Inhibit Switch for CAD/CADM-Z1-5A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-5B	Inhibit Switch for CAD/CADM-Z1-5B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-1-5C	Inhibit Switch for CAD/CADM-Z1-5C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-6A	Inhibit Switch for CAD/CADM-Z1-6A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-6B	Inhibit Switch for CAD/CADM-Z1-6B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-1-6C	Inhibit Switch for CAD/CADM-Z1-6C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z1.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg. H-2-28884)	ESSENTIAL DRAWING NUMBER
ASG-22	Audible Signal Generator. (Analog Type). Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-22.	Fabricated per H-2-72419	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z2-1A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 235A-3.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z2-1B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 235A-3.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z2-1C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 235A-3.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z2-2A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 5.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z2-2B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 5.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z2-2C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 5.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z2-3A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 166.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z2-3B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 166.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z2-3C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 166.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z2-4A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 308.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10

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CAD-Z2-4B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 308.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAD-Z2-4C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 308.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CADM-Z2-1A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-1B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-1C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-2A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-2B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-2C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-3A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CADM-Z2-3B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-3C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-4A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-4B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z2-4C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-1	Criticality Alarm Horn. Located in Building 234-52 Room 211.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-2	Criticality Alarm Horn. Located in Building 234-52 Room 224.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-3	Criticality Alarm Horn. Located in Building 234-52 Room 229.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-4	Criticality Alarm Horn. Located in Building 234-52 Room 232.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAH-Z2-5	Criticality Alarm Horn. Located in Building 234-52 Room 233.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-6	Criticality Alarm Horn. Located in Building 234-52 Corridor 5.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-7	Criticality Alarm Horn. Located outside on South Wall of Building 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-8	Criticality Alarm Horn. Located in Building 234-52 Room 262.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-Z2-9	Criticality Alarm Horn. Located in Building 234-52 Room 262.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-Z2-10	Criticality Alarm Horn. Located in Building 234-52 Room 262.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-Z2-11	Criticality Alarm Horn. Located in Building 234-52 Room 260.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-Z2-12	Criticality Alarm Horn. Located in Building 234-52 Room 263.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-Z2-13	Criticality Alarm Horn. Located in Building 234-52 Room 260.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9

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CAH-Z2-14	Criticality Alarm Horn. Located in Building 291-Z Room 502.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-15	Criticality Alarm Horn. Located in Building 291-Z Room 502.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-16	Criticality Alarm Horn. Located in Building 291-Z Room 502.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-17	Criticality Alarm Horn. Located in Building 291-Z Room 502.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-18	Criticality Alarm Horn. Located in Building 234-52 Tunnel 2.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 7
CAH-Z2-19	Criticality Alarm Horn. Located in Building 234-52 Tunnel 1.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 7
CAH-Z2-22	Criticality Alarm Horn. Located in Building 291-Z Room 502.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z2-23	Criticality Alarm Horn. Located in Building 291-Z Room 501.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11
CAH-Z2-24	Criticality Alarm Horn. Located in Building 291-Z Room 501.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11

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CAH-Z2-25	Criticality Alarm Horn. Located in Building 291-Z Room 500.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11
CALM-Z2-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z2.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z2-2	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z2.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAP-Z2	Criticality Alarm Panel Zone 2. Contains the CADMs, CALMs, CARM, Inhibit switches, local (building) annunciation and Intertie relays for the Zone 2 Criticality Alarm System. Located in Building 234-52 Corridor 2.	Relay Rack. Premier, TVA 7719-23	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CARM-Z2	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-Z2.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CBS-Z2-1	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the criticality alarm system in excess of 8 hours and charger capable of maintaining the charge on the battery and while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-22.	Battery: Exide Power Systems 12 or 3 CC-5 24 VDC, 100 A. Charger: Exide Power Systems SCRF 24-1-40-E 24 VDC, 40 A	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE) AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating false alarms.	Allen Bradley # 700-C201A1	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-1A	Inhibit Switch for CAD/CADM-Z2-1A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-2-1B	Inhibit Switch for CAD/CADM-Z2-1B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-1C	Inhibit Switch for CAD/CADM-Z2-1C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-2A	Inhibit Switch for CAD/CADM-Z2-2A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-2B	Inhibit Switch for CAD/CADM-Z2-2B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-2C	Inhibit Switch for CAD/CADM-Z2-2C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-3A	Inhibit Switch for CAD/CADM-Z2-3A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-3B	Inhibit Switch for CAD/CADM-Z2-3B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-3C	Inhibit Switch for CAD/CADM-Z2-3C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z2.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 2

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-2-4A	Inhibit Switch for CAD/CADM-Z2-4A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-22.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-4B	Inhibit Switch for CAD/CADM-Z2-4B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-22.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-2-4C	Inhibit Switch for CAD/CADM-Z2-4C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-22.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 3

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
ASG-Z3	Audible Signal Generator. (Analog Type). Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-Z3.	Fabricated per H-2-72419	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-1A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 14A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-1B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 14A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-1C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 14A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-2A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 235B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-2B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 235B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-2C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 235B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-3A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 179.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z3-3B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 179.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z3-3C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 179.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 3

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg. H-2-28884)	ESSENTIAL DRAWING NUMBER
CAD-Z3-4A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 221C.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-4B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 221C.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-4C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 221C.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-5A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 10.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-5B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 10.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-5C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 10.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-6A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 6.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-6B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 6.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z3-6C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 6.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z3-1A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

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OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 3

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CADM-23-1B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-23-1C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-23-2A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-23-2B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-23-2C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-23-3A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-23-3B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-23-3C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-23-4A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

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OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 3

