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 - 10 August 18, 1989 Letter from PLC to CECo responding to finding of Annual Fire Protection Audit
 - 11 Fire Protection for Quality Records
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 - 14 Dresden Station Site Quality Verification Audit 12-94-01
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 - 16 Dresden Station Site Quality verification Audit #12-95-10
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 - 3 Timelines for Spuriously Open Electronic Relief Valves (Preliminary)
 - 4 Isolation Condenser Inboard Valves Transfer Starters (EPED Calc. No. 6779-31-91-1)
 - 5 Torus Water Temperature (Quad Cities NSLD Calc. No. 3C3-0779-001)
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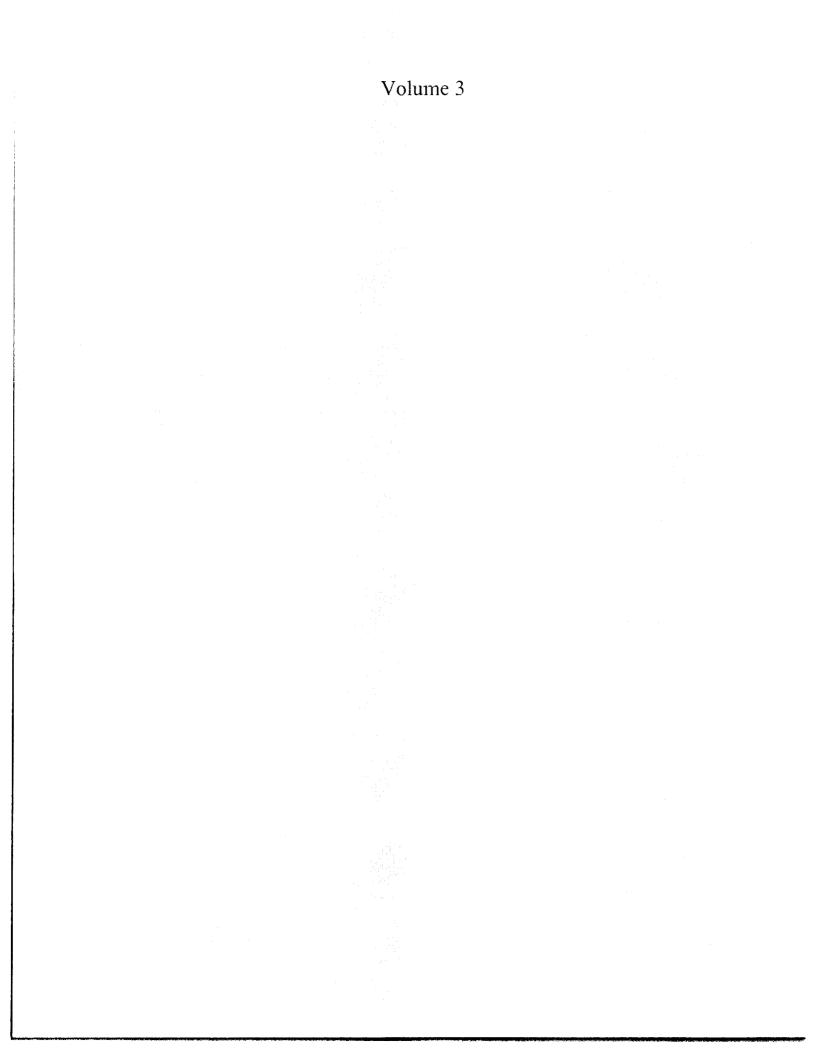
- 5 Correspondence Referenced in the February 1983 10CFR50 Appendix R Safety Evaluation Report
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Correspondence Referenced in the September 28, 1987 Safety Evaluation and Acceptance of Exemption Request for Drywell Expansion Gap

Page	Date	<u>To/From</u>	Subject
V.0-15	06-05-86	NRC/CECO	Request for Exemption from 10CFR50 Appendix R for Drywell Expansion Gap



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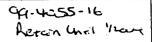
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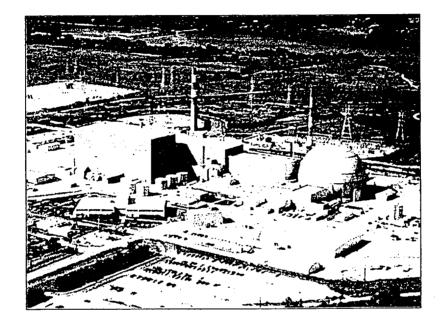
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Fire Protection Drawings

The Fire Protection Drawings are available through Central Files.



QA RECORD COMMONWEALTH EDISON COMPANY DRESDEN NUCLEAR STATION UNITS 2 & 3



FIRE PRE-PLANS

Revision 4

Prepared By: Nexus Technical Services Corp.

Date: 12/13/99

COMMONWEALTH EDISON COMPANY DRESDEN STATION UNITS 2 & 3

FIRE-PRE PLANS Revision: 4 Date: 12/13/99

1.0 INTRODUCTION

The Dresden Fire Pre-Plans have been developed to provide guidance for fire brigade actions as required by NRC guidelines.

Each Pre-Plan is developed in two parts. The first is the "Pre-Plan Summary" which is just that; a brief summary of the data in the main body of the pre-plan. The main body is entitled "Fire Pre-Plan" and includes detailed data such as identification of individual circuit breakers necessary to disconnect power to major pieces of equipment.

A drawing of each pre-plan area is included on page 2 of each pre-plan.

2.0 **DEVELOPMENT**

Initial development of the pre-plans was accomplished by review of the Fire Hazard Analysis (FHA). Initial pre-plan organization followed the various fire areas as identified in the FHA. Each fire area was evaluated relative to such factors as: combustible loading, fixed suppression systems, and accessibility. From this evaluation, each pre-plan area was defined. After development, the pre-plans were organized and numbered in a manner which will allow for easy reference.

Utilizing the FHA, Station "F-Drawings," General Arrangement Drawings, Electrical Line Diagrams and other documentation, first-draft pre-plans were developed. The pre-plans were then field-checked to verify manual suppression equipment, communications equipment, access, automatic protection and general area lay-out. (A few areas of the plant could not be checked due to Health-Physics restrictions.)

Revision 4 December 13, 1999

Data gathered in the field was incorporated into the pre-plans and a revised draft published and sent to the plant for review. Station comments were incorporated and the pre-plans were published and released.

2.1 <u>1990 UPDATE (REVISION 1)</u>

For the 1990 update of the pre-plans, a review was performed to identify certain types of discrepancies between the plant status as described in the pre-plans and the actual status. The following tasks were performed:

- A. The pre-plans were reviewed to identify: safe shutdown access paths which are supposed to be available according to the text; fire hazards listed as being present in each fire zone; fire protection-related structures and equipment; and exposures (i.e., vulnerable safe shutdown equipment).
- B. The list of items identified in Task A above were reviewed against the Fire Hazards Analysis (FHA) and the "F" series (fire protection) drawings to identify discrepancies. This review was performed as follows: safe shutdown access paths were checked against the lighting and access drawings; fire hazards were checked against the FHA; fire protection-related structures and equipment were checked against the FHA and "F" drawings; and exposures were checked against the FHA.
- C. A walkdown of appropriate areas of the plant was performed to verify the existence and location of the items identified in Task A and discrepancies were recorded.
- D. Based on the discrepancies noted in the reviews and walkdowns described above, the preplans were revised as appropriate. The pre-plan text and figures were produced using PCbased software to facilitate future revisions and the entire document was reissued.

Revision 4 December 13, 1999

2.2 1992 UPDATE (Revision 2)

This revision incorporated identification of areas which contain CO_2 gaseous suppression systems and areas which may be affected by the gaseous suppression systems. Additionally, the isolation valves for the water suppression systems in the plant have been identified.

2.3 <u>1998 UPDATE (Revision 3)</u>

This revision incorporated the identification of the areas in which the arrangement of several items of fire protection equipment have been changed. This includes the portable extinguishers, hose reels, detection, and placement thereof. Many items of this nature have been either relocated, changed to a different media, or deleted from the area altogether. Additionally, several areas in which combustible gap material was identified at the expansion gap around the tops of various walls were incorporated into the pre-plans.

2.4 <u>1999 UPDATE (Revision 4)</u>

The purpose of this report is to update the existing Dresden Nuclear Station, Units 2 & 3 Fire Pre-Plans to incorporate plant changes that have occurred since the last update. In addition, to address pre-plan issues discussed in Fire Protection Self-Assessment Report dated 12/15/98, Special Notes were incorporated into the following fire pre-plans to indicate: 1) Hose stations provided with non-electrically rated nozzles (2/3 RB-32, U2TB-48 and U2TB-49); 2) Hose stations with fire hoses that do not provide coverage to certain plant areas (U2RB-5, U3RB-25, U2TB-50, U3TB-78, 3CT-100, 3CT-101, 2/3C-124, 2/3C-125, 2/3OG-131, 2/3OG-132 and 1C-137); and 3) Locations where the brigade may open a fire door to route a hose potentially exposing required Appendix R safe shutdown components to fire (U2RB-5, U2RB-6, U3RB-24, U3RB-28, and U2TB-43).

Revision 4 December 13, 1999

3.0 PRE-PLAN DIRECTORY

A summary of the pre-plans is provided in Table 3.1.

An individual listing of the pre-plans is provided in Table 3.2.

TABLE 3.1

FIRE PRE-PLAN SUMMARY

Section	Pre-Plan Numbers	Area
U2RB	U2RB1 thru U2RB12	Unit 2 Reactor Building
U3RB	U3RB19 thru U3RB31	Unit 3 Reactor Building
U2/3RB	2/3RB32	Unit 2 & 3 Reactor Building
U2TB	U2TB36 thru U2TB58	Unit 2 Turbine Building
U3TB	U3TB68 thru U3TB85	Unit 3 Turbine Building
2/3TB	2/3TB92 thru 2/3TB97	Unit 2 & 3 Turbine Building Common Area
3CT	U3CT100 thru U3CT101 2/3DG105	Unit 3 Cable Tunnel Swing Diesel Generator
2/3RW	2/3RW108 thru 2/3RW118	Radwaste Building
2/3C	2/3C124 thru 2/3C126	Unit 2/3 Crib House
2/30G-1C-TR	2/3OG131 thru 2/3OG133 U1C-137 1/2/3TRH2-140 thru 1/2/3TRH2-143	Off-Gas Filter Building Unit 1 Crib House Transformers and Hydrogen Areas

Revision 4 December 13, 1999

Pre-Plan Number	Fire Zone	Unit No.	Description	Elev.	Rev.
U2RB-1	1.1.2.1	2	Torus	476	4
U2RB-2	11.2.1	2	Southwest Corner Room	476	4
U2RB-3	11.2.2	2	Southeast Corner Room	476	4
U2RB-4	11.2.3	2	HPCI Pump Room	476	4
U2RB-5	1.1.2.2	2	Ground Floor	517	4
U2RB-6	1.3.2	2	Shutdown Cooling Pump Room	517	4
U2RB-7	1.1.2.3	2	Secondary Containment	545	4
U2RB-8	1.1.2.3	2	Non-Reg. Heat Exchanger	545	4
U2RB-9	1.1.2.3	2	Shutdown Heat Exchanger	545	4
U2RB-10	1.1.2.4	2	Secondary Containment	570	4
U2RB-11	1.1.2.5.D	2	Stand-by Liquid Control Area	589	4
U2RB-12	1.1.2.5.A	2	Isolation Condenser Area	589	4
U3RB-19	1.1.1.1	3	Torus	476	4
U3RB-20	11.1.1	3	Southwest Corner Room	476	4
U3RB-21	11.1.2	3	Southeast Corner Room	476	4
U3RB-22	11.1.3	3	HPCI Pump Room	476	4
U3RB-23	1.1.1.2	3	Ground Floor	517	4
U3RB-24	1.3.1	3	Shutdown Cooling Pump Room	517	4
U3RB-25	1.4.1	3	Tip Drive Room	517	4
U3RB-26	1.1.1.3	3	Secondary Containment	545	4
U3RB-27	1.1.1.3	3	Non-Reg. Heat Exchanger	545	4
U3RB-28	1.1.1.3	3	Shutdown Heat Exchanger	545	4
U3RB-29	1.1.1.4	3	Secondary Containment	570	4
U3RB-30	1.1.1.4 1.1.1.5.D	3	Standby Liquid Control Area	589	4

Revision 4 December 13, 1999

Pre-Plan Number	Fire Zone	Unit No.	Description	Elev.	Rev.
U3RB-31	1.1.1.5.A	3	Isolation Condenser Area	589	4
U2/3RB-32	1.1.1.2 1.1.2.6	2/3	Refueling Floor	613	4
U2TB-36	8.2.1.A	2	Condensate Pumps	469	4
U2TB-37	8.2.2.A	2	CCSW Pumps	495	4
U2TB-38	8.2.5.B	2	Low Pressure Heater Bays	517	4
U2TB-39	8.2.5.C	2	Oil Storage	517	4
U2TB-40	8.1	2	Clean and Dirty Oil Room	517	4
U2TB-41	8.2.5.A	2	H.P. Heaters/Steam Lines	517	4
U2TB-42	8.2.5.A	2	Reactor Feed Pumps	517	4
U2TB-43	9.0.A	2	Diesel Generator	517	4
U2TB-44	8.2.5.A	2	Cond. Transfer Pumps/Hallway	517	4
U2TB-45	8.2.5.A	2	Trackway Area	517	4
U2TB-46	6.2	2/3	Computer Room and Auxiliary Electrical Room	517	4
U2TB-47	8.2.5.A	2	Switchgear and MCC	517	4
U2TB-48	8.2.6.A	2	RFP Vent, H ₂ Seal Area	538	4
U2TB-49	2.0	2	Control Room	534	4
U2TB-50	8.2.6.B	2	Low Pressure Heater Bays	538	4
U2TB-51	8.2.6.A	2	Switchgear Area	534	4
U2TB-52	8.2.7	2	T.B. Ventilation Area	549	4
U2TB-53	7.0.A.13/ 8.2.7	2	Battery Rooms	549	4
U2TB-54	8.2.8.D/14.2.A	2	Fan Floor	549	4
U2TB-55	14.2.B/8.2.8.D	2	Off-Gas Recombiner	571	4

Revision 4 December 13, 1999

Pre-Plan Number	Fire Zone	Unit No.	Description	Elev.	Rev.
U2TB-56	14.2.C	2	Off-Gas Recomb./H2 Analyzer	590	4
U2TB-57	8.2.8.A	2	Main Turbine Floor	561	4
U2TB-58	8.2.8.A	2	Turbine Area	561	4
U3TB-68	8.2.1.B	3	Condensate Pumps	469	4
U3TB-69	8.2.2.B	3	CCSW Pumps	495	4
U3TB-70	8.2.5.D	3	Low Pressure Heater Bays	517	4
U3TB-71	8.2.5.E	3	H.P. Heaters/Steam Line	517	4
U2TB-72	8.2.5.E	3	Reactor Feed Pump	517	4
U3TB-73	9.0.B	3	Diesel Generator	517	4
U3TB-74	8.2.5.E	3	Cond. Transfer Pumps/Hallway	517	4
U3TB-75	8.2.5.E	3	Trackway Area	517	4
U3TB-76	8.2.5.E	3	Switchgear Area	517	4
U3TB-77	8.2.6.E	3	RFW SWGR H ₂ Seal	538	4
U3TB-78	8.2.6.D	3	Low Pressure Heater Bays	538	4
U3TB-79	6.1	3	U-3 Battery Charger Room	538	4
U3TB-80	7.0.B	3	250V Battery Room	551	4
U3TB-81	8.2.8.D/14.3.A	3	Fan Floor	549	4
U3TB-82	14.3.B/8.2.8.D	3	Off-Gas Recombiner	571	4
U3TB-83	14.3.C/8.2.8.D	3	Off-Gas Recomb./H ₂ Analyzer	590	4
U3TB-84	8.2.8.A	3	Main Turbine Floor	561	4
U3TB-85	8.2.8.A	3	Turbine Area	561	4
2/3TB-92	8.2.5.C	2/3	EHC Reservoir Area	517	4
2/3TB-93	8.2.5.C	2/3	Cond. Demin. Area	517	4
2/3TB-94	8.2.6.C	2/3	Lube Oil Reservoir Area	534	4

Revision 4 December 13, 1999

Pre-Plan Number	Fire Zone	Unit No.	Description	Elev.	Rev.
2/3TB-95	8.2.6.C	2/3	Heat Exchanger Area	534	4
2/3TB-96	8.2.8.A	2/3	MG Sets	561	4
2/3TB-97	8.2.8.B/8.2.8C	2/3	Rx. Bldg. Ventilation Equip.	581	4
U3CT-100	8.2.4	3	Cable Tunnel East	502	4
U3CT-101	8.2.4	3	Cable Tunnel West	502	4
2/3DG-105	9.0.C	2/3	Swing Diesel Generator Room	517	4
2/3RW-108	14.1	2/3	Sludge/Spent Resin Tank	488	4
2/3RW-109	14.1	2/3	Barrel Storage	507	4
2/3RW-110	14.1	2/3	Barrel Storage	517	4
2/3RW-111	14.1	2/3	Area "A" – Vent Fan Room Area "B" – Cement Silo/Hopper	529/544	4
2/3RW-112	14.5	2/3	Control Room/Truck Lock	517	4
2/3RW-113	14.5	2/3	Solidification Building	529	4
2/3RW-114	14.6	2/3	Max Recycle	529	4
2/3RW-115	14.6	2/3	Max Recycle	540	4
2/3RW-116	14.5	2/3	Stock Vent Room	551	4
2/3RW-117	14.6	2/3	Max Recycle	558	4
2/3RW-118	14.6	2/3	Max Recycle	579	4
2/3C-124	11.3	2/3	Circulating Water Pumps Room	490	4
2/3C-125	11.3	2/3	Service Water Pumps Room	509	4
2/3C-126	11.3	2/3	Ground Floor	517	4
2/30G-131	14.4	2/3	Equipment	476	4
2/30G-132	14.4	2/3	Agitator Area	497	4
2/30G-133	14.4	2/3	Ventilation Equipment Room	517	4

Revision 4 December 13, 1999

Pre-Plan Number	Fire Zone	Unit No.	Description	Elev.	Rev.
U1C-137		1	Crib House	517	4
TRH ₂ -140	18.1.1, 18.2.1, 18.3.1	3	Unit 3 Transformer Area	517	4
TRH ₂ -141	18.1.2, 18.2.2, 18.3.2	2	Unit 2 Transformer Area	517	4
TRH ₂ -142	18.5.1	1/2/3	Hydrogen Tank Farm	517	4
TRH ₂ -143	18.5.2	1/2/3	Hydrogen Trailer Area/Empty Radwaste Container Storage	517	4

Revision 4 December 13, 1999

4.0 ASSUMPTIONS & METHODOLOGY

The location of each pre-plan area is provided in general terms and by area name. It is assumed that persons using the pre-plans are familiar with general plant lay-out and area designations.

Access is defined to identify the point of entry to the area. No attempt was made to describe travel route from major plant area (such as the Control Room).

Electrical equipment of 480-V and higher rating only was listed. Minor items such as small motoroperated valves, light fixtures, etc. were not identified regardless of voltage.

Radioactive equipment listed in Section 3.0 reflects permanently installed equipment and does not take into account areas that may become contaminated due to maintenance, etc.

Equipment listed under Fire Protection Equipment includes manual fire fighting equipment (i.e., hose lines and portable extinguishers), automatic and manual suppression, and detection equipment.

The guidelines for fire attack are not intended to be strictly followed in sequence. It will be necessary to apply these guidelines to the specific fire situation and adapt as necessary.

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

AMENDMENT 13 Pre-plan <u>U2RB-1</u> Page 1 of 6 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 476'-6" Fire Zone 1.1.2.1 Torus

3.0 HAZARDS

Fire: Cable Insulation

Electrical: See 3.2

Other: Entrapment Possible Radioactive Equipment

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post in SE corner of U-2 at 517'-6"
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution: De-energize elect. equip.
- Ventilate
- Overhaul

7.0 EXPOSURES

Div. I and II Cable Trays

8.0 COMMUNICATIONS

1 Extension Phone in corner room Portable Radios

9.0 CONSTRUCTION

Concrete on all sides Part of West wall is 3-hour rated

2.0 ACCESS

- Primary: From door in SE corner room Unit 2 el. 476'
- Secondary: From door in SW corner room Unit 2 el. 476'

4.0 FIRE PROTECTION EQUIPMENT

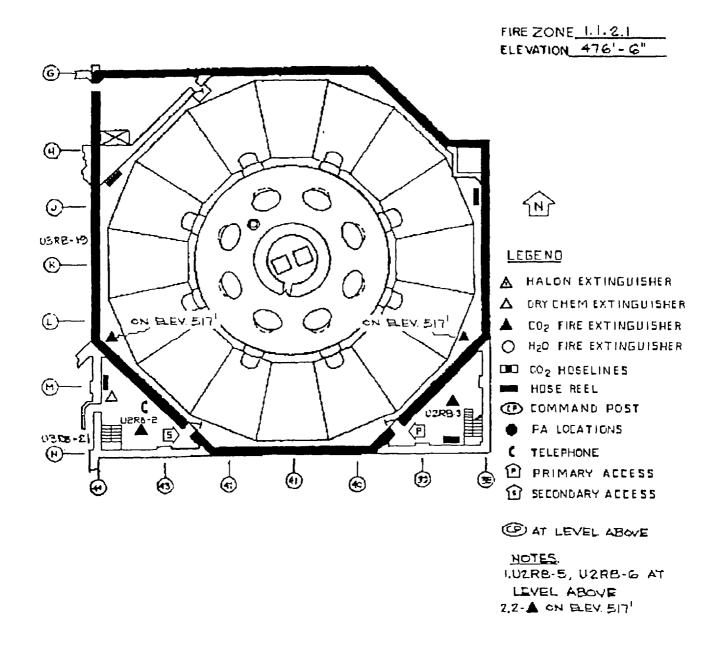
Detection: Linear thermal in and under cable trays

- 4 Hose Cabinets (2 available in corner rooms)
- 4 CO₂ Port. Extinguishers
 (2 available in corner rooms)
 (2 available at el. 517')
- 1 Dry Chemical Portable Extinguisher available in corner room

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke up the ladder to hatch at el. 517'-6" Rad Key needed to unlock hatch

AMENDMENT 13 Pre-plan <u>U2RB-1</u> Page 2 of 6 Rev. 4



AMENDMENT 13 Pre-plan <u>U2RB-1</u> Page 3 of 6 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 476'-6" Fire Zone 1.1.2.1 Torus

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From door in SE corner room Unit 2 el. 476'
- 2.2 Secondary: From door in SW corner room Unit 2 el. 476'

3.0 Hazards:

3.1 <u>Fire</u>:

<u>Hatch</u>	<u>Materials</u>	<u>Class</u>	
Pumps	Lubricating oil	B	
Panels	Cable insulation	A,C	
Electrical cables	Cable insulation	A,C	

3.2 Electrical:

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
2-3702	Closed Cooling Water Drywell Supply Valve	F4	MCC 28-1
2-3703	Closed Cooling Water Drywell Return Valve 2A	F3	MCC 29-1
2-1501-21A	LPC1 Outboard Isolation Valve 2A	D2	MCC 28-7
2-1501-22A	LPC1 Outboard Isolation Valve 2A	B3	MCC 28-7
2-1001-5A	Shutdown Cooling Return Isolation Valve 2A	C3	MCC 28-1

AMENDMENT 13 Pre-plan <u>U2RB-1</u> Page 4 of 6 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2-1402-38A	Core Spray Pump Recirc. Isolation Valve 2A	E4	MCC 28-1
2-1402-4A	Core Spray Vest Test Bypass Valve 2A	J1	MCC 28-1
2-1001-5B	Shutdown Cooling Return Isolation Valve 2B	B4	MCC 28-1
2-1501-22B	LPC1 Inboard Isolation Valve 2B	C3	MCC 29-7
2-202-7A	Recirculation Pump 2A Discharge Bypass Valve	C3	MCC 28-7
2-202-7B	Recirculation Pump 2B Discharge Bypass Valve		MCC 29-7
2-1402-3B	Core Spray Pump Recirc. Isolation Valve	E3	MCC 29-4
2-1402-4	Core Spray Test Bypass Valve 2B	A2	MCC 29-4
2-2042 (7)	Reactor Bldg. Equipment Pump and Heat Exchanger	B-1	MCC 29-3
2001-452A	Rx Bldg, Floor Drain Sump Pump	B-2	MCC 20-3
2001-452B	Rx Bldg. Floor Drain Sump Pump	B-3	MCC 29-3
2-1501-20A	LPC1 Torus Spray Valve	L2	MCC 28-1
2-1501-13A	LCP1 Pump Flow Bypass Valve 2	N1	MCC 28-1
2-1501-38A	LPC1 Torus Spray Valve 2A	L1	MCC 28-1
2-1501-18A	LPC1 Torus Ring Spray Valve 2A	L3	MCC 28-1
2-1501-19A	LPC1 Torus Ring Spray Valve 2B	L4	MCC 28-1
2-1501-13B	LPC1 Pump Flow Bypass Valve 2B	C4	MCC 29-4
2-1501-19B	LPC1 Torus Ring Spray Valve 2D	B4	MCC 29-4
2-1501-18B	LPC1 Torus Ring Spray Valve 2C	B3	MCC 29-4
2-1501-20B	LPC1 Torus Spray Valve 20	B2	MCC 29-4
2-1501-38B	LPC1 Torus Spray Valve 2C	B1	MCC 29-4

3.3 Hazardous Substances: Radioactive Equipment

3.4 Physical Hazards: None

AMENDMENT 13 Pre-plan <u>U2RB-1</u> Page 5 of 6 Rev. 4

3.5 Life Safety: Entrapment Possible

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: Linear thermal detectors in and under cable trays southside of Torus connected with both LPCI rooms panel #2223-114 located el. 517' West wall Unit 2.
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 4 Hose Cabinets (2 located in corner rooms)
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 4 - CO₂ (2 located in corner rooms, 2 located on catwalk at el. 517') 1 - Dry Chemical Extinguisher available in corner room

5.0 Guidelines for Fire Attack:

- Establish command post in SE corner of U-2 Reactor Bldg at 517'-6" el.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
 - 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up ladder and thru hatch on elev. 517'-6". Rad Key needed to unlock hatch.
- 6.3 Exposures: Division I and II Cable Trays
- 7.0 Exposures: Division I and II Cable Trays LPCI Valve Motors: 2-1501-13B, 2-1501-18B, 2-1501-19B, 2-1501-20B, 2-1501-38B, 2-1501-22A, 2-1501-22B, HPCI Valve Motors: 2-1001-5A and 2-1001-5B RBCCW Valve Motor: 2-3702, 2-3703

AMENDMENT 13 Pre-plan <u>U2RB-1</u> Page 6 of 6 Rev. 4

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: 1 Extension Phone available in corner room (U2RB-2)

9.0 <u>Construction</u>:

- 9.1 Floor: 30" Reinforced concrete on grade
- 9.2 <u>Wall</u>:
 - a. North: 12" Concrete
 - b. South: 12" Concrete
 - c. East: 12" Concrete
 - d. West: 24" Concrete, 3-hour rated except for an unrated door
 - e. Southeast: 30" Concrete
 - f. Southwest: 30" Concrete
- 9.3 Ceiling: 24" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-Plan Summary AMENDMENT 13 Pre-plan <u>U2RB-2</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 476'-6" Fire Zone 11.2.1 Southwest Corner Room

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil HVAC Duct Lining

Electrical: See 3.2

Other: None

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at top of stairs
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search area for victims
- Caution: De-energize equipment
- Ventilate
- Overhaul

7.0 EXPOSURES

Core Spray Pump, LPCI/Cont. Cooling Heat Exchanger LPCI/Cont. Cooling Pump LPCI Valves

9.0 CONSTRUCTION

Reinforced concrete on all sides West wall 3-hour rated

2.0 <u>ACCESS</u>

Primary: Stairs in SW corner of Unit 2 Reactor Building at Ground Floor el. 476'

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Linear Thermal

- 1 Hose Station
- 2 CO₂ Portable Extinguishers
- 1 Dry Chemical Portable Extinguisher

6.0 VENTILATION

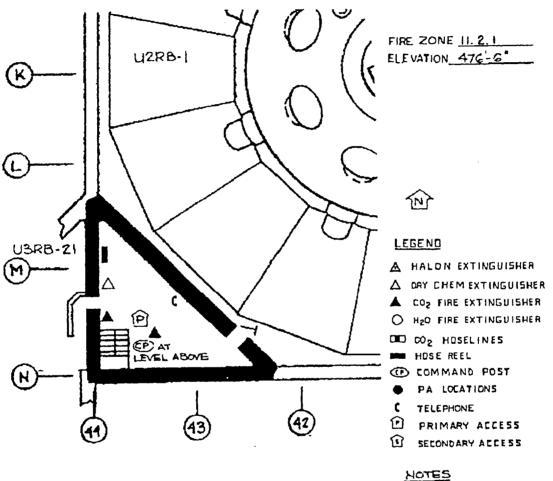
- Fixed: Operation of HVAC by Control Room as needed.
 - Manual: Use Smoke Ejectors to exhaust smoke up stairs in SW corner room Unit 2

8.0 COMMUNICATIONS

1 Extension Phone Portable Radios

AMENDMENT 13 Pre-plan <u>U2RB-2</u> Page 2 of 5 Rev. 4

I



NOTES U2 RB-5 AT LEVEL ABOVE

AMENDMENT 13 Pre-plan <u>U2RB-2</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 476'-6" Fire Zone 11.2.1 Southwest Corner Room

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From stairs in SW corner of Unit 2 Reactor Building at Ground Floor to el. 476'.
- 2.2 Secondary: None

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	Material	<u>Class</u>
Pumps	Lubricating oil	B
Ventilation System	Duct lining	A
Electrical Cables	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2-B-1401	Core Spray Pump	2429	4160V Swgr 24-1
2-2001-311A&B	Core Spray Pump 2A	E5	MCC 29-1
2-2001-311A&B	Area Sump Pumps 2B	E3	MCC 29-1
2C-1502	LPCI/Containment	2425	4160V
	Cooling Pump		Swgr 24-1
2D-1502	LPCI/Containment	2427	4160V
	Cooling Pump		Swgr 24-1
2-5782 2A	Reactor Bldg. Cond.	A3	MCC 29-3
	Return Pump		
2B	Reactor Bldg. Cond.	D2	MCC 29-3
 –	Return Pump		

AMENDMENT 13 Pre-plan <u>U2RB-2</u>

Page 4 of 5

Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2A	LPCI Core Spray Pump Area Cooling Unit	F3	MCC 28-1
2A	LPCI Core Spray Pump Area Cooling Unit	D4	MCC 29-4
2-1501-11B	LCPI Heat Exchanger Bypass Valve 2B	E4	MCC 29-4
2B-1402-3	Core Spray Pump Suction	A1	MCC 29-4
2-1501-32B	LPCI Header Crosstie Isolation Valve 2B	C3	MCC 29-4
2-1501-3B	Contain Cooling Heat Exchanger Valve 2B	C2	MCC 29-4
2-1501-5D	LPCI Pump 2D Suction Valve	A4	MCC29-4
2-1501-5C	LPCI Pump 2C Suction	A3	MCC

- 3.3 Hazardous Substances: None
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: Linear Thermal Detectors Panel #2223-114 located 517'-6" West wall Unit 2
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 1 Hose Station
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 2 - CO₂ 1 - Dry Chemical

5.0 Guidelines for Fire Attack:

- Establish command post at stairs in SW corner of Unit 2 Reactor Building at Ground Floor.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).

AMENDMENT 13 Pre-plan <u>U2RB-2</u> Page 5 of 5 Rev. 4

- Caution should be used when applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in SW Corner Room Unit 2
- 7.0 Exposures: LPCI/Containment Cooling/Core Spray Instrument Rack 2-2202-198 Recirculation Pump Instrument Rack (4) 2-2202-10A, 2-2202-10B, 2-202-10C, 2-2202-36 HPCI Instrument Racks 2202-29 A & B Core Spray Pump B LPCI Containment Cooling Heat Exchanger B LPCI/Containment Cooling Pump C,D LPCI/Emergency Air Cooler B LPCI Valves: M02-1501-11B, M02-1501-32B, M02-1501-3B, M02-1501-5C, M02-1501-5D HPCI Valve M02/3-2301-36

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: 1 Extension Phone

9.0 <u>Construction</u>:

- 9.1 Floor: 18" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. Northeast: 30" Reinforced concrete
 - b. South: 18" Reinforced concrete
 - c. West: 36" Reinforced concrete, 3-hour rated
- 9.3 Ceiling: 24" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 **Pre-Plan Summary**

AMENDMENT 13 Pre-plan U2RB-3 Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 476'-6" Fire Zone 11.2.2 Southeast Corner Room

3.0 HAZARDS

Fire: Cable Insulation **HVAC Duct Lining** Lubricating Oil

Electrical: See 3.2

Other: None

GUIDELINES FOR FIRE ATTACK 5.0

- Command Post near stairs el. 517'-6"
- S.C.B.A.
- Attack with Port. Ext., followed by 1-1/2" hose line
- Search area for victims
- Caution: De-energize equipment
- Ventilate
- Overhaul

7.0 EXPOSURES

Core Spray Pump LPCI/Cont. Cooling Heat Exchanger LPCI/Cont. Cooling Pumps LPCI Valves

COMMUNICATIONS

Operation of HVAC by Control

Use Smoke Ejectors and

Flexible Ducting to exhaust smoke up stairs in SE corner

Room as needed.

room Unit 2

Portable Radios

VENTILATION

Fixed:

Manual:

6.0

8.0

9.0 CONSTRUCTION

Concrete on all sides

Unit 2 Reactor Building at Ground Floor to el. 476'

From stairs at SE corner of

Secondary: None

ACCESS

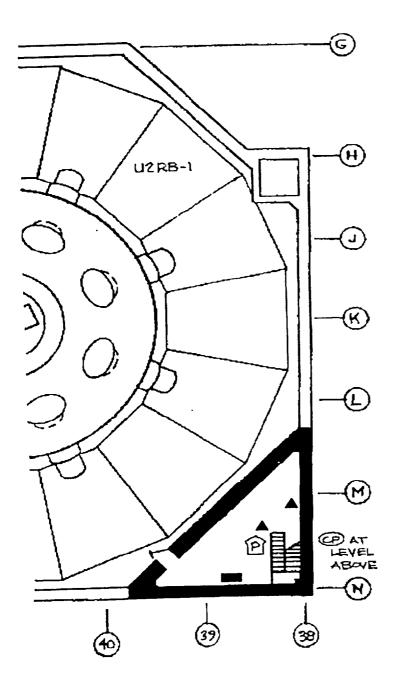
Primary:

2.0

FIRE PROTECTION EQUIPMENT 4.0

Detection: Linear Thermal 1 - Hose Cabinet 2 - CO₂ Portable Extinguishers (one located at el. 494')

AMENDMENT 13 Pre-plan <u>U2RB-3</u> Page 2 of 5 Rev. 4



FIRE ZONE 11.2.2 ELEVATION 476'-6"



LEGEND

HALON EXTINGUISHER
 DRY CHEM EXTINGUISHER
 CO2 FIRE EXTINGUISHER
 H20 FIRE EXTINGUISHER
 CO2 HOSELINES
 HDSE REEL
 COMMAND POST
 PA LOCATIONS
 TELEPHONE
 PRIMARY ACCESS
 SECONDARY ACCESS

NOTES

I. U2RB-5 AT LEVEL

AMENDMENT 13 Pre-plan <u>U2RB-3</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 476'-6" Fire Zone 11.2.2 Southeast Corner Room

2.0 <u>Access</u>:

- 2.1 Primary: From stairs at SE corner of Unit 2 Reactor Building Ground Floor to el. 476'.
- 2.2 Secondary: None

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Pumps	Lubricating oil	B
Ventilation System	Duct lining	A
Electrical Cables	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2-A-1401	Core Spray Pump	2330	4160∨ Swgr 23-1
2-	Safety Sys. Jockey Pump	B1	MCC 28-1
2-A-1502	LPCI/Cont. Cooling	2331	4160V
	Pumps (2)		Swgr 23-1
2-B-1502	LPCI/Cont. Cooling	2325	4160V
	Pumps (2)		Swgr 2301
2-2001-510A	Core Spray Pump Area		
	Sump Pump A	N5	MCC 28-1
2-2001-510B	Core Spray Pump Area		
	Sump Pump B	N3	28-1
2-1501-3A	Contain Cooling Heat Exchanger Discharge Valve	H3	MCC 28-1

AMENDMENT 13 Pre-plan <u>U2RB-3</u> Page 4 of 5 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2-1501-5A	LPCI Pump 2A Suction Valve	C1	MCC 28-1
2-1501-5B	LPCI Pump 2B Suction	K2	MCC 28-1
2-1501-			MCC 28-1
2-1501-11A	LPCI Heat Exchanger Bypass Valve 2A	N2	MCC 28-1
2-1501-32A	LPCI Header Crosstie Isolation Valve 2A	M3	MCC 28-1

- 3.3 Hazardous Substances: None
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

4.1	Linear Thermal Detectors
	 Panel # 2223 114 located 517'-6" West wall Unit 2

- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 1 Hose Cabinet
- 4.4 <u>Portable</u> Extinguishers: 2 - CO₂, one located on next landing on el. 494'

5.0 Guidelines for Fire Attack:

- Establish command post near Stairs on el. 517'-6", one level above fire pre-plan area.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Caution should be used when applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.

AMENDMENT 13 Pre-plan <u>U2RB-3</u> Page 5 of 5 Rev. 4

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up the Stairs in SE corner Room to ground level.

7.0 Exposures: Safety-Related Equipment Core Spray Pump A LPCI/Containment Cooling Heat Exchanger A LPCI/Containment Cooling Pump A, B LPCI/Emergency Air Cooler A LPCI/Containment Cooling/Core Spray Instrument Rack 2-2202-19A Recirculation Pump Instrument Rack (2) 2-2202-9, 2-2202-35 LPCI Valve Motors: 2-1501-5A, 2-1501-5B, 2-1501-3A, 2-1501-11A, 2-1501-32A

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 <u>Telephone</u>: None

9.0 Construction:

- 9.1 Floor: Concrete on grade
- 9.2 <u>Wall</u>:
 - a. South: 36" concrete
 - b. East: 36" Reinforced concrete
 - c. Northwest: 42" Concrete
- 9.3 Ceiling: 24" concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary AMENDMENT 13 Pre-plan <u>U2RB-4</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 476'-6" Fire Zone 11.2.3 HPCI Pump Room

3.0 HAZARDS

Fire: Lubricating Oil Cable Insulation Grease HVAC Duct Lining

Electrical: See 3.2

Other: CO2 Hazard

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization Suppression: Pre-action Sprinklers 1-Hose station (located in adjacent area)

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post in SW Corner U-2, 571' el.
- Support Sprinklers
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search area for victims and ventilate
- Caution: De-energize equipment
- Overhaul
- Standby Valve and Post Fire Watch

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors to exhaust smoke through Corner Rooms, up stairs of U-2 SW corner Room.

8.0 COMMUNICATIONS

1 Extension Phone nearby Portable Radios

7.0 EXPOSURES

HPCI Emergency Air Cooler, System Valve Motors, Drive Turbine, Pump and Turbine Cooling Pump

9.0 CONSTRUCTION

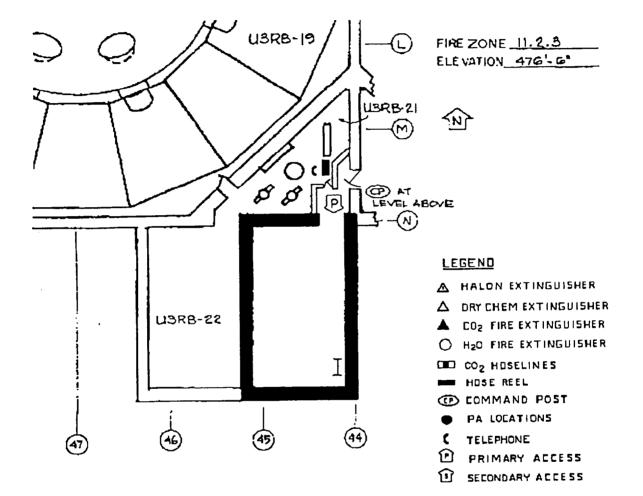
Reinforced concrete on all sides

2.0 ACCESS

Primary: From Unit 2 SW Stairs to Unit 3 SE Corner Room through door in North wall of HPCI Room el. 476'

Secondary: None

AMENDMENT 13 Pre-plan <u>U2RB-4</u> Page 2 of 5 Rev. 4



AMENDMENT 13 Pre-plan <u>U2RB-4</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 476'-6" Fire Zone 11.2.3 HPCI Pump Room

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From Unit 2 SW Stairs to Unit 3 SE Corner Room, door in North HPCI Room wall el. 476'.
- 2.2 Secondary: None

3.0 <u>Hazards</u>:

3.1 Fire:

<u>Hazard</u>	<u>Material</u>	<u>Class</u>
Turbine/Pump	Lubricating oil	В
	Grease	В
Ventilation System	Duct lining	А
Panels	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2-2301-57	HPCI Gland Seal Condenser HPCI Pump and Turbine	50	400)/
2301-57	HPCI Aux. Coolant Pump	D2	480∨ MCC 29-4
2	HPCI Pump 2 Area Cooling Unit	D3	480∨ MCC 29-4
	HPCI Turbine Oil Tank Heater	E5	48OV MCC 29-4
2301-250	HPCI Floor Drain Sump Pump	C1	MCC 29-1

Pre-plan <u>U2RB-4</u> Page 4 of 5 Rev. 4

- 3.3 Hazardous Substances: None
- 3.4 Physical Hazards: None
- 3.5 <u>Life Safety</u>: None There is a CO₂ suppression system in the above Unit 2/3 Diesel Generator room.

4.0 Fire Protection Equipment

- 4.1 Detection: Ionization Detectors
- 4.2 <u>Automatic</u> <u>Suppression</u>: Pre-action Sprinkler System ISO Valve #2-4199-135 located at el. 517'- 6'' Unit 2
- 4.3 Hose Reels: 1-Hose Station located in adjacent area
- 4.4 <u>Portable</u> <u>Extinguishers</u>: None

5.0 **Guidelines for Fire Attack:**

- Establish command post in SW corner of U-2 Rx at 517' el.
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- If suppression system fails to actuate, manual actuation is located adjacent to MCC-29-7 at South wall of Unit 2 Reactor Bldg. el. 517'.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Caution should be used when applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control valve located in Unit 2 Reactor Building at 517'-6" el. next to MCC 29-7 at South wall.
- Provide a fire watch until fire detection and fire suppression systems are returned to service, if out of service time greater than 1 hour per DATRs.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke through corner rooms, up stairs in Unit 2 SW corner room.

Pre-plan <u>U2RB-4</u> Page 5 of 5 Rev. 4

7.0 Exposures: HPCI/Emergency Air Cooler HPCI System Valve Motors 2-2301-3, 2-2301-6, 2-2301-9, 2-2301-10, 2-2301-14, 2-2301-15, 2-2301-48, 2-2301-49 HPCI Drive Turbine HPCI Pump HPCI Turbine Cooling Water Pump HPCI Condenser Air Exhaust Fan HPCI Oil Tank Heater HPCI Emergency Bearing Oil Pump HPCI Auxiliary Oil Pump HPCI Condensate Pump

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: 1 Extension Phone available in Unit 3 corner room

9.0 Construction:

- 9.1 Floor: 30" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated
 - b. South: 36" Reinforced concrete
 - c. East: 36" Reinforced concrete
 - d. West: 36" Reinforced concrete, 3-hour rated except for HVAC duct without a damper
- 9.3 Ceiling: 42" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

SPECIAL NOTES:

Extra length (minimum 50') of hose needs to be added to hose station near TIP Drive Room prior to charging hose to reach this room.

Safe shutdown components are located within 20' of Secondary access point. If fire has the potential of spreading outside of the Unit 2 Reactor Building, Ground Floor, the fire fighting effort should be suspended and access fire door closed.

2.0 ACCESS

- Primary: From Airlock at NE Corner of Unit 2 el. 517' High Rad key needed to access TIP Drive Room
- Secondary: From Unit 3 through doorway on common wall for Unit 2/3, el. 517' High Rad key needed to access TIP Drive Room

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization,

Photoelectric

- Suppression: Local over Air
- Compressor
- 3 Hose Cabinets
- 5 CO₂ Portable Extinguishers
- 2 Dry Chemical Portable Extinguishers, both are located outside the area

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in either the NW, SW or SE corners of U-2 el. 517'

AMENDMENT 13 Pre-plan <u>U2RB-5</u> Page 1 of 6 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 517'-6" Fire Zone 1.1.2.2 Ground Floor

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil

Electrical: See 3.2

Other: Radioactive Equipment

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post outside Airlock in TB
- S.C.B.A.
- Attack fire with Port. Ext., follow with 1-1/2" hose line
- Search area for victims
- Caution: De-energize equipment
- Ventilate
- Overhaul
- CAUTION: Combustible gap material

7.0 EXPOSURES

Safety-Related Equipment (See 7.0)

8.0 COMMUNICATIONS

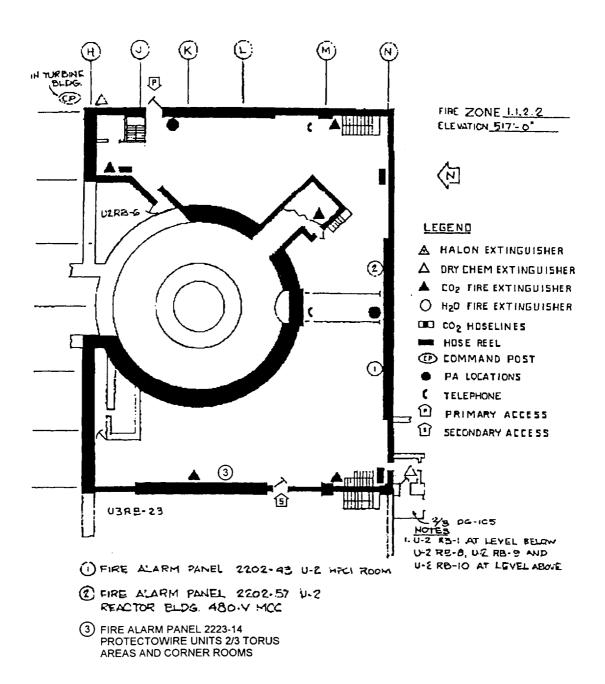
2 P.A. Locations 2 Extension Phones Portable Radios

9.0 CONSTRUCTION

Concrete on all sides North/West walls are 3-hour rated South/East walls - parts of walls are 3hour rated

AWEINDMENT 13

Pre-plan <u>U2RB-5</u> Page 2 of 6 Rev. 4



AMENDMENT 13 Pre-plan <u>U2RB-5</u> Page 3 of 6 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 517'-6" Fire Zone 1.1.2.2 Ground Floor

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From Airlock at the Northeast corner of Unit 2 Rx Bldg. el. 517'. High Rad key needed to access TIP Drive Room.
- 2.2 <u>Secondary</u>: From Unit 3 through doorway on common wall for Unit 2/3 el. 517. High Rad key needed to access TIP Drive Room.

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

<u>Hazard</u>	<u>Material</u>	<u>Class</u>	
Compressors	Lubricating oil	В	
Panels, Electrical Cables	Cable insulation	A,C	

3.2 Electrical:

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
2-1501-28A	LPCI Pumps Drywell Spray Discharge Valve 2B	M2	MCC 28-1
2-1501-27A	LPCI Pump Drywell Spray Discharge Valve 2A	K3	MCC 28-1
2-1501-21B	LPCI Outboard Isolation Valve 2B	A3	29-7
	Railroad Tunnel Door Operators	E6	MCC 29-4
	Car Puller	D2	MCC 29-1
	RX Drywell Equipment Patch Shield Door	C3	MCC 29-3
MCC 29-5	480V 29-5	M.O.	Swgr-29
MCC 29-6	480V MCC 29-6	М.О.	Swgr-29
MCC 39-5	480V MCC 39-5	396-C	Swgr-39
MCC 39-6	480V MCC 39-6	396-D	Swgr-39
MCC 29-7	MCC 29-7	293-B	Swgr-29
	Refueling Platform II-35	C4	MCC 29-3

Pre-Plan <u>U2RB-5</u> Page 4 of 6 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
MCC 28-7 2A	MCC 28-7 Post Loca H₂ & 0₂ Sample Pump	285A N4	Swgr 28 480V MCC 28-1
2B	Post Loca $H_2 \& 0_2$ Sample Pump	E6	MCC 29-1
MCC-29-1 MCC-28-1	480V MCC 480V MCC	292C 284-A	Swgr 29 Swgr 28
MCC-29-4	480V MCC	292-C	Swgr 29
2-2501	Air Compressor Drywell Air Compressor	70A (C4) B1	MCC 29-1 MCC 29-1
2A-4710	Drywell Instr Air Compressor	D-2	28-1 MCC
2B-4710	Drywell Instr Air Compressor	F4	29-1 MCC
28-1	MCC	284A	480V Trans 28
29-1 28-7	MCC MCC	294C	Trans 29
29-7	MCC	294C	Trans 29
29-4 302-8	MCC CRD Hydraulic System - Pressure Cont. Valve 2A	2940 D1	MCC 28-1
302-10	CRD Hydraulic System Pressure Cont. Valve 2B	E1	MCC 28-1

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: Ionization and Photoelectric Detectors
 4.2 <u>Automatic</u> <u>Suppression</u>: Local Suppression over Air Compressor 2-2501 (L-M) (39-40) ISO Valve # located on 517'-6" South Wall.
 4.3 <u>Hose Reels</u>: 3 - Hose Cabinets
 4.4 <u>Portable</u> <u>Extinguishers</u>: 5 - CO₂
 - 2 Dry Chemical, both are located outside the area.

Pre-Plan <u>U2RB-5</u> Page 5 of 6 Rev. 4

5.0 Guidelines for Fire Attack:

- Establish command post outside Airlock in Turbine Building el. 517'-6".
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control valve located at 517' el. at South wall of U-2 Reactor Building
- Provide a fire watch until fire detection and fire suppression systems are returned to service, if out of service time greater than 1 hour per DATRs.
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.
- SPECIAL NOTE: Extra length (minimum 50') of hose needs to be added to hose station near TIP Drive Room prior to charging hose to reach this room.
- SPECIAL NOTE: Safe shutdown components are located within 20' of Secondary access point. If fire has the potential of spreading outside of the Unit 2 Reactor Building, Ground Floor, the fire fighting effort should be suspended and access fire door closed.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up the stairs in either the NW, SW, or SE corners of U-2 Rx Building el. 517' Note: Location of Fire would determine which exhaust path to use.
- 7.0 Exposures: Safety-Related Equipment:

Instrument Panels, 2202-14, 2202-16 SRM/IRM Pre-Amp Panels, 2202-15A, 2202-15B Leak Detector Monitor Instrument Rack, 2202-28 Jet Pumps Instrument Rack, 2202-7 Control Rod Drive Hydraulic Control Unit (177) Accumulator Monitor Panel 2202-20 Division I Cable Trays Division II Cable Trays Motor Control Panel, MCC 29-7, 28-7, 29-1, 28-1, 29-4, 29-5, 29-6, 234X5

Pre-Plan <u>U2RB-5</u> Page 6 of 6 Rev. 4

Air Compressor 2-2501 Air Receiver 2-2502 LPCI Valve Motor: 2-1501-21A, 2-1501-21B CRD Valves: 2-0301-3A, 2-0301-3B, 3-0301-3A, 3-0301-3B Drywell Air Compressor A(B)-2-4210 Primary Containment Monitoring Panel 2-2252-81A, 2-2252-81B

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: 2 P.A. Locations
- 8.3 Telephone: 2 Extension Phones

9.0 <u>Construction</u>:

- 9.1 Floor: 24" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated
 - b. South: 12" Reinforced concrete Portion separating Fire Zone 9.0.c is 3-hour rated
 - c. East: 12" Reinforced concrete exterior wall Portion adjoining personnel access is 3-hour rated
 - d. West: 24" Reinforced concrete, 3-hour rated
- 9.3 Ceiling: 12" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

SPECIAL NOTE:

Safe shutdown components are located within 20' of Primary access point. If fire has the potential of spreading outside of the Shutdown Cooling Pump Room, the fire fighting effort should be suspended and access fire door closed.

2.0 ACCESS

Primary: From U-2 Reactor Bldg. Floor (517'); door is in SE wall of shutdown Cooling Pump Room. Rad key needed to access room

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Photoelectric

- 1 Hose Cabinet
- 1 CO₂ Portable Extinguisher
- 1 Dry Chemical Portable Extinguisher
- 6.0 VENTILATION
 - Fixed: Operation of HVAC by Control Room as needed.

Manual: Use Smoke Ejectors and Flexible Ducting to exhaust upstairs in NE corner to floor above

Fire

Dampers: Dampers may not close against air flow, therefore, shut down the ventilation system to ensure closure

8.0 COMMUNICATIONS

1 P.A. Location nearby 1 Extension Phone nearby Portable Radios Pre-plan <u>U2RB-6</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 517' Fire Zone 1.3.2 Shutdown Cooling Pump Room

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil

Electrical: See 3.2

Other: PCB Tank

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at Turbine Building
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Ventilate
- Overhaul

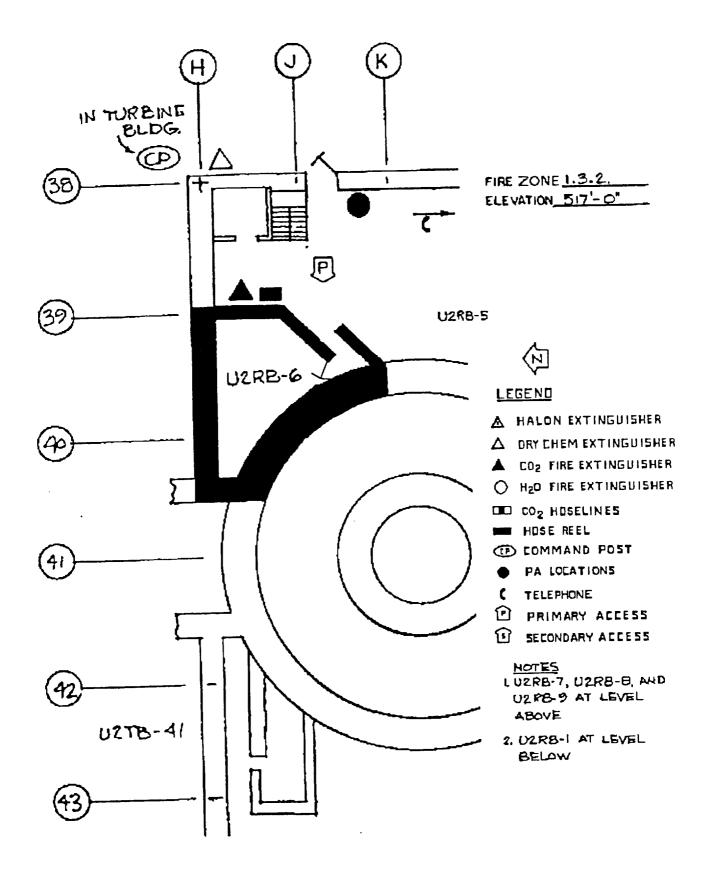
7.0 EXPOSURES

Shutdown Cooling Pumps and their suction valves

9.0 CONSTRUCTION

Reinforced concrete all sides South and East Walls 3-hour rated

Pre-Plan <u>U2RB-6</u> Page 2 of 5 Rev. 4



Pre-Plan <u>U2RB-6</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 517'-6" Fire Zone 1.3.2 Shutdown Cooling Pump Room

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From U-2 Reactor Building Floor (517' el.); Door is on the SE wall of the Shutdown Cooling Pump Room. Rad key needed to access room
- 2.2 Secondary: None

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Pumps	Lubricating oil	B
Panels	Cable insulation	A,C
Electrical cables	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2A-1002	Shutdown Cooling Pumps	2323	4160V Swgr 23-1
2B-1002	Shutdown Cooling Pumps	2428	4160V Swgr 24-1
2C-1002	Shutdown Cooling Pumps	2321	4160V Swgr 23-1
2A	Shutdown Cooling Inlet Isol Valve 2A	C4	MCC 28-1

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

Pre-Plan <u>U2RB-6</u> Page 4 of 5 Rev. 4

4.0 Fire Protection Equipment:

4.1	Detection:	Photoelectric smoke detectors
4.2	<u>Automatic</u> Suppression:	None
4.3	Hose Reels:	1 - Hose Cabinet, located outside the area
4.4	<u>Portable</u> Extinguishers:	1 - CO₂,located outside the area 1 - Dry Chemical, located outside the area

5.0 Guidelines for Fire Attack:

- Establish command post in Turbine Building at Airlock.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible (see Section 3.2 for Electrical Component Listing).
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- SPECIAL NOTE: Safe shutdown components are located within 20' of Primary access point. If fire has the potential of spreading outside of the Shutdown Cooling Pump Room, the fire fighting effort should be suspended and access fire door closed.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in NE corner of U-2 Reactor Building to floor above.
- 6.3 <u>Fire</u> <u>Dampers</u>: Fire Dampers may not close against air flow, therefore, shut down the ventilation system to ensure enclose.
- 7.0 Exposures: Shutdown Cooling Pumps Shutdown Cooling Valve Motors: 2-1001-2A, 2-1001-2B, 2-1001-2C

Pre-Plan <u>U2RB-6</u> Page 5 of 5 Rev. 4

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: 1 P.A. Location at doorway to U-2 Reactor Bldg.
- 8.3 Telephone: 1 Extension Phone at doorway to U-2 Reactor Bldg.