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CADM-Z3-4B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z3-4C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z3-5A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z3-5B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z3-5C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z3-6A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z3-6B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z3-6C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-23.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-1	Criticality Alarm Horn. Located in Building 234-52 Corridor 14A.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

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OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 3

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAH-Z3-2	Criticality Alarm Horn. Located in Building 234-52 Corridor 13.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-3	Criticality Alarm Horn. Located in Building 234-52 Room 235B.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-4	Criticality Alarm Horn. Located in Building 234-52 Room 230C.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-5	Criticality Alarm Horn. Located in Building 234-52 Room 170.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-6	Criticality Alarm Horn. Located in Building 234-52 Room 172.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-7	Criticality Alarm Horn. Located in Building 234-52 Corridor 6.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-8	Criticality Alarm Horn. Located in Building 234-52 Room 179.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-9	Criticality Alarm Horn. Located in Building 2734-ZG.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z3-10	Criticality Alarm Horn. Located in Building 234-52 Room 264.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9

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ZONE 3

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAH-23-11	Criticality Alarm Horn. Located in Building 234-52 Room 265.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-23-12	Criticality Alarm Horn. Located in Building 234-52 Room 264.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-23-13	Criticality Alarm Horn. Located in Building 234-52 Room 262.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-23-14	Criticality Alarm Horn. Located in Building 234-52 Room 262.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-23-15	Criticality Alarm Horn. Located in Building 234-52 Room 199.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z3-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z3.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z3-2	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z3.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z3-3	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z3.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z3-4	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z3.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAP-Z3	Criticality Alarm Panel Zone 3. Contains the CADMs, CALMS, CARM, Inhibit switches, local (building) annunciation and intertie relays for the Zone 3 Criticality Alarm System. Located in Building 234-52 Corridor 13.	Relay Rack. Premier, TVA 7719-23	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CARM-23	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-Z3.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CBS-Z3-1	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the criticality alarm system in excess of 8 hours and charger capable of maintaining the charge on the battery and while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-Z3.	Battery: Exide Power Systems 12 or 3 CC-5 24 VDC, 100 A. Charger: Exide Power Systems SCRF 24-1-40-E 24 VDC, 25 A	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE) AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating false alarms.	Allen Bradley # 700-C201A1	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-1A	Inhibit Switch for CAD/CADM-Z3-1A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-1B	Inhibit Switch for CAD/CADM-Z3-1B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-1C	Inhibit Switch for CAD/CADM-Z3-1C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-3-2A	Inhibit Switch for CAD/CADM-Z3-2A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-2B	Inhibit Switch for CAD/CADM-Z3-2B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-2C	Inhibit Switch for CAD/CADM-Z3-2C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-3A	Inhibit Switch for CAD/CADM-Z3-3A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-3B	Inhibit Switch for CAD/CADM-Z3-3B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-3C	Inhibit Switch for CAD/CADM-Z3-3C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-4A	Inhibit Switch for CAD/CADM-Z3-4A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-4B	Inhibit Switch for CAD/CADM-Z3-4B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 3

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-3-4C	Inhibit Switch for CAD/CADM-Z3-4C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-5A	Inhibit Switch for CAD/CADM-Z3-5A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-5B	Inhibit Switch for CAD/CADM-Z3-5B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-5C	Inhibit Switch for CAD/CADM-Z3-5C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-6A	Inhibit Switch for CAD/CADM-Z3-6A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-6B	Inhibit Switch for CAD/CADM-Z3-6B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-3-6C	Inhibit Switch for CAD/CADM-Z3-6C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z3.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0):

3.1.2 Criticality Detectors and Alarms

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OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 4

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
ASG-Z4	Audible Signal Generator. (Analog Type). Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-24.	Fabricated per H-2-72419	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-1A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Room 236.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-1B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Room 236.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-1C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Room 236.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-2A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Corridor 239A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-2B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Corridor 239A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-2C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Corridor 239A.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-3A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Room 264.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z4-3B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Room 264.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z4-3C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Room 264.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAD-Z4-4A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Corridor 3.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAD-Z4-4B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-5Z, Corridor 3.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10

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CAD-Z4-4C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Corridor 3.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAD-Z4-5A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 192B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-5B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 192B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-5C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 192B.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-6A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 192C.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-6B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 192C.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAD-Z4-6C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 234-52, Room 192C.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-1A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-1B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-1C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-2A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-2B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-2C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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CADM-Z4-3A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-3B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-3C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-4A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-4B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-4C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-5A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-5B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-5C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-6A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-6B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CADM-Z4-6C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z4.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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CAH-Z4-1	Criticality Alarm Horn. Located in Building 234-5Z Room 194.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-2	Criticality Alarm Horn. Located in Building 234-5Z Corridor 292.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-3	Criticality Alarm Horn. Located in Building 234-5Z Room 192A.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-4	Criticality Alarm Horn. Located in Building 234-5Z Room 192B.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-5	Criticality Alarm Horn. Located in Building 234-5Z Room 192C.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-6	Criticality Alarm Horn. Located in Building 234-5Z Room 270.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-Z4-7	Criticality Alarm Horn. Located in Building 234-5Z Room 183.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-8	Criticality Alarm Horn. Located in Building 234-5Z Corridor 6.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-9	Criticality Alarm Horn. Located in Building 234-5Z Room 321.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAH-Z4-10	Criticality Alarm Horn. Located in Building 234-5Z Corridor 3.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAH-Z4-11	Criticality Alarm Horn. Located in Building 234-5Z Room 308.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAH-Z4-12	Criticality Alarm Horn. Located in Building 234-5Z Room 308.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10