9.0 Construction:

- 9.1 Floor: 24" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. North: 24" Reinforced concrete
 - b. Southeast: 24" Reinforced concrete, 3-hour rated
 - c. East: 24" Reinforced concrete, 3-hour rated
 - d. West: 60" Reinforced concrete
- 9.3 <u>Ceiling</u>: 12" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: Stairway in NE corner of Reactor Bldg., Unit 2 el. 545'

Secondary: Stairway in SW corner of Unit 2 Reactor Building el. 545'

4.0 FIRE PROTECTION EQUIPMENT

- Detection: Ionization, Photoelectric
- Suppression: Wet pipe sprinkler over ventilation/pipe opening
- 4 Hose Stations
- 3 CO₂ Portable Extinguishers

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs at SW corner of U-2 or up stairs at NE corner of U-2, or up hatchway

8.0 COMMUNICATIONS

1 P.A. Location 1 Extension Phone Portable Radios

Pre-plan <u>U2RB-7</u> Page 1 of 6 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 545'-6" Fire Zone 1.1.2.3 Secondary Containment

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil Polyethylene Polyurethane

Electrical: See 3.2

Other: None

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at NE Corner, 517' el.
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search area for victims
- Caution with Electrical
- Ventilate Overhaul
- Fire Watch
- CAUTION: Combustible gap materials

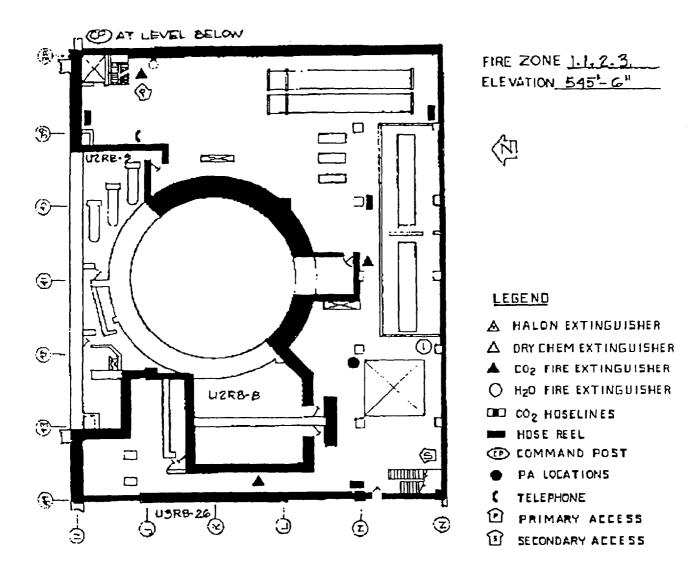
7.0 EXPOSURES

Switchgear, Cable Trays and Instrument Racks

9.0 CONSTRUCTION

Reinforced concrete on all sides

Pre-plan <u>U2RB-7</u> Page 2 of 6 Rev. 4



() FIRE ALARM RANEL 2202-50 U2 REACTOR BLDG. 4 KV SWER NOTES 1. UZRB-10 AT LEVEL ABOVE 2. UZRE-5 & UZRB-6 AT LEVEL BELOW

Pre-plan <u>U2RB-7</u> Page 3 of 6 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 545'-6" Fire Zone 1.1.2.3 Secondary Containment

2.0 <u>Access</u>:

2.1	Primary:	Stairway in NE corner of Reactor Building Unit 2, el. 545
2.2	Secondary:	Stairway in SW corner of Unit 2 Reactor Bldg, el. 545'.

3.0 Hazards:

3.1 <u>Fire</u>

Hazard	<u>Material</u>	<u>Class</u>
Pumps	Lubricating oil	B
Panels, Electrical Cables	Cable insulation	A,C
-	Polyethylene	A
-	Polyurethane	A

3.2 Electrical:

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
23-1	4-KV Switchgear	2329-NC 2333-NO	4 KV BUS 23
24-1	4-KV Switchgear	2430-NC 2422-NO	4 KV BUS 24
2-1201-8	Clean-up Recirc. Pumps Bypass Valve	E4	MCC 29-3
2-1402-25	Core Spray Inboard Isolation Valve 2A	H2	MCC 28-1
2-1402-24B	Core Spray Outboard Isolation Valve 2B	E1	MCC 24-1
2-1501-27B	LPCI Drywell Spray Valve 2C	D4	MCC 29-1

Pre-plan <u>U2RB-7</u> Page 4 of 6 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2-1501-28B	LPCI Pumps Drywell Spray Discharge Valve	F1 2D	MCC 29-1
2-3701	Closed Cooling Water Header Isolation Valve	P5	MCC 28-1
2-3704	Shutdown Ht Exchang. Closing Cool Water Isolation Valve	D3	MCC 29-1
2A-212-1205	Reactor Water Clean-up Recirc. Pumps	2326	4160 V Swgr 23-1
2B-212-1205	Reactor Water Clean-up Recirc. Pumps	2431	Swgr 24-1
4KV Swgr 24-1	4KV Swgr 24-1	2411	Swgr 24
4KV Swgr 23-1	4KV Swgr 23-1	2302	4160V
			Swgr 23
2A-3701	Rx Bldg. Closed Cooling Water Pumps	2322	Swgr 23-1
2B-3701	Rx Bldg. Closed Cooling Water Pumps	2433	Swgr 24-1
2C-37O1	Rx Bldg. Closed Cooling Water Pumps	2434	Swgr 24-1
2-1206	Rx Clean-up Demin. Aux. Pump	283D	480∨ Swgr 28
1213	Clean-up Filter Sludge Pump	D5	MCC 29-3
2-5901	Rx Bldg. Elevator	A2	MCC 29-3
	Dry Well Air Sampling System	B4	MCC 29-3
2-1201-9A	Clean-up Recirc. Pump 2A Discharge Valve	F2	MCC 29-3
2-1201-9B	Clean-up Recirc. Pump 2B Discharge Valve	F3	MCC 29-3
2-1201-11	Clean-up Demin. to Condenser Shutoff Valve	E1	MCC 29-3
2-1201-12	Clean-up Demin. to Condenser Shutoff Valve	E2	MCC 29-3

3.3 Hazardous Substances: PCB tank behind 23-1/24-1 switchgear

- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

Pre-plan <u>U2RB-7</u> Page 5 of 6 Rev. 4

4.0 Fire Protection Equipment:

- 4.1 Detection: Ionization and Photoelectric Detectors
- 4.2 <u>Automatic</u> <u>Suppression</u>: Wet pipe sprinklers above ventilation/pipe opening to Shutdown Cooling Pump Room.
- 4.3 Hose Reels: 4 Hose Stations
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 3 - CO₂

5.0 <u>Guidelines for Fire Attack</u>:

- Establish command post at Stairway in NE corner at Ground Floor level.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible (see Section 3.2 for Electrical Component Listing).
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Provide a fire watch until fire detection system is returned to service, if out of service time greater than 1 hour per DATRs.
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

6.0 Ventilation:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in SW corner of Unit 2, or stairs in NE corner of Unit 2, or exhaust smoke up equipment hatchway.
- 7.0 Exposures: Switchgear 23-1 and 24-1 Division I and II Cable Trays Instrument Rack 2202-5 and 2202-6 MCC 42-1 RBCCW Pumps (3) RBCCW Hx (3)

Pre-plan <u>U2RB-7</u> Page 6 of 6 Rev. 4

Core Spray Valve: 2-1402-4B RBCCW Valves: 2-3701, 2-3704 LPCI Valve Motors: 2-1501-27B, 2-1501-28B Service Water Valves: 2-3904A, 2-3904B, 2-3904C RWCU Valves: MO2-1201-2, MO1-1201-3, PVC-2-1217, MO3-1201-2, MO3-1201-3, PVC-3-1217

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: 1 P.A. Location
- 8.3 Telephone: 1 Extension Phone

9.0 <u>Construction</u>:

- 9.1 Floor: 12" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated except for HVAC duct without a fire damper
 - b. South: 12" Concrete 3 hour
 - c. East: 12" Concrete 3 hour
 - d. West: 12" Concrete 3-hour rated
- 9.3 Ceiling: 36" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

Pre-plan <u>U2RB-8</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 545'-6" Fire Zone 1.1.2.3 Non-Regen Heat Exchangers

3.0 HAZARDS

Fire: Cable Insulation Polyethylene Polyurethane

Electrical: See 3.2

Other: None

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post near stairs
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search area for victims
- Ventilate
- Overhaul
- CAUTION: Combustible gap materials

6.0 VENTILATION

Fixed: Operation of HVAC by Control Room as needed.

Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in SW corner of Unit 2 Rx Bldg. el. 545'

8.0 COMMUNICATIONS

1 P.A. Location Portable Radios

7.0 EXPOSURES

None

9.0 CONSTRUCTION

Floor/Ceiling – concrete Walls - Masonry, concrete

2.0 ACCESS

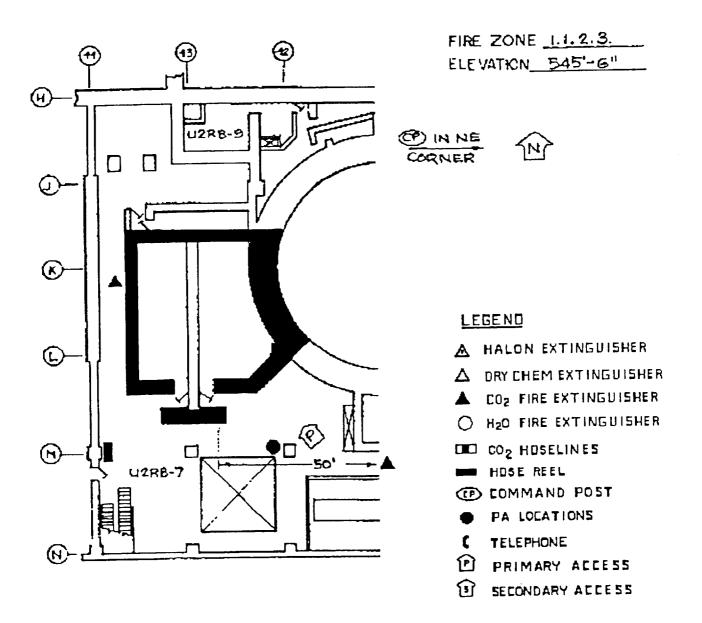
Primary: From doors at South end of the Heat Exchanger Rooms, Unit 2 Reactor Bldg. el. 545' High Rad key needed to access these rooms.

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

- 1 Hose Cabinet
- 2 CO₂ Portable Extinguishers

Pre-plan <u>U2RB-8</u> Page 2 of 5 Rev. 4



NCTES

1. UZRB-10 AT LEVEL ABOVE

2 UZRB-3 AND UZ RB-6 AT LEVEL BELOW

Pre-plan <u>U2RB-8</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 545'-6" Fire Zone 1.1.2.3 Non-Regen Heat Exchangers

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From doors at South end of Heat Exchanger Rooms, Unit 2 Reactor Building el. 545'. High Rad key needed to access these rooms
- 2.2 Secondary: None

3.0 Harzards:

3.1 <u>Fire</u>:

<u>Hazard</u>	<u>Material</u>	<u>Class</u>
Electrical cables	Cable insulation Polyethylene	A,C A
-	Polyurethane	A

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2-1201-4	Clean-up Demin. Aux. Pump Discharge Valve	F1	MCC 29-3
2-1207-7	Clean-up System Return Isolation Valve	C1	MCC 28-1

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

Pre-plan <u>U2RB-8</u> Page 4 of 5 Rev. 4

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4.0 Fire Protection Equipment:

- 4.1 Detection: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 <u>Hose Reels</u>: 1 Hose Cabinet (Available in nearby area)
- 4.4 <u>Portable</u> <u>Extinguishers</u>: $2 - CO_2$ (Available in nearby area).

5.0 <u>Guidelines for Fire Attack</u>:

- Establish command post near stairs.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the top of various walls and the ceiling that may cause hidden fire spread.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up Stairs in SW corner of U-2 Rx Bldg. el. 545'

7.0 Exposures: None

8.0 <u>Communications</u>:

- 8.1 <u>Portable radios</u>: OK to use
- 8.2 Public Address: 1 P.A. Location
- 8.3 <u>Telephone</u>: None

Pre-plan <u>U2RB-8</u> Page 5 of 5 Rev. 4

1

1

9.0 Construction:

9.1 Floor: 12" Reinforced concrete

9.2 <u>Wall</u>:

- a. North: Masonry
- b. South: Masonry
- c. East: Concrete
- d. West: Masonry
- 9.3 <u>Ceiling</u>: 36" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

Pre-plan <u>U2RB-9</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 545'-6" Fire Zone 1.1.2.3 Shutdown Heat Exchangers

3.0 HAZARDS

Fire: None

Electrical: See 3.2

Other: Radioactive Equipment

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post near stairs in NE corner
- S.C.B.A.
- Attack with Port. Ext., followed with 1-1/2" hose line
- Search area for victims
- Ventilate
- Overhaul
- CAUTION: Combustible gap material

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in NE corner of U-2 Rx Bldg., el. 545'

8.0 COMMUNICATIONS

1 Extension Phone Portable Radios

7.0 EXPOSURES

Safety-Related Equipment

9.0 CONSTRUCTION

Floor/Ceiling – Reinforced concrete North Wall - Reinforced concrete (3-hour rated) East/West/South Walls - Masonry

West of stairs High Rad key needed to access this area

From door in NE corner of

Unit 2 Rx Bldg., el. 545'

Secondary: None

2.0

ACCESS

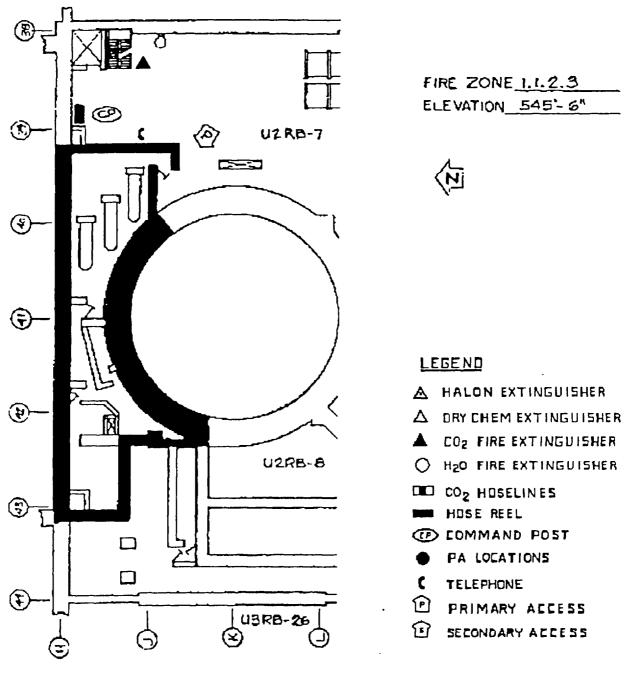
Primary:

4.0 FIRE PROTECTION EQUIPMENT

Detection: Photoelectric

- 1 Hose Cabinet
- 1 CO₂ Portable Extinguisher

Pre-plan <u>U2RB-9</u> Page 2 of 5 Rev. 4



NOTES

- I. U2RE-IC AT LEVEL ABOVE
- 2 UZRB-5 AND UZRB-6 AT LEVEL BELOW

Pre-plan <u>U2RB-9</u> Page 3 of 5 Rev. 4 1

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Reactor Building Elevation 545'-6" Fire Zone 1.1.2.3 Shutdown Heat Exchangers

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From doors near NE corner of Unit 2 Reactor Bldg el. 545', just West of stairway. High Rad key needed to access this area.
- 2.2 <u>Secondary</u>: None

3.0 <u>Hazards</u>:

- 3.1 Fire: None
- 3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2-1402-24A	Core Spray Outboard Isolation Valve 2A	H1	MCC 28-1
2-1402-4A	Core Spray Test Bypass Valve 2A	J1	MCC 28-1
2-1402-25B	Core Spray Inboard Isol Valve 2B	E2	MCC 29-1

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

4.1 <u>Detection</u>: Photoelectric Detectors

Pre-plan <u>U2RB-9</u> Page 4 of 5 Rev. 4

- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 1 Hose Cabinet
- 4.4 <u>Portable</u> Extinguishers: 1 - CO₂

5.0 Guidelines for Fire Attack:

- Establish command post near stairs.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke to and up stairs in the NE corner of U-2 Rx Bldg. el. 545'
- **7.0** Exposures: Shutdown Cooling Heat Exchangers (3) Shutdown Cooling Valve Motors: 2-1001-4A, 2-1001-4B, 2-1001-4C.

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: None
- 8.3 Telephone: 1 Extension Phone

9.0 Construction:

9.1 Floor: 12" Reinforced structural concrete

Pre-plan <u>U2RB-9</u> Page 5 of 5 Rev. 4

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- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated
 - b. South: Masonry
 - c. East: Masonry
 - d. West: Masonry
- 9.3 <u>Ceiling</u>: Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: From Stairs in the NE corner of Unit 2 Reactor Bldg. el. 570'. High Rad key needed to access Cleanup Pipeway

Secondary: From Stairs at SW corner of Unit 2 Reactor Bldg. El. 570'. High Rad key needed to access Cleanup Pipeway

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization, Linear Thermal Suppression: Preaction, wet pipe system for hatchway and stairs 5 - Hose Cabinets 4 - CO₂ Portable Extinguishers

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in either the NE or SW corner of U-2 Rx Bldg. el. 570'

8.0 COMMUNICATIONS

2 Extension Phones Portable Radios Pre-plan <u>U2RB-10</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 570' Fire Zone 1.1.2.4 Secondary Containment

3.0 HAZARDS

Fire: Cable Insulation Polyurethane Polyethylene

Electrical: See 3.2

Other: Radioactive Equipment, 2 Transformers containing Pyranol.

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at el. 545' at stairwell
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution De-energize Equipment
- Ventilate
- Overhaul
- CAUTION: Combustible gap materials

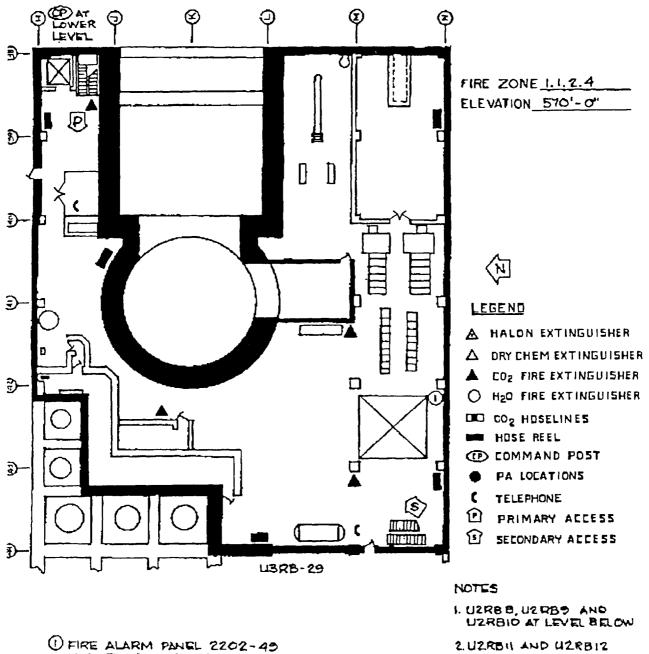
7.0 EXPOSURES

- Division I and II Cable Trays
- 480V SWGR 28, 29
- 250 Vdc MCC 2A, 2B
- 125 Vdc Dist. Panel 2

9.0 CONSTRUCTION

Concrete on all sides North and West walls 3-hour rated Portion of ceiling 3-hour rated

Pre-plan U2RB-10 Page 2 of 5 Rev. 4



U-2 REACTOR BLDG 480V SWGR

2. UZRBII AND UZRBIZ AT LEVEL ABOVE

Pre-plan <u>U2RB-10</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 570' Fire Zone 1.1.2.4 Secondary Containment

2.0 <u>Access</u>:

2.1 <u>Primary</u> :	From Stairs in NE Corner of Unit 2 Reactor Bldg, el. 570'. High Rad key
	needed to access Cleanup Pipeway.

2.2 <u>Secondary</u>: From Stairs at SW corner of Unit 2, Reactor Bldg., el. 570' near Reactor Bldg. Cooling Water Expansion Tank. High Rad key needed to access Cleanup Pipeway

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Panels	Cable insulation	A,C
Electrical cables	Cable insulation	A,C
Rad Chem. Sample Area	Paper	А

3.2 Electrical:

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
29-3	MCC		
2A	D.C. MCC 2A		
2B	750V MCC		
28	480V Swgr		
29	480V Swgr		
MCC 2A	250V D.C. MCC 2A	A01 or AL	250V DC MCC 2
MCC 2B	250V D.C. MCC 2B	001 or AL	250V DC MCC 2
Swgr 28	480V Swgr 28	MF28	480V Trans 28
Swgr 29	480V Swgr 29	MF29	480V Trans 29
			110113 23

Pre-plan <u>U2RB-10</u> Page 4 of 5 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2-A-1902	Fuel Pool Cooling Pumps	283A	480V Swgr 28
2-B-1902	Fuel Pool Cooling Pumps	293A	480V Swgr 29
29-3 MCC	480V MCC	294-B	480V Swgr 29
1214	Clean-up Pre-coat Tank Mixer	D3	480V MCC 29-3
2-1222		25OV DC	
2-1211	Clean-up Filter and Pump D1	MCC 29-3	MCC 29-3

- 3.3 <u>Hazardous Substances</u>: Radioactive Equipment
- 3.4 Physical Hazards: None
- 3.5 <u>Life Safety</u>: 2 Transformers (28 and 29) containing Pyranol

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: Ionization detectors through fire zone except for cleanup demineralizer and filter areas. Linear detection at hatchway and stair which actuates preaction suppression system.
- 4.2 <u>Automatic</u> <u>Suppression</u>: Closed head preaction, wet pipe system at hatchway and stairs.
- 4.3 <u>Hose Reels</u>: 5 Hose Cabinets
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 4 - CO₂

5.0 **Guidelines for Fire Attack**:

- Establish command post near northeast stairs at el. 545'-6".
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible (see Section 3.2 for Electrical Component Listings.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.

Pre-plan <u>U2RB-10</u> Page 5 of 5 Rev. 4

- Overhaul entire fire area; check for extension.
- Provide a fire watch until fire detection system is returned to service, if out of service time greater than 1 hour per DATRs.
- CAUTION: This area contains combustible materials ini the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs at either the NE or SW corners of U-2 Rx Bldg. el. 570'
- 7.0 Exposures: Division I and II Cable Trays 480V SWGR 28, 29 250 - Vdc MCC 2A, 2B 125 Vdc Dist. Panel 2

8.0 <u>Communications</u>:

- 8.1 <u>Portable radios</u>: OK to use.
- 8.2 <u>Public Address</u>: No handset available
- 8.3 <u>Telephone</u>: 2 Extension Phones

9.0 <u>Construction</u>:

- 9.1 <u>Floor</u>: 36" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. North: Reinforced concrete, 3-hour rated except for a HVAC duct without a fire damper
 - b. South: Reinforced concrete
 - c. East: Reinforced concrete
 - d. West: Reinforced concrete, 3-hour rated
- 9.3 <u>Ceiling</u>: 18" Reinforced concrete, southside 3-hour rated

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

- Primary: Stairway in NE corner of Unit 2 Rx Bldg. el. 589'
- Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Local at Stand-by Liquid Control System 2 - Hose Stations 1 - Dry Chemical

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors to exhaust smoke up stairs in NE corner of U-2 Rx Bldg. el. 589'.

8.0 COMMUNICATIONS

1 P.A. Location 1 Extension Phone Portable Radios

Pre-plan <u>U2RB-11</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 589' Fire Zone 1.1.2.5.D Stand-by Liquid Control Area

3.0 HAZARDS

Fire: Lubricating Oil Cable Insulation Polyurethane

Electrical: See 3.2

Other: Entrapment Possible

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at NE Stairway
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line

- Search Area for victims
- Caution: De-energize equipment
- Ventilate
- Overhaul
- Fire Watch
- CAUTION: Combustible gap materials

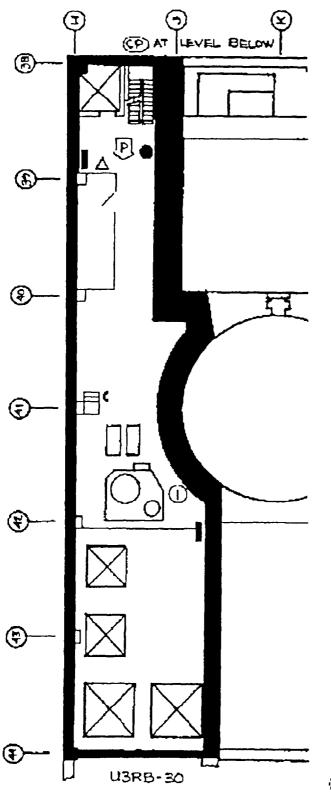
7.0 <u>EXPOSURES</u>

Stand-by Liquid Control System Tank and Pumps

9.0 CONSTRUCTION

Reinforced Concrete on all Sides West Wall - 3-hour rated North Wall - 3-hour rated; except for HVAC duct penetration

Pre-plan <u>U2RB-11</u> Page 2 of 5 Rev. 4



FIRE ZONE 1.1.2.5.D. ELEVATION 589-0



LEGEND

- A HALON EXTINGUISHER
- Δ DRY CHEM EXTINGUISHER
- ▲ CO2 FIRE EXTINGUISHER
- O H20 FIRE EXTINGUISHER
- CO2 HOSELINES
- HDSE REEL
- D COMMAND POST
- PA LOCATIONS
- C TELEPHONE
- PRIMARY ACCESS
- SECONDARY ALCESS

NOTES

- I. U2RB-32 AT LEVEL
- 2. U2RB-10 AT LEVEL BELOW
- TIRE ALARM PANEL 2202-48 U-2 STANDBY LIQUID CONTROL AREA

Pre-plan <u>U2RB-11</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 589' Fire Zone 1.1.2.5.D Stand-by Liquid Control Area

2.0 Access:

- 2.1 <u>Primary</u>: Stairway in NE corner of Unit 2 Rx Bldg. el. 589'.
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Pumps	Lubricating oil	B
Electrical cables	Cable insulation	A,C
-	Polyurethane	A

3.2 Electrical:

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
2A-1102	Stand-by Liquid Control System Pumps	F4	480V MCC 28-1
2B-1102	Stand-by Liquid Control System Pumps	B-3	480V
	Stand-by Liquid Control Heater	B-2	MCC 29-1

- 3.3 Hazardous Substances: None
- 3.4 Physical Hazards: None
- 3.5 <u>Life Safety</u>: One means of egress; entrapment possible.

Pre-plan <u>U2RB-11</u> Page 4 of 5 Rev. 4

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: Local Detection at Stand-by Liquid Control System
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 2 Hose Stations
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - Dry Chemical

5.0 **Guidelines for Fire Attack**:

- Establish command post at Stairway in NE corner at el. 570'.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution: De-energize electrical equipment if possible (see Section 3.2 for electrical component listing).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Provide a fire watch until fire detection system is returned to service, if out of service time greater than 1 hour per DATRs
- CAUTION: This area contains combustible materials ini the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread..

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Extinguisher and Flexible Ducting to exhaust smoke up stairs in the NE corner of U-2 Rx. Bldg. el. 589'.
- 7.0 Exposures: Stand-by Liquid Control System tank and pumps.

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: 1 P.A. Location

Pre-plan <u>U2RB-11</u> Page 5 of 5 Rev. 4

8.3 <u>Telephone</u>: 1 Extension Phone

9.0 <u>Construction</u>:

- 9.1 Floor: 36" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete 3-hour rated except for HVAC duct without a fire damper
 - b. South: Reinforced concrete
 - c. East: Reinforced concrete
 - d. West: 24" Reinforced concrete, 3-hour rated
- 9.3 <u>Ceiling</u>: 18" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 <u>ACCESS</u>

Primary: From Stairs at SW corner of Unit 2 Rx Bldg., el. 589'

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization, Linear Thermal

Suppression: Closed head preaction at hatchways, wet pipe sprinklers at stairs

2 - Hose Cabinets 2 - CO₂ Portable Extinguishers

6.0 <u>VENTILATION</u>

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in the SW corner of U-2 Rx. Bldg

8.0 COMMUNICATIONS

1 Extension Phone Portable Radios Pre-plan <u>U2RB-12</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Reactor Building Elevation 589'-0 Fire Zone 1.1.2.5.A Isolation Condenser Area

3.0 <u>HAZARDS</u>

Fire: Cable Insulation

Electrical: See 3.2

Other: Radioactive Equipment

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post near Stairs
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Ventilate
- Overhaul

7.0 EXPOSURES

Safety-Related Equipment.

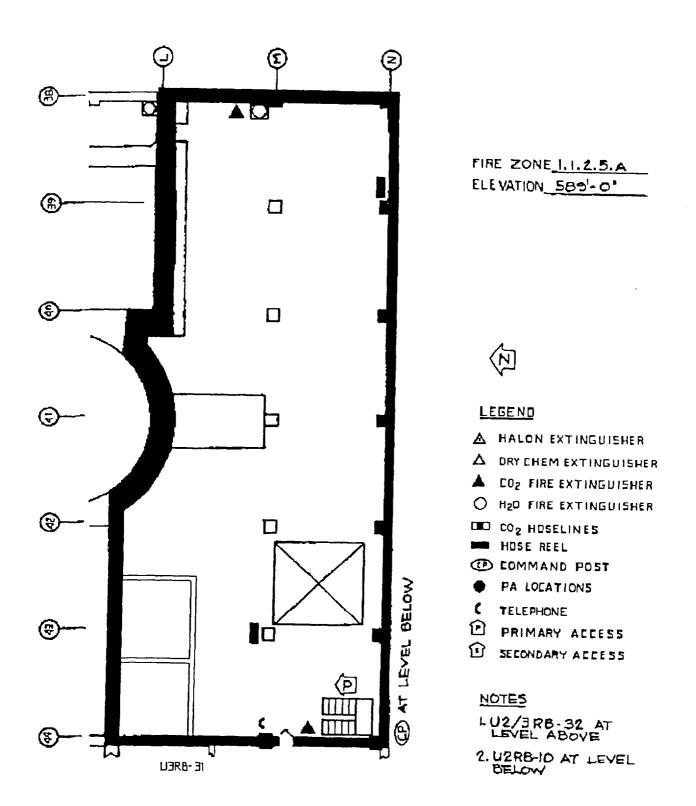
Isolation Condensers, and associated valves Division I and II Cable Trays

9.0 CONSTRUCTION

Concrete on all sides

Floor, North wall, and West wall 3 hour rated.

Pre-plan <u>U2RB-12</u> Page 2 of 5 Rev. 4



Pre-plan <u>U2RB-12</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Reactor Building Elevation 589'-0" Fire Zone 1.1.2.5.A Isolation Condenser Area

2.0 <u>Access</u>:

- 2.1 Primary: From Stairs at SW corner of Unit 2 Rx Bldg., el. 589'.
- 2.2 Secondary: None

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	Material	<u>Class</u>
Electrical cable	Cable insulation	A, C

3.2 Electrical:

Component	Component	Circuit	Power
<u>Number</u>	<u>Description</u>	<u>Breaker</u>	Supply
(4399-74) 2-1302	Isolation Condenser	E3	480∨ MCC 29-3

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 <u>Physical Hazards</u>: None
- 3.5 Life Safety: One means of egress provided, entrapment unlikely

4.0 Fire Protection Equipment:

4.1 <u>Detection</u>: Ionization detectors throughout area. Linear detection at hatchway and stair which activates preaction suppression system. Linear detection at hatchway.

Pre-plan <u>U2RB-12</u> Page 4 of 5 Rev. 4

4.2 <u>Automatic</u> Suppression: Closed hea

<u>n</u>: Closed head preaction system at hatchways, wet pipe sprinklers at stairs.

- 4.3 <u>Hose Reels</u>: 2 Hose Cabinets
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 2 - CO₂

5.0 <u>Guidelines for Fire Attack</u>:

- Establish command post near Stairs at el. 570'.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers, if sprinklers have not actuated, backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Provide fire watch until fire system is returned to service.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in the SW corner of Unit-2 Rx. Bldg.

7.0 Exposures: Safety-Related Equipment:

Division I and II Cable Trays Isolation Condenser Isolation Condenser Valves: MO2-1301-10, MO2-4102, AO2-1301-17, A02-1301-20, 2-1301-633, 2-1301-634, 2-1301-39, 2-1301-40, 2-1301-16

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 <u>Public Address</u>: No handset available
- 8.3 <u>Telephone</u>: 1 Extension Phone

Pre-plan <u>U2RB-12</u> Page 5 of 5 Rev. 4

1

9.0 <u>Construction</u>:

- 9.1 Floor: 18" Reinforced concrete 3 hour rated
- 9.2 <u>Wall</u>:
 - a. North: Minimum 36" reinforced concrete, 3-hour rated for HVAC ducts without fire dampers.
 - b. South: 18" Reinforced concrete
 - c. East: 24" Reinforced concrete
 - d. West: 24" Reinforced concrete, 3-hour rated
- 9.3 <u>Ceiling</u>: 18" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

- Primary: From door in Unit 3 SW corner room el. 476'
- Secondary: From door in Unit 3 SE corner room el. 476'

4.0 FIRE PROTECTION EQUIPMENT

Detection: Liner thermal in and under cable trays.

- 4 Hose Stations (2 located in corner rooms)
- 2 CO₂ Portable Extinguishers (1 located in corner room)
- 3 Dry Chemical Portable
 Extinguisher
 (2 located in corner rooms)

6.0 VENTILATION

- Fixed: Operation of HVAC by control room as needed
- Manual: Utilize Smoke Ejectors and Portable Ducting to exhaust upstairs smoke up the ladder leading to the hatch on elev. 517. Rad key needed for lock on ladder hatch.

8.0 COMMUNICATIONS

2 Extension Phones in corner rooms Portable Radios AMENDMENT 13 Pre-plan <u>U3RB-19</u> Page 1 of 6 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 476' Fire Zone 1.1.1.1 Torus

3.0 HAZARDS

Fire: Cable Insulation

Electrical: See 3.2

Other: Entrapment Possible

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at top of stairs
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution: de-energize elect. equip.
- Ventilate
- Overhaul

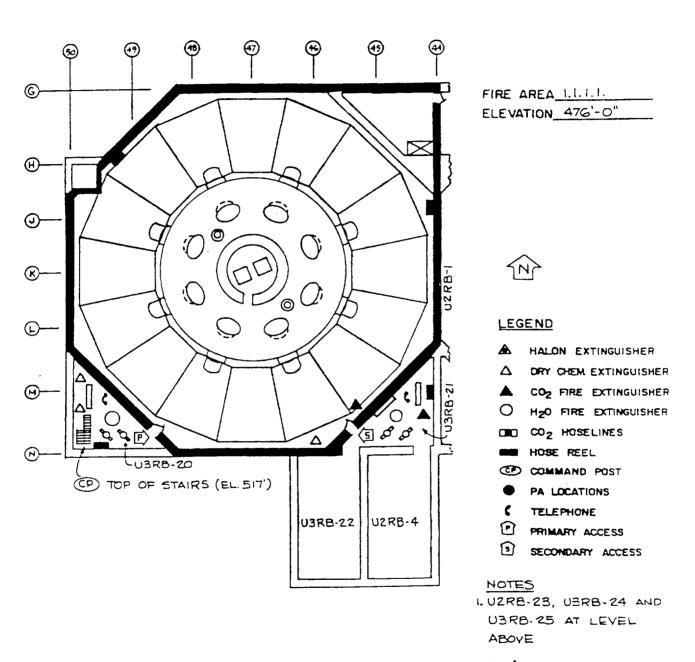
7.0 EXPOSURES

Div. I and II Cable Trays Motor Operated Valves

9.0 CONSTRUCTION

Concrete on all sides Portions of South and East Walls are 3hour rated

AMENDMENT 13 Pre-plan <u>U3RB-19</u> Page 2 of 6 Rev. 4



2. 3.- A AT EL. 517' READILY AVAILABLE FOR THIS AREA

AMENDMENT 13 Pre-plan <u>U3RB-19</u> Page 3 of 6 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 476' Fire Zone 1.1.1.1 Torus

2.0 <u>Access</u>:

2.1	Primary:	From door in Unit 3 SW corner room el. 476'.
2.2	Secondary:	From door in Unit 3 SE corner room el. 476'.

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Electrical Cables	Cable Insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
3-2042	Reactor Building Equipment Pump	B-1	MCC 39-3
3A-2001-452	Rx Building Floor Drain Sump Pump	B-2	MCC 39-3
3B-2001-452	Rx Building Floor Drain Sump Pump Vacuum Breakers Rx Building Cond. Return Unit (Pump)	В-3	MCC 39-3
3-1501-38A	LPCI Torus Spray Valve 3A	B1	MCC 38-4
3-1501-38B 3-1501-18A	LPCI Torus Ring Spray Valve	B3	MCC 38-4

AMENDMENT 13 Pre-plan <u>U3RB-19</u> Page 4 of 6 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
3-1501-19A	LPCI Torus Ring Spray Valve	B4	MCC 38-4
3-1501 - 13A	LPCI Pump Flow Bypass Valve 3A	E2	MCC 38-4
3-1001-5A	Shutdown Cooling Return Isol. Valve 3A	G2	MCC 38-1
3-3703	Closed Cooling Wtr. Drywell Return Valve 3A	G3	MCC 38-1
3-1001-5B	Shutdown Cooling Return Isol. Valve 3B	D4	MCC 38-1
3B-1402-3A	Core Spray Pump Suction Valve	H4	MCC 39-1
3-1501-20	LPCI Torus Spray Valve	L2	MCC 39-1
3-1501-38B	LPCI Torus Spray Valve	L1	MCC 39-1
3-1501-18B	LPCI Torus Spray Valve	L3	MCC 39-1
3-1501-19B	LPCI Torus Spray Valve	L4	MCC 39-1
3-3702	Closed Cooling Water Drywell Supply Valve	C3	MCC 39-1
3B-1402-38	Core Spray Pump Recirc. Isol. Valve	E4	MCC 39-1
3A-1402-38	Core Spray Pump Recirc. Isol. Valve 3A	E3	MCC 38-4
3-1501-22A	LPCI Inboard Isol. Valve 3A	A2	MCC 38-7
3-1501-21B	LPCI Outboard Isol. Valve 3B	A3	MCC 39-7
3-1501-22B	LPCI Inboard Isol. Valve 3B	C2	MCC 39-7

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 Physical Hazards: None
- 3.5 Life Safety: Entrapment possible

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: Linear thermal detectors in and under cable trays southside of Torus connected with both LPCI rooms Panel # located 517' West wall Unit 3.
- 4.2 <u>Automatic</u> <u>Suppression</u>: None

AMENDMENT 13 Pre-plan <u>U3RB-19</u> Page 5 of 6 Rev. 4

- 4.3 Hose <u>Reels</u>: 4 Hose Stations (2 located in corner rooms)
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 2 - CO₂, (1 located in corner room)
 - 3 Dry Chemical, (2 located in corner rooms)

5.0 Guidelines for Fire Attack:

- Establish command post at top of stairs at el. 517'-6" (SW corner).
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible (see Section 3.2 for electrical component listings).
- Ventilate area--utilize fixed ventilation system or place portable smoke ejectors as indicated (see Section 6.0).
- Overhaul entire fire area; check for extension.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary have control room shutdown HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode
- 6.2 <u>Manual</u>: Exhaust smoke with Portable Smoke Ejectors and Flexible Ducting via I ladder thru hatch on elev. 517-6" Rad key needed for lock on ladder hatch.

NOTE: Smoke ejectors may be needed every 40 feet.

7.0 Exposures: Div. I and II Cable Trays LPCI Valve Motors: 3-1501-13B, 3-1501-18B, 3-1501-19B, 3-1501-20B, 3-1501-38B, 3-1501-22B HPCI Valve Motors: 3-2301-5A, 3-2301-5B Shutdown Cooling Valve Motors: 3-1001-5A, 3-1001-5B RBCCW Valve Motors: 3-3702, 3-3703

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: 2 Extension Phones in corner rooms.

AMENDMENT 13 Pre-plan <u>U3RB-19</u> Page 6 of 6 Rev. 4

9.0 <u>Construction</u>:

- 9.1 Floor: 30" Reinforced concrete on grade 3-hour
 - 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete
 - b. South: 36" Concrete, 3-hour rated along HPCI room wall.
 - c. East: 24" Concrete, 3-hour rated except for an unrated door.
 - c. East: 24 Concrete, d. West: 12" Concrete
 - e. Southeast: 36" Concrete
 - f. Southwest: 36" Concrete
- 9.3 <u>Ceiling</u>: 24" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

Pre-plan <u>U3RB-20</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 476'-6" Fire Zone 11.1.1 Southwest Corner Room

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil HVAC Duct Lining

Electrical: See 3.2

Other: None

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post near stairs on el. 517'-6"
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution: De-energize equipment
- Ventilate
- Overhaul

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs.

8.0 COMMUNICATIONS

1 Extension Phone Portable Radios

7.0 EXPOSURES

Safety-Related Equipment Core Spray Pump B LPCI/Cont. Cooling Heat Exchanger B LPCI/Cont. Cooling Pump C, D LPCI/Emergency Air Cooler B LPCI Valve Motors

9.0 CONSTRUCTION

Reinforced concrete on all sides

2.0 <u>ACCESS</u>

4.0

Primary: From stairs in SW corner of Unit 3 Rx. Bldg., el. 476'

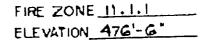
FIRE PROTECTION EQUIPMENT

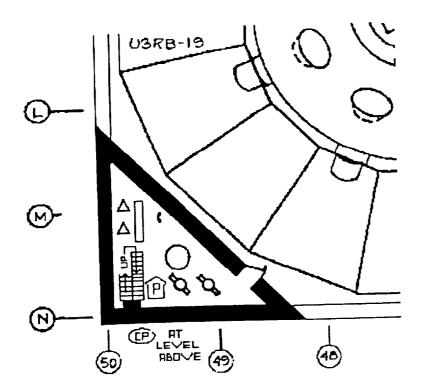
2 - Dry Chemical Portable Extinguisher

Secondary: None

1 - Hose Cabinet

Pre-plan <u>U3RB-20</u> Page 2 of 5 Rev. 4





LEGEND

- A HALON EXTINGUISHER
- A DRY CHEM EXTINGUISHER
- LO2 FIRE EXTINGUISHER
- O H20 FIRE EXTINGUISHER
- CO2 HOSELINES
- HOSE REEL
- COMMAND POST
- PA LOCATIONS
- C TELEPHONE
- PRIMARY ACCESS
- SECONDARY ALLESS

NOTES

I. UBRB-23 AT LEVEL ABOVE

Pre-plan <u>U3RB-20</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 476'-6" Fire Zone 11.1.1 Southwest Corner Room

2.0 <u>Access</u>:

- 2.1 Primary: From Stairs in SW corner of Unit 3, Rx Bldg., el. 476'.
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Pumps Ventilation	Lubricating oil Duct lining	B A
Electrical Cables	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
A 3-2001-511	Core Spray Pump Area Sump Pump	J3	480V MCC 39-1
B 3-2001-511	Core Spray Pump Area Sump Pump	J4	48OV MCC 39-1
3-B-1401	Core Spray Pump	3429	4160V Swgr 34-1
	Safety Sys Jockey Pump		
3C-1502	LPCI/Cont. Cooling Heat Exchanger and Pumps	3425	4160V Swgr 34-1
3D-1502	LPCI/Cont. Cooling Heat Exchanger and Pumps	3431	4160∨ Swgr 34-1
3-1501-20A	LPCI Torus Spray Valve 3B	B2	MCC 38-4
3-1501-3B	Contain. Cooling Heat Exchanger Discharge Valve 3B	E2	MCC 39-1

Pre-plan <u>U3RB-20</u> Page 4 of 5 Rev. 4

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
3-1501-5C 3-1501-5D 3-1501-11B	LPCI Pump Suction Valve LPCI Pump Suction LPCI Heat Exchanger Bypass Valve	K1 K2 N2	39-1 39-1 39-1
3-1501-32B	LPCI Header Crosstie Isol Valve	P4	MCC 39-1

- 3.3 Hazardous Substances: None
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 1 Hose Cabinet
- 4.4 <u>Portable</u> Extinguishers: 2 - Dry Chemical

5.0 <u>Guidelines for Fire Attack</u>:

- Establish command post near Stairs on el. 517'-6".
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Caution should be used when applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs.

Pre-plan <u>U3RB-20</u> Page 5 of 5 Rev. 4

7.0 Exposures: LPCI Valve Motors: 3-1501-3B, 3-1501-5C, 3-1501-5D, 3-1501-11B, 3-1501-32B Core Spray Pump B LPCI/Containment Cooling Heat Exchanger B LPCI/Containment Cooling Pumps C,D LPCI/Emergency Room Air Cooler B

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 <u>Telephone</u>: 1 Extension Phone

9.0 <u>Construction</u>:

9.1 Floor: 30" Reinforced concrete basemat

9.2 <u>Wall</u>:

- a. Northeast: 42" Reinforced concrete
- b. South: 12" Reinforced concrete, exterior
- d. West: 12" Reinforced concrete, exterior
- 9.3 Ceiling: 24" Reinforced concrete with stairway penetration

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 <u>ACCESS</u>

Primary: Down U2 Rx Bldg. Stairs thru door in Unit 2/3 wall into SE corner of Unit 3, Rx Bldg., el. 476'

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

1 - Hose Cabinet

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors to exhaust smoke upstairs in Unit 2 SW corner room to ground floor.
- Fire Dampers: Fire dampers may not close against air flow therefore, shut down the ventilation system to ensure closure.

8.0 COMMUNICATIONS

1 Extension Phone Portable Radios

Pre-plan <u>U3RB-21</u>

Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 476'-6" Fire Zone 11.1.2 Southeast Corner Room

3.0 HAZARDS

Fire: Cable Insulation Internal HVAC Duct Insulation Lubricating Oil

Electrical: See 3.2

Other: CO₂ suppression system in nearby diesel generator room

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at Unit 2 Stairs
 - S.C.B.A.
 - Attack with Port. Ext., follow with 1-1/2" hose line
 - Search Area for victims
 - Caution: De-energize equipment
 - Ventilate
 - Overhaul

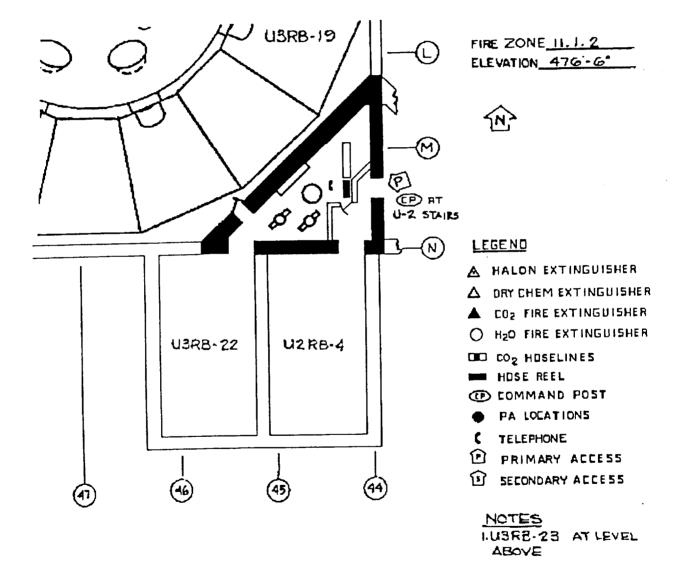
7.0 EXPOSURES

Core Spray Pump LPCI/Cont. Cooling Heat Exchanger, Pumps & Motors LPCI/Emergency Air Cooler, Instrument Rack LPCI Valves

9.0 CONSTRUCTION

Reinforced concrete on all sides East/South Walls - 3-hour rated.

Pre-plan <u>U3RB-21</u> Page 2 of 5 Rev. 4



Pre-plan <u>U3RB-21</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 476'-6" Fire Zone 11.1.2 Southeast Corner Room

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: Down U2 Rx Bldg. stairs thru door in Units 2/3 wall into SE corner of Unit 3 Rx Bldg., el. 476'.
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

Hazard	Material	<u>Class</u>
Pumps	Lubricating oil	B
Ventilation	Internal duct lining	A
Electrical Cables	Cable insulation	A,C

3.2 Electrical

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
3-5782	Rx Bldg. Cond. Return Unit		
3A-1401	Core Spray Pump	3331	4160V Swgr 33-1
3-2001-510A	Area Sump Pumps	F4	480V MCC 38-1
3-2001-510B	Core Spray Pump 3A Area Sump Pump	J4	MCC 39-1
3-A-1502	LPCI/Cont. Cooling Heat Exch's and Pumps (2)	3327	4160V Swgr 33-1
3-B-1502	LPCI/Cont. Cooling Heat Exch's and Pumps (2)	3330	4160V Swgr 33-1

Pre-plan <u>U3RB-21</u> Page 4 of 5 Rev. 4

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
3-2001-511B	Core Spray Pump 3B Area Sump Pump	B1	480V MCC
3-2001-511A	Core Spray Pump 3B	J3	MCC 39-1
3B	LPCI/Core Spray Pump Area Cooling Unit	F1	MCC 39-1
3-1501-13B	LPCI Pump Flow Bypass Valve	N1	39-1
3A	LPCI/Core Spray Pump Area Cooling Unit 3A	C1	MCC 38-1
3-1501-3A	Contain. Cooling Heat Exchanger Discharge Valve 3A	E3	MCC 38-1
3-1501-5A	LPCI Pump 3A Suction Valve	A3	MCC 38-4
3-1501-5B	LPCI Pump 3B Suction Valve	A4	MCC 38-4
3-1501-32A	LCPI Header Crosstie Isolation Valve 3A	C3	MCC 38-4
3-1501-11A	LCPI Heat Exchanger Bypass Valve 3A	E4	MCC 38-4

- 3.3 Hazardous Substances: None
- 3.4 Physical Hazards: None

3.5 <u>Life Safety</u>: There is a CO₂ suppression system in the nearby Unit 2/3 diesel generator room.

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 <u>Hose Reels</u>: 1 Hose Cabinet
- 4.4 <u>Portable</u> <u>Extinguishers</u>: None

5.0 Guidelines for Fire Attack:

- Establish Command post at Stairs in SW corner of Unit 2 Reactor Building at Ground Level.
- Self-contained breathing apparatus should be used by all personnel.

Pre-plan <u>U3RB-21</u> Page 5 of 5 Rev. 4

- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Caution should be used when applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.

6.0 Ventilation:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in Unit 2 SW Corner Room to Ground Level
- 6.3 <u>Fire Dampers</u>: Fire Dampers may not close against air flow therefore, shut down the ventilation system to ensure closure.
- 7.0 Exposures: Core Spray Pump A LPCI/CC Pumps: 3A-1502, 3B-1502 LPCI/Containment Cooling Heat Exchanger A LPCI/Emergency Air Cooler A LPCI/Containment Cooling/Core Spray Instrument Rack: 3-2203-19A LPCI/CC Valve Motors: 3-1501-3A, 3-1501-5A & B, 3-1501-11A, 3-1501-32A

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 <u>Telephone</u>: 1 Extension Phone

9.0 Construction:

- 9.1 Floor: 30" Reinforced concrete on grade
- 9.2 <u>Wall</u>:

а.	Northwest:	42" Reinforced concrete
b.	South:	36" Reinforced concrete, 3-hour rated
C.	East:	24" Reinforced concrete, 3-hour rated

9.3 <u>Ceiling</u>: 24" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: From SE Corner Room Unit 3 (11.1.2) through door at South wall of Unit 3 Rx Bldg., el. 476'

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization Suppression: Pre-action System 1 - Hose Cabinet nearby

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs at M-N, 44 in SW corner room of U-2 Rx. Bldg.
- Fire Dampers: Fire Dampers may not close against air flow therefore, shut down the ventilation system to ensure closure.

Pre-plan <u>U3RB-22</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 476'-6" Fire Zone 11.1.3 HPCI Pump Room

3.0 HAZARDS

Fire: Lubricating oil Internal Duct Lining Grease Cable insulation

Electrical: See 3.2

Other: One means of egress. CO₂ suppression system in room above.

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post in SW corner (517' el) Unit 2
- Check Suppression System
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Ventilate
- Overhaul
- Provide a Fire Watch

7.0 EXPOSURES

HPCI Turbine and Pump HPCI Cooling Water Pump HPCI/Emergency Air Cooler HPCI/MOV & Solenoid Valves HPCI/Instrument Racks Level Switches Temperature Switches

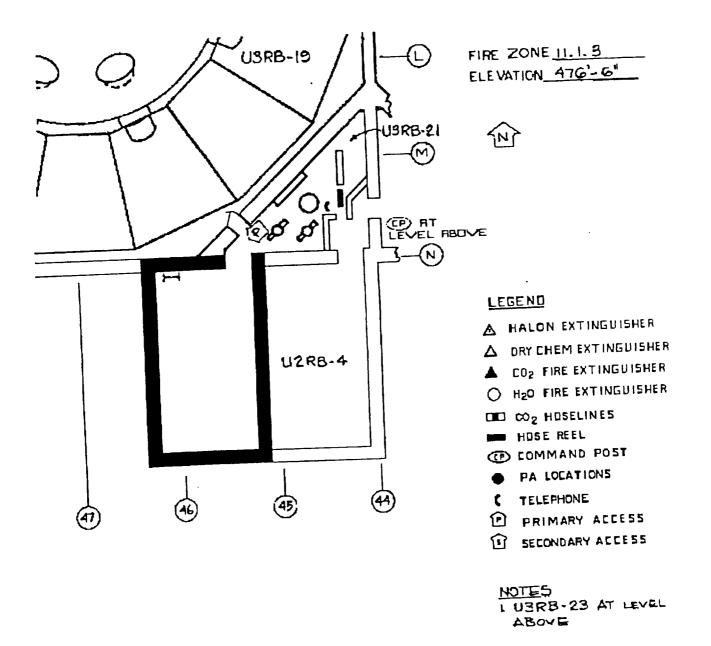
8.0 COMMUNICATIONS

1 - Extension Phone in adjacent area Portable Radios

9.0 CONSTRUCTION

Ceiling/Floor - Concrete East/West/South Walls - Concrete North Wall - Pyrocrete (3-hour rated)

AMENDMENT 13 Pre-plan <u>U3RB-22</u> Page 2 of 5 Rev. 4



Pre-plan <u>U3RB-22</u> Page 3 of 5 Rev. 4

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COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 476'-6" Fire Zone 11.1.3 HPCI Pump Room

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From SE Corner Room Unit 3 (Zone 11.1.2) thru door on South wall of SE corner room of Unit 3 Rx Bldg., el. 476'.
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

Hazard	Material	<u>Class</u>
Turbine	Lubricating oil, grease	B
Ventilation System	Internal duct lining	A
Panels	Cable insulation	A,C

3.2 Electrical:

Component <u>Number_</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
3-2301-250	HPCI Floor Drain Sumps and Pumps	E5	480V MCC 38-4
3-2301-57 3-2301-57 3	HPCI Pump and Turbine HPCI Aux. Coolant HPCI Oil Tank Heater HPCI Pump 3 Area	A1 F3 B1	MCC 39-1 MCC 39-1 MCC 39-1
	Cooling Unit		

- 3.3 Hazardous Substances: None
- 3.4 Physical Hazards: None

Pre-plan <u>U3RB-22</u> Page 4 of 5 Rev. 4

3.5 <u>Life Safety</u>: One means of egress, entrapment unlikely. There is a total flooding CO_2 suppression system in the fire zone above(9.0.C)

4.0 Fire Protection Equipment:

- 4.1 Detection: Ionization Detectors
- 4.2 <u>Automatic</u> <u>Suppression</u>: Pre-action Sprinkler System ISO Valve # 3-4199-141 located at el. 517'-6", Unit 3
- 4.3 Hose Reels: 1 Hose Reel located in adjacent area
- 4.4 <u>Portable</u> Extinguishers: None

5.0 Guidelines for Fire Attack:

- Establish command post in Secondary Containment near stairs in SW corner of Unit 2 el. 517'.
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- If suppression system fails to actuate, manual actuation may be
- accomplished by operating valve adjacent to MCC 39-7 el. 517' at South wall U-3 Rx Building.
- Self-contained breathing apparatus should be used by all personnel.
 Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control
- Position one person with a portable radio drophilate provide a fire watch until fire detection and fire suppression systems are returned to service.
- Provide a fire watch until fire detection and fire suppression systems are retained and intersection and fire suppression systems are retained and intersection and fire suppression systems are retained and intersection and fire suppression systems are retained and fire supersection are retained a

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs of U-2 Rx Bldg SW corner Room.
- 6.3 <u>Fire Dampers</u>: Fire Dampers may not close against air flow therefore, shut down the ventilation system to ensure closure.

Pre-plan <u>U3RB-22</u> Page 5 of 5 Rev. 4

7.0 Exposures: Safety-Related Equipment

HPCI Instrument Racks 3-2203-29A and 3-2203-29B HPCI Drive Turbine HPCI Pump HPCI Turbine Cooling Water Pump HPCI/Emergency Air Cooler HPCI Pump Discharge Isolation Valve Motor 3-2301-9 HPCI Turbine Steam Supply Valve Motor 3-2301-3 HPCI System Valve Motors: 3-2301-6, 3-2301-10, 3-2301-14, 3-2301-15, 3-2301-35 HPCI Emergency Bearing Oil Pump 3 HPCI Auxiliary Oil Pump 3 HPCI Condensate Pump 3 HPCI Oil Tank Heater

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: 1 Extension Phone, located in adjacent area.