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CAH-Z4-13	Criticality Alarm Horn. Located in Building 234-52 Room 308.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAH-Z4-14	Criticality Alarm Horn. Located in Building 234-52 Room 308.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAH-Z4-15	Criticality Alarm Horn. Located in Building 234-52 Room 341.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAH-Z4-16	Criticality Alarm Horn. Located in Building 234-52 Room 306A.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAH-Z4-17	Criticality Alarm Horn. Located in Building 234-52 Corridor 1.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 10
CAH-Z4-18	Criticality Alarm Horn. Located outside on North Wall of Building 234-52 (near entrance to Rm 192).	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-19	Criticality Alarm Horn. Located outside in Stairway 13, Southwest Corner of Building 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-20	Criticality Alarm Horn. Located outside on West Wall (Southwest Corner) of Building 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-21	Criticality Alarm Horn. Located in Building 234-52 Room 265.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 9
CAH-Z4-22	Criticality Alarm Horn. Located in Building 234-52 Room 235D.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-23	Criticality Alarm Horn. Located on North West Roof of 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11
CAH-Z4-24	Criticality Alarm Horn. Located on West Roof of 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11

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CAH-Z4-25	Criticality Alarm Horn. Located in Building 234-52 Room 192.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-26	Criticality Alarm Horn. Located in Building 234-52 Room 236.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-27	Criticality Alarm Horn. Located in Building 234-52 Room 236.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAH-Z4-28	Criticality Alarm Horn. Located on North Roof of 234-52.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 11
CAH-Z4-30	Criticality Alarm Horn. Located in Building 234-52 Room 187.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z4-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z4.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z4-2	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z4.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CALM-Z4-3	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z4.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CAP-Z4	Criticality Alarm Panel Zone 4. Contains the CADMs, CALMs, CARM, Inhibit switches, local (building) annunciation and Intertie relays for the Zone 4 Criticality Alarm System. Located in Building 234-52 Corridor 13.	Relay Rack. Premier, TVA 7719-23	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CARM-Z4	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-Z4.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
CBS-Z4-1	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the criticality alarm system in excess of 8 hours and charger capable of maintaining the charge on the battery and while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-Z4.	Battery: Exide Power Systems 12 or 3 CC-5 24 VDC, 100 A. Charger: Exide Power Systems SCRF 24-1-40-E 24 VDC, 40 A	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE) AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating false alarms.	Allen Bradley # 700-C201A1	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-1A	Inhibit Switch for CAD/CADM-Z4-1A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-1B	Inhibit Switch for CAD/CADM-Z4-1B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-1C	Inhibit Switch for CAD/CADM-Z4-1C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-2A	Inhibit Switch for CAD/CADM-Z4-2A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-2B	Inhibit Switch for CAD/CADM-Z4-2B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-2C	Inhibit Switch for CAD/CADM-Z4-2C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-3A	Inhibit Switch for CAD/CADM-Z4-3A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-3B	Inhibit Switch for CAD/CADM-Z4-3B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-3C	Inhibit Switch for CAD/CADM-Z4-3C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-4A	Inhibit Switch for CAD/CADM-Z4-4A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z4.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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S-4-4B	Inhibit Switch for CAD/CADM-Z4-4B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-24.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-4C	Inhibit Switch for CAD/CADM-Z4-4C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-24.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-5A	Inhibit Switch for CAD/CADM-Z4-5A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-24.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-5B	Inhibit Switch for CAD/CADM-Z4-5B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-24.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-5C	Inhibit Switch for CAD/CADM-Z4-5C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-24.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-6A	Inhibit Switch for CAD/CADM-Z4-6A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-24.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-6B	Inhibit Switch for CAD/CADM-Z4-6B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-24.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8
S-4-6C	Inhibit Switch for CAD/CADM-Z4-6C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-24.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28885 sht 8