9.0 Construction:

- 9.1 Floor: 36" Reinforced concrete basemat
- 9.2 <u>Wall</u>:
 - a. North: Pyrocrete, 3-hour rated
 - b. South: 36" Reinforced concrete, exterior
 - c. East: 36" Reinforced concrete
 - d. West: Reinforced concrete, exterior
- 9.3 Ceiling: 42" Reinforced concrete with unsealed concrete access plugs.

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

- Primary: From Airlock in the NW Corner of Unit 3 Rx. Bldg. el. 517'
- Secondary: From Doorway in Unit 2/3 Common wall, el. 517'

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization Suppression: Local Wet Pipe Sprinkler 3 - Hose Stations

5 - Dry Chemical Portable Extinguishers

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors to exhaust thru door at center east wall of room or up stairs in the NW corner of U-3 Rx. Bldg. el. 571'.

8.0 COMMUNICATIONS

2 P.A. Locations 4 Extension Phones Portable Radios Pre-plan <u>U3RB-23</u> Page 1 of 6 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 517'-6" Fire Zone 1.1.1.2 Ground Floor

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil Polyethylene

Electrical: Motor Control Centers

Other: CO₂ suppression system in adjacent room.

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at entry door
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- De-energize Electrical
- Ventilate with Portable
- Overhaul, Stand-by valve
- Fire Watch
- CAUTION: Combustible gap material

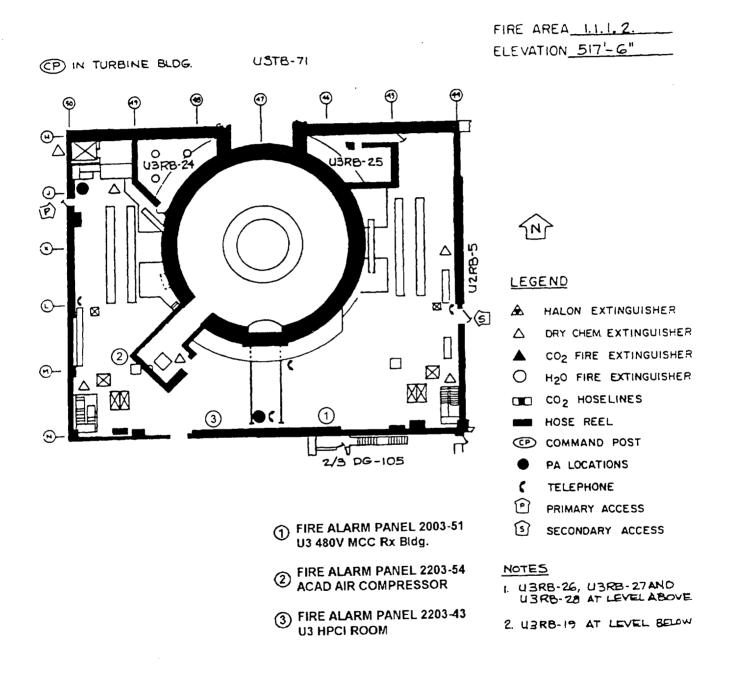
7.0 EXPOSURES

Safety-Related Instrumentation and Control Panels Motor Control Centers Div. I and II Cable Trays

9.0 CONSTRUCTION

Reinforced concrete on all sides

Pre-plan <u>U3RB-23</u> Page 2 of 6 Rev. 4



Pre-plan <u>U3RB-23</u> Page 3 of 6 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 517'-6" Fire Zone 1.1.1.2 Ground Floor

2.0 <u>Access</u>:

- 2.1 Primary: From Airlock in the NW Corner of Unit 3 Rx. Building, el. 517'
- 2.2 Secondary: From doorway in Unit 2/3 Common wall, el. 517'

3.0 Hazards:

3.1 Fire:

Hazard	<u>Material</u>	<u>Class</u>	
Compressors	Lubricating oil	B	
Panels, Electrical Cables	Cable insulation	A,C	
-	Polyethylene	A	

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
3-2501 MCC-38-7	ACAD Compressor 480V Reactor Building	G3 385-A	MCC 39-1 Swgr-38
MCC-39-7	MCC 38-7 480V Reactor Building MCC 39-7	394-C	Swgr-39
MCC-39-1	480V Reactor Building MCC 39-7	393-B	Swgr-39
MCC-38-1	480V Reactor Building MCC 38-1	384-A	Swgr-38
MCC-38-4	480V Reactor Building MCC 38-4	384-A	Swgr-38
3-2501	ACAD Air Compressor Refueling Platform Drywell Air Compressor	G3 C4 A2	MCC 39-1 MCC 39-3 MCC 38-1

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Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
3A-4710	Drywell Inst Air Comps		
3B-4710	Drywell Inst Air		
3-1001-1B	Comps Shutdown Cooling Inlet	D3	MCC 38-1
0 45 01 27P	Isol. Valve 3B LPCI Drywell Spray Valve	K3	MCC 39-1
3-15-01-27B 3B	Post Loca. H2+02 Moni- toring Sample Pump	N3	MCC 39-1
3-0302-3	CRD Hyd. System Pres- sure Cont. Valve 3A	D1	MCC 39-1
3-0302-10	CRD Hyd. System Pres- sure Cont. Valve 3B	E1	MCC 39-1
0D 4504 28B	LPCI Drywell Spray Valve	K4	MCC 39-1
3B-1501-28B 3-1501-21A	LPCI Outboard Isolation Valve 3A	C3	MCC 38-7

- Hazardous Substances: None 3.3
- None Physical Hazards: 3.4

There is a CO₂ suppression system in the adjacent Unit 2/3 Life Safety: 3.5 diesel generator room.

Fire Protection Equipment: 4.0

- **Ionization Detectors** Detection: 4.1
- Automatic 4.2 1 - 2 head Wet Pipe System protecting Air Compressor 3-2501 Suppression:
- 3 Hose Stations 4.3 Hose Reels:
- Portable 4.4 5 - Dry Chemical, one located in locked area Extinguishers:

Guidelines for Fire Attack: 5.0

- Establish command post in Turbine Building at entry door.
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.

Pre-plan U3RB-23 Page 5 of 6 Rev. 4

- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible (see Section 3.2 for electrical component listing).
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control
- valve located at 517'-6" el. along the South wall of U-3 Reactor Building near equip. door - Provide a fire watch until fire detection system and fire suppression systems are returned to
- service, if out of service time greater than 1 hour per DATRs
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

Ventilation: 6.0

- As necessary have control room shutdown HVAC to prevent spreading Fixed: 6.1 smoke or change HVAC to smoke exhaust mode
- Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke to Manual: 6.2 door at center East wall of room or up stairs in the NW corner of U-3 Rx Bldg el. 517'-6".
- SRM/IRM Pre-Amp Panels 2203-15A and 2203-15B Exposures: 7.0 Leak Detector Monitor Instrument Rack 2203-28 Jet Pumps Instrument Rack 2203-7, 2203-4, 2203-8 Control Rod Drive Hydraulic Control Unit (177) Instrument Panel 2203-14, 2203-16 Air Compressor 3-2501 Air Receiver 3-2502 Accumulator Monitor Panel 2203-20 Division I and II Cable Trays Motor Control Panels MCC 39-1, 39-7, 39-1, 38-1, 38-4, 38-7 LPCI Valve Motors: 3-1501-21B, 3-1501-27B, 3-1501-28B Local Reactor Pressure and Level Instrumentation: PI2-263-139A & B PI3-263-139A & B LI3-263-151A & B LITS2-263-151A & B

Pre-plan <u>U3RB-23</u> Page 6 of 6 Rev. 4

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: 2 P.A. Locations
- 8.3 <u>Telephone</u>: 4 Extension Phones

9.0 Construction:

9.1 Floor: 24" Reinforced concrete

9.2 <u>Wall</u>:

- a. North: 18" Reinforced concrete, 3-hour rated
- b. South: 12" Reinforced concrete, 3-hour rated along swing diesel room
- c. East: 24" Reinforced concrete, 3-hour rated
- d. West: 12" Reinforced concrete, 3-hour rated along airlock
- 9.3 Ceiling: 12" Reinforced concrete with stairwells and equipment hatches

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

SPECIAL NOTE:

Safe shutdown components are located within 20' of Primary access point. If fire has the potential of spreading outside of the Shutdown Cooling Pump Room, the fire fighting effort should be suspended and access fire door closed.

2.0 ACCESS

Primary: From U-3 Reactor Bldg. at 517' el., thru door in SW corner of room. Rad key needed to access room.

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Photoelectric

- 2 Hose Cabinets nearby
- 3 Dry Chemical Extinguishers nearby

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke upstairs to next level.

Fire

Dampers: Fire Damper may not close against airflow, therefore, shut down the ventilation system to ensure closure.

8.0 COMMUNICATIONS

- 1 P.A. Location nearby
- 1 Extension Phone nearby
- Portable Radios

Pre-plan <u>U3RB-24</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 517'-6" Fire Zone 1.3.1 Shutdown Cooling Pump Room

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil

Electrical: 480V Pump Motors

Other: Radiation

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at Turbine Bldg. Airlock
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution: electrical
- Ventilate
- Overhaul

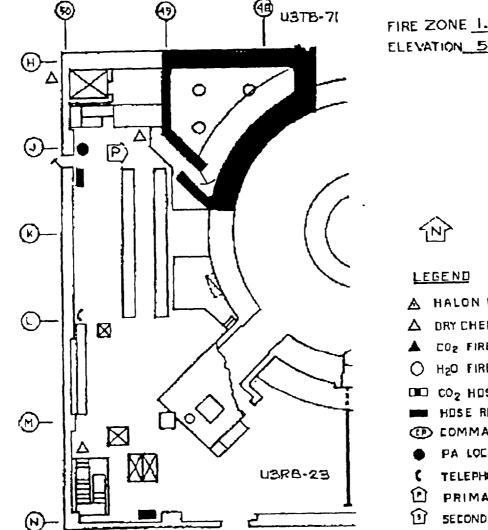
7.0 EXPOSURES

Shutdown Cooling Pumps (3) Shutdown Cooling Valve Motors

9.0 CONSTRUCTION

Reinforced concrete all sides

Pre-plan U3RB-24 Page 2 of 5 Rev. 4



(P) IN TURBINE BLDG.

FIRE ZONE 1.3.1 ELEVATION 517-6"

- A HALON EXTINGUISHER
- ▲ DRY CHEM EXTINGUISHER
- CO2 FIRE EXTINGUISHER
- O H20 FIRE EXTINGUISHER
- CO2 HOSELINES
- HDSE REEL
- (P) COMMAND POST
- PA LOCATIONS
- TELEPHONE
- PRIMARY ACCESS
- SECONDARY ALLESS

NOTES

- 1. U3RB-26, U3RB-27 AND U3RB- 28 AT LEVEL ABOVE
- 2. UBRB-19 AT LEVEL BELOW

Pre-plan U3RB-24 Page 3 of 5 Rev. 4

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COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

Unit 3 Reactor Building 1.0 Location: Elevation 517'-6" Fire Zone 1.3.1 Shutdown Cooling Pump Room

2.0 Access:

2.1	From U-3 Reactor Building, 517'-6" el., thru door in SW corner of room. Rad key needed to access room.
	Rey needed to access room.

2.2 Secondary: None

Hazards: 3.0

3.1 Fire:

Hazard	<u>Material</u>	<u>Class</u>
Pumps Electrical cables	Lubricating oil Cable insulation	B A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
3A-1002	Shutdown Cooling Pump	3329	4160V Swgr 33-1
3B-1O02	Shutdown Cooling Pump	3430	4160V Swgr 34-1
3C-1O02	Shutdown Cooling Pump	3433	4160V Swgr 34-1

- Hazardous Substances: Radiation 3.3
- None Physical Hazards: 3.4
- One means of egress Life Safety: 3.5

Pre-plan <u>U3RB-24</u> Page 4 of 5 Rev. 4

4.0 Fire Protection Equipment:

- 4.1 Detection: Photoelectric detectors
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 2 Hose Cabinets nearby in adjacent area
- 4.4 <u>Portable</u> Extinguishers: 3 – Dry Chemical nearby in adjacent area

5.0 Guidelines for Fire Attack:

- Establish command post in Turbine Building at Airlock.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible (see Section 3.2 for Electrical Component Listing).
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- **SPECIAL NOTE:** Safe shutdown components are located within 20' of Primary access point. If fire has the potential of spreading outside of the Shutdown Cooling Pump Room, the fire fighting effort should be suspended and access fire door closed.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Use Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in NW corner of U-3 Reactor Building to floor above.
- **7.0 <u>Exposures</u>:** Shutdown Cooling Pumps (3) Shutdown Cooling Valve Motors: 3-1001-2A, 3-1001-2B, 3-1001-2C.

8.0 Communications:

- 8.1 Portable radios: OK to use.
- 8.2 Public Address: 1 P.A. Location nearby
- 8.3 Telephone: 1 Extension Phone nearby

Pre-plan <u>U3RB-24</u> Page 5 of 5 Rev. 4

9.0 Construction:

- 9.1 Floor: 24" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated
 - b. Southwest: 24" Reinforced concrete, 3-hour rated
 - c. East: 48" Reinforced concrete
 - d. West: 24" Reinforced concrete, 3-hour rated
- 9.3 Ceiling: 24" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

SPECIAL NOTE:

Extra length (minimum 50') of hose needs to be added to hose station near TIP Drive Room prior to charging hose to reach this room.

2.0 ACCESS

Primary: From U-3 Reactor Bldg. floor (517' el.), doorway is in North wall of room. High Rad key needed to access room.

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Photoelectric

- 1- Hose Reel available in nearby area
- 2 Dry Chemical Portable Extinguishers available in adjacent area

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke into U-2 Rx Bldg. el 517' via doorway on common wall of U-2 and 3 and up stairs.

Fire

Dampers: Fire Damper may not close against airflow, therefore, shut down the ventilation system to ensure closure.

8.0 COMMUNICATIONS

1 Extension Phone available nearby Portable Radios Pre-plan <u>U3RB-25</u> Page 1 of 4 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 517' Fire Zone 1.4.1 TIP Drive Room

3.0 HAZARDS

Fire: Cable Insulation

Electrical: None

Other: Radiation

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at NW corner of Reactor Building
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Ventilate
- Overhaul

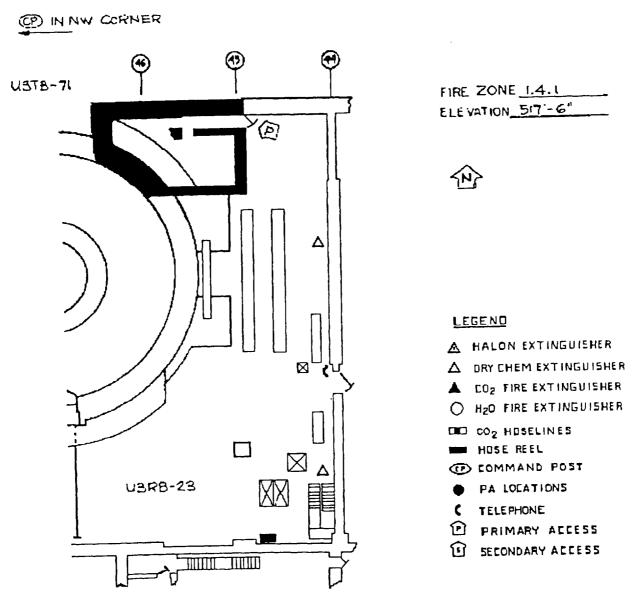
7.0 EXPOSURES

Inboard Isolation Condenser Valve Transfer Panel 2203-75

9.0 CONSTRUCTION

Reinforced concrete (3-hour rated)

Pre-plan <u>U3RB-25</u> Page 2 of 4 Rev. 4



NOTES

- I. USRB-28 AT LEVEL ABOVE
- 2. UBRB-19 AT LEVEL BELOW

Pre-plan <u>U3RB-25</u> Page 3 of 4 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 517' Fire Zone 1.4.1 TIP Drive Room

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From Unit 3 Reactor Building floor (517' el.), doorway is in North wall of room. High Rad key needed to access room.
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

	Hazard	<u>Material</u>	<u>Class</u>
	Electrical cables	Cable insulation	A,C
3.2	<u>Electrical</u> :	None	
3.3	Hazardous Substances:	Radioactive area	
3.4	Physical Hazards:	None	

3.5 Life Safety: One means of egress

4.0 Fire Protection Equipment:

- 4.1 Detection: Photoelectric Detectors
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 1 Hose Reel available in nearby area
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 2 – Dry Chemical Extinguishers available in nearby area

Guidelines for Fire Attack: 5.0

- Establish command post in NW corner of U-3 Reactor Building at 517' el.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- SPECIAL NOTE: Extra length (minimum 50') of hose needs to be added to hose station near TIP Drive Room prior to charging hose to reach this room.

Ventilation: 6.0

- As necessary have Control Room shut down HVAC to prevent spreading 61 Fixed: smoke or change HVAC to smoke exhaust mode.
- Use Smoke Ejector and Flexible Ducting to exhaust smoke up stairs in SE 6.2 Manual: corner of U-2 Reactor Building to floor above via doorway on common wall of U-2 and 3 Rx Bldg el. 517'.
- 6.3 Fire Dampers: Fire Dampers may not close against air flow, therefore, shut down the ventilation system to ensure closure.
- Inboard Isolation Condenser Valve Transfer Panel 2203-75 7.0 Exposures:

Communications: 8.0

- Portable radios: OK to use. 8.1
- Public Address: No handset available 8.2
- 1 Extension Phone available at doorway to U-2 Reactor. A telephone is Telephone: 83 also available in U-2 Reactor Building near door.

Construction: 9.0

- 24" Reinforced concrete 9.1 Floor:
- Wall: 9.2
 - 24" Reinforced concrete, 3-hour rated a. North:
 - 24" Reinforced concrete, 3-hour rated b. South:
 - 24" Reinforced concrete, 3-hour rated c. East:
 - 48" Reinforced concrete, 3-hour rated to main steam tunnel d. West:
- 24" Reinforced concrete, 3-hour rated Ceiling: 9.3

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: From Ground Level, up stairs at NW corner of Unit 3 Rx Bldg., el. 545'-0"

Secondary: From Unit 2 Reactor Mezzanine Floor thru door on Unit 2/3 common wall el. 545'-6"

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization, Photoelectric Suppression: Wet Pipe Sprinkler (local)

- 3 Hose Stations
- 1 CO₂ Portable Extinguishers
- 2 -Dry Chemical
- 3 Wheeled Fire Carts

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke upstairs in SW corner of Unit 2 or upstairs in NW Corner of Unit 3.
- Fire Damper: Fire Dampers may not close against air flow, therefore, shut down the ventilation system to ensure closure.

Pre-plan <u>U3RB-26</u> Page 1 of 7 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 545'-6" Fire Zone 1.1.1.3 Secondary Containment

3.0 HAZARDS

Fire: Lubricating Oil Cable Insulation Polyurethane

Electrical: See 3.2

Other: Radioactive Contaminated Equipment

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at stairs on Ground Floor
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- De-energize electrical
- Ventilate
- Overhaul Fire Watch
- CAUTION: Combustible gap material

7.0 EXPOSURES

Safety-Related Equipment, Switchgear, Div. I and II Cable Trays

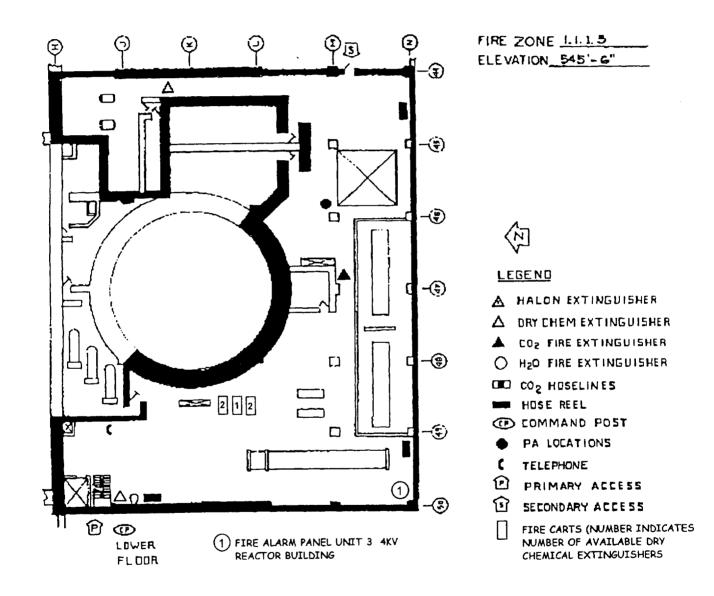
8.0 COMMUNICATIONS

1 P.A. Location 1 Extension Phone Portable Radios

9.0 CONSTRUCTION

Reinforced concrete on all sides

Pre-plan <u>U3RB-26</u> Page 2 of 7 Rev. 4



Pre-plan <u>U3RB-26</u> Page 3 of 7 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 545'-6" Fire Zone 1.1.1.3 Secondary Containment

2.0 <u>Access</u>:

2.1	Primary:	From Ground Level, up stairs at NW corner of Unit 3 Rx Bldg Elev. 545'.
2.2		From Unit 2 Reactor Building Mezzanine Level, thru door on Unit 2/3 common wall elev. 545'.

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	Material	<u>Class</u>
Pumps	Lubrication oil	B
Panels	Cable insulation	A,C
Electrical cables	Cable insulation	A,C
-	Polyurethane	A

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
34-1 (HS)	4KV Swgr	3403	4KV Swgr 34
33-1 (HS)	4KV Swgr	3312	4KV Swgr 33
3-0202-4A	Recirc. Pump 3A Discharge Valve	B-1	MCC-38-7
3-0202-9A	Recirc. Loop Equal Bypass Valve 3A	A-3	MCC-38-7
3-0202-5A	Recirc. Pump 3A Discharge Valve	B-2	MCC-38-7

Pre-plan <u>U3RB-26</u> Page 4 of 7 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
3-0202-7A	Recirc. Pump 3A	В-3	MCC-38-7
3-0202-6A	Discharge Bypass Valve Recirc. Loop Equalizer Valve 3A	B-4	MCC-38-7
3-1213	Clean-up Filter Sludge Pump	D5	MCC 39-3
2253-70	Cont. Atmos. Analy Panel		
2253-49	Dry Air Samp. Panel	3322	4160V
3A-3701	Rx Bldg. Closed Cooling Water Pumps	3322	Swgr 33-1
3B-3701	Rx Bldg. Closed Cooling Water Pumps	3422	4160V Swgr 34-1
3A-3-1205	Reactor Water Clean-up Recirc. Pumps	3324	Swgr 33-1
3B-3-1205	Reactor Water Clean-up Recirc. Pumps	3423	Swgr 34-1
3-1206	Reactor Water Clean-up Aux. Pump		
3-9201	Dry Well Air Comp. Sampling System and Equipment Recirc. Pumps	B4	MCC 39-3
2223-56 2/3	Inst Rack Rx Bldg. Cooling Water	3428	4160V
3-1206	Pump Rx Clean-up Demin Aux.	383D	Swgr 34-1 480V Swgr 38
34-1 (HS)	Pump 4KV Swgr 34-1	3403	4KV Swgr 34
33-1 (HS)	4KV Swgr 33-1	3312	4KV Swgr 33
3-1206	Rx Water Clean-up Aux. Pump		480V Swgr 38
3-1213	Clean-up Filter Sludge Pump		
2203-6 2253-97	Instr Rack Diesel Gen. Vent H.V. Control Panel		
3B-3701	Rx Bldg. Closed Cooling Water Pumps	3422	4KV 34-1
3A-3701	Rx Bldg. Closed Cooling Water Pumps	3322	4KV 33-1
2203-5 3A-3-1205	Instr Rack Rx Water Clean-up Recirc. Pump	3324	Swgr 34-1

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Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
3B-2-1205	Rx Water Clean-up Recirc.	3423	Swgr 34-1
3-3704	Pump Shut Down Ht. Exch. Closed Cooling Water Isol Valve	G1	MCC 38-1
3-1402-24A	Core Spray Outboard Isol Valve 3A	E1	MCC 38-1
3-1402-25A	Core Spray Inboard Isol Valve 3A	E2	MCC 38-1
3-1501-27A	LPCI Drywell Spray Valve 3A	H3	MCC 38-1
3-1501-28A	LPCI Drywell Spray Valve 3B	H4	MCC 38-1
3-3701	Closed Cooling Header Isolation Valve	C4	MCC 39-1

3.3		Radioactive Contaminated Equipment	
		PCB Tank behind 33-1/34-1 switchgear	

- 3.4 <u>Physical Hazards</u>: None
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

- 4.1 Detection: Ionization detectors and Photoelectric detectors
- 4.2 <u>Automatic</u> <u>Suppression</u>: Wet pipe sprinklers above ventilation/pipe opening to shutdown cooling pump room
- 4.3 Hose Reels: 3 Hose Stations
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - CO₂ 2 - Dry Chemical 3 - Wheeled Fire Carts

5.0 Guidelines for Fire Attack:

- Establish command post at stairs (NW corner) on Ground Floor Level of Unit 3 Reactor Building.
- Self-contained breathing apparatus should be used by all personnel.
 - Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.

Pre-plan <u>U3RB-26</u> Page 6 of 7 Rev. 4

- Search entire area for possible victims.
- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible (see Section 3.2 for Electrical Component Listing).
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Provide a fire watch until fire detection system is returned to service, if out of service time greater than 1 hour per DATRs.
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilizing Portable Smoke Ejectors and Flexible Ducting, exhaust smoke down stairs at either NW corner or Unit 2 SW corner

7.0 Exposures: Safety-Related Equipment

Instrument Rack 2203-6 and 2203-5 Div. I and II Cable Trays 4kV Switchgear 33-1 and 34-1 MCC 42-1 Local Reactor Pressure Level Instr.: PI3-263-60A & B, LI3-263-72B & C, LI53-263-59A & B, LI3-263-72A & D

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: 1 P.A. Location
- 8.3 Telephone: 1 Extension Phone

9.0 Construction:

9.1 Floor: 12" Reinforced concrete south stairwell and equipment hatch

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- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated
 - b. South: 12" Reinforced concrete
 - c. East: 12" Reinforced concrete, 3-hour rated
 - d. West: 12" Reinforced concrete
- 9.3 <u>Ceiling</u>: 12" Reinforced concrete with stairwell and equipment hatch

Pre-plan U3RB-27

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Rev. 4

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: Doors in south wall of Heat Exchanger rooms near Unit 2/3 common wall el. 545'. High Rad key needed to access rooms.

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

- 1 Hose Cabinet outside room
- 1 CO₂ Portable Extinguisher outside room
- 1 Dry Chemical outside room
- 3 Fire Carts in nearby area

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke through door at SE corner of room to next level via stairwell, or up equipment hatch located in area.

8.0 COMMUNICATIONS

1 P.A. Location nearby Portable Radios

1.0 LOCATION

Unit 3 Reactor Building Elevation 545' Fire Zone 1.1.1.3 Non-Regen Heat Exchanger Rooms

3.0 HAZARDS

Fire: Lubricating Oil Cable Insulation Polyurethane

Electrical: See 3.2

Other: Equipment Radioactive Contaminated

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at stairs
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution: De-energize Equipment
- Ventilate
- Overhaul
- CAUTION: Combustible gap material

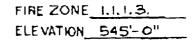
7.0 EXPOSURES

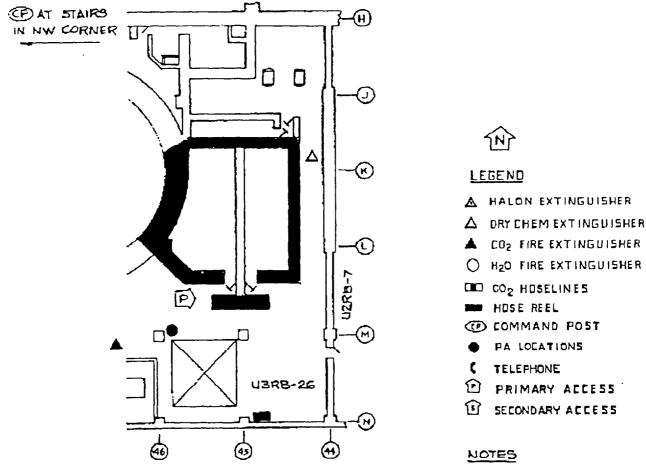
MOV3-1201-2

9.0 CONSTRUCTION

Concrete on all sides, South Wall concrete and concrete block

Pre-plan <u>U3RB-27</u> Page 2 of 5 Rev. 4





- I. UBRB-29 AT LEVEL ABOVE
- 2 UBRB-23, UBRB-24 AND UBRB-25 AT LEVEL BELOW

Pre-plan <u>U3RB-27</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 545' Fire Zone 1.1.1.3 Non Regen Heat Exchanger Rooms

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: Doors in South wall of Heat Exchanger Rooms near Unit 2/3 common wall el. 545'. High Rad key needed to access rooms.
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

<u>Hazard</u>	<u>Material</u>	<u>Class</u>
Electrical cables	Cable insulation Polyurethane	A,C A

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
3-1201-11	Clean-up Demin to Condenser Shut-off Valve	E-1	MCC 39-3
3-1201-12	Clean-up Demin to Condenser Shut-off Valve	E-2	39-3
3-1201-8	Clean-up Recirc. Pump Bypass Valve	E-4	39-3
3-1201-9A	Clean-up Recirc. Pump 3A Disch. Valve	F-2	39-3
3-1201-9B	Clean-up Recirc. Pump 3B Disch. Valve	F-3	39-3
3-1201-4	Clean-up Demin Auxiliary Pump Disch. Valve	F-1	39-3

Pre-plan <u>U3RB-27</u> Page 4 of 5 Rev. 4

	Component <u>Number</u>	Compone <u>Descriptic</u>		Circuit <u>Breaker</u>	Power Supply
	3-1201-7	Clean-up S Isol Valve	System Return	F-1	38-1
3.3	Hazardous S	ubstances:	Equipment Contami	nated	
3.4	Physical Haz	ards:	None		
3.5	Life Safety:		One means of egree	ss; entrapme	ent unlikely.

4.0 Fire Protection Equipment

- 4.1 Detection: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose <u>Reels</u>: 1 Hose Cabinet
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - CO₂ located in adjacent area 1 - Dry Chemical in adjacent area
 - 3 -Fire Carts in adjacent area

5.0 Guidelines for Fire Attack:

- Establish command post at stairs at (NW corner).
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

6.0 <u>Ventilation</u>:

6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.

Pre-plan <u>U3RB-27</u> Page 5 of 5 Rev. 4

- 6.2 <u>Manual</u>: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke thru door at SE corner of room to stairs in the SW corner of U-2 Rx. Bldg. el. 545' or up Equipment hatch located in area.
- 7.0 Exposures: RWCU Valve Motor 3-1201-5

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: 1 P.A. Location nearby
- 8.3 <u>Telephone</u>: None

9.0 Construction:

- 9.1 Floor: 12" Reinforced concrete
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete
 - b. South: 12" Reinforced concrete/concrete block
 - c. East: 12" Reinforced concrete
 - d. West: 12" Reinforced concrete
- 9.3 Ceiling: 12" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

SPECIAL NOTE:

Safe shutdown components are located within 20' of Primary access point. If fire has the potential of spreading outside of the Shutdown Heat Exchanger Room, the fire fighting effort should be suspended and access fire door closed.

- 2.0 ACCESS
 - Primary: From door east of stairs in th NW corner of Unit 3 Rx Bldg elev. 545'. High Rad key needed to access room.

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Photoelectric

- 1 Hose Cabinet outside room
- 1 Dry Chemical Portable Extinguisher outside room
- 3 Fire Carts in nearby area

AMENDMENT 13 Pre-plan <u>U3RB-28</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 545' Fire Zone 1.1.1.3 Shutdown Heat Exchanger Room

3.0 HAZARDS

- Fire: Cable Insulation Polyurethane
- Electrical: Switchgear and Pumps
- Other: Equipment Contaminated Radioactive

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at stairs at NW corner
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2 hose line
- Search Area for victims
- Caution: De-energize electrical equip.
- Ventilate
- Overhaul
- CAUTION: Combustible gap material

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke up the stairs in the N corner of U-3 Rx Bldg. el. 545

8.0 COMMUNICATIONS

1 Extension Phone nearby Portable Radios

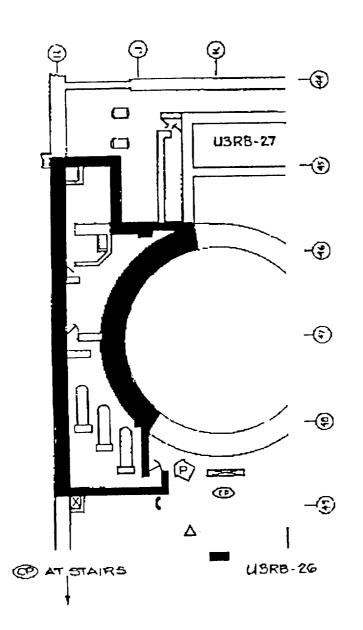
7.0 EXPOSURES

Rx Bldg. Shutdown Cooling Hx (3) Safety-Related Equipment

9.0 CONSTRUCTION

Concrete on all sides, West wall Concrete block, South wall concrete and concrete block

Pre-plan <u>U3RB-28</u> Page 2 of 5 Rev. 4



FIRE ZONE 1.1.1.3. ELEVATION 545-0



LEGEND

- A HALON EXTINGUISHER
- △ DRY CHEM EXTINGUISHER
- ▲ CO2 FIRE EXTINGUISHER
- O H20 FIRE EXTINGUISHER
- CO2 HOSELINES
- HOSE REEL
- D COMMAND POST
- PA LOCATIONS
- C TELEPHONE
- PRIMARY ALLESS
- SECONDARY ALLESS

NOTES

- 1. U3RB-29 AT LEVEL ABOVE
- 2 U3RB-23, U3RB-24 AND U3RB-25 AT LEVEL BELOW

Pre-plan <u>U3RB-28</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 545' Fire Zone 1.1.1.3 Shutdown Heat Exchanger Room

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From door, east of stairs, in the NW corner of Unit 3 Rx Building, elev. 545'. High Rad key needed to access room.
- 2.2 Secondary: None

3.0 <u>Hazards</u>:

3.1 Fire:

Hazard	<u>Material</u>	<u>Class</u>
Electrical cables	Cable insulation	A,C
-	Polyurethane	А

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
3-1402-24B	Core Spray Outboard Isol Valve	H1	MCC 39-1
3-1402-25B	Core Spray Inboard Isol Valve	H2	MCC 39-1

- 3.3 Hazardous Substances: Equipment Contaminated: Filter Sludge Pump and Tank
- 3.4 Physical Hazards: None
- 3.5 <u>Life Safety</u>: One means of egress; entrapment unlikely.

4.0 Fire Protection Equipment:

- 4.1 Detection: Photoelectric detectors
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 1 Hose Cabinet located in adjacent area
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - Dry Chemical located in adjacent area 3 - Fire Carts available in nearby area

5.0 Guidelines for Fire Attack:

- Establish command post near stairs at NW corner of Room, Unit 3 Rx Building 545'-6" Mezzanine Floor.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Caution should be used in applying water to avoid electrical shock.
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.
- SPECIAL NOTE: Safe shutdown components are located within 20' of Primary access point. If fire has the potential of spreading outside of the Shutdown Heat Exchanger Room, the fire fighting effort should be suspended and access fire door closed.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up the stairs in NW corner of U-3 Rx Bldg. el. 545'.
- 7.0 Exposures: Shutdown Heat Exchangers 3A-1003, 3B-1003, 3C-1003 Shutdown Cooling Valve Motors: 3-1001-4A, 3-1001-4B, 3-1001-4C RBCCW Valve Motor: 3-3704

Pre-plan <u>U3RB-28</u> Page 5 of 5 Rev. 4

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 <u>Telephone</u>: 1 Extension Phone located in adjacent area

9.0 <u>Construction</u>:

- 9.1 Floor: Reinforced concrete
- 9.2 Wall:
 - a. North: Reinforced concrete, 3-hour rated above TIP room and shutdown cooling pump room
 - b. South: Reinforced concrete/concrete block
 - c. East: Reinforced concrete
 - d. West: Concrete block
- 9.3 Ceiling: Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

Pre-plan <u>U3RB-29</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 570'-0" Fire Zone 1.1.1.4 Secondary Containment

3.0 HAZARDS

Fire:	Cable Insulation
	Polyurethane

- Electrical: 480V Switchgear
- Other: Radioactive Equipment Contaminated, 2 Transformers containing Pyranol.

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post near stairs (Unit 2)
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2 hose line
- Search area for victims
- Caution: De-energize Electrical
- Ventilate -- Overhaul
- CAUTION: Combustible gap material

7.0 EXPOSURES

480 V SWGR 38, 39 250 Vdc MCC 3A, 3B 125 Vdc Reactor Bldg. Dist. Pnl 3

8.0 COMMUNICATIONS

2 Extension Phones Portable Radios

9.0 CONSTRUCTION

Reinforced concrete on all sides

2.0 ACCESS

Primary: From U-2 Reactor Bldg. via stairs in SE corner of Unit 2 Rx Bldg. Thru door in Unit 2/3 common wall, el. 570'. High Rad key needed to access RWCU Demin Filter Pipeway.

Secondary: From stairs in NW corner of Unit 3 Rx Bldg., el. 570'. High Rad key needed to access RWCU Demin Filter Pipeway

4.0 FIRE PROTECTION EQUIPMENT

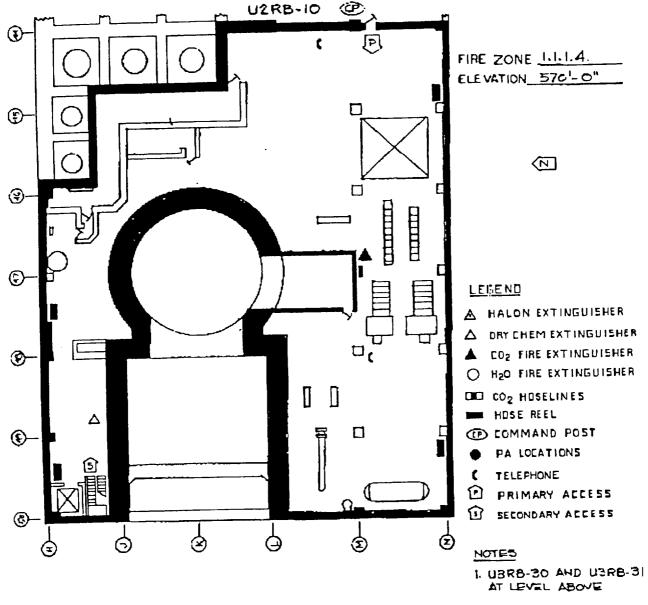
Detectors: Ionization, Linear Thermal Suppression: Wet pipe sprinklers and Closed Head Preaction water curtains around opening in ceiling.

- 4 Hose Cabinets
- 1 CO₂ Portable Extinguisher
- 1 Dry Chemical

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke to stairs at NW corner or through door at SE corner of area or up stairs in the NW corner of U-3 Rx Bldg. el. 570'. Depending on the Location of the Fire.

Pre-plan <u>U3RB-29</u> Page 2 of 5 Rev. 4



^{2.} UBRE-26, UBRE-27 AND UBRE-28 AT LEVEL BELOW

Pre-plan <u>U3RB-29</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 570'-0" Fire Zone 1.1.1.4 Secondary Containment

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From stair in SE corner of Unit 2 Rx Bldg. through door on Unit 2/3 common wall el. 570' el. 570'. High Rad key needed to access RWCU Demin Filter Pipeway.
- 2.2 <u>Secondary</u>: From stairs in NW corner of Unit 3 Rx Bldg. el. 570'. High Rad key needed to access RWCU Demin Filter Pipeway.

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	Material	<u>Class</u>
Panels	Cable insulation	A,C
Electrical cables	Cable insulation	A,C
-	Polyurethane	А

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
38 39 Swgr 38 (ESS Div I)	480V Switchgear 480V Switchgear 480V Switchgear	MF38-NC MF39-NC 3325	Trans. 38 Trans. 39 Swgr 33-1
Swgr 39 (ESS Div II)	480V Switchgear	3426	Swgr 34-1
3-A-1902	Fuel Pool Cooling Water Pumps	383A	Swgr 39
3-B-1902	Fuel Pool Cooling Water Pumps 3B	393A	Swgr 38
MCC 39-3	480V Rx Bldg. MCC	394-B	480∨ Swgr 39
3-1222	Clean-up Pre-Coat Pump	D-6	MCC 39-3
3-1211	Clean-up Filter AID Pump	D-1	MCC 39-3

Pre-plan <u>U3RB-29</u> Page 4 of 5 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
MCC-3A	250V DC Reactor Building MCC-3 Bus 3A		MCC-3
MCC-3B	250V DC Reactor Building MCC-3 Bus 3B		MCC-3
3-5901 3-1214	Rx Building Elevator Clean-up Pre-coat Tank	A3 D3	MCC 39-3 MCC 39-3
5-1214	Mixer	55	1100 00 0

3.3 Hazardous Substances: Some Contaminated Equipment

3.4 Physical Hazards: 2 - Transformers (38 and 39) containing Pyranol.

3.5 Life Safety: None

4.0 Fire Protection Equipment

4.1	Detection:	Ionization Detectors and Linear Thermal Detection around openings in ceiling.
4.2	Automatic Suppression:	Wet pipe sprinklers and thermally activated closed head preaction water curtains around openings in ceiling
4.3	Hose Reels:	4 - Hose Cabinets
4.4	Portable	

<u>Extinguishers</u>: 1 - CO₂ 1 - Dry Chemical

5.0 <u>Guidelines for Fire Attack</u>:

- Establish command post at SW corner of Unit 2 Reactor Building.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution should be used in applying water to avoid electrical shock.
- De-energize electrical equipment if possible (see Section 3.2 for Electrical Component Listing).
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- CAUTION: This area contains combustible materials ini the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

Pre-plan <u>U3RB-29</u> Page 5 of 5 Rev. 4

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke to stairs at NW corner, or thru door at SE corner of Unit 3 to stairs at SW corner of Unit 2.

NOTE: Location of the fire will determine which exhaust path.

7.0 <u>Exposures</u>: 480V SWGR 38, 39 250Vdc MCC 3A, 3B 125Vdc Reactor Bldg. Dist. Pnl 3

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: 2 Extension Phones

9.0 <u>Construction</u>:

- 9.1 Floor: 12" Reinforced concrete with stairwell and equipment hatch
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated along turbine bldg. wall
 - b. South: 12" Reinforced concrete, exterior
 - c. East: 24" Reinforced concrete, 3-hour rated
 - d. West: 12" Reinforced concrete, exterior
- 9.3 <u>Ceiling</u>: 12" Reinforced concrete with stairwell and equipment hatch, south end 3hour rated

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: From stairs at NW Corner of Unit 3 Rx Building, Elev. 589'

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Local at Stand-by Liquid Control Equipment

2 - Hose Stations

1 - Dry Chemical

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust up stairs in NW corner of room.

8.0 COMMUNICATIONS

1 Extension Phone Portable Radios

Pre-plan <u>U3RB-30</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 3 Reactor Building Elevation 589' Fire Zone 1.1.1.5.D Standby Liquid Control Area

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil Polyethylene

Electrical: See 3.2

Other: Entrapment Possible

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post near stairs at NW Corner of room el. 570'
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution: De-energize elec. equip.
- Ventilate
- Overhaul
- CAUTION: Combustible gap material

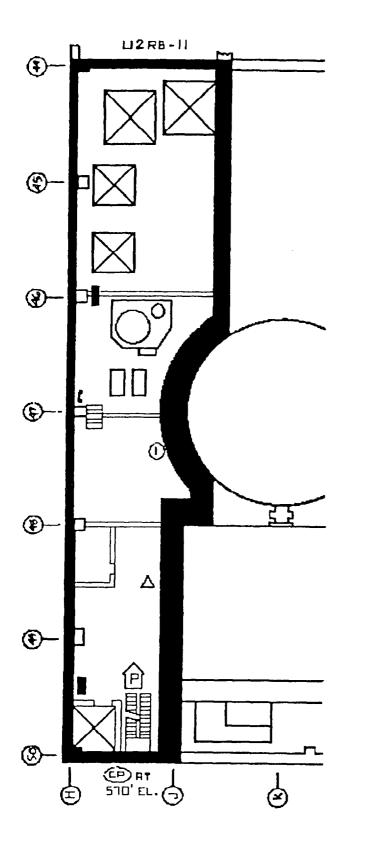
7.0 <u>EXPOSURES</u>

Stand-by Liquid Control Tank and Pumps Division I and II Cable Trays

9.0 CONSTRUCTION

Concrete on all sides, East Wall 3-hour rated, North wall 3-hour rated except for HVAC duct penetration

Pre-plan <u>U3RB-30</u> Page 2 of 5 Rev. 4



FIRE ZONE 1.1, 1.5.D



LEGEND

- A HALON EXTINGUISHER
- Δ DRY CHEM EXTINGUISHER
- ▲ CO2 FIRE EXTINGUISHER
- O H20 FIRE EXTINGUISHER
- CO2 HOSELINES
- HDSE REEL
- D COMMAND POST
- PA LOCATIONS
- C TELEPHONE
- PRIMARY ALLESS
- D SECONDARY ALCESS

<u>NOTES</u>

I. U2/SRB-32 AT LEVEL ABOVE

2. U3RB-29 AT LEVEL BELOW

() FIRE ALARM PANEL 2203-48 STAND-BY LIQUID CONT. AREA

Pre-plan <u>U3RB-30</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 589' Fire Zone 1.1.1.5.D Stand-by Liquid Control Area

2.0 <u>Access</u>:

- 2.1 Primary: From stairs in NW corner of Unit 3 Rx Bldg., elev. 589'
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Pumps	Lubricating oil	B
Electrical cables	Cable insulation	A,C
-	Polyethylene	A

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
EPN-3A-1102	Stand-by Liquid Control Pump 3A	B-3	MCC-38-1
EPN-3B-1102	Stand-by Liquid Control Pump 3B	F-4	MCC-39-1
EPN-3-1103	Stand-by Liquid Control Heater	B-2	MCC-38-1

- 3.3 Hazardous Substances: None
- 3.4 Physical Hazards: None
- 3.5 <u>Life Safety</u>: One means of egress; entrapment possible

4.0 Fire Protection Equipment:

- 4.1 Detection: Ionization detection over the Stand-by Liquid Control System
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 2 Hose Stations
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - Dry Chemical

5.0 <u>Guidelines for Fire Attack</u>:

- Establish command post near stairs at NW corner el. 570'.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Provide a fire watch until fire detection system is returned to service, if out of service time greater than 1 hour per DATRs.
- CAUTION: This area contains combustible materials in the expansion gap around containment and at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs at NW Corner of U-3 Rx Bldg el. 589'.
- 7.0 <u>Exposures</u>: Stand-by Liquid Control System Tank Stand-by Liquid Control System Pumps (2) Division I and II Cable Trays

8.0 <u>Communications</u>:

8.1 Portable radios: OK to use

Pre-plan <u>U3RB-30</u> Page 5 of 5 Rev. 4

- 8.2 Public Address: No handset available
- 8.3 <u>Telephone</u>: 1 Extension Phone

9.0 <u>Construction</u>:

- 9.1 <u>Floor</u>: 12" Reinforced concrete with stairwell and unsealed mechanical penetrations
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated except for HVAC duct without a fire damper
 - b. South: 36" Reinforced concrete
 - c. East: 24" Reinforced concrete, 3-hour rated
 - d. West: 12" Reinforced concrete, exterior
- 9.3 <u>Ceiling</u>: 12" Reinforced concrete with stairwell and unsealed mechanical penetrations

Pre-plan U3RB-31

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Rev 4

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: From stairs at SW corner of Unit 2 Reactor Bldg. thru doors between units on 2/3 common wall, el. 589'.

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization, Linear Thermal Suppression: Closed Head Preaction System at Hatchway

- 2 Hose Stations
- 1 CO₂ Portable Extinguisher

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke up stairs in the SW corner of U-2 RX Bldg via door in common wall.

8.0 COMMUNICATIONS

Portable Radios

3.0 HAZARDS

LOCATION

Elevation 589' Fire Zone 1.1.1.5.A Isolation Condenser Area

1.0

Fire:	Cable	Insulation

Unit 3 Reactor Building

Electrical: See 3.2

Other: Radioactive Material Storage

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at Unit 2 stairs
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" Hose Line
- Search Area for Victims
- Ventilate
- Overhaul

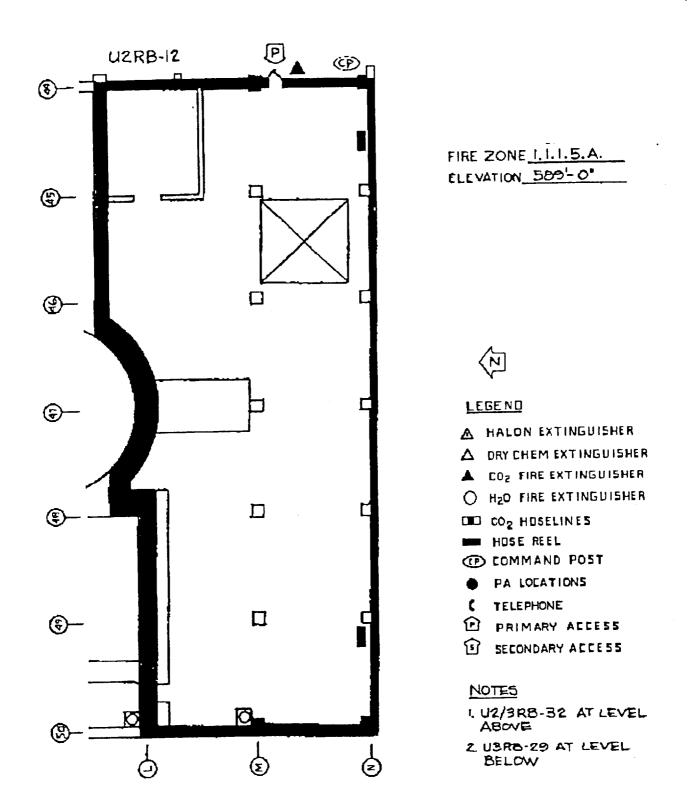
7.0 EXPOSURES

Div. I and II Cable Trays Isolation Condenser Isolation Condenser Valves

9.0 CONSTRUCTION

Concrete on all sides Floor/East Walls 3-hour rated

Pre-plan <u>U3RB-31</u> Page 2 of 5 Rev. 4



Pre-Plan <u>U3RB-31</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 3 Reactor Building Elevation 589' Fire Zone 1.1.1.5.A Isolation Condenser Area

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From Unit 2 stairs at SW corner of Unit 2 Rx Bldg. thru door between Units on 2/3 common wall el. 589'
- 2.2 <u>Secondary</u>: None

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Electrical Cables	Cable insulation	A,C

3.2 Electrical:

Component	Component	Circuit	Power
<u>Number</u>	<u>Description</u>	<u>Breaker</u>	<u>Supply</u>
3-1302 3-4399-74	Isolation Condenser	E-3	480V MCC 39-3

- 3.3 <u>Hazardous Substances</u>: Radioactive Contaminated Materials Storage
- 3.4 Physical Hazards: None
- 3.5 Life Safety: One means of egress, entrapment unlikely.

Pre-Plan <u>U3RB-31</u> Page 4 of 5 Rev. 4

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: Ionization detectors throughout area and Linear Thermal detection around hatchway.
- 4.2 <u>Automatic</u> <u>Suppression</u>: Closed Head Preaction system around hatchway isolation valve 3-4199-177
- 4.3 <u>Hose Reels</u>: 2 Hose Stations
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - CO₂ located in adjacent area

5.0 **Guidelines for Fire Attack**:

- Establish command post at stairs in SW corner of Unit 2 Reactor Building.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke up the stairs in the SW corner of U-2 RX Bldg. via door of wall common to Units 2 and 3.
- 7.0 Exposures:
 Div. I and II Cable Trays

 Isolation Condenser
 Isolation condenser valves:

 M03-1301-10, MO3-4102, A03-1301-17, A03-1301

 20, 3-1300-202, 3-1300-203, 3-1301-39, 3-1301-40, 3-1301-16, 3-1301-644.

8.0 <u>Communications</u>:

8.1 Portable radios: OK to use

Pre-Plan <u>U3RB-31</u> Page 5 of 5 Rev. 4 ł

- 8.2 Public Address: No handset available
- 8.3 <u>Telephone</u>: None

9.0 <u>Construction</u>:

- 9.1 Floor: 12" Reinforced concrete, 3-hour rated
- 9.2 <u>Wall</u>:
 - a. North: 36" Reinforced concrete
 - b. South: 12" Reinforced concrete, exterior
 - c. East: 24" Reinforced concrete, 3-hour rated
 - d. West: 12" Reinforced concrete, exterior
- 9.3 <u>Ceiling</u>: 18" Reinforced concrete with equipment hatch

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

SPECIAL NOTE:

Do not use fog pattern near new fuel vault to preclude possibility of criticality. Smooth bore nozzles provided near new fuel vault. When using these nozzles, Extreme Caution should be used to avoid electrical shock.

2.0 ACCESS

- Primary: From stairs and thru Airlock doors in NE Corner of Unit 2 Rx bldg. el. 613'-0"
- Secondary: From stairs and thru Airlock doors in NW Corner of Unit 3 Rx Bldg., el. 613'

4.0 FIRE PROTECTION EQUIPMENT

- 8 Hose Cabinets
- 4 CO₂ Portable Extinguishers

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use Smoke Ejectors and Flexible Ducting to exhaust smoke down stairs at NW corner of Unit 3 or the stairs in the NE corner of Unit 2, OR exhaust to other unit, same elev.

8.0 COMMUNICATIONS

3 P.A. Locations 6 Extension Phones Portable Radios

Pre-plan <u>2/3RB-32</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 and 3 Reactor Building Elevation 613'-0" Fire Zones 1.1.1.6, and 1.1.2.6 Refueling Floor

3.0 HAZARDS

- Fire: Cable Insulation Lubricating Oil
- Electrical: See 3.2
- Other: Radioactive Equipment

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at stairwell in NE corner 589'
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2 hose line
- Caution: De-energize elec. equip.
- Search Area for victim-Ventilate
- Overhaul

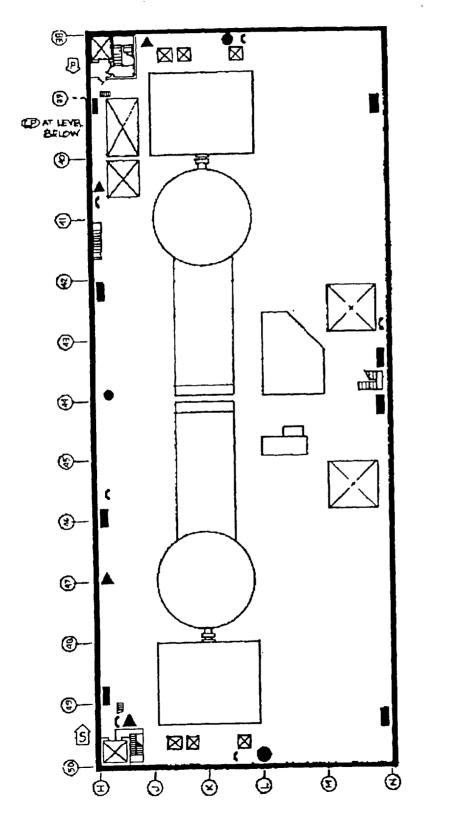
7.0 EXPOSURES

None

9.0 CONSTRUCTION

North Wall - Concrete (3-hour rated) and Unrated Metal Siding South/West/East Walls -Unrated Metal Siding Roof - Built-up Roofing on exposed steel Floor - Reinforced concrete

Pre-plan <u>2/3RB-32</u> Page 2 of 5 Rev. 4



FIRE ZONE 1.1.1.2 \$ 1.1.2.6 ELEVATION 613-0"



LEGEND

- A HALON EXTINGUISHER
- △ DRY CHEM EXTINGUISHER
- LO2 FIRE EXTINGUISHER
- O H20 FIRE EXTINGUISHER
- CO2 HOSELINES
- HOSE REEL
- D COMMAND POST
- PA LOCATIONS
- **C** TELEPHONE
- PRIMARY ACCESS
- 1 SECONDARY ALLESS

NOTES

I U3RB-30, U3RB-31 U2RB-11 AND U2RB-12 AT LEVEL BELOW

Pre-plan <u>2/3RB-32</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Units 2/3 Reactor Building Elevation 613'-0" Fire Zone 1.1.1.6 and 1.1.2.6 Refueling Floor

2.0 <u>Access</u>:

- 2.1 Primary: From stairs and thru Airlock doors in NE corner of Unit 2 Rx Bldg., el. 613'
- 2.2 Secondary: From stairs and thru Airlock doors in NW corner of Unit 3 Rx Bldg., el. 613'

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

<u>Hazard</u>	Material	<u>Class</u>
Crane Hoist	Lubricating oil	В
Panels	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2/3	Rx Building Crane	273B	48OV Swgr 27
2-899	Refueling Floor Jib Cranes	C1	480V MCC 29-4
3A-57O2	MG Set Vent Fan	3850	48OV Swgr 38
3B-5702	MG Set Vent Fan	394A	480V Swgr 39
2-A-5701	MG Set Vent Fan	285D	480V Swgr 28
2-B-5701	MG Set Vent Fan	294A	480V Swgr 29
3-A-5702	South Turb. Rm Vent Fans	385C	480V Swgr 38

Pre-plan <u>2/3RB-32</u> Page 4 of 5 Rev. 4

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
3-B-5702	South Turb. Rm Vent Fans	395A	480V Swgr 39
2/3-5003	New Fuel Storage Vault and Equipment Hatch Jib Cranes	F4	MCC 29-3
2/3	Rx Building Crane	373B	480V Swgr 37
1402-3A	Core Spray Pump Suction Valve 2A	H4	480V MCC 28-1
5715	South Turb. Room Evap. Cooler Recirc. Pump	B2	MCC 36-1
3-899	Refueling Floor Jib Cranes	A2	MCC 39-7
	Fuel Pool 480 Volt Receptacles	A1	MCC 29-3

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 Physical Hazards: Fuel Pool
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: None
- 4.3 Hose Reels: 8 Hose Cabinets
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 4 - CO₂

5.0 <u>Guidelines for Fire Attack</u>:

- Establish command post at Stairwell (NE corner of room) el. 589'.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2).
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.