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
ASG-Z5	Audible Signal Generator. (Analog Type) Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-Z5.	Fabricated per H-2-72419	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-1A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 4, Room 43.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-1B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 4, Room 43.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-1C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 4, Room 43.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-2A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 4, Room 41.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-2B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 4, Room 41.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-2C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 4, Room 41.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-3A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 2 (Floors 4-5).	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-3B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 2, (Floors 4-5).	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-3C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 2, (Floors 4-5).	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z5-4A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 5, Room 50.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CAD-25-4B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 5, Room 50.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-4C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 5, Room 50.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-5A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 3, Elevator.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-5B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 3, Elevator.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-5C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 3, Elevator.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-6A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 3, Room 12, Maintenance Hood.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-6B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 3, Room 12, Maintenance Hood.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-6C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 3, Room 12, Maintenance Hood.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-7A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 2, Room 26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-7B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 2, Room 26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-25-7C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 2, Room 26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CADM-Z5-1A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-1B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-1C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-2A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-2B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-2C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-3A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-3B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-3C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CADM-Z5-4A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-4B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-4C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-5A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-5B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-5C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-6A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-6B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z5-6C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CADM-25-7A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-25-7B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-25-7C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-25.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-1	Criticality Alarm Horn. Located in Building 236-Z, Floor 6, Room 60.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-2	Criticality Alarm Horn. Located in Building 236-Z, Stairway 2, Floor 5.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-3	Criticality Alarm Horn. Located in Building 236-Z, Floor 5, Room 50.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-4	Criticality Alarm Horn. Located outside on East Wall of Building 236-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-5	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Room 40.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-6	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Room 41.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CAH-25-7	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Room 42.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-8	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Corridor 47.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-9	Criticality Alarm Horn. Located in Building 234-5Z, Stairway 1, Floors 3-4.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-10	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Room 46.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-11	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Room 45.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-12	Criticality Alarm Horn. Located in Building 236-Z, Floor 3, Corridor 31.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-13	Criticality Alarm Horn. Located in Building 236-Z, Floor 3, Corridor 31.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-14	Criticality Alarm Horn. Located in Building 236-Z, Floor 2, Room 12, Maintenance Hood.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-25-15	Criticality Alarm Horn. Located in Building 236-Z, Floor 2, Corridor 20.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CAH-Z5-16	Criticality Alarm Horn. Located in Building 236-Z, Floor 2, Corridor 21.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z5-17	Criticality Alarm Horn. Located in Building 236-Z, Floor 2, Corridor 21.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z5-18	Criticality Alarm Horn. Located in Building 236-Z, Stairway 2, Floor 2.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z5-19	Criticality Alarm Horn. Located in Building 236-Z, Floor 1, Corridor 14.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z5-20	Criticality Alarm Horn. Located in Building 236-Z, Floor 1, Corridor 10.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z5-21	Criticality Alarm Horn. Located in Building 236-Z, Floor 1, Corridor 11.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CALM-Z5-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z5.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CALM-Z5-2	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z5.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CALM-Z5-3	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z5.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CALM-Z5-4	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z5.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAP-Z5	Criticality Alarm Panel Zone 5. Contains the CADMs, CALMs, CARM, Inhibit switches, local (building) annunciation and Intertie relays for the Zone 5 Criticality Alarm System. Located in Building 236-Z, Floor 4, Corridor 44.	Relay Rack. Premier, TVA 7719-23	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CARM-Z5	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-Z5.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CBS-25-1	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the criticality alarm system in excess of 8 hours and charger capable of maintaining the charge on the battery and while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-Z5.	Battery: Exide Power Systems 12 or 3 CC-5 24 VDC, 100 A. Charger: Exide Power Systems UC 26-25 24 VDC, 25 A	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE) AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating false alarms.	Allen Bradley # 700-C200-A1	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-1A	Inhibit Switch for CAD/CADM-25-1A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z5.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-1B	Inhibit Switch for CAD/CADM-25-1B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z5.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-1C	Inhibit Switch for CAD/CADM-25-1C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z5.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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S-5-2A	Inhibit Switch for CAD/CADM-25-2A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-2B	Inhibit Switch for CAD/CADM-25-2B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-2C	Inhibit Switch for CAD/CADM-25-2C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-3A	Inhibit Switch for CAD/CADM-25-3A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-3B	Inhibit Switch for CAD/CADM-25-3B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-3C	Inhibit Switch for CAD/CADM-25-3C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-4A	Inhibit Switch for CAD/CADM-25-4A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-4B	Inhibit Switch for CAD/CADM-25-4B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-5-4C	Inhibit Switch for CAD/CADM-25-4C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-5A	Inhibit Switch for CAD/CADM-25-5A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-5B	Inhibit Switch for CAD/CADM-25-5B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-5C	Inhibit Switch for CAD/CADM-25-5C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-6A	Inhibit Switch for CAD/CADM-25-6A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-6B	Inhibit Switch for CAD/CADM-25-6B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-6C	Inhibit Switch for CAD/CADM-25-6C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-7A	Inhibit Switch for CAD/CADM-25-7A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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S-5-7B	Inhibit Switch for CAD/CADM-25-7B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-5-7C	Inhibit Switch for CAD/CADM-25-7C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-25.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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ASG-Z6	Audible Signal Generator. (Analog Type). Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-Z6.	Fabricated per H-2-72419	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-1A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Room 13.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-1B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Room 13.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-1C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Room 13.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-2A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 14.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-2B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 14.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-2C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 14.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-3A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Room 19.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-3B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Room 19.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-3C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Room 19.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-4A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 1, Floors 1-2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CAD-Z6-4B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 1, Floors 1-2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-4C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 1, Floors 1-2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-5A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 20.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-5B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 20.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-5C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 20.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-6A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 21.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-6B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 21.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-6C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Floor 1, Corridor 21.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-7A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 2, Floors 2-3.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-7B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 2, Floors 1-2.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAD-Z6-7C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 236-Z, Stairway 2, Floors 2-3.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CADM-26-1A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-26-1B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-26-1C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-26-2A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-26-2B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-26-2C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-26-3A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-26-3B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-26-3C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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CADM-Z6-4A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-4B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-4C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-5A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-5B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-5C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-6A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-6B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-6C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CADM-Z6-7A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-7B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26. 41	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CADM-Z6-7C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-26.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-1	Criticality Alarm Horn. Located in Building 236-Z, Floor 1, Room 19.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-2	Criticality Alarm Horn. Located in Building 236-Z, Floor 1, Room 18, (Airlock).	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-3	Criticality Alarm Horn. Located in Building 236-Z, Floor 1, Room 16.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-4	Criticality Alarm Horn. Located in Building 236-Z, Floor 1, Corridor 14.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-5	Criticality Alarm Horn. Located in Building 236-Z, Stairway 3, Floors 1-2.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-6	Criticality Alarm Horn. Located in Building 236-Z, Floor 2, Room 26.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAH-Z6-7	Criticality Alarm Horn. Located in Building 236-Z, Floor 2, Corridor 25.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-8	Criticality Alarm Horn. Located in Building 236-Z, Floor 2, Room 26.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-9	Criticality Alarm Horn. Located in Building 234-5Z, Floor 2, Room 27.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-10	Criticality Alarm Horn. Located in Building 236-Z, Floor 3, Room 12, (Maintenance Hood).	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-11	Criticality Alarm Horn. Located in Building 236-Z, Floor 3, Corridor 33.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-12	Criticality Alarm Horn. Located in Building 236-Z, Floor 3, Corridor 33.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-13	Criticality Alarm Horn. Located in Building 236-Z, Floor 3, Room 34.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-14	Criticality Alarm Horn. Located in Building 236-Z, Floor 3, Room 35.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-15	Criticality Alarm Horn. Located in Building 236-Z, Floor 3, Room 38.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CAH-Z6-16	Criticality Alarm Horn. Located in Building 236-Z, Stairway 1, Floors 3-4.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-17	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Room 43.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-18	Criticality Alarm Horn. Located in Building 236-Z, Stairway 3, Floors 3-4.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-19	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Room 44.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-20	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Corridor 47.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-21	Criticality Alarm Horn. Located in Building 236-Z, Floor 4, Room 44.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAH-Z6-22	Criticality Alarm Horn. Located in Building 236-Z, Floor 1, Room 19.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CALM-Z6-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z6.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CALM-Z6-2	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z6.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
CALM-Z6-3	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z6.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CALM-Z6-4	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z6.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CALM-Z6-5	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z6.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CAP-Z6	Criticality Alarm Panel Zone 6. Contains the CADMs, CALMs, CARM, Inhibit switches, local (building) annunciation and Intertie relays for the Zone 6 Criticality Alarm System. Located in Building 236-Z Corridor 44.	Relay Rack. Premier, TVA 7719-23	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CARM-Z6	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-Z6.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
CBS-Z6-1	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the criticality alarm system in excess of 8 hours and charger capable of maintaining the charge on the battery and while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-Z5.	Battery: Exide Power Systems 12 or 3 CC-5 24 VDC, 100 A. Charger: Exide Power Systems UC 26-25 24 VDC, 25 A	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE) AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating false alarms.	Allen Bradley # 700-C200-A1	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-1A	Inhibit Switch for CAD/CADM-Z6-1A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-6-1B	Inhibit Switch for CAD/CADM-Z6-1B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-1C	Inhibit Switch for CAD/CADM-Z6-1C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-2A	Inhibit Switch for CAD/CADM-Z6-2A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-2B	Inhibit Switch for CAD/CADM-Z6-2B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-2C	Inhibit Switch for CAD/CADM-Z6-2C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-3A	Inhibit Switch for CAD/CADM-Z6-3A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-3B	Inhibit Switch for CAD/CADM-Z6-3B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-3C	Inhibit Switch for CAD/CADM-Z6-3C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg. H-2-28884)	ESSENTIAL DRAWING NUMBER
S-6-4A	Inhibit Switch for CAD/CADM-Z6-4A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-4B	Inhibit Switch for CAD/CADM-Z6-4B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-4C	Inhibit Switch for CAD/CADM-Z6-4C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-5A	Inhibit Switch for CAD/CADM-Z6-5A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-5B	Inhibit Switch for CAD/CADM-Z6-5B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-5C	Inhibit Switch for CAD/CADM-Z6-5C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-6A	Inhibit Switch for CAD/CADM-Z6-6A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-6B	Inhibit Switch for CAD/CADM-Z6-6B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28884)	ESSENTIAL DRAWING NUMBER
S-6-6C	Inhibit Switch for CAD/CADM-Z6-6C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-7A	Inhibit Switch for CAD/CADM-Z6-7A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-7B	Inhibit Switch for CAD/CADM-Z6-7B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2
S-6-7C	Inhibit Switch for CAD/CADM-Z6-7C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z6.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-28888 sht 2