Pre-plan <u>2/3RB-32</u> Page 5 of 5 Rev. 4

- Overhaul entire fire area; check for extension.
- SPECIAL NOTE: Do not use fog pattern near new fuel vault to preclude possibility of criticality. Smooth bore nozzles provided hear new fuel vault. When using these nozzles, Extreme Caution should be used to avoid electrical shock.
- 6.0 Ventilation:
 - 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
 - 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke to and down stairs at NW corner of Unit 3 or to the stairs in the NE corner of Unit 2 OR exhaust smoke to the other unit, same elevation.
- 7.0 Exposures: New fuel in storage vault.

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: 3 P.A. Locations
- 8.3 Telephone: 6 Extension Phones

9.0 <u>Construction</u>:

- 9.1 Floor: 12" Reinforced concrete
- 9.2 Wall:
 - a. North: 18" Reinforced concrete to 622' el., 3-hour rated, then metal siding on unprotected steel
 - b. South: Unrated metal siding on unprotected steel
 - c. East: Unrated metal siding on unprotected steel
 - d. West: Unrated metal siding on unprotected steel
- 9.3 Roof: Built-up roofing on exposed structural steel

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary AMENDMENT 13 Pre-plan <u>U2TB-36</u> Page 1 of 6 Rev. 4

1.0 LOCATION

Unit 2 Turbine Building Elevation 469' -6" Fire Zone 8.2.1.A Condensate Pumps

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil Grease

Electrical: See 3.2

Other: Radioactive equipment Hydrogen Addition Lines

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at stairs el. 517' near shield wall
- Check Suppression System
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution De-energize Equipment
- Ventilate
- Overhaul. Provide a Fire Watch

7.0 EXPOSURES

Divisions I and II Cable Trays

2.0 ACCESS

Primary: From stairs in Unit 2 Turbine Building el. 517'

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Suppression: Wet Pipe Sprinklers

- 1 Hose Reel
- 1 CO₂ Portable Extinguisher
- 1 Dry Chemical Portable Extinguisher

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke to stairs on west wall of room

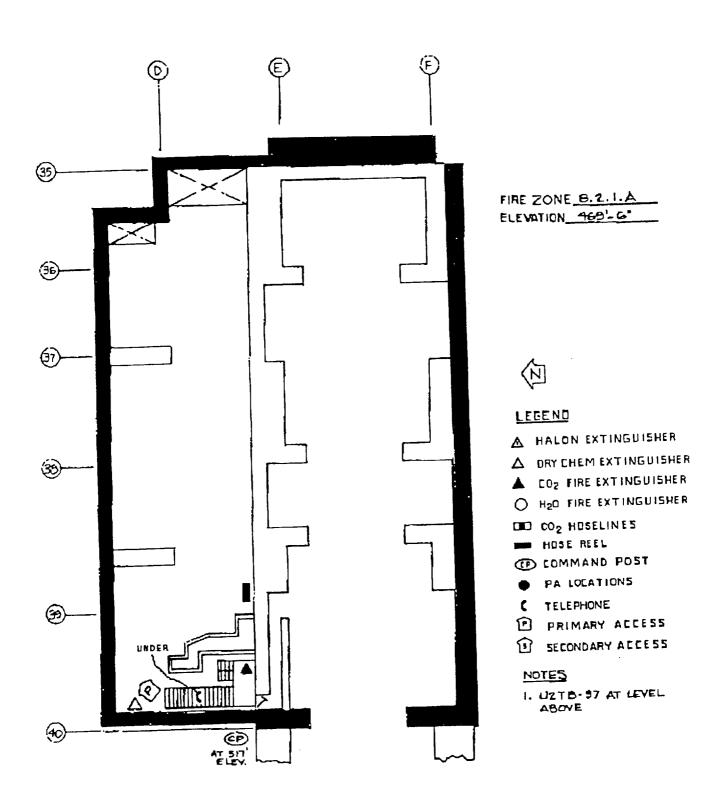
8.0 COMMUNICATIONS

1 Extension Phone Portable Radios

9.0 CONSTRUCTION

Concrete all sides

AMENDMENT 13 Pre-plan <u>U2TB-36</u> Page 2 of 6 Rev. 4



AMENDMENT 13 Pre-plan <u>U2TB-36</u> Page 3 of 6 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Turbine Building Elevation 469'-9" Fire Zone 8.2.1.A Condensate Pumps

2.0 Access:

- 2.1 Primary: From stairs in Unit 2 Turbine Building, el. 517' to el. 469'
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	Class
Pumps	Lubricating oil, Grease	В
Electrical Cables	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2-4403A	Condenser Circ. Water Valve	К2	480V MCC 25-2
2-4403B	Condenser Circ. Water Valve	K4	480∨ MCC 25-2
2-4403C	Condenser Circ. Water Valve	L2	480V MCC 25-2
2-4403D	Condenser Circ. Water Valve	L4	MCC 25-2
2-4509	Chlorine Residual Sample Pump	C6	480∨ MCC 26-1
	Man Lift	C4	MCC 27-1
2A-3401	Condensate and Booster Pumps	2307	SWGR 23

AMENDMENT 13 Pre-plan <u>U2TB-36</u> Page 4 of 6 Rev. 4

Component <u>Number</u>			Power Supply
2B-3401	Condensate and Booster Pumps	2309	SWGR 23
2-4407	Condenser Dewatering Pump	J3	25-2
	HYDR PWR Unit Filters and Fans	A3	48OV MCC 25-1
	HYDR PWR Unit Filter Pump	A4	480V MCC 25-1
0 0044 406	Hotwell Sample Pump	12	MCC 25-2
2-3341-106	Condensate and	2412	SWGR
2C-3401	Booster Pumps		24
	Condensate and	2410	SWGR
2D-3401	Booster Pumps		24
2A-3302	Condensate Pumps	2307	SWGR 23
2B-3302	Condensate Pumps	2309	SWGR 23
2C-3302	Condensate Pumps	2412	SWGR 24
2D-3302	Condensate Pumps	2410	SWGR 24
2A-2001-453	Turb. Bldg. Floor Drain Sump & Pump	F6	25-2
2B-2001-453	Turb. Bldg. Floor Drain Sump & Pump	A3	27-1
2A-2001-457	Turb. Bldg. Floor	F7	25-2
2B-2001-453	Drain Sump & Pump Turb. Bldg. Floor Drain Sump & Pump	B1	27-1
2-5700-50	Cond. & Cond. Booster Pump Room Exh. Fan	H4	MCC 25-2 480V

- 3.3 <u>Hazardous Substances</u>: Radioactive Equipment Hydrogen Addition Lines in Area
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

- 4.1 Detection: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: Wet Pipe Sprinkler Isolation Valve 2-4199-194 located at EL 495'

Pre-plan U2TB-36 Page 5 of 6 Rev. 4

- 1 Hose Reel Hose Reels: 4.3
- Portable 4.4 $1 - CO_{2}$ Extinguishers: 1 - Dry Chemical

Guidelines for Fire Attack: 5.0

- Establish command post near stairs in Unit 2 Turbine Building el. 517' near shield wall.
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- -Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers, if sprinklers had not activated,
- backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (See section 3.2 for electrical component listings).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control valve located in North wall of heater bay at Col. D-41; SE of TBCCW Heat Exchangers (534' el.).
- Provide a fire watch until fire suppression system is returned to service, if out of service time greater than 1 hour per DATRs.

Ventilation: 6.0

- As necessary have control room shutdown HVAC to prevent spreading 6.1 Fixed: smoke or change HVAC to smoke exhaust mode.
- Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke to 6.2 Manual: stairs on West wall of room

Exposures: Divisions I and II Cable Trays 7.0

Communications: 8.0

- Portable radios: OK to use 8.1
- Public Address: No handset available 8.2
- 1 Extension Phone, under stairs Telephone: 8.3

Pre-plan <u>U2TB-36</u> Page 6 of 6 Rev. 4

9.0 <u>Construction</u>:

- 9.1 Floor: 30" Reinforced concrete on grade
- 9.2 Walls: 36" Reinforced concrete all sides
- 9.3 Ceiling: 18" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: Down stairs in Turbine Building Unit 2, from ground floor level to el. 495'

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Suppression: Wet Pipe Sprinklers

- 1 Hose Reel
- 1 CO₂ Portable Extinguisher

Pre-plan <u>U2TB-37</u> Page 1 of 6 Rev. 4

1.0 LOCATION

Unit 2 Turbine Building Elevation 495' Fire Zone 8.2.2.A Containment Cooling Service Water Pumps (CCSW)

3.0 HAZARDS

Fire: Grease, Lubricating Oil, Cable Insulation, Internal HVAC Duct Lining, Filters

Electrical: See 3.2

Other: Radioactive equipment One means of Egress, entrapment possible

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at top of stairs
- Support Sprinklers
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution De-energize Equipment
- Ventilate Overhaul
- Valve Operator Fire Watch

6.0 VENTILATION

- Fixed: Operation of HVAC by control room as needed.
- Manual: Use Smoke Ejectors to exhaust smoke up stairs on west wall to el. 517'

8.0 COMMUNICATIONS

1 Extension Phone Portable Radios

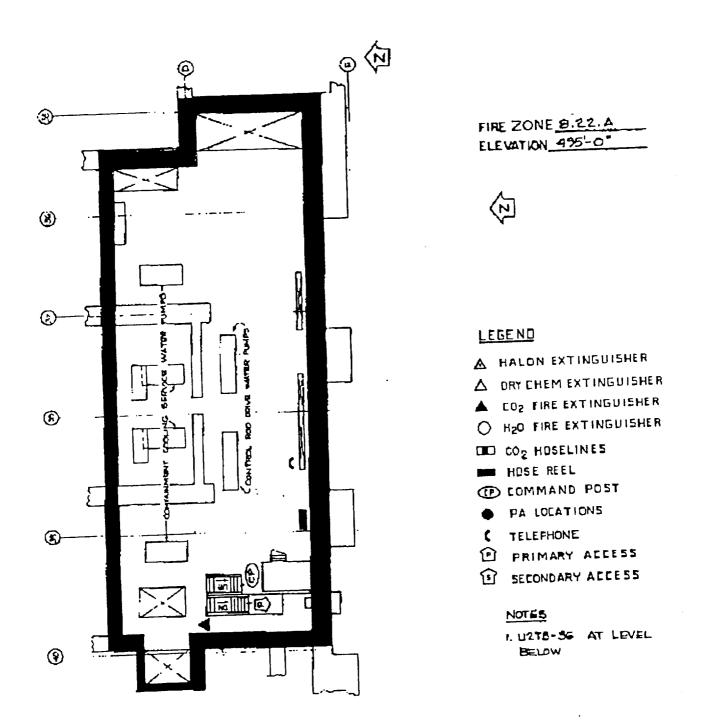
7.0 EXPOSURES

Safety-Related and Safe Shutdown Equipment.

9.0 CONSTRUCTION

Concrete on all sides.

Pre-Plan <u>U2TB-37</u> Page 2 of 6 Rev. 4



Pre-Plan <u>U2TB-37</u> Page 3 of 6 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Turbine Building Elevation 495' Fire Zone 8.2.2.A Containment Cooling Service Water (CCSW) Pumps

2.0 <u>Access:</u>

- 2.1 <u>Primary</u>: Down stairs in Unit 2 Turbine Building from ground floor level to 495' el.
- 2.2 Secondary: None

3.0 <u>Hazards</u>:

3.1 Fire:

Hazard	Material	<u>Class</u>
Pumps	Lubricating oil,	B
1 ampo	Grease	В
	Filters	А
	Internal duct	А
	Lining	
Panels, Electrical Cables	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2-4402A	Condenser Circ. Water Valve	К 1	MCC 25-2
2-44O2B	Condenser Circ. Water Valve	К 3	MCC 25-2
2-4402C	Condenser Circ. Water Valve	L 1	MCC 25-2
2-4402D	Condenser Circ. Water Valve	L 3	MCC 25-2
2A-1501-44	Containment Cooling Service Pumps	2306	4160V SWGR 23
2B-1501-44	Containment Cooling Service Pumps	2304	4160V SWGR 23

Pre-Plan <u>U2TB-37</u> Page 4 of 6 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2C-15O1-44	Containment Cooling Service Pumps	2403	416OV SWGR 24
2D-1501-44	Containment Cooling Service Pumps	2401	4160V SWGR 24
2A-302-3	Control Rod Drive Feed Pump 2B	2301	4160V SWGR 23
2B-302-3	Control Rod Drive Feed Pump 2B	2414	4160V SWGR 24
Fan 1 (A)	Cont. Cooling Serv. Water Pump Cub. Cooler Fan 1	B2	MCC 28-2
Fan 2 (A)	Contain. Cool. Serv. Wtr. Pump Cub. Cooler Fan 2	E2	MCC 28-2
Fan C1	Contain. Cool. Serv. Wtr. Pump Cub. Cooler Fan	D1	MCC 28-2
Fan C2	Contain. Cool. Serv. Wtr. Pump Cub. Cooler Fan	D2	MCC 28-2
Fan D1	Contain. Cool. Serv. Wtr. Pump Cub. Cooler Fan	D3	MCC 28-2
Fan D2	Contain. Cool. Serv. Wtr. Pump Cub. Cooler Fan	D4	MCC 28-2
Fan B1	Contain. Cool. Serv. Wtr. Pump Cub. Cooler Fan	F1	MCC 28-2
Fan B2	Contain. Cool. Serv. Wtr. Pump Cub. Cooler Fan	F3	MCC 28-2

- 3.3 Hazardous Substances: Radioactive Pumps
- 3.4 Physical Hazards: None
- 3.5 <u>Life Safety</u>: One means of egress, entrapment possible.

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: None
 4.2 <u>Automatic</u> <u>Suppression</u>: Wet Pipe Sprinklers Isolation Valve 2-4199-185 located at EL. 495
 4.3 <u>Hose Reels</u>: 1 - Hose Reel
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - CO₂

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5.0 Guidelines for Fire Attack:

- Establish command post near stairway at el. 517' ground level.
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- Self-contained breathing apparatus should be used by all personnel.
- Jointained breating apparatus choice be deed by an particular be deed by an particular of activated,
 Initial attack should be made with portable extinguishers, if sprinklers have not activated,
- backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Caution should be used when applying water to avoid electrical shock.
- De-energize electrical equipment if possible (See section 3.2 for electrical equipment listings)
- De-energize clocking of optimizer in possible (see Section 6.0) or place portable smoke
 Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke
- ejectors at personnel doors.Overhaul entire fire area; check for extension.
- Overnau entre area, oncer of enteriors.
 Position one person with a portable radio at sprinkler system control valve located in North wall of heater bay SE of TBCCW Heat Exchangers (534' el.).
- Provide a fire watch until fire suppression system is returned to service, if out of service time greater than 1 hour per DATRs.

6.0 Ventilation:

- 6.1 <u>Fixed</u>: As necessary have control room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Smoke Ejectors and Flexible Ducting to exhaust smoke up stairwell to ground floor el. 517'

NOTE: Exhaust smoke to exterior only with H/P approval.

7.0 Exposures:

Safety Related Equipment	Shutdown Equipment
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Containment Cooling	Control Rod Drive
Service Water Pumps	Water Pumps, Motors (2)
and Motors (4)	CRD valves 2-0301-2A, 2-0301-2B
Containment Cooling	TBCCW valves 2-3899-204, 2-3899-205
Service Water Room Air	Service Water Valves 2-3999-348,
Coolers (4)	2-3999-349, 2-3999-358,
Division I Cable Trays	2-3999-357, 2-3999-360,
Division Cable Trays	2-3999-361

Non-Safety Related

8.0 Communications:

8.1 Portable radios: OK to use

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- 8.2 Public Address: No handset available
- 8.3 Telephone: 1 Extension Phone

9.0 Construction:

- 9.1 Floor: 18" Reinforced concrete with exposed structural steel
- 9.2 <u>Wall</u>:
 - a. North: Reinforced concrete
 - b. South: 48" Reinforced concrete with exposed structural steel
 - c. East: 48" Reinforced concrete
 - d. West: 48" Reinforced concrete
- 9.3 Ceiling: 18" Reinforced concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: From door in Unit 2 Shield Wall near MCC 25-2, el. 517', Rad key needed to access these areas

Secondary: From door in Shield Wall near Unit 2 EHC, el. 517' Rad key needed to access these areas

4.0 FIRE PROTECTION EQUIPMENT

Suppression: Wet Pipe System

- 1 Hose Reel in adjacent area
- 3 CO₂ Portable Extinguishers in adjacent areas

Pre-plan <u>U2TB-38</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Turbine Building Elevation 517'-0" Fire Zone 8.2.5.8 Low Pressure Heater Bays (North Turbine cavity)

3.0 HAZARDS

Fire: Cable Insulation

Electrical: LP Heaters (3) Main Condenser

Other: High Radiation Area

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at Shield Wall el. 517'-6"
- Check System Actuation
- S.C.B.A.
- Attack with Port. Ext., follow with 1 1/2" hose line
- Caution: De-energize Equipment
- Search Area for victims
- Ventilate
- Overhaul
- Positive Person at Control Valve
- Fire Watch

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke thru door in Shield Wall near Unit 2 EHC el. 517'

8.0 COMMUNICATIONS

Portable Radios

7.0 EXPOSURES

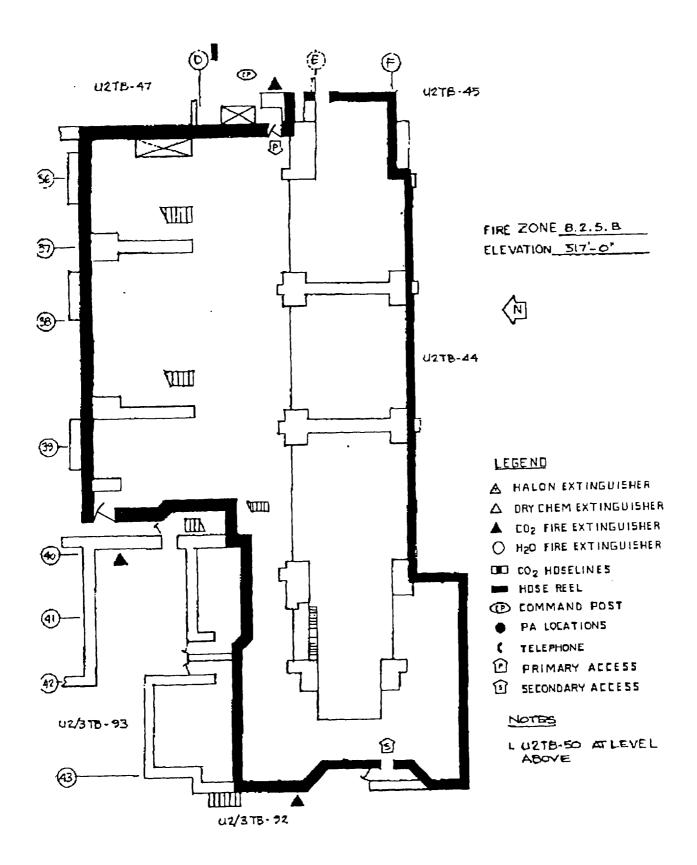
Divisions I and II Cable Trays

9.0 CONSTRUCTION

All Sides - Concrete East Wall 3 Hour Rated along exterior portion

II-160

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COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Turbine Building Elevation 517'-0" Fire Zone 8.2.5.B Low Pressure Heater Bays (North Turbine cavity)

2.0 <u>Access</u>:

2.1		From Door in Unit 2 Shield Wall near MCC 25-2, el. 517'. Rad key needed to access these areas
2.2	<u>Secondary</u>	From Door in Shield Wall near Unit 2 EHC, el. 517'. Rad key needed to access these areas

3.0 Hazards:

3.1 <u>Fire</u>:

Hazard	Material	<u>Class</u>
Electrical Cables	Cable insulation	A-C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
L.P. Heaters	(3) 2C1-3104 2C2-31O4 2C3-3104		
Condenser - 3403	2 - 3301 Low Pressure Feed Water By Pass Valve	J1	480V MCC 25-2
2-4404	Condenser WRT Box Vacuum Pump	F8	MCC 25-2
2B1	L.P. Feed Htr. 2B1 Extraction Steam Valve	G1	480∨ MCC 25-2
2B2	L.P. Feed Htr. 2B1 Extraction Steam Valve	G2	480V MCC 25-2
2B3	L.P. Feed Htr. 2B1 Extraction Steam Valve	G3	480V MCC 25-2

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Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2C1	L.P. Feed Htr. Extraction Steam Valve	G4	48OV MCC 25-2
2C2	L.P. Feed Htr. Extraction Steam Valve	H1	480V MCC 25-2
2C3	L.P. Feed Htr. Extraction Steam Valve	H2	480V MCC 25-2
2-3401A	L.P. Heater Line 1 Inlet Isolation Valve	B1	480V MCC 25-2
2-3402A	L.P. Heater Line 1 Inlet Isolation Valve	C1	480V MCC 25-2
2-3401B	L.P. Heater Line 2 Inlet Isolation Valve	B2	480∨ MCC 25-2
2-3402B	L.P. Heater Line 2 Inlet Isolation Valve	C2	480V MCC 25-2
2-3401C	L.P. Heater Line 3 Valve	B3	48OV MCC 25-2
2-3402C	Inlet Isolation Valve	C3	480V MCC 25-2

- 3.3 Hazardous Substances: Radioactive Equipment (High Radiation Area)
- 3.4 Physical Hazards: None
- 3.5 Life Safety: None

4.0 Fire Protection Equipment:

- 4.1 Detection: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: Wet Pipe System throughout area, except over Main Condenser Pit. Isolation valve 2-4109-508 located El 534' southeast of TBCCW Hxs.
- 4.3 Hose Reels: 1 Hose Reel located in adjacent area
- 4.4 <u>Portable</u> Extinguishers: 3 - C0₂ located in adjacent areas

5.0 Guidelines for Fire Attack:

- Establish Command post near door in Shield Wall near MCC 25-2 el. 517'
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers, if sprinklers have not activated,

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backed up by a 1-1/2" hose line.

- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2 for Electrical Component Listings).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0 or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control valves located on 534' el. at S. end of TBCCW Heat Exchangers for N. Turbine Bay and at 561' el. by MG set for S. Turbine Bay.
- Provide a fire watch until fire suppression system is returned to service, if out of service time greater than 1 hour per Tech Spec DATRs.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have control room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke thru door of Shield Wall Unit 2 near EHC el. 517'
- 7.0 Exposures: Divisions I and II Cable Trays

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: None

9.0 Construction:

- 9.1 Floor: 18' Reinforced concrete on exposed structural steel
- 9.2 <u>Walls</u>:
 - a. North: 30" Reinforced concrete
 - b. South: 12" Reinforced concrete with exposed structural steel
 - c. East: 36" Reinforced concrete, 3 hour rated along exterior portion
 - d. West: 48" Reinforced concrete
- 9.3 Ceiling: 18" Reinforced concrete on exposed structural steel

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

Pre-plan <u>U2TB-39</u> Page 1 of 5 Rev. 4

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1.0 LOCATION

Unit 2 Turbine Building Elevation 517'-6" Fire Zone 8.2.5.C Oil Storage

3.0 HAZARDS

Fire: Lubricating Oil

Electrical: None

Other: None

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post near door entrance
- Check Suppression System Actuation
- S.C.B.A.
- Attack with Port. Ext., follow with 1 1/2" hose line
- Search Area for victims
- Ventilate
- Overhaul
- Provide fire watch

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Exhaust Smoke through door into common area el. 517' to and up stairs west of the Equipment Elevator

8.0 COMMUNICATIONS

Portable Radios

7.0 EXPOSURES

None

9.0 CONSTRUCTION

All Sides - Concrete

2.0 ACCESS

Primary: From door near stairs leading to CCSW Area, el. 517'-6'' Unit 2 Turbine Bldg.

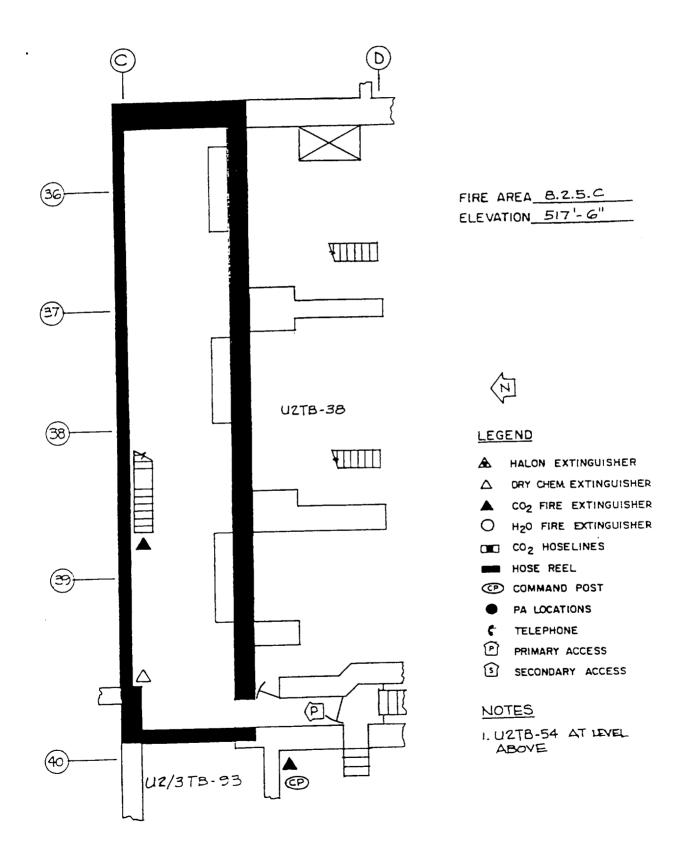
Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Suppression: Wet Pipe System

- 2 CO₂ Portable Extinguisher (one located in adjacent area)
- 1 Dry Chemical Portable Extinguisher

Pre-plan <u>U2TB-39</u> Page 2 of 5 Rev. 4



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COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Turbine Building Elevation 517'-6" Fire Zone 8.2.5.C Oil Storage

2.0 <u>Access</u>:

2.1	Primary:	From door near stairs leading to CCSW Area, Unit 2 Turbine Bldg., el. 517'-6"
-----	----------	--

2.2 <u>Secondary</u>: None

3.0 <u>Hazards</u>:

3.2

3.3

3.4

3.5

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Oil barrels	Lubricating oil	В
<u>Electrical</u> :	None	
Hazardous Substances:	None	
Physical Hazards:	None	
Life Safety:	None	

4.0 Fire Protection Equipment:

- 4.1 <u>Detection</u>: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: Wet Pipe Sprinkler System Isolation Valve 2-4199-157 located at El. 517' East Wall.
- 4.3 Hose Reels: None

Portable 4.4 $2 - CO_2$ (one located in adjacent area) Extinguishers: 1 - Dry Chemical

Guidelines for Fire Attack: 5.0

- Establish command post near door entrance el. 517'-6"
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers, if sprinklers have not activated, backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control valve located at 517' el. in SE corner of room.
- Provide a fire watch until fire suppression system is returned to service, if out of service time greater than 1 hour per DATRs

(Note: Prevent fire from spreading into Hallways of Fire Zones 8.2.5.A and 8.2.5.E)

6.0 Ventilation:

- As necessary, have control room shut down HVAC to prevent spreading smoke 6.1 Fixed: or change HVAC to smoke exhaust mode.
- Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke thru 6.2 Manual: door into the common area el. 517' to and upstairs just west of Equipment Elevator.
- None 7.0 Exposures:

Communications: 8.0

- Portable radios: OK to use 8.1
- Public Address: No handset available 8.2
- None 8.3 Telephone:

9.0 Construction:

Concrete 9.1 Floor:

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- 9.2 <u>Wall</u>:
 - a. North: 18" Reinforced concrete and concrete block exterior portion 3 hour rated
 - b. South: 30" Reinforced concrete and concrete block
 - c. East: 48" Reinforced concrete, 3-hour rated
 - d. West: 24" Reinforced concrete block
- 9.3 <u>Ceiling</u>: 18" Reinforced concrete

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Rev. 4

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

- Primary: From doorway at el. 517'-6" on north side of room
- Secondary: From doorway at el. 517'-6" on west side of Oil Room

4.0 FIRE PROTECTION EQUIPMENT

Suppression: Wet Pipe Sprinklers

- 1 Hose Cabinet (outside room)
- 1 CO₂ Portable Extinguishers, (outside room)
- 2 Fire Carts (outside room)

Unit 2 Turbine Building

LOCATION

Elevation 517'-6" Fire Zone 8.1 Clean and Dirty Oil Room

3.0 HAZARDS

1.0

Fire: Lubricating Oil Polyethylene

Electrical: See 3.2

Other: None

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post in hallway near condensate makeup pumps
- Check suppression system support
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for Victims
- Caution: De-energize equipment
- Ventilate
- Overhaul Provide a fire watch
- CAUTION: Combustible gap materials

6.0 VENTILATION

Fixed: Use room exhaust fan

- Manual: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke to the doorway into the hallway of Unit 2 Turbine Building, el. 517'
- Fire Dampers: Fire Dampers may not close against air flow therefore, shut down the ventilation system to ensure closure

8.0 COMMUNICATIONS

Portable Radios

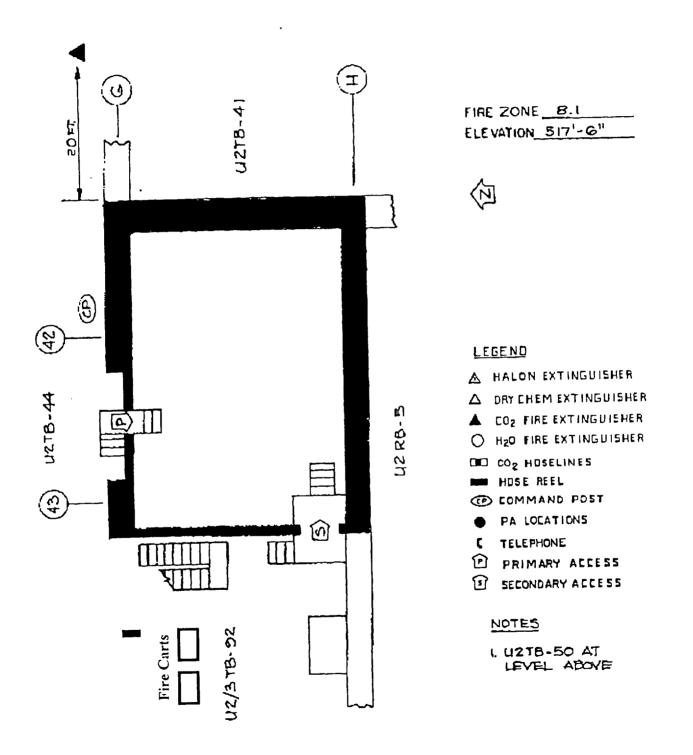
7.0 EXPOSURES

None

9.0 CONSTRUCTION

All sides reinforced concrete - 3 hour

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COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 <u>Location</u>: Unit 2 Turbine Building Elevation 517'-6" Fire Zone 8.1 Clean and Dirty Oil Room

2.0 <u>Access</u>:

- 2.1 Primary: From doorway on north side of Oil Room, el. 517'
- 2.2 Secondary: From doorway on west side of room, el. 517'

3.0 <u>Hazards</u>:

3.1 Fire:

<u>Hazard</u>	<u>Material</u>	<u>Class</u>
Oil tanks	Lubricating oil Polyethylene	B A

3.2 Electrical:

3.3

3.4

Component omponent <u>Number Descriptior</u>	<u>1</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2/3 A-5103 Turb. Oil Tra	ansfer Pump	C1	480V MCC 25-1
2/3 B-5103 Turb. Oil Tra	ansfer Pump	C3	480V MCC 26-1
Oil Tank Ex	haust Fan	B2	480V MCC 26-1
Receptacle Turbine Oil	in Oil Room Purifier	D2	480∨ MCC 35-1
Hazardous Substances:	None		
Physical Hazards:	None		

3.5 Life Safety: None

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4.0 Fire Protection Equipment:

- 4.1 Detection: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: Wet Pipe Sprinkler Isolation Valve 2-4118-500 located outside North wall.
- 4.3 Hose Reels: 1 Hose Cabinet located outside room
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - CO₂ (outside room)
 2 - Fire Carts with Dry Chemical Extinguishers located outside room

5.0 **Guidelines for Fire Attack**:

- Establish command post in hallway near condensate makeup pumps.
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (See Section 3.2 for electrical component listings)
- Caution should be used in applying water to avoid electric shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control valve located at the entrance to the room.
- Provide an hourly fire inspection until fire suppression system is returned to service.
- CAUTION: This area contains combustible materials at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: Utilize room exhaust fan as needed to remove smoke.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke out door into hallway of Unit 2 Turbine Bldg.
- 6.3 <u>Fire Dampers</u>: Fire Dampers may not close against air flow therefore, shut down the ventilation system to ensure closure.
- 7.0 Exposures: None

Pre-plan <u>U2TB-40</u> Page 5 of 5 Rev. 4

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8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: None

9.0 Construction:

9.1 Floor: 8" concrete finish, over a 28" reinforced concrete slab, 3-hour rated

9.2 <u>Wall</u>:

- a. North: 12" Concrete block, 3-hour rated
- b. South: 48" Reinforced concrete, 3-hour rated
- c. East: 60" Reinforced concrete, 3-hour rated
- d. West: 12" Concrete Block, 3-hour rated
- 9.3 Ceiling: 48" Reinforced concrete slab, 3-hour rated

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

Pre-plan <u>U2TB-41</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Turbine Building Elevation 517'-6" Fire Zone - 8.2.5.A. H.P. Heaters/Steam Lines

3.0 HAZARDS

Fire: Cable Insulation External HVAC Duct Insulation

Electrical: See 3.2

Other: Radioactive (Steam) One means of egress

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post near Reactor Feed Pumps
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution: De-energize Equipment
- Ventilate
- Overhaul

7.0 EXPOSURES

Divisions I and II Cable Trays

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Use portable smoke ejectors and flexible ducting to exhaust smoke through door adjacent to Unit 2 Hallway el. 517'

8.0 COMMUNICATIONS

1 Extension Phone nearby Portable Radios

9.0 CONSTRUCTION

Concrete all sides South and West walls - 3-hour rated

II-175

2.0 ACCESS

Primary: From door adjacent to Unit 2, Hallway el. 517' Rad key needed to access area

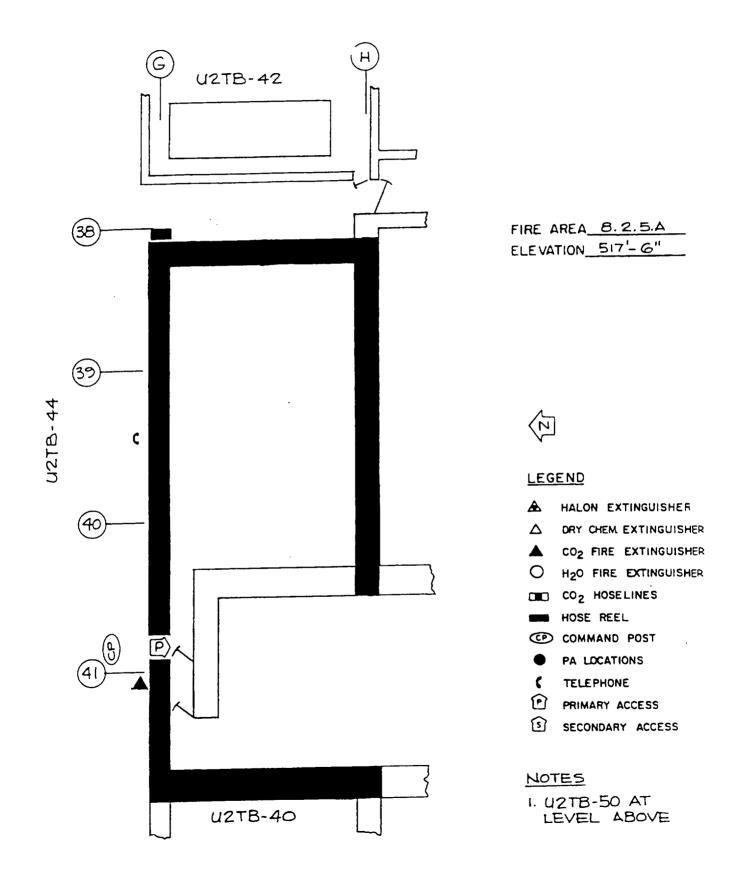
Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Supression: Wet pipe system over hot heaters.

- 1 Hose Reel outside room
- 1 CO₂ Portable Extinguisher outside room

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Pre-Plan <u>U2TB-41</u> Page 3 of 5 Rev. 4

COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Turbine Building Elevation 517'-6" Fire Zone 8.2.5.A H.P. Heaters - Steam Lines

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From door adjacent to Unit 2 Hallway el. 517'. 'R-2' Key may be required for entry.
- 2.2 Secondary: None

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Electrical Cables	Cable insulation	A,C
Ventilation System	External duct insulation	A

3.2 Electrical:

Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power <u>Supply</u>
220-90A,B,C,D	Main Steam Line Drain Valves	A2	MCC 28-2
?	H.P. Heaters (3)	?	?
2-3202-A	High Pressure Feedwater	D1	MCC
	Heater 2D1 Inlet Valve		26-1
2-3202-B	High Pressure Feedwater	D2	MCC
	Heater <u>2D2 Inlet</u> Valve		26-1
2-3202-C	High Pressure Feedwater	D3	MCC
	Heater <u>2D3 Inlet</u> Valve		26-1
2-3204-A	High Pressure Feedwater	E1	MCC
	<u>2D1 Outlet</u> Valve		26-1
2-3204-8	High Pressure Feedwater	E2	MCC
	<u>2D2 Outlet</u> Valve		26-1
2-3204-C	High Pressure Feedwater	E3	MCC
	<u>2D3 Outlet</u> Valve II-177		26-1

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Component <u>Number</u>	Component Description	Circuit <u>Breaker</u>	Power Supply
2-3205A	Rx Feedwater Inlet Valve 2A	H1	MCC 26-1
2-3205B	Rx Feedwater Inlet Valve 2B	H2	MCC 26-1
3103A	HP Feed Htr. 201 Extraction Steam Valve	E4	MCC 26-1
3103B	HP Feed Htr. 2D2 Extraction Steam Valve	F1	MCC 26-1
31O3C	HP Feed Htr. 2D3 Extraction Steam Valve	F2	MCC 26-1

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 Physical Hazards: None

3.5 Life Safety: One means of egress; entrapment possible.

4.0 Fire Protection Equipment

4.1	Detection:	None

- 4.2 <u>Automatic</u> <u>Suppression</u>: Wet Pipe System over the H.P. Heaters Isolation valve 2-4109-507 located on El. 561' by 2A MG set.
- 4.3 Hose Reels: 1 Hose Reel located in adjacent area.
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - C0₂ outside entrance door at Col. G-41

5.0 Guidelines for Fire Attack:

- Establish command post in Hallway, Unit 2 near Reactor Feed Pumps el. 517'-6".
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2 for electrical component listing).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.

6.0 <u>Ventilation</u>:

6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.

Pre-Plan <u>U2TB-41</u> Page 5 of 5 Rev. 4

- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke to door adjacent to Unit 2 Hallway, el. 517'.
- 7.0 Exposures: Division I and II Cable Trays

8.0 Communications:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 <u>Telephone</u>: 1 Extension Phone in adjacent area

9.0 <u>Construction</u>:

- 9.1 Floor: Reinforced concrete, 3-hour rated above Torus area.
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete
 - b. South: 12" Reinforced concrete, 3-hour rated
 - c. East: 12" Concrete
 - d. West: 36" Concrete, 3-hour rated
- 9.3 Ceiling: 18" Reinforced concrete supported on exposed Structural Steel

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: From door adjacent to Hallway of Unit 2 Turbine Bldg., el. 517'

Secondary: From door just inside Unit 2 Turbine Bldg., Airlock, el. 517'

4.0 FIRE PROTECTION EQUIPMENT

Suppression: Wet Pipe System

- 1 Hose Cabinet outside room
- 1 Hose Reel outside room
- 1 CO₂ 1" 150'-0" Hose Reel outside room
- 1 CO₂ Portable Extinguishers (G-35)
- 1 Dry Chemical Portable Extinguisher outside room

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Roo as needed.
- Manual: Use portable smoke ejectors and flexible ducting to exhaust smoke out door into Unit 2 Hallway

8.0 COMMUNICATIONS

2 Extension Phones (1 in adjacent area) Portable Radios Pre-plan <u>U2TB-42</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Turbine Building Elevation 517'-6" Fire Zone - 8.2.5.A. Reactor Feed Pumps

3.0 HAZARDS

Fire: Cable Insulation Lubricating Oil Ext. HVAC Duct Insulation

Electrical: See 3.2

Other: Radioactive Feed Pumps CO₂ suppression system in adjacent diesel generator room

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post in Trackway
- Check Sprinkler Actuation
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2 hose line
- Search Area for victims
- Caution: De-energize Equipment
- Ventilate
- Overhaul
- Provide a Fire Watch

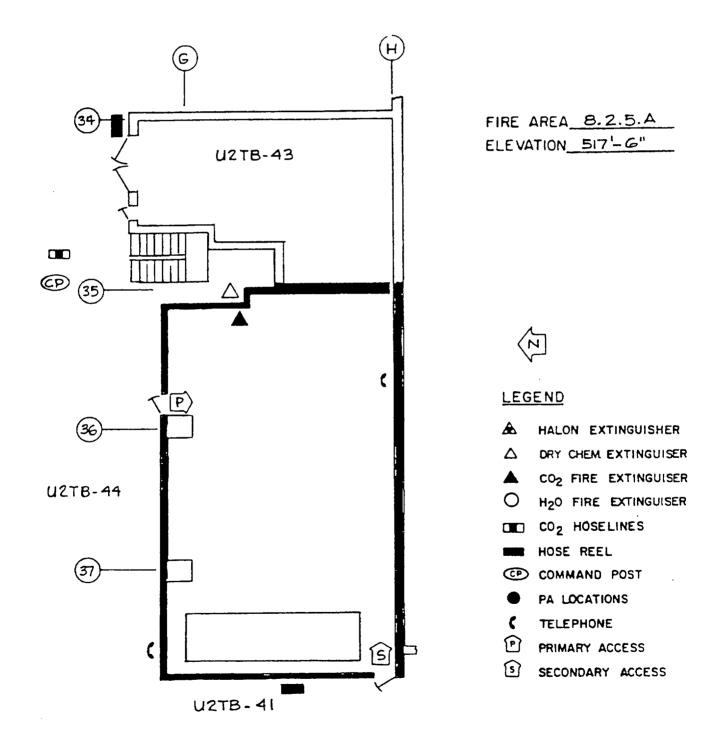
7.0 EXPOSURES

Divisions II Cable Trays

9.0 CONSTRUCTION

North, East, West Walls - Steel (Sound Barrier Construction) South wall - Concrete (3 hour rated) Ceiling/Floor - Concrete

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COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Turbine Building Elevation 517'-6" Fire Zone 8.2.5.A Reactor Feed Pumps

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From door adjacent to Unit 2 Turbine Bldg. Hallway, el. 517'.
- 2.2 Secondary: From door just inside Unit 2 Turbine Bldg. Airlock, el. 517'.

3.0 <u>Hazards</u>:

3.1 <u>Fire</u>:

Hazard	Material	<u>Class</u>
Pumps	Lubricating oil	В
Electrical Cables	Cable insulation	A,C

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power Supply
2A-3201	Reactor Feed Pumps	2103	SWGR 21
2B-3201	Reactor Feed Pumps	2202	SWGR 22
2C-3201	Reactor Feed Pumps	2203	SWGR 21
2C-3201	Reactor Feed Pumps	2102	SWGR 22
2A	Rx Feed Pump	A1	480V MCC
	Auxiliary Oil Pump		25-2
2B	Rx Feed Pump	C4	480V MCC
	Auxiliary Oil Pump		26-1
2C	Rx Feed Pump	C5	480V MCC
	Auxiliary Oil Pump		26-1
3201A	Rx Feed Pump	F3	MCC 26-1
	Discharge Valve 2A		
3201B	Rx Feed Pump	F4	MCC 26-1
	Discharge Valve 2B		
3201C	Rx Feed Pump	A2	MCC 26-1
	Discharge Valve 2C		

Pre-plan <u>U2TB-42</u> Page 4 of 5 Rev. 4

- 3.3 Hazardous Substances: Radioactive Equipment
- 3.4 Physical Hazards: None
- 3.5 Life Safety: CO₂ Suppression system in adjacent Unit 2 diesel generator room.

4.0 Fire Protection Equipment

- 4.1 <u>Detection</u>: None
- 4.2 <u>Automatic</u> <u>Suppression</u>: Wet Pipe System Isolation Valve 2-4199-195 located inside area.
- 4.3 <u>Hose Reels</u>: 1 -Hose Cabinet located in adjacent area.
 1 -Hose Reel located in adjacent area.
 1 -CO₂ 1" 150'-0" Hose Reel located in adjacent area.
- 4.4 <u>Portable</u> <u>Extinguishers</u>: 1 - CO₂ at Col G-35
 - 1 Dry Chemical located in adjacent area.

5.0 <u>Guidelines for Fire Attack</u>:

- Establish command post in Trackway
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2 for electrical component listing).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0) or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control valve located on 517' el. at Col. 37G, between pumps 2B and 2C.
- Provide a fire watch until fire suppression system is returned to service, if out of service time greater than 1 hour per DATRs.

6.0 <u>Ventilation</u>:

- 6.1 <u>Fixed</u>: As necessary, have Control Room shut down HVAC to prevent spreading smoke or change HVAC to smoke exhaust mode.
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke outdoor into Unit 2 Hallway el. 517'.

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7.0 Exposures: Division II Cable Trays.

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK to use
- 8.2 Public Address: No handset available
- 8.3 Telephone: 2 Extension Phones (1 located in adjacent area)

9.0 <u>Construction</u>:

- 9.1 Floor: Concrete
- 9.2 <u>Wall</u>:
 - a. North: Steel (Sound Barrier Construction)
 - b. South: Concrete
 - c. East: Steel (Sound Barrier Construction)/Concrete, 3-hour rated along DG Room
 - d. West: Steel (Sound Barrier Construction)
- 9.3 <u>Ceiling</u>: Concrete

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

SPECIAL NOTE:

Safe shutdown components are located within 20' of Primary access point. If fire has the potential of spreading outside of the Diesel Generator Room, the fire fighting effort should be suspended and access fire door closed.

- 2.0 ACCESS
 - Primary: From door of Unit 2 Turbine Bldg. Diesel Generator Room, el. 517', 'DS' Key needed for entry

Secondary: None

4.0 FIRE PROTECTION EQUIPMENT

Detection: Thermal Suppression: CO₂ and Wet Pipe(Day Tank) 1 - Hose Reel

- 1 CO, 1 150'-0" Hose Reel
- 1 Dry Chemical Portable Extinguisher

6.0 VENTILATION

- Fixed: Control of Diesel Room exhaust fan from local switch Panel under MEZZ
- Manual: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke thru door of Generator Room el. 517'-6" into U-2 Trackway area
- Fire Dampers: Fire Dampers may not close against air flow therefore, shut down the ventilation system to ensure closure

Pre-plan <u>U2TB-43</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Turbine Bldg. Elevation 517'-6" Fire Zone 9.0.A Diesel Generator

3.0 HAZARDS

Fire: Lubricating & Diesel Fuel Oils Cable Insulation HVAC Flexible Connection Polyethylene Polyurethane

Electrical: See 3.2

Other: Transformer containing PCB. One means of egress. CO₂ suppression system.

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post outside Unit 2 Generator Room el. 517'-6:
- Check Sprinkler System Actuation
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for Victims
- Caution: De-energize Equipment
- Ventilate Overhaul
- Provide Fire Watch
- CAUTION: Combustible gap material

7.0 EXPOSURES

Safety-Related Equipment (see 7.0)

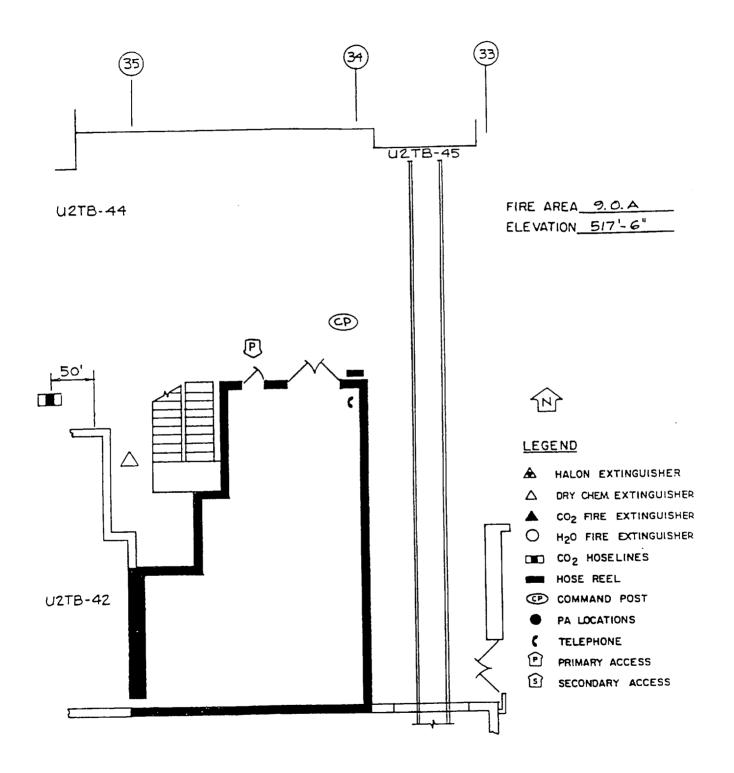
8.0 COMMUNICATIONS

1 Extension Phone Portable Radios

9.0 CONSTRUCTION

Concrete All Sides - 3-hour rated Ceiling concrete on protected structural steel

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COMMONWEALTH EDISON CO.

DRESDEN NUCLEAR UNITS 2 & 3

FIRE PRE-PLAN

1.0 Location: Unit 2 Turbine Building Elevation 517'-6" Fire Zone 9.0.A Diesel Generator

2.0 <u>Access</u>:

- 2.1 <u>Primary</u>: From door of Unit 2 Turbine Bldg. Diesel Generator Room, el. 517'-6", 'DS' Key needed for entry.
- 2.2 Secondary: None

3.0 Hazards:

3.1 <u>Fire</u>:

Hazard	<u>Material</u>	<u>Class</u>
Diesel generator Day tank Panels - - Ventilation system	Lubricating oil Fuel oil Cable insulation Polyurethane Polyethylene Flexible connections	B A,C A A A

3.2 Electrical:

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2	2500 KW Stand-by Generator Transfer Pump		
2/3A-43O3	Clean Demin Water Pump	H3	MCC 25-2
2/3B-4303	Clean Demin Water Pump	J4	MCC 25-2
2-5203	Diesel Fuel Oil Transfer Pump	B2	MCC 29-2
2-5790	Diesel Generator Room Vent Fan	D5	MCC 29-2
2A	Diesel Starting Air Compressors	E3	MCC 28-2

Pre-plan <u>U2TB-43</u> Page 4 of 5 Rev. 4

Component <u>Number</u>	Component <u>Description</u>	Circuit <u>Breaker</u>	Power <u>Supply</u>
2B	Diesel Starting Air	A3	MCC 29-2
2	Compressors Diesel Circ. Water Heater 2	A2	MCC 28-3

- 3.3 Hazardous Substances: Diesel Neutral Transformer Containing PCB
- 3.4 Physical Hazards: None
- 3.5 <u>Life Safety</u>: One means of egress provided. CO₂ suppression system. Generator neutral ground transformer contains PCB.

4.0 Fire Protection Equipment:

4.1	Detection:	Thermal Detection	
4.2	<u>Automatic</u> Suppression:	CO₂ throughout fire zone including over Day Tank Wet pipe over Day Tank Isolation Valve 2-4119C-500 located in Reactor Feed Pump Room.	
4.3	Hose Reels:	1 - Hose Cabinet (outside of room) 1 - CO ₂ 1 - 150'-0'' Hose Reel (outside of room)	
4.4	<u>Portable</u> Extinguishers:	1 - Dry Chemical (outside of room)	

5.0 Guidelines for Fire Attack:

- Establish command post outside Unit 2 Generator Room el. 517'.
- If suppression system has actuated, assistance may not be needed.
- Provide support to automatic suppression system.
- If suppression system fails to actuate, manual actuation
- Self-contained breathing apparatus should be used by all personnel.
- Initial attack should be made with portable extinguishers backed up by a 1-1/2" hose line.
- Search entire area for possible victims.
- De-energize electrical equipment if possible (see Section 3.2 for Electrical Component Listings).
- Caution should be used in applying water to avoid electrical shock.
- Ventilate area--utilize fixed ventilation system (see Section 6.0 or place portable smoke ejectors at personnel doors.
- Overhaul entire fire area; check for extension.
- Position one person with a portable radio at sprinkler system control valve located at 517' el. at U-2 R.F.P. Area by Col. 36G.

Pre-plan <u>U2TB-43</u> Page 5 of 5 Rev. 4

- Provide a fire watch until fire detection and suppression systems are returned to service, if out of service time greater than 1 hour per DATRs.
- CAUTION: This area contains combustible at the gap between the tops of various walls and the ceiling that may cause hidden fire spread.
- SPECIAL NOTE: Safe shutdown components are located within 20' of Primary access point.
 If fire has the potential of spreading outside of the Diesel Generator Room, the fire fighting effort should be suspended and access fire door closed.

6.0 Ventilation:

- 6.1 Fixed: Local control of Diesel Room Exhaust Fan from Panel under Mezzanine
- 6.2 <u>Manual</u>: Utilize Portable Smoke Ejectors and Flexible Ducting to exhaust smoke through door of Generator Room el. 517'-6" into U-2 Trackway area.
- 6.3 <u>Fire Damper</u>: Fire Dampers may not close against air flow therefore, shut down the ventilation system to ensure closure.

7.0 Exposures: Safety-Related Equipment

- 2500 KW standby Unit 2 Diesel
- Supply Fan
- Air Receiver
- Diesel Fuel Oil Transfer Pump
- 750 gallon Diesel Fuel Oil Day Tank
- Diesel Generator Vent Fan

8.0 <u>Communications</u>:

- 8.1 Portable radios: OK To Use
- 8.2 Public Address: No handset available
- 8.3 Telephone: 1 Extension Phone

9.0 Construction:

- 9.1 Floor: 18" Reinforced concrete on grade Structural Steel
- 9.2 <u>Wall</u>:
 - a. North: 12" Reinforced concrete, 3-hour rated
 - b. South: 12" Reinforced concrete, 3-hour rated
 - c. East: 12" Reinforced concrete, 3-hour rated
 - d. West: 12" Reinforced concrete, 3-hour rated
- 9.3 Ceiling: 18" Reinforced concrete on protected Structural Steel
 - Penetrations: 3-hour rated except for unsealed mechanical penetrations (DG exhaust and intake)

COMMONWEALTH EDISON CO. Dresden Units 2/3 Pre-plan Summary

2.0 ACCESS

Primary: From U-2 Turbine Bldg. Trackway area, el. 517'

Secondary: From U-3 Turbine Bldg. hallway, el. 517'

4.0 FIRE PROTECTION EQUIPMENT

Detection: Ionization Suppression: Wet Pipe Sprinklers 1 - Fire Hose Reel

- 1 Fire Hose Cabinet
- 1 CO₂ Hose Reel
- 1 CO₂ Portable Extinguisher
- 1- Dry Chemical Portable Extinguishers

6.0 VENTILATION

- Fixed: Operation of HVAC by Control Room as needed.
- Manual: Utilize Smoke Ejectors to exhaust smoke thru doorway opening into the RR Trackway Area Unit 2, el. 517'

8.0 COMMUNICATIONS

2 Extension Phones Portable Radios Pre-plan <u>U2TB-44</u> Page 1 of 5 Rev. 4

1.0 LOCATION

Unit 2 Turbine Building Elevation 517'-6" Fire Zone - 8.2.5.A Condensate Transfer Pumps/Hallway

3.0 HAZARDS

Fire: Cable Insulation, Cloth, Rubber Lubricating Oil

Electrical: See 3.2

Other: CO₂ suppression system in adjacent diesel generator room

5.0 GUIDELINES FOR FIRE ATTACK

- Command Post at Trackway
- S.C.B.A.
- Attack with Port. Ext., follow with 1-1/2" hose line
- Search Area for victims
- Caution: De-energize Equipment
- Ventilate
- Overhaul

7.0 EXPOSURES

Div. I and II Cable Trays Condensate Transfer Pumps Condenser Makeup Pump MCC 26-1

9.0 CONSTRUCTION

Ceiling/Floor - Reinforced concrete on Exposed Structural Steel North/South - Reinforced concrete (part of south 3-hour rated) East/West - Open