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ZONE 7

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28083)	ESSENTIAL DRAWING NUMBER
ASG-Z7	Audible Signal Generator. (Analog Type) Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-Z7.	Fabricated per H-2-72419	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N1A	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 1.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N1B	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 1.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N1C	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 1.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N2A	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 2.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N2B	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 2.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N2C	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 2.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N3A	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 3.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N3B	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 3.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N3C	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 3.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-Z7-N4A	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 4.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg. H-2-28083)	ESSENTIAL DRAWING NUMBER
CAD-27-N4B	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 4.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-27-N4C	Criticality Alarm Detector. (Neutron). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Vault 4.	Battelle Northwest Laboratory Fabricated per H-3-29983	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-27-5A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-27-5B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Corridor.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAD-27-5C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 2736-Z, Corridor.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CMP-27-N1A	Comparator Panel. Serves Neutron CDS-1 and CDS-2. Provides logic and alarm functions for the Neutron Detectors. Located in CAP-27.	Battelle Northwest Laboratories, Drawing H-32692	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CMP-27-N2A	Comparator Panel. Serves Neutron CDS-3 and CDS-4. Provides logic and alarm functions for the Neutron Detectors. Located in CAP-27.	Battelle Northwest Laboratories, Drawing H-32692	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CADM-27-5A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-27.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CADM-27-5B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-27.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CADM-27-5C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-27.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2

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OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 7

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28083)	ESSENTIAL DRAWING NUMBER
CAF-1	Criticality Alarm Flasher. Blue light used to supplement audible criticality alarms in areas with high background sound. Located in 2736-ZA, North Room.	North American ST-1250/Blue	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAF-2	Criticality Alarm Flasher. Blue light used to supplement audible criticality alarms in areas with high background sound. Located in 2736-ZA, North Room.	North American ST-1250/Blue	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAF-3	Criticality Alarm Flasher. Blue light used to supplement audible criticality alarms in areas with high background sound. Located in 2736-ZA, North Room.	North American ST-1250/Blue	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAF-4	Criticality Alarm Flasher. Blue light used to supplement audible criticality alarms in areas with high background sound. Located in 2736-ZA, South Room.	North American ST-1250/Blue	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-27-1	Criticality Alarm Horn. Located in Vault 1 of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-27-2	Criticality Alarm Horn. Located in Vault 1 of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-27-3	Criticality Alarm Horn. Located in Vault 2 of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-27-4	Criticality Alarm Horn. Located in Vault 2 of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-27-5	Criticality Alarm Horn. Located in Vault 3 of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2

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OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 7

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28083)	ESSENTIAL DRAWING NUMBER
CAH-Z7-6	Criticality Alarm Horn. Located in Vault 3 of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-Z7-7	Criticality Alarm Horn. Located in Vault 4 of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-Z7-8	Criticality Alarm Horn. Located in Vault 4 of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-Z7-9	Criticality Alarm Horn. Located in corridor of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-Z7-10	Criticality Alarm Horn. Located in corridor of 2736-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-Z7-11	Criticality Alarm Horn. Located on North wall of 2736-Z	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-Z7-12	Criticality Alarm Horn. Located on North wall of 2736-Z	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-Z7-13	Criticality Alarm Horn. Located on roof of 2736-Z (south side).	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-Z7-14	Criticality Alarm Horn. Located on roof of 2736-Z (south side).	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28083)	ESSENTIAL DRAWING NUMBER
CAH-27-15	Criticality Alarm Horn. Located in 2736-ZA.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAH-27-16	Criticality Alarm Horn. Located in 2736-ZA.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CALM-27-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs.	Per Drawing H-2-91179	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CAP-27	Criticality Alarm Panel Zone 7. Contains the Neutron and Gamma Detection system associated components including comparator panels, CADMs, CALM, CARM, inhibit switches, system interconnection, local (building) annunciation, and Intertie relays for the Zone 7 Criticality Alarm System. Located in Building 2736-ZA.	Purchase Spec # IED2736CA1	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CARM-27	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-27.	Per Drawing H-2-91180	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
CBS-27	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the CAHs, CADMs, and Gamma detection system associated with CAP-27 in excess of 8 hours and charger capable of maintaining the charge on the battery while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-27.	Purchase Spec # IED2736CA1	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
PLS-27-1 (Not required for labeling at this time.)	(NON-SE). Loss of Power Annunciators. Located in Corridor of 2736-2 (near Vault 1 door).	Federal Model 450, 24 VDC Vibratone Horn	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
PLS-27-2 (Not required for labeling at this time.)	(NON-SE). Loss of Power Annunciators. Located in Corridor of 2736-2 (near Vault 1 door).	Federal Model 350, 120 VAC, 60 Hertz Vibratone Horn	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-28083)	ESSENTIAL DRAWING NUMBER
AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE). AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating a false alarm.	Allen Bradley # C700-200-A1	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
S-7-5A	Inhibit Switch for CAD/CADM-7Z-5A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-27.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
S-7-5B	Inhibit Switch for CAD/CADM-7Z-5B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-27.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
S-7-5C	Inhibit Switch for CAD/CADM-7Z-5C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-27.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2
UPS-27	Uninterruptible Power Supply. Provides interrupted power to Neutron Criticality Detection System.	Purchase Spec # IED2736CA1	H-2-28083 sht 9 H-2-28883 sht 1 H-2-28883 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-91823)	ESSENTIAL DRAWING NUMBER
ASG-Z8	Audible Signal Generator. (Analog Type). Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-Z8.	Fabricated per H-2-72419	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAD-Z8-1A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 241-Z, Tank Room.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAD-Z8-1B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 241-Z, Tank Room.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAD-Z8-1C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 241-Z, Tank Room.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAD-Z8-2A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 241-Z, Tank Room.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAD-Z8-2B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 241-Z, Tank Room.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAD-Z8-2C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in 241-Z, Tank Room.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CADM-Z8-1A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z8.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CADM-Z8-1B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z8.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CADM-Z8-1C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z8.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2

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ZONE 8

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-91823)	ESSENTIAL DRAWING NUMBER
CADM-28-2A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-28.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CADM-28-2B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-28.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CADM-28-2C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-28.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAH-28-1	Criticality Alarm Horn. Located outside on West Wall of Building 241-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAH-28-2	Criticality Alarm Horn. Located outside on West Wall of Building 241-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAH-28-3	Criticality Alarm Horn. Located in Building 241-Z Tank Room, West Wall.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAH-28-4	Criticality Alarm Horn. Located in Building 241-Z Tank Room, West Wall.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAH-28-5	Criticality Alarm Horn. Located in Building 241-Z Tank Room, East Wall.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAH-28-6	Criticality Alarm Horn. Located in Building 241-Z Tank Room, East Wall.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2

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ZONE 8

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-91823)	ESSENTIAL DRAWING NUMBER
CAH-28-7	Criticality Alarm Horn. Located outside on East Wall of Building 241-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAH-28-8	Criticality Alarm Horn. Located outside on East Wall of Building 241-Z.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CALM-Z8-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-28.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CAP-28	Criticality Alarm Panel Zone 8. Contains the CADMs, CALMs, CARM, Inhibit switches, and local (building) annunciation relays for the Zone 8 Criticality Alarm System. Located in Building 241-Z Corridor.	H-2-91823 Part No. 13 67.5" H x 22" W with 61.25" high panel mounting space for 19" wide panels per ANSI C83.9, rear door for access.	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CARM-28	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-28.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
CBS-28-1	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the criticality alarm system in excess of 8 hours and charger capable of maintaining the charge on the battery and while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-28.	Battery: Exide 82329 Charger: Exide 101620	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE). AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating false alarms.	Square D Class 8501, Catalog # CO-16 120 VAC, 60 Hz	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
S-8-1A	Inhibit Switch for CAD/CADM-Z8-1A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-28.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-91823)	ESSENTIAL DRAWING NUMBER
S-8-1B	Inhibit Switch for CAD/CADM-Z8-1B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z8.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
S-8-1C	Inhibit Switch for CAD/CADM-Z8-1C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z8.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
S-8-2A	Inhibit Switch for CAD/CADM-Z8-2A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z8.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
S-8-2B	Inhibit Switch for CAD/CADM-Z8-2B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z8.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2
S-8-2C	Inhibit Switch for CAD/CADM-Z8-2C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z8.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-91823 sht 2

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MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-80144/80145)	ESSENTIAL DRAWING NUMBER
ASG-Z9	Audible Signal Generator. (Analog Type). Generates an "AH-OO-GAH" electrical signal that is wired to the criticality annunciator horns. Located in CAP-Z9.	Fabricated per H-2-72419	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-1A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 642.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-1B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 642.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-1C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 642.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-2A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 641.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-2B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 641.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-2C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 641.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-3A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 638.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-3B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 638.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-3C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 638.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-4A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 636.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

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CAD-Z9-4B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 636.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-4C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 636.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-5A	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 637.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-5B	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 637.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAD-Z9-5C	Criticality Alarm Detector. (Gamma). Detects radiation resulting from potential criticality excursions. Located in Building 2736-ZB, Room 637.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-1A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-1B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-1C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-2A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-2B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

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CADM-Z9-2C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-3A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-3B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-3C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-4A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-4B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-4C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-5A	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CADM-Z9-5B	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-Z9.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

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CADM-Z9-5C	Criticality Alarm Detection Module. One (1) per CAD. Provides dose rate indication, calibration adjustments for the CAD-CADM unit, and alarm functions. Located in CAP-29.	Nuclear Measurement Corp. Model GA-2 TMO	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAF-Z9-1	Criticality Alarm Flasher Rotating. Located in Building 2721-ZB Room 648.	Federal Signal Corp. Model 121A, Blue	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-1	Criticality Alarm Horn. Located in Building 2736-ZB Corridor 625.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-2	Criticality Alarm Horn. Located in Building 2736-ZB Corridor 625.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-3	Criticality Alarm Horn. Located in Building 2736-ZB Room 641.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-4	Criticality Alarm Horn. Located in Building 2736-ZB Room 641.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-5	Criticality Alarm Horn. Located in Building 2736-ZB Room 637.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-6	Criticality Alarm Horn. Located in Building 2736-ZB Room 637.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-7	Criticality Alarm Horn. Located in Building 2736-ZB Room 622.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

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CAH-Z9-8	Criticality Alarm Horn. Located in Building 2736-ZB Room 622.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-9	Criticality Alarm Horn. Located in Building 2736-ZB Room 600.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-10	Criticality Alarm Horn. Located in Building 2736-ZB Room 600.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-11	Criticality Alarm Horn. Located in Building 2736-ZB Room 602.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-12	Criticality Alarm Horn. Located in Building 2736-ZB Room 602.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-13	Criticality Alarm Horn. Located in Building 2736-ZB Room 620.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-14	Criticality Alarm Horn. Located in Building 2736-ZB Room 620.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-15	Criticality Alarm Horn. Located in Building 2736-ZB Corridor 609.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-16	Criticality Alarm Horn. Located in Building 2736-ZB Corridor 609.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

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CAH-Z9-17	Criticality Alarm Horn. Located outside on South Wall of Building 2736-ZB.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-18	Criticality Alarm Horn. Located outside on South Wall of Building 2736-ZB.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-19	Criticality Alarm Horn. Located outside on East Wall of Building 2736-ZB.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-20	Criticality Alarm Horn. Located in Building 2721-ZB Room 647.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CAH-Z9-21	Criticality Alarm Horn. Located in Building 2721-ZB Room 648.	Audible Signaling Device: Federal Signal Corp. Model 300 GC, 24 VAC/DC Selectone Connector Board: FS Corp. Model 300 CK	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CALM-Z9-1	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z9.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CALM-Z9-2	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z9.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CALM-Z9-3	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z9.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CALM-Z9-4	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z9.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CALM-Z9-5	Criticality Alarm Logic Module. Provides the logic circuitry for annunciation of alert and alarm conditions as detected by the CADMs. Located in CAP-Z9.	Per Drawing H-2-91179	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

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CAP-Z9	Criticality Alarm Panel Zone 9. Contains the CADMs, CALMs, CARM, Inhibit switches, local (building) annunciation and Intertie relays for the Zone 9 Criticality Alarm System. Located in Building 2736-ZB Room 638.	Premier TVA 7719-23, Relay Rack One Bay, Standard 19" W x 23" D 2.125" Trim	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CARM-Z9	Criticality Alarm Relay Module. Activates the alarm signal generator and provides an annunciation signal in the event of a high alarm signal from the CALM. Includes an inhibit switch to disable the alarm output signal. Located in CAP-Z9.	Per Drawing H-2-91180	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
CBS-Z9-1	Central Battery System. Nominal 24 VDC system. Includes one 12 cell battery capable of supplying power to the criticality alarm system in excess of 8 hours and charger capable of maintaining the charge on the battery and while providing normal power. Primary supply power failure annunciation. Located adjacent to CAP-Z9.	Battery: Exide 3CC-5, 24VDC 100 A Charger: Exide UC 26-25, 24 VDC, 25 A	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
AC POWER RELAY (Not required for labeling at this time.)	(SC-3 SE). AC Power Monitor Relay. Deenergizes on loss of power. A manual reset is required to prevent a fluctuating (erratic) power supply from initiating false alarms.	Allen Bradley # 700-C200-A1	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-1A	Inhibit Switch for CAD/CADM-Z9-1A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-1B	Inhibit Switch for CAD/CADM-Z9-1B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-1C	Inhibit Switch for CAD/CADM-Z9-1C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

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S-9-2A	Inhibit Switch for CAD/CADM-Z9-2A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-2B	Inhibit Switch for CAD/CADM-Z9-2B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-2C	Inhibit Switch for CAD/CADM-Z9-2C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-3A	Inhibit Switch for CAD/CADM-Z9-3A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-3B	Inhibit Switch for CAD/CADM-Z9-3B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-3C	Inhibit Switch for CAD/CADM-Z9-3C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-4A	Inhibit Switch for CAD/CADM-Z9-4A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-4B	Inhibit Switch for CAD/CADM-Z9-4B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

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S-9-4C	Inhibit Switch for CAD/CADM-Z9-4C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-5A	Inhibit Switch for CAD/CADM-Z9-5A used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-5B	Inhibit Switch for CAD/CADM-Z9-5B used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
S-9-5C	Inhibit Switch for CAD/CADM-Z9-5C used to prevent annunciation of alarm during test, calibration, and replacement of CADs and CADMs. Located on CAP-Z9.	Square D Class 9001, Type LRSA-2K1 with Type LA-1 Contact Blocks	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

APPLICABLE OSR LCO (WHC-SD-CP-OSR-010 Section 3.0)

3.1.2 Criticality Detectors and Alarms

OSR SYSTEM EQUIPMENT/COMPONENT LIST

ZONE 9

MASTER COMPONENT INDEX NUMBER	FUNCTIONAL DESCRIPTION	MANUFACTURER PART/MODEL NUMBER (Dwg H-2-80144/80145)	ESSENTIAL DRAWING NUMBER
MIR	Master Intertie Relay Box. Located near CAP-Z1 in Building 234-5Z. Includes Master Intertie Relays MIR-K1 & MIR-K2 and Reset Switch MIR-S1.	Enclosure: Hoffman A-14N12B Panel: Hoffman A-14N12P MIR-K1/K2: Potter-Brumfield KRP11DG-24, 24 VDC, DPDT Relay Potter-Brumfield 27E122, 8-pin Octal Socket Switch: Square D #9001-KR-1RN13	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
NA	Master Intertie Relay Z1-K5. Located in CAP-Z1 in Building 234-5Z.	Potter-Brumfield KRP11DG-24, 24 VDC, DPDT Relay Potter-Brumfield 27E122, 8-pin Octal Socket	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
NA	Master Intertie Relay Z1-K6. Located in CAP-Z1 in Building 234-5Z.	Potter-Brumfield KRP11DG-24, 24 VDC, DPDT Relay Potter-Brumfield 27E122, 8-pin Octal Socket	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
NA	Master Intertie Relay Z6-K3. Located in CAP-Z6 in Building 236-2.	Potter-Brumfield KRP11DG-24, 24 VDC, DPDT Relay Potter-Brumfield 27E122, 8-pin Octal Socket	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
NA	Master Intertie Relay Z6-K4. Located in CAP-Z6 in Building 236-2.	Potter-Brumfield KRP11DG-24, 24 VDC, DPDT Relay Potter-Brumfield 27E122, 8-pin Octal Socket	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
NA	Master Intertie Relay Z7-K7. Located in CAP-Z7 in Building 2736-2A.	Potter-Brumfield KRP11DG-24, 24 VDC, DPDT Relay Potter-Brumfield 27E122, 8-pin Octal Socket	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2
NA	Master Intertie Relay Z9-K2. Located in CAP-Z9 in Building 2736-2B.	Potter-Brumfield KRP11DG-24, 24 VDC, DPDT Relay Potter-Brumfield 27E122, 8-pin Octal Socket	H-2-28883 sht 1 H-2-28883 sht 2 H-2-80143 sht 2

**APPENDIX C
CAS SAFETY ENVELOPE BOUNDARY DRAWINGS**

The following drawing defines the Safety Envelope Components for the Criticality Alarm System.

H-2-28883 Sheet 1, Criticality Alarm System Block Diagram and Drawing Index
H-2-28505 (classified CNSI)

**APPENDIX D
CAS ESSENTIAL DRAWINGS**

The following drawings are ESSENTIAL for the Criticality Alarm System.

- H-2-28083 sheet 9, NUCLEAR CRITICALITY ALARM SYSTEM [Bldg 2736-Z, 2736-ZA]
- H-2-28883 sheet 2, CRITICALITY ALARM SYSTEM BLOCK DIAGRAM AND DRAWING INDEX
- H-2-28885 sheet 7, CRITICALITY ALARM SYSTEM FOUNDATION & TUNNEL [Bldg 234-5Z]
- H-2-28885 sheet 8, CRITICALITY ALARM SYSTEM FIRST FLOOR [Bldg 234-5Z]
- H-2-28885 sheet 9, CRITICALITY ALARM SYSTEM DUCT LEVEL [Bldg 234-5Z]
- H-2-28885 sheet 10, CRITICALITY ALARM SYSTEM SECOND FLOOR [Bldg 234-5Z]
- H-2-28885 sheet 11, CRITICALITY ALARM SYSTEM ROOF [Bldg 234-5Z]
- H-2-28888 sheet 2, CRITICALITY ALARM SYSTEM FLOOR PLAN [Bldg 236-Z]
- H-2-80143 sheet 2, CRITICALITY ALARM SYSTEM [Bldg 2721-Z, 2736-ZB]
- H-2-91823 sheet 6, CRITICALITY ALARM SYSTEM FLOOR PLAN [Bldg 241-Z]

